The Rise of Empiricism:
William James, Thomas Hill Green, and the Struggle over Psychology

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For my Mother and Father,
Whose own investigations
Instigated these.

And it is important for thinkers of all schools not to go on repeating things about experience and empirical method that have been proved factually false. … And were this the proper occasion, I think it could be shown that two contemporary schools, now exercising considerable influence, the British analytic school and the school of logical positivism, suffer greatly because of their dependence upon pre-Jamesian psychology.

…Present-day biological, anthropological and psychological knowledge is required in order to purge the minds of philosophers of antiquated notions—whatever be the direct function of this knowledge in philosophy. … The significance of James for those who take their stand in philosophy upon experience [is that he] … pointed to a new way of analyzing and reporting it. And he did more than point. He opened up paths of access to nothing less than a revolutionary change in traditional empiricism.

John Dewey (Dewey 1942, 54)

['the' del.] [intrl. marked by caret cut off] [illeg. word, poss. 'microcosm'] cobwebs, *['lost' del.] gone like [ab. del. 'burst through'] bubbles in the sun. ['There' del.] Once heavy ['weights' del.] upon us, they ['now count no m' del.] weigh['s' del.] no more than air. [del. 'We are free of them, we sing, we move, we ['float' del.] soar, *we sing [intrl., undel. in error]'] We are borne on a ['wave that overflows it glorious' del.] wave that ['rolls them under, their pressure is unfelt towers above them, *and [ab. del. 'as it']' del.] rolls them ['under' del.] so easily *under its **volume ['v' ov. 'gl'] [intrl.] that their very resistance is unfelt. ['These superior levels of personal energy' del.] We are free of them, we move, we soar, we sing. This *sense of enfranchisement and ease [ab. del. 'carolling and lyric['al' del.] quality' del.] characterize['s' del.] all these superior levels of personal energy and gives them *a glad & [ab. del. 'the'] carolling ['and lyric' del.]

William James, from an undated notebook
(WB, 422)

Alexander M. Klein

The Rise of Empiricism: William James, Thomas Hill Green, and the Struggle over Psychology

The concept of empiricism evokes both a historical tradition and a set of philosophical theses. The theses are usually understood to have been developed by Locke, Berkeley, and Hume. But these figures did not use the term "empiricism," and they did not see themselves as united by a shared epistemology into one school of thought. My dissertation analyzes the debate that elevated the concept of empiricism (and of an empiricist tradition) to prominence in English-language philosophy.

In the 1870s and '80s a lively debate about psychology emerged. Neo-Kantian idealists criticized the very idea that the mind can be studied scientifically. A group of philosopher-psychologists responded, often in *Mind*. They were among the first to call themselves "empiricists," arguing that psychology could provide a scientific basis for philosophical progress.

Idealists held that empirical psychology depended on premises developed by Locke, Berkeley, and Hume. These premises were allegedly absurd because they rendered ideas of extension, as well as other ideas crucial to natural science, unreal. Those who wanted to advance psychology towards becoming a legitimate science were forced to engage these philosophical attacks, while at the same time to develop empirical theories that could successfully explain some characteristics of experience. I show how James's theory of space perception accomplished both tasks.

In developing this theory, James found he had to reject the Lockean notion that reality is associated with passively-registered sensations. James also abandoned Berkeley and Hume's claim that ideas are ultimately derived from atomic sensations. Instead, James presented experimental evidence that sensation is a continuous stream. The mind must actively parse this stream if it is to gain a coherent representation of its environment. I argue that James's stream-of-thought thesis served as a presupposition of his entire psychology. The thesis showed how the labor of investigating the mind could be divided between philosophers and scientists, and in a manner sensitive to the concerns of both. The stream thesis also provided a scientific basis for a new philosophical empiricism that, I argue, has a hidden legacy in the history of analytic philosophy.

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Cheryl Misak | Frederick Schmitt

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Contents

Abbreviations

Citations to the following works will be given by corresponding abbreviations. These will typically be followed by a page range that, where appropriate, will be correlated with Books, Volumes, Sections, and so on, according to the format given after relevant entries, below.

CMP — Charles W. Morris Papers owned by the Institute for American Thought at Indiana University Purdue-University Indianapolis.

CWJ — William James, *The Correspondence of William James* (James 1992-2004). Citation format: n.m, where n denotes the volume number, and m denotes the page number.

CPR — Immanuel Kant, *Critique of Pure Reason*, translated by Norman Kemp Smith (Kant 1781_1787/1965). Citation format: An, Bn, where n denotes the page number in the relevant edition.

EPh — William James, *Essays in Philosophy*, Works Edition (James 1978).

EPs — William James, *Essays in Psychology*, Works Edition (James 1983).

ECHU — John Locke, *Essay Concerning Human Understanding* (Locke 1700/1975). Citation format: n.m.o, where n denotes the book number, m denotes the chapter number, and o denotes the section number.

ERE — William James, *Essays in Radical Empiricism*, Works Edition (James 1912/1976).

GWR — Thomas Hill Green, *Works of Thomas Hill Green* (Green 1894). Citation format: n.m, where n denotes the volume number, and m denotes the page number.

INT — Thomas Hill Green, "Introduction to Hume's *Treatise of Human Nature*" (Green 1874/1894). Citation format: §n, m, where n denotes the section number, and m denotes the page number. Where

multiple passages are cited, section numbers follow §§, and page numbers are omitted.

MEN — William James, *Manuscripts, Essays and Notes*, Works Edition (James 1988a).

ML — William James, *Manuscript Lectures*, Works Edition (James 1988b).

MT — William James, *The Meaning of Truth*, Works Edition (James 1909/1978).

PP — William James, *The Principles of Psychology*, Works Edition (James 1890/1981).

PBC — William James, *Psychology: Briefer Course*, Works Edition (James 1892/1984).

PRL — Thomas Hill Green, *Prolegomena to Ethics* (Green 1883/1906). Citation format: §n, m, where n denotes the section number, and m denotes the page number. Where multiple passages are cited, section numbers follow §§, and page numbers are omitted.

RBP — Ralph Barton Perry, *The Thought and Character of William James* (Perry 1935). Citation format: n.m, where n denotes the volume number, and m denotes the page number.

THN — David Hume, *Treatise of Human Nature* (Hume 1739/1978). Citation format: n.m.o, p, where n denotes the book number, m denotes the part number, o denotes the section number, and p denotes the page number in the Selby-Bigge edition.

WB — William James, *The Will to Believe, and Other Essays in Popular Philosophy*, Works Edition (James 1897/1979).

WJP — William James Papers, Houghton Library, Harvard University, Cambridge, MA. Citation format: xyz, where xyz refers to the Houghton Library call number. All passages I quote and cite are by permission of the Houghton Library, Harvard University.

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).

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[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 positivism[4] and analytic philosophy owe to neo-Kantians. Contrary to received wisdom, early figures of these two movements were often *hostil*e 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]

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[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?

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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.

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[7] In 1930, Herbert Feigl immigrated to the Unites 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

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[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 Arayan-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]

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[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 well[13]—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]

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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

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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.

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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

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[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,

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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.

Part One

Empiricism:
On the Origin of a Historical-Philosophical Concept

Chapter One
Empiricism: A Tool for Attacking Psychologists

> The *names* of our categories may be very old and stable, but the *concepts*, the modes of classifying and interpreting which they represent, undergo progressive alteration with the advance of thought.
>
> C. I. Lewis (Lewis 1929/1956, 235)

1. Introduction to Part One

William James published his first major article in 1878. At that time, the word "empiricism" was not widely used by English-speaking philosophers. Even the most scholarly dictionaries listed no philosophical sense of the term, from Noah Webster's erudite *American Dictionary of the English Language* (1860) to John Ogilvie's then-authoritative[18] *Imperial Dictionary of the English Language* (1883).

Such dictionaries listed two senses of "empiricist," both pejorative. In the medical fields, an empiricist was a quack, one with no formal education who practiced medicine anyway. In common language, the word signified an ignoramus, an uneducated person who had pretensions to knowledge.[19]

It is not that the philosophical sense of the word had fallen out of fashion. There never had been a consistent philosophical meaning of "empiricism" in English. None of the canonical British Empiricists described themselves using this term. Even J. S. Mill, on many accounts the last of the classic empiricists, explicitly disavowed commitment to any position bearing the name (Van Fraassen 2002, 207).

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[18] The first fascicle of the *Oxford English Dictionary* appeared in 1884, covering A to Ant in 352 pages. It would be years before the *OED* would seriously rival Ogilvie's 4-volume behemoth, which was aptly subtitled: *Complete Encyclopedic Lexicon, Literary, Scientific, and Technological*.

[19] See Appendix I for a timeline and summary of dictionary definitions of "empiricism." If there is any doubt that these dictionaries did not give a philosophical gloss to "empiricism" because they did not cover philosophical terms of art at all, consider that Ogilvie's *Imperial Dictionary* has entries for the following philosophical terms: "metempiricism" ("transcendentalism" is given as a synonym), "mode" (a special sense is devoted to Locke's use of the term), "doctrine of occasional essence" (refers to the Cartesian explanation of how mind and matter interact), and "realism" (contrasted with "idealism" in metaphysics), to take just a few examples.

Philosophers had tried to co-opt "empiricism" from time to time as a term of art, using the word in a variety of ways usually to describe the follies of others. But no stable philosophical meaning—*a fortiori*, no favorable philosophical meaning—coalesced until the 1880s.

During that decade, the concept came to play a central role in philosophical debates over empirical psychology. The most important exchanges were published in the British journal *Mind*. By the end of the 1880s, a philosophical connotation finally appeared in scholarly dictionaries.[20]

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[20] There is something curious about the first dictionary appearances of a philosophical sense of "empiricism." The earliest such entry I can find is in 1889 (see Appendix I), and the entry cites then-recent examples. But in 1891, the "E" fascicle of the *Oxford English Dictionary* not only included a philosophical usage of "empiricism," but supported the usage with examples dating back to 1803. It is peculiar that the *OED* suddenly found a 90-year history of a usage of "empiricism" that had been in English dictionaries only two years, up to that point. Two factors explain this. First, "empiricism" appeared with more frequency in German-language philosophy (especially in connection with Kant) during the 19th century than in English-language philosophy. Since English-speaking philosophers sometimes engaged with German philosophy, there are scattered examples of early English usages of "empiricism" in discussions of Kant. The *OED*'s first historical citation is just such an example. The citation is to an 1803 article in the Edinburgh Review of a French book on Kant (the citation is reproduced in Appendix I).

Kant had used "empiricism" in the first *Critique*, in the "Antinomy of Pure Reason." He identified four antinomies, or inconsistent pairs of cosmological ideas that could neither be given in experience nor brought by reason into harmony with the laws of nature. In "Section 3", Kant associated one side of each inconsistent pair with a type of philosophy. Empiricism ("*der Empirismus*"), exemplified by Epicurus, was associated with what Kant called the "antitheses" of the antinomies. Dogmatism (*der* "*Dogmatismus*"), exemplified by Plato, was associated with the "theses" of the antinomies (CPR, A466/B494 - A476/B504). Kant's second use of "*Empirismus*" came in the final chapter of the Critique, where he gave a "History of Pure Reason." He wrote that philosophy had made progress primarily in its treatment of three controversies. The first controversy was over the object of rational knowledge. Sensualists think reality is only to be found in objects of the senses. Intellectualists think the senses only give illusion. The second controversy concerns the origin of rational knowledge. Empiricists ("*Empiristen*") hold that experience is the source of such knowledge, while noologists ("*Noologisten*") hold that reason alone is the source. Curiously, in this passage empiricism is exemplified by Aristotle, and sensationalism by Epicurus (whereas earlier Epicurus was the exemplar of empiricism). It is also interesting that Locke, not Hume, is the chief recent spokesman for empiricism. The third controversy concerns the methods of philosophy. Naturalists eschew reason. Those who use a scientific method ("*einer szientifischen Methode*") can be dogmatists, like Wolff, or skeptics, like Hume (CPR, A854, B882).

Even though one can find occasional English-language references to Kant's discussions of empiricism, this seems not to be a prominent strain of English-language Kant scholarship in

Over the next half century something dramatic happened to empiricism. The concept came to signify such a popular project that by 1939, the American philosopher Cornelius Benjamin could confidently proclaim, "the problem is no longer whether one is to be a rationalist or an empiricist, but what sort of an empiricist one is to be" (Benjamin 1939, 517). He was writing in the influential *Journal of Philosophy*.

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the 19th century. It was not prominent enough for the Kantian sense of "empiricism" to reach English dictionaries before 1889; but it was just prominent enough that the *OED* could retrospectively identify some scattered usages dating back to Kant's day. Moreover, when philosophers used the word as a term of art, they often injected the word with quite different meanings before the 1880s. In the English-speaking world, then, the philosophical notion of empiricism was used at best very rarely before the '80s, even in connection with Kant; and when it was used, authors could not assume their readers would be familiar with the concept.

The second factor in pre-1880 usages of "empiricism" in English is that philosophers sometimes used the word in one of its everyday senses. Thus, the next earliest example cited by the *OED* of a distinctively philosophical sense owes to James Mill. But Mill simply used "empiricism" to mean pretense to wisdom in the absence of rational methods: "Mere observation and empiricism, not even the commencement of science" (*see* Appendix 1). This is exactly the older, pejorative usage of the term. The usage appears distinctively philosophical to *OED* editors merely because the cited author was himself a philosopher, it seems.

One might make a similar point about van Fraassen's otherwise excellent discussion of early usages of "empiricism." He cites Bacon's use of the word as a "clear and early precedent" for our modern usage. Bacon wrote that the sciences have been practiced by

> empiricists or dogmatists. The empiricists, like the ants, merely collect and use: the rationalists, like spiders, spin webs out of themselves. But the way of the bees lies in between: she gathers materials from the flowers of the garden and the field and then by her own powers transforms and digests them; and the real work of philosophy is similar. (Quoted in Van Fraassen 2002, 203)

Van Fraassen cites a similar usage in Leibniz. But these usages are not distinctively philosophical. In these cases, the word was being used not as a term of art, but in its everyday, pejorative sense. Below, I will make a similar case about T. H. Green's use of the word "empiricism" to denote a simplistic reliance on pre-theoretical, common knowledge.

So again, the fact that philosophers before the 1880s use the word "empiricism" does not tell against my claim that its distinctively philosophical usage only became established in the 1880s. To sum up, "empiricism" does appear from time to time in English-language philosophy before the 1880s. But in the rare cases where it appears as a philosophical term of art (*e.g.*, in connection with Kant), it does not appear regularly enough to have established itself as a working part of the language of philosophical English.

What happened during the interim? What accounts for empiricism's evolution from philosophical epithet to big tent of English-language philosophy? One burden of my dissertation is to begin to answer this question.

In Section Two of this chapter, I analyze our contemporary notion of empiricism. After all, we must clearly identify a concept before we can ask how it evolved. In Section Three, I consider and reject the prevailing explanation of how this term evolved. The prevailing view is that T. H. Green either invented or popularized the concept, and that we inherited it from him virtually unchanged. I show that this view severely distorts Green's actual role in the invention of empiricism. He did not use the concept in anything like our contemporary manner. In Section Four, I develop an alternative account of how Green and his idealist allies *did* use the term during the 1870s. The task of getting clear on how Green conceived of his opponents is of crucial importance to my story. James's version of empiricism—the version I will explore in most detail—was formulated partly as a response to Green. In Section Five, I deal with some objections to the methodology used in this chapter.

A preliminary word on that methodology is in order, here. Many historians pay lip service to the view that our current understanding of history profoundly impacts the way we practice philosophy today. For example, Richard Rorty writes:

> The self-image of a philosopher—his identification of himself as such (rather than as, perhaps, an historian or a mathematician or a poet)—depends almost entirely upon how he sees the history of philosophy. It depends upon which figures he imitates, and which episodes and movements he disregards. So a new account of the history of philosophy is a challenge which cannot be ignored. (Rorty 1982b, 41)

I partially concur with the view expressed here. Rorty thinks one's self-image as a philosopher (as opposed to as a historian or mathematician) typically depends[21] on

[21] I agree that a philosopher's self-image is likely to be *tied up* with a particular way of understanding the history of philosophy. But I do not agree that a philosopher's self-image usually "depends" on his or her view of history. Sometimes it does. But about as often, it is the philosopher's interest in this or that contemporary research project that drives his or her self-image as a philosopher. In such cases, philosophers' self-images do not depend on their reading of history, it seems to me—the self-image depends on contemporary intellectual interests. This is an important point because it is also common for a philosopher's particular reading of history, like his or her self image, to depend on current intellectual interests, and

which historical figures one thinks are worth emulating. I would go further, in this respect—one's understanding of one's own philosophical project (as naturalistic rather than Kantian, say) is often bound up with a sense of which historical movements one thinks are worth emulating.

One premise of this dissertation is that my historical subjects were also people whose practice of philosophy was tied up with how they understood history. Thus, I will be exploring the history of a philosophical debate about psychology. But I will also be exploring the history of the history of this debate, as my subjects saw it. This is because the struggle over psychology was also a struggle over warring interpretations of history, and I have found that these two stories must be told in tandem.

2. Contemporary Interpretation of Empiricism

Whether we are historians or not, contemporary philosophers tacitly treat empiricism as what I shall call a "historical-philosophical concept." I mean that we typically take the concept to refer not just to a philosophical thesis. We also take it to refer to a set of philosoph*ers* we group together precisely in virtue of their common commitment to the aforementioned thesis.

This makes tracing the evolution of empiricism a complicated affair. One can inquire about the history of *the philosophical thesis* that "empiricism" now denotes. That is to say, one can ask about the history of (some version of) the view that knowledge must be justified by appeal to experience. I will use "'epistemological empiricism'" to refer to this first sense of the word "empiricism."[22]

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not vice versa. In short, sometimes our particular interpretation of history powers our self-identity; sometimes our self identity powers our particular interpretation of history. So one should not insist that self-image always simply "depends" on one's reading of history, as Rorty claims.

[22] Philosophers commonly distinguish between 'concept-empiricism', the semantic view that all concepts are derived from experience, and 'knowledge-empiricism', the epistemological view that all propositional knowledge derives from experience. Note that the former version of empiricism is a semantic thesis, but it is typically of interest for its epistemological implications. On this distinction as it relates to Locke, *see* (Ayers 1991/1993, 14-15). Ayers thinks Locke is only a 'concept-empiricist'; Green appears to saddle Locke with a version of 'knowledge-empiricism', though Green himself does not employ this distinction. It is

But one can inquire about the history of *the history* to which "empiricism" refers, as well. In other words, one can ask about the history of the schematism that describes early modern philosophy as an epistemological dispute between British Empiricists and Continental Rationalists. I will use "British Empiricism" when I want to refer specifically to this second sense of the word "empiricism."

I will argue that the histories of the concepts 'epistemological empiricism' and British Empiricism are intertwined in two respects. First, the concept of 'epistemological empiricism' developed in tandem with the historical schematism that divides modern philosophy into an epistemological dispute between British Empiricism and Continental Rationalism. Second, our contemporary usage of the concept empiricism is constrained by *both* the epistemological notion of 'empiricism' *and* by the historical category of British Empiricism. If this second point is right, then we tacitly treat empiricism as a kind of higher-order concept. I contend that this higher-order concept itself has a history, a history I will explore in this dissertation.

A word on some typographic conventions is in order, here. I will put single quotation marks around –ism words that refer, without invoking any particular history, to a position or stance (*e.g.*, 'adaptationism' is the view that natural selection is the only significant engine of evolutionary change). I will capitalize words that refer to historical movements in the first instance (*e.g.*, the New Realists published a joint platform in 1912). I use double quotation marks to distinguish between use and mention.

But how should I write about concepts that words like "empiricism" denote? I am arguing precisely that our concept of empiricism cannot be reduced without remainder either into a bare philosophical position, or into a simple historical category. I will underline words that refer to such "historical-philosophical concepts," as I am calling them.

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important to note that Green's chief interest in Locke is not epistemological, but metaphysical, as we shall see below.

Finally, I will leave words like "empiricism" un-underlined, uncapitalized, and without quotation marks when I wish to remain agnostic on how the word is being used. Often such agnosticism is helpful when I am speaking about other people's usage. For example, I might write "Brink thinks that Green's target was empiricism," if it is unclear whether Brink thinks Green meant to attack a position or a historical movement.

Here is a summary, for ease of reference:

SUMMARY OF TYPOGRAPHIC CONVENTION

'empiricism'	=	a philosophical position
Empiricism	=	a historical movement
empiricism	=	a historical-philosophical concept
empiricism	=	either a position, a historical movement, or some combination of the two

I will use these typographic conventions for the rest of this dissertation.

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Today, "empiricism" typically has hybrid connotations. I will now give an account of how such hybrid concepts function. I will call concepts defined in terms of mutually reinforcing theoretical and historical considerations "historical-philosophical concepts." Consider the following definition schema:

SCHEMA FOR HISTORICAL-PHILOSOPHICAL (HP) CONCEPT X:

(1) THESIS: concept x denotes a philosophical thesis or stance, and the thesis or stance was affirmed by the philosophers mentioned in (2).
(2) HISTORY: a canonical set of historical figures, S, are to be grouped together on the basis of their common commitment to the thesis or stance mentioned in (1).

I will now explain the sense in which each part of the definition-schema constrain one other. I will do this by examining one HP concept, empiricism. I will then offer evidence that my HP analysis does capture the way contemporary philosophers in fact use the concept empiricism.

What makes empiricism a slippery concept is precisely the relationship between the two parts of its definition. Any adequate usage of "empiricism" must conform to *both* parts of its definition, and a change in one part will require a corresponding change in the other. Consider how the history constrains the thesis. Though there

may be no single philosophical thesis that everyone agrees constitutes 'empiricism,' the history we associate with empiricism (the HP concept) limits how much flexibility we will tolerate in specifying such a thesis. If a philosopher used the adjective "empiricist" to describe a philosophical position clearly held by Descartes, Spinoza, and Leibniz ("DSL," henceforth), and denied by Locke, Berkeley, and Hume ("LBH," henceforth), we would think the philosopher did not know how to use the word "empiricism." Moreover, as we will see below, one who modifies standard ways of filling in (1) is often expected to make it plausible that LBH can be read as sharing a commitment to this new variant. If this is right, then the thesis one specifies in any construal of empiricism is constrained by the history one associates with the concept.

And the history one associates with empiricism is similarly constrained by the thesis one chooses. If a philosopher grouped LBH together on the basis of a pure historical fact—these philosophers' self-conscious effort at building a school united in its opposition to DSL, say—we would (or should, at any rate) regard the philosopher as historically ignorant.[23] LBH did not regard themselves as forming a school. They did not regard themselves as united in opposition to Cartesian Rationalists. And they certainly did not regard themselves as united by a shared theory about the source of all knowledge.

[23] For a helpful summary of problems scholars have found with the notion that LBH constitute one coherent tradition, *see* (Loeb 1981, 32-36). One famous exchange among historians highlights the point. (Popkin 1959b, 71) wrote that "It is … highly questionable whether Hume ever read Berkeley, or derived any views from him." (Wiener 1959) challenged Popkin to substantiate the claim. Popkin responded in (Popkin 1959a) by maintaining that Hume was not seriously engaged with Berkeley's views, and that the former's passing references to Berkeley can be explained without supposing that Hume had ever even read Berkeley. In 1963 a Polish journal published a letter in which Hume recommended that a friend read Berkeley's *Principles of Human Knowledge*. (Popkin 1964) finally conceded that Hume had read Berkeley, but that the former was nevertheless not seriously engaged with the latter's philosophy. Today, it is still common to treat Locke, Berkeley, and Hume as bearing philosophical affinities to one another. But in the wake especially of Popkin's work, it is no longer tenable to hold that these three formed a self-conscious school united in opposition to what we now call Continental Rationalism. *See* also (Bracken 1977-1978; Kuklick 1984; Loeb 1981; Norton 1981; Norton 1982; Van Fraassen 2002, 201-225). *Cf.* (Ayers 1984).

Instead, we expect those who group LBH together to do so on the basis of shared philosophical commitments among the three that we can ascribe retrospectively. Typically, the shared commitment involves the view that experience plays a strong role in knowledge. If this is right, then the historical part of any construal of empiricism is constrained by the thesis one specifies in part (1).

Now I will present evidence that what I have just written accurately captures our contemporary interpretation of empiricism.

We find a straightforward example of a definition of empiricism with two mutually-constraining parts in the preface to Garrett and Barbanell's *Encyclopedia of Empiricism*. "Empiricism," we read, can be used to refer to a "philosophical emphasis" on experience over a priori reasoning. It can also indicate

> a particular philosophical movement or tendency of the seventeenth and eighteenth centuries, originating and centered in Great Britain …. Its … most important representatives are John Locke, George Berkeley, and David Hume. (Garrett and Barbanell 1997, ix)

True, the authors continue, these thinkers did not call themselves "Empiricists."

> Nevertheless, they and the thinkers most directly influenced by them clearly conceived of themselves as seeking a more experiential basis for philosophy. In that sense, although they lacked the term, they conceived of themselves as empiricists. (Garrett and Barbanell 1997, x)

Thus, Empiricism (the tradition) is to be identified by its founders' common 'empiricist' epistemology.

Let us look more closely at Garrett's own use of "empiricism." Garrett's usage illustrates that whatever thesis empiricism is used to denote, the thesis is typically epistemological. This will be important when we contrast late-19th century interpretations. Garrett's usage also illustrates the way in which the thesis and the history components of empiricism typically constrain one another.

Garrett proposes five flavors of empiricism in his book on Hume. Note that each sense of empiricism contains an epistemological component; and that Garrett's senses of empiricism are supposed to be important precisely because they specify a set of substantive philosophical commitments that DSL (mostly) oppose, and that LBH (mostly) support. Thus, for each sense of "empiricism," Garrett is at pains to

offer evidence that each member of DSL in fact oppose empiricism under the sense in question, and that each member of LBH support it.[24]

Here are Garrett's five brands of 'empiricism.' First, Hume is a "methodological empiricist" because he thinks observation should be the "main determinant of theory" (Garrett 1997, 30-33). Second, Hume is a "conceptual empiricist" because he holds concepts all to be derived from sense experience (pp. 33-34). Third, Hume is a "nomological empiricist" because he holds that laws of nature can only be known on the basis of experience (pp. 34-35). Fourth, Hume is an "explanatory empiricist" because he thinks there are brute facts that resist sufficient explanation (pp. 35-36). Fifth, Hume is a "reductive empiricist" because he often employs a pattern of argumentation where he explains the existence of a state of affairs by defining that state of affairs in terms of what would typically be regarded only as *evidence* for the existence of that state of affairs.[25]

The first meaning of 'empiricism' is epistemological in the sense that it gives us a method for settling disputes over theoretical knowledge-claims. The second is epistemological in the sense that LBH are not portrayed as interested in semantics as an end in itself, but only interested insofar as knowing the source of our concepts helps figure out how to justify knowledge claims in which they are employed, allegedly. The third brand of 'empiricism' is straightforwardly epistemological. Garrett presents the fourth as simply the negation of the principle of sufficient reason—a principle that maintains optimistic expectations about which facts we can hope to have an explanation for. Explanation is, for Garrett, an epistemological notion. The fifth brand of 'empiricism' has epistemological concerns built-in—

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[24] Garrett does allow exceptions. For example, Descartes appears to be an explanatory empiricist, "despite his 'rationalism' in other respects," (p. 35).

[25] This last brand of "empiricism" can be clarified with two examples. Locke defined personal identity in terms of a subject's memory of his own chronologically-continuous set of experiences. Critics counter that this definition conflates the *evidence* for personal identity with the very concept of personal identity itself (pp. 36-37). A second, prominent example is Hume's definition of causation in terms of constant conjunction (p. 38). Again, critics complain that Hume is conflating part of the evidence for a causal relation with the relation itself.

according to Garrett, reductive empiricists justify their argument strategy by insisting it is the only way to avoid epistemological skepticism (p. 36).

Thus, Garrett proposes five special varieties of 'epistemological empiricism.' He motivates his use of each by arguing that for the most part, LB & H are all committed to the version of 'empiricism' in question, and that DS & L all deny it.

As we proceed, we will need to distinguish carefully the sense of empiricism at issue in the 19th century from the way we, today, cash out this idea. Therefore, I will use the phrase "contemporary interpretation of empiricism" when I mean to talk about our current understanding of this concept, which we can now record as follows:

CONTEMPORARY INTERPRETATION OF EMPIRICISM (CIE):

(1) THESIS: 'empiricism' is an epistemological thesis emphasizing the role of experience in knowledge, a thesis affirmed by the philosophers mentioned in (2).

(2) HISTORY: The Empiricists were a set of 17th and 18th century philosophers—Locke, Berkeley, and Hume—who should be grouped together in virtue of their commitment to the thesis mentioned in (1).

Note that CIE follows the form of the HP concept schema—that is to say, our contemporary interpretation of empiricism is what I am calling a historical-philosophical concept. In future chapters, I will use "empiricism" to denote a concept whose meaning evolved over time. I will use "CIE" strictly to refer to empiricism in its present incarnation.

CIE is itself a sketch, and is not intended to be a complete definition of "empiricism." Below, I will argue that our contemporary interpretation of empiricism does not map neatly onto older versions of that concept. But to see that this is the case, we do not need to identify any one concrete definition that all philosophers agree upon—there are, of course, many notions of empiricism in use. For our purposes, it will be enough to see that in step (1) of our contemporary interpretation, the theses are typically *epistemological* in character; and that the figures mentioned in step (2) are almost invariably Locke, Berkeley, and Hume. (In

some cases, current usage countenances a semantic thesis or set of theses in step (1), but this is usually in service of a deeper epistemological thesis.)[26]

3. The Usual Suspect: T. H. Green

A cottage-industry in the meta-history of philosophy flourished especially between about 1959 and the early 1980s. A host of authors argued that there is something illegitimate about the idea that there were two major schools in modern philosophy, Rationalists and Empiricists.[27] The literature is especially critical of the idea that the Locke-Berkeley-Hume triad really constitutes anything worth calling a "tradition." Two questions to emerge from this literature are when and why the idea of British Empiricism became a stable historical category.

One prominent answer points to Thomas Hill Green. Green was the founder of British Idealism,[28] and a savage critic of Locke, Berkeley, and Hume. He and Thomas Grose brought Hume's *Treatise* back into print after a long absence. Green wrote a 374-page "Introduction" to Hume that criticized, from a neo-Kantian perspective, the group we now think of as British Empiricists. Several scholars claim Green was not just someone who attacked empiricism, but that he was one of the inventors, or chief popularizers, of the very concept of empiricism (Loeb 1981, 31; Norton 1981, 332-333). In this section, I will first present the best available evidence in favor of this claim. Then I will show that this evidence is not compelling.

There are three chief reasons why Green is suspected to be an inventor of the empiricism concept. First, his "Introduction" does draw together Locke, Berkeley, and Hume as the three most important figures in the tradition he criticizes. Second, Green studied and taught at Balliol College, Oxford, eventually becoming Whyte's

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[26] See fn. 22.

[27] The literature I have in mind includes (Bracken 1977-1978; Kuklick 1984; Loeb 1981; Norton 1981; Norton 1982; Popkin 1959a; Popkin 1964; Van Fraassen 2002, 201-225) (cf. Ayers 1984; Wiener 1959).

[28] One need not undertake any complicated meta-history in order to talk about British Idealism. This is because unlike the British Empiricists, Idealists (like Green, F. H. Bradley, and Bernard Bosanquet, among others) actually saw themselves as part of one philosophical movement. It is the *ex post facto* historical categories about which we need to be careful.

Professor of Moral Philosophy there. Green's students included such Idealist luminaries as F. H. Bradley, Bernard Bosanquet, Edward Caird, John Caird, and R. L. Nettleship (Loeb 1981, 31.n37). So his students eventually gained the stature and influence to spread widely whatever philosophical classifications they had learned from Green.

A third reason has to do with the full version of the modern-philosophy narrative as widely taught, today. Most philosophers have been trained to read modern philosophy not just as a battle over 'epistemological empiricism' between DSL and LBH. A crucial part of the story is that *Kant* is supposed to have ended the battle by showing how to synthesize what was right about the two respective positions. This is similar to Green's version of events. He argues that we must read Locke, Berkeley, and Hume in order to appreciate "the intellectual necessity of the Kantian answer," (INT, §3, 3).

Green may have contributed to the creation of British Empiricism by grouping Locke, Berkeley, and Hume together as the key figures of a philosophical tradition. But I will now argue that Green did not conceive of his targets in the epistemological manner suggested by CIE. Thus, he could not be the inventor of that framework, at least as now understood.

Virtually every philosopher who writes about British Idealism today uses "empiricism" as shorthand for whatever tradition or position Idealists were arguing against (Brink 2003, 9; Hylton 1985, 91; Hylton 1990, 22; Lemos 1968, v-vi; Norton 1981, 332; Randall 1966, 218; Rorty 1979, 147).[29] This is a costly mistake,

[29] Some philosophers use "empiricism" to denote a *tradition* Idealists argued against. For example, (Hylton 1990, 22) says that according to Green's "picture, empiricism forms a single school of thought …" that is constituted by LBH. Other philosophers use the phrase to mark a philosophical position. For example, (Brink 2003, 9) says Green wants to attack "a form of empiricism that he finds in common sense, as well as philosophical thought," citing §20 of Green's *Prolegomena to Ethics*. Note that Green did not actually use the word "empiricism" in the cited section. Brink does give a short but more or less accurate description of a philosophical position Green is concerned to argue against: "In this tradition, reality is associated with simple ideas delivered to the senses and contrasted with the workmanship of the understanding and relations, which are in some sense illusory or conventional," (p. 10). But this is not the doctrine we *now* call "empiricism." The brand of empiricism Green targets, for Brink, is a metaphysical doctrine about the distinction

for it obscures what was at stake in Green's attack on LBH. Green's ultimate goal was not to criticize an *epistemology* shared by LB & H. Green wanted to attack this group's shared metaphysics, a metaphysics Green saw as the philosophical foundation for empirical psychology. In other words, the philosophical connotations of empiricism—step (1) of CIE—do not map neatly onto early Idealists' conceptions of their targets. Note that I will use the phrase "early Idealists" to denote Green and his chief early ally, Edward Caird.

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I will begin by reviewing two standard accounts of Green on empiricism. Norton claims we inherited a particular outline of philosophical history from Green.[30] Although in the 20th century, Norton writes, we discarded Green's Hegelian vocabulary (no more talk of "dialectical movements" for *us*), we retained that history's substantive core.

> … There has seemed to be little reason to dispute what could be called the 'factual' side of Green's account, and thus in the past 60 or so years our favourite, perhaps one

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between reality and fantasy. The thesis component of empiricism, as it is now standardly understood (*see* fn. 22, *above*) is an epistemological doctrine about the need to justify knowledge claims by appeal to sensation. To be sure, the epistemological claim is related to the metaphysical claim. But it is a mistake to run the two together.

[30] Green himself is supposed to have inherited these ideas from Thomas Reid. Norton claims Reid is the originator of the idea of that empiricism starts with Locke, is continued by Berkeley, and is taken to its logical conclusion by Hume. (Reid is occasionally cited in this connection by other authors as well.) For example, Norton writes that according to Reid, Berkeley failed to see a lingering problem "inherent in the empiricist theory"; but Hume did see the problem, and carried empiricism to its logical conclusion (Norton 1981, 331-332). In fact, Reid did not use the words "empiricism" or "empiricist" at all. It is true that he linked Berkeley and Hume with Locke, but he did not link these characters in virtue of a shared empiricism.

There are two reasons we ought not to assimilate Reid's understanding of history to CIE. First, Reid sees Berkeley and Hume as exploring principles laid down not *just* by Locke, but by Descartes and Malebranche as well (Reid 1863, I.101). This is peculiar if we are working with the CIE notion of empiricism—Descartes, that supposed grandfather of rationalism, is here portrayed as a grandfather of Berkeley and Hume. Second, the principle that ties this tradition together is not the principle of 'epistemological empiricism', under any name—not the principle that knowledge must be justified by appeal to experience. The principle tying together Descartes, Malebranche, Locke, Berkeley, and Hume concerns *perception*, according to Reid—that perception's objects are ideas, or some other "image presented to the mind" (Reid 1863, I.263). So Reid's version of Berkeley and Hume's position in history is a far cry from the version given by CIE.

> could say our standard, historians of philosophy have taken for granted the claims that Rationalism and Empiricism were disparate movements, that Locke is to be understood as opposing the Rationalists, and that Berkeley and Hume can be satisfactorily understood as developments of the Empiricism established by Locke. (Norton 1981, 333)

Norton suggests that we finally give up "the 'factual side'" of Green's account. But notice that the "'factual' side" of Green's account is supposed to hold that LBH are leaders of empiricism, a movement intrinsically opposed to rationalism.[31] I agree that current philosophers often accept this framework uncritically, and that we ought not to do so. But Norton is wrong about one thing—the framework does *not* come from Green. In fact, Green did not work with anything like the ideas imputed to him here. He was not even aware of this now-standard framework, as we will see, which suggests that its widespread use would only come later.

The question of whether Green subscribed to the familiar framework is not trivial. Norton goes on to claim that Green's *chief goal* in the "Introduction" was to argue precisely against empiricism:

> T.H. Green set about showing both the legitimacy and inevitability of this victory [of German philosophy over the "intellectual world"] by editing the first (and only) complete edition of Hume's philosophical works. The cunning reason for this otherwise puzzling step was simple: Green wanted to show that Hume had in fact brought a certain mode of philosophy - empiricism - to its ultimate and fully negative conclusion, and thus to show that such remaining empiricists as John Stuart Mill were mere anachronisms [fn omitted].[32] (Norton 1981, 332)

Norton is right that Green aimed to show that Hume brought a certain philosophical tradition to its logical end—but the tradition Hume's work was supposed to reduce to absurdity was not empiricism in anything like our contemporary interpretation of that project.

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[31] I underline "empiricism" and "rationalism" here because Norton seems to think of these concepts as involving both a historical schematism and a substantive philosophical commitment.

[32] Norton's footnote cites the first five section of (INT), which do not use the words "empiricism" or "empiricist"; they do not suggest that LBH are united by a shared *epistemology* at all. For more on the way these sections are commonly misread, *see below,* pp. 150 *ff*.

Norton's account of Green's view of history is standard (for similar accounts, see the in-text citations on page 37). Consider one more example. David O. Brink (now a leading Green scholar, among other things), concurs:

> Green is concerned with a form of empiricism that he finds in common sense, as well as philosophical thought (§20).[33] Though Green believes that John Locke's *Essay concerning Human Understanding* was largely responsible for making empiricism philosophically influential, he thinks that only David Hume adheres to empiricist principles consistently (*Works*, i.1-5, 132) and that, as a result, the full metaphysical and epistemological difficulties with empiricism become clear only in Hume's work, especially his *Treatise of Human Nature*. (Brink 2003, 10)

Again, Green's aim is supposed to be to show that Hume reduced empiricism to absurdity. I admire both Norton and Brink's respective work.[34] However, this portrayal of Green is seriously mistaken.

Brink correctly notes that Green associated Locke's empiricism with "common sense." But Brink slides into the incorrect claim that Green thought Lockean empiricism was influential in *philosophy*. It is true that Green thought Hume gave the most consistent expression to something in Locke's philosophy. But that something was not Locke's 'epistemological empiricism.' It was a metaphysical system meant to undergird a science of mind, as we will see in the next section.

What evidence is there to support Norton and Brink's view that Green was attacking CIE-style empiricism? Few scholars offer positive evidence of this claim. Norton is an exception. At (Norton 1981, 332), he cites the following passage. Green did write that Locke "gathered up the results of the 'empirical' philosophy of his predecessors" (INT, §3, 3). Norton infers that since, on Green's view, Hume

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[33] This is a reference to Green's *Prolegomena to Ethics,* where Green associates Locke—but not Berkeley or Hume—with "common-sense." Green does not use "empiricism" or "empiricist" in this passage. He does not mention the view that knowledge somehow reduces to experience, either.

[34] I hasten to add that (Norton 1981) is a stab at the sort of meta-history of philosophy I pursue in this chapter. His work has been influential on my own thinking. But I cannot subscribe to the story that arises out of his meta-history. Brink's book does a wonderful job of presenting Green's moral philosophy for a contemporary audience. But his brief treatment of Green's view of history—particularly concerning the history of metaphysics and epistemology—is also not accurate.

reduced certain Lockean principles to absurdity, the principles in question must also involve "empiricism."

This passage provides a weak foundation for Norton's inference—but as we have nothing stronger to work with, let us consider it in some detail. There are two things to notice about this passage. First, Green associated the history of "'empirical' philosophy" with Locke, *not* with either Berkeley or Hume. Further study of the way Green used "empiricism" reveals that he used the word to denote some position that *distinguishes* Locke from Berkeley and Hume. If I am right, then the passage Norton cites is obviously not good evidence that Green saw LB & H as tied together by their shared "empiricism," whatever Green meant by this word.

Second, note that Green did not actually use either "empiricism" or "empiricist" in the passage Norton cites. In fact, Green never calls *anyone* an "empiricist." The term "empiricism" does appear elsewhere in the *Introduction*, but far too rarely to serve as any organizing concept—it appears exactly four times in the entire 371-page work (INT, §118, §119, §224, §227). Neither "empiricism" nor "empiricist" appears at *all* in Green's lengthy discussions of Hobbes, Spencer, Lewes, Mill, or Kant, either. That is, neither word appears in the first two volumes of the *Collected Works* (GWR, I-II), save for the four mentioned instances in the "Introduction" to Hume.

In each of the four instances where Green does use "empiricism," he uses the word not to associate Berkeley and Hume with Locke, but to associate Locke with philosophical views to which the *common person* subscribes. I will now survey each of these occurrences of "empiricism" to show that Green used the word differently from the way Norton and Brink think he used it.

Consider Green's first usage. He said Locke could "claim authorship at once of the popular empiricism of the modern world, and of its refutation" (INT, §118, 98). This passage is ambiguous. To what does the phrase "the popular empiricism of the modern world" refer? If "the modern world" is Green's shorthand for the world of 17th and 18th century *philosophy*, then this passage may assert that Locke invented a view called "empiricism" that was "popular" among early modern

philosophers. This reading would be consistent with the Norton and Brink's view. But this reading is not defensible.

Green more likely meant the phrase "popular empiricism" to be a synonym for something he usually called "popular philosophy." Green *often* wrote that Locke was the author of this popular philosophy. The substitution of "empiricism" for "philosophy," here, emphasizes the allegedly *ignorant character* of popular thought. Green was not using "empiricism" as a term of art, but as the then-common epithet evoking pretensions to knowledge among the untutored (see Appendix I). Moreover, by "the modern world," Green probably meant *the contemporary world*—viz., his own, Late-Victorian Europe. Green saw Lockean philosophy as still dominating popular thought, among Victorians. A closer look at the Greenian notion of "popular philosophy" supports my reading.

In "Popular Philosophy in its Relation to Life" (first published in 1868) Green drew a parallel between the public role of philosophy in Victorian England and in Ancient Greece. The Sophists used philosophical ideas merely for rhetorical value. According to Green, this shows that philosophy had a sweeping, popular appeal in the ancient world. Otherwise Sophists could not have used philosophical ideas for public persuasion (GWR, III.92).[35] Philosophical ideas were being used for public persuasion—for sophistry—in Victorian England as well, according to Green.

"Popular philosophy" was Green's name for any set of philosophical principles to which the general public subscribed, in a given place and time. The principles thereby set out the ideals of the entire culture. The principles were popular enough that an appropriate appeal to them in public speech could be expected to have rhetorical force. For example, the notion that political freedom is intrinsically valuable is a philosophical idea that American politicians today actually evoke in their rhetoric. That this is often an effective rhetorical strategy counts as evidence

[35] A very useful essay on Green that discusses "Popular Philosophy in its Relation to Life" is (Walsh 1986). The introduction to the same volume, (Vincent 1986), is invaluable for outlining debates in Green scholarship, and for situating Green in the context of late Victorian intellectual life.

that some principle concerning the intrinsic value of political freedom would be part of contemporary "public philosophy," in Green's sense.

Green seems not to have thought that one could always find a popular philosophy in all cultures in all time periods. But Victorian Britain did have a popular philosophy, and the philosophy was descended from Ancient Greece and filtered through Locke. The popular philosophy was supposed to be a set of ideals Locke had popularized, a set of ideals that played a strong rhetorical role in the French and American revolutions. Green especially disliked the Lockean notion of natural human rights, which he saw as still a major component of the popular philosophy of his own age. For Green, political rights come from an individual's participation in a community, not from nature alone.[36] Green's arguments against Locke are typically intended to show that the Lockean metaphysics on which the popular idea of natural rights rests is incoherent.

It makes sense that Green would characterize the popular philosophy as a form of "empiricism," because he standardly characterized popular philosophy as unsubtle. "Genuine speculation," Green wrote, leaves "antithetical ideas … fluid and elastic." But in contrast, "popular philosophy … gives them a positive answer, Yes or No …" (GWR, III.92). This rush to give a positive answer was a mark of intellectual naïveté. *Professional* philosophy acknowledges, along with Hegel, that our deepest questions about the universe have contradictory answers. But popular philosophy hurries to resolve contradictions with simplistic pronouncements. Popular philosophy's "dichotomous formulae"—those Yes or No answers—"are inadequate to comprehend the real world of morals, religion, and law" (GWR, III.93).

Green called Locke the "parent" of contemporary, popular philosophy (GWR, III.93), the principles of which he formulated this way:

> The doctrine that man, the sensitive man, is the measure of all things, which as being *par excellence* the doctrine that fits philosophy to be an instrument of rhetoric, may be taken as characteristic of the Sophists, survived the criticism of Plato and Aristotle. … So in the modern world, the doctrines of the *Aufklärung* are not to be supposed dead and done with, because Kant outgrew them nearly a hundred years ago. From the

[36] On the topic of Green's conservative criticism of human rights in this article, *see* (Sherover 1989, 113-117).

> pulpit and the senate, from the newspaper and the journal of science, from saint and from sage, the disciple of Kant finds them smite him in the face whichever way he look. (GWR, III.93-94)

We learn from this passage that popular philosophy's characteristic doctrine is Protagoras's dictum that *man is the measure of all things*. It is important to note that Green qualified the usual way of putting this statement, emphasizing that in Lockean popular philosophy, it is "the *sensitive* man" who is the measure of all things. This phrase refers to the human being in his or her capacity for sensory experience, *as opposed to* the human in his or her capacity for intellectual deliberation. This is crucial because the fatal flaw Green finds in the Lockean "popular philosophy" is that it relies on an inadequate account of the relationship between sense and intellect.

The popular philosophy is essentially the "uncritical expression" of the familiar enlightenment ideals proclaiming people's right "to be free, to enjoy, and to understand." These ideals are supposed to have emerged in the public consciousness in the long history of poetry, religion, and metaphysics (GWR, III.97). However:

> The ethical theories of popular philosophy, however various, have this in common, that they rest wholly on feeling. Of feeling, as such, they give no account. As in the popular theory of knowledge, no distinction is made between sensation itself and the intellectual judgment of which sensation is the occasion or accompaniment, so in the corresponding theory of morals, feeling is treated as the exhaustive account of all modes of consciousness with which it is associated. (GWR, III.97)

So in their uncritical, "popular" expression, the enlightenment ideals of freedom, happiness, and understanding are somehow premised on a conception of "feeling" that fails to make adequate sense of the role of the intellect in experience. We will see in the next chapter exactly *how* this failure to understand the relationship between sensation and emotion goes awry. For now, we need to note the conclusion Green draws from this central flaw in popular philosophy. It literally results in man's[37] failure to achieve enlightenment.

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[37] For all Green's talk of enlightenment, he was not above the prejudices of his era: "As the talk of a woman or a child is tedious from the iteration of 'I like' and 'I don't like,' so the literature of … [the time of Charles II—he's talking about Bishop Butler] nauseates with the description of agreeable sensations and reflections, and with easy theories of their production" (GWR, III.98).

Thus, the usually-stodgy Green manages a stirring conclusion. I will quote Green at length, because the passage sheds light on his entire project.

> But the modern English utilitarian is generally better than his logic. In defiance of Hume and Bentham, he distinguishes higher and lower pleasures by some other criterion than that of quantity, and takes as the object to which 'expediency' is relative a 'good of others,' which involves his own. He is not practically the worse for failing to perceive that to live for such an object is to live, not for the attainment of any sum of agreeable sensations, but for the realisation of an idea, of which the philosophy that starts from feeling can give no account.

The general public shows in its practice an alienation from its own popular philosophy. Earlier in the paper, Green argued that popular philosophy evolved from the Lockean ideals of the *Aufklärung* into Millian utilitarianism. Mill famously distinguished between higher and lower pleasures, a serious departure from Bentham. Green held that Mill had no criterion to draw this distinction, unless the latter granted that community flourishing is intrinsically valuable. But this view is incompatible, somehow, with the underlying Lockean idea that all reality reduces to feeling. Green's conclusion is very important for understanding his conception of Lockean popular philosophy:

> 'Not practically the worse,'—but man, above all the modern man, must theorise his practice, and the failure adequately to do so, must cripple the practice itself. Hitherto, except from a school of German philosophers, which did not make itself generally intelligible, no adequate theory has been forthcoming, and hence that peculiar characteristic of our times, the scepticism of the best men. Art, religion, and political life have outgrown the nominalistic logic and the psychology of individual introspection; yet the only recognised formulae by which the speculative man can account for them himself, are derived from that logic and psychology. Thus the more fully he has appropriated the results of the spiritual activity of his time, the more he is baffled in his theory, and to him this means weakness, and the misery of weakness. Meanwhile, pure motive and high aspiration are going for nothing, or issuing only in those wild and fruitless outbursts into action, with which speculative misery sometimes seeks to relieve itself. The prevalence of such a state of mind might be expected at least to excite an interest in a philosophy like that of Hegel, of which it was the professed object to find formulae adequate to the action of reason as exhibited in nature and human society, in art and religion. (GWR, III.124-125)

Green seems to think that the fundamental problem with popular philosophy is *not* (just) that it rests on a false metaphysics. Ultimately, Green's complaint is that those who accept the popular philosophy are insufficiently self-critical. Their "practice"—their life in a community—is "cripple[d]" by *a failure to theorize*. Humans can only

hope to achieve enlightenment by seeking a detailed, metaphysical understanding of experience.

We can now see why Green called Lockean philosophy a form of *empiricism*. The cardinal mistake of the popular philosophy is its intellectual complacency, its failure to seek real wisdom. Real wisdom is only gained through the kind of metaphysical criticism Green associated with professional, German philosophy. Literally, the way to enlightenment is through German academic metaphysics; and popular philosophy is the height of empiricism, because it can only deliver a hollow pretension to wisdom.

The only use of "empiricism" I can find in Green's entire output, outside the "Introduction," appears in this article. Again, it is used to signify the pretension to knowledge in the absence of real learning (read "real learning" as a grasp of academic metaphysics). Green accused Butler of "laps[ing] … into the raw empiricism of popular philosophy …" (GWR, III.100).

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Here are the other three uses of "empiricism" in the "Introduction." Green portrayed "the popular Logic" as something "derived" from "Locke's empiricism" (INT, §119, 99). Later, he noted that "Locke's empiricism becomes invincible as soon as it is admitted that qualified things are 'found in nature' without any constitutive action of the mind" (INT, §224, 185). And finally, he wrote that Locke's "'empiricism'" (in inverted commas, for some reason) "could not assimilate" the view that the mind originates something real (INT, §227, 188).

Note that in all of these cases, "empiricism" is a label only applied to Locke, never to Berkeley or Hume. This seems to be because Green only regarded *Locke's* philosophy as simplistic enough to have resounded in the popular mind. While Berkeley and Hume did develop certain Lockean themes, Green thought these latter two developed such themes in a far more sophisticated way. Thus he wrote that Hume finally makes

> the doctrines of the popular philosophy … consistent with themselves, and thoroughly worked out. For that very reason, probably, his doctrine has never been itself popular, since to make such philosophy consistent with itself is to make it offensive to the 'heart,' to destroy its adaptation to the many sides of practical life, to render it

> unavailable as rhetoric. His greatest and only systematic work on philosophy, 'The Treatise of Human Nature,' fell, as he tells us, 'dead-born from the press,' and has always been better known in Germany than in England. Yet it is absolutely the last word of the philosophy of Locke. (GWR, III.106)

So Hume developed Locke's ideas with honest academic rigor. But it should now be clear that Green only used "empiricism" as a pejorative way of describing Locke's contribution to the public philosophy. Hume (and I will just baldly assert that Green had the same attitude about Berkeley) was spared this scorn because, though ultimately mistaken, Hume was a sophisticated metaphysician. Hume's hard work was sophisticated enough that his philosophy could never be co-opted by popular "rhetoric."

That Hume was not to be associated with the simplistic (read: "empiricist") popular philosophy is echoed in the "Introduction." Green wrote that Hume adopted the

> premises and method of Locke, he cleared them of all illogical adaptations to popular belief, and experimented with them on the body of professed knowledge, as one only could do who had neither any twist of vice nor any bias for doing good, but was a philosopher because he could not help it. (INT, §2, 2)

Locke's philosophy was impure. He had to keep things unsophisticated because he wanted his ideas to be adaptable for public rhetoric. But Hume followed philosophical ideas where logic led, insulating himself from the naïve demands of popular thought. Again, it makes sense that Green reserved "empiricist" for Locke—this was a Greenian epithet, not a term of art.

Another serious blow to Norton and Brink's idea—that Green read LBH as empiricists in our contemporary sense—comes from the following passage. Green actually called Locke and Hume "Rationalists":

> The genius of Locke and Hume was their readiness to follow the lead of Ideas: their spirit was the spirit of Rationalism—the spirit which, however baffled and forced into inconsistent admissions, is still governed by the faith that all things may ultimately be understood. (INT, §5, 5)

"Rationalism" contrasts here not with CIE's 'empiricism,' but with a religious orientation in philosophy that takes some facts to be explicable only by revealed

theology.[38] Even if Locke's ideas lent themselves to uncritical expression in the popular philosophy, they nevertheless were proposed in the spirit of "Rationalism." So whatever Green meant by "empiricist," it was clearly not a word meant to contrast with his label "Rationalist"—for he used *both* labels in connection with Locke.

So early Idealists did not use the *rhetoric*, at least, of CIE—the rhetoric of employing "empiricists" and "rationalists" to demarcate people according to their answer to a key epistemological question.[39] Green did not show the slightest awareness, when he used words like "rationalist" and "empiricist," that his readers might expect him to be characterizing either opposed positions in the theory of knowledge, or two warring traditions that reigned in the 17th and 18th centuries.

Finally, Green made no attempt to distinguish Locke, Berkeley, and Hume from people we now call "Cartesian Rationalists", under *any* name. The person, and position, with which Green contrasted LBH is Kant and Kantianism, as we will see below. Green never even mentioned Descartes in the "Introduction"; he once mentioned Spinoza, saying that Hume showed Berkeley to be "a Spinozist" concerning substance (INT, §341, 293); and he mentioned Leibniz on two early pages as an influence on Kant (INT, §2-3).

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Edward Caird did use the label "empiricism," and in a very different manner from Green. In *A Critical Account of the Philosophy of Kant*, Caird's major early work, empiricism seems to be an HP-concept. Historically, Caird used the concept in connection with Bacon and, suggestively, Martin Luther (Caird 1877, 30 ff). Caird

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[38] Note that if this passage is taken literally, Green's Hume affirms the *principle of sufficient reason*. Green's Hume would thus differ from Garrett's on the issue of explanatory empiricism. *See* the text to which fn. 25 is appended, *above*.

[39] Here is evidence that our contemporary interpretation of empiricism is closely linked to our contemporary interpretation of rationalism. The *Stanford Encyclopedia* does not have an independent entry for "empiricism"—they only have an entry for "empiricism vs. rationalism." Note that the entry characterizes the debate between the schools as fundamentally epistemological: "The dispute between rationalism and empiricism concerns the extent to which we are dependent upon sense experience in our effort to gain knowledge" (Markie 2004).

did not cleave modern philosophy into two sharp groups, like CIE. What draws his cast of modern philosophers together is a commitment to something called "individualism." Descartes and Spinoza were the pioneers of modern individualism (pp. 27-51), which includes a philosophical assumption, and a question. Individualism *assumes* that reality is metaphysically separate from the thinking subject, and then asks the *question*, How can the thinking subject come to have knowledge of said reality? (p. 12). Locke presses forward with the same individualistic project, but is less hopeful than Descartes and Spinoza about how much the subject can really know about reality (p. 55).

Locke's philosophy was to have been plagued, however, by two incompatible metaphysical commitments. On one hand, Locke saw reality as a physical universe of which the mind, "enclosed in a particular body," forms a part. On the other, Locke saw reality as constituted by whatever appears to the mind in sensation (p. 59). Locke came to play a stronger role than Descartes as the father of modern philosophy—Caird read Berkeley, Hume, and Leibniz each as responding to problems inherent in Locke's original philosophy.[40]

Caird also used 'empiricism' to denote a thesis, but he is not clear about how the thesis is supposed to relate to the Empiricist school of Bacon and Luther. Since this is a book on Kant, it is natural that Caird's philosophical conception of

[40] Berkeley tried to make Locke consistent by discarding the first metaphysical commitment, and by pursuing only the second (p. 61). But Berkeley attempted to show (what Caird thought was impossible) that we learn, through collections of finite sensations alone, about God's infinite nature (p. 64). Hume then tried to correct Berkeley by discarding the latter's pretension that through our sensations, we can know *anything* beyond the sensations themselves (p. 65). But Hume's skepticism that we can know external objects then (somehow—Caird does not clearly spell out an argument) contradicts itself: "But a principle that is fatal even to the illusion of knowledge, refutes itself" (p. 71). While Berkeley and Hume were pursuing the sensationalist side of Locke's project, Locke's "French disciples took hold of the other side of his doctrine—his theory of the mechanical action of matter on mind," pursuing a brand of materialism (p. 72). Without mentioning him, Caird seems to have Comte in mind, here. Locke's true successor, however, is Leibniz (p. 73), of all people, who develops hints of idealism hiding in Book IV of the *Essay* (p. 73). Wolff offers a final, failed effort to reconcile the respective individualisms of Locke and Leibnitz (p. 120). Kant finally refutes individualism in the first *Critique*, and there builds the first genuine idealism (pp. 180-181).

'empiricism' comes from Kant's usage in the Antinomies. Kant used the word to signify the view that rational knowledge has its origin in experience (*see* fn. 20, *above*). Thus, some of Caird's uses of 'empiricism' come in a discussion of the Antinomies (Caird 1877, 574, 576).[41]

So Caird does have a notion of 'epistemological empiricism' which he gets from Kant. But like Green, Caird does *not* organize modern philosophy according to a split between Continental Rationalists and British Empiricists, whose chief disagreement concerns the epistemological question of the extent to which knowledge depends on sense experience. In other words, "empiricism" was a word Caird primarily used to denote an epistemological thesis; the word barely figured into Caird's interpretation of history, which bears little resemblance to that given by CIE.

Of course this leaves the possibility that Green and Caird use different vocabulary, but only superficially different historical schematisms. Perhaps there remains a creative way to see CIE lurking in their work yet. I will not argue against this possibility directly, because there is no obvious way to fill in the details of such an interpretation. The burden falls for developing such a view on those who would defend CIE as an intelligible reading of how early Idealists conceived of their targets. Instead, I will simply advance my own view of how to conceptualize early Idealists' targets.

If what I have written in this section is correct, what terminology should we use to characterize Idealists' actual targets? Clearly, Green and Caird did not see themselves as arguing against empiricists. I propose to call their targets "proto-empiricists."[42] We should keep using some form of "empiricism" in this context

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[41] Caird's book actually uses "empiricism" with unusually high frequency for this period of English-language philosophy (Caird 1877, 158, 164, 168, 502, 574-576, 664, 668). It is beyond my scope to give a detailed analysis of Caird's usage here. But the fact that this is a book on Kant, along with the evidence I cited *above* in fn. 20 suggests that an important dimension of the evolution of empiricism runs through Kant. Note well that Caird has more sustained discussions about "empirical psychology" (Caird 1877, 374, 434, 474-475, 478-480, 494, 535) than about Kant's notion of "empiricism."

[42] I will use underlined, lowercase "-ist" words (like "proto-empiricist") to refer to a person who subscribes to the project that the "-ism" form of the word denotes. Thus, a "proto-

because the notion that LBH can be attacked as a group (especially with arguments like those used by Idealists) is genetically related to CIE. These Idealist attacks sowed the seeds of an interpretation of Locke, Berkeley, and Hume that would eventually morph into CIE.

For our purposes it is not necessary to offer a full account of how this happened, exactly. One commentator sees James's *Pragmatism* (James 1907/1978) as an important source of the contemporary division between Rationalists and Empiricists (Kuklick 1984, 131-132). In any case, in the remainder of the chapter I will develop a positive account of how Green conceived of his main target, proto-empiricism.

4. Proto-empiricism: Green and Caird's Actual Opponents

In this section, I offer a positive account of how early Idealists *did* conceive of their opponents. I will argue that they conceived of their targets in the hybrid manner suggested by the HP definition-schema—they used mutually-constraining historical and philosophical criteria to specify their target. As I have been arguing, the particular way CIE fills out the HP schema is importantly different from how Green and Caird would have filled it out on behalf of their opponents. I will identify their true opponents by showing how Green, especially, would have filled out each step of the schema.

First, *whom* did Green mean to attack? Green's metaphysical and epistemological critique was best developed in his "Introduction," which had three clear targets: Locke, Berkeley, and Hume, each of whom was considered in turn. Certainly, Green was partly motivated by pure historical interest in these figures. His engagement with each was serious, and his criticisms were often detailed.

However, Green was enough of a Hegelian to have an active conception of how the historical dialectic that encompassed LBH stretched down to his own day. The story was that recent English[43] philosophers—particularly people like Mill who saw

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empiricist" is one who is committed to the reality principle for the purposes of trying to advance a project begun by LBH.

[43] I use "English" rather than "British" deliberately, because this was Green's own choice of words. He insisted on referring even to Hume as an "English philosopher" (see the subtitle

a robust role for empirical psychology in philosophy—had failed to understand that Hume dealt a death blow to Lockean philosophy. For Green, contemporary English psychologists were mistaken in portraying themselves as the inheritors of the Lockean tradition; the *real* successors to LBH were Kant and his German disciples.

This story comes in part from an oft-cited passage in "Introduction," §1-5. But those who tell this story usually overlook the passage's most important component—that the false prophets of LBH were supposed to be contemporary English philosophers, particularly those inclined towards empirical psychology. Green argued that English philosophers who lived after Hume "cannot understand" that Hume dealt Lockean philosophy a fatal blow.

Hume had shown that if we accept "the method" of Lockean philosophy—pure introspection—as a way to explain how knowledge is possible, we are forced to an unacceptable, skeptical result. We are forced to accept that knowledge must actually be impossible. Here is how Green criticized post-Humean English philosophers:

> Hume was perfectly cognisant of this [skeptical] result, but his successors in England and Scotland would seem so far to have been unable to look it in the face. They have either thrust their heads again into the bush of uncriticised belief, or they have gone on elaborating Hume's doctrine of association, in apparent forgetfulness of Hume's own proof of its insufficiency to account for an intelligent, as opposed to a merely instinctive or habitual, experience. (INT, §3, 2)

This passage is easily misread. What Hume's successors attempt to do is develop his associationist psychology. For Green, these successors fail to understand that the principles of this psychology entail an absurdity, that knowledge is impossible. This is an absurdity (and not just unpalatable) because if knowledge is impossible, then there *can* be no science of the association of ideas—there can be no science at *all*.

For contemporary readers, Green's mention of skepticism makes us think he sees Hume's project as an attempt to build a theory of knowledge. We are now used to epistemologists whose criterion for a successful epistemology is precisely that the

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of §2), despite that Hume was, of course, Scottish. Today Scots do not appreciate being called "English," in my experience. I do not know if the distinction between British and English simply did not have the same connotations in Green's day, or whether Green was implying that Hume really worked in the tradition of *English* philosophy, whatever Hume's own personal heritage.

theory resists skepticism. But this is not what Green had in mind. He did not see Hume as someone whose entire project was to argue with the skeptic. Hume's project was to build a *science of mind*,[44] as he claimed at (THN, xiii-xix). The eventual "proof" that knowledge is impossible was a confession that there was a fatal flaw in the original project, Green held.[45]

Thus, Green was partly motivated by a desire to kill the idols of those of his contemporaries who saw Hume as an important pioneer in the science of mind. The contemporaries are people Green calls "empirical psychologists" (Green discusses such psychologists at INT, §§6, 9, 10, 18, 24, 98, 198, 200).

Three years after the "Introduction" appeared, Green would more explicitly acknowledge that his attack on LBH was supposed to inflict a blow on empirical psychologists. Green began a critique of the psychologist-philosophers Herbert Spencer and G. H. Lewes by reflecting on the 1874 "Introduction" to Hume. Many readers were offended at the "Introduction's" suggestion that the real advances over LBH had occurred in Germany, not England, Green wrote.

> With those who look to 'mental philosophy' for discoveries corresponding to those of the physical sciences, the German writers referred to [Kant and Hegel] have become almost a by-word for unprofitableness, while the 'empirical psychology' of our own country has been ever showing more of the self-confidence, and winning more of the applause, which belong to advancing conquest. It had seemed to me, indeed, that a clear exposition, such as I sought to furnish, of the state of the question in metaphysics, as Hume left it, would suffice to show that it had not been met but ignored by his English followers. A fuller consideration, however, might have taught me that each generation requires the questions of philosophy to be put to it in its own language, and unless they are so put, will not be at the pains to understand them. (GWR, I.373)

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[44] Hume actually wrote that he wanted to develop a "science of man" (THN, xvii). But he the component of such a science most important to Green and his colleagues was the science of *mind*. I use "science of mind" because it emphasizes the significance of Hume for Green and the latter's contemporaries. Robertson explicitly says he will use the two terms interchangeably, in discussing Hume. *See below,* p. 56.

[45] *See* (Garrett 1997, ch. 10) for a delicate discussion of how to balance Hume's skepticism with his stated goal of building a science of man. Garrett characterizes this question as the deepest in Hume scholarship, and reviews the prevailing literature (p. 206). The received view is that Hume cannot begin to establish a science of man, given his skepticism; Garrett ingeniously argues that he can.

In the "Introduction," Green did occasionally chide Hume's hapless "successors" in England without naming which successors he had in mind. In the passage just quoted, Green confirmed that the successors who (he alleged) did not understand Hume were empirical psychologists. Green lamented that empirical psychologists did not have the patience to read between the lines, so to speak, of his critique of Hume. Since this passage is the opening to an extended attack on two leading psychologists, the suggestion is that Green will now read between the lines for them. In short, Green saw a tradition running through Locke, Berkeley, Hume, and associationist (or "empirical") psychologists like Hartley, the Mills, Herbert Spencer, and G. H. Lewes.

There is evidence in the "Introduction" itself that Green had meant to attack psychologists all along. For one thing, *see* the sections (cited two paragraphs *above*) where Green portrayed "empirical psychologists" as suffering from the same shortcomings as LBH (see especially INT, §9, §18, §200; Green 1882b, 182).

One should also note how the "Introduction" began and ended. Green both introduced and concluded that work by referring to Hume's "successors in England and Scotland" who misunderstood the skeptical results in which Hume showed the Lockean tradition to dead end (GWR, I.3, II.64).

For further evidence that Green had empirical psychologists as a main target, note that Green's *Works* contain extensive attacks on Spencer, Lewes, and John Stuart Mill (GWR, I.373-520, II. 195-335). These attacks adapt arguments first deployed against LBH in the "Introduction." For example, a key argument in the "Introduction" is that simple ideas as conceived by Locke, Berkeley, and Hume could not by themselves convey knowledge of reality (*e.g.,* at INT, §§18, 13, 248-249), as Hylton notes.[46] Green claimed that a similar criticism applied to "modern treatises of Logic," at (INT, §320, 272).[47] Green would later deploy the same argument against J. S. Mill, at (GWR, II.197-200).

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[46] Hylton couches his discussion of Green in terms of Green's arguments against Lockean *epistemology*, not metaphysics. So the emphasis on *ideas of reality* is mine, not Hylton's. But I owe the observation that these passages develop similar arguments to Hylton.
[47] Hylton actually cites p. 267, but that appears to be a mistake.

Indeed, R. L. Nettleship, the editor of Green's *Works*, notes in a preface that three years after finishing his "Introduction," Green "began to apply the same principles of criticism to contemporary English psychology as represented by Mr. Herbert Spencer and Mr. G. H. Lewes" (GWR, I.vi). And the fight against empirical psychologists stretched into ethics, as well. See (PRL, 67, 73; Green 1882b, 182).

Moreover, approximately the first third of (PRL) was originally published as a series of articles entitled, "Can There Be a Natural Science of Man?" (Green 1882a; Green 1882b; Green and Bradley 1882). The "natural science" in question is clearly contemporary empirical psychology, as will be apparent from my discussion in the next section.[48]

I want to emphasize not just that empirical psychologists were *meant* to be the ultimate targets of Green's attack on LBH. Empirical psychologists themselves ducked as Green's arrows headed their way. "Can There Be a Natural Science of Man?" in particular, was published in the journal *Mind*, and it ignited fierce arguments over the scientific status of psychology for the next decade. Consider how Croom Robertson, the editor of *Mind* who agreed to publish this essay of Green's, described the scope of that argument:

> Locke and his followers to the present day have proceeded in a manner that has laid them open to a kind of criticism that apparently makes an end of their pretensions to rank as a serious philosophical school. The criticism directed by Green against Locke and Hume tells also, as it was plainly meant to tell, against Mill and others in this generation who, working at philosophy from the standing-ground of psychology and making whatever progress in either department, have been hardly more careful than

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[48] Again, Green seldom mentioned his targets by name, in this article. He did explicitly criticize "accepted representatives of empirical psychology," Lewes and Mill, on (Green 1882b, 182). But generally, these pieces do not include sustained discussions of any one person or group mentioned by name. Hume, of course, claimed to be building a science of "human nature," which is to provide a foundation for "a compleat system of the sciences" (THN, Intro, xvi). Hume also describes his goal to be to help popularize a "science of man" (THN, I.iv.7, 273). Presumably, Green's title "Can There Be a Natural Science of Man?" alludes to Hume, though Hume is not cited explicitly in connection with the title. Green does discuss Hume in the first installment of that article (pp. 1-3), but the issue is the existence of the moral faculty. As a side note, there is a laudable, nascent trend of philosophers who have lately been looking at Hume again as a kind of scientist, not (just) a skeptic. For a discussion, *see* (Biro 1993). Also *see above,* fn. 45.

> Hume or Locke to draw a clear line between natural science of mind (or man) and the ulterior consideration of things in relation to mind. The point of the criticism urged by Green (after Kant), with a massive persistence that stamps it as an original philosophical achievement, is too well-known—repeated as the argument has lately been in these pages—to need more than general indication. (Robertson 1883, 7)

I will review Robertson's position in the next chapter. Here I only want to note that Green's contemporaries viewed his writings on Locke and Hume exactly as an attack on contemporary empirical psychologists. In this passage, Robertson said Green's arguments were obviously meant to count against Mill (he meant J. S.) and others who take up the standpoint of empirical psychology as a starting point for doing philosophy.

Finally, consider Green's influence as described by one of his own pupils, Henry Scott Holland:

> [Many people came to believe that] Scientific Analysis held the key to the universe. Under this intellectual dominion we had lost all touch with the Ideals of life in Community. There was a dryness in the Oxford air, and there was singularly little inspiration to be felt abroad. We were frightened; we saw everything passing into the tyranny of rational abstract mechanism …. Then at last, the walls began to break. A world of novel influences began to open to us. Philosophically the change in Oxford thought and temper came about mainly through the influence of T. H. Green. He broke for us the sway of individualistic Sensationalism. He released us from the fear of agnostic mechanism. He gave us back the language of self-sacrifice, and taught us how we belonged to one another in the one life of high idealism. We took life from him at its spiritual value.[49]

Many Victorians were rocked by the quick expansion of science in the mid-19th Century. In addition to a rich collection of astronomical predictions confirmed by observation (such as the existence of Neptune, confirmed in 1846), the period also saw the creation of the kinetic theory of gases, the laws of thermodynamics, and of course Darwin's theory of natural selection. Such discoveries threatened to make scientifically tractable not just the origins of humanity, but also the very facts of human experience itself. Although this passage does not specifically mention psychology, it makes clear the "spiritual" stakes of science's general advance. One of the chief attractions of Idealism was Green's promise to resist what Holland called

[49] Quoted in (Tyler 2003).

"agnostic mechanism"—and in particular, to resist the form it took in empirical psychology.

The important point is that CIE treats LB & H as the central figures in a certain philosophical tradition, British Empiricism. This tradition aims to build an epistemology that grounds knowledge in experience. In contemporary discussions, the 'epistemological empiricism' that ties this school together has as its measure of success the formation of an epistemological theory that resists the threat of skepticism (for a similar suggestion, see Friedman 1999, 4-5). The moral of this chapter so far is that early Idealists, those whose grouping-together of LBH is among the earliest known ancestor of our own grouping, *did not see LBH as united on the basis of a shared 'epistemological empiricist' program*. Idealists united these thinkers into a group on the basis for their role as intellectual forefathers of empirical psychology.[50]

In other words, what was at stake in the philosophical projects of LBH was not the formation of an 'empiricist' epistemology, for Green and his colleagues. What was at stake was the viability of a science of the mind.

This is not to say that Idealists drew together LBH purely on the basis of their aims, and *not* on the basis of a shared philosophical position. The point about aims is rather that it should set off warnings that the chief goal with which Green saddles proto-empiricists is starkly different from the chief goal of contemporary empiricists—building a science of mind, not an epistemology that resists skepticism. Thus, it should not be surprising to find that the core philosophical idea Green *does* think ties LBH together is metaphysical, and not epistemological.[51]

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[50] In the next section, I will offer a historical account of the broader philosophical context in which Green was publishing. This account further supports my contention that what was at stake in Green's attack on LBH was not 'epistemological skepticism,' in the first instance, but the very idea of a science of the human mind.

[51] I am not denying (though neither am I affirming) that the British Empiricists may all have held some form of 'epistemological empiricism.' My point is that Green did not see 'epistemological empiricism' as *what was at stake* in his attack on LBH; and neither did he see LBH as worth putting into a common historical category on the basis of their epistemological commitments, in the first instance.

I will now suggest how to fill in the second part of our HP definition-schema for the concept proto-empiricism. Since James and philosophers of his generation commonly regarded Green as the father of Idealism, I will focus on his work in filling in the details of what philosophical position proto-empiricists were supposed to hold.

Green's "Introduction" is a rambling affair, launching what can seem like a battery of disjointed attacks against Locke, Berkeley, and Hume. But there *is* evidence that these three were supposed to share one core commitment, according to Green, that I dub "the reality principle":

THE REALITY PRINCIPLE:

> the distinction between fantasy and reality matches the distinction between ingredients of experience contributed by the mind, and ingredients contributed directly through sensation.

I will explain what the principle is supposed to assert, exactly, by reviewing specific instances where Green used it.[52]

First, consider §153 of the "Introduction." Here, Green was summarizing his treatment of Locke, and was transitioning to his discussion of Berkeley. Green wrote:

> We have now sufficiently explored the system [viz., Locke's system] which it was Hume's mission to try to make consistent with itself. We have found that it is governed throughout by the antithesis between what is given to consciousness—that in regard to which the mind is passive—as the supposed real on the one side, and what is 'invented,' 'created,' 'superinduced' by the mind on the other …. Stripped of these superinductions, nothing has been found to remain of it but that of which nothing can be said—a chaos of unrelated, and therefore unmeaning, *individua*.

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[52] What I am calling the "reality principle" is not original to Green. Kant uses three non-overlapping distinctions to carve the history of western philosophy, at (CPR, A852 – 856, B666-669, 880-884). The first distinction is between those who affirm the reality principle ("intellectualists," in Kant's terminology), and those who deny it ("sensualists"). Kant cites Epicurus as the best example of a sensationalist, and Plato as the best example of an intellectualist. Kant's second historical distinction is between *empiricists* like Aristotle and Locke, and *noologists* (or rationalists) like Plato and Leibniz. The former affirm, and the latter deny, versions of what I am calling 'epistemological empiricism.' I can recast my overall meta-historical point in Kantian terms. Commentators write as though Green conceived of LBH as empiricists. In fact, Green grouped LBH together on the basis of a shared sensualism. Kant's third historical distinction separates "naturalistic" philosophers who banish rational methods (particularly mathematics) in favor of pure observation, from "scientific" philosophers who are systematic, and do adopt rational methods.

Locke's system is "governed throughout" by two distinctions that track one another—the distinction between reality and fantasy, and that between what is given in sense and what is created by the mind. On the one hand, we get genuine information about reality through what is given to experience by sensation. On the other, we get fantastical representations when the mind manipulates material it first receives from the senses.[53]

Berkeley, according to Green, was also committed to this principle. Though Berkeley had good Christian intentions, he pursued a Christian theology via "a doctrine resting on an inadequate philosophical principle," and "it is the principle and not the purpose that will regulate the permanent effect of the doctrine" (§154). In other words, Berkeley's philosophy may have had laudable theological goals, but he pursued those goals by hewing to a substantive philosophical principle that must be assessed independently. Green got around to telling us what the (flawed) substantive principle was at §158: Berkeley accepted Lockean materialism's "recognised principle, that all intellectual 'superinduction' upon simple feeling is a departure from the real." "Superinduction" is Green's word for mental operations on whatever is given in sensation.

Although Locke and Berkeley therefore both subscribe to the reality principle, according to Green, Berkeley did not accept that reality contains matter, as against Lockean materialism. This difference does not affect the underlying commitment to the reality principle, though. At §170 Green reaffirms that for Berkeley as much as for Locke, information we receive through the senses is associated with what is real. What Locke and Berkeley differ over is their view of *what causes* sensations.

So Locke and Berkeley both held that the reality principle is true. Here, it will be helpful to point out a peculiar word I have used in formulating the reality principle. The principle asserts that the distinction between reality and fantasy "matches" the distinction between information the mind receives in sensation, and

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[53] Other passages where Green treats the reality principle as central to Locke's philosophy include §51, 113, and 194. *See* also (Green 1882a, 15-16), where he (curiously) cites (ECHU, II.xii.1) as a basis for attributing such a principle (he might have done better to cite II.xxx).

features of experience the mind creates in thought. I have used this neutral word exactly because Locke and Berkeley (and Hume, as we shall see) do not all agree about *why* these two distinctions go together, on Green's reading.

It is not simply that the reality/fantasy distinction is *epistemically dependent* on the other distinction. Green certainly portrayed LB & H as all holding that we only *learn* about the difference between thought and reality by attending to the difference between what the mind creates, and what is given in sensation. But Green thought such a view is important precisely because it must be undergirded by a prior metaphysical commitment to treating reality as composed of stuff that is well-suited to affect our senses. It is this metaphysical commitment, as we shall see in Chapter Three, that is supposed to be the downfall of proto-empiricism.

What Berkeley and Locke did not agree on, according to Green, is a particular metaphysical story of why reality is constituted in a way that matches up with our sensory apparatuses. Locke held there is something about the nature of matter that makes it well-suited to being perceived, while Berkeley held that God delivers sense impressions, on Green's view. What Locke and Berkeley share, again, is the affirmation *that* these two distinctions *do* match up metaphysically, though they differ on why that should be the case. In fact, this is why I call the reality principle "metaphysical" and not "epistemological." What LB & H share, according to Green, is the *metaphysical* claim that reality is wholly composed of stuff that is sensible. They differ on how we come to know that this claim is true.

To be clear, I am not claiming that the distinction between reality and fantasy is *metaphysically parasitic* on the difference between thought and sensation, for Green. That language suggests that an object is real *in virtue of* affecting the senses. This is clearly not Locke's view. It is not Berkeley's view, either, at least according to Green.

There is also evidence that the reality principle was supposed to be Hume's core commitment, as it was for Berkeley and Locke. Green wrote that "Hume was trying to explain it [the reality of a physical world] away in order that the same theory of reality—the theory which identifies it with feeling—might be consistently

maintained" (GWR, I.383).[54] Green read Hume as a phenomenalist who refused to postulate a separate external world. The material world, for Green's Hume, is just regularities we detect in our impressions and ideas. Thus, Green saw Hume as "explain[ing] … away" the reality of the material world in order to preserve the reality principle.[55]

Finally, Green cited the reality principle when summarizing the key failure of proto-empiricism, in general. I cited a passage, on p. 53 *above*, where Green claimed that Hume's shortcomings had been ignored by empirical psychologists. A few pages later, Green summarized exactly what the shortcoming was of Hume's philosophy, as well as of the entire proto-empiricist tradition as exemplified by Spencer and Lewes. Green wrote:

> We are thus brought to the contradiction which underlies all Locke's doctrine, and which current philosophy must show that it has overcome if it is to be proof against the charge of being anachronistic—the contradiction between that conception of the real on the one hand [viz., the real as what is received in simple impressions], which alone allows of its being knowable, but at the same time, by finding it in relations, implies that it is a work of thought, and a conception which leaves it the unknown negative of consciousness on the other hand. Only if the latter conception is the true one, is there any reason for taking feeling, on the ground of the mind's supposed passivity in it, to be the organ which reports the real; only if the former conception be the true one, has feeling anything real to report. … It was the presence of this contradiction in Locke's system that led to its disintegration at the hands of Berkeley and Hume. (Green 1894, I.379)

This passage comes as Green is summing up the relevance of his attack on LBH to contemporary empirical psychology.[56]

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[54] This last passage comes in the context of the early part of Green's discussion of Herbert Spencer. Here, Green was specifying the main difficulty inherent in proto-empiricism that contemporary empirical psychologists must overcome. Green portrays Spencer's shortcomings along similar lines to LBH's, at (GWR, I.428-429, 442); and on Lewes in this regard, *see* (GWR, I.489-490, 493).

[55] Specifically, Green read what Hume scholars sometimes call the "copy principle" as Hume's modification of the reality principle. I will not present evidence for this claim until below (*see* pp. 169, *ff.*) when I explore the role of the copy principle in Hume's account of space perception.

[56] Brink is one of the few commentators who accurately pinpoints what I am calling the "reality principle" as the core philosophical commitment (and alleged failure) of empiricism. He writes, "In this tradition, reality is associated with simple ideas delivered to the senses and contrasted with the workmanship of the understanding and relations, which are in some sense illusory or conventional," (Brink 2003, 10).

I now take myself to have established the following. First, Green manufactured a tradition in which he placed his chief philosophical opponents. To summarize Green's conception of his rivals' tradition, I am using the concept of "proto-empiricism." Second, like our contemporary interpretation of empiricism (or "CIE"), proto-empiricism is an HP-concept. In other words, CIE and proto-empiricism both have the same hybrid structure. They each refer both to a substantive thesis, and to a historical group of philosophers who are supposed to have developed that thesis. But third, although they have the same structure, proto-empiricism and CIE are not usefully viewed as the same basic concept. This is because the particular thesis to which proto-empiricism refers is not the same as the thesis to which CIE refers. In Green's hands, the thesis that the proto-empiricist tradition was to have jointly developed was a metaphysical thesis—viz., the reality principle. In contrast, what characterizes the empiricist tradition as we now understand it is a shared *epistemological* commitment—viz., to the view that knowledge must be justified by appeal to experience.

Perhaps I am placing too much weight on the dubious claim that the reality principle is metaphysical and not epistemological. If this claim cannot be justified then the basis appears to collapse for my argument against people like Norton and Brink. These two hold that early Idealists conceived of their chief targets more or less as CIE-style empiricists. If the reality principle can be shown to entail or in some way to be tied up with 'epistemological empiricism,' then it seems pointless to insist that CIE and proto-empiricism be regarded as distinct concepts.

This objection fails to grasp typical reasons a philosopher might have for employing an HP concept in the first place. By attending to the typical role of these concepts in philosophical discourse, we can develop an individuation criterion that will make plain why we ought to regard CIE and proto-empiricism as distinct concepts.

I submit that we often use HP concepts to encapsulate a myriad of issues at stake in some specialized discussion. The substantive thesis to which such a concept

refers is typically but one note in an entire, complex melody, to speak metaphorically. When participating in a specialized community—in a community that shares a professional training—we can fill in much of the missing melody by evoking a concrete group of philosophers (*e.g.*, the British Empiricists) in the same breath that we evoke a substantive thesis (*e.g.*, that knowledge must be justified by appeal to experience).

Suppose one is handed sheet music to a jazz song, and one sees that the key signature has no sharps or flats. If one is told that the tonal center of the song is A, one can surmise several things. One can surmise the likely key of the song (A minor), and perhaps a set of basic scales or triads that will likely harmonize with the tune. But if one *only* knows the tonal center of the song, one still does not know the song itself. There are an infinite number of melodies that can be played in the key of A minor, after all.

Similarly, if one is told that an interlocutor holds that knowledge must be justified by appeal to experience, there are an infinite number of melodies that might be played in this key, to continue the metaphor. For instance, such a claim might be made en route to showing that there can be objective aesthetic judgments, or that moral facts are natural facts, or that one should reject the prospect of gaining metaphysical knowledge through a priori speculation, or that the epistemological skeptic can only be refuted if knowledge is reduced to the realm of incorrigible sense experience. Or such a claim might be made en route to defending utilitarianism in ethics, or naturalism in meta-ethics, or anti-realism in the philosophy of science. And so on.

By specifying a concrete group of philosophers in the same breath that we specify some core philosophical position—as we do when we use HP concepts like empiricism—we can cut through these bewildering possibilities and evoke a crisp yet still-rich narrative about *what is at stake* in endorsing the core position. Since most who have a professional training in philosophy have detailed background knowledge of what Locke, Berkeley, and Hume are supposed to have been up to, we can use

words like empiricism to communicate efficiently the contours of a whole philosophical landscape.

For instance, what is most commonly at stake for those arguing over 'epistemological empiricism' today is probably the question of how to develop a theory of knowledge strong enough to resist the skeptic. We think Locke, Berkeley, and Hume shared a general approach to developing such a theory, and one who is sympathetic to this approach may don the mantle of (CIE-style) empiricism. But one who dons the mantle of empiricism is likely to harbor some *related* philosophical attitudes, as well. Such a person is likely to think an empiricist-style epistemology helps undercut the notion that we can gain metaphysical insights through a priori speculation, for instance. Academic philosophers share certain expectations about how Locke, Berkeley, and Hume fit these various positions and attitudes into a coherent philosophical project. In virtue of these expectations, HP concepts like empiricism can function tacitly to specify such a larger project. In Appendix II, I provide a more detailed argument in support of this account of why we use -ism words—HP concepts—in philosophy.

If my account is substantially correct, then a crucial question in individuating HP concepts will be whether *what is at stake* matches, more or less, between two given usages.[57] In the case at hand, what really divides CIE-style empiricism from Green-style proto-empiricism is the different stakes involved in defending each concept. True, the reality principle is metaphysical whereas 'epistemological empiricism' is an epistemological principle. But this is a difference that *makes* a difference precisely because the respective stakes involved in defending the two principles concern sharply divergent philosophical projects.

In the late-19th century, what was at stake in defending the reality principle (and thus in espousing or repudiating proto-empiricism) was the viability of psychology as a legitimate science, I am claiming. In Chapter Three, we will see in

[57] In Appendix II, I show that the word "empiricism" is used with vastly different stakes in two distinct sub-communities in contemporary philosophy. This illustrates the way in which two HP concepts might appear superficially similar—for example, by bearing the same name—but in fact turn out to be distinct, upon closer inspection.

more detail how this principle actually figured into philosophical arguments over empirical psychology. For now, I only want to register that in contrast, 'epistemological empiricism' (and thus CIE-style empiricism) is a principle that has profoundly different stakes for contemporary philosophers.

So here is my response to the objection at hand. We should not run together CIE with proto-empiricism because these HP concepts carried profoundly different stakes. Commentators who do run these concepts together—commentators like Norton and Brink—miss the crucial fact that Green had entirely different reasons than the contemporary epistemologist for grouping Locke, Berkeley, and Hume into one tradition. What was at stake for Green was the viability of mental science, not how to develop a Skeptic-proof theory of knowledge.

There is another group of culprits who one might think invented the notion of British Empiricism. I can only discuss them briefly, here. The concept of "British Empiricism" first appeared prominently in English-Language philosophy during the 1880s. This period witnessed a boom in the publication and distribution of English-language textbooks in the history of philosophy. Many were translated from German originals starting in the early 1870s, and some historians claim that these textbooks used the terms "empiricism" and "rationalism" in something like our contemporary sense. As such, one set of culprits are authors like Friedrich Üeberweg, whose *History of Philosophy from Thales to the Present Time* was translated in 1871 and 73 (Üeberweg 1871; Üeberweg 1873); Kuno Fischer, whose *Descartes and His School* was translated in 1887;[58] and Wilhelm Windelband, whose *History of Philosophy* was translated in 1893 (Windelband 1893).[59]

[58] It seems likely that when it came to the impact on English-speaking philosophers of German historians, Fischer was probably the most influential. (Fischer 1887, 160-161) offered the (characteristically Hegelian) claim that epochs in philosophy are marked by "antitheses," and for early modern philosophy the chief antithesis is between two warring theories of knowledge. Fischer called one side the "empiricists," and the other the "rationalists." Empiricism, or "empirical philosophy," was founded by Bacon, and developed by Hobbes and Locke. This school then gave birth to two sibling movements—the French enlightenment, especially exemplified by Voltaire; and British sensationalism, especially exemplified by Berkeley and Hume. Fischer cites his own (Fischer 1875) as a work that

However, despite the popularity of translated German histories during this period, English-speaking philosophers were also hard at work at their own histories during this period. The late 19th century saw the rise of professors as the most influential Anglo-American philosophers. These professors wrote their own lecture notes, and published their own textbooks. They were no doubt influenced by German histories, but there is evidence of serious departures as well. For example, in Croom Robertson's "Elements of General Philosophy," he writes of early modern philosophy:

> Within this movement we meet early with an opposition in thought that admits of greatly varied expression. The German classifications, e.g. Schwegler's and others, are somewhat unsatisfactory. Schwegler, Kuno Fischer, and most of the German historians, divide all schools into Realists and Idealists—those who explain thoughts from things, and those who explain things from thoughts. But this is a bad use of

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more fully developed an account of British philosophy. An earlier edition of that work had been translated as (Fischer 1857).

All three Fischer works I cite in this footnote appear to have been read critically by key *Mind* writers. For example, James's friend and Scratch Eight co-member Carveth Read devoted (Read 1879) to a critique of Fischer's mature history of British philosophy (Fischer 1875). Read wrote, "It may be assumed that readers of *Mind* are not unacquainted with the book's general nature and value. The first edition has long been translated, and it is much to be desired that the second edition of 1875, which is more than twice the bulk of the former one, should also find a translator" (Read 1879, 347-348). Perhaps Read thought it important to respond to Fischer because the latter had been widely read. Read's article was mildly critical of Fischer's way of carving up history—Fischer's historical schematisms are found to be somewhat artificial, and Fischer too quick to assume that the sequence of history proceeds rationally (pp. 347, 351). Read repudiated some of Fischer's criticisms of British philosophy—particularly the claim that "the Baconian method" British philosophy often employed is impotent to provide real historical explanations (pp. 349-350). More importantly, Read saw Fischer's history as a subtle attempt to undermine, in Kantian fashion, "the deepest and most secret idea of English philosophy." English philosophy, for Read, was to be characterized by the view that "human consciousness, however ancient its origin, is a natural growth. To demonstrate the naturalness of the mind was an essential step to the justification of positive law, to social science, and to a coherent view of the world" (p. 359). According to Read, Fischer's history was couched in terms of the faulty claim that Kant showed empirical philosophy, the forerunner to empirical psychology, to be unworkable.

[59] On the emergence of textbooks in the history of philosophy, *see* (Kuklick 1984, 129; Loeb 1981, 25-32; Van Fraassen 2002, 209-213). Fischer is emphasized as an important architect of the modern schematism by (Loeb 1981, 31.n38), who also discusses the impact of Reid and Kant in this regard. A valuable source on the history of histories of philosophy is (Mandelbaum 1976), especially the first section. Mandelbaum situates Fischer in the context of 19th century historians of philosophy at pp. 715 *ff*.

> ambiguous, much abused terms. Realist, e.g. has been used both in the question of the perception of an external world and also in that of the reality of 'universals.' (Robertson 1896/1905, 56)

Robertson claimed that German histories usually divide modern philosophy into two groups, realists and idealists. He held this division to be misleading, and so developed his own schematism. His schematism divides modern philosophy into rationalists and empiricists, and this schematism more clearly comes to play a role in English-language philosophy during the 1880s than does the schematism from German histories.

Though the evidence is only suggestive, I find further confirmation of the notion that 19th century German histories did not conventionally divide modern philosophy into British Empiricism and Continental Rationalism in the following account of *Carnap's* early philosophical context. Richardson writes,

> Interestingly, [the young] Carnap does not think that empiricism, rationalism, and Kantianism are the traditional epistemological schools. Rather he thinks that realism, idealism, and phenomenalism are. (Richardson 1998, 23n.32)

Carnap's understanding of history resonates with Robertson's characterization of German histories of philosophy in the preceding generation. This provisionally suggests that Robertson may have been right that Empiricism and Rationalism were not the schools into which German historians most commonly divided modern philosophy, at least at the end of the 19th century. A more careful consideration of this issue is, however, beyond the scope of my project.

One subtle account of the history of the concept of empiricism in German philosophy comes from Gary Hatfield. Hatfield points out that empiricism can be given two different theoretical senses by contrasting it with either nativism or with rationalism. He attributes the distinction between empiricism and nativism to Helmholtz. In tracing the history of this second usage—the usage with which I am more concerned—he offers early cases where 18th century historians employ the word "empiricism" as part of various frameworks for organizing the history of modern philosophy. But he does not offer early cases where philosophers actually espouse 'epistemological empiricism' themselves. There are several problems with this account, for our purposes.

First, not all the historians Hatfield cites actually seem to have used "empiricism" in its current, epistemological sense. Hatfield first writes that the earliest usage of "empiricism" in this sense owes to an 18th century division of 17th century philosophies. He then suggests that the exact origin of the terms is hard to pinpoint, but nevertheless it was "well entrenched by the middle of the nineteenth century" (Hatfield 1991, 272). Then he provides a selection of 19th century German philosophers who allegedly used the empiricism/rationalism distinction—Wilhelm Gottlieb Tenneman, Hegel, Üeberweg, and Falckenberg. But he notes that "empiricism" sometimes appeared in such histories alongside one, some, or all of the following: "idealism," "dogmatism," "skepticism," and "criticism."

The problem is that Hatfield wants to define his second sense of "empiricism" as denoting a position *essentially* opposed to 'epistemological rationalism.' But the appearance of "empiricism" in these 18th century German histories alongside such a wealth of different distinctions suggests that in these histories we are finding the recurrence of a word that does not yet have a stable meaning, at least not as a word that contrasts strictly with "rationalism."

His portrayal of Falckenberg and Üeberweg's respective uses of "empiricism" in the mid- to late-19th century begins to sound like empiricism *qua* an epistemological position that is at heart opposed to rationalism. If, in fact, 'epistemological empiricism' became an important category in 19th century German histories of philosophy, it would be helpful to know more precisely when this occurred.

Second, we have seen that at least in English, "empiricism" had pejorative overtones through much of the 19th century. We are interested in how such overtones were sloughed off, so that philosophers began to *self*-identify as empiricists, particularly in the English-speaking world. All Hatfield's citations are historians characterizing *others* as empiricists, though. This suggests that in 19th-century Germany, "empiricism" perhaps still had pejorative overtones as well. I do not know of any German philosophers before about Helmholtz's time who self-identified as an empiricist.

I cannot pursue the history of German historians' uses of "empiricism" any further here. My interest is in how the notion of empiricism came to be embraced by English-language philosophers.

5. Methodological Objections, Conclusion

Where are we?

I began by developing an account of our contemporary interpretation of empiricism (CIE). I characterized CIE as an example of a historical-philosophical concept that itself has a history. Some philosophers argue that in his criticism of Lockean philosophy, T. H. Green invented the idea of CIE; and virtually all philosophers who write about Green claim he understood the Lockean tradition much as it is described by CIE. But I showed that Green simply did not write about Lockean philosophy as it is portrayed by CIE, and neither did Edward Caird, Green's early prominent ally.

In the previous section I began my positive account of proto-empiricism, the project against which Green and Caird actually understood themselves to be arguing. In the following chapter, I will continue my story of how proto-empiricism evolved. First though, while I am taking stock, I want to address two possible objections to my methodology.

I am using the label "proto-empiricism" to describe Green and Caird's actual opponents. Whereas "empiricism" is a label philosophers like James applied to *themselves* (as we are about to see), "proto-empiricism" is a label I am applying retrospectively. A reader might object that I am not entitled to apply such labels retrospectively.

After all, I have argued against *other* philosophers' retrospective application of "empiricism." There are two groups I have targeted. One contains people like Norton and Loeb, who point to Green as the inventor of CIE. The other contains people like Brink, who are not interested in the origin of CIE, but simply use "empiricism" as a shorthand way of describing Green's opponents. I have suggested that both uses of "empiricism" are misleading and should be avoided.

Brink, at least, might reply that "Green attacked empiricists" is just harmless shorthand for "Green attacked those people *we now* think of as empiricists." The first statement need carry no implication that Green attacked opponents *he* thought of as empiricists. So if I have a legitimate complaint against Brink's description of Green, it seems my complaint must be based on an in-principle rejection of the retrospective application of historical labels. But if this is so, then I have no business retrospectively applying post-hoc labels like "proto-empiricist" myself.

In fact, I have no in-principle objection to the use of retrospective labels. It would be folly to insist that one must only classify historical subjects using categories that subjects applied to themselves. We typically have a more panoramic view of the history to which our subjects belong than they themselves had. For example, I am calling Green's target "proto-empiricism" precisely because Green unwittingly played a pivotal role in the evolution of a concept we now call "empiricism." By the time he died in 1882, he could not have guessed that his account of Locke, Berkeley, and Hume would nourish our evolving notion of empiricism, nor that CIE would eventually have such a strong impact on English-language philosophy in the 20th century. We should use concepts that help us understand how Green fits into *our* history, ultimately. But what, then, is my objection to Brink?

What I object to is *silently*-retroactive classification. There is an instrumental danger in using historical categories that are unacknowledgedly post-hoc.

I began this chapter by suggesting that anyone who thinks history informs contemporary philosophy ought to take seriously the possibility that history informed bygone philosophy, too. When we employ historical categories that are silently post-hoc, we run the risk of tacitly substituting our contemporary interpretation of history for *our subjects'* interpretation of history—for example, of assuming that when he fought against Locke's legacy, Green *saw* Locke's legacy much as we do. If there is one thing I hope to establish in this chapter, it is that 17th and 18th century philosophy looked very different in the 19th century than it does in the 21st. If we want a full-blooded interpretation of 19th century philosophy, we

need a full-blooded interpretation of how 19th century philosophers saw their own history.

I will call "the historian's fallacy" the tacit substitution of a contemporary interpretation of history for a historical subjects' own understanding of that same history.[60] Again, this move is a fallacy only instrumentally—the use of silently-post-hoc categories is a mistake because of the risk one runs of obscuring the historical facts. So it is true that Brink *need* not concede that his use of "empiricism" is illicit. But the responsibility is his to show that it is not. In general, if a philosopher applies a historical category in a way that is demonstrably post-hoc, the responsibility falls, in fairness, to that philosopher to justify such a high-risk usage.

So I have no in-principle objection to calling Hume or Berkeley "empiricists," because I have no problem with the use of post-hoc classificatory schemas in doing history. I object to slipping into the historian's fallacy, to assuming that historical actors saw their own history as we see their history. Guarding against this fallacy does not mean foregoing new classificatory schemas; it means going back and reading what historians working *in* (not on!) the period in question were writing about their past.

Historians sometimes accuse one another of "presentism," of portraying history through the distorting lens of the present. In itself, I do not think "presentism" must be regarded as an offence. What elevates history above mere record-keeping is the honest attempt to tell a story—a true story—that sheds light on our current

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[60] An important precedent—indeed, inspiration—for my idea of a historian's fallacy comes directly from William James:

> 'The Psychologist's Fallacy.' The great snare of the psychologist is the confusion of his own standpoint with that of the mental fact about which he is making his report. I shall hereafter call this the 'psychologist's fallacy' par excellence. For some of the mischief, here too, language is to blame. The psychologist … stands outside of the mental state he speaks of. Both itself and its object are objects for him. Now when it is a cognitive state (percept, thought, concept, etc.), he ordinarily has no other way of naming it than as the thought, percept, etc., of that object. He himself, meanwhile, knowing the self-same object in his way, gets easily led to suppose that the thought, which is of it, knows it in the same way in which he knows it, although this is often very far from being the case. [fn. omitted] (PP, 195)

condition. In this sense, I hope my story rings with presentism. But I hope it is an intellectually honest presentism.

This is a good place to handle a second objection to my methodology, as well. Someone might worry that my insistence on studying philosophy's meta-history will lead to an infinite regress. If a proper account of the history of philosophy requires a proper account of the history of the *history* of philosophy, why end there? Wouldn't a sound meta-history then require a meta-*meta*-history, and so on, *ad infinitum*?

The answer is that meta-history is only necessary for doing the history of philosophy when, a) the actors under consideration practiced philosophy in a way that affected or was affected by their interpretation of history, and b) the actors' own interpretation of history underwent revision, either within the time period studied, or between that time period and the present. Since the philosophers I am considering did not themselves practice the meta-history of philosophy, it would be absurd to insist that I undertake a meta-*meta*-history of philosophy. Since there was no important *meta*-history in the late 19th century, there would be nothing for a meta-*meta*-history to study.

We can put criterion b) more generally. Call a meta-historical account a "first-level history," a meta-meta-historical account a "second-level history," and so on. Criterion b) asserts that one must positively show that the nth-level historical story has changed in order to reasonably demand an $n+1^{st}$-level history. Notice that this is exactly what I demonstrated in Section 4—that the historical story Green told about LBH *has substantially changed* between his era and the present. If I have been successful, then the demand for meta-history is legitimate in this instance.

True, I may be complicating the task of future historians if others now incorporate meta-history into their historical research. But even this development would not by itself require future historians to practice meta-*meta*-history. Suppose that meta-history came to impact the way some practice philosophy. Historians looking back at our era would thereby find criterion a) satisfied. But unless our meta-historical narrative about philosophy *changes*, there will be no need for future historians to bump up to the level of meta-*meta*-history, at least not in any serious

way. So one need not worry that my methodology entails an infinitely regressive demand for ever higher-level meta-histories.

Chapter Two
The Life of *Mind:* Psychologists Take Their Stand

1. Interlude: The Role of Professionalism

In the previous chapter we learned how Idealists constructed an interpretation of the history of British philosophy. The canonical figures in this history were Locke, Berkeley, and Hume. These three were to have successively articulated a philosophical view of the mind that would provide a foundation for empirical psychology. A main purpose for constructing this history was to demonstrate that the foundation was faulty. According to Idealists, late 19th-century psychologists working in the Humean tradition of associationism[61] were therefore pursuing futile projects. Idealists emphasized the most skeptical passages in Hume with the intention of showing that the Lockean philosophy of mind logically entails that there can be no knowledge at all. Consequently, the Lockean philosophy will not support a science of mind, as empirical psychologists hoped. I now turn to psychologists' view of the situation.

On page 55, *above*, I quoted passage where Croom Robertson responded to Green. The latter's attack on LBH was ultimately meant to undermine empirical psychology, Robertson held. He had a privileged perspective from which to make such a judgment. Green published some of the most important versions of his anti-psychology arguments in *Mind*, under Robertson's editorship. Usages from the

[61] Note that in contemporary cognitive psychology, what James and his colleagues called "associationism" is now more commonly referred to as "structuralism." In recent textbooks, "associationism" usually refers to an approach to psychology that emphasizes learning. This movement is typically thought to post-date James—indeed, his student Edward Thorndike is often cited as an exemplar of this movement. "Structuralism," on the other hand, is now used to refer to an earlier approach to psychology that emphasized the analysis of perception into component sensory atoms. Wundt is often cited as an exemplar. For examples of such textbooks, see (Goldstein 2005, 74-76; Sternberg 2006, 5-8). The reader should take care not to confuse these terms. When James and his contemporaries wrote about "associationism," they meant what contemporary textbooks call "structuralism." I will follow the older usage, like many historians of psychology—that is, I follow James's usage.

ensuing controversy are among the early examples of English-speaking philosophers consistently describing their own views as forms of "empiricism." "Empiricism" had occasionally been used to describe various trends in philosophy. But, as I argued in the previous Chapter, the word was rarely contrasted with "rationalism," and rarely (if ever) embraced as a *self*-description.

Professionalization[62] was an important factor in the early self-application of this concept.[63] Those participating in the debates in *Mind* were among the first generation of philosophy professors (as opposed to teachers of theology, or intellectuals working outside of universities) to set the agenda of English-language philosophy. They became advocates for professionalized philosophy.

Like Green, Robertson had been bothered by the hitherto amateur character of British philosophy. Under Robertson's editorship, *Mind* would encourage professionalization by providing a forum for scholarly, and not amateur, British philosophy. Robertson gave a manifesto in the first issue.

> Except in Scotland (and even there Hume was not a professor) few British thinkers have been public teachers with philosophy for the business of their lives. Bacon, Hobbes, Locke, Berkeley, Hume, Hartley, the Mills did their philosophical work at the beginning or at the end or in the pauses of lives otherwise active, and addressed for the most part the common intelligence of their time. It may not have been ill for their fame; but their work itself is not what it otherwise might have been, and their manner of thinking has affected the whole character and standing of philosophical inquiry in England. If their work had been academic, it would probably have been much more sustained—better carried out when it did not lack comprehension, more comprehensive when it was well and carefully begun. The informality of their thought

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[62] Following the historian Louis Menand, by "professionalization" I shall mean philosophers' shift towards seeing themselves as accountable solely to one another, not to theologians or church leaders, for example (Menand 2001, 100), or to educated amateurs. For the generation before Robertson and James, any intellectual could, in principle, publish a philosophy article in popular magazines like *The Contemporary Review* in England, or *Nation* or *The Atlantic Monthly* in the United States. One's philosophic writing could in turn be criticized in such publications by intellectuals with no particular training in philosophy. But the arrival of journals like *Mind* marked the early days of philosophical professionalism. By Robertson's design, virtually everyone publishing there had made a vocation of either academic philosophy or psychology, and their debates were kept strictly amongst themselves. As a result, the controversies that raged there were often a step removed from the more broadly engaging discussions of popular intellectual magazines.

[63] Kuklick persuasively treats the transition from amateur to professional philosophy in America (Kuklick 1977; Kuklick 2001).

> has undoubtedly prevented philosophy from obtaining the scientific consideration which it holds elsewhere. (Robertson 1876, 1)

From Bacon through Mill, leading British intellectuals had historically not been professional philosophers. According to Robertson, their writing might have been more rigorous—more *scientific*—had they devoted their working lives to philosophy.

Recall from my previous chapter that Green also found traditional British philosophy, especially that emanating from Locke, to be too sloppy. Locke was quick to sacrifice logical rigor in order that his ideas could be digestible in a public, political forum, according to Green. Robertson agreed that traditional British philosophy had not been rigorous enough. And he agreed that the way to make philosophy rigorous was to encourage professionalization.[64]

But he disagreed on what *kind* of professionalization would be best for British philosophy. The quoted passage continues:

> There has not been wanting in England a generally diffused interest in the subject [philosophy], such as is fed by discussions, more or less philosophical, mixed up with lighter literature in the pages of miscellaneous magazines; but of special interest, like that felt in mathematics or physics or chemistry by a multitude of active workers and a multitude of trained and continuous learners, there has hitherto been little. Even now the notion of a journal being founded to be taken up wholly with metaphysical subjects, as they are called, will little commend itself either to those who are in the habit of declaring with great confidence that there can be no science in such matters, or to those who would only play with them now and again. (Robertson 1876, 1-2)

Green wanted to remake British philosophy into an academic profession like that which flourished in German universities. He wanted British philosophers to become professional metaphysicians in the spirit of Hegel, as we saw in Chapter One. In

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[64] The view of British philosophy as having been hampered by its lack of professionalism seems to have been more widespread than just Green and Robertson. For example, the British intellectual historian and literary critic David Masson noted that Britain had the reputation in Europe of having given up on real philosophy, entirely. He wrote:

> The Germans, in particular, have long pitied us on this account. It is more than forty years since one of their greatest thinkers [Hegel] publicly denounced us by pointing out that England was the only country in Europe where the word Philosophy had been synonymous with natural science, where the barometer and thermometer were spoken of as 'philosophical instruments,' and where a so-called *Philosophical Journal* treated of agriculture, housekeeping, cookery, and the construction of fire-places. (Masson 1866, 10)

contrast, Robertson held that the way to make British philosophy rigorous was to make it more like a science.[65] In this passage, Robertson said England showed a pronounced, yet unfocused interest in philosophy. The interest was unfocused in that it was expressed in popular magazines amidst "lighter literature." Robertson wanted philosophy to be pursued by trained professionals in the manner of math, physics, and chemistry, and published in specialized journals of its own. In the former passage, Robertson blamed British philosophy's failure to become rigorous—to attract what he called "scientific consideration"—on the amateurism of traditional British philosophers.

Robertson wanted philosophy to come into closer contact with the sciences in respect to both methodology and subject matter. First, Robertson suggested in the passages just quoted that philosophers should emulate the professional ethos of those working in the exact sciences. Second, as we will see below, he thought philosophy should draw on results from the nascent science of empirical psychology. But psychology had not yet (in 1876) become a legitimate science, in Robertson's view. So he saw the quest to help *build* a genuine science of mind as an integral part of the

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[65] Though some English-speaking writers in the 19th century used "science" to mean something like the German notion of *Wissenschaft*, this was not Robertson's usage. For evidence, first consider that Robertson clearly wanted *psychology* to become a natural science. In a follow-up essay to the one I am currently citing, Robertson wrote:

> When Psychology is distinguished from Philosophy and the question is raised whether there is any special relation of the one to the other, it is Empirical Psychology that is to be understood—the science of mind worked out in the way of the natural sciences, if not regarded as itself one of them: Rational Psychology has always been taken as philosophical or nothing. (Robertson 1883, 4)

In this passage, Robertson made clear that when he wrote about a "science" of mind, he did not mean merely a *Wissenschaft* that takes mind as its object. He meant mental studies that employ the methods of *natural* science, presumably in the manner of his teacher, Alexander Bain.

When Robertson discussed *philosophy's* "scientific" status, though, did he use "scientific" in the same way? The passages just quoted in the text suggest that he does. In the first of the quoted passages, Robertson discussed obstacles to philosophy's being treated scientifically. In the second passage, he gave examples of other fields that got the sort of "scientific" treatment he hoped philosophy would soon receive—these included mathematics, physics, and chemistry. Thus Robertson wanted philosophical questions to be approached in the manner that mathematicians and natural scientists approached questions.

quest to make philosophy more professional and scientific. Only when psychology becomes genuinely scientific can philosophy hope to live up to its own potential as a rigorous field of study.

Robertson's allies in the debate over how best to professionalize British philosophy came to call themselves "empiricists." In one sense, Robertson's side was victorious, but the victory had several unexpected consequences.

First, as mental science matured, it splintered off from philosophy and became an independent field.[66] But philosophy did not then draw on the new psychology's empirical research, as Robertson had hoped. It *consigned* empirical research to its increasingly-estranged sister field.[67] In the wake of empirical psychology's exodus,

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[66] This view is commonly accepted among historians of both psychology and philosophy—so much so that it is rarely argued for. One deft exception is (Wilson 1990), which discusses the relationship between psychology and philosophy in America. One historian capitalizes on scholars' widespread failure to argue positively for the view that psychology is an offspring of philosophy (Reed 1997). Reed argues that philosophy as we now know it is descendent from psychology, and not vice versa. This view is provocative, but indefensible. Reed argues that in American research universities in the late 19th century, psychology managed to get a foothold before philosophy did. This is a remarkable fact, but it is not evidence of philosophy's being an offshoot of psychology. Compared to American psychology, American philosophy simply had a more difficult transition from intellectual magazines to graduate programs (Wilson 1990). But even if one grants Reed's dubious assumption that there was no philosophy before there was *academic* philosophy, in Germany and Great Britain, for example, philosophy had a longer history as an academic field than did psychology.

Moreover, one of the key figures in the new psychology, William James, taught his own students that psychology was the offspring of philosophy, not vice versa. We know this from Ralph Barton Perry's class notes in Phil 3, which he took with James in 1896-1897. In Perry's notes on 10/8/1896, he wrote—

> Pos. says Phil. has not made any progress, but it is responsible for all the sciences. They all started together with Aristotle and as each branch has grown overloaded, it has fallen from the tree of Phil.—e.g. Psych is about to do so" (WJP, bMS Am 1092.9 (4590), Folder 1, page II.3; by permission of the Houghton Library, Harvard University)

Perry's student notes are divided into reading notes and notes on lectures he attended. The quoted passage appears in Perry's notes from James's lectures. If Reed is right that psychology gave birth to philosophy, one would expect late 19th century psychologists to have noticed this new-fangled field called "philosophy." This is not the case, if these notes are any indication. Late 19th century psychologists regarded themselves as children of philosophy, and not vice versa.

[67] Perry recalled a precise moment when empirical studies of the mind were finally consigned to the Psychology faculty at Harvard. He wrote in 1943:

English-speaking philosophers began to see their work as confined to non-empirical issues. Thus, even as British philosophers of the next generation (led by Russell and Moore) abandoned Idealism, the surviving conception of what it was to *be* a philosopher was largely Green's, by default. Though they abandoned the Hegelian vocabulary, philosophers of Russell's generation became academics whose specialty was a priori deliberation. Robertson died in 1892, but he, James, and most other *Mind* empiricists would have lamented this development had they lived to see it flourish.

There was a second unexpected consequence of the drive to professionalize philosophy. Professors needed a coherent narrative to teach students about the history of their field. Of course, earlier generations of philosophy instructors used schematisms to teach the history of philosophy, too (Kuklick 1984). But as *instructors* like James, Robertson, and Green emerged as leading philosophical

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> The to me regrettable chasm between the first and third floors of Emerson Hall, Cambridge [where Harvard's Psychology and Philosophy Departments were housed, respectively], is symbolic of a change in the relations between philosophy and psychology which has taken place during my own professional life-time. Time was when the difference was one of emphasis, but now it is a difference of vocation, profession, problems and technique. We came to the parting of the ways when, some years ago, the philosophers were asked to sit in judgment on a series of candidates whose doctoral dissertations dealt with the a-mazed rodent. Feeling ourselves to be rank amateurs in the field, we sat in silence and accepted the expert judgment of our junior colleagues who, having been reared in a new age, were as ignorant of philosophy as were we of what is now called 'psychology.' … William James was at one and the same time one of the first of the scientific psychologists and one of the last of the philosophical psychologists. (Perry 1943, 122)

Perry does not say exactly when the dissertation defenses concerning the rodents occurred (mazes have long been used to investigate capacities like spatial perception and memory among mice and rats). Perry saw James's *Principles* (1890) as a pivotal publication in the transition from "philosophical" to "scientific" psychology. The defenses must have occurred well after this date, because Perry did not begin teaching at Harvard—and thus could not have participated in dissertation defenses—until 1902. Harvard formed a separate Psychology Department only in 1934; but Perry just refers to the chasm between the first and third floors of Emerson Hall, not to a chasm between separate departments. I do not know how long more empirically-minded members of the Philosophy Department may have been housed on the first floor of Emerson Hall. So it is difficult to narrow the possible date of the episode to which Perry refers—and thus of the moment Perry realized philosophers were no longer competent judges of empirical psychology—to a time frame any more narrow than 1902 and 1943.

authors, they began importing their teaching schematisms into their original writing. Empiricism's historical connotations seem to have grown up partly for the purposes of teaching. But those connotations were subsequently injected into professional debates over the viability of a science of mind.[68]

I will revisit professionalism at the end of Chapter Five. In this chapter, I aim to establish two main theses about the development of empiricism. One thesis is that some early philosophers to call themselves "empiricists" had a special purpose in allying themselves with the Lockean tradition as conceived by this new teaching schematism. The tradition provided philosophical support and intellectual prestige (despite Green's best efforts) for the idea that psychology could become a genuine science. And it provided support for the related idea that results from empirical studies of the mind could be a foundation for professionalized, rigorous philosophy. During the 1880s, both these ideas were under attack from British Idealists, and *Mind* provided a forum for the ensuing debate.

The second thesis I establish is that William James was an integral player in these early debates about empiricism. Not only did he impact these debates, but the debates in turn shaped his work, especially in psychology.

Many of James's articles published in the 1880s would be incorporated into his 1890 masterpiece *The Principles of Psychology*. The journal in which most of this work appeared was *Mind*, and it appeared during a period of intense debate between Idealists and psychologists. I survey James's correspondence and publications to show that his work in *Mind*—even his empirical research—during this decade had Idealists as enduring targets, and the viability of psychology as a guiding theme. In Chapters Four and Five, I will argue that the very theoretical

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[68] I should note that the battle lines were not as clearly drawn for American Idealists as they were for British Idealists. American Idealists like Josiah Royce, George Ladd, and the early Dewey actually wrote treatises that sought to combine experimental methods of the new psychology with neo-Kantian (Royce) and neo-Hegelian (Ladd) metaphysics. Nevertheless, that did not mean American Idealists saw psychology as a genuine science. Pursuing an *experimental* component of psychology did not, for these Idealists, make psychology into a *science*. Famously, Ladd criticized James's *Principles* for its pretensions to build a genuine science of mind. See (James 1892; Ladd 1892); for a brief history of the exchange, see (Giorgi 1990).

backbone of his psychology—the stream of consciousness—was designed to resist these Idealist attacks on empirical psychology.[69]

In the remaining chapters I will analyze the philosophical details of debates between Idealists and psychologists. But the historical work I undertake in this and the previous chapter is a necessary preliminary. This is because James's early work is rarely read in the context of debates with Idealists—especially not with *British* Idealists. So before I can analyze James's role in this conversation, I must first establish that James really was an important participant.

In Sections Four and Ten of this chapter, I show that the impact of British Idealism on James's early thinking is almost universally ignored in the secondary literature. Here is a mistaken inference James scholars have been prone to draw. They begin with an observation that has long been routine[70]—that James's work articulated a spirit that was distinctively American. But scholars mistakenly infer that the main context needed to understand that work can therefore be found largely inside America's own intellectual life. Thus one typically finds James anthologized in volumes with titles like *Pragmatism and Classical American Philosophy* (Stuhr 2000). One gets the impression that James's work can be understood as part of a purely local conversation with figures like Emerson, Peirce, Dewey, and Royce.

If the evidence I present in this chapter is compelling, interpretations of James that exclusively focus on his conversations with American peers are deficient. In

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[69] The stream is the single most important theoretical framework in the principles. James spends the first eight chapters of the Principles on methodological and physiological issues. He turns to introspection in chapter nine ("We now begin our study of the mind from within," p. 219), at which point he immediately introduces the notion of a stream of thought. He then uses the idea of a stream of thought to give theories of the self, attention, conception, time, memory, sensation, imagination, space, reality, reasoning, the emotions, will, and necessary truth, among other topics. In Chapter Four, I show that James's idea of a stream of thought grows directly out of his early research on space perception.

[70] This claim was routine even when James was alive. Royce said that James captured "the spiritual life of his own people." Santayana wrote that James "had a prophetic sympathy with the dawning sentiments of the age, with the moods of the dumb majority" (both quotes can be found at Cotkin 1994, 13). *See below*, Section Ten, for more recent expressions of the same sentiment.

fact, the shape of James's thinking was deeply influenced by his direct and sustained participation in *British* intellectual debates, as well.[71]

2. James's Philosophy Clubs

During his career, James was strongly associated with Harvard in all its academic prestige. He held posts in physiology (1872-80), philosophy (1880-1907), and psychology (1889-1907), becoming perhaps the most famous academic in the United States after the abridgement of his textbook appeared in 1892 (PBC). However, he came of age in a time and place where cutting-edge philosophy was undergoing a transition. James's father's generation pursued philosophy in social clubs that freely mixed intellectual deliberating with socializing.[72] When they published, their work typically appeared in literary or broadly intellectual magazines. During much of William James's own life, the activity of philosophizing still centered on social clubs. But these groups were more likely to be populated by philosophy (or psychology) professors than clubs of the earlier generation. And the papers they discussed were more likely to be published in professional journals than those discussed in the older clubs.

For example, the prestigious Saturday Club was an important philosophical venue for William's father, Henry James, Sr. He was voted a member two years after the family moved to Cambridge in the early 1860s (Menand 2001, 204). Other members of the Saturday Club included luminaries like Louis Agassiz, Ralph Waldo Emerson, Nathaniel Hawthorne, Henry Wadsworth Longfellow, James Russell Lowell, Charles Eliot Norton, and Oliver Wendell Holmes, Sr., (Menand 2001, 6). Many of these men—Agassiz, Holmes, Longfellow, Lowell, Norton—were professors

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[71] James was extremely cosmopolitan. He also participated extensively in French philosophical debates as well, and this topic stands in need of investigation (*see below*, fn. 85). In fact, the *Principles* is dedicated to François Pillon, who co-published *L'Année Philosophique* and *La Critique Philosophique* with Charles Renouvier. James frequently appeared in the pages of these journals.

[72] On the role of social clubs in American philosophy of this era, *see* (Fisch 1986a; Kuklick 1977, 46-62). On the professionalization of American philosophy more generally, *see* (Cotkin 1994; Wilson 1990).

at one point or another in their careers, to be sure. But they were not philosophy professors. Emerson, Hawthorne, and Henry James, Sr. (the latter had inherited his own father's fortune)[73] were never professors at all. In clubs like these, intellectuals of many stripes gathered to discuss one another's philosophical ideas and essays.

Though William James was professionally ensconced at Harvard by 1872, many of his publications in psychology and philosophy during the next two decades grew out of his participation in clubs he maintained with his own contemporaries, in both the United States and abroad. Unlike participants in his father's clubs, though, many of William's colleagues *were* philosophy (or psychology) professors.

It is important to attend to the intellectual climate of these clubs if one wants to understand James's early work in philosophy and psychology. This is because his club papers were often published in professional journals like *Mind* and the *Journal of Speculative Philosophy*,[74] and later incorporated into his 1890 opus, the *Principles of Psychology*.

The American clubs in which James participated included (most famously) the Metaphysical Club (1871-75), in which the idea of pragmatism was first hatched.[75] He also participated in several other American clubs: a second incarnation of the Metaphysical Club (1876-79), a Hegel Club run by two Illinois businessmen (1880-81), and another Hegel club (1881-87) run by William Torrey Harris, editor of the *Journal of Speculative Philosophy* (Fisch 1986a, 139).

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[73] A lovely intellectual biography of Henry Sr. is (Habegger 1994).

[74] This is not to say that James shared Green and Robertson's views about the need to professionalize philosophy. In fact, James came to think professionalism would harm philosophy, and this disagreement occasionally surfaced, albeit not acrimoniously, in correspondence with Robertson. For example, in a letter to James about an article the latter had recently published in the *Princeton Review*, Robertson wrote: "… pity that Philosophy is so hard up that she cannot strive with her own children and keep them from mixing with the wicked world of popular-review writers. Ach, wir armen [Oh, we poor]! But you have been more virtuous than most" (CWJ, V.226). For a colorful example of James's worries about professionalism, *see* his "The Ph.D. Octopus," in (James 1987, 67-74). I will return to James's views on professionalism at the end of Chapter Five.

[75] There has been some scholarly discussion about the actual, historical role of the Metaphysical Club in the development of pragmatism (Fisch 1964; Fisch 1981; Menand 2001, 201-232).

James also participated in several British clubs during his travels. For example, he went to Europe from August 1882 to March 1883, spending most of his trip in England. Perry wrote that the effects of this particular visit on James's philosophical thinking were "the most important in all James's European adventures …" (RBP, I, 586). The trip was as important for James's professional as for his intellectual development. He met J. S. Haldane at the recently-formed Aristotelian Society, and made connections with another London philosophical club, Leslie Stephen's facetiously-named "Tramps." A subset of the latter group called themselves the "Scratch Eight," and they accepted James as their ninth (RBP, I.594-596). Perry says the Scratch Eight was "the nucleus of James's 'philosophic society'" (RBP, I.596).

While the Tramps convened on long walks through the countryside, the Scratch Eight more commonly met over dinner at a member's house. The latter group consisted of some important writers for *Mind*, as James recorded in a letter to his wife dated December 16, 1882: Edward Gurney, Shadworth Hodgson, James Sully, Carveth Read, Frederick Pollock, Leslie Stephen, *Mind's* editor George Croom Robertson, "& a certain Maitland, he being, so far as I know, the only one not known to fame" (CWJ, V.332). Gurney taught psychology at Cambridge. Sully, Read and Robertson were philosophy professors. Hodgson was unaffiliated with any institution, but devoted his life to writing philosophy. As we will see below, James's public role as an advocate of empiricism was primarily a function of his publications in *Mind*, and of his participation in this and other clubs.[76] We will come back to James's relationship with *Mind* and its authors, below.

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[76] For an account of James's relationship to Croom Robertson, *see* (RBP, I.596-606). To get a sense of how casual, yet at the same time high-powered, these clubs could be, I reproduce a poem one member wrote about The Tramps. Note the two references to the fact that club members publish articles in the journal *Mind*—the clubs were equally places to socialize, rub elbows, and talk philosophy:

> The Ballade of the Sunday Tramps
> If weary you grow at your books
> Or dyspeptical after you've dined,
> If your wife makes remarks on your looks,
> If in short you feel somewhat inclined

James had early been acquainted with neo-Kantianism through his own studies in philosophy.[77] But his face-to-face struggle with the kind of Idealism we have been looking at evolved through his participation in the American clubs, particularly in the second incarnation of the Metaphysical Club.

Initial club members included Thomas Davidson, Oliver Wendell Holmes, Jr., Nicholas St. John Green, John Fiske, F. E. Abbot, Joseph Warner, Francis Bowen, C. C. Everett, E. F. Fenollosa, J. E. Cabot, and G. H. Howison (Fisch 1986a, 140).

For fresh air and a six hours' grind
And good metaphysical talk—
With a party of writers in *Mind*
You should go for a Sabbath day's walk.

Leave the town by the earliest train
(In your Bradshaw bedtimes underlined)
With umbrella in case it should rain,
Enduring of sun and of wind—
'T is no harm if they toughen your rind—
Your boots you'll remember to caulk,
Your pockets with sandwiches lined,
You are good for a twenty-mile walk.

Though surely we all by our rule
Are as peripatetics defined,
Yet each philosophical school
Is here with each other combined:
Idealists, real ists, find
Representatives here, as we stalk
In the breezes, like them unconfined,
Overhills of clay, gravel, or chalk.

Envoy
So, Prince, leave your troubles behind,
And resolving for one day to baulk
Black care, with the writers in *Mind*
Go forth for your Sabbath day's walk.

[77] Perry notes that an early and profound influence on James's understanding of the Kantian legacy was (Masson 1866); *see* (RBP, I.573-585). There is no record of Masson's book in the Houghton Library. Perry's list of books from James's collection that were sold, at WJP bMS Am 1092.9 (4578), make no mention of this volume either. Perry wrote that this was a book "belonging to his father's library," at (RBP, I.574). No copy of Masson that James might have read and annotated survives. Perry's list is cited by permission of the Houghton Library, Harvard University.

Howison, Davidson, James, Bowen, and Fenollosa were philosophy professors.[78] Holmes, Green, and Fiske were lawyers. Abbot and Everett were ministers (the latter eventually taught religion at Harvard, and served a term as Dean). James's American philosophical clubs thus had a moderately higher proportion of members who were philosophy and psychology professors than the clubs of his father's generation. But James's British clubs of the same period were dominated even more exclusively by professors.

At any rate, this second Metaphysical Club began in 1876 by reading T. H. Green's edition of Hume's *Treatise of Human Nature*, especially its lengthy introduction. The group then moved on to the first edition of Edward Caird's *Critical Account of the Philosophy of Kant* in 1877-78 (Fisch 1986a, 144). Fisch characterized the respective publications of these two works as "the major philosophic events of the decade," for club members (Fisch 1986a, 146). These two works appear to have been especially influential in James's thinking about Idealism. As we have begun to see, both of these works sought to show that proto-empiricism was an inconsistent philosophical position, and that consequently, the very idea of an empirical psychology was incoherent.

James's first paper written expressly for the *Principles* was an article on space perception. He wrote this paper in July 1878 as a response to his friend, J. E. Cabot, a Hegelian. In March, earlier that year, Cabot had delivered a club paper defending an account of space perception the group would have associated with Green and Caird, as I show at the end of Chapter Three. Cabot's paper was published that summer in Harris' *Journal of Speculative Philosophy*; James's response was later published in the same journal (see Fisch 1986a, 147-148).

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[78] In fairness, not all these characters were philosophy scholars in our contemporary sense. Bowen was of the older generation, when a philosophy professor was as apt to teach theology. Though Fenollosa briefly taught philosophy, he was more of an artist and Japan scholar. Thomas Davidson taught philosophy in Scotland and in London, but in the United States was more involved in creating experimental schools—notably, a summer school in the Adirondacks at which James sometimes lectured, and The Breadwinner's College in New York City for working class students (see Anderson 2004, 240).

Less than a month after Cabot delivered his paper, he wrote a letter that sheds light on the way battle lines had been drawn among club members. As the group turned its attention to Caird, two camps had apparently formed. One camp was sympathetic to Green and Caird, and defended a Kantian approach to the mind. The other side resisted Green and Caird, taking up the mantle of what I am calling "proto-empiricism," defending an empirical-psychological approach. On March 26th, Cabot wrote to Howison (a Cambridge transplant from St. Louis, then a hotbed for neo-Hegelian philosophy):

> You shall see my paper & welcome, as soon as I get it back from Mr [G. Stanley] Hall, who borrowed it. I regret to say however that I spent most of the available time in reading the books wh. Mr James lent me, on *the psychological side*; & did not succeed in putting my thoughts into good shape. . . .
>
> We missed you very much: the discussion did not amount to much, partly because Dr James had to go away very soon, and partly because nobody except Dr Hedge, who was present, cared to look at it from *the Kantian side*.
>
> We were so "demoralized" that we dispersed without fixing upon anything for next time. What shall we do? Will you give us the Caird?[79]

From this letter it appears that the club was arguing about two conceptions of the human mind. We know from the rest of their output that James and Hall would have represented the view here called "psychological," and Cabot, Howison, and Thomas Davidson represented the opposed "Kantian" view.

Since James's first article on space was a response to Cabot, it is especially important that I show this particular figure to have been on "the Kantian side." I will review Cabot's paper in Chapter Three. For now, I simply note that Cabot recorded his admiration for Green in an 1875 letter, written the year after the publication of the "Introduction." Cabot wrote that he "takes great comfort in Mr. Green's Introduction to the new ed. of Hume" (quoted at Fisch 1986a, 138).

It is not only James's interactions with neo-Kantians that makes 1878 a crucial year for understanding his early thought. For that June, James signed a contract with Henry Holt to publish a psychology textbook. After James's marriage in early July, he began to compose the book—his *Principles*—by penning a response to

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[79] Quoted in (Fisch 1986a, 147), emphasis mine. "The Caird" refers to a paper Howison had in the works on Edward Caird, Fisch claims.

Cabot's club paper on space.[80] In this article (which we will investigate at length in Chapter Four), James finally sided with a group he called the "empiricists."[81] The article was entitled "The Spatial Quale," and appeared in the *Journal of Speculative Philosophy* in January of 1879. James went on to publish voluminously about space perception, and the topic received more attention (measured in number of pages) in the *Principles* than any other topic. Space perception, as we shall see, would become a battleground issue for the fight between Idealists and empiricists.

3. *Mind*, A New Review of Psychology and Philosophy

James engaged in a prolonged and public struggle with Idealists, the contours of which shaped much of the work that went into the *Principles*. The story of this struggle begins in earnest soon after the publication of "The Spatial Quale" in 1879. James had become miffed at William Torrey Harris, the publisher of the *Journal of Speculative Philosophy*, in part because the latter refused one of James's subsequent submissions. In a letter to Josiah Royce from February, 1880, James wrote:

> I will never write again for Harris's journal.[82] He refused an article of mine a year ago 'for lack of room,' and has postponed the printing of 2 admirable original articles by T. Davidson and Eliot Cabot for the last 10 months, or more, in order to accommodate

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[80] He began this work on his own honeymoon, dictating the paper to his new wife, Alice Gibbens (Simon 1997, xxv). One wonders how Alice Gibbens James fancied her groom's idea of a honeymoon.

[81] Evidence that James saw "The Spatial Quale" as a defense of something called "empiricism" can be found in the concluding paragraph of the essay:

> The mere innateness of the spatial form of sensibility is surely not the essence of the Kantian position. Every sensationalist empiricist must admit a wealth of native forms of sensibility. The important question is: Do they, or do they not, yield us *a priori propositions*, synthetic judgments? If our "sensation" space does this, we are still Kantians in a deeper sense by far than if we merely call the spatial *quale* a form of *Anschauung*, rather than an *Empfindung*. But if the new geometry of Helmholtz and others has upset the necessity of our axioms (and this appears to be the case …), then the Kantian doctrine seems literally left without a leg to stand on. (EPs, 82)

We will see *below*, this chapter, what James might have meant by "empiricism."

[82] In fact, James was to publish one more article for the *Journal of Speculative Philosophy*. It was an article on the perception of time, appearing in 1886 (James 1886).

> Mr Channing's verses and Miss -----?s drivel about the school of Athens etc etc. (CWJ, V.84)

"Eliot Cabot," here, is J. E. Cabot, James's friend and author of the article to which "The Spatial Quale" was a reply. Davidson was another close friend of James's who was an Idealist like Cabot. James was annoyed to have his own work refused. But he was also annoyed that Harris refused his friends' work, especially while publishing what James regarded as bad poetry.

Happily, James found another nascent journal, this one on the other side of the Atlantic. *Mind* was explicitly dedicated to *not* mixing the publication of poetry and philosophy—and its editor proved to have wide open arms for James.

In 1876, the English associationist Alexander Bain began financing this academic publication (to the reported tune of £3,000, by the time he was through).[83] Bain appointed his student Croom Robertson as the first editor. Robertson dubbed the journal "*Mind*," and edited the publication until 1891, when he retired for reasons of ill-health. G. F. Stout then took over as editor, and Henry Sidgwick as patron. Robertson died the following year at age 50 (Quinton 1976, 6, 8).

The journal's subtitle described its two chief topics: *Mind* was to be a review both of *Psychology and Philosophy*. Though we now think of it as a philosophy publication, the journal was founded as a forum for research that considered these two topics, together. In fact, Robertson indicated that the *order* in which "Psychology and Philosophy" appear in the journal's subtitle was purposeful (Robertson 1883, 1). Robertson explained that psychology was listed first because it was to provide a kind of neutral, scientific foundation for philosophy.

He chose a masthead that reflected *Mind's* emphasis on both psychology and philosophy. The masthead remained virtually unchanged from the journal's inception in 1876 all the way through 1974, when *Mind* finally dropped "psychology" from its subtitle. See Figures 1 and 2.

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[83] For the fascinating background of the two years leading up to *Mind's* first issue, see (Neary 2001).

No. 1.] [January 1876.

MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

I.—PREFATORY WORDS.

THE first English journal devoted to Psychology and Philosophy, MIND appears in circumstances that call for some remark.

That no such journal should hitherto have existed is hardly surprising. Long as English inquiry has been turned on the things of mind, it has, till quite lately, been distinguished from the philosophical thought of other countries by what may be called its unprofessional character. Except in Scotland (and even there Hume was not a professor) few British thinkers have been public teachers with philosophy for the business of their lives. Bacon, Hobbes, Locke, Berkeley, Hume, Hartley, the Mills did their philosophical work at the beginning or at the end or in the pauses of lives otherwise active, and addressed for the most part the common intelligence of their time. It may not have been ill for their fame; but their work itself is not what it otherwise might have been, and their manner of thinking has affected the whole character and standing of philosophical inquiry in England. If their work had been academic, it would probably have been much more sustained—better carried out when it did not lack comprehension, more comprehensive when it was well and carefully begun. The informality of their thought has undoubtedly prevented philosophy from obtaining the scientific consideration which it holds elsewhere. There has not been wanting in England

1

Figure 1: Masthead of *Mind*, 1876 (first issue). Note prominence of "Psychology and Philosophy" in subtitle. The journal would keep this layout (and subtitle) until 1974.

MIND

A quarterly review of philosophy
edited by D. W. Hamlyn

Volume LXXXIII
1974

Published for the Mind Association by Basil Blackwell

Figure 2: The new *Mind* masthead, from the 1974 issue in which it first appeared. The new masthead came with a new subtitle: *Mind* is now just a "Review of Philosophy," not of "Psychology and Philosophy."

In *Mind's* first issue (January 1876), Robertson explained and defended *Mind's* outlook. The journal was to be "the first English journal devoted to Psychology and Philosophy." Such a journal was needed, Robertson wrote, because psychology was under attack as an imposter science.[84] The time had come to settle the question of whether psychology was a genuine science, and the journal's chief aim was to provide a forum for scholars to help settle the question.

Here is how Robertson described *Mind's raison d'être*:

> Now, if there were a journal that set itself to record all advances in psychology, and gave encouragement to special researches by its readiness to publish them, the uncertainty hanging over the subject could hardly fail to be dispelled. Either psychology would in time pass with general consent into the company of the sciences, or the hollowness of its pretensions would be plainly revealed. Nothing less, in fact, is aimed at in the publication of Mind than to procure a decision of this question as to the scientific standing of psychology. (Robertson 1876, 3)

Robertson intended *Mind* to accomplish two main tasks. He wanted the journal to encourage research in psychology by providing a professional forum for the publication of its research. And he wanted the journal to help scholars come to a consensus on whether psychology should be counted as a genuine science.

But why, then, is *Mind* to be a review of psychology and *philosophy*? To answer this question, we need a clearer sense of what sort of activity Robertson took psychology to be.

In Robertson's view, psychology had an objective and a subjective component. On one hand, the field had an objective arm that investigated "the Nervous System in man and animals," a practice which connected the field with biology and the physical sciences. Psychology also pursued the "objective study" of language, of insanity, of the mental characteristics of "Human Races" and of "lower animals," among other topics (Robertson 1876, 3-4).

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[84] The only example Robertson gave of an alleged attack on psychology was the Royal Commission on Scientific Instruction's *Third Report*, an 1873 document (jointly-authored by T. H. Huxley and others) that reviewed all aspects of science instruction at Oxford and Cambridge. The document explicitly excluded "the Mental and Moral Sciences" from its purview. If Robertson did not yet see Idealists as opponents of psychology in 1876, he soon would, as we shall see. The founding document of British Idealism for the first generation to make their mark in *Mind* was Green's "Introduction" to Hume. That been published less than two years before *Mind's* opening issue appeared.

But psychology was not *just* an objective field of research:

> No such statement, however, can come near to exhausting the matter of psychology. Whatever place may be claimed for it among the sciences in respect of its method, psychology in respect of its subject must stand for ever apart. Include Mind, as it may possibly be included, in the widest conception of Nature, and it is like one half of the whole facing all the rest. Oppose it, as more commonly it is opposed, to Nature, and again Mind is nothing less than one half of all that exists…. (Robertson 1876, 4)

Robertson claimed that psychology may be objective in its methodology, but psychology's subject matter was unique among the sciences. This was because psychology was about the mind, but the mind cannot be exhaustively described as a natural object. The mind is *part* natural object, but it also stands above nature in some important respects. In order to investigate both aspects of the mind, psychology needs to employ both objective and subjective methods.

In what respect, exactly, is the mind supposed to stand above nature? For Robertson, when viewed subjectively, the mind stands above nature in the sense that its activities are necessary for our apprehension of nature in the first place. The passage just quoted continues with the suggestion that the subjective study of the mind amounts to something like traditional philosophical reflection:

> … Nay, in a most serious sense, it ["Mind"] extends to all that exists, because that which we call Nature, in all its aspects and all its departments, must have an expression in terms of thought or subjective experience. It is in this view that Psychology may be shown to pass inevitably into Philosophy, but let it suffice here to have merely suggested why, although all objective lines of inquiry bearing more or less directly on mind will in turn be pursued in these pages, the fundamental consideration of mind is and must be subjective. (Robertson 1876, 4)

Minds are in nature. But minds are also the organs by which we come to represent nature to ourselves. Indeed, minds are the organs by which we represent "all that exists." Psychology is continuous with philosophy, therefore, because the thing that it studies—the mind—has as *its* scope all reality. Even the sort of "objective" study of mind that Robertson's journal will publish has as its ultimate concern the mind in this subjective capacity—the mind as that through which all reality is apprehended. Thus, Robertson praised Germans like Wundt and Helmholtz who started as physiologists, but now are doing "some of the best philosophical work" (Robertson 1876, 2).

The long passage I have just quoted claims that there is a continuity between the objective and the subjective study of the mind. The suggestion is that the best psychology is aided by keeping philosophical considerations in view. But Robertson also held that philosophy, in turn, is aided by keeping psychological considerations in view.

This is because empirical psychology can provide a neutral groundwork for philosophical reflection, on Robertson's view.

> With reference to general Philosophy or Metaphysic proper, psychology may be viewed as a kind of common ground whereon thinkers of widely different schools may meet, and, if they do not forthwith agree, may at least have their differences plainly formulated, as a first step towards any agreement that is possible. The new journal should thus, while promoting psychological science, help also to compose that secular strife which scientific inquirers as well as popular writers are never weary of representing as the opprobrium of philosophy. (Robertson 1876, 5)

Psychology is not just philosophy's intellectual neighbor. Psychology is a propaedeutic for rigorous philosophic work. It provides a neutral set of facts that even warring philosophical schools can agree upon. This common ground is to provide a basis for transforming philosophy's characteristic "secular strife," now lampooned by scientists, into more productive disagreement.

Thus, psychology studies subject matter that leads into philosophy. But philosophy's subject matter leads into psychology as well, according to Robertson. Neither psychologists nor philosophers can ultimately make progress unless they engage with one another's work. Thus, psychology and philosophy are to be mutually reinforcing enterprises, and *Mind* is a journal that will help encourage this reinforcement.

4. James Finds *Mind*

James's deserved reputation as an American intellectual icon has tended to obscure the fact that he was heavily engaged with German, French, and British philosophy, particularly during the years he was publishing articles that came to be incorporated into the *Principles* (1878-1890). I will now argue that James's position with respect to British philosophy was more than that of external observer. He was *participating* at the center of important debates in British philosophy as they were

happening, especially during the 1880s. And the most important locus for James's participation was Robertson's *Mind*.

Figure 3 and Figure 4 offer an overview of James's substantive publications in English during the run-up to the *Principles*. By "substantive publications," I mean all his essays on any topic, from psychology to philosophy to psychical research. I include reports on conferences, but exclude letters to the editor, notes, and book reviews. James published a large number of very short such contributions, which I exclude because I want to give a sense of where he was sending his most carefully-written work during this period.[85]

Figure 3 illustrates that *Mind* was, by a large margin, the journal in which James published the most work during this period. Royce, G. Stanley Hall, and eventually Dewey were other important American contributors during these years. Out of all James's substantive publications, 47% of his total pages during this period were published in *Mind*, across 14 articles.[86] James's *Principles* reproduced much of this material. Harris's *Journal of Speculative Philosophy* came in a distant second, with just 17% of his total number of substantive pages during this period.

I include Figure 4 to show that James's publications in *Mind* were not confined to a burst of activity during one or two years, but were evenly distributed, more or less, across the period. To be sure, 1887 was a particularly productive year for James in *Mind*—that was the year his 4-part essay on space perception appeared. But he published more in Robertson's journal than anywhere else during each of the

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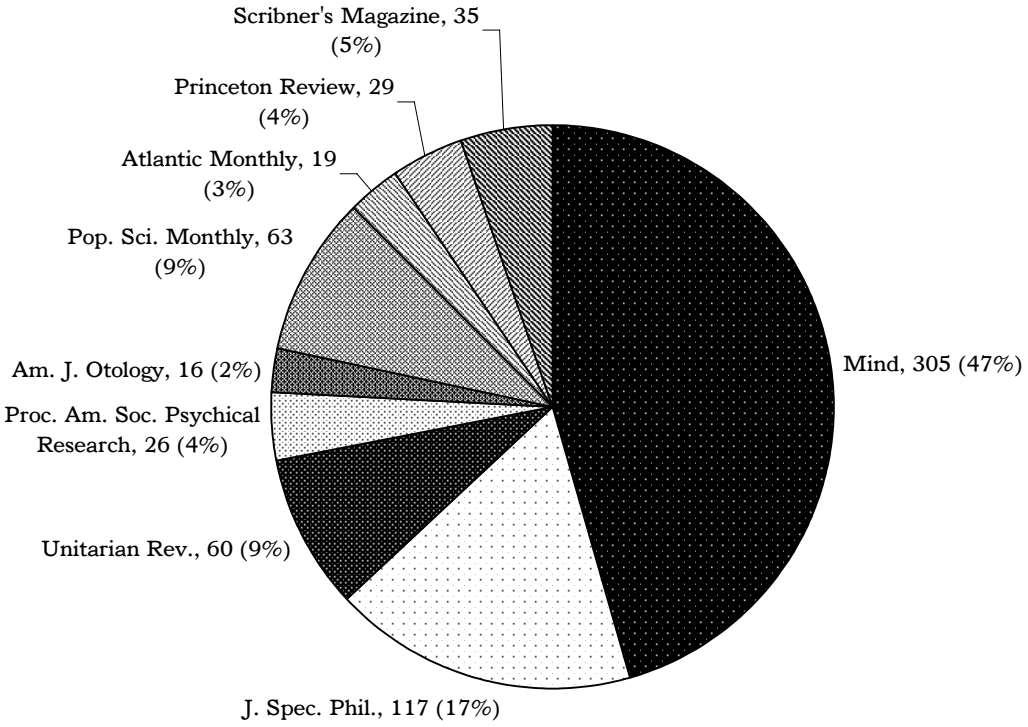
[85] I should note two important trends in James's publishing record during these years that Figure 3 and Figure 4 do not reflect. First, the inclusion of notes, reviews, and letters has the effect of highlighting popular intellectual journals like *The Atlantic Monthly* and *Nation* to which James was a regular contributor during this period. Also, I have excluded French translations of James's essays during this period. A thorough overview of James's publications during this period would surely have to take account of James's presence in François Pillon and Charles Renouvier's *Critique Philosophique*, and related journals. The large majority of these articles were translations of pieces that first appeared in English. But the articles sparked lively discussion, and rocketed James to intellectual fame in France. In many cases, Renouvier published responses, to which James offered rejoinders. This story is beyond the scope of my project.

[86] Four of these constitute "The Perception of Space," which was published in four consecutive issues (James 1887a; James 1887b; James 1887c; James 1887d).

years 1879, 1882, 1884, 1885, and 1889 as well. *Mind* was the journal that published the bulk of James's research during the run-up to the *Principles*.

JOURNALS PUBLISHING JAMES'S RESEARCH, BY TOTAL PAGES PUBLISHED: 1878-1890[87]



Label format: [Journal Name], [total number of substantive pages published in journal during period], ([number of substantive pages in journal as percentage of total substantive pages from WJ during this period]).

Figure 3: Total pages of James's substantive articles that appeared in various journals over the years 1878-1890. Note that the journal publishing the largest volume of James's substantive work during this period is *Mind*.

[87] I compiled the data for these charts from Ralph Barton Perry's annotated bibliography. The bibliography was edited and republished by John McDermott in (James 1967, 811-858).

JOURNALS PUBLISHING JAMES'S RESEARCH, BY PAGES PUBLISHED PER YEAR: 1878-1890

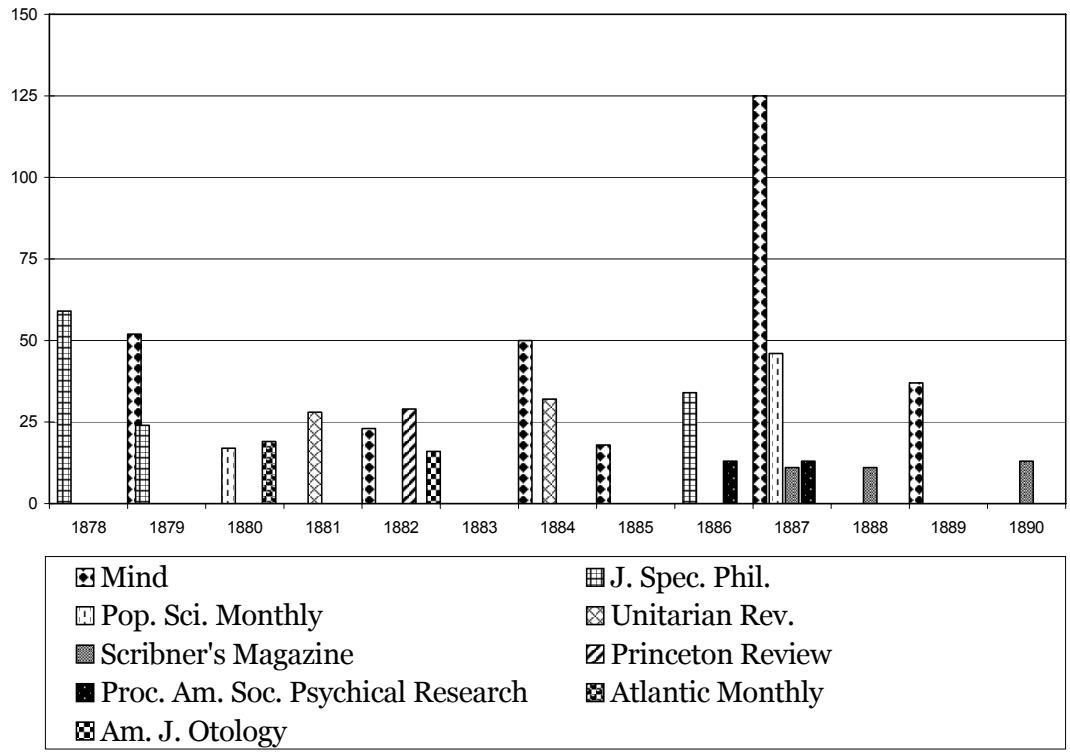


Figure 4: Total pages of James's substantive publications per journal, over the years 1878-1890. Though James was particularly productive in *Mind* in 1887, notice that he published more in this journal than anywhere else during each of the years 1879, 1882, 1884, 1885, and 1889, as well.

With the exception of (RBP, I.596-606), I can find no major studies of James that pursue his relationship to *Mind* or to its editor Croom Robertson. And none pursue James's relationship to British Idealists like Green and Caird who were crucial animators of *Mind's* contentious climate during the 1880s, either.

There are several resources that treat James's relationship to later Idealists, particularly Royce and Bradley. En route to clarifying James's response to Moore and Russell, (Sprigge 1997) deals with James's response to Royce and to Bradley on

the issue of intentionality. (Sprigge 1993) extensively compares James's metaphysics to F. H. Bradley's. (Conant 1997) looks at James's struggle with Royce over how to draw a distinction between truth and error. (Seigfried 1984) looks at James and Royce's diverging interpretations of biological evolution. But these pieces contain no mention of Caird, and virtually no mention of Green—the two earlier Idealists I write about.

There are several helpful resources for studying the history of *American* Idealism (see Easton 1966; Flower and Murphey 1977, ch. 8; Good and DeArmey 2001; Lützeler 2005). A very helpful overview that is short but detailed is (Watson 1982). Unfortunately, none of these resources shed light on James's relationship to Green and Caird. The literature on Green and British Idealism that I cited in Chapter One (on page 37, *above*) does not discuss James at any length, either.

One gets a measure of the role Green, Caird, and Cabot play in contemporary James scholarship by looking at the end of *The Cambridge Companion to James*, where there are exactly zero references to any of these three figures in either the bibliography or index (Putnam 1997). Two older exceptions include (RBP), always the reliable source, which has scattered tidbits about each of these important characters. And (Thayer 1968, 466-486) has an extensive discussion of *Dewey's* debt to Green.

In short, James scholars have paid almost no attention to the impact of British Idealists, or of the debates they sparked in *Mind* during the 1880s. The oversight is surprising given that so much of James's research appeared in that journal during the period when he was developing the *Principles*.

It turns out that the intellectual climate of *Mind* was stormy during the 1880s, and James sat very much in the eye. Many of the articles James published in that journal were incorporated into the *Principles*. These articles—and ultimately, the *Principles* as an entire work—have a set of philosophical ambitions scholars have overlooked. I think one source of this oversight is the general failure to investigate James's role in *Mind* during this period. In particular, scholars have failed to see that James shared Robertson's concern to develop a framework for empirical psychology

that resists Idealist attacks on mental science, and to show how empirical psychology stands to edify philosophical discourse—or so I shall argue.

5. James and Robertson

James was welcomed into the community of core *Mind* writers by the early 1880s. I am including details about Robertson's vision for *Mind* not just because Robertson was at the center of that intellectual community. For our purposes, Robertson is also important because he was James's closest partner in that community. He developed a close relationship with James, both personal and professional. In this section, I offer evidence of James and Robertson's growing relationship, and of the fact that James shared Robertson's goal of defending empirical psychology from Idealist attacks. To do this, I review some of the James-Robertson correspondence, with reference to relevant published material.

◈

The sense that sides had been drawn in philosophy infused James and Robertson's entire correspondence (*e.g.*, CWJ, V.38, V.182, V.226, V.484; VI.62, VI.262-263, VI.288, VI.429). Perry used that correspondence to show what a tender friendship grew between James and Robertson (RBP, I.596-606). But the letters also show two professionals coordinating a response to Idealists.

In late 1881, for example, James submitted to *Mind* an essay that attacked Idealism. The piece was entitled "On Some Hegelisms." In an important letter dated November 11, 1881, Robertson explained that he could not publish James's piece right away:

> … I think it well not to let you have your fling before April. You must know—or rather are now to be told—that the Hegelians are to be coming out in force in Mind, at last. Green himself opens in Jany., and I would rather not affront him just as he begins to speak. He will continue in April, but ought by that time to be more at his ease.—If you have seen the last No. of Mind, you will have noted a first plea (in the journal) for Hegel from another devotee [Andrew Seth Pringle-Pattison]. For some months past the youthful members of the brotherhood have been making desperate attempts to get up a Hegelian journal all to themselves. They have not succeeded—did not deserve to succeed, for reasons too long now to relate—and the whole band give promise now of sailing in the ship that has been going these six years [viz., *Mind*]. We shall see how they settle down with you & other shipmates.

In this letter, Robertson told James that *Mind* would finally publish Hegelians. The January 1882 issue included their leader, "Green himself," along with Josiah Royce. Green's article, "Can There Be a Natural Science of Man?" continued over the next two issues, and its publication was a watershed for *Mind*. Green died later that year, but his article was the opening shot in a battle between Idealists and empirical psychologists in *Mind*. Two of his students, Bradley and Bernard Bosanquet, would carry on the Idealist cause in *Mind*, as would Andrew Seth and a host of others.[88]

"On Some Hegelisms" did appear in April. As James described it in a letter, the piece targeted "points which have been made popular by the teachings of Green, the Cairds and Palmer."[89] It opened with the claim that "Hegelism" had become "one of the most potent influences of the time." Hegelians had become so zealous that

> 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. … Although 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, there can still be no doubt that, as a movement of reaction against the traditional British empiricism, the hegelian influence represents expansion and freedom, and is doing service of a certain kind.
>
> Such service, however, ought not to make us blindly indulgent. Hegel's philosophy mingles mountain-loads of corruption with its scanty merits, and must, now that it has become quasi official, make ready to defend itself as well as to attack others. (James 1882, 186)

Those like James who wanted to practice empirical psychology found they were accosted at every turn. Hegelians objected that the mind had properties which transcend time and space, and as such could not be studied empirically. In this essay, James undertook to strike back. Note that he used "British empiricism" to

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[88] A curious testament to how thoroughly the climate shifted in *Mind* after 1882 is (Schiller 1901). This is an anonymously-published spoof of *Mind*, widely thought to have been written by F. C. S. Schiller. Schiller, very much an empiricist (and Britain's most vocal champion of James's particular brand of empiricism, by the way), was himself a regular contributor to *Mind*. His faux issue lampooned Idealists who, by 1901, had a very prominent place in the journal. Idealists did not have a presence at all in *Mind* before 1882.

[89] This is from James's letter to G. H. Howison, dated September 30, 1881 (CWJ, V.180). George Herbert Palmer was a friend of James who spent several summers studying philosophy with Edward Caird in Scotland, a practice James ridiculed throughout the correspondence of this period.

denote Idealism's foes—this was still an uncommon usage in *Mind* during the early 1880s.

This passage shows something important about the impact of these debates on James's own thinking. We see that James wanted to defend empirical psychologists from Idealists. But James's suggestion that Hegelians had done a measure of *good* in their critique of the British tradition was also sincere. James was actually more sensitive to the Hegelian critique of empirical psychology than many of his allies in *Mind*. When we turn to the substance of James's defense of psychology in Chapter Four, we will see that his defense actually involved *conceding* a portion of the Hegelian critique of, for example, the simple/complex distinction as it had traditionally been used in the British tradition. During the 1880s, much of James's work in *Mind* sought to show how to salvage "British empiricism," to be sure. But it sought to show how to do this while *accepting* some (certainly not all) aspects of the Hegelian attack.

"On Some Hegelisms" called forth no response from Idealists. Perhaps James's occasionally mocking tone distracted from his serious criticisms. For example, the piece concluded with a long footnote recounting James's personal experiments with nitrous oxide (laughing gas). He claimed the only time he ever felt he understood Hegel was when intoxicated by the substance (James 1882, 206-208).[90]

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[90] The note may not have been intended to be humorous—perhaps not even to be mocking, though it was likely read that way. James regarded nitrous oxide as a tool for exploring the possible range of human experience. In *The Varieties of Religious Experience*, he summed up the result of his experiments with nitrous oxide:

> Some years ago I myself made some observations on this aspect of nitrous oxide intoxication, and reported them in print. One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded. (James 1902/1985, 307-308)

James was disappointed by the lack of response. In July, Robertson wrote that he was sorry for this outcome, as well—

> … none of the people who had most to learn from it ["On Some Hegelisms"] should have set themselves to lay hold of the lesson by making as if they wd. reject it. … You must try them another time on a more solemn tack; and they will be compelled to answer. …
>
> Has anything more come of your Expts. with deaf-mutes? They promised a really definite result. And generally don't let us fall behindhand with anything you are doing. The journal has its arms always wide open for you. (CWJ, V.226)

In the correspondence from this period in general, these two often refer to a struggle with Idealists.[91] This letter is an example of how enthusiastic Robertson was to have James's work appear in *Mind*. More importantly, the letter shows that Robertson particularly encouraged James's attacks on Hegelians.

It had been one thing for Robertson to proclaim, as he did in the first issue, that *Mind* would help settle the question of whether psychology could be a natural science. But it was entirely another to have active opponents of empirical psychology finally serving up their criticisms in *Mind*. Robertson had been itching to host this debate, and now that he had the leading critics in his pages, he wanted to be sure the charges were answered by able psychologists. The last letter I quoted gives the impression that Robertson saw James as a worthy respondent.

This impression is strengthened by looking at further letters. James would go at the Hegelians again in the winter of '83-'84, submitting "On Some Omissions of Introspective Psychology," another attack on Green et. al. Robertson wrote that he would print the piece (along with James's now-famous "What Is an Emotion?"),

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The first sentence refers, apparently, to the long footnote in "On Some Hegelisms." This latter article was reprinted in *The Will to Believe*, and the footnote called forth a letter from an anonymous British reader who had had similar revelations while using nitrous oxide. James published the anonymous reader's account in (James 1898a). James indicated his openness to experimenting with nitrous oxide in an early, friendly review of Benjamin Paul Blood's "Anaesthetic Revelation and the Gist of Philosophy" (James 1874).

[91] The Houghton Library preserves 25 letters from Robertson to James (WJP, bMS Am 1092.9 (504-528)), and 17 letters from James to Robertson (WJP, bMS Am 1092.9 (3536-3552))—cited by permission of the Houghton Library, Harvard University. Many of these are reproduced in James's published correspondence. References to letters that discuss the response to Idealism can be found on p. 100, *above*. Where possible, I give references to these letters as published in James's collected *Correspondence*.

> …because I desire nothing better than to keep at them. Your Schlagfertigheit [quick-wittedness] is altogether admirable, and if, besides the positive value of the stroke (which in this case I think not little), it means that you feel yourself in the best of intellectual trims, I rejoice in it.… As for the other paper still on the stocks, I am not in the least afraid of giving our people a surfeit of you, and if you will let me have it on no other terms than that it must appear in July, some one else must just get out of the way of your impatience or need; but the some-one-else won't like it, will think himself not too well used &c &c—and, in short, if you can, upon reconsideration, see your way to giving me the choice of October (if need be), I should be very glad. … But I say not this to make you withhold rather than yield. You must not in any case withhold; but I say it to give you a notion of the things I have to consider. (CWJ, V.484)

The start of the passage shows that Robertson continued to be eager to publish James's work. It also shows that Robertson continued to encourage psychologists—or James, at least—to respond to Idealists. Omitted sections contain Robertson's hemming and hawing over who he would have to push aside if James insisted on appearing in July. The fact that he was so eager to have more work from James, despite the apparent inconvenience James's impatience may cause, shows what a favorable impression James's publications must have made on *Mind's* readers, and presumably on Robertson's Scratch Eight philosophy club as well (*see page 84, above*).

For his part, James's letters show deep hostility towards Hegelians, as well. To take one example, James wrote to Robertson on August 13, 1885:

> Why don't you have a special "neo-hegelian department" in Mind, like the "Children's department" or the "Agricultural department" in our newspapers, which educated readers skip? (CWJ, VI.62)

The correspondence between the two continued in this fashion until Robertson's death in 1892. References like this to the ongoing argument between Hegelians and psychologists can be multiplied throughout.

I conclude from the evidence in this section that arguments between two camps were flaring up in *Mind* during the 1880s. James was eager to collaborate with Robertson's side in these discussions—the side that wanted to defend empirical psychology from Hegelian attacks. Also, *Mind's* editor Croom Robertson regarded James as an important contributor to the effort to defend psychology in that journal.

6. *Mind*, from Partisan Haven to Open Ocean

We can get a broad overview of the kinds of intellectual concerns that dominated *Mind* during the early years by surveying some important publications while Robertson was editor. The first six years of *Mind's* existence had been dominated by those who (like James and Robertson) saw psychology as intimately connected with philosophy. For example, in the first issue we find Bain on James Mill, Spencer on "The Comparative Psychology of Man," and Hodgson on philosophy of psychology. Hodgson's piece was continued in the April issue, where we heard from G. H. Lewes on sensation, and Wundt on the nervous system and consciousness.

Meanwhile, Green and Idealism had been all the rage among a young group of British philosophers since the mid-70s. But the only real *Mind* discussion of Idealism during that decade came in October of 1876, when Sidgwick savaged—"mocked" is not too strong—Bradley's *Ethical Studies* in a five-page review (Sidgwick 1876).

Thus, I cannot agree with Anthony Quinton's claim that Robertson "cast his net" "widely" (Quinton 1976, 15) during the latter's entire tenure as editor, a misleading and oft-repeated view (e.g., Neary 2001, 63). In fact, *Mind's* first six years were dominated exclusively by writers who saw a close kinship between philosophy and psychology.

Quinton divides British philosophers during the period a bit too nicely, into six schools. His evidence of Robertson's widely-cast net is that the first issue contained articles by representatives from three of these schools—John Venn, from the group Quinton calls "logicians and methodologists"; Herbert Spencer, from the Evolutionists; and Bain, Lewes, and Sidgwick, whom Quinton characterizes as "more or less traditional empiricists." (Note that none Quinton cites as belonging to the school of "empiricists" actually applies that label to himself in *Mind's* early years.) In fact, all these figures shared the view that psychology and philosophy are intimately connected, in roughly the way Robertson had indicated in the opening issue.

To be sure, there were serious disagreements within the group of philosophers who took empirical psychology seriously—Spencer, for example, cared more about evolution than Bain. But even Venn, the logician, insisted that his work was continuous with empirical psychology (Venn 1876, 51-52). Especially after the landmark publication of Green's "Introduction" to Hume in 1874, Idealism had been among the most influential movements in British philosophy. Their absence in early issues of *Mind* would have been glaring. Dividing Idealists' opponents into three categories and then applauding Robertson for publishing representatives of all three in *Mind's* opening issue seems an odd measure of inclusiveness, therefore.

In fact, *Mind* became decidedly more inclusive only in 1882 with the publication of several important Idealists (most importantly Green himself). We will see below that Robertson himself saw fit to apologize for the narrow philosophical band to which *Mind's* regular contributors, up to this point, had belonged. So I agree with Quinton that Robertson was "too widely read in the history of philosophy to be a zealot for one particular point of view" in what he chose to publish (Quinton 1976, 9). But I disagree that *Mind* was *consistently* non-partisan throughout Robertson's tenure. It became non-partisan, but it did not start that way. The story of the journal becoming less partisan is crucial for understanding the changing contours of British philosophy during the 1880s.

7. "Empiricism" in *Mind* Before 1882

The attentive reader will have noticed that so far, we have seen few explicit references to "empiricism" by Robertson or his allies. I now turn to the story of how psychologists began to construct their own history to fortify the position they sought to defend from Idealists. The word "empiricism" seems to shift meanings very roughly around 1882, when Green ignited the debate about psychology with his, "Can There Be a Natural Science of Man?" In this section, I will review how the word "empiricism" was used in *Mind* during earlier years. In the next section, I will show that it is in response to Green's 1882 that we find among the earliest recognizable avatars of the concept of British empiricism.

◈

Unfortunately, when *Mind* contributors used the word "empiricism" in the years following that journal's 1876 inauguration, they typically used it in passing. This makes it difficult to glean a precise, intended meaning in each case. However, a pattern emerges from the contexts in which the word was most often used during this early period. "Empiricism" typically appeared in one of two contexts—either in connection with Kant, or in connection with the complaint (reflected in the colloquial pejorative) that some other philosopher relies naively on experience. Note that in these early issues of *Mind*, "empiricism" is always a label attached to others, not a word expressing the author's own position. It was not until after Green appeared in *Mind* that "empiricism" came to mark a position anyone cared to defend (though this is not, as I argued in the previous chapter, because Green himself had used the word).

Mind offered reviews of foreign philosophy and psychology journals. In the first issue, they published overviews of some of the main journals to be covered. An early example in *Mind* of "empiricism" used in connection with Kant comes from R. Flint's 1876 overview of Fichte's *Zeitschrift für Philosophie und philosophiche Kritic*. He says the journal's chief aim is to "do justice to" systems of the past,

> especially those which have issued from the critical investigations of Kant, to mediate between speculation and empiricism, to harmonize metaphysical philosophy and positivistic science, and to elaborate and establish a comprehensive Theistic theory of the universe. (Flint 1876, 136-137)

It is not clear whether Kant is supposed to have mediated between two separate arguments—one between "speculation and empiricism," the other between "metaphysical philosophy and positivistic science"—or whether Kant is supposed to have mediated one argument that is being described here with sets of synonyms. In the latter case, "empiricism" would be a synonym for "positivistic science." This is the only place in the article where the word "empiricism" appears, so it is hard to say with certainty how Flint intended the word. The important point is that in the rare early cases where "empiricism" is used in *Mind*, the usages are often vague

(and made in-passing), and are often given in discussions of Kant or post-Kantian German philosophy.

The same issue contained one other appearance of "empiricism." W. C. Coupland used the word, again in connection with Kant, in a review of Friedrich Paulsen's 1875 book, *Versuch Entwicklungsgeschichte der Kantischen Erkenntnisstheorie*.

> Kant professed to adjudicate between contending schools, but really took part with the rationalists. His attempt to reach a position superior both to Rationalism and Empiricism was a failure, as the author believes similar attempts will always prove to be. (Coupland 1876, 155)

Though this usage is also in passing, it is consistent with our contemporary interpretation of empiricism, which I am calling "CIE." This usage of "empiricism" is rare during the early period of *Mind*. In any case, this is a second example of that word appearing in connection with German philosophy. So the English philosophical use of "empiricism" likely owes something substantial to Kant (*see above,* Chapter One, fn. 20). In any case, I am more interested in the way certain English-speaking philosophers came to construct an empiricist identity for *themselves*.

The next substantial example of a philosophical usage of "empiricism"—the next example I can find in *Mind*—does not occur until October 1878.[92] R. B. Haldane reviewed several German books under the title "Hegelianism and Psychology," and his usage foreshadowed the way "empiricism" would be used in the coming debate with Green. Haldane wrote:

> Kant met Hume upon psychological ground in the case of questions arising within the sphere of experience, and his philosophy is therefore of great psychological interest. But Hegel, in abolishing the psychological side of Kant's system, abolished, as it appears to us, every point of contact with that English empiricism against which the latter had directed his attacks, and out of which his theory of knowledge may be said to have arisen. Empirical psychology, involving as it does, a distinction between subject and object, is for Hegel no doubt a branch of knowledge, falling within that sphere of the timed and spaced …. It has no special interest as throwing light on the problem of

[92] The January issue of 1878 contains an article that uses "empiricism" (Read 1878, 122, 124). But these usages are hard to make sense of, because they occur in passing, and in a confusing context. The context is *Carveth Read's* recounting and criticizing of *Francis Bowen's* reading of *William Hamilton's* reading of something *Bowen* calls "empiricism" (phew).

> the constitution of experience, towards which it stands in just the same position as any other branch of empirical science, and is really no more akin to philosophy proper than is, for example, physiology. (Haldane 1878, 570-571)

On Haldane's usage, one cannot be engaged with "English empiricism" unless one is engaged with empirical psychology. Whatever are meant to be the sufficient conditions for being an English empiricist—Haldane does not elaborate—he clearly thinks a *necessary* condition is that one take account of empirical psychology in one's philosophizing. This usage would become much more popular, but only after Idealists came out in force in *Mind*.

In that same issue, Arthur Balfour (the same Balfour who would become Prime Minister of the United Kingdom, by the way) referred to "the difficulty Kant and Kant's successors saw in the empiricism of Hume …" (Balfour 1878, 33). It is interesting that Balfour here referred to Hume's "empiricism," because Balfour went on to say that this topic had been adequately dealt with by "Mr. Green and Mr. Caird." Thus, here we do find an example where Green is characterized as presenting a Kantian criticism of Hume's "empiricism."[93] Presumably, this usage is an echo of Kuno Fischer's terminology (Fischer is cited at pp. 503-504 of this article, albeit not in connection with empiricism; *see above,* Chapter One, fn. 58, for more on Fischer).

At this time, "empiricism" also continued to be used in the colloquial, pejorative sense as well. One example is (Bain 1876, 187), which charges that one is "obliged to conclude" that Sidgwick's method in ethics amounts to "simple empiricism." And C. H. Lake asks whether one can form general principles in the philosophy of education, thereby raising philosophy of education into a respectable intellectual pursuit. The author phrases the question by asking whether the philosophy of education is capable "of being lifted out of the region of empiricism" (Lake 1876, 572).

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[93] Balfour's article appears before Green's "Can There Be a Natural Science of Man?" Balfour is clearly thinking of Green's "Introduction" to Hume, and Caird's *A Critical Account of the Philosophy of Kant* (Caird 1877). Balfour's usage of "empiricism" suggests that philosophers had begun by 1878 to use "empiricism" as shorthand for the school that culminates in Hume, and that Green sought to show Kant had overcome.

8. Robertson's Vision of Empiricism

Green's "Can There Be a Natural Science of Man?" appeared in 1882, and defenses of (and references to) the British "empiricist" tradition become more common thereafter. Among the most important defenders of this "empiricism" was *Mind's* editor, Croom Robertson.

Robertson wrote a response to Green in January 1883 (though Green had passed away the year before). It was Robertson who best articulated the notion of empiricism psychologists would espouse in response to Green, during the 1880s. The evidence in this section suggests that those who invented (or at least popularized) the idea of empiricism did so as a way to mark off the philosophical territory they intended to protect from the likes of Green. I now turn to Robertson's notion of empiricism.

Robertson began his response to Green by reviewing *Mind*'s first seven years, immediately seeing fit to apologize for the early appearance of partisanship. *Mind*, Robertson insists, has

> given a representation that cannot be called other than impartial of the manifold currents of thought running among the English-speaking race here and in America. If at times some forms of opinion have seemed to assert themselves more than others, the fault lay with the others that chose to assert themselves less. It became clear from the beginning that the number of English thinkers, at the present day, who cared to have a clearly defined psychological basis was very small: not that any can be without their psychology, but that most are of opinion either that it supplies no basis for philosophical consideration or that they can get on very well without thought of it. All who had anything serious to say have, therefore, from the first been encouraged to deliver themselves of their message, whatever it might be; and while I reflect with satisfaction that the chief opponent, in this generation, of the English philosophical tradition was using the Journal for the exposition of his matured conclusions when a cruel fate snapt on a sudden the thread of his life, I can truly say that no philosophical contribution offered has ever been declined on the ground of its being of one cast of thought rather than of another. (Robertson 1883, 3)

This passage illustrates two important points. First, *contra* Quinton and Neary, *Mind's* own editor acknowledged the appearance that the journal seemed not to give a balanced reflection of British philosophical currents before 1882. Robertson claimed that the journal was "impartial," but went on to explain that it was "impartial" in the sense that its editor never rejected any worthy submission for

partisan reasons. Robertson may have *wanted* to publish writers representing a broad range of the British philosophical spectrum. But he was unable to attract authors who doubted that psychology could be a basis for philosophy—that is, until Green finally appeared. Second, the letter shows, once again, that Robertson saw Green to be the "chief opponent … of the English philosophical tradition." As we are about to see, Robertson claimed that a reliance on psychology was the essence of this tradition Green had attacked.

Robertson went on to co-opt some aspects of the proto-empiricist tradition, as Green had conceived it. In particular, Robertson also conceived of that tradition as laying a philosophical groundwork for empirical psychology. Robertson, of course, had a higher estimation of this tradition than Green. It will pay to investigate the details of that tradition as Robertson conceived it.

Robertson wrote:

> It is certainly to Locke that we must go back to find the beginnings of the opinion that philosophy should start from what is now called (though Locke did not call it) psychological inquiry. There is in Hobbes, in the previous generation, more express inquiry of the psychological sort, but not pursued with any such directly philosophical purpose. Locke, with the definite aim of furnishing a theory of the validity and limits of knowledge, elects to proceed by what he calls the "plain historical way" of a consideration of its origin; in other words, he seeks to solve the philosophical question of the import of knowledge by reference to the psychological question of its coming-to-pass. (Robertson 1883, 5)

Locke was the first to propose that if we want to investigate the limits of knowledge, we must begin by giving an empirical account of how the mind actually acquires its ideas. In other words, epistemology must begin with what Robertson called "psychological inquiry."

The passage continued this way:

> The idea worked so powerfully that, in the next generation, we find Berkeley solving the religious question of the relation of the creature to the Creator through a philosophical theory of knowing and being suggested by a special inquiry in the psychology of vision; and Hume, in turn, declaring that, while even such sciences as mathematics are in a manner dependent on the science of man, this is still more true of properly "philosophical researches," which can be conducted only after a scientific understanding of human nature, to be attained by the same way of "experience and observation" as had been found effective in other sciences. When Hume thus wrote, Locke's idea of psychological inquiry had been caught up in a still more positive spirit by Hartley, and through Hartley more than Hume it has worked upon those who in

> this century have advanced farther upon the way of thinking that has become stamped as characteristically English. Even the reaction against Hume's philosophical conclusions, in Scotland, started from a not less emphatic assertion of the need of resting philosophy upon an inductive science of mind …. (Robertson 1883, 5)

This passage suggests an answer to a question that has long puzzled historians of British philosophy—namely, why is Berkeley included among Locke and Hume as an exemplar of British philosophy?[94] Berkeley was then read as an 'idealist' in the sense that he did not believe material objects existed independently of a representing mind. Why should historians lump Berkeley together in one tradition with Locke and Hume, who both had realist sympathies? The passage I have just quoted suggests that it was Berkeley's work in *psychology*—particularly in the *New Theory of Vision*—which earned his place in the canon. Berkeley, like Locke, is here portrayed as someone who saw empirical psychology as providing a groundwork for philosophy. He tried to understand the human relationship to God by applying a philosophical theory that was first gleaned from his work in the psychology of vision.

In footnote 45, *above*, I noted that a recurring theme in Hume scholarship has been the question of how to reconcile Hume's stated goal of building a "Science of Man" with his apparent skeptical conclusions in the *Treatise*. While 20th century Hume scholars long tipped toward the view that no reconciliation was possible—that Hume's skepticism succeeded, while his science of man failed—Robertson read the situation in reverse. Robertson saw Hume as one who, like Locke and Berkeley before him, sought to ground philosophy in a study of mind that employed the methods of natural science. It is not clear what Robertson made of the more skeptical aspects of Hume.

One thing that contrasts with Green's reading of the British tradition is that, for Robertson, David Hartley was to have been even more influential than Hume in influencing the scientific study of mind, at least as that study had developed in 19th-century Britain. In any case, what ties together the British tradition is clearly the

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[94] Loeb sets out reasons to wonder why Berkeley should be included as a member of British Empiricism, at (Loeb 1981, 59-62). Loeb argues that "Berkeley was not much interested in systematic epistemology" (p. 62); and if we try to reconstruct a Berkeleyan epistemology we get a view closer to Descartes' than Locke's.

emphasis on psychology as a foundation for philosophy. Even the Scottish common sense school, a group typically regarded as an enemy of Hume, is to have carried on the tradition of starting philosophy with an inductive study of the mind. Robertson acknowledged that German psychologists like Herbart and Beneke also advanced the tradition Locke founded (Robertson 1883, 5-6).

So perhaps even more explicitly than Green, Robertson constructed a tradition of thinkers who had seen psychology as a foundation for philosophy. The tradition started with Locke, and wove its way through Berkeley, Hume, and Hartley—then it was carried on in the 19th century by English associationist psychologists as well as by German psychologists like Herbart and Beneke. Robertson went on to articulate a specific vision of philosophy that this tradition defended.

> What is, then, the exact import of the idea thus introduced by Locke into the stream of philosophical thought? It is (so far as philosophy turns upon the problems of knowledge) that, before attempting to determine what can be known ultimately of things, investigation shall be made of the human faculty of knowing by the same method that has been found effective in the region of the positive sciences. Locke was deeply impressed by the scientific achievements of his century, culminating in the work of Newton, and, while declaring that for himself philosophy is turned from direct speculation about things into general theory of knowledge as complementary to the special sciences, he is most of all decided on the point that such philosophical theory can be wrought out only after scientific account has been rendered of mind. This is his really characteristic idea; for the conception of philosophy as theory of knowledge in relation to the sciences is equally proclaimed by Kant later and had already been shadowed out earlier by Descartes. To arrive at philosophical conclusions that might the more readily command assent because drawn from a basis of properly scientific results about mind, which could no more be contested than any results of mathematical or physical science—such is the idea of Locke and his followers. (Robertson 1883, 6)

Philosophers like Descartes and Kant agreed that philosophy should center around an epistemological investigation of the sciences. Locke's contribution—the *English* contribution (a pinch of national pride is unmistakable in the article)—is that philosophy should not just study science from the outside. Philosophy should itself apply Newtonian methods to the study of mind. Epistemological results drawn from a genuine mental science could no more be challenged than could the results of Newtonian physics, or other branches of natural science.

But Robertson quickly acknowledged that Locke's vision could not be carried out, in the end. I excerpted the following passage in Chapter One, but it bears reprinting now that we have a richer account of its original context:

> Locke and his followers to the present day have proceeded in a manner that has laid them open to a kind of criticism that apparently makes an end of their pretensions to rank as a serious philosophical school. The criticism directed by Green against Locke and Hume tells also, as it was plainly meant to tell, against Mill and others in this generation who, working at philosophy from the standing-ground of psychology and making whatever progress in either department, have been hardly more careful than Hume or Locke to draw a clear line between natural science of mind (or man) and the ulterior consideration of things in relation to mind. The point of the criticism urged by Green (after Kant), with a massive persistence that stamps it as an original philosophical achievement, is too well-known—repeated as the argument has lately been in these pages—to need more than general indication. Locke and the others are charged with assuming for the explanation of mental experience that which is itself unintelligible except as the result of a mental function. They would account for mental experience, including thought, by supposing a world of 'objects' acting upon a mind or a multitude of minds, when it can be shown that the very things or objects assumed are themselves mental constructions dependent on the activity of that thought which is in this way to be explained. The moral is that in no such way as the English school has trodden can the work of philosophy be performed, but only by a path at least as different as that which Kant had in view, when he scouted the notion that the least philosophical importance could be attached to psychological (or anthropological) science. (Robertson 1883, 7)

Green had rejected the Lockean tradition of seeing empirical psychology as a starting point for philosophy. Robertson only recounted the gist of Green's argument, because it had been recently elaborated in *Mind* (in "Can There Be a Natural Science of Man?").

Green charged that psychology gave a circular account of the mind. Psychology proposed to answer the question of how the mind functions. In order to answer this question, it first assumed a certain metaphysical picture to be true. On this picture, the mind is embedded in a physical world, where it is impacted by physical objects. Mental functioning is then understood as the mind's law-governed manipulation of the impressions made (in part) by these physical objects. Green argued that this metaphysical picture was ultimately incoherent. According to Green, we cannot give an account of physical objects unless we admit that those objects are themselves constructed by the mind. Mental construction, however, is itself one variety of mental functioning. So in order for psychologists to begin explaining mental

functioning, they have to assume the existence of objects that have already been constructed by some hitherto unexplained act of mind.

Robertson went on to propose a solution to Green's problem, one that is hinted at in the passage above. In brief, the solution was to enforce a strict separation between the disciplines of psychology and philosophy. The two disciplines were to reinforce one another, to be sure. But the kinds of metaphysical questions with which philosophy is principally concerned are not to be imported into psychology. Psychology assumes a certain metaphysical picture at the outset, as must any science. Philosophy vindicates that metaphysical picture; but philosophy also imports results from empirical psychology. This was the point of Robertson's acknowledgement, in the passage above, that Green's attack targeted late 19th-century empirical psychologists who had been "hardly more careful than Hume or Locke to draw a clear line between natural science of mind (or man) and the ulterior consideration of things in relation to mind."

We will not see in detail how this solution of separating philosophy and psychology is supposed to work until Chapter Five. What I hope to have established in this section is that Green's work was not received as an antiquarian analysis of long-dead philosophers. Contemporaries read Green's attack as a direct challenge to the philosophical foundation of empirical psychology.

At any rate, Robertson certainly read Green this way; and his description was little-enough idiosyncratic that it called forth no published complaints from either Idealists or psychologists. The essay I have been considering is signed "Editor," like all Robertson's essays in *Mind*. Though he did not hesitate to offer original philosophical analysis in these essays, Robertson took special pains in his role as editor to describe the philosophical debates of *Mind* in as neutral a manner as possible.

I also take myself to have shown that the psychologists themselves sought to rehabilitate the historical tradition Green had tried to undermine. Robertson did not just offer a theoretical response to Green. He tried to show how the discredited

English tradition of empirical philosophy could be repaired. Why, though, did Robertson *bother* with the historical side of his response to Green?

The tradition Robertson presented in this essay was a tradition he seems to have developed more fully in the classroom. After Robertson died, his lecture notes from philosophy and psychology classes were edited and published. The philosophy lecture notes came from classes given over the period 1870-1892 at University College, where Robertson had held the Grote Professorship. His lectures reflect a similar, if more nuanced picture of the history of Western philosophy to that we have just seen.

He began by discussing how to divide the main trends of modern philosophy. He rejects what he portrays as the main schematism used in German histories, between Realists and Idealists (he names two German historians, Schwegler and Fischer). Instead, he chooses a division which would become standard in the 20th century. On the one side were "rationalists" like Descartes, Spinoza, and Leibnitz. On the other were "experientialists" or "empiricists" like Locke, Berkeley, and Hume (Robertson 1896/1905, 60).

> There are thus two main lines to be distinguished—those who say that knowledge is explicable from reason,[95] and those who hold it is explicable from experience—and these hold good up to Kant, when we begin to get approximations from one line to another …. (Robertson 1896/1905, 58)

Rationalists hold that all knowledge is "explicable" from reason (Robertson did not here distinguish between explanations of how knowledge is to be justified from descriptions of the causal antecedents of knowledge). Empiricists hold that knowledge is to be explained by appeal to experience.

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[95] Robertson added a footnote here that reads:

> the student must distinguish between the narrower peculiarly German connotation of Rationalism used here, and its wider meaning, common in this country, of the revolt of individual reason or judgment against authority in all ultimate questions. Ed.

This note is another clue that the concept of "rationalism" that came to be opposed to "empiricism" is a concept English-speaking philosophers culled from earlier German philosophy—probably largely from German *histories* of philosophy.

Unlike David Masson (more on whom, below), who saw the distinction between what he called "empiricism" and "transcendentalism" as just one way to carve modern philosophy, Robertson sees this as the *essential* distinction. Thus, the "empiricist" side of Robertson's story looks very much like CIE, particularly when we note that Kant is supposed to begin blurring the distinction between these two schools.

However, there is a very important difference between the sense of "empiricism" in Robertson's writing and the sense expressed by CIE. The difference is captured in the following passage.

> Although he was a general philosopher and not a psychologist, he [Locke] nevertheless worked out his philosophy in a psychological spirit. He started from the psychologist's point of view, with the notion of investigating the mind in the same scientific way as Newton was investigating nature. This departure had an effect in the very next generation through Berkeley, who carried out special psychological investigation with surprising acuteness in his New Theory of Vision. Hume also, without putting forward any system of psychology, worked in a psychological spirit, and discussed particular psychological questions in a notable way, especially the laws of association as containing an explanation of knowledge. (Robertson 1896/1905, 65)

We need not be concerned with the richer historical detail into which Robertson's textbook delved. It suffices for our purposes to see that there is something different *at stake* in what Robertson calls "empiricism" than what is at stake in CIE. Robertson's "empiricism" is a historical-philosophical concept. As in the case of CIE, Robertson would fill in step 1 of the HP concept-schema with the *thesis* that knowledge is to be accounted for by appeal to experience. And he would fill in step 2 with a *history* whose canonical figures are Locke, Berkeley, and Hume. But it is important to notice that the *stakes* are different in Robertson's history. Locke, Berkeley, and Hume have a chief goal, a *reason* for espousing 'epistemological empiricism': they want to bring Newtonian methods to the study of mind; in turn, they want to use data from the resulting mental science as a firm foundation for epistemological deliberation.

I leave the stakes of HP concepts without explicit expression in my HP concept-schema. This is because the stakes in our actual use of HP concepts are typically

expressed tacitly. Thus, Robertson would fill in the HP concept-schema for empiricism much the same way I have filled in that schema in the case of CIE:

ROBERTSONIAN EMPIRICISM:

(1) Thesis: 'empiricism' is an epistemological thesis emphasizing the role of experience in knowledge, a thesis affirmed by the philosophers mentioned in (2).

(2) History: The Empiricists were a set of 17th and 18th century philosophers—Locke, Berkeley, and Hume—who should be grouped together in virtue of their commitment to the thesis mentioned in (1).

One chief function of associating a philosophical position with a historical tradition—as we do in the case of empiricism—is that the tradition specifies in rich detail the intended stakes of using the concept in question. Thus, for Robertson and for many of his *Mind* allies, empiricism was worth associating with Locke, Berkeley, and Hume precisely because these figures illustrate what it might look like to found philosophy on a Newtonian science of mind.

Robertson's notion is the earliest example I am comfortable treating as an avatar of empiricism. Unlike Green, who attached a significantly different historical narrative to Locke, Berkeley, and Hume, Robertson operates with a concept of empiricism that bears close resemblance to our contemporary notion.[96]

I close this section with several conjectures. The fact that Robertson's history of modern philosophy was both a philosophical and a teaching tool suggests the following. Philosophy's professionalization in the late 19th century may have had a deeper impact than we now recognize on the substantive details of our contemporary interpretation of our own history. I mean that the specific history Robertson taught his *students* plainly served the struggles Robertson was engaged in

[96] The line is not sharp between early, genuine incarnations of the empiricist concept (like Robertson's) and older usages that are merely precursors (like Green's). On Green's usage, neither the core thesis of proto-empiricism nor the stakes involved in endorsing that concept match CIE. The canonical historical group does match. In contrast, both the core thesis and the canonical group of Robertson's empiricism do match CIE. Only the implicit stakes in endorsing these respective concepts do not match. So Robertson's empiricism does match CIE more closely than does Green's concept of proto-empiricism. But the difference is one of degree, not kind.

with his *professional interlocutors*. By suggesting that the Lockean tradition was one of the two great pillars of modern Western philosophy, Robertson infused his own position—the position that held that empirical psychology could provide a scientific foundation for philosophy—with historical gravitas.

More than that, the tradition also infused the position with the kind of richly-articulated intellectual detail that is only possible when one stands, so to speak, on the shoulders of giants. Robertson did not have to invent from scratch examples of how mental science might bolster philosophy. He could cite volumes of work by Locke, Berkeley, and Hume as examples, even if those examples were not always successful.

Though I do not take the point to be established beyond doubt, I am suggesting that what became the standard *classroom* outline of modern philosophy has its roots in 19th century scholarly arguments over the viability of psychology, and over psychology's relationship to philosophy. Since earlier philosophy professors had not *been* engaged in scholarly debates (because they were not scholars at all), this injecting of professional concerns into classroom narratives would have been a new development, and one (apparently) with lasting consequences.

Also, our standard narrative about modern philosophy may have been impacted by professionalism in another way. Professional instructors like Robertson had a greater responsibility to develop a concise account of the history of philosophy than did earlier generations of philosophers. Earlier philosophers like Locke, Berkeley, and Hume did not themselves take teaching as an occupation. The pressure to develop a coherent historical narrative for the purposes of instruction may have left Robertson and his professional peers in a better position to bring an interpretation of history to bear on their own philosophical writing. Though I will not argue for this point, I conjecture that 19th-century professional philosophers' incorporation of historical-philosophical concepts (like empiricism) into original research may have been a byproduct of their new responsibilities as public instructors.

9. James and Empiricism

I shall have reason to refer back to Robertson's conception of empiricism. It was Robertson who articulated philosophical commitments that united *Mind* psychologists in their response to Idealists. But in this section, I want to look at how James wielded this concept himself.

Ignas Skrupskelis offers a fairly standard view of James's relationship to British philosophy. He writes:

> From the mid-1880s he [James] came to view himself as heir to the whole tradition of British philosophy, including in his extensive reading even minor figures. (Skrupskelis 1988, xlviii)

This view is not uncommon in James scholarship. This is a central thesis of the most influential study of James (RBP), and there have been no shortage of adherents to the view.

I agree that James came to see himself as the heir to British philosophy. However, from our contemporary vantage, I do not think it is easy to glean how James *interpreted* the tradition of British philosophy to which he saw himself heir. In this section I will review evidence of how James understood the legacy of Locke, Berkeley, and Hume.

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From his published work, we know that James associated empiricism with Locke, Berkeley, and Hume. For example, in his 1895 entry on "Person and Personality," from *Johnson's Universal Cyclopaedia*, James wrote that

> In Locke's Essay Concerning Human Understanding the great revolution toward empiricism begins. Personality is now explained as a result, and not assumed as a principle. It is not something which, by simply being, gives rise to consequences, but something which is made from moment to moment by a cause which can be assigned. . . . "Consciousness" is what makes a person, when it remembers past experiences, as having been also its own. … Hume went beyond Locke in discarding substances, whether spiritual or material, altogether. … Locke's and Hume's views have been carried out both in Germany and England by the associationist psychology, which in consequence has been dubbed a "psychology without a soul."
> . . .
> Recent psychology has, in the main, elaborated itself on Lockean lines. (EPs, 317-318)

Here James characterized Locke as having shifted philosophy towards "empiricism." On this usage, "empiricism" apparently denotes a tendency to reject a priori principles (in this case, a principle of personal identity) as furnishing genuine knowledge about the mind. Instead, empiricists investigate—presumably empirically—the *causal* factors of the mind's development. Locke and Hume exemplified this new empirical turn in philosophy, and the tradition they started was carried on in James's day by associationist psychologists in Germany and England.

Unlike in the case of Green, Caird, and Robertson, James did not publish detailed analyses of Locke, Berkeley, or Hume. So it is difficult to reconstruct James's historical views from published writing. The best available resources for learning how James viewed the British tradition are unpublished materials related to his teaching. One especially helpful document is Ralph Waldo Black's student notes from Philosophy 5, which he took with James during the academic year 1884-1885. This was Harvard's course on Locke, Berkeley, and Hume. James's own lecture notes from that year are not preserved.

We know that in 1880-1881, the section of Philosophy 5 James taught was entitled "Psychology" (ML, 177-178). It is not clear whether James taught Locke, Berkeley, and Hume in this version of the course. When Black took the course on LBH, Skrupskelis says the title was "English Philosophy" (Skrupskelis 1988, xlviii). However closely the content of these courses did or did not match, it is suggestive that Harvard's basic courses in psychology and in English philosophy during this period were taught under the same course number, Philosophy 5.

A copy of Black's lecture notes are preserved (*at* WJP, bMS Am 1092.9 (4583a)).[97] At 64 pages, they are too detailed to do full justice to here. However, I will identify several trends in these notes relevant to our question of how James understood the empiricist tradition. We will see that first, attacks on the tradition from idealists like Green and Royce loomed large. Second, the question of whether various theories of space perception support idealism was a major issue. Third,

[97] All passages from Black's notes I cite or quote are used by permission of the Houghton Library, Harvard University.

James broached empirical issues about the mind more often than one would now expect to find in a class entitled "English Philosophy." Fourth, another frequent topic in the class was whether there is synthetic a priori knowledge. Black's lecture notes use the word "empiricism" mostly in connection with this latter debate.

Philosophy 5 lasted for two semesters. James spent the first third of the course on Locke, the second third on Berkeley, and the final third on Hume. The notes contain detailed discussions of philosophical and psychological issues, often recording views on varied topics consistent with James's published positions. The notes are also full of references to specific passages in Locke, Berkeley, and Hume, as well as to a dizzying array of secondary sources. Though James is known to have felt inadequate as a teacher, Black's notes show a truly diligent professor who came to class prepared for a detailed presentation of each day's topic. A second set of student notes preserved at Houghton show a similar diligence.[98]

Early in the course, James gave a list of potentially fruitful thesis subjects for students in Phil 5. That he presented the list to students studying Locke, Berkeley, and Hume suggests that James saw the listed topics as relevant to students of the British tradition. I reproduce the list in full because there are several points it will help me draw out.

Any one of the following works will furnish a capital thesis subject.

Descartes'	Meditations etc.	
Spinoza's	Ethics	
Leibnitz'	Nouveaux Essais	This criticizes Locke ꝑ by ꝑ
Thomas Reid	Essays	These [*a vertical line is drawn next to Reid,*
Dugald Stewart,	Elements	*Stewart, Brown, and Hamilton*] succeeded one
Thomas Brown	Lectures	another and refuted Locke, Hume, and
Berkeley		
Sir William Hamilton		
James Mill,	Analysis	
John Stuart Mill	Logic	
Bossuet and Condillac		
T. H. Green's	Introduction	
Immanuel Kant		
A. T. Lange,	History of Materialism [*sic*—should be F. A. Lange]	

[98] The notes were taken by Ralph Barton Perry in Phil 3, 1896-1897. They are preserved at (WJP, bMS Am 1092.9 (4590))—cited by permission of the Houghton Library, Harvard University.

G. H. Lewes, Problems of Life and Mind
Herbert Spencer's Psychology
F. H. Bradley's Logic

The following are subjects for Theses in Psychology

1. Sleep and Dreams
2. Sensory Functions of Spinal Chord (Unconscious cerebration)
3. Phrenology
4. The Conscious Automaton Theory
5. Aphasia
6. Localization of Functions in the Brain
7. The Psycho-physical Law
8. Time required by Mental and Nervous Actions
9. The Perception of Space
10. The Eternal World of Idealism
11. Sensation versus Perception
12. Illusions, Hallucinations, etc.
13. Spencer Versus Darwin
14. Spencer's Definition of Mind and Law of Intelligence,--Are they adequate?
15. Spencer's Attempt to evolve the Function of Casuition.
16. Can Axioms be derived from Experience? Spencer, Mill etc. versus Kant
17. Imaginary Geometry.
18. The Association of Ideas. Will it explain all mental processes and products?
19. Nominalism, Conceptualism & Realism.
20. Reason and Reasoning; The Brute and the Human Mind.
21. The Effect of Attention.
22. The Ego and Personal Identity.
23. Freewill
24. Origin of Moral Sense
25. What is Materialism?
26. Analysis of Types of Character. (p. 3)

First, note that neo-Kantian idealism is prominent on this list. James mentioned both figures and issues that were associated with such idealism. In addition to mentioning Kant explicitly, James also mentioned Green's "Introduction" as a good thesis topic. James would discuss Green on several occasions throughout the 1884-85 year with his Phil 5 class (*see* pp. 6, 16, 18, 19, 60).[99] James also listed Friedrich Albert Lange's *History of Materialism*. Though the work is almost forgotten today, this founding document of the Marburg school of neo-Kantianism contained a critical discussion of Locke (see Hussain 2005). And James mentioned Bradley's *Logic*, as well.

[99] The reference on page 6 in the lecture notes is implicit, while all others are explicit.

The issues James listed that were important in discussions with idealists included "The Eternal World of Idealism" (item 10); "Can Axioms be derived from Experience? Spencer, Mill etc. versus Kant" (item 16); "Imaginary Geometry [i.e., non-Euclidean geometry]" (item 17); "The Ego and Personal Identity" (item 22); and the "Origin of Moral Sense" (item 24). In Chapters Three through Five, *below*, we will see how James took up in his scholarship issues like those mentioned in items 10, 17, 22, and to a lesser extent 24.

Throughout the year, James would discuss the challenges of idealism, particularly the challenges coming from Kant, Green, Renouvier, and Royce. Two paragraphs above I cited pages where James discussed Green. Kantian idealism also came up for discussion on pp. 12-15, 49-54, 59, 63-64. Indeed, the last sentence Black recorded from James's final lecture was this: "Humian philosophy useful as a protest against the Hegelian spirit" (p. 64). So in his class on the British tradition, James taught that empiricists were engaged in a dialectic with Idealists. As I have been arguing, James was also participating in this dialectic professionally during the 1880s, not just teaching about it.

In class, James also discussed Berkeley's idealism at length, though here the focus had little to do with Kant, of course. James discussed how Berkeley used empirical evidence, particularly in the *New Theory of Vision*, to support a unique brand of idealism.[100]

A chief emphasis was Berkeley's theory of space perception (pp. 33-39). The first full lecture on Berkeley occurred on January 8th. Black's notes from that day begin this way.

> Berkeley's chief interest in his theory of vision was as a support to his (theological) idealism. If he can prove that distance, an apparent object of perception, is really an idea in the mind, he opens way to proving idealism. (p. 33)

Berkeley had advanced a theory of distance perception that would prove profoundly influential in 18th and 19th-century psychology. His view was that distance perception arises when a subject learns to coordinate various muscular feelings with

[100] *An Essay Towards a New Theory of Vision* first appeared in 1709 and went through several editions before Berkeley died in 1753 (see Berkeley 1975).

certain visual images. In particular, when the subject focuses on a moving object, the muscles in her eyes will feel relatively more or less tensed according to how far away the object is. She then learns to associate this muscular tension with visual images of objects that are relatively closer to the subject. James taught his students that Berkeley's theory thus made the perception of distance a mental construction rather than a matter of directly-perceived properties in the external world. This is why the theory of vision was supposed to provide a measure of support for Berkeley's idealism—it purported to show that distance "is really an idea in the mind." Space perception was an important topic in Philosophy 5. It came up in discussions of Locke as well (pp. 6, 8-11,[101] 18—the latter passage also discusses Green).

Black's notes on space perception, especially in connection with Berkeley, are remarkable because they show how much empirical evidence James brought into the philosophy classroom. For instance, in discussing Berkeley's theory James provided several anatomical sketches of the eye (on pp. 34-35). He also discussed case studies of blind patients, notably those with cataracts, who had their eyesight restored in operations. Although in the 18th and 19th-centuries such cases were more often thought to support Berkeley's theory (Degenaar and Lokhorst 2005), James took the opposite position (p. 36).[102]

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[101] Pp. 8-11 discuss the metaphysics of space rather than space perception.

[102] In a 1688 letter to Locke, Molyneux had asked whether someone born blind who had learned to distinguish a globe from a cube by touch would, if sight were surgically restored, then be able to distinguish the globe from the cube using vision only. This came to be known as "Molyneux's problem," and Berkeley answered in the negative. This problem was an important topic of psychological and philosophical discussion in the 18th and 19th centuries, especially when accounts of the first real cases of surgically-restored sight began to be published. Some accounts supported an affirmative answer to the question, some supported a negative answer (Degenaar and Lokhorst 2005). James's discussion of surgically-restored sight came in connection with his discussion of Molyneux's problem. James wrote that "too much has been made of" cases where eyesight has been restored, "but so far as they go, they go against Berkeley" (p. 36). As we will see in Chapter Four, a cornerstone of James's theory of space perception is that we have an innate ability to perceive distance—so he sharply disagreed with Berkeley. In Philosophy 5, James seems to have taught that those cases where newly-sighted patients *could not* recognize shapes visually—those cases that would support Berkeley's view—are to be dismissed, because such patients "are mostly young, or ignorant, & even unable to express themselves" (p. 36). I should note that the context of this last remark is somewhat opaque in Black's notes; I have provided context on

Similarly, James's list of suggested thesis topics is also remarkable for the way he co-mingled empirical issues with (what we are now likely to regard as) straightforwardly philosophical ones. He apparently thought the student of Locke, Berkeley, and Hume might naturally write a thesis on sleep and dreams, on the spinal chord, on phrenology, on aphasia, on the question of which areas of the brain control which psychological functions, on Fechner's psycho-physical law, on the amount of time taken by various mental processes (the study of which was popularized by so-called "brass-instrument" psychologists like Wundt), on space perception, on the difference between sensation and perception, on illusions and hallucinations, on the association of ideas, on animal cognition, and on the analysis of character types. Like Robertson, James apparently regarded LBH as paving the way for a new empirical philosophy in which psychology—the scientific study of mind—was to play a starring role.

A potential objection arises here. Perhaps James saw this list of thesis topics as relevant to Philosophy 5 students not so much because they were studying Locke, Berkeley, and Hume *per se*, but because many may have been philosophy majors expected to write a thesis on *something* of philosophical interest, eventually. If this is the case, then we should not read the list as a summary of issues in which James thought students of LBH might be interested.

This objection cannot be decisively refuted, but it can be minimized. James went on in his Phil 5 lectures to discuss many of the topics in this list, including many of the proposed "Psychology" thesis topics. To be sure, not all topics were taken up. He did not, at least according to Black's record (note that Black missed several lectures), discuss sleep and dreams, or the sensory functions of the spinal cord, or phrenology, for example. However he *did* discuss the perception of space repeatedly and at length (pp. 6, 8-11, 18, 33-40, as I have mentioned). He also discussed "the eternal world of idealism" (pp. 33, 47, 52-53), sensation versus perception (p. 7), nominalism, conceptualism, and realism (pp. 3-4, 40-41, 45), and

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the basis of historically-common nativist responses to such cases (for more on which, see Degenaar and Lokhorst 2005).

the question of whether mathematical and geometric axioms can be derived from experience (pp. 10, 32), for example.

There is one final issue we must glean from these student notes. One issue James continually took up was whether the mind has a native structure, and if so whether that structure furnishes necessary truth about reality. Or, to use the Kantian phrase, James often sought to mark differences over the question of synthetic a priori knowledge. For example, on the third class meeting, James used this issue to situate Locke with respect to other philosophers and historical movements. The following table appears in Black's notes (p. 4):

	Lockean	Pre-Kantian Apriorist	Kant	Spencer
Has the mind a structure?	Not a native	Yes, native	Yes, native	Yes, native
If so, whence is it derived?	After birth from experience	God	God	Ancestral experience
Does it thereby foretell truth?	partially	Yes	Yes	Yes
If so, what truth?	Probable particular future experiences	Eternal necessary truth	Our necessary phenomenal experiences	Only our own phenomenal experiences

The bottom row of this table will prove important for understanding James's thinking about the English tradition. In James's published work, a key commitment of what he called "empiricism" was the denial that the mind had a structure from which we can glean truth about "our necessary phenomenal experiences," as Kant

held (James 1879b, 87; James 1983, 82). In other words, the essence of empiricism (at least in some of James's moods) is the denial of synthetic a priori knowledge.

James presented this conception of empiricism to his class, as well. Black's notes from early December show that James lectured on "the dispute between Empiricist and Apriorist" over whether the mind has a native structure that furnishes necessary truths. On James's view, everyone must admit that "the mind has some structure." Even the empiricist admits this point. What distinguishes the empiricist is that he or she rejects the further claim that the mind has "innate propositions or principles" that furnish necessary truth. He used Kant as the chief example of an a priorist (pp. 27-29).

Unlike on our contemporary interpretation of empiricism, James taught that "the question of Innate Ideas" is "not important" for understanding Locke's legacy. This question is misleading because whatever Locke's intentions, he was in the end forced to accept a native structure for the mind (Green made a similar point in the "Introduction"). James cited Locke's *Essay*, IV.7 as "full of admissions that the mind does have a structure…." What *really* distinguished Locke was his view that the mind only perceives "particulars," never "generals" (p. 4).

James revisited the issue of the mind's native structure once again in January. He compared different philosophers in their views on what binds all our various experiences together into a perception of one stable reality. The Scholastics, Kant, Berkeley, Hume and Mill, Neo-Kantians, and Rosmini were contrasted. Rosmini and Kant agreed that the "mortar" of reality is some native mental form (38).

To conclude my observations about Black's class notes, James lectured on topics ranging from synthetic a priori knowledge to the concept of infinity to the viability of nominalism. Certainly, James's interpretation of the British philosophical tradition is far more complex than simply taking Locke, Berkeley, and Hume to be characters only important for the way they connected philosophical speculation with the empirical study of mind, or for the way they provide a "protest" against 19th-century Idealism. However, it is clear from these notes that *one* reason James held LBH to be historically important is that they undertook philosophy from an empirical starting

point. This sentiment comes through particularly clearly in James's discussion of Berkeley. Though he rejected Berkeley's idealism, James greatly admired philosophers who brought empirical results to bear on philosophical issues.

How accurate are these notes as a record of what James was actually teaching? Might these notes reflect merely the whims of their author, a college student at the time? There are two pieces of evidence that suggest these student notes give a reliable record of James's lectures. First, consider the following. On one page of Black's notes, the main ideas of an earlier lecture are repeated. When Black later typed these notes for inclusion in the Houghton Archive, he appended a short explanation to the repeated passage:

> The repetition in the above notes are probably due to the fact that James would occasionally dictate a restatement of matters which he wished put down in the precise wording in which he gave them. R.W.B. (p. 59)

James expected his students to take down his lectures with precision. Of course, Black wrote that James only "occasionally" gave exact dictations for his students. Still, a professor who occasionally gave exact dictations is a professor who probably held his students responsible for learning the material about which he was lecturing in close detail. So this suggests that Black would have been expected to take down in notes an accurate record of James's lectures.

One might still wonder whether Black was a strong enough student to *fulfill* that expectation. There is evidence that he was. James actually footnoted Black in the *Principles* (PP, 964-965.n), which was published five years after Black's notes were written. In the footnote, James quoted approvingly and at length from one of Black's student essays. That James thought Black a competent enough student to warrant this reference suggests that Black would have been one of James's very strong pupils. This vote of confidence does not mean Black's notes give us a perfect transcript of James's lectures; but it suggests the notes were at least taken by a competent student.

In any case, James's own lecture notes are not preserved from any class in which the main texts were Locke, Berkeley, and Hume.[103] So we simply have no better resource than Black's notes if we want insight into how James taught about the British tradition.

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Although James did not publish histories of the British tradition, he did use the word "empiricism" throughout his career. I will now investigate these usages. In this subsection, I ask what connotation the word had when James first learned it.

The word "empiricism" perhaps had more currency among American philosophers during the 1870s than among British philosophers (*see* Section Seven, this chapter, *above*). James used the word in his own notebooks and writings during this period—but he used the word freely, in association with many different philosophic positions and historic figures.

Perry convincingly argued that an important source of James's use of "empiricism" to classify philosophers is David Masson (RBP, I.497, 574). Masson was known as an essayist and historian of literature. He gave a series of public lectures at the Royal Institute in 1865 on British philosophy, and these were published in America the following year. For James, who never had a formal education in philosophy, this book was one of his early introductory texts.

James found the book in his father's personal library. Perry wrote that in James's notes from the early 1870s,

> Masson's classifications constantly appear: his use of terms such as 'experientialism' and 'nihilism'; [and] his recognition of the 'psychological difference' that divides an empiricist like Mill from a transcendentalist like Carlyle or Hamilton, over the question of the nature of mind and the source of its ideas …. (RBP, I.574)

Though Perry did not put "empiricist" and "transcendentalist" in quotes, these were Masson's actual terms. Masson used those two words to denote a fundamental split in the history of philosophy. The split actually does line up with that between LBH and DSL. I will now look at Masson's usage.

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[103] *See* (ML, 177-178) for James's lecture notes from Phil 5: Psychology (1880-1881). The notes span less than a page, and do not mention Locke, Berkeley, or Hume.

Masson began by arguing that philosophers may be divided according to their Psychological Theory, their Cosmology, or their Ontology. Masson saw the main Psychological disagreement as concerning the source of ideas (Masson 1866, 36). "Empiricists," such as Hobbes, Locke, Berkeley, and Hume (Masson 1866, 40-41), held that the source of all ideas is experience. This group held that since it is a contingent matter *which* experiences (and thus ideas) one actually has, there are no necessary truths.

Masson called the opponents of this group "transcendentalists" or "intuitionalists," such as Clarke, Butler, Descartes, Spinoza, Malebranche, and Leibnitz (Masson 1866, 43). This side held that there are ideas "the origin or reason of which transcends or lies beyond the horizon of historical conditions" (Masson 1866, 39-40).

This division seems not to have been standard in 1865. When introducing the word "Empiricism," Masson acknowledged that the word was imperfect, because it "unfortunately has opprobrious connotations," but used it anyway to characterize LBH (Masson 1866, 38). I cannot find an earlier English-language philosopher who used "empiricism" this way. However, the meaning of the term did not become standard with Masson. We saw in my previous chapter that Green and Caird seemed oblivious to Masson's classificatory scheme.

Masson's classification seems very much like CIE, except for one thing. The division of philosophers into groups with different "psychological theories" (viz., into "empiricists" and "intuitionalists") was not the only, or even the most important way Masson had for dividing philosophers. He also divided philosophers according to their cosmologies and according to their ontologies. Compared to the division according to psychological theories, the perennial differences in cosmology were more important. This was because having a theory of psychology was a "luxury," while everyone had a theory of cosmology, even if not fully articulated (Masson 1866, 53-54). Masson spent the most space discussing ontology, because it was the most encompassing area of philosophy (Masson 1866, 70-141).

James puzzled over Masson's terminology—especially "transcendentalist" and "empiricist"—in a notebook entitled "Miscellanea I: Mostly Concerning Empiricism," dated 1870-1873. The chief issue separating these schools on James's reading was the question of whether experience had a necessary structure—a departure from Masson's own description of these two traditions. The only historical figures James named were Mill and Hamilton. Presumably, Mill would have been the empiricist, Hamilton the transcendentalist, though James's view is not explicitly given (MEN, 133-135). The notebook continued with James associating with "the Empiricist" the rejection of the principle of sufficient reason (MEN, 136). James also wrote that empiricists deny that words like "Nothing," "Absolute," "Infinite," "Noumenon," and "Unknowable" represent anything real, because they are "never immediately found in Experience" (MEN, 139). This sounds like he attributed something like the reality principle to those he called "empiricists"—only ideas drawn directly from experience are real.

James's surviving notebooks written during the 1870s show continual use of "empiricism," though many of James's musings there were unfocused. He rarely named particular philosophers when he used the word in his published writings during this decade.[104] At the end of the decade, James published "The Sentiment of Rationality" in *Mind*, and used "English empiricism" in connection with nominalism, and with the denial that there are any necessary truths about nature. He there connected the word to Bain, J. S. Mill, and Renouvier.

In short, James borrowed Masson's word "empiricism" during the 1870s. But James used the word in connection with a variety of figures and topics. The figures included Bain, Mill, and Renouvier. The topics included nominalism, the causal source of ideas of reality, and the question of whether experience has a necessary structure.

[104] He did refer to Chauncey Wright as an "empiricist" (MEN, 300). Wright was "a worker on the path opened by Hume, and a treatise on psychology written by him … would probably have been the last and most accomplished utterance of what he liked to call the British school" (James 1875).

James also used the phrase "empiricism" in publications as well (for examples, the earliest dating to 1873, see James 1987, 266, 300, 313, 322). In this subsection, I will review James's published usages that echo Masson's definition. More importantly, I will also show that James adapted Masson's notion of "empiricism" to characterize the position or school *Green* had sought to discredit.

First, consider one striking example of James echoing Masson's terminology. The example comes in "Absolutism and Empiricism," an 1884 response to J. S. Haldane in *Mind*.[105] Haldane's article was an idealist-flavored piece published in January 1884, in the wake of Green's "Can There Be a Natural Science of Man?" James opened the article by using Masson's distinction between "empiricism" and "transcendentalism" to characterize the fight that had finally broken out in earnest in *Mind:*

> No seeker of truth can fail to rejoice at the terre-à-terre sort of discussion of the issues between Empiricism and Transcendentalism (or, as the champions of the latter would probably prefer to say, between Irrationalism and Rationalism) that seems to have begun in Mind. It would seem as if, over concrete examples like Mr. J. S. Haldane, both parties ought inevitably to come to a better understanding. As a reader with a strong bias toward Irrationalism, I have studied his article … with the liveliest admiration …. (James 1884a, 281)

In this example, we see that James used "Empiricism" and "Transcendentalism" to mark the two camps involved in a debate in *Mind*. This example is interesting because James was still using Masson's distinction after Green's arrival in *Mind*.

Is there evidence that James interpreted Green's attack in terms of this Massonian distinction? James did characterize Green's targets as "empiricists," though it is not clear to what extent he had Masson's distinction in mind (EPs, 162).

There is an interesting piece of marginalia where James used the word "empiricism" in connection with Green. It suggests that James also associated the word with Green's targets, though in perhaps a surprising way. "Empiricism" also meant, for James, a philosophical method of giving *parts* explanatory priority over *wholes*. The marginalia is found in the third installment of Green's "Can There Be a

[105] At this point, James has already published two attacks on Green in *Mind*—"On Some Omissions of Introspective Psychology," and "On Some Hegelisms."

Natural Science of Man?" James simply wrote "empiricism" next to a passage where Green suggests that the individual facts of the world can only be explained in virtue of their position in the Absolute. James did not mean that Green was an empiricist, but that this passage *speaks* to the issue of empiricism.[106] James later gave a similar definition of "empiricism" in (James 1911/1979, 24).

There are several instances later in James's career when he would reflect on the importance of the debates Green sparked in *Mind*, particularly those about space, for his own intellectual development. Towards the end of his life, James recalled that the revived Metaphysical Club "almost invariably wound up with a quarrel about space perception" (quoted at Fisch 1986a, 138). In 1909, James reflected on his early struggles with Green:

> Years ago, when T. H. Green's ideas were most influential, I was much troubled by his criticisms of english [sic] sensationalism. One of his disciples in particular [Fisch claims James is talking about J. E. Cabot, here] would always say to me, "Yes! terms may indeed be possibly sensational in origin; but relations, what are they but pure acts of the intellect coming upon the sensations from above, and of a higher nature?" Well, I remember the sudden relief it gave me to perceive one day that space-relations at any rate were homogeneous with the terms between which they mediated. The terms were spaces, and the relations were other intervening spaces. (James 1909/1978, 79)[107]

There is no mystery about the period to which James is alluding, when Green's influence was at its height. Green achieved international fame in 1874, with his "Introduction", and he died in 1882. So it was during this period that James was grappling with Green's attack on English "sensationalism." Note that James's

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[106] The passage can be found at (Green and Bradley 1882, 333-334):

> Human action is only explicable by the action of an eternal consciousness, which uses them as its organs and reproduces itself through them. The question why there should be this reproduction, is indeed as unanswerable as every form of the question, why the world as a whole should be what it is. Why any detail of the world is what it is, we can explain by reference to other details which determine it; but why the whole should be what it is, why the mind which the world implies should exhibit itself in a world at all, why it should make certain processes of that world organic to a reproduction of itself under limitations which the use of such organs involves--these are questions which, owing perhaps to those very limitations, we are equally unable to avoid asking and to answer.

James's marginalia is found on p. 333. See WJP Phil 22.4.6*—cited by permission of the Houghton Library, Harvard University.

[107] Fisch's claim that James is referring to Cabot can be found at (Fisch 1986a, 149).

breakthrough—the breakthrough we will explore in Chapter Four—came in thinking about space perception.

Also, when James presented his philosophy as a form of "revised empiricism," he typically cited Green's role as the leader of Idealism, the school with which empiricism is to be contrasted:

> By the time T. H. Green began at Oxford, the generation seemed to feel as if it had fed on the chopped straw of psychology and of associationism long enough …. Green's great point of attack was the disconnectedness of the reigning english [sic] sensationalism. *Relating* was the great intellectual activity for him, and the key to this relating was believed by him to lodge itself at last in what most of you know as Kant's unity of apperception, transformed into a living spirit of the world. … Hence a great disdain for empiricism of the sensationalist sort has always characterized this school of thought …. But now there are signs of its giving way to a wave of *revised empiricism*. I confess that I should be glad to see this latest wave prevail; so—the sooner I am frank about it the better—I hope to have my voice counted in its favor as one of the results of this lecture-course." (James 1909/1977, 8-9, my emphasis on "revised empiricism")

The fact that much of *A Pluralistic Universe*—published in 1909—is dedicated to refuting Idealism shows what an enduring theme this was in James's career.

10. Tensions with Secondary Literature

One of my claims about James—that the attempt to resist Idealists like Green and Caird shaped James's own work in philosophy and psychology—stands in tension with three themes in the James literature. For one thing, James is often read as making a clean break from modern philosophy, not as someone who sought to carry that tradition forward by responding to criticisms of it. For another, much of the literature on James is preoccupied by a struggle to give a "one world" reading that systematizes all of James's work on disparate topics. I deliberately resist giving an over-arching view of James, so I might be accused of presenting a view that cannot be sustained on a more systematic reading. Finally, scholars who do attend to James's early work vis à vis neo-Kantian and -Hegelian philosophy actually present James as *himself* some variety of Kantian. I will take each objection in turn.

The first trend in James scholarship with which my work is in tension is a trend created largely by Richard Rorty. Rorty is responsible for a dominant view of classic American philosophy. This view holds that James and Dewey were, above all,

philosophical radicals. They are supposed to have been critics who taught us to *abandon* modern philosophy, not to repair it. They allegedly refused to engage with central problems of modern philosophy—especially with the problem of finding what Rorty calls "a general theory of representation" (Rorty 1979, 3).

Rorty thinks pragmatists see modern philosophy as a dead-end literary genre invented by Plato. This genre has

> outlived its usefulness. This does not mean that [pragmatists] … have a new, non-Platonic set of answers to Platonic questions to offer, but rather that they do not think we should ask those questions anymore (Rorty 1987, 27).

Rorty's favorite pragmatists are James and Dewey (Rorty 1987, 31). The suggestion is that these trailblazers did not try to *solve* modern philosophical problems, particularly those concerning representation; they *rejected* those problems as not worthy of attention.

According to Rorty, logical positivists unfortunately wrested control from pragmatists in the 1940s and 50s (Rorty 1982a, 160, 214-215). This plunged American philosophy back to the bad old days of taking questions about representation seriously—especially questions about *scientific* representation (Rorty 1987, 29).

Rorty's view is truly dominant. For example, in the introduction to a leading anthology, John Stuhr refers to classic American philosophers'

> wholesale rejection of the central problems of modern philosophy…. Classical American philosophers, that is, did not attempt to provide better answers to traditional problems … as much as they sought to dissolve, dismiss, and undercut these problems altogether …. (Stuhr 2000, 3)

Again, pragmatists are portrayed as having been radicals more interested in turning their back on traditional philosophical problems than in solving them.

Stuhr's view echoes a theme from Cornel West:

> … American pragmatism is less a philosophical tradition putting forward solutions to perennial problems in the Western philosophical conversation initiated by Plato and more a continuous cultural commentary or set of interpretations that attempt to explain America to itself at a particular historical moment. (West 1989, 5)

Stuhr and West agree that pragmatists did not try to solve traditional problems. Stuhr suggests that pragmatists attempted to "dissolve, dismiss, or undercut" those

problems. West holds that pragmatism's positive project was really to give a cultural commentary on America. For a similar narrative, *see* (Seigfried 1990, 21).[108]

I think this view of classic pragmatism is misleading. It is true that James and Dewey were both radical in their own ways. But James, at least, was considerably *less* radical than the prevailing view would have it. Far from abandoning the Lockean tradition, or ignoring Green's polemic against it, James developed an interesting and detailed defense. To be sure, James wanted *to revise* Lockean philosophy. But against Rorty, James wanted to salvage what he saw as the legitimate core of the Lockean project—the goal of building a science of mind that would enrich philosophical discourse.

Rorty's view is not entirely indefensible, admittedly. One certainly finds rhetoric in some of Dewey's work (e.g., Dewey 1920) that suggests a radical break with tradition. And even in James, one occasionally finds such rhetoric.[109] For example, James characterized Papini's pragmatism—approvingly—as a project that cried "farewell to the past of philosophy" (James 1906, 338).

But we must guard against reading James through the lens of Dewey—and through a selective reading of Dewey at that. Indeed, when one looks past the quotable lines in James, one often finds far more constructive ambitions to engage traditional philosophy than people like Rorty imagine. For instance, when one pursues James's reference to Papini, one finds that bidding "farewell" to past philosophy only meant that Papini endorsed a decidedly traditional commitment—nominalism. Papini bid farewell, it seems, only to Platonism about universals.

I doubt there is any single piece of evidence that could adjudicate my disagreement with Rorty. However, I can say this much. Surely, Rorty would not accuse Green or Bradley of being philosophical radicals in the sense of being people

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[108] One rarely finds Peirce, James, and Dewey read alongside the modern philosophical tradition with which, in my view, they were actually engaged. But *c.f.* pre-Rorty works like (RBP ;Thayer 1968).

[109] One does not find such rhetoric in Peirce, though. Misak emphasizes that Rorty is pursuing a strand of pragmatism that owes primarily to James. In fact, she argues that Rorty sometimes pursues ideas James's *critics* read into *Pragmatism*, ideas from which James actually distanced himself (Misak Forthcoming).

who abandoned the questions of modern philosophy. I will argue that James's own philosophy and psychology were directly shaped by his wrestling with Idealist arguments. So Rorty's view will be relatively undermined to whatever degree I succeed in establishing this dialectical connection between James and Idealists.

The second trend in James scholarship with which my work is in tension has been an ongoing argument about how to find a consistent, "one-world interpretation" that makes James's main published writing come out as articulating one systematic doctrine. For literature on the unity of James's thought, *see* for example (Cooper 1990; Cooper 2002; Gale 2004; Gale 2005; Gale and Myers 1999; Pawelski 2003; Schlecht 2001).[110] The search for a one-world interpretation has resulted in an excessively internalistic view (in the historian's sense) of James, where the goal is to show how all the very different things James wrote about philosophy, psychology, religion, and even parapsychology relate systematically to one another.

This trend is pernicious because James never took himself to be creating a system—he preferred to approach problems in a piecemeal way, like the scientist he was. Of course James was interested in consistency. But he tended to solve particular problems, and then to worry about how his views on diverse topics fit together only later. So the search for an overarching Jamesean system can be an interesting excursus; but it does not reflect James's own intentions.

Moreover, for those interested in James's actual historical impact, the question of how to reconcile all his diverse views is not very important, except insofar as those he influenced were engaged in such a reconciling project themselves. But in the pantheon of those influenced by James, the reconcilers came to dominate James scholarship only recently. For example, the mania for new forms of realism in the 1910s and 1920s took off largely from the popularity of just one of James's essays (James 1904)—*see* (De Waal 2001, xxiv). Of course, one *need* not read James with

[110] The phrase "one-world interpretation" is due to Gale's 1999, a valuable work despite its reconciling ambitions.

the goal of understanding his historical impact. But then we must be careful not to substitute our own, rationally-reconstructed James for James the historical actor.

Here is the third trend in James scholarship with which my work stands in tension. James's early work is rarely read as a response to neo-Kantian or -Hegelian Idealism. While James's later struggle with Royce's brand of 'idealism' is well known, there are no available studies that show how James's psychology and philosophy were seriously influenced by his early interactions with British Idealism.[111] However, two historians do situate James's early thought with respect to neo-Kantian philosophy, but they actually portray James *himself* as a Kantian (Kuklick 1977, 161, 272-164, 313n, 316-119; Kuklick 2001, 129-178; Murphey 1968). Though this claim is now well known in American philosophy circles, its basis is actually very thin. Perhaps because neither Murphey nor Kuklick are primarily trained as philosophers, they end up with a conception of what it is to be a Kantian that is too simple. They both seem to hold that anyone who thinks the mind plays an active role in constructing perception deserves to be called a Kantian. As such, both Murphey and Kuklick regard the Kantian influence on James as established simply by the fact that the Jamesean mind is an active agent in constructing perception, not a tabula rasa as earlier empiricists had held.[112]

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[111] There is an important study of James's relation to Bradley, but this book focuses primarily on James's later work (Sprigge 1993). When Sprigge does write about the *Principles*, the focus is on the latter's metaphysics, including his views on personal identity, free will, and the relationship between brain and mind (pp. 67-107)—topics I do not broach in this dissertation.

[112] Murphey claims that "…it was Kant who was the dominant influence upon the pragmatists" (Murphey 1968, 9). When it came to James, that influence is to be found in his psychology. On pp. 15-16, Murphey describes the Jamesean stream of consciousness in a long paragraph. He emphasizes that according to James's view, when a subject parses the chaotic, raw data of sensation, "it is the mind which selects and chooses …." The entire paragraph discusses James's notion of a stream of thought, and then concludes with this cryptic remark: "James's debt to idealism could not be clearer." Without further argument, Murphey proceeds to treat James's Kantianism as fully established. He later writes, presumably on the strength of the earlier paragraph: "…James … emphasize[d] the activity and constructive action of the mind in a manner which is profoundly indebted to Kant and the idealists." Kuklick offers more historical details to bear out the claim that James was a Kantian, but these details appear to be irrelevant. "It is a sign of the Kantian orientation of much of James's philosophizing that he began reading the *Critique* [of Pure Reason] at the time he was pouring over Renouvier" (Kuklick 1977, 161). True, James was deeply engaged

There are several reasons this view is not satisfactory. First, these historians are mistaken in thinking that Kant was the only philosopher who gave the mind an active role in constructing perception. For example, Thomas Reid—a philosopher well respected by James—also emphasized the constructive role of the mind.[113] But Reid began publishing such theories in 1764—almost two decades before Kant's critical turn. Reid should surely not be considered a Kantian. Similarly, although he was writing well after Kant, James developed a model of mind that happened also to emphasize constructive activity. But James also developed this model independently of any deep Kantian influence.

Second, to bear out the claim that James was one of "Kant's Children," as Murphey puts it, one must have an account of the *essence* of Kant's actual legacy. But we nowhere get such an account from the historians. One can find agreement between almost any two philosophers on *some* topic, if one really searches. This is not enough to show that two philosophers belong to the same school or tradition. At very least, establishing that two figures belong to the same tradition requires the following. One should show that a) the more recent philosopher had a view about the essence or central aspects of the older philosopher's legacy, and b) that the more recent philosopher was actually sympathetic to that legacy.

In point of fact, we *do* have a record of what James held to be the essence of the Kantian position. Unfortunately for the historians, by James's own criterion, he is clearly not a Kantian. In a passage we will have cause to consider in greater detail (*see below* p. 278), James wrote:

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with Renouvier's philosophy. But the fact that James read Kant at the same time he read Renouvier really shows nothing about James's judgments about Kant. Later in the book, Kuklick claims that it is late in James's career that his latent Kantianism really blooms (pp. 273-274). There, the "Kantianism" ascribed to James has two components. The first component mirrors Murphey's view. James gave the mind an active role in constructing our perception of reality. The second component is that Kuklick infers that James believed in a "*Ding an sich*" about which we could know nothing. The evidence seems sketchy to me, but in any case my main criticism still holds. James held the essence of Kantianism to be a positive answer to the question, *is there synthetic a priori knowledge*. James expressly denies that there is such knowledge (EPs, 82), as we will see below, in Chapter Four.

[113] Thomas Reid argued that the mind plays an active role in constructing perception in (Reid 1764/1997; Reid 1785/2002). *See* (Wolterstorff 2001, 74-76).

> The mere innateness of the spatial form of sensibility is surely not the essence of the Kantian position. Every sensationalist empiricist must admit a wealth of native forms of sensibility. The important question is: Do they, or do they not, yield us a priori propositions, synthetic judgments? (EPs, 82)

This passage says that the "essence of the Kantian position" is not the view that the mind has native categories—categories it uses to construct perception. The essence of Kantianism is one's answer to the question, is there or is there not synthetic a priori knowledge? As we will see in Chapter Four, James answered with a resounding negative.

If there remains any doubt about whether James took himself to be a Kantian, one should note that James constantly discouraged his peers even from taking Kant seriously. For example, he wrote:

> The true line of philosophic progress lies, in short, it seems to me, not so much through Kant as round him to the point where now we stand. … Kant's mind is the rarest and most intricate of all possible antique bric-a-brac museums, and connoisseurs and dilettanti will always wish to visit it and see the wondrous and racy contents. The temper of the dear old man about his work is perfectly delectable. And yet he is really … at bottom a mere curio, a 'specimen.' (James 1907/1975, 269)

Here is another colorful example:

> The whole lesson of Kantian and post-Kantian speculation is, it seems to me, the lesson of simplicity. With Kant, complication both of thought and statement was an inborn infirmity, enhanced by the musty academicism of his Königsberg existence. With Hegel it was a raging fever. Terribly, therefore, do the sour grapes which these fathers of philosophy have eaten set our teeth on edge. (PP, 346)

The Kantian reading must contend with James's own plentiful and unequivocal repudiations of Kant. It will require an ingenious argument to show that despite these protests, James ought nevertheless to be called a Kantian himself. I do not think any such argument can be proffered.[114]

Kuklick does acknowledge passages like these (at Kuklick 1977, 316-319). In response, he adduces three reasons why James should nevertheless be counted as a Kantian. First, though James repudiated Kant's notion that one can neatly separate thought's content from its form, this repudiation was consistent with

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[114] I note that Perry called Kantian idealism James's "favorite philosophical enemy," (RBP I.711). I will have more to say about James and the Kantian tradition in Chapters Four and Five.

transcendentalists like Royce and Bradley, who are clear followers of Kant (P. 318). Second, James allegedly *acted* like a Kantian, in the following sense. He presented his own pragmatism as a way to mediate between "rationalism" and "empiricism"—"and this was exactly Kant's historic role" (p. 317). James allegedly sought to "answer … Hume's skepticism" by combine empiricism's epistemology with rationalism's religious tendencies, thereby attempting to perform "a Kantian task a hundred years after Kant" (p. 318). Third, the "Continental rationalists were more interested in science and mathematics than were the British empiricists[.] … Kant carried on this interest" (p. 319). Thus, to be a philosopher interested in science is, for Kuklick, to be a Kantian.

The first argument mistakenly assumes that being part of a particular philosophical tradition is a matter of holding some view or other that is consistent with the views of people who work in the tradition in question. This cannot be correct. It would be difficult to find a philosopher in the late 19th century who did *not* hold *some* view that, taken by itself, is consistent with views held by unequivocal Kantians like Royce and Bradley. Kuklick would need to specify some *core* commitment of the Kantian tradition that James endorsed—and even then, Kuklick's view would contradict James's own judgment about the essence of Kantianism, as we have seen. The second argument rests on a similar mistake. Unless the *essence* of being a Kantian were that one attempts to mediate between empiricism and rationalism, this is not a good basis on which to class James as a Kantian. Again, James clearly did not recognize this as the essence of Kantian philosophy. The third argument contradicts a view I've argued for at length in this chapter—that the very idea of a British Empiricist tradition is itself the product of arguments over a science of mind. Those hopeful about mental science allied themselves with Locke, Berkeley, and Hume, after Green had gathered these three together as totems for psychology. Those who saw themselves as carrying the Kantian torch, indeed, *opposed* psychology—the science for which James became famous. Although Kuklick provides invaluable insights on the role of professionalism

in the development of American philosophy, we must reject his claim that James was fundamentally working in the tradition of Kant.

Some of the best work on James over the last half-century has come from philosophically-minded historians, and historians of science. Much of this work has placed James in a social or institutional context.[115] But the philosophers who have treated William James have, almost without exception, failed to write about him with enough historical nuance, in my view. The result is an odd, composite portrait of James. The historians often portray him as a man with his finger on the pulse of America, a philosopher who exquisitely reflects his social circumstances;[116] but the philosophers portray him as a man whose work seems *not* to be embedded in any distinctive context, except perhaps in the context of Peirce and Dewey's respective pragmatisms. (As we have seen, West's reading stands in a middle ground, presenting James and Dewey as cultural critics.)

Is this oversight justified? Or ought we to read James as the sort of philosopher who responded to a wide range of work, not just to cultural currents of Late Victorian America? And more specifically, ought we to read James as having been engaged with the Idealists I focus on in this dissertation?

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[115] Some good examples include (Cotkin 1994; Menand 2001; Wilson 1990). Excellent work on James in the context of the history of psychology include (Croce 1995; Leary 1990; Leary 1995; Leary 1997; Leary 2002; Leary 2003; Reed 1997, chapter 11; Richards 1987, Capter Nine). *Also see* fn. 194, *below*, for a broader review of literature on James from historians of psychology, much of it very good. Among my favorite philosophically-minded historians is Bruce Kuklick, whose (Kuklick 1977) remains among the finest history available of the "golden era" of American philosophy—even despite the mistakes about Kant's legacy. Ignas Skrupskelis must be mentioned, who probably knows more than anyone about James's surviving manuscripts. He has worked as an editor on the *Works of William James*, and as such the modest length of the list of his James scholarship understates his impact on the field. I cite several of his articles where relevant, in this dissertation. Finally, an older generation of historians set high standards for such research—one must mention Murray Murphey, Philip Wiener (Murphey 1968; Wiener 1949), and above all Max Fisch (Ketner and Kloesel 1986), especially (Fisch 1986a; Fisch 1986b).

[116] The passage I quoted from West, *above*, is an example of this view. Also *see* (Hollinger 1980).

One factor that has prevented philosophers from paying serious attention to the context in which James worked is that on just about any page James ever wrote, one finds so *many* references to other intellectuals. Most of these intellectuals are now forgotten, and they worked in fields ranging from poetry to biology to psychical research. Contemporary scholars seem to react by not chasing down *any* of the references. This is actually not as bad a strategy as it sounds. Who was Edward Gurney or Mary Baker Eddy or Fitz-James Stephen? Since James' writing is littered with references to forgotten intellectuals, it is difficult to choose any *one* set of interlocutors that stand to shed light on the central thrust of James's philosophy.

For example, many (e.g., Hollinger 1985, ch. 1; Kitcher 2004) rest content with recasting the entirety of the *Varieties* and the "Will to Believe" as a polemic against Clifford and Huxley. These are easy interlocutors to pluck from the "Will to Believe," but they are two interlocutors among many who spurred James's thought. Perhaps these figures have been cherry-picked because their reputations have survived for independent reasons. In any case, the result is the same—James is portrayed as a philosopher who wrestled with questions that come from a very narrow band of acquaintances, most of them American.

If philosophers would give up the urge to find systematic readings that make sense of all of James's thought in one swoop, they might free themselves to investigate his detailed responses to particular interlocutors on individual topics.[117]

My goal is more modest. I am interested specifically in James's empiricism. I hope to have convinced the reader that to understand James's empiricism, one must investigate his reaction to early British Idealists like T. H. Green and Edward Caird. I do not claim that James's entire career should be read as single-mindedly devoted to refuting Green and Caird.

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[117] Here and there, one finds welcome exceptions, often from historians of psychology. (Viney 1997) investigates James's debt to Lequyer and Renouvier on the topic of free will; (Conant 1997) is a philosophical piece on James's argument with Royce over absolute idealism; (High 1981; High 1982; Pastore 1981) is a helpful debate over the relationship between James and Shadworth Hodgson on space, to offer a few examples.

In any case, it is to the British Idealists' substantive criticisms to which I now turn.

Part Two

T. H. Green and The Case Against Empiricism

Chapter Three

Green against Hume: Space Perception and the Intelligibility of Sensations

1. Introduction to Part Two

What part of our spatial perceptions comes directly from sensation, and what part is contributed by the mind itself? Green argued that a crucial flaw in proto-empiricism was that it could not give an intelligible answer. The difficulty stems from two of proto-empiricism's core commitments. First, Berkeley and Hume maintained that perceptions are ultimately made up of sensory atoms. Second, they also held that the distinction between illusion and reality matches the distinction between what the mind receives from sensation and what it creates in thought. This puts proto-empiricists in a bind concerning perceived spatial relations. If our perceptions are fundamentally atomic, then spatial relations between those atoms must be added, somehow, by the mind. But by proto-empiricists' own lights, this would make spatial relations (like *being to the left* or *right of*, *above* or *below*) nothing but mental fictions—an embarrassment, especially given the robust role of observable spatial properties in many scientific theories.

In this chapter, I turn to the philosophical details of Idealist attacks on proto-empiricism, and thereby on empirical psychology. The above argument was a centerpiece of the 1874 "Introduction" to Hume, in which Green hoped to demonstrate why Lockean philosophy, and the empirical psychology subsequently built upon it, had to be abandoned in favor a Kant-flavored alternative. In Section Two, I explain why space perception should have emerged as a central topic of the "Introduction." In Section Three, I analyze Green's attack on Hume's account of the perception of spatial relations. This section is the heart of the chapter, because it lays out the most important arguments among those we will see James responding to in the next two chapters. In Section Four, I show that Green's attack on Humean spatial perception was an instance of a general argument to the effect that *no* atomic

sensation could ever be intelligible to a subject, given basic commitments of proto-empiricism. I focus on the general account of ideas first laid out by Locke.

Note that in Section Three, I begin with Green's attack on the more recent figure (Hume rather than Locke) and on the more specific criticism (of spatial ideas, rather than of ideas in general). I look at Locke and Green's general criticism of the way of ideas only in Section Four. I use this strategy because I want to emphasize that Green's attack on the proto-empiricist account of space stands on its own ground. One does not need to reject the entire proto-empiricist account of ideas in order to be persuaded that Green's argument against Hume on space is troubling.

In Section Five, I present another of Green's important arguments, one central to his 1882 attack in *Mind*, "Can There Be a Natural Science of Man." This argument sought to show that empirical psychologists could not make sense of their own scientific practice, because they had no way to distinguish between accurate and inaccurate perceptions. In other words, Green argued that proto-empiricists could not make sense of the normative component of scientific theories.

I then turn from criticism of proto-empiricism to positive Idealist accounts of the mind, in order to give a sense of the alternative to empirical psychology on offer. In Section Six, I look at one such account from Edward Caird, another account with which James and his colleagues were also engaged. I conclude the chapter with a brief exposition of J. E. Cabot's adaptation of Idealist criticisms. James's own early work on space—the work to which I turn in Chapter Four—was written in direct response to Cabot.

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It has become a commonplace that the status of relations was a key element in Russell and Moore's eventual break with Idealism. In particular, Russell and Moore rejected the claim that, since relational properties belong to an object's essence, there are no entities short of the Absolute that are truly metaphysically independent.[118]

[118] For two recent discussions on this topic, *see* (Fortier 1996; Hylton 1990, 106-116, 120-127).

In this chapter, we will see that Green argued that relations were part of the basic fabric of reality, but could be supplied only by intellectual acts of perceivers. The result was that reality was supposed to be, in some deep sense, mental.

Like Russell and Moore after the turn-of-the-century, James also responded to such claims. However, while Russell and Moore developed alternatives to *both* idealism and empiricism (Hylton 1990, 9, 130-132), James defended empiricism. And where Russell's battleground on these issues was primarily that of logic and the nature of propositions, James carried out his reply in the realm of perceptual psychology. In this chapter, we will see in close detail why early mental scientists like James had to address Green's influential arguments.

2. The Goals of Green's "Introduction"[119]

2.1 Goal: Show That There Can Be No Scientific Account of Science

Green and his colleague Thomas Hodge Grose edited and reprinted Hume's *Treatise of Human Nature*. The reprint (Hume 1739/1874) appeared in two volumes in 1874, with Green's 373-page "Introduction" split between the two. If Green retains a reputation today, it is principally for his moral and political philosophy.[120] However, he first achieved international fame with his lengthy "Introduction" to Hume, which was disproportionately focused on the latter's psychology, epistemology, and metaphysics. To demonstrate that Green's "Introduction" was focused on these subjects, I now offer a summary of the contents of each volume.

The first volume of Green and Grose's edition of the *Treatise* contained only Book I ("Of the Understanding"), along with over 80% of Green's "Introduction." This first installment of the "Introduction" placed Book I in the philosophical

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[119] The pagination of Green's first "Introduction" is identical in Volume I of the Green and Grose edition of the *Treatise*, and in Volume I of Green's *Collected Works*. Thus, where the context makes clear that I am citing Green's first "Introduction," I simply give a paragraph and page range.

[120] Witness the *Stanford Encyclopedia of Philosophy's* entry on Green, which is devoted to the latter's social and political thought (Tyler 2003). The "Introduction" receives only one passing reference in this long entry.

context of Lockean philosophy. The second volume contained the *Treatise's* Books II and III ("Of the Passions," and "Of Morals"), the entire *Dialogues Concerning Natural Religion*, and the remaining 20% of Green's introductory remarks, these devoted to Hume's moral philosophy. The entire "Introduction" was reprinted posthumously in Green's *Collected Works*, in 1894.

The first "Introduction," devoted to Book I, is where one finds Green's most detailed criticism of Hume. True, Hume himself did not receive sustained discussion until page 161 of 299, more than halfway into the endeavor. That first half had been devoted to Locke and Berkeley. But the second "Introduction" also began by considering other figures—principally Locke, but Hobbes, Butler, and Hutcheson appear as well, among others—so that only about 39 pages (INT, 331-370) are there devoted principally to Hume's moral philosophy. Even if one subtracts out the extended discussions of other philosophers, Green devoted almost four times as much space in his "Introduction" to Book I (138 pages, or 78%) than to Books II and III (39 pages, or 22%).

I claimed in Chapter One (*above*) that a main goal of the "Introduction" was to attack the philosophical foundations of empirical psychology. In this section and the next, I will provide more detailed evidence in support of my reading.

Commentators typically look to §§1-5 for a quick overview of Green's intentions in the "Introduction." The picture drawn from those opening paragraphs is distorted. The opening suggests that Green was interested primarily in the theory of knowledge, and that he aimed to show that Lockean "empiricism" dead-ended in Humean skepticism. Thus, Hylton thinks

> An important characteristic of Green's philosophy is that it presents a picture of the history of philosophy.... According to this picture, Empiricism forms a single school of thought.... Hume's great genius lay in the rigour with which he argued from Locke's fundamental principles, resolutely ignoring common sense, and arriving at absurdity. For empiricist [*sic*] philosophers after Hume, Green has very little respect, for he sees in their work a series of attempts to evade or disguise the bankruptcy of Empiricism which Hume had demonstrated (see *Works*, i.1-5).
>
> ...The problem that the Empiricists set themselves was that of 'the origin of "ideas" in the individual man, and their connection as constituting knowledge' (*Works*, i.6). This enquiry into the origin of our ideas and knowledge is an enquiry into our

> capacities as knowers, i.e. into the question, what things are possible objects of knowledge for us. (Hylton 1990, 22)

This is a standard story about Green's view of history, and I concur with some of it (for a similar view also drawn from §§1-5, see Brink 2003, 9). Green did think that Hume reduced Locke's philosophy to absurdity, and that contemporary philosophers had ignored or tried to disguise this result. But the emphasis on epistemology in this story is misleading.

Indeed, from our contemporary vantage these sections make it look as though Green saw the Lockean tradition as primarily interested in epistemology. But this is a case of the historian's fallacy—of substituting our own interpretation of modern philosophy for Green's. First, I will offer an alternative account of the opening passage of Green's "Introduction" in order to explain how contemporary philosophers easily slip into this fallacious reading. Second, I will suggest a different passage that more accurately captures Green's understanding of what was at stake in defending or attacking Lockean philosophy.

Prima facie, the opening passage of any work is a sensible place to look for a summary announcement of the author's intentions. But the opening of Green's "Introduction" is an exception. The first five sections of that work were a kind of preamble that discussed Green's proposed methodology. The preamble did not seek to make major interpretive claims about the Lockean tradition. Since the actual history sketched in these opening sections is so thin, it is easy to read our own contemporary historical views into Green's scanty remarks.

In the opening passage Green was concerned to establish that a history of philosophy had to employ different methodology than a history of literature. He began by arguing that a certain, general view of human history ought to be applied to the history of philosophy. The general view is that human history is a story of progress carried on by "great men" across the ages. Green argued that the history of philosophy, as well, ought to be interpreted as a progressive history advanced by great men (§§1-2). Thus:

> There is a view of the history of mankind … which detaches from the chaos of events a connected series of ruling actions and beliefs—the achievements of great men and great epochs, and assigns to these in a special sense the term 'historical.' … (§1, 1)

> A corresponding theory may with some confidence be applied to simplify the history of philosophical opinion. … (§2, 1)

Green then explained that he rejected the methods of those who tell philosophical history by surveying many works all together. Perhaps he had in mind recently-translated blockbuster histories like Üeberweg's, which bore the title *History of Philosophy, from Thales to the Present Time*.[121] Instead of picking one or a few "great men" to study in depth, these compendious histories group together philosophers according to the time in which they lived and the relative popularity they continued to enjoy. Such works tangle together so many competing views that they obscure progress, according to Green, that philosophy has made over the centuries.

Green then announced that he intended to treat Hume as one such great man. Hume was supposed to have advanced the tradition Locke began and Kant (in some sense) continued (§3, 2-3).

If Hume was a great man advancing a theoretical project, Green argued, then Hume scholars should not employ the methods of literary history. Literary history explores the *personal* peculiarities that made some author great. In contrast, legitimate history of philosophy had to treat thinkers as "vehicles of a system of thought," not as mere literary sensations (§4, 4). Green branded as "sceptic[s]" those who studied philosophy in a literary mode, writing as though philosophy made no progress.

We must be careful when we read Green's comments about what *sort* of system Hume is supposed to have advanced. In this opening passage, Green wrote:

> The value of that system of thought, which found its clearest expression in Hume, lies in its being an effort to think to their logical issue certain notions which since then have become commonplaces with educated Englishmen, but which, for that reason, we must detatch ourselves from popular controversy to appreciate rightly. (§5)

Green did claim that Hume pushed "certain notions" to their logical conclusion. But in this early passage, he did not specify what those "notions" were supposed to be,

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[121] The first, translated volume of Üeberweg's work appeared in 1871, and the second volume in 1873 (Üeberweg 1871; Üeberweg 1873). Green's "Introduction" appeared in 1874.

save that they were "commonplaces with educated Englishmen." Because our *contemporary* interpretation of empiricism features Hume pushing Locke's basic epistemology to its logical conclusion, it is tempting to assume that this is the story Green had in mind, as well. This is not accurate, as we will see when we look at more substantive passages.

For now, I only want to point out that §§1-5 of the "Introduction" do not give a programmatic statement of Green's view of history, as commentators like Hylton and Brink assume. Instead, Green here made a point about his own methodology—that historians ought to focus squarely on how a great philosopher advanced the theoretical project of his predecessors. The *nature* of the theoretical project Hume was supposed to have advanced is not given any serious characterization in these opening sections.

What about the passage Hylton cited from §6? Recall that he quoted Green in a way that suggested the following view of English philosophy. The "Empiricists" are to have set themselves an epistemological task—that of exploring "the origin of 'ideas' in the individual man, and their connection as constituting knowledge (*Works*, i.6)" (Hylton 1990, 22). There are two reasons to be suspicious of Hylton's characterization of this passage.

First, §6 marks the start of Green's investigation specifically of Locke. The quoted comment was actually not meant to describe a tradition that ran through Berkeley or Hume—it was only a description of Locke's philosophy. Second, the quoted sentence may be read in several different ways. Let us look at the full context of this passage:

> About Locke, as about every other philosopher, the essential questions are, What was his problem, and what was his method? . . . His problem was the origin of 'ideas' in the individual man, and their connection as constituting knowledge: his method that of simply 'looking into his own understanding and seeing how it wrought.' These answers commend themselves to common sense, and still form the text of popular psychology. … Our concern at present is merely to show their precise meaning, and the difficulties which according to this meaning they involve. (INT, §5, 5-6)

Locke's question about "the origin of 'ideas'" is ambiguous. Did Green mean that Locke was interested in the question of how ideas are *justified?* Or did he mean Locke was interested in the *causal* origin of ideas? There is not much in this scanty

passage to help us. On one hand, Green did say that Locke was interested in how the "connections" between ideas "constitut[e] knowledge." So Locke was clearly to have had at least some interest in epistemological issues. But on the other hand, the very next sentence characterized Locke's project as commending itself to common sense and to "popular psychology." The reference to psychology suggests that Locke himself was interested in the "origin of ideas" as an empirical problem, not (just) as an epistemological problem.

By "popular psychology," Green presumably meant the brand of associationism found in J. S. Mill, Alexander Bain, Herbert Spencer, and other influential psychologists of the era. Green used the phrases "popular psychology" and "empirical psychology" interchangeably in the "Introduction." For instance, *see* the quoted passage immediately below (from INT, §200) where Green characterized "'empirical psychology'" as fundamentally interested in the origin of ideas, just as "popular psychology" had been portrayed in §6.

So by themselves, the opening remarks leave us with only a vague suggestion about the significance of Locke's question about the origin of ideas. We are supposed to see this question as important to empirical psychology, but we do not yet know why.

We will find that Green consistently portrayed the Lockean tradition as sharing a pretension to using natural science—especially empirical psychology—as a substitute for traditional metaphysical speculation. Green did think proto-empiricists were interested in epistemological questions. But *contra* the standard reading, Green did not portray any substantive epistemology as what was *essential* to the Lockean tradition. Instead, as I will now show, one important commitment that tied this tradition together was the use of scientific techniques to answer questions that had traditionally been left to a priori metaphysics.

I have just argued that the opening passage of Green's "Introduction" was intended to present Green's historical methodology, not to announce anything substantial about his reading of history. To get a more substantial, yet still concise

statement of Green's reading of history, one must look to the middle of the "Introduction."

Hume did not come in for detailed criticism until p. 161 of this work. The passage where Green (in my view) *did* explain his intentions spans the following seven pages (at INT, §§195-202, 161-169).

This passage actually holds a prominent position in Green's "Introduction." The work is, after all, an introduction to *Hume*. After enduring 161 pages on Locke and Berkeley, the reader is quite ready for an explanation of what all this has to do with the author of the *Treatise*. Here is the explanation we find.

The passage began mildly, with the first two pages dealing with Hume's perceptual psychology. Green gave a basic account of Hume's conception of ideas, and of a certain "rule" Hume employed (INT, §§195-196). We now call the rule in question the "copy principle," and I shall have more to say about it in Section Three, *below*.

Green then launched into a critical account of the significance of Hume's philosophy, and of Hume's fundamental philosophic failure (INT, §§197-202—henceforth the "pivotal passage"). In this passage, Green argued that a critical treatment of Hume was needed to give empirical psychologists their comeuppance. This, in my view, was the primary aim of Green's "Introduction."

It was not that Green was an enemy of science. He actually saw science as one of the two most important forms of knowledge, the other being religion. But he did not think one could finally explain the way either scientific or religious knowledge was possible unless one undertook a deeper, *metaphysical* examination of the conscious subject. With Brink (Brink 2003, 8-9), I see Green's notion of a subject as indebted to Kant's transcendental ego of apperception. The very fact that we have knowledge cannot be explained, Green thought, unless there is a subject that binds all our changing ideas into one unified conscious life (*see below*, p. 201). The examination of such a subject had to be metaphysical because for Green, the subject

exists outside of space and time, and one can only glean facts about it through transcendental reasoning.[122]

In contrast, empirical psychologists thought they had learned the following lesson from Hume, according to Green: that one could gain a legitimate explanation of scientific knowledge *from inside science itself*. In particular, one could get an account of scientific knowledge from the emerging science of empirical psychology, or from the related science of physiology. One did not need to resort to metaphysics. Green was most interested in correcting this allegedly mistaken view about science's prospects for helping philosophers to do without metaphysics.

I will quote Green at length here, because his work is so little known, and because these passages explain the aim of the entire "Introduction."

> The quarrel of the physiologist with the metaphysician is, in fact, due to an *ignorantia elenchi*,[123] on the part of the former, for which the behaviour of English 'metaphysicians,' in attempting to assimilate their own procedure to that of the natural philosophers, and thus to win the popular acceptance which these alone can fairly look for, has afforded too much excuse. The question really at issue is not between two coordinate sciences, as if the theory of the human body were claiming also to be a theory of the human soul, and theory of the soul were resisting the aggression. *The question is, whether the conceptions which all the departmental sciences alike presuppose shall have an account given of them or no.* For dispensing with such an account altogether (life being short) there is much to be said, if only men would or could dispense with it; but the physiologist, when he claims that his science should supersede metaphysic, is not dispensing with it, but rendering it in a preposterous way. He accounts for the formal conceptions in question, in other words for thought as it is common to all the sciences, as sequent upon the antecedent facts which his science ascertains—the facts of the animal organisation. But these conceptions—the relations of cause and effect, &c.—are necessary to constitute the facts. They are not an *ex post facto* interpretation of them, but an interpretation without which there would be no ascertainable facts at all. To account for them, therefore, as the result of the facts is to proceed as a geologist would do, who should treat the present conformation of the earth as the result of a certain series of past events, and yet, in describing these, should assume the present conformation as a determining element in each. (INT, §199, 164-165; my italics on the full sentence)

The physiologist pretends that "his science should supersede metaphysic" in answering a crucial question. The crucial question is how to give an account of the

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[122] For a discussion of Green's aspiration to use metaphysics to reconcile religion and science, see (Vincent 1986, 5-10).

[123] This phrase roughly means *irrelevant argument*. This is the fallacy of establishing a conclusion that is actually irrelevant to the issue at hand.

basic concepts used in science. The physiologist argues that such an account can be built from *inside science itself*—in particular, from the results of physiology. But Green here argued that any physiological account of ideas is irrelevant to an account of scientific concepts like "the relations of cause and effect." This is because physiology itself relies on these concepts, and so cannot be used to criticize them.

Note that the crucial question of modern philosophy, according to Green, is not what contemporary readers might have expected. The question is not how to specify necessary and sufficient conditions for knowledge, or how to give an epistemological account strong enough to resist the skeptic. Instead, the crucial question is how to account for the existence of "ascertainable" scientific "facts." Green's chief complaint against proto-empiricists is that the latter were supposed to hold that such an account can come from inside science itself.

In the next paragraph, Green made a similar case against "empirical psychologists," and explained what Locke, Berkeley, and Hume had to do with the controversy:

> 'Empirical psychology,' however, claims to have a way of its own for explaining thought, distinct from that of the physiologist, but yet founded on observation, though it is admitted that the observation takes place under difficulties. Its method consists in a history of consciousness, as a series of events or successive states observed in the individual by himself. By tracing such a chain of *de facto* sequence it undertakes to account for the elements common to all knowledge. Its first concern, then, must be, as we have previously put it, to ascertain what consciousness is to itself at its beginning. No one with Berkeley before him, and accepting Berkeley's negative results, could answer this question in Locke's simple way by making the primitive consciousness report itself as an effect of the operation of body. To do so is to transfer a later and highly complex form of consciousness, whose growth has to be traced, into the earlier and simple form from which the growth is supposed to begin. This, upon the supposition that the process of consciousness by which conceptions are formed is a series of psychical events—a supposition on which the whole method of empirical psychology rests—is in principle the same false procedure as that which we have imagined in the case of a geologist above. But the question is whether, by any procedure not open to this condemnation, the theory could seem to do what it professes to do—explain thought or 'cognition by means of conceptions' as something which happens in sequence upon previous psychical events. … No one has pursued it with stricter promises, or made a fairer show of being faithful to them, than Hume. He will begin with simple feeling, as first experienced by the individual—unqualified by complex conceptions, physical or metaphysical, of matter or of mind—and trace the process by which it generates the 'ideas of philosophical relation.' …We believe … some suspicion may perhaps be created that a natural history of self-consciousness, and of the conception by which it makes the world its own, is impossible, since such a

> history must be of events, and self-consciousness is not reducible to a series of events; being already at its beginning formally, or potentially, or implicitly all that it becomes actually or explicitly in developed knowledge. (INT, §200, 165-166)

This passage suggests that "'empirical psychology'" has a method of accounting for scientific cognition that is similar to physiology's method. Empirical psychology also attempts a scientific account of ideas. However, the psychologist does not observe "animal physiology," but rather the sequence of his own ideas. In so doing, he hopes to arrive at "a natural history of self-consciousness." That is, psychologists assume that the causal history of ideas can provide an account of "the elements common to all knowledge."

True, this last statement seems to support the received view, on which Green saw the Lockean tradition as tied together by a particular epistemology. But this passage follows immediately on §199, which I quoted in its entirety. In context, it is clear that empirical psychology attempted the same basic task as physiology—psychology simply "claims to have a way of its own" for showing how science can supersede metaphysics. Thus, Green did not portray the Lockean tradition as *tied together* by an epistemology. Rather, this tradition is to have sought to give an account of science from inside science itself. In other words, Locke and his followers wanted to give a theory of science that was not drawn from speculative metaphysics, but rather was drawn from empirical psychology. This is the crucial point to draw from these long quotes.

In the remainder of the pivotal passage, Green argued that psychologists were mistaken not just in thinking science could supersede metaphysics. They were mistaken in their interpretation of Hume. A careful reading of the *Treatise* would therefore show two things, Green promised. First, it would show that Hume, the hero of 19th-century empirical (read: "physiological") psychologists, had in fact *given up* Locke's aspiration to base philosophy on an empirical study of the mind. Second, it would show that Hume nevertheless tried to salvage Locke's disavowal of metaphysics. He did this by substituting a strict 'phenomenalism'[124] for Locke's

[124] I use "'phenomenalism'" in its usual way, to denote the view that physical objects can be reduced to experiences.

allegedly empirically-based philosophy. But Green promised to show that Hume's 'phenomenalism' was itself a philosophical failure. I will now examine each of these claims in turn.

2.2 Goal: Show that Hume Rejected Physiology as a Basis for Metaphysics

The next part of the pivotal passage argued as follows. Hume is to have held that an account of ideas must not make philosophically basic Locke's notion of physical bodies that "impress" the mind. In Section Three, *below*, I will explain why Hume is supposed to have held this view. The notion of physical bodies that impress the mind constituted a rotten apple in the bushel of Lockean philosophy, Hume was supposed to have seen, and if the entire Lockean bushel was to be salvaged, the rotten apple had to be eliminated. So Hume held himself to a strict 'phenomenalism.'

His 'phenomenalism' entailed drawing all distinctions between types of ideas according to introspectively available criteria, not according to the supposed causes of those ideas (INT, §197, 163). For example, it was experienced force or liveliness that was to distinguish ideas and impressions. Hume's denial that external bodies were philosophically basic meant our conception of external bodies had to be phenomenologically constructed, according to Green. To put it simply, external bodies had to be constructed from ideas, and not vice versa.

Green held that this move quietly severed Humean psychology from physiology, in the following sense. Like Locke, Hume's epistemology was a 'sensationalism.'[125] But sensations, as empirical psychologists understood them, could not be building blocks of knowledge of external bodies, given the claims of my previous paragraph. Empirical psychologists (following physiologists) understood sensations to be *themselves* physical modifications of a certain type of external body, *viz*., the brain and nervous system of the human organism. Since Green's Hume held that knowledge of external bodies had to be constructed phenomenologically, he saw he

[125] I use "'sensationalism'" to denote the view that all non-trivial knowledge is in some sense derived from sensations. People who hold this view—like Locke and Hume—typically deny that there are innate ideas.

could not appeal to the physiologist's notion of sensation at the start, as Locke had (INT, §198, 163).

Green regarded the quiet severance of Humean psychology from physiology as a scandal, for two reasons.

> He [Hume] thus logically cuts off his psychology from the support which, according to popular conceptions, its primary truths derive from physiology. (§198)

First, Hume's philosophy was supposed to derive its plausibility and good reputation not just from its use of any old psychology, but from its use of physiological psychology. In forming an alliance between philosophy and physiological psychology, Hume was supposed to have followed Locke, according to the popular imagination. For it was *Locke* who originally tried to explain the nature of consciousness from the point of view of the "natural philosopher" (§198, 163). Thus, "Locke and his followers" had only managed to "win popular acceptance" by "assimilat[ing] their own procedure to that of the natural philosophers …" (§198, 164).

So the first scandal was that Locke, Hume, and their followers won popular acclaim precisely by allying themselves with the science of physiology, which had a much longer and more distinguished history than the young field of empirical psychology. But in practice, Hume quietly betrayed this alliance. The popular appeal of Locke and Hume's philosophy (and of proto-empiricist anti-metaphysics in general) would be undercut if Green could show that Hume did not, in fact, base his philosophy on empirical science.

Second, the revelation that Hume rejected physiology as a basis for philosophy was supposed to be scandalous not just to the *popular* reputation of Lockean thought, but to its reputation among English philosophers as well. Green's professional colleagues purported to have learned from Locke and Hume to quit trying to give an account of scientific knowledge from a metaphysical point of view. Green's contemporaries allegedly thought Locke and Hume's lesson had been that scientific knowledge can be understood from inside science itself.

Most English philosophers sought to use one of two sciences to give an account of scientific thought—physiology or "'empirical psychology'" (tellingly, Green liked to use scare quotes around that latter phrase). Philosophers failed to understand

Hume's skepticism about the uses of science in philosophy, and they failed to understand the underlying reasons that drove Hume to that skepticism.

In the pivotal passage, Hume was portrayed as having seen a crucial reason why physiological science could not be used to account for scientific thought. Green wrote:

> … However certain may be the correlation between the brain and thought, in the sense that the individual would be incapable of the processes of thought unless he had brain and nerves of a particular sort, yet it is equally certain that every theory of the correlation must presuppose a knowledge of the processes, and leave that knowledge exactly where it was before; [and] … thus their science [viz., physiology], valuable like every other science within its own department, takes for granted just what metaphysic, as a theory of knowledge, seeks to explain. When the origin, for instance, of the conception of body or of that of an organic structure is in question, it is in the strictest sense preposterous to be told that body makes the conception of body, and that unless the brain were organic to thought I should not now be thinking. (INT, §198, 164)

Again, Lockean philosophers could not account for how scientific knowledge was possible in the first place. They drew on physiology and psychology to offer scientific accounts of scientific knowledge. But this could only result in question-begging explanations. It may be true, Green granted, that brain activity is necessary for there to be any thought at all. It may also be true that physiology and empirical psychology may one day come to understand how such brain activity is correlated with thought. But in order to specify which brain processes are correlated with which types of thought, one needs to have already in place scientific knowledge both of some brain process and of some thought. The possibility of *these* bits of scientific knowledge must be assumed at the outset. Hence, philosophers who think physiological psychology can explain the nature of scientific thought are begging the question.

Hume is supposed to have seen this problem (among others) with the prospect of a scientific account of science, and thereby been driven to espouse 'phenomenalism.' Compared with more contemporary versions, Hume's psychology was supposed to have been attenuated. Unlike contemporary physiological psychology, Hume's psychology was to have relied on pure introspection. Green's contemporaries allegedly read Hume badly, and thus did not understand the skeptical upshot of the latter's work. And even if this misreading were corrected,

Hume's attenuated, purely introspective psychology could not eliminate the need for a metaphysical account of science—could not eliminate this need any more than physiological psychology could (§200, 166).

2.3 Space Perception and the Failure of Phenomenalist Anti-Metaphysics

In the last section, I showed that for Green, empirical psychologists had blithely ignored the real skeptical lesson of Hume. Hume did not base (and did not think he *could* base) his philosophy on physiological psychology. Green further argued that Hume's actual project did constitute an attempt to salvage Locke's disavowal of metaphysics.[126] Hume's real modus operandi was to substitute a strict 'phenomenalism' for Locke's philosophical reliance on the empirical study of the mind.

Green sought to show that Hume's more austere 'phenomenalism' was no more able than Locke's psychology to replace metaphysics in philosophy. Hume's philosophy collapses, Green argued, when we try to use it to account for the nature of scientific knowledge. The lesson was that empirical psychologists could not find in Hume a justification for banning metaphysics.

Space perception then emerged as an important illustration of Hume's failed attempt to save Lockean anti-metaphysics.[127] First, what were the specific shortcomings in Locke's philosophy Hume thought he had to remedy?

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[126] Van Fraassen's most recent account of empiricism is very different from mine (Van Fraassen 2002), but here I note an important overlap. For van Fraassen, empiricism is not a position, but a stance. The stance involves a general opposition to metaphysics. I agree that opposition to metaphysics has been common to many who have thought of themselves as empiricists. Certainly, in this sense Green saw Hume as an empiricist. However, where I differ from van Fraassen is that I do not think empiricism is properly understood in isolation from either a specific thesis or from the history the concept evokes. That is to say that I regard empiricism as a historical-philosophical concept. Van Fraassen seems to think that because the theses to which "empiricism" have referred have changed so much over time, one must not think of the word as denoting a concept at all. In contrast, I think we should *see* empiricism as a substantive concept, just one that has evolved.

[127] Locke, and to a greater extent Berkeley and Mill's respective accounts of space are all given serious consideration, as well, but I shall confine myself to Green's critique of Hume. *See* (GWR I.26-27, I.140-147, II.238-251).

According to Green, Hume was supposed to have seen[128] a problem concerning Locke's conception of the relationship between external bodies and sensation. Locke allegedly had reasoned in a circle, sometimes explaining simple ideas of sensation by evoking solid bodies that imprint themselves on our minds, at other times explaining solid bodies as complex ideas built from simple ideas of sensation (INT, §228, 189).[129] (These are the reasons referred to *above*, on p. 159, why Hume was supposed to have rejected any philosophically basic notion of external body.)

Those who wanted to defend Locke had to choose between these two directions of explanation—they had either to stick strictly to the view that complex ideas, including ideas of extended bodies, are always to be explained in terms of simple ideas; or they had to grant that sometimes simple ideas can only be explained with reference to complex ideas. Or so Hume's criticism of Locke goes, on Green's reading (INT, §230, 191).

Hume had made plain that both choices were untenable. Green wrote:

> … Having come to suppose that there are solid bodies, we explain our feeling as due to their solidity; but we may not at once interpret feeling as the result of solidity, and treat solidity as itself a feeling. … Hume tears off the disguise, and in effect gives him [Locke] the choice of being convicted either of reasoning in a circle or of explaining the simple idea by reference to the complex. (INT, §230, 191)

Consistent Lockeans could not accept the *Essay's* circular reasoning, whereby sensations are explained as mental effects of external bodies, and external bodies explained as products of sensation. Two choices remain. One is to give up the insistence of always explaining complex ideas in terms of simple ideas. This choice was not acceptable, for Hume. Allowing that simple ideas can be explained by reference to the complex meant accepting a form of reasoning that could be used to draw metaphysical conclusions. This left one option. The notion of solid body had to be derived from simple ideas.

At this point in the "Introduction," Green had just (at INT, §§225-226) returned to the issue he first broached in the pivotal passage—viz., to the point that

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[128] Green cited (THN, I.iv.4).

[129] Green took himself to have demonstrated this circularity in Locke, as well. Green cited his own discussion of the matter at (INT, §99 *ff.*).

one of Hume's chief goals was to defend Locke's attempt at purging philosophy of all metaphysics. Preserving this goal meant that Hume must not allow explanations of simple ideas of sensation that proceed by reference to prior, complex ideas like our idea of body. Hume had to repudiate, in other words, any metaphysical assumption about external bodies imprinting themselves on our minds.

On Green's reading, this repudiation is what drove Hume to a strict 'phenomenalism.' Our ideas of bodies, or of what Hume called "distinct and continued existences," could amount to nothing but a "propensity to feign."

> Hence Hume's attempt, reversing Locke's derivation of ideas of sense from primary qualities of body, to derive what with Locke had been primary qualities, as compound impressions of sense, from simple impressions and to reduce body itself to a name not for any 'just and consistent idea,' but for a 'propensity to feign,' the gradual product of custom and imagination. (INT, §231, 192)

This long sentence asserts the following: Hume gave up Locke's attempt to explain ideas of sensation by appeal to external bodies. Instead, Hume tried to explain what Locke had called primary qualities—features of bodies like solidity and shape[130]—in terms of simple impressions. Hume thus came to treat our ideas of external bodies that endure in the absence of anyone's experience as nothing but "propensities to feign," in Hume's phrase.[131]

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[130] For a careful treatment of Locke's primary qualities, *see* (Wilson 2002).

[131] The view Green endorses, that Hume thinks external objects are mere "fictions" that must be constructed from impressions, has been challenged by a new reading that emerged in the last twenty years or so. Kenneth Winkler dubbed this "The New Hume" (Winkler 1991). On one side of the debate are those like Winkler who defend a more traditional reading of Hume. For example, David Owen also holds (with Green and Winkler) that according to Hume, an investigation into the causes of impressions is ruled out by Hume's claim (at THN I.i.1, 7) that impressions "arise … from unknown causes." Green cites this passage as well, at (INT, §195, 161). He also cites (THN, I.iii.5, 84), where Hume wrote of any impression that its "ultimate cause is, in my opinion, perfectly inexplicable by human reason, and 'twill always be impossible to decide with certainty, whether they arise immediately from the object, or are produc'd by the creative power of the mind, or are deriv'd from the author of our being" (see Owen 1999, 71-72). Among the most notable works defending the New Hume is (Strawson 1989). A helpful volume that collects some important work in this new scholarship is (Read and Richman 2000). In conversation, Fred Schmitt defends a New Hume reading. He rejects Owen's way of reading the Hume passages just quoted—Owen's reading is similar to Green's. For Schmitt, Hume only intended to argue that we cannot know with *certainty* the causes of our impressions, at least not by purely rational means. But this is not to say that Hume thought we cannot have

Since Green was trying to show that Locke and Hume's banishment of metaphysics was not sustainable, it was crucially important to probe Hume's anti-metaphysical reduction of external bodies to perceptions. But when he explained the need to investigate Hume's reduction, Green's immediate, first step was *not* to criticize or even interpret this reduction in any detail, directly.

His first step (announced at INT, §232, 193) was to argue that because Hume purged any "just and consistent" idea of body from his philosophy, Hume's accounts of *the perception of both space and extension* could therefore not succeed. Green saw the perception of space and of extension as the Achilles heel, in other words, of Hume's 'phenomenalist' attempt to rescue Locke's anti-metaphysical philosophy.

Green had two reasons for seeing space perception as the Achilles heel of Hume's 'phenomenalism,' apparently. First, he argued that Hume had to treat ideas of spatial and temporal relations as real if he wanted to account for ideas of body and of necessary connection as "fictions." This is because such fictitious ideas had nevertheless to be composed of real compound sensations which were first experienced in space and time. If there can be no real ideas of space and time, there are no real (*read:* actual) ideas from which to derive fictions about bodies and necessity (INT, §253). And second, Green thought Hume's 'phenomenalism' had driven him to espouse a particularly austere account of the perception of space, whereby spatial ideas must themselves be derived "solely from the senses of sight and feeling" (INT, §233). Green thought such a derivation, necessitated by Hume's radical attempt to save Locke's anti-metaphysics, was impossible. In the next section, I will examine Green's arguments that purport to establish the impossibility of a coherent, Humean account of spatial perception.

Here is a summary of what I take myself to have established in Sections 2.1-2.3. First, I argued that Green's first "Introduction," which focused on Book I of the

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justified beliefs about the sources of our impressions. Similarly, Norton argues that Hume meant only to claim that an explanation of the origins of impressions is a task to be left to others, such as anatomists and natural philosophers (Norton 1993, 6-7). He cites a passage at (THN, II.i.1, 275-276). For more on this topic, *also see below,* fn. 148, though I cannot do justice to this rich and heated issue in contemporary Hume scholarship.

Treatise, is where Green offered his most sustained criticism of Hume. I argued that the pivotal passage for understanding Green's chief aim in that first "Introduction" did not come at §§1-5, as most commentators assume, but at §§195-202, where Green began his discussion of Hume. Next, I showed that in this pivotal passage, Green argued that a proper reading of Hume revealed that the latter had *not* claimed (and could not consistently claim) to eliminate metaphysics in favor of physiological psychology, as his followers believed. Green hoped this revelation would undercut both the popular and professional appeal of Hume's thought. I also argued that Hume's strategy for salvaging Lockean anti-metaphysics (that is, to salvage a philosophy that helps explain scientific knowledge without relying on metaphysics) was to develop a radical 'phenomenalism,' on Green's reading. Space perception emerged as a test case for that 'phenomenalism' because ideas of extension had to be the foundations from which our complex, "feigned" ideas of body were to be built.

I will now analyze Green's argument against Hume's account of the perception of spatial relations. He sought to show that by Hume's own anti-metaphysical strictures, ideas of space had to be as unreal as our ideas of body.

3. Space is Fantasy: Green's Attack on Humean Space Perception

3.1 Locke, Berkeley, and Hume's 'Psychological Atomism'

To understand Hume's account of space perception (and Green's criticism of it), we need to begin with an account of proto-empiricist perceptual psychology.

Hume classed perceptions using three sets of distinctions. First, all perceptions are either lively *impressions*, or fainter *ideas*. Ideas are always exact copies of impressions (THN, I.i.1, 1-2). For Hume, "perception" was a term of art that covered both impressions and ideas.

Second, all perceptions must be either *simple* or *complex*. Simple perceptions "admit of no distinction nor separation," whereas complex perceptions may be analyzed into constituent parts (THN, I.i.1, 2). Third, Hume divided impressions

into those derived from *sensation*, and those from *reflection*. Impressions of sensation appear in the mind from "from unknown causes," while impressions of reflection arise when the mind considers its own ideas (THN, I.i.2, 7-8).[132]

The simple/complex distinction is worth looking at more closely. Commitment to this distinction is sometimes called "psychological atomism," as by Michael Ayers in connection with Locke (Ayers 1991/1993, 18).[133] More precisely, a 'psychological atomist' holds that *all perceptions are either simple or complex, and that all complex perceptions can be analyzed into the simple impressions of which they are composed.* Hume and (mutatis mutandis) Locke were both 'psychological atomists' in this sense, as Ayers and Don Garrett both note.[134] Berkeley was an atomist in roughly this sense, as well.

However, there are important differences between the nature of Lockean psychological atoms, on the one hand, and Berkeleyan and Humean atoms, on the other. Green's argument—the one under consideration presently—targets Berkeley and Hume's shared brand of 'atomism.' So I will now distinguish Berkeley and Hume's view from Locke's.

Garrett convincingly argues that Hume drew the distinction between simple and complex ideas differently from Locke. When Locke introduced his notion of a simple idea, his chief examples included ideas of primary qualities, such as the coldness and hardness of a piece of ice, the fragrance and color of a lily, the taste of sugar, and so on. Each such simple idea counts as such because it has a uniform appearance, and cannot be analyzed into any constituent ideas (ECHU, II.ii.1). The Lockean simple ideas that compose a perception of, say, an apple might include properties like red, existence, spatial extension, unity, and so on.

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[132] Green's first account of Humean perceptual psychology can be found at (INT, §§195-196). *See above*, fn. 131, for a discussion of what to make of Hume's claim that impressions come "from unknown causes."

[133] Ayers sometimes uses the phrase "compositionalism" as a synonym, as at (Ayers 1991/1993, 41). Don Garrett uses the related phrase "simple/complex distinction," for example at (Garrett 1997, 21-22). I take both these phrases to refer to the view I mention in the text.

[134] For more on Locke's conception of ideas, *see* (Ayers 1991/1993, 13-69, especially 36-43). On the relationship between Hume and Locke's respective 'atomisms,' *see* (Traiger 1997).

In contrast, were Hume citing the simple impressions that compose a visual perception of a red apple, he would *only* have cited a collection of red, extensionless, colored points. These colored points are sometimes called "minima sensibilia." Garrett cites good evidence in support of this reading of Hume from *Treatise* I.ii and I.iv.4 (Garrett 1997, 60-62), along with evidence about how the view fits with other aspects of Hume's broader project.[135]

Garrett's reading of Hume, on which ideas deriving from impressions of sight and touch are composed *always* and *only* of minima sensibilia, is today unusual, but it is not new. Green also emphasized that Humean impressions of sight and touch—those out of which perceptions of spatial extension are to be built—are always collections of *minima sensibilia* in just Garrett's sense (*see*, *e.g.*, INT, 201).

I should note briefly that Hume's conception of simple ideas is similar to Berkeley's. Berkeleyan psychological atoms were also minima sensibilia. There is some debate among scholars over whether Berkeleyan sensibilia are extensionless, like Humean sensibilia, or whether they are extended. Raynor argues that Berkeley's minima sensibilia are extensionless (Raynor 1980), though Bracken, for example, takes the position that they are extended, albeit very small (Bracken 1984, 95). However, I will be focusing on Green's attack on Hume, not Berkeley, so nothing I have to say will turn on this disagreement.

[135] Another bit of evidence Garrett might have cited is that Hume explicitly distanced himself from Locke's use of the word "idea." Hume called Locke's usage "too broad" (*see*, THN, I.i.1, 2; *index*, 699).

3.2 Space Perception and the Copy Principle

Here is Hume's account of space perception.[136] We have seen that for Hume, visual and tactile perceptions are composed of perceptual atoms, or "minima sensibilia." Hume claimed that when we have a perception of space or extension,[137] we are perceiving nothing but a collection of minima sensibilia. The shape of an extended object and the relations between points in a spatial area are given by the *manner* in which such visual and tactile sensibilia are organized with respect to one another (INT, 194; THN, I.ii.3, 33-39, I.iv.5, 235;Garrett 1997, 53). Hume often repeated this account, consistently maintaining that impressions of spatial extension are not just bare collections of colored points, but colored points "disposed" or organized "in a certain order" (e.*g.*, THN, I.ii.5, 62, and II.iii.7, 429).

How does the mind form ideas of such organization, though? At (INT, §234, 194-195) Green noted that for Hume, "the idea of space, like every other idea, must be a 'copy of an impression,'" citing (Hume 1748/2000, I.ii.3).[138] But if our ideas of

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[136] There is also a disagreement about Berkeley's view of space perception. The debate is whether Berkeley believed we intuit a spatially-organized, *two*-dimensional visual field that must be transformed by the mind into a three-dimensional field, or whether even the two-dimensional visual field must be actively constructed. (Falkenstein 1994) offers a penetrating treatment, adjudicating this debate between historians of psychology and historians of philosophy. This distinction helps clarify Green's reading. When one searches the "Introduction," one does not find Green distinguishing between the view that only the third dimension of visual space must be constructed by the mind, and the more strict view that both the second and third need to be constructed. Green seems to have assumed that both Berkeley and Hume sought to show how both the second and third dimensions of visual space could be constructed from minima sensibilia. Falkenstein calls the view that even two-dimensional space must be constructed "strict constructionism." Later advocates of strict constructionism included Steinbuch, Bain, Lotze, and Wundt (Falkenstein 1994, 65). Bain was the first financier of *Mind*, and Wundt was an early contributor. Both were leading exponents of empirical psychology, in Green's generation. So if Falkenstein's reading of these latter two is correct, it may be that Green read his contemporaries' views about spatial construction back onto Berkeley. Or of course, it may just be that the distinction simply did not occur to Green. *Also see* the discussion of Steinbuch at (Hatfield 1991, 131-143).

[137] Garrett claims that for Hume, when we perceive any collection of minima sensibilia, we perceive a spatial area. But we only perceive extension in cases where the perceived sensibilia are contiguous (Garrett 1997, 247n.245). He does not cite textual evidence.

[138] Green had an irksome habit of putting quotation marks around phrases that were not quotations of Hume, but paraphrases. Here, Green's quotation marks suggest that Hume wrote that every idea must be a "copy of an impression." But at the cited location, Hume's actual words were: "every idea is derived from some impression." In this case, no grave

extension are copied from the *manner* in which visual impressions are disposed, then these ideas are not copied from any impression, or even collection of impressions. Rather, they are copied from *relations between* impressions. After all, *the manner* in which impressions are arranged is not itself an impression.

To understand the full force of Green's argument, we need to consider a cornerstone principle of Hume's philosophy. It is conventionally called the "copy principle," and Hume articulated it in several different passages:

> … all our simple ideas in their first appearance are deriv'd from simple impressions, which are correspondent to them, and which they exactly represent. (THN, I.i.1, 4)
> … every idea, with which the imagination is furnish'd, first makes its appearance in a correspondent impression. (THN, I.ii.3, 33)
> … all our ideas or more feeble perceptions are copies of our impressions or more lively ones. (Hume 1748/2000, Section 2, p. 14)

The copy principle says that all ideas are exact copies of either one simple impression, or of collections of simple impressions. There can be no idea that was not originally either a simple impression, or a collection of simple impressions (Green presented the copy principle at the very start of his discussion of Hume; *see* INT, §195, 162).

I should pause to note that at this point in Green's "Introduction," there are interesting marginalia in James's personal copy of the book. On page 162, next to Green's initial presentation of the copy principle, there is a cross-reference in the margin to page 167. On page 167, where Green offered a short criticism of that principle,[139] James wrote "162," followed by a short response on Hume's behalf.

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harm is done—"copy" is a reasonable paraphrase of "derive," in context. However, readers need to be careful not to assume that Green's quotes of Hume are always accurate. Green's practice of using quotation marks when actually paraphrasing was not rare. Also, even when Green's quotes were accurate, he sometimes misrepresented the original context of the quote. For example, on p. 195 (half a page later), Green reproduced a lengthy quote from Hume on the perception of extension, subsequently treating the passage as Hume's articulate view on the subject. But the passage comes from I.iv.5 of the *Treatise*, which is devoted to the immateriality of the soul, not to the perception of space or extension. Though Hume presumably would stand by the account of the perception of extension given in this section, it is a peculiar choice from which to take Hume's official view on spatial perception, especially since Hume devoted much of Book I, Part ii to the topic.

[139] Among the most important of Green's arguments against the copy principle is that Hume's account of space perception requires a violation of that principle. Note that Green

Green's criticism was that the copy principle was supposed to provide a *test* for telling when an idea has reality. The test is that ideas have reality[140] just in case one can point to an impression from which the idea is derived. In Green's words, the copy principle was supposed to test whether "a phrase, purporting to express an 'abstract conception,' expresses any actual idea or not …" (§201, 167). Green objected that if ideas were nothing but impressions grown fainter, then "the force of the test would be gone." This is because a person who is pressed to find an impression corresponding to a dubious idea could simply say that he or she had never experienced the idea in question in a more lively manner—and that should suffice to make the idea count as an impression, by the lights of the copy principle.

James was reading closely. He wrote the following response in the margin of his copy:

> Its being an idea need not be supposed to depend on itself having once been more lively, but on accompanying impressions being more lively. An imagined apple on the near table before me is [*doubtful:* reduced] by the table as well as by previous [*doubtful:* real] apples.

The two doubtful words make it hard to be certain of James's response. But his idea seems to have been something like this. We can determine that a perception is an idea rather than an impression by comparing the liveliness of different, *co-occurring* perceptions. For example, if I stand before a real table and imagine that there is an apple on it, my perception of the apple will seem fainter than my perception of the table. This is a good way to identify the perception of the table as an impression and the perception of the apple as an idea. I need not rely on my judgment that a particular perception was once livelier in order to identify that perception as an idea.

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has other arguments against this principle, as well. I am focusing only on the argument from space perception.

[140] When Green wrote about ideas *having reality*, he meant what Descartes (drawing on medieval philosophy) called "objective reality," not "formal reality." Recall that an intentional object, like an idea or a painting, has objective reality in virtue of what it represents. An idea of a unicorn has less *objective* reality than an idea of my puppy Cookiepuss, since Cookiepuss actually exists. In contrast, all objects have formal reality in virtue of their own level of perfection. An idea of a unicorn and an idea of Cookiepuss both have the same *formal* reality, because both are ideas. When I attribute to Green talk about reality of ideas, I always mean *objective* reality.

Thus, a perception may count as an idea even though the subject has no memory of the perception in a more lively state, and Green's objection fails.[141]

In any case, this is one of Green's passing criticisms of the copy principle. Let us turn to a deeper account of Green's reading and criticism of this principle.

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It is crucial to note that Green saw the copy principle as a Humean twist on Locke's (as I have called it) reality principle. An attack on the copy principle was not just an attack on Hume, but an instance of a broader attack on the entire proto-empiricist tradition.

Green relied on a particular *Treatise* excerpt that articulated the copy principle with a distinct slant, as we will see again in Section 3.3, *below*. The excerpt made more obvious the close connection between the copy principle and Locke's reality principle than do the now-standard passages I quoted two pages back. The passage on which Green relied read this way: "It must be some one impression, that gives rise to every real idea" (THN, I.iv.6, 251; INT, §§ 205, 209).

Notice that in this passage, Hume did not claim that *every* idea is derived from an impression—only that every "*real*" idea is thus derived. I argued in Chapter One, *above*, that Green saw the reality principle as the core commitment of the Lockean tradition, a tradition Hume supposedly wanted to carry forward.[142] This passage suggested to Green that for Hume, as for Locke and Berkeley, reality was still to be associated with what the mind receives passively in sensation, and illusion to be associated with the mind's manipulation of sensations. In short, Green saw the copy principle as the reality principle redecorated with Humean mental furniture, impressions and ideas.

Hume himself regarded the copy principle as vitally important, of course. Early in the *Treatise*, Hume wrote that the copy principle is "the first principle I establish

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[141] James's copy of Green's "Introduction" (his copy was not from Green's 1894 *Collected Works*, but from the 1874, Green and Grose edition of Hume's *Treatise*) can be found at (WJP, WJ 540.54.2)—cited by permission of the Houghton Library, Harvard University.
[142] Again, the core Lockean *commitment* was the reality principle. The core *goal* Hume supposedly tried to salvage, as we saw *above* in Section Two, this chapter, was to account for scientific knowledge without resorting to metaphysics.

in the science of human nature …" (Hume 1748/2000, I.i.1, 7). He used the principle to establish as unreal important metaphysical ideas, like those of substance, vacuum, and necessary connections in nature.[143] Thus, the charge of a serious violation of the copy principle strikes at the heart of Hume's philosophical project. If he does not consistently apply the copy principle, this undermines his justification for using this principle to eliminate metaphysical concepts.

We can now state more precisely Green's main argument against Humean spatial perception. Every idea must be copied from some simple impression, or collection of simple impressions, according to the copy principle. We clearly do have ideas of spatial relations. But ideas of spatial relations cannot be copied from any simple impression. An idea of spatial relation cannot even be copied from a complex impression, which is just a bundle of simple impressions. Ideas of spatial relations must be copies of (or compounds formed from copies of) the *organization* of collections of simple impressions. But this means that *not* all our ideas come from simple impressions alone, as the copy principle requires.[144] Green summarized his complaint this way: Hume "…implies that space is a relation, and a relation which is not a possible impression."[145] If there is no possible impression from which our ideas of space could have been copied, then either the copy principle has been seriously breached, or our ideas of space are nothing but "propensities to feign," as Hume calls our ideas of bodies that exist independently of our perceptions.

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[143] For a helpful discussion, *see* (Garrett 1997, Chapter 2).

[144] An extremely useful essay on problems with Hume's views on space is (Falkenstein 1997). *See* especially 179-181, which gives an exhaustive summary of prior scholarship on the matter. A helpful piece that puts Hume's theory of space into historical context is (Frasca-Spada 1990).

[145] Green gives a running, paragraph-by-paragraph summary of his own arguments in the "Introduction." As was common in publications during this period, the summary appears in the margins throughout the work (thus, these were called "marginal analyses"), and is collected in the analytical table of contents. The quoted sentence to which this footnote is appended appears in the margins at (INT, §250, 207-208). The editor of Green's *Collected Works* notes that the marginal analysis of the "Introduction" was written by Green himself though marginal analyses in the rest of the *Collected Works* were added by editors; *see* GWR, vi).

Green argued that if Hume was to be consistent, he had to accept that spatial relations, like ideas of independent bodies, amount to nothing but mental fictions. Hume must hold that spatial properties like *being to the left* or *right* of are merely relations the mind *imposes* on minima sensibilia.

I will now present a further illustration of Green's charge, so that we can fairly contemplate some potential responses.

Consider the collection of white and black minima sensibilia out of which the visual perception of a black globe and white cube would have to be built.[146] These sensibilia could be arranged in an infinite number of ways—now as a black globe and white cube, now as a black cube and a white globe, now as a black and white portrait of Hume's favorite uncle.[147] So our perception of the globe and cube must be determined by more than just bare collections of minima sensibilia—it must be determined by information about the *organization* of those perceptual simples, as well. Green is asking where this information comes from. Hume wanted to say that a complex impression of a globe may be constituted by one set of simple impressions that, as a group, conveys *both* color and spatial information. The question is whether he can consistently allow this—whether his account is consistent with the view that we get perceptual information not just from the *matter* of impressions, as it were, but from their form as well.[148]

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[146] Hume considers the perception of a black and white globe, at (THN, I.i.7, 25). He does not offer an exhaustive list, though, of simple impressions out of which such complex ideas must be built.

[147] In their discussion of James, (Madden and Madden 1978) set up the problem of spatial relations in a similar way. However, they see the problem of relations as a problem internal to empirical psychology. I hold that the chief reason the perception of relations preoccupied James was that this problem is the cornerstone of attacks from Idealists like Green. These attacks are supposed to show not just that empiricism is untenable, but that the entire project of using empirical psychology for philosophical purposes is incoherent. See Chapter One, Section Four, *above*.

[148] In correspondence, Garrett suggests that impressions are spatially organized from the start, and they get their organization from the spatial relations of the external objects (or "continued and distinct existences," in Hume's language) that cause our perceptions (Garrett 2005). Garrett also makes this suggestion in print (Frasca-Spada and Garrett 2001, 463). Green, at least, would reject this as an accurate account of Hume's view. For Green, Hume's

Here is one possible solution. Perhaps the organizational information somehow is contained in each minima sensibilium.

Hume explicitly rejected this possibility. He wrote that we can divide philosophical relations[149] in terms of those that are fully parasitic on the character of the ideas related, and those that are not. Spatial relations like distance and contiguity fall into the second category, because one can shift the spatial relations two sensibilia bear to one another without thereby altering the sensibilia themselves, or the ideas that copy them (THN, I.iii.1, 69). For example, consider two minima sensibilia in the visual field. These will be just extensionless colored points. Suppose one point is red, and lies to the right of the other point, which is green. Changing the position of the two sensibilia with respect to one another does nothing to the character of each moved sensibilia. That the red sensibilia now has the property of lying-to-the-*left*-of-the-green-sensibilia does not change the intrinsic character of the red sensibilia. Thus, minima sensibilia do not contain information about their own spatial position, Hume held. It follows that the organizational component of complex ideas of extension cannot be intrinsic to any simple impressions from which they are copied. The copy principle is still in jeopardy.

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chief philosophical advance over Locke is to have rejected the appeal to external objects to explain anything about the character of ideas, as we have seen; rather, Hume appeals to ideas to explain the *appearance* of external objects (INT, §232, 192-193). So, Green would deny that Hume could cite external objects as the ultimate suppliers of spatial information in our complex ideas of extension. This is not to say that Garrett has no reply—he reads Hume's discussion of distinct existences not as a *repudiation* of bodies that exist independently of our minds, but as an explanation of why we believe (and why Hume himself believes) in independent external bodies, despite that such judgment "involves our making conflations," in Garrett's words. Green would have insisted that in any case, continued and distinct existences must be constructed from experience; they cannot be turned around to explain the character of experience. This disagreement about whether Hume believed in the existence of external bodies again raises the specter of the New Hume (*see above*, fn. 131). I cannot adequately delve into this interpretive debate here. Even if Hume believed in external bodies, the question I am dealing with here is not how those bodies could imprint themselves on our minds. The question is how the ordered sets of impressions, *whatever* their origins, could be copied into ideas, on Hume's view. It seems to me this is as difficult a question for the New Hume as for the Old Hume.

[149] *See* my next paragraph for more on Hume's distinction between *natural* and *philosophical* relations.

Let us consider another potential solution. Perhaps Hume could draw on his own, general account of either "natural" or "philosophical" relations between ideas (THN, I.i.5, 13-15) to respond to Green—a solution considered at (INT, §206, 170-171). Hume tells us that two ideas are *naturally* related just in case the appearance of one idea "naturally introduces" the other—i.e., just in case the appearance of one idea sparks the appearance of another, and this *sparking* is governed by any of the three principles of association that Hume proposes (at THN, I.i.5, 10-13). *Philosophical* relations between ideas involve the subject's bringing two ideas together in thought in an arbitrary rather than a law-like manner.

Certain types of relations, such as spatial relations, can cut across the two categories. Some spatial relations are natural, for example when we perceive two objects that stand in close proximity. But other spatial relations are philosophical, as when we contemplate the spatial relation between very distant objects.

Now, does Hume's account of spatial relations as either natural or philosophical help him explain space perception? Green's answer was a resounding no, and for reasons that went to the heart of his complaint with Hume. Green claimed that for Hume, even a natural relation must, if Hume was to remain consistent, amount to nothing but what the latter philosopher calls, in another context, a "propensity to feign" (THN, I.iv.2, 209). Green again fixed on Hume's insistence that "it must be some one impression that gives rise to every real idea" (INT, 174; THN, I.iv.6, 251), demanding to know from what impression a real idea of a spatial relation (or of any other relation, natural or philosophical) could possibly be copied. For spatial relations, as for ideas of causal relations, relations in time, relations between subject and object, and many others, Green insisted no cluster of impressions can be cited.

Hume failed to recognize that *no* relation can be traced back to an impression, according to Green. Hume tried to admit certain relations—natural relations—as legitimately derived from impressions. He then sought to use those *real* relations (especially resemblance and contiguity) to account for all the other "propensities to feign," starting with personal identity and causation (INT, §210, 174-175). Green's objection was that even natural relations cannot derive from any impressions. For

example, he attacked Hume's claim that resemblance is a natural relation that could be derived from impressions. Green argued that two impressions may resemble one another, but that is not the same as saying that one can have *an idea* of the resemblance between two impressions. In other words, an idea of resemblance is not the same as a resemblance between ideas. Hume needed the former, but his copy principle could only countenance the latter (INT, §212-213, 175-177).

In short, Hume must treat *all* relations, natural and philosophical, as unreal—including causal relations, relations of identity, contiguity, cause and effect, and even time and spatial relations—if he is not to violate the copy principle.

3.3 Space Perception and the Separability Principle

Garrett responds to such criticism (without discussing Green). The copy principle only seems in trouble, Garrett suggests, given the assumption that complex ideas of space must be derived from *separate* spatial impressions. If we assume that our complex impression of a black globe must include a collection of minima sensibilia that conveys color information, plus a *separate* set that conveys information about shape, then Hume may have a problem. But this is not an assumption Hume need accept.

On Garrett's reading, impressions of a black globe's color just *are* impressions of the black globe's shape. This is because for Hume, one compound perception may exhibit more than one quality. Thus, compound perceptions (that is, perceptions composed of or copied from two or more minima sensibilia) derived from visual impressions are at once impressions of *both* color *and* shape. There are no separate impressions devoted strictly to conveying shape or other spatial information. Since there is no need to cite a separate impression that only portrays shape, Garrett argues, there really is no threat to the copy principle.

Garrett seems to recognize that this solution leads to new problems for Hume. Chiefly, the solution stands in tension with perhaps the second most important principle in Hume's philosophy. This is sometimes called the "separability principle," and Hume defined it this way:

> We have observ'd, that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination. (THN, I.i.7, 18)

The separability principle asserts that all objects (including perceptions) that are different can be separated, and that all objects that can be separated are different.

Now here is the trouble. Garrett rightly claims that when we have a perception of a white globe, an idea of the globe's color *just is* an idea of the globe's shape, on Hume's view. There are not two separate ideas, one of color, the other of shape. But by the separability principle, the fact that we can distinguish color and shape (and we can—we just did!)[150] should suffice to establish that color and shape are two different ideas. But if the globe's color and shape are two different ideas, then we are back to Green's worry—there are no separate impressions for our ideas of shape to copy. Again, it seems Hume either has to admit that spatial extension constitutes a major exception to the copy principle, or he has to give up the copy principle all together.

Some may suspect that I am misrepresenting the separability principle by applying it to ideas. The separability principle states that *objects* that are different are distinguishable, and vice versa. Did Hume really mean to include ideas under "objects"? There is good evidence that he did. At the end of this section, Hume referred back to "…the principle above explain'd, *that all ideas, which are different, are separable*" (THN, I.i.7, 24, his italics). Although this passage only restates the first conjunct of the principle, the use of "idea" here suggests that by "object" Hume meant to include objects of the mind, or in other words, perceptions.

In any case, Garrett's reading may well capture Hume's own intentions, for Hume himself tried to address the complaint of a violation of the separability principle. The complaint is worth investigating further.

Hume's acknowledgement that the distinction between shape and color appears to violate the separability principle came at the end of (THN, I.i.7). He claimed that figure and color may be distinguishable in some intuitive sense, but they are *not* distinguishable in the sense required by the separability principle. Instead, Hume

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[150] I borrow this quip from Garrett himself (Garrett 1997, 59).

wrote, figure and color are two different *aspects* of one and the same idea. It is only by drawing what he called a "distinction of reason" that we come to notice these different aspects of our idea of, say, a white cube.

There is an extended passage (at THN,I.i.7, 25) in which Hume developed his solution. I will break the passage down into four manageable chunks, in order to present my reading. Hume began this way:

> 'Tis certain that the mind wou'd never have dream'd of distinguishing a figure from the body figur'd, as being in reality neither distinguishable, nor different, nor separable; did it not observe, that even in this simplicity there might be contain'd many different resemblances and relations.

By "figure" and "body figur'd," Hume apparently meant something like the form and matter of a perception, as will become clear immediately below. Here, he wrote that the shape and color of a visual perception are not *really* different or distinguishable. It would never have occurred to anyone to separate the shape and color of one visual perception unless that person first noticed that one perception may resemble different objects in different respects.

The passage continued this way:

> Thus when a globe of white marble is presented, we receive only the impression of a white colour dispos'd in a certain form, nor are we able to separate and distinguish the colour from the form. But observing afterwards a globe of black marble and a cube of white, and comparing them with our former object, we find two separate resemblances, in what formerly seem'd, and really is, perfectly inseparable.

Consider my perception of a *white globe*. Hume claimed that if I have no other store of perceptions from which to draw, I will be unable to distinguish the shape of the globe from its color. I will have one, inseparable impression composed of a set of white minima sensibilia arranged in my visual field in the shape of a globe. Suppose I later have an experience of a *black* globe and of a *white* cube. I notice that the ideas I form from these two new perceptions afford comparisons with two different *aspects* of my one original perception—viz., the white cube resembles the original white globe in color, but not shape, and the black globe resembles the original white globe in shape, but not color.

Practice, Hume continued, then helps us use a "distinction of reason" to separate aspects of visual perceptions, such as shape and color.

> … That is, we consider the figure and colour together, since they are in effect the same and undistinguishable; but still view them in different aspects, according to the resemblances, of which they are susceptible.

Figure and color must always be "consider[ed]" together, since they are undistinguishable. But practice helps us "view them" as different aspects of one perception. Hume concluded by repeating that we can never really "consider" figure and color separately:

> … A person, who desires us to consider the figure of a globe of white marble without thinking on its colour, desires an impossibility; but his meaning is, that we shou'd consider the colour and figure together, but still keep in our eye the resemblance to the globe of black marble, or that to any other globe of whatever colour or substance. (THN, I.i.7, 25)

In short, the figure and color of any visual perception are not distinguishable in the sense required by the separability principle. Shape and color are thus not different perceptions, but two aspects of one perception. Since there is no *separate* idea of space, Hume thought he was free from the need to find any separate impression from which spatial ideas are copied. Garrett thinks Hume is out of trouble (Garrett 1997, 58-64).

Green, however, was not satisfied. Hume repeated this account of how we use distinctions of reason to isolate figure from color, which are always given as two "aspects" of one perception (THN, I.ii.3, 34). Green quoted this latter passage at (INT, §249, 207). He had three main reasons for resisting Hume's refined position.

Green's first objection seems the least convincing. Hume's attempt to save the separability principle forced him to accept something about ideas Green found odd. Consider the mind's awareness of the *shape* of a white globe. Shape in this case is not itself an independent perception, but a *quality* of a perception. But this means that perceptions have qualities that are perceptible, yet are not perceptions. If they were perceptions, remember, they would be either ideas, in which case they must have been copied from simple impressions, or they would be impressions themselves. Green asserted that "feeling" and "perception" are supposed to be synonyms in Hume's project. The mind was supposed to be furnished with *nothing but* ideas and impressions, all of which are ultimately copied from simple impressions. If Hume starts saying that some perceptions have felt qualities, and

that these qualities are yet not composed of simple impressions themselves, he compromises his own 'psychological atomism.' The mind would then *not* exclusively be populated by perceptions that all either derive from simple impressions or are themselves simple impressions (INT, §238, 197-198).

However, Green's charge is not very strong, in my view. Green often asserted that Hume was committed to the view that all we are aware of are perceptions. But Green never provided textual evidence for this reading, that I can find. Indeed, I do not believe any such evidence exists. I do not see how Hume contradicts himself by claiming that the objects that populate the mind are, in all cases, perceptions, but that perceptions can themselves have felt qualities which are not themselves composed ultimately of simple impressions.

Green's second reason for resisting Hume's detailed account of space perception is that the account allegedly cannot support a coherent theory of geometry. This charge is much stronger. Hume's account entails that strictly speaking, there are no independent perceptions either of figure or of spatial area. Every perception of a figure or spatial area must have some determinate color (and, less controversially, every perception of color must have some determinate properties of figure or spatial extension). But this would make geometry a "science of color,"[151] in Green's words. Because there are no independent ideas of shape that could be the subject of geometry, Green thinks Hume's account entails that geometers must be in the business of studying the nature of color as well as of shape. Green thought this result, if squarely faced, would have been unacceptable to Hume himself, because

> … Hume, though ready enough to outrage 'Metaphysics and School Divinity,' always stops reverently short of direct offence to the mathematical sciences. (INT, §249, 207)

Green thought Hume's view on spatial perception rendered geometry unrecognizable. Here, again, Hume was presented as one whose reputation depended on a close affinity with—even a willingness to defer to—the natural sciences.

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[151] In the 19th century, the science of color focused on the physical and physiological conditions of color perception. Hering and Helmholtz were leaders in this field.

This second criticism may at first have a whiff of rhetorical ploy. What difference does it makes whether geometry is thought to deal with independent ideas of figure, or (as Hume held) with *aspects* of composite ideas of both figure and color? Green expanded on the objection elsewhere in the "Introduction." He had something like the following in mind.

Hume's psychology requires that all geometric figures be constructed out of sets of minima sensibilia. On Hume's view, every line we can picture must be composed of some definite, whole number of minima sensibilia. The number of sensibilia must be whole because sensibilia are, by definition, not divisible. But in Euclidean geometry, one can prove theorems about figures with the following property: they cannot be constructed out of lines whose length can be divided into n units, where n is any whole number. It seems Hume's view requires that strictly speaking, we can have no idea of such figures.

Consider the diagonal of a unit square, for example. A unit square is a square each side of which is one unit in length. It is easy to show, using the Pythagorean Theorem, that the diagonal of a unit square is $\sqrt{2}$ units long. But $\sqrt{2}$ is irrational, and thus cannot be represented by any whole number (worse, it cannot even be represented as a fraction of whole numbers). Humean psychology entails that we can have no idea of the length of the diagonal of a unit square, because that length would have to be composed of some irrational number of minima sensibilia.[152] This is a serious problem.

Hume did take up some objections that dealt with geometry. In one notorious passage, he considered definitions of Euclidean notions like equality and straightness. He argued that to the extent geometers' definitions clash with actual human notions, we must reject the geometers' definitions. In the case of equality and straightness, the chief tension is that our everyday notions of equality and straightness are always approximate, whereas geometers purport to give exact definitions. In everyday life, we learn such concepts by *correcting* ourselves over

[152] Garrett presents a similar example, acknowledging that Hume's view "provides at best a problematic basis for geometry," (Garrett 1997, 74-75).

time, Hume wrote. For example, we may judge two lines to be equal in length, but find upon closer inspection that we are mistaken. By correcting our original judgment, we become more refined at our ability to deploy the notion of equality (THN, I.ii.4, 47-48).

Hume made a similar point about straightness, offering a concrete example where our everyday notion of straightness ought to be preferred over our exact, mathematical notion. In Euclidean geometry, two non-parallel straight lines in the same plane will (by the Euclidean definition of "straight line") intersect at exactly one point. But Hume argued that mathematicians only "pretend" to "give an exact definition of a right [straight] line" (THN, I.ii.4, 50). In reality, our notion of straightness is approximate, like our notion of equality. Hume asked us to consider two lines that "approach at the rate of an inch in twenty leagues." He thinks in everyday life, we would (and should) judge such lines as sharing *more* than one point as they converge (THN, I.ii.4, 51). *See* Figure 5, *below*.

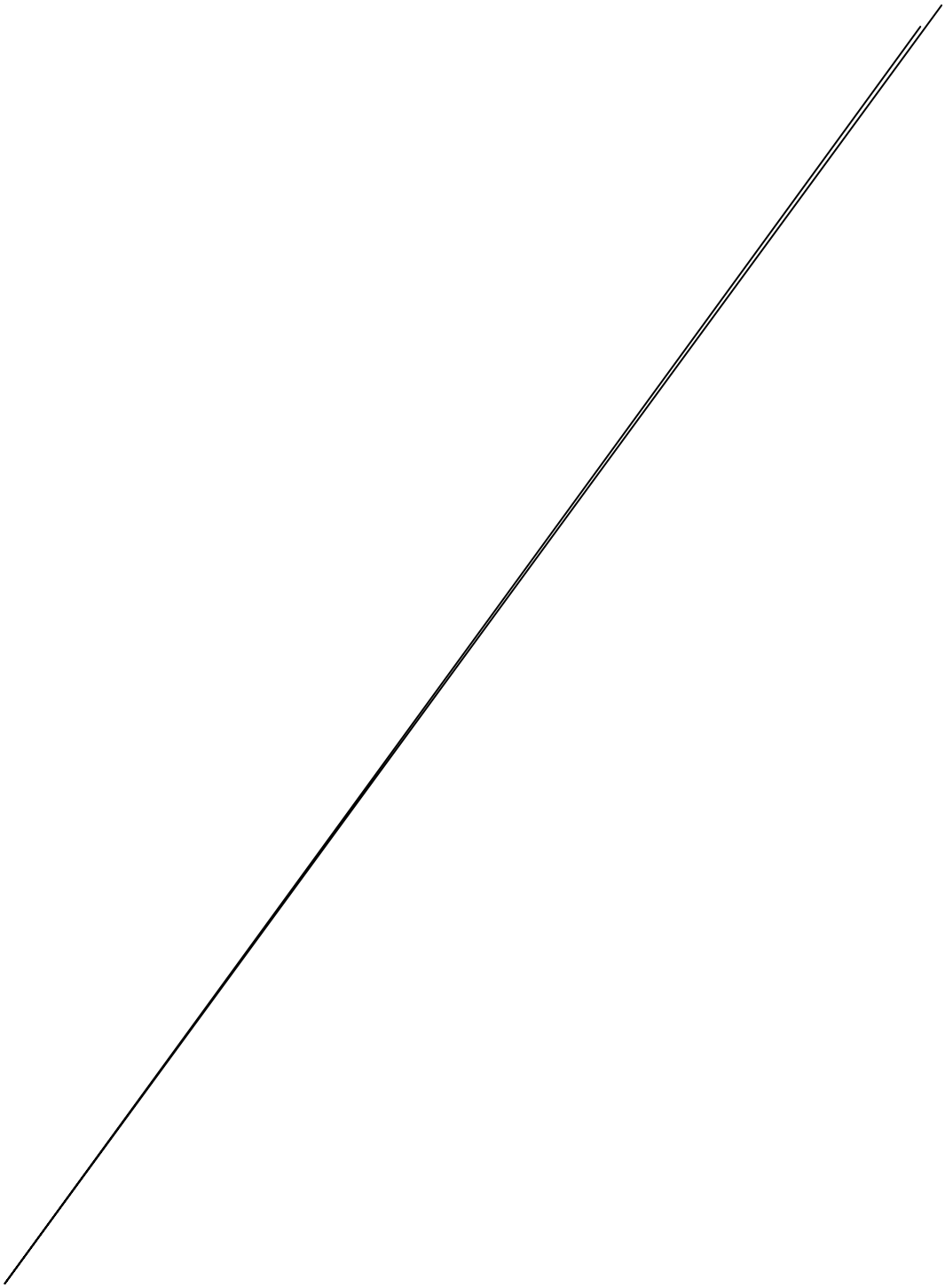

Figure 5: Look closely! Two lines approach very gradually, and appear to overlap for an extended length (towards the bottom left corner of the figure). Such lines satisfy our everyday, *approximate* notion of "straightness," which Hume preferred over the strict, Euclidean definition according to which straight lines can intersect at one and only one point.

Green was surely right when he replied that this "is not mathematical science as it exists" (INT, §275, 232). Hume's view entails that Euclidean geometry is almost never precisely true. Euclidean geometry purports to demonstrate facts about ideas we could never, according to Hume's psychology, entertain—ideas such as the ideally straight line or the $\sqrt{2}$-lengthed diagonal. Instead, Euclidean geometry must itself be treated as dealing with approximations of our everyday notions of figure and spatial relations.

That is quite a bullet to bite, especially for someone who purported to be a friend of science. As we have seen, Green held that the chief failure of Lockean philosophy (including Hume's revision of Locke) was that it could not make sense of the possibility of scientific knowledge. Green very reasonably regarded geometry as essential to scientific knowledge,[153] so Hume's failure to make sense of this branch of mathematics was not trivial.

Thus, Green concluded that Hume had to "adjust the exact sciences to his theory of space and time" (INT, §263, 221),[154] instead of adjusting his theory of space and time to account for scientific knowledge as it genuinely exists. The "adjustment" was that Hume's view of space required him to hold the following. Given any measured quantity that appears in a scientific theory, if the quantity cannot be reduced to whole numbers of minima sensibilia, the quantity must be regarded as a "fictitious denomination," in Hume's own words (THN, I.ii.2, 30; INT, §264, 223). Green took this result to be a flat failure to understand real science as it is actually practiced (INT, §264-266, 222-225).

Green had a third criticism that seems most damaging, for my purposes. He pointed out that Hume used the copy principle as a razor for banishing metaphysical

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[153] The mid- to late-19th century saw an explosion of astronomical discovery, some of which relied on Euclidean geometry. For example, Ulpian J. J. Leverrier and John Couch Adams had used geometry to predict the existence of Neptune, which in 1846 was confirmed by Johann Friedrich Galle using telescopic observation. So by Green's day, despite the concurrent emergence of non-Euclidean geometry in pure mathematics, Euclidean geometry still seemed an essential tool of astronomic prediction. Hume's view that Euclidean geometry only arrived at approximate truths appeared obviously wrong, to Green.

[154] This quote comes from Green's marginal analysis, not from the text.

concepts, like the concept of substance. If Hume now allowed that figure and spatial relations are separable *aspects* of some perceptions, but aspects that do not copy any separate impression, what ground remains for rejecting the notion of substance? Green thought there remained none.

Green made his case by quoting a particular passage from the *Treatise* that dismissed metaphysical concepts, such as substance and mode, as unreal. Hume had asked whether the idea of substance was

> … deriv'd from the impressions of sensation or reflexion? If it be convey'd to us by our senses, I ask, which of them; and after what manner? If it be perceiv'd by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses. …. (THN, I.i.6, 15-16; INT, §208, 173)

Hume concluded that since no one could cite an impression of color, sound, etc., that could serve as the source impression for the idea of substance to copy, the idea of substance must be unreal. The argument obviously relies on the copy principle, which banishes concepts not derived from impressions.

Green first excerpted this passage in the context of his discussion of Hume on relations. Green argued that by the same reasoning, Hume should admit that all relations, even natural relations, are also unreal. Green argued that given 'psychological atomism,' there can be no impression of *any* relation, spatial or otherwise. Here, Green also cited the Hume quotation to which I first alluded on page 170, *above*, that expressed a version of the copy principle:

> 'It must be some one impression, that gives rise to every real idea.' What, then, is the one impression from which the idea of relation is derived? 'If it be perceived by the eyes, it must be a colour; if by the ears, a sound; if by the palate, a taste; and so of the other senses.' (INT, §209, 174)

Of course, Green thought this question has no good answer—there is *no* impression from which any idea of relation can have been derived.

Thirty pages later, Green used the same strategy to focus on spatial relations. He wrote that "if words have any meaning," Hume's account of spatial relations (plus the separability principle)

> must imply that the disposition of points is at least a different idea from either colour or tangibility, however impossible it may be for us to experience it without one or other of the latter. … Is this 'disposition,' then, an impression of sensation? If so, 'through

> which of the senses is it received? If it be perceived by the eyes, it must be a colour, &c. &c [fn. to §208] …. (INT, §250, 208)

In short, if Hume was to use the copy principle to deem metaphysical concepts like *substance* to be unreal, this commits him to treating *all* relations—including and especially spatial relations—as unreal, as well.

Here is how this objection involved the separability principle. Hume wrote that if one is asked to consider an idea of the shape of a globe, then strictly speaking, one is being asked to perform an impossible task (*see above*, page 179). However, Hume admitted, we understand such a request anyway. We are being asked to consider an idea with both a color and a shape, but to keep in front of our mind's eye only the shaped *aspect* of that idea. Green's third objection was that Hume was determining *ad hoc* which apparently separable ideas counted as truly Separable, and thus could be assumed to have been copied from some independent impression. This willy nilly use of the separability principle undermined Hume's justification both for *demanding* the original impression from which metaphysical concepts like substance might have been copied, and for *ignoring* the demand for an original impression from which ideas of spatial relation might have been copied.

Those sympathetic with Hume might reply this way. Suppose one grants that it is *ad hoc* to claim that there are separable *aspects* of ideas (like figure and color) that need not have been copied from separate impressions. This would only be a problem, for Hume, if there were some consistent way to use distinctions of reason to support metaphysical ideas that, by Hume's lights, should count as real. But Green produces no such story, and the burden is on him to do so.

It is true that Green produced no such story, but he might easily have. Though a metaphysician who asks us to think about substance is, strictly speaking, asking us to perform an impossible task, we know what she means (Green might have written, parroting Hume on ideas of figure). She is asking us to consider an *aspect* of a perception. Consider the perception, for example, of a white globe. The metaphysician who wants us to entertain an idea of substance is really asking us to keep in front of our mind's eye only that aspect of the perception of the white globe that resembles a perception of a yellow pyramid and a perception of a blue cube, but

does *not* resemble a perception of injustice or of filial love. In the name of consistency, Hume should have admitted that we can use distinctions of reason to identify a real idea of substance in this way, too. There is no one impression from which that idea could have been copied, but then neither is there some one impression from which we copy our real ideas of shape.[155]

Or conversely, since Hume demands to know the color of the impression from which our idea of substance was copied (if it was copied from sight, and so on for other sensory modalities), he should also demand what color our idea of space is (for a similar argument, *see* INT, §250, 208). J. E. Cabot, the man who wrote the article on space perception to which we will see William James responding in the next chapter, may have been drawing from Green when he wrote the following:

> It is natural for us to say that we *see* the place, distance, direction, and extent of bodies—that the separateness of the letters on this page, for example, is visible …. Evidently, this is a figurative way of speaking; for it is not meant, I suppose, that Extension is an affection of the optic nerve; in other words, that it is a color. If this *is* meant, then we are entitle [*sic*] to ask, What color? Some one, I forget who, has suggested that Space is of a bluish tint …. (Cabot 1878, 225-226)

Cabot, like Green, insisted that we should be able to specify *which* sensations—which colors, if spatial impressions—we derive our notion of space from, if our ideas of space are purely sensory. I will return to Cabot below.

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[155] The only book-length account I know of that is devoted entirely to Hume on space is (Frasca-Spada 1998). She deals in her second chapter with the objection Green raises, that spatial ideas violate the copy principle. Her solution is that the copy principle is not a hard and fast rule, but a "maxim" designed to guide experimental inquiry into the nature of the mind (p. 64). Spatial ideas are not a violation of this maxim, for Frasca-Spada. Rather, the maxim successfully guides us to identify elements of experience *not* supplied by impressions. She writes that the copy principle "has made it possible to discover and to bracket the mental contents—the elementary perceptions of sight and touch—involved in the origin of the idea of space, and thus to single out the act of the mind as a residue" (p. 75). The product of the "act of the mind," apparently, is supposed to be ideas of spatial relations. Though Frasca-Spada's work is often ingenious (I particularly admire her analyses of Hume's rhetoric), this solution is unsatisfactory. Green would reply that this response cedes to Kant the point that ideas of space are forms imposed by the mind's native structure on our sensations. This is not a point Hume can grant without radically curtailing his own philosophical ambitions. For Frasca-Spada's solution requires Hume to give up the claim that all "real ideas" are copied from impressions. But that, in turn, means giving up the copy principle as a basis for showing that metaphysical concepts like substance and necessary connection are illusory.

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In this section, I take myself to have established that Green put forward persuasive arguments against Hume's account of space perception. The arguments can be summed up this way. Proto-empiricists consistently held some form of both the reality principle (in Hume's case, the copy principle), along with 'psychological atomism.' Hume's copy principle requires that all real ideas be copies of impressions. His separability principle tells us how to *find* the ideas of which we can expect to find an original impression—viz., any idea that is separable in thought can be assumed to have been copied from a separate impression. But there is no separate impression from which an idea of a spatial relation could ever have been copied. Hume tried to claim that ideas of spatial relations are not *really* separable from impressions of color, in the sense required by the separability principle. An idea of spatial relation is an *aspect* of a complex visual or tactile perception, not a Separable component. Ideas of spatial relations, therefore, cannot be expected to have been copied from any separate impression. But Green replied that this solution was unsatisfactory for several reasons. The most important problem with this solution is that Hume's introduction of "distinctions of reason"—the intellectual method for isolating aspects of complex perceptions—opens the ballpark to a host of unsavory metaphysical concepts the copy principle was originally designed to keep out, such as substance and body. So the cost of giving a coherent account of space perception, Green argued, was finally the reintroduction of metaphysics. Since one of Hume's chief concerns was to preserve Locke's ban on metaphysics, Green saw this result as tantamount to a demonstration that Hume's entire project was a failure.

Recall from Section Two that Green's main purpose in criticizing Locke and Hume was to convince contemporaries that they could not use empirical psychology as a scientific substitute for metaphysical criticism. Unbeknownst to proto-empiricists in Green's day, Hume had already shown that physiology could not be a starting point for philosophy, Green argued. And if empirical psychologists tried to follow Hume's *actual* scientific phenomenalism by keeping purely to introspective

rather than physiological psychology, that project would fail as well. The chief respect in which Hume's 'phenomenalism' was a philosophical failure was that it could not account for scientific knowledge, allegedly. In Section Three, we saw one crucial respect in which Hume's 'phenomenalism' was supposed to fail at this task. Green showed that Hume could not account for the perception of spatial properties—crucial components of many scientific theories—while using the copy principle to banish metaphysical concepts.

Green did not hold that ideas of spatial relations are the only Humean ideas that collapse into fictions. Green would go on to argue that *all* ideas must amount to fictions if one adopts any variety of proto-empiricism's reality principle. Green's attacks on proto-empiricist accounts of space perception would have been enough, in my view, to show that proto-empiricism was deeply flawed. But for good measure, he went on to attack the very conception of ideas on which proto-empiricist philosophy of mind, and in turn empirical psychology, rested. I now turn to that broad attack.

4. All is Fantasy: Green's General Attack on 'psychological atomism'

Locke's conception of ideas, according to Green, was an important source of many philosophical shortcomings in proto-empiricism. Berkeley and Hume had tried to carry forward two important characteristics of Locke's conception of ideas, but nevertheless failed to avoid trouble. First, both Berkeley and Hume retained altered forms of Locke's 'psychological atomism' (as we have seen on pp. 167 *ff.*, *above*). They also retained a commitment to their own respective versions of the reality principle.[156]

In this section, I present Green's critique of the proto-empiricist conception of ideas, especially as Locke originally articulated it. I begin by situating Green's interpretation of Lockean ideas with respect to views in contemporary Locke

[156] For evidence that Green saddled LBH with the reality principle, *see above*, Chapter One, pp. 58-61, and this chapter, *above*, pp. 172 *ff*.

scholarship. I then show Green holds, not unreasonably, that the reality principle is woven into the fabric of Locke's conception of ideas. I finish the section by considering Green's general criticism of Lockean ideas. Green contends that if proto-empiricists consistently apply the reality principle, they cannot hold that there are any real ideas at all.

Lockean simple ideas, when they refer to objects or properties outside of us, come from unprocessed sensation.[157] These ideas refer naturally to whatever generally causes us to have such an idea. Since it has been notoriously difficult to give a consistent interpretation of the nature of Lockean ideas, it may be helpful for contemporary readers to have Green's interpretation of Locke situated with respect to contemporary views.

John Yolton claimed that Thomas Reid pioneered a reading of Locke that is still popular today—that Lockean ideas are images with some robust ontological status in the mind. On this view, Lockean ideas refer to natural objects in virtue of some sort of *resembling* relation, and knowledge just amounts to perceiving this resemblance (Yolton 1984, 5). Yolton offered an alternative reading which has Locke taking sides in a debate between Arnaud and Malebranche over the nature of ideas. Arnauld's view (and Locke's, according to Yolton) is a variety of direct realism, where ideas are identical to perceptions. To have an idea-perception is not to have a proxy for an external object physically inside of one's head; it is just for the mind to cognitively take hold of that object (Yolton 1984, 61-68, 88-113).

Michael Ayers rejects Yolton's reading, after considering it sympathetically (Ayers 1991/1993, 56-59). Ayers maintains that Lockean ideas *are* images or "intentional objects" in the mind. Ideas represent whatever natural objects are their causes (Ayers 1991/1993, 38-39, 44-51, 60-66). Siding with Ayers on this issue is (Chappell 1994, 28, 32-35).

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[157] Locke posited two sources of ideas—sensation and reflection. But ideas of external objects come from ideas of sensation.

Green saw Lockean ideas much as Ayers and Chappell now do—Lockean ideas are images in the head that are supposed to be naturally suited to stand in thought for whatever real property is generally responsible for causing ideas of their type (INT, §20, 15). Ayers nicely sums up this view by saying that a Lockean idea is a "natural sign" for its own cause.

Green emphasized that for Locke, simple ideas have (objective) reality precisely because they are formed passively, by external objects imprinting themselves on our sensory apparatuses (INT, §27, 22). Simple ideas thereby acquire all their information from the external bodies that imprint our sensory apparatuses. Since the mind does not add any information to simple sensory ideas, we can take such ideas as accurate records of their own causes. Thus, simple ideas of sensation are real.

Green's view of Locke is not unfair. For example, Locke himself wrote:

> And thus our simple ideas are all real and true, because they answer and agree to those powers of things which produce them in our minds, that being all that is requisite to make them real, and not fictions at pleasure. For in simple ideas (as has been shown), the mind is wholly confined to the operation of things upon it, and can make to itself no simple idea, more than what it has received. (ECHU, II.xxx.1-2)

Since the mind cannot manufacture simple ideas of sensation, Locke thought, these ideas had to agree with (represent) their own causes.

For Locke, the mind sometimes forms complex ideas too. It does this by joining or juxtaposing simple ideas.[158] Such mental activity amounts to a kind of processing that involves *adding* information (concerning relations, for example)[159] to simple ideas. Since this information was not originally stamped on our sensory apparatuses from without, complex ideas can be tainted by information that does not correspond with any external reality. Therefore, error or fantasy may be present in complex ideas. After all, the mind is capable of constructing complex ideas by *adding*

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[158] In some cases, our sensations *do* give us complex ideas directly, with no mental processing. For example, when I look an orange, I get a complex idea of a round, orange object with a determinate size, shape, etc., for Locke.

[159] Locke wrote that relations have "no other *reality*, but what they have in the Minds of Men" (ECHU, II.xxx.4).

information to collections of simple ideas. The reality principle is thus built into Locke's basic 'psychological atomism.'

Hume did not give the same rationale for maintaining the reality principle. For Hume, all we mean by "real ideas" are ideas marked by their "force and settled order" (THN, I.iii.9). Hume did not argue that forceful perceptions (viz., impressions) must correspond to their causes, and *a fortiori* did not argue that impressions must correspond to their causes because they were formed passively. In fact, he held that sensory impressions come from "unknown causes" (THN, I.i.2, 7-8). But he nevertheless insisted that reality was to be associated with raw impressions.

Thus, Green criticized Locke and Hume's shared assumption that the distinction between fantasy and reality matches the distinction between what is received in sensation and what is produced by imagination (*see* fn. 156, *above*). Green's criticism of both Locke and Hume was that given their respective combinations of 'psychological atomism' with the reality principle, *all* ideas and impressions, simple or complex, must amount to fantasy. Thus, Green wrote:

> In short, the admission of the antithesis between the real and the work of the mind, and the admission that relation is the work of the mind, put together, involve the conclusion that nothing is real of which anything can be said. (PRL, §20, 25)

'Psychological atomism' assumes that sensory ideas and impressions are separate, independent entities. Relations between those atoms must be the work of the mind. Green argued that when combined with the reality principle, 'atomism' entails that *all* ideas are fantastical (*also see* INT, §§309-310, 261-263). In fact, one of the good consequences of Hume's logical rigor was to have "force[d] these questions"—questions about whether there can be any real ideas at all—"to the front" (INT, §114, 94).

Now how does this argument work, in detail? Green was widely associated with a catch phrase: "a consistent sensationalism must be speechless" (INT, §45, 36). The phrase reflected his most general charge against proto-empiricism: that no

simple idea could be intelligible without the mind's adding relations to it.[160] If this charge is correct, then by the reality principle, proto-empiricists must accept that *all* ideas are tainted by ingredients supplied by the mind, and all must be fantasy.[161]

The key to understanding Green's argument is, therefore, to see how he sought to establish the speechlessness of *all* atomic sensations. Green had a myriad of arguments for establishing this. The arguments were tailored variously to Locke, Berkeley, or Hume. We can catch the gist of these arguments by looking at the version Green applied to Locke.

The argument sought to establish that single ideas cannot be (objectively) real except when placed in relation to a network of other perceptions. Consider, for example, the idea of yellow in the judgment *this is yellow*. Green argued that this idea only applies to a yellow item when a subject classes that item—puts the item in relation—with the community of all yellow things we might experience (INT, §37-38, 47). But putting an object into relation with other objects is a clear case of the mind *adding* information not inherent in the simple idea of sensation, by Locke's lights. Locke really held relations to be inventions of the mind (ECHU, II.xxv.8; INT, §44, 35). So if all ideas of the color yellow are inherently relational, no idea of yellow could ever be real, by Locke's lights. The idea, by itself, is not *of* yellow until

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[160] Again Hume is a special case, because he allowed that some relations can furnish real knowledge. But Green thought Hume's conception of relations violated the copy principle, as we have seen.

[161] The phrase, "a consistent sensationalism must be speechless" became something of a gauntlet for both neo-Kantians and those like James who wanted to defend proto-empiricism. James's annotated copy of Green's *Introduction* (which can be found at WJP, WJ 540.54.2—cited by permission of the Houghton Library, Harvard University) contains a loose scrap of paper with an index written in James's hand. The index gives a sense of James's attentiveness to this neo-Kantian objection:

> not names but noises
> consistent sensationalism
> 16, 19 21
> must be speechless, 36
> 79, 93, 143, 149
> 150 relations are universal,
> feelings not, 151, 153
> 166, 176, 196
> 259

the idea is placed into relation with other ideas of yellow objects—that is, until the intellect adds relational information to the idea.[162] Green used a similar strategy here as he used in his arguments concerning space perception—the mind would need to be active in constructing meaningful ideas of predicates, just as it would need to be active in constructing spatial ideas.

Green went on to argue that *no* simple idea can be meaningful without the mind's adding relations to it. It follows that all thought is tainted by ingredients supplied by the mind, and all must be fantasy, for Locke. In effect, this means Locke cannot draw a distinction between fantasy and reality at all.[163]

So far, we have only looked at Green's argument that one cannot perceive an object to have any *property* unless we put the idea of the object into relation with other ideas. Green had several other arguments that, combined, sought to establish the sweeping claim that *all* simple ideas are unintelligible until placed into various relations. His strategy was to show that a subject must grasp a myriad of relations before various types of simple ideas can be made intelligible.

Here, briefly, are two such arguments, both purporting to show (independently) that for Locke, the sphere of reality is empty. First, for any of our ideas to constitute knowledge of the external world, they or at least one of their constituents must succeed in referring to things in the external world. But to understand an idea as referring to stuff outside us, we must employ some pre-existing, abstract idea of substance. If Green is right that a subject could not refer simple ideas to external objects without making use of abstractions like substance and property, then given a commitment to the reality principle, proto-empiricists cannot claim that simple ideas are realistic indicators of external objects (INT, §34, 27-28).

Second, Green argued that for a subject to understand a simple idea as referring to something in the external world, that subject must already grasp *causal* relations.

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[162] James attributes to Plato's "latest followers ... the neo-hegelian writers" the view that "the only reals ... appear to be *relations*, relations without terms, or whose terms are only speciously such and really consist in knots, or snarls of relations finer still *in infinitum*." He goes on to quote the *Prolegomena* and the "Introduction" to show that Green is an example of such a writer (PP, 658-659, ff.).

[163] For a neat statement of this attack, *see* (PRL, §20).

This is because the very idea of an external object can only be cashed out, according to Locke himself, in terms of that which *causes* a sensation. But causation is a relational concept, and thus, for a proto-empiricist, the epitome of a property supplied by the human mind rather than found directly in nature (on this point, also see Hylton 1990, 25). Green concluded,

> But this means no less than that he is finding there ["in any act that is to be the beginning of knowledge at all"] already the conceptions of substance and relation. Hence ... a contradiction between the primariness in knowledge of the ideas of substance and relation, and the seemingly gradual attainment of these 'abstractions' by the individual intellect. (INT, §16, 12)

Green's charge, in short, was that Locke does not tell us how the subject can jump from the bare experience of a sensation to an intelligible judgment that there is something to which the sensation corresponds. Green calls this "the fundamental confusion, on which all empirical psychology rests" (INT, §24, 19).

Again, these two arguments were supposed to establish the speechlessness of bare sensations. Sensations can only become intelligible when a subject brings abstract, formal conceptions to bear on raw sensation, on Green's view. But if this is so, then even simple ideas must be unreal, given the reality principle. In other words, Green charges that Locke must admit an absurdity, that the sphere of reality is empty.

Here is how Green's criticisms of Locke and Hume were continuous. In addition to the specific breach we have seen above, Green went on to target Hume's copy principle—the notion that all real ideas must be copies of some impression—in a similar manner to the way he targeted Locke's reality principle. Among Green's most persistent complaints against Hume was that the latter had to treat all our ideas as "fictions," and all our beliefs as mere "propensities to feign." At the start of his discussion of Hume, Green wrote:

> It was just with the distinction between the 'real and fantastic,' as Locke had left it, that he [Hume] had to deal; and, as will appear, it is finally by a 'propensity to feign,' not by a uniform order of natural phenomena, that he replaces the real which Locke, according to his first mind, had found in archetypal things and their operations on us. (INT, §203, 169)

Locke had called external bodies "archetypes," and the simple ideas that copied them "ectypes" (*see* ECHU, II.xxxi.13, 383; ECHU, II.xxx.1, 372; INT §§23, 52, 81, 117). In the above passage, Green claimed that where Locke treated ectypical ideas, which were received passively from sensation, as "real" and "adequate" (Locke's words), Hume would be driven to reduce all ideas to fictions, and all beliefs to mere "propensities to feign." As Green elaborated this argument, it became clear that he saw this reduction as a rational requirement for anyone (like Hume) who affirmed the copy principle.

Hume had used the phrase "propensity to feign" to describe our belief only in the "continu'd existence of all sensible objects" (THN, I.iv.2, 209). Green argued that Hume could not restrict the set of beliefs that count as "propensities to feign" only to belief in persisting external bodies. Strictly speaking, no idea was simply a copy of a sensory impression. That made all ideas, for anyone who accepted the copy principle, nothing but a "fiction," and all belief nothing but "propensity to feign."[164]

Green's strategy for supporting this bold claim against Hume was similar to the strategy used against Locke. In Hume's case, Green inspected our various ideas and tried to show that in each case, none can have been copied merely from simple impressions. Green thus argued that Hume first transformed Locke's reality principle into the copy principle. But modifying the reality principle did not protect Hume from being committed, like Locke, to the view that there are no real ideas, and that all beliefs are just "propensities to feign." Green employed this strategy at, for example, (INT, §§210, 240, 242, 245, 247, 250, 253, 258, 262, 301, 305, 310, 336, 343).

[164] Green was adapting Hume's own use of the word "fiction," as it appears at, for example (THN, I.ii.4, 48-49). Recall that for Green, the notion that all beliefs are "propensities to feign" is an absurdity, because there must be *some* genuine belief in real ideas. Otherwise, there are no ideas from which to derive ideas that Hume officially counts as propensities to feign, ideas like substance and necessary connection. *See above*, p. 165.

I began this Chapter by writing that Green thought proto-empiricists could not explain the nature of scientific knowledge without resorting to metaphysics. We have so far seen two Greenian strategies for establishing this claim.

First, we considered in detail Green's argument that all ideas of space must be unreal, if Hume consistently adhered to his own principles. Green held that *all* proto-empiricists had to regard our representations of space and figure as fictions. Since all natural phenomena occur in space and time, this admission would seriously undercut any proto-empiricist claim to be able to make sense of science. Second, we considered more quickly Green's broader argument that *no* idea could have reality, given core commitments of proto-empiricism. If there could be no real ideas, then *a fortiori* there could be no real scientific ideas. In the philosophical context of late-19th century England, *ideas* (rather than propositions or sentences, say) were the ultimate vehicles of facts. Thus, if all ideas are illusory, it follows that all scientific facts are illusory as well—an unacceptable result for proto-empiricists.

This concludes my discussion of Green's attack on proto-empiricist conceptions of ideas. I now turn to Green's claim that proto-empiricists could not make sense of the normative force of scientific knowledge.

5. Green on the Normativity of Scientific Knowledge[165]

The criticisms we have inspected so far largely turned on two proto-empiricist commitments: 'psychological atomism,' and the reality principle. Green attacked another proto-empiricist commitment that retains perhaps a more current interest. Proto-empiricists held that the human mind exists inside the same natural world that science discloses. Robertson's view was a good representative of the position (*see above*, pp. 93 *ff.*). Though the mind is the organ through which we represent nature to ourselves, he held, the mind is also a *part* of nature, and like other natural objects should be studied scientifically.

[165] In this section I confine myself to a narrow issue that arises in Green's ostensibly ethical work—namely, the issue of whether proto-empiricists can account for the normative force of scientific knowledge. Readers interested in gaining a broader appreciation for Green's moral thought are advised to consult (Brink 2003).

I will call "'strong mental naturalism'" the view that all coherent questions one might ask about the mind can only be answered through scientific investigation. Neither Robertson nor James actually held this strong a view, but nevertheless this is a view Green was concerned to attack (PRL, §2, 4).[166]

Green had two connected concerns about strong mental naturalism. First, he thought the view was prevalent among "the multitude of the educated" (PRL, §1, 1). Second, the view entailed that *morality* could be understood through natural scientific investigation. I will call 'strong moral naturalism' the view that all coherent questions about morality can only be answered through scientific investigation.[167] At the start of the *Prolegomena to Ethics*, Green described the view he was concerned to refute this way:

> That a physical science of Ethics is not intrinsically impossible, however difficult it may be rendered by the complexity, and inaccessibility to direct experiment, of its subject-matter; that there are no intelligible questions—no questions worth asking—as to human life which would be beyond the reach of such a science; this would seem to be the general opinion of modern English 'culture,' so far as it is independent of theological prepossessions. … Ethics, so understood, becomes to all intents and purposes a science of health, and the true moralist will be the physiologist who, making

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[166] Robertson and James both held a weaker view, that *some* important questions one might ask about the mind can only be answered through scientific investigation. For these empiricists, there actually were questions that outstripped science, and were more properly dealt with philosophically. Despite how Green framed the debate, the real disagreement over the relation between science and philosophy came to whether a scientific investigation of the mind was a *sound starting point* for philosophy, or whether philosophers should feel free to propose theories that *contradicted* mental science. Green and his allies saw science as issuing only partial truths, insisting that only transcendental criticism could give us ultimate truth about reality. For his part, James *also* described science as only giving us partial truth (e.g., in Mind, James 1879a, 319, 339). That is because James did not think there *was* such a thing as ultimate truth. For James, what facts we find depends on the questions with which we start our inquiry. The real disagreement with Green was that the intellectual questions philosophers and scientists ask about the mind were supposed to be continuous, according to James and Robertson (as we saw in Chapter Two), so the two groups could safely draw on one another's work. Green, on the other hand, did not see any safe passage from scientific investigation to philosophical investigation. Those on James and Robertson's side saw psychology as a powerful starting point for philosophy; Green and his allies saw psychology as a red-herring for philosophical investigation.

[167] For a history of Hume, Smith, and Bentham's roles in advancing secular, scientific approaches to the mind, approaches that were also supposed to have salubrious moral and political consequences, *see* (Long 1990). J. S. Mill, that other proto-empiricist whom Green loved to hate, may be placed squarely in this tradition as well.

> the human physique his specialty, takes a sufficiently wide view of his subject …. (PRL, §2, 4-5)

Educated English opinion (save among those with a religious bent) held that ethics, like all aspects of human life, could be understood through natural science. In principle (though not yet in practice), ethical questions could be reduced to physiological questions about human health, where "health" is taken broadly.

In contrast, Green held that we can approach that which ultimately grounds ethics only by investigating that which ultimately grounds science. Green thought that both moral and scientific facts presuppose the existence of an eternal, unchanging "principle." The "ego," as he sometimes called this principle, must exist outside space and time in order to make possible all experiences of related objects *in* space and time.[168]

In a preface to the fifth edition of Green's *Prolegomena*, Edward Caird described Green's project this way:

> The problem from which Green, like Kant, starts is the apparent opposition between the ordinary conception of the world, as a system of causally connected objects in space and time, which is presupposed by physical science, and what seem to be the fundamental ideas of morality and religion, the ideas of God, freedom, and immortality. If man, like all other objects of our empirical knowledge, is merely one part of the world of objects which act and react upon each other, according to fixed general laws, what room is left for the assertion of his moral freedom, or for any higher destiny which distinguishes him from the other creatures? …
>
> Now Green, like Kant, endeavours to show that in ordinary experience and in physical science we usually ignore or abstract from a principle which, nevertheless, is always present in all our knowledge, and that therefore such science does not deal with the ultimate reality of things, but only with phenomena; i.e. with things partially understood, or not apprehended in their whole reality. When, however, we detect this principle in relation to which all phenomena exist and are known, the result is both to vindicate the ways of knowing that characterise science and ordinary experience within their proper sphere, and at the same time to establish our right to apply the principles of morality and religion to the absolute reality. (PRL, iii-iv)

Caird here characterized Green as having started from the problem of how to reconcile our scientific conception of the world with the fundamental conceptions of

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[168] For a neat summary of Green's strategy, *see* Edward Caird's "Preface to the Fifth Edition" of the *Prolegomena*, especially p. iv. On the "principles" that all experience presupposes, *see especially* PRL, Book I, Chapter 1. I find §§ 27, 32-34, and 52 to give helpful summaries of Green's project.

morality and religion. This passage elliptically refers to a "principle" that is "always present" in scientific knowledge. Exploration of this mysterious principle promises to "vindicate" science, morality, and religion all at once. What is the Greenian "principle" Caird had in mind?

Green often emphasized the philosophical importance of a "principle" that he likened to Kant's notion of the synthetic unity of apperception, or simply "transcendental apperception" (PRL, §§33, 38). This is the principle Caird had in mind. Kant's notion of *transcendental apperception* is that of a "pure original unchangeable consciousness" (CPR, A107) that stands behind all our experiences in the following sense. For Kant, all necessary facts have transcendental conditions that can only be gleaned through a priori reflection. Apperception is the transcendental condition of a certain necessary fact about all conscious experience. The necessary fact in question is that *all our varied experiences* (in Kant's language, the "manifold of all our intuitions," A 106) are bound together in the conscious life of one unified self. My experiences, varied as they are, are all *mine*. There must be some transcendental ground of this necessary "synthesis" (A 106). "Apperception" is the name of Kant's transcendental ground of the necessary synthesis of the manifold of all intuition in one unified consciousness. Green seems to have used "apperception" and "understanding" more or less interchangeably (*see* his remark at PRL, §33, 40).

When Green wrote about knowledge gained through the "understanding," he followed Kant in postulating a "principle" that did not exist in space and time, and that made possible all experience *in* space and time. Green held that a purely empirical self amounted to nothing but changing feelings. But as he liked to repeat, changing feelings do not amount to feelings of change. Only an *un*changing subject—a subject outside of space and time—could consciously register perceptions as changing *in* space and time (e.*g.,* INT, §§132, 314).

Now this unchanging subject makes possible more than just experiences of objects in space and time (and thus scientific knowledge). It also makes possible "the consciousness of a moral ideal and the determination of human action thereby"

(PRL, §8, 13). So an ultimate investigation into the ground of moral facts—just like an ultimate investigation of the ground of scientific facts—will require a metaphysical account of the transcendental ego.

However, if Green was to convince his readers that ultimate moral facts could only be grasped through transcendental metaphysics, he first had to launch an attack on 'strong mental naturalism.' This is because 'strong mental naturalism' was the actual foundation for the widespread view that moral facts can be understood through scientific investigation.

Green might be accused of the fallacy of denying the antecedent, since a refutation of 'strong mental naturalism' does not entail a refutation of 'strong moral naturalism.' This objection misses Green's real intentions. One of his ultimate goals, as I have repeatedly argued, was to attack those who saw empirical psychology as a foundation for philosophy. He apparently understood his targets, including contemporaries like Mill and Spencer, all actually to have grounded 'moral naturalism' in some form of 'mental naturalism.' Thus, he could undermine his actual opponents—and whom else might he hope to attack?—by undermining the actual foundation they maintained for 'moral naturalism.'

His attack on 'strong mental naturalism' did bear a kinship in one important respect to his eventual criticism of 'strong moral naturalism.' He argued that neither position could make sense of norms—of cognitive norms in the former case, of moral norms in the latter.

I will focus on the former charge, which Green developed mainly in his three-part *Mind* article entitled "Can there be a Natural Science of Man?" (Green 1882a; Green 1882b; Green and Bradley 1882). This was the article Robertson wrote eagerly to James about (*see above*, p. 100). Green's *Mind* article was incorporated into the *Prolegomena*, constituting about the first quarter of that longer work (*see* PRL, §§3-100). I concur with Perry that the three parts of the *Mind* piece "appear to have stimulated" James's thinking, particularly in "On Some Omissions of Introspective Psychology" (RBP, I.565, James 1884b).

Green regarded both 'strong mental naturalism' and 'strong moral naturalism' as component parts of the proto-empiricist project. In fact, the idea of a "Natural Science of Man," as Green attacked it in his *Mind* piece, came from Hume.[169] Green opened his piece by citing Hume as having given "the most consistent theory on the subject" of naturalist accounts of morality (Green 1882a, 1).

Green argued that the cognitive skills required to *practice* science would not be available to a creature that was nothing but a product of natural forces. One important such skill involved recognizing and using epistemic norms or standards. For example, in order to gain genuine scientific knowledge one must correctly distinguish accurate from inaccurate perceptions, and discern which claims really are justified. But science discloses a material world apparently devoid of cognitive norms like accuracy and justification (and devoid as well of moral norms like goodness or justice). So if the mind is just one more object in the natural world—the natural world as disclosed by science—there could exist no norms to which such a mind could hew.

To see why a natural mind could not, in Green's view, take the kind of epistemic responsibility required for genuine knowledge, we must first unpack the notion of "science" at play in Green's construal of 'mental naturalism.'

Introspection was to be a methodological bond holding the entire proto-empiricist tradition together, from LBH through late 19th-century empirical psychologists. Introspection was also to transform the investigation of the mind into a scientific enterprise.[170] Physicists and chemists test hypotheses via *outer*

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[169] "There is no question of importance, whose decision is not compriz'd in the science of man; and there is none, which can be decided with any certainty, before we become acquainted with that science. In pretending therefore to explain the principles of human nature, we in effect propose a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security" (THN, "Introduction," xx).

[170] On the emergence of introspection in psychology, *see* (Danziger 1990, 18-24). Danziger claims that it was not until the 19th century that introspection became a distinct methodology. The *idea* of introspection has philosophical roots in Locke's distinction between sensation and reflection, Danziger thinks, and in Kant's subsequent attempt to clarify what it would be to have a science of mind. But in order for introspection to become a genuine *methodology* in psychology, there needed to be an actual academic discipline

observation, observation of the external world. In contrast, empirical psychologists (at least, the British associationist and evolutionary psychologists Green had in view) purported to test hypotheses about the mind via *inner* observation, or introspection. Green wrote:

> As an observation of the 'thinking thing,' the 'philosophy of mind' seems to assume the character of a natural science, and thus at once acquires definiteness, and if not certainty, at least plausibility. To deny the possibility of such observation, in any proper sense of the word, is for most men to tamper with the unquestioned heritage of all educated intelligence. Hence … the general conviction that the Hegelian reduction of Psychology to Metaphysics is either an intellectual juggle, or a wilful return of the philosophy, which psychologists had washed, to the mire of scholasticism. (INT, §9, 7)

There are two important points to draw from this passage. First, for Green, psychologists were widely viewed as having purged philosophy of scholastic metaphysics by recasting philosophy of mind as a natural science. Second, notice *how* psychologists transform philosophy of mind into a genuine science—they employ a methodology of observation of the "thinking thing."[171]

Green's strategy in the *Mind* piece, then, was to argue for the truth of the following conditional: if the human mind is a natural object explainable by scientific methods—by "an observation of the 'thinking thing'"—then the mind is not the sort of thing that could ever have genuine knowledge. If the conditional is true, then the very idea of psychology entails a contradiction. The project of psychology gets off the

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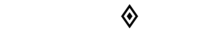
purporting to use this tool, for Danziger. He points to the emergence of psychology in 19th century German universities as the locus where introspection was elevated to method-hood. *Also see* (Danziger 1980), which contrasts views of introspection in English- and German-language thought. Green may be read as bringing German views about the limitations of introspection to bear on British associationist and evolutionary psychology. By Danziger's account, the latter had historically been much more optimistic about the use of introspection in a science of mind.

[171] It is not clear to me how much Green was influenced by Kant's famous claim that empirical psychology could never achieve the status of a natural science (Kant 1786/2004, 7-8 [4: 471]). *See* (Hatfield 1992) for a helpful discussion of Kant. Readers interested in Hegel's critique of empirical psychology as well as Kant's should consult (Tolman 2001). Danziger argues that for Kant, putting psychology on empirical footing was necessary, but not sufficient to make psychology into a science. The data with which psychology dealt—experience—had to be mathematizable in order for psychology to achieve the status of a science, according to Kant (Danziger 1990, 20). Kant had argued that this was not possible, in his own day. Green did not, that I can find, emphasize that experience cannot be mathematized.

ground precisely by assuming that the antecedent of this conditional is true. Psychologists, in other words, construe the human mind as a natural object. However, psychologists also assume their own minds do grasp genuine knowledge—otherwise they cannot claim to be practicing science. This means psychologists affirm the antecedent and deny the consequent of this conditional, a problem if Green can show the conditional is true. I will now examine Green's argument for the truth of the conditional.



You'll have guessed that Green's answer to the question posed by his *Mind* title—"Can There Be a Natural Science of Man?"—was a resounding "No." He began his piece by criticizing attempts to show that we can account for morality using nothing more than the resources of natural science. Two chief difficulties immediately present themselves—how to account for the existence of free will, and how to account for the existence of "a moral sense." Green meant by "moral sense" the ability to appreciate what is morally praiseworthy or repugnant.

The second was the more difficult problem. To see why, consider the following question. What qualities in human action excite or depress our moral sense? Empirical psychology places severe constraints on the range of acceptable answers. Since psychologists purported only to employ observational methods, Green thought it followed that the subject psychology *studied* must not have robust faculties of reason. He thought this placed the following constraint on how a naturalizer can answer the above question. Whatever quality in human action excites our moral sense, that quality cannot be something we need reason to discover. We must be able to take pleasure in the "'mere survey'" of the quality in question, "independently of any consequences of the act to the person contemplating it…" (Green 1882a, 2). The emphasis in that last clause should be on *contemplating*—the moral naturalizer cannot cite qualities in human action it requires rational contemplation to appreciate.

Now the leading ethical naturalizer was Hume, as far as Green was concerned. Hume posited a tendency to take pleasure in actions that generally increase pleasure or decrease pain in others. But a mystery remained.

> The problem which Hume bequeathed to a successor who adopted his principles was mainly to account for the two-fold fact, that the mere survey of actions as tending to produce pleasures, in which the contemplator will have no share, is yet a source of pleasure to him; and that among the pleasures taken into account in that estimate of the tendency of an action which determines the moral sentiment are such as have no direct connexion with the satisfaction of animal wants. (Green 1882a, 2)

How, Green asked, can the "mere survey" of an act from which I am not to benefit nevertheless cause me pleasure? And how can I be caused pleasure by observing more rarified moral acts, right acts that make no difference to *anyone's* "animal wants"? If we can answer this two-fold question, we will "have given to our national system of ethics … the solid foundation of a natural science" (Green 1882a, 3).

But Green thought naturalizers could never provide a satisfactory answer. The naturalizer could only answer with descriptions of what we in fact find pleasurable, not with judgments about what we *ought* to find pleasurable. To give up on explaining the normative force of ought-judgments is to shuck the entire project of ethics, for Green.

> It has generally been expected of a moralist, however, that he should explain not only how men do act, but how they should act: and as a matter of fact we find … [naturalists] are as forward as any to propound rules of living to which they conceive that, according to their view of the influences which make him what he is, man *ought* to conform. (Green 1882a, 5)

Naturalists try to define what is desirable, what we *ought* to do, in terms of what we actually desire. If they are to be consistent, they must forego any pretension to give a theory that has normative force. They can explain the origin of the *phrases* "ought" and "ought not," and of the *belief* that some things are better than others. But insofar as they restrict themselves merely to observing the mind, they cannot derive any conclusions about what people really ought to do (Green 1882a, 5-6).

Green's argument continued this way:

> Now it is obvious that to a being who is simply a result of natural forces an injunction to conform to their laws is unmeaning. It implies that there is something in him independent of those forces, which may determine the relation in which he shall stand to them. (Green 1882a, 5)

The naturalist cannot 1) say that moral laws reduce to laws of nature, 2) say that human subjects, including their moral sentiments, are nothing but the outgrowth of natural processes, and 3) *recommend* that human subjects conform to moral laws. The problem is that one who is nothing but a product of natural laws cannot also choose to conform to those laws, unless there is some part of the person above or outside nature. But that is exactly what is denied by 'strong mental naturalism' and 'strong moral naturalism'—that there is any trans-empirical subject standing behind human mental life.

Green then considered whether naturalists can *do without* an idea of morality all together. Perhaps when anyone talks about what *ought* to be done, the 'moral naturalist' might simply think of this as, in Green's words, "at best making use of a serviceable illusion" (Green 1882a, 6). Green argued that the 'moral naturalist' should get uncomfortable at this point, because this elimination of the concept of obligation puts into jeopardy the 'strong mental naturalism' her position presupposes. He wrote:

> We cannot but inquire whether a being that was merely a result of natural forces could form a theory of those forces as explaining himself. …
>
> Can the knowledge of nature be itself a part or product of nature in that sense of nature in which it is said to be an object of knowledge? … If [this question] is answered in the negative, we shall at least have satisfied ourselves that man, in respect of the function called knowledge, is not merely a child of nature. (Green 1882a, 6-7)

This passage is put in the form of a rhetorical question, but we can readily anticipate Green's answer. The question is whether the kind of human subject postulated by 'strong mental naturalists' could also be the sort of subject that is able to practice psychology. The implied answer is negative. A being for whom the notion of obligation is merely a "serviceable illusion" could not have the capacity to treat a theory as explaining herself. The problem is not to do with a natural creature explaining *herself* in particular. The problem has to do with a natural creature having the capacity to treat any theory as an explanation.

A natural creature cannot grasp an explanation as such because she can form no conception of the difference between accurate and inaccurate representations, for Green. To grasp an explanation, one must take a string of words as capturing or

failing to capture reality. But a merely feeling consciousness—the only sort of consciousness Green thinks is visible to empirical psychological investigation—could not possibly accomplish this task.

To illustrate why not, Green asks us to consider a train engineer who "sees a signal wrong." That engineer must have the capacity to make normative judgments about his own perceptions. He must take his perceptions as standing for external objects; and he must then judge some representations to be better or more accurate than others. But these acts of normative discernment are not available to the purely feeling consciousness, Green wrote.

> … Is a feeling, which is undoubtedly felt, really related as some one thinking about it takes it to be ? If an engine-driver, under certain conditions, … 'sees a signal wrong,' his disordered vision has its own reality just as much as if he saw right.[172] There are relations between combinations of moving particles on the one side and his visual organs on the other … as full and definite … as in any case of normal vision. There is as much reality in the one case as in the other, but it is not the same reality: *i.e.,* it does not consist in the same relations. The engine-driver mistakes the effect of one set of relations for that of another, one reality for another, and hence his error in action. He may be quite innocent of a scientific theory of vision, but he objectifies his sensations. He interprets them … as signs of objects from which he distinguishes his feelings and by which he explains them. Were this not the case, his vision might be normal or abnormal, but he would be incapable of mistaking one kind of reality for another, since he would have no conception of reality at all. (Green 1882a, 10)

Here is the question Green thinks it is impossible for 'strong mental naturalists' to answer adequately: what makes possible a subject's normative judgments about his own perceptions? The engineer is able to question what relation his perception of the signal stands to the signal in the external world. This kind of judgment is not possible, Green thought, for the purely feeling consciousness the naturalist postulates, for several reasons. First, the purely feeling consciousness cannot take *any* relations as real, as we saw in Section Four, *above*. All the feeling consciousness has to work with is passing, atomic feelings. Such a consciousness could perhaps conceive of two different signal-perceptions, each standing in different relations to some imagined reality. But since she must regard *all* relations as fictions, she cannot have any reason to think *one* relation is preferable to the other.

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[172] Note that here Green intends formal reality, not objective reality as was most often the case in INT.

Green specifies one necessary condition any creature must satisfy if it is to be capable of normative judgments. Green held that when we judge a perception to correspond with reality, the notion of "reality" at play is one where events are subsumed under natural laws. But we cannot form ideas of natural laws except through the "understanding," which must exist outside of space and time. Thus, he wrote:

> The terms 'real' and 'objective,' then, have no meaning except for a consciousness which presents its experiences to itself as determined by relations, and at the same time conceives a single and unalterable order of relations determining them, with which its temporary presentation, as each experience occurs, of the relations determining it may be contrasted. (Green 1882a, 10)

One must have an idea of events in reality obeying universal laws—this is what Green means by a "single and unalterable order of relations" determining our perceptions. One must then be able to contrast one's fleeting perceptions, perhaps made in sub-par circumstances (a foggy day on the train line, say) with reality as viewed from an absolute standpoint. The merely feeling consciousness has only fleeting perceptions and no faculty of reason. Green thinks it requires reason, not mere sensation, to form such a perspective. In short, the merely feeling consciousness studied by psychologists lacks the cognitive resources to form an idea of a God's-eye view, so to speak, on Reality.

Green's argument was that knowledge requires the use of standards—there has to be a difference between correct and incorrect observations to enable us ever to have legitimate knowledge of the natural world. Science cannot be built by stringing together simple reports on our experiences, like "I see a dot in my telescope." To count as having knowledge we must be prepared to *endorse* some of those experiences as correct—to employ standards. We need to be able to endorse claims like "I see a dot in my telescope, and that dot is Neptune."

According to Green, we cannot keep eliminating normative notions from our theoretical toolbox forever—for at some point, we will have to make sense of the notion not just of how we ought to *act*, but also of what we ought to *believe*.

Finally, contemporary readers will find such charges against the Lockean tradition familiar. In the 1950s, Wilfrid Sellars accused empiricists like Price of making a mistake akin to the naturalistic fallacy in ethics.

> Now the idea that epistemic facts can be analyzed without remainder—even "in principle"—into non-epistemic facts … is, I believe, a radical mistake—a mistake of a piece with the so-called "naturalistic fallacy" in ethics." (Sellars 1956/1997, 19)

It was Moore who made the naturalistic fallacy famous in his 1903 *Principia Ethica*. He charged that it was a fallacy to define "good" in terms of natural properties like desire. The charge was that words like "good" have normative force, whereas words that describe natural properties do not have such force.

Sellars presented his own attack on empiricist epistemology as a modification of Moore's argument in ethics. Ironically, Moore is very likely to have *learned* the argument from Green—or at least from Green's student F. H. Bradley, who himself is likely to have learned the argument from Green. In other words, the argument I have been considering in this section does not just bear a coincidental resemblance to Sellars's attack on traditional empiricism. Green's argument is a historical ancestor of that argument.

Moore cited J. S. Mill as the paradigmatic example of one who committed the naturalistic fallacy, charging that the latter defined "desirable" as what we in fact desire, rather than as what we *ought* to desire (citing Mill 1863, Ch. IV, Parag. 3). Recently, Steve Gerrard has both defended Mill[173] and traced the history of Moore's charge (Gerrard 2002, 37).

Gerrard's defense portrays Moore as having misread Mill in a distinctive way. Gerrard then traces Moore's alleged misreading through Sidgwick back to F. H. Bradley. Gerrard does not mention Green, but since Bradley was Green's student, it stands to reason that Green was involved in the transmission of this criticism. There is textual evidence from Green to support my contention.

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[173] Gerrard first argues that Mill meant to define "desirable" as what an "educated person under proper conditions" desires. Hence "desire" was already a normative notion, and Mill was not guilty of the naturalistic fallacy (p. 45).

Although the last passage I cited from Green does not bear any obvious link to Moore's way of putting the argument, other passages in Green bear a more striking resemblance to Moore. In his *Lectures on Kant*, for example, Green's argument is more clearly directed at the notorious passage from Mill:

> hedonistic moralists are always contradicting themselves by trying to represent pleasure, through an equivocation between the desired and the desirable, as at once the unconditioned good (because that which alone we actually desire), and an object we *should* desire. (GWR, II.110)

Notice Green's use of "desire" and "desirable," the two words Moore accused Mill of misusing in the latter's notorious passage from *Utilitarianism*. We do not know when this passage was written, as they come from posthumously published lecture notes. I surmise from (GWR, II.1) that the notes were likely written in the early 1870s. Moore was deeply influenced by Bradley (Hylton 1990, 44), and Bradley was a student of Green's at Balliol College, Oxford.

It is surprising to see that Sellars's attack on empiricism—fresh as it still seems today—actually traces all the way back to T. H. Green. In the next chapter, I will suggest that James had a response to this argument. Whether James has resources for responding to Sellars's specific version of the argument is an issue I must leave to future research.

To summarize this section, here is a brief reconstruction of Green's *Mind* argument, which was supposed to establish the conditional I laid out *above*, on p. 204. The conditional states that if the human mind is a natural object explainable by scientific methods—by "an observation of the 'thinking thing'"—then the mind is not the sort of thing that could ever have genuine knowledge.

'Strong mental naturalism,' the view that the mind is in principle fully explicable by scientific methods, entails 'strong moral naturalism,' the view that moral properties are explicable by scientific methods. But 'strong moral naturalism' entails that normative notions are nothing but "serviceable illusions." Thus, the 'strong mental naturalist' must also hold that normative notions are illusions. But then the 'strong mental naturalist' cannot answer an important question about

human life, viz., how is scientific knowledge itself possible? Any adequate answer to this question, Green argued, must be able to show how a subject can make legitimate normative judgments about her own perceptions. One cannot have scientific knowledge—one cannot do psychology at all—unless one can discern which perceptions are accurate, and which amount to "seeing the signal wrong." Thus, if the human mind is a natural object explainable purely by scientific methods, then it is impossible to have scientific knowledge.

I now turn to Edward Caird's own work. I give a brief review of Caird's version of proto-empiricist history, and of his positive account of space. James had been reading Caird around the same time he had been working through Green, as we saw in Chapter Two. I cannot consider Caird's views in as much detail as Green's, but I explore his work just enough so that we will be able to understand James's reaction to Idealists.

6. Edward Caird: A Kantian Account of Space

Edward Caird was another prominent British exponent of Kant and German idealism. He was a Scotsman in the first generation after Mill and Bain of those who looked to Germany for ideas about how to repair or recast the common-sense philosophy that had died with Mill's examination of Hamilton.[174]

Caird was perhaps more thoroughly influenced by Hegel than Green had been,[175] though in Caird's own attack on proto-empiricism he continually deferred to Green's influential work.[176] However, certain unique features of Caird's argument

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[174] Hamilton had also been influenced by Kant and German philosophy, but where Hamilton's generation had been interested in surpassing Kant, Caird's was more focused on recovering what they regarded as Kant and Hegel's true, lost philosophical insights.

[175] In addition to his thorough 1877 account of Kant's philosophy, which sprouted a second significantly revised edition in 1889, Caird also published a similarly influential volume on Hegel in 1883 (Caird 1883).

[176] For some examples, *see* (Caird 1877, 58, 62 fn., 64, 64 fn., 71). He adapted Green's idea that sensations are speechless, as follows: "Or how, without bringing in conceptions of relations, not given in sensations themselves, can we bind these sensations together, and refer them to a permanent self? If the Baconian rule of taking facts as they are, be interpreted on the hypothesis, that pure sensations are the only facts, then reality is something, which we may feel, but of which we can neither think or speak. 'A consistent

also surfaced in James' response to Idealists, so it is important to introduce them here.

Caird followed Hegel in seeing the history of philosophy as evolving through broad, dialectical advances. Descartes was supposed to have been "the philosophical counterpart of the Protestant Reformation," which meant that Descartes was to be treated as the earliest philosopher to raise forcefully the question of how an *individual* mind can know about the world. Although the Cartesian philosophy "was immediately corrected by the thought, that the consciousness of self is secondary to the consciousness of God," nevertheless, Caird thought Descartes failed fully to understand the epistemology of individual consciousness. Once Descartes broached the topic of how an individual mind can have genuine knowledge, it had as a matter of historical necessity to be fully explored (Caird 1877, 52).

Thus, while Cartesians quickly made recourse to God in their accounts of the epistemology of individuals, Locke's contribution was to keep more consistently to the individual perspective in probing this issue. But he did not quite succeed, in Caird's view; Locke ended up quietly switching between two incompatible perspectives from which he philosophized about the foundation of knowledge. This will seem familiar from Green. Locke sometimes asked what can be known from the perspective of an individual mind, in which case the only plausible answer is collections of ideas, and not any outer object in itself. At other times, Locke took on a "God's eye view" of the universe as containing both material objects and the thinking things they impinge. But when he worked from this latter perspective, argued Caird, Locke could give no account of how the physical material of the world could ever be translated into mental signals to which minds have access. Let us look at this argument in more detail.

Caird thought Locke faced a dilemma: either give up the prospect of a materialistic psychology for the sake of a coherent, naturalistic ontology; or give up

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sensationalism must be speechless' [fn: "Green's *Introduction to Hume*, § 45."]" (Caird 1877, 61-62).

the prospect of a naturalistic ontology for the sake of materialistic psychology. The ontology-instead-of-psychology horn is not tenable, for Locke:

> …The philosophy of Locke reduces itself to an attempted synthesis of two contradictory theories. For one of two things is inevitable. Either consciousness must be conceived as transcending the individuality of the human animal, as embracing in one thought the duality of subject and object, which then can have no existence in themselves apart from the unity in which they are known. In this way we may save, if not the ontology of Locke, at least some kind of ontology at the expense of his psychology. (Caird 1877, 60)

Caird held that a subject can come to know an object in itself only if the subject and object of the relevant perceptions are both conceptually and ontologically part of one higher "thought" or unified perception. For example, consciousness (note that I don't write "my" or "one's" consciousness, and that Caird here avoids those locutions as well) may transcend the limited perspective of an individual animal and have real knowledge of, say, the columbine flower in Lisa's garden, but only if the flower and the viewer are both dependent parts carved from one higher, unified thought. But such a perception cannot correspond to anything but a fiction for anyone who accepts 'psychological atomism' and the reality principle. Thus if Locke wanted a defensible ontology, he must sacrifice his psychology.

The second horn of the dilemma is to retain a materialistic psychology, but to give up on a naturalistic ontology:

> Or if, on the other hand, the individual consciousness is not to be conceived as transcending itself, then we must be in earnest about its limits. We must give up all pretence of knowing things in themselves, or construing out of our own affections a reality not included in them. We must surrender all that part of Locke's philosophy which deals with things as opposed to ideas, with real material substance defined by the primary qualities, as opposed to the secondary qualities which exist only in the mind. It is impossible to preserve both the sensationalist view of the development of knowledge, and the materialistic account of the origin of sensation. (Caird 1877, 60)

In other words, Locke may keep his sensationalist psychology, but only at the expense of the accompanying view that the mind can ever come to know objects as they exist in nature, independent of their ever being perceived.

For Caird the method of introspection and the individual perspective it requires are essential to proto-empiricism, and so Locke and his followers were forced to choose this second horn, accepting the "substitution of psychology for ontology"

(Caird 1877, 64). This is exactly what Hume in particular had tried to do, according to Caird.

> The philosophy of Locke and Berkeley had been developed partly from the point of view of an individual mind, whose immediate knowledge was confined to its own feelings, but partly also from the universal point of view of a spectator, who could observe both the mind and its object, first in their separateness, and then in their action upon each other. Seeing clearly the inconsistency of this double procedure, Hume made at least a vigorous effort to avoid it, and to confine himself to the observation of his own consciousness. (Caird 1877, 64)

Caird here suggested that any "individualism," as he elsewhere called it, will be impotent to show how humans can have genuine knowledge of the external world. Hume recognized this, the story goes, and thus abandoned Locke's aspirations to ontology. With Hume, the question was no longer how the mind can know independently-existing things in the world, but rather "how a series of isolated and transitory sensations should ever come to have for us the appearance of a connected world of objects" (Caird 1877, 65).

But this project raised two new difficulties, for Caird's Hume.

> In the first place, he has to explain how isolated and transitory feelings can be in any way related or combined with each other. And, in the second place, he has to explain, how combinations of impressions and ideas in certain cases come to be regarded as real and objective existences independent of the mind. (Caird 1877, 66)

The first problem Caird posed for Hume was to explain how psychological atoms can be combined with one another. As I have mentioned, Caird thought Locke's 'psychological atomism' prevented him from forming an "ontology"—by which he meant a robust conception of reality. The second problem was to show how the combination of psychological atoms can constitute a perception of reality.

Caird read Hume as having been sensitive to these problems, and as proposing that there are "natural relations" already inherent "in the very data of sensation" to try to skirt them (Caird 1877, 67). Natural relations are whatever in one idea calls up another idea according to psychological laws (Caird 1877, 67, citing THN, I.61.64). The first problem was supposed to be answered in part by putting relational properties into the impressions and simple ideas themselves.

Recall that for Hume there were three sets of relations inherent in ideas: resemblance, contiguity (which include some space and time relations), and

sequence (which is what explains the appearance of causation). Hume then was supposed to account for the second of the two challenges (to show how some combinations of impressions come to seem real) by showing how causality and identity are derived from natural relations between ideas. Causality and identity are categories at the foundation of our conception of a real, objective world. But these categories—or what remains of these categories after they are reduced to natural relations—could be "explain[ed] away" as "propensities to feign" (Caird 1877, 68-69).

Caird's main response was that the idea of natural relations which is supposed to be at the foundation of our conception of an external world "presupposes the very categories [of causality and identity] in question" by assuming that a series of changing sensations can constitute or refer to one object through time. In other words, the very assumption that we have a stock of ideas in our heads that persist through time presupposes that we already have a grasp of the "category" of identity. Hume thus is guilty of trying to explain away "categories" of causation and identity via an experience whose coherence requires that we already have those very categories in place to begin with.

But Caird puts much of his attack against proto-empiricism, particularly on the topic of space, in the mouth of Kant. Just before his so-called "critical period," Kant had come to reject the Leibnizian view that relations between substances are all unreal—and in particular, that for space to exist, there had by definition to be a collection of objects related to one another (Caird 1877, 160-161). Caird wrote:

> In a short essay on *The first ground for the distinction of regions in space*, Kant maintains that the idea of space in general is not acquired, … but that, on the contrary, the idea of the one absolute space is presupposed in the determination of all particular spaces, and things in space. In asserting this doctrine, Kant, in principle, declares war against … Individualism: for Individualism cannot regard the whole as prior to the parts. To Locke as to Leibnitz, space is an idea of the relations of objects, and, therefore, logically posterior to the ideas of the objects themselves. But Kant here contends that when we examine carefully the 'judgments of perception' regarding the extension of objects, we find … we cannot determine matter as extended, or as having its parts definitely situated in regard to each other, except in relation to absolute space, as a unity in which every particular extension is included. (Caird 1877, 165)

Thus Kant's break with *both* Locke and Leibniz comes in his break with "individualism." "Individualism" seems to be the methodological approach of explaining parts in terms of their function in wholes—we might term the reverse approach "methodological holism." Thus, Caird saw Kant's early critical-period insight to have been the abandonment of individualism in favor of a holism about space. Kant began to see space not as built out of individual objects or positions, but as an absolute unity out of which positions or objects, if it contains any, are to be analyzed.

For Caird, Kant's argument for the priority of a unified space is that in every distinction between right and left, up and down, front or back, there is an *implied* relation of parts of the body not just to one another, but to absolute space. If space were just relations between bodies, then if we properly inverted a relationship between two objects, their relations to one another may not change, but their position in (absolute) space does. So, "while ... we cannot immediately perceive absolute space, we perceive distinctions of body which presuppose it, and which could not exist without it" (Caird 1877, 167).

In short, Kant's early critical period is marked by his arrival at the

> conviction that absolute space is an idea which is not given in outward experience, yet which is the very condition of its possibility. Hence, he [Kant] could no longer conceive material substances as monads or exclusive individuals. The unity of such substances as in one space is given before their isolated existence, and they must therefore conform to the nature of space. Hence, also, the synthesis of geometry, which, at an earlier period, Kant had treated as an arbitrary process of construction, acquires a real and objective value. (Caird 1877, 167-168)

For Caird's critical-period Kant, Euclidean geometry gives the principles that govern possible relations in which objects of experience may stand. The Euclidean "principle of synthesis," in Caird's phrase, comes from the mind itself, and cannot be derived from experience (Caird 1877, 168).

Helmholtz had also pointed out (in an article James attacked in "The Spatial Quale") that Kant thought that the mind was unable to conceive of any other spatial relations than those given by Euclid's geometry. But Euclid's (synthetic) axioms are discovered *a priori*, not empirically. So there must be an *a priori* constraint on all our space perceptions, and space perception cannot be grounded purely in experience

(Helmholtz 1878, 212-213). Moreover, Kant had (and thus Caird and Green presumably both have, as well) a positive account in Euclidean geometry for the nature of the spatial constraint the mind places on possible experiences of the external world. The challenge for proto-empiricism was to offer a similarly principled explanation of what makes space perception possible.

Caird seems to have regarded this challenge as insurmountable. He took Green to have established that Hume had failed to show how spatial perception could be the result of any synthesis of minima sensibilia. In contrast, Kant had succeeded not just in explaining space perception as a capacity that presupposes a prior concept of absolute space. Kant had also shown (Caird held) that Euclid's axioms spell out *precisely* what constraints this prior concept of absolute space places on our spatial perceptions. All this strongly suggested to Caird that spatial perception simply could not be convincingly explained as any bare experiential synthesis. Thus he allowed himself some triumphant language:

> Is it not clear that Empiricism[177] must be altogether rejected as an explanation of knowledge. Take away from experience the ideas of time, space, causation, and the like, and what remains? Only a series of sensations without connexion, and therefore without intelligible meaning. If, therefore, there is connection and intelligible meaning in the empirical consciousness; if it sets before us a world of definitely related objects, the reason must be found in the *a priori* forms by which the matter of causation is organised and combined. And it will be the business of philosophy to discover and enumerate the *a priori* elements of knowledge, and to determine their relations to each other. (Caird 1877, 168-169)

Notice that for Caird, as for Green, the crucial disagreement with proto-empiricists is over the proper relation between science and philosophy. With Green, Caird concluded that it is "the business of philosophy" to undertake an a priori analysis of knowledge, not to undertake any empirical study of the mind.

So far we have seen in Green a collection of arguments to the effect that proto-empiricists cannot account for how the mind could come to know relations in general, and spatial relations in particular. Caird diagnosed the source the proto-empiricist failure. The source was a foolhardy insistence that the individual

[177] For more on Caird's use of "Empiricism," *see above,* pp. 48-50.

perspective of introspection can be used to yield a defensible, naturalistic ontology. Knowledge of the external world requires that the subject perceive both the object and the subject of particular perceptions at once. One cannot make theoretical sense of this absolute perspective using introspection alone. Also, Caird argued for a Kantian account of space perception. Against proto-empiricists, Caird held that a formal, Euclidean conception of absolute space was presupposed by all experiences of the external world.

Against this background, I conclude this chapter with a brief review of J. E. Cabot's article on space.

7. J. E. Cabot: Taking the Fight to Psychologists

James Elliot Cabot (1821-1903) was James's senior by two decades, and a member of the Boston elite. He was a Harvard graduate who went on to study under Schelling in Berlin, eventually becoming editor of Ralph Waldo Emerson's collected papers, published in 1883.

As I have mentioned, Cabot's article was written for and delivered to the revived Metaphysical Club when they were reading Green and Caird. Though he did not refer explicitly to those two authors, he shared their Kant-flavored outlook on space perception. Cabot focused his attention on those like J. S. Mill who try to show that one or another variety of sensation can be used to build, piecemeal, a consciousness of extension (Cabot 1878, 229).

One feature of Cabot's article immediately distinguishes it from Green and Caird's work. Green and Caird both tended to write in general terms about "empirical psychologists" and their flawed philosophical commitments, but often failed to wrestle with empirical psychology in any detail. In contrast, Cabot's paper is peppered with direct references to empirical work in psychology. The paper is short (10 pages), but includes footnotes to Carl Stumpf, Joseph Delboeuf (a Belgian psychologist and hypnotist), Wundt, Lotze, and Helmholtz. Cabot also offered direct discussion of J. S. Mill's theory of space perception. So whereas Caird and Cabot sought to attack empirical psychology by way of its historical-philosophical

foundation in proto-empiricism, Cabot adapted such arguments directly to contemporary empirical psychologists.

Cabot's central argument was that "a most violent paradox" arises from the assumption that we have an idea of space drawn from sensory perception alone. On the one hand, our perceptions of objects are all fleeting. I turn my head to the right and see my lamp; to my left I see my guitar. Though these two perceptions are not in front of my mind's eye at once, my experience is nevertheless such that the objects of those perceptions—my lamp and my guitar—seem to coexist in space and time. Cabot claimed that something is needed to explain this inference we seem habitually to make from fleeting perceptions, themselves only appearing to us in a temporal succession, to the idea that objects of those perceptions coexist in space and time.

> In order to admit such a conclusion he ["a purely sentient being, having no knowledge of Extension"] must first have come, not merely to distrust his senses, but to the implicit assumption that their informations are of no value whatever; that their value lies in what they *prove*, not in what they are—in short, he must have begun to think, instead of merely to feel. (Cabot 1878, 231)

Thus, the "most violent paradox" is the suggestion to someone with no a priori conception of extension and no mental faculties other than sensory ones, that his fleeting experiences correspond to objects that persist in space even when he is not looking, listening, or whatever. The only way to mitigate this "paradox" is to admit that awareness of space presupposes an intellectual faculty that makes sense of such bare sensations.

This argument shows echoes of Caird and Green. Caird claimed (see page 216, *above*) that Hume ultimately failed to offer a coherent account of "natural relations" because the Humean subject must make use of a native category of identity. Cabot makes a similar charge against Mill. The psychologist's imagined subject must also make use of some intellectual principle of identity before he can come to treat fleeting sensations as having stable objects. Moreover, Cabot claimed that rational thought is what lets us discover what our experiences "signify, or what hypothesis they oblige us to adopt." As with Green, Cabot's sensations are meaningless; only a

separate intellectual faculty could accomplish the task of interpreting them (Cabot 1878, 231).

Cabot rejected the proto-empiricist view that we have discrete sensations which are then glued into a composite whole by a unifying intellectual faculty. Rather, he allied himself with Caird's Kant (*see* page 217, *above*) by claiming that our intellect natively has a conception of unified space. Individual sensations are then interpreted as referring to objects that exist in space. We could never refer sensations to objects in space unless we already understood this universal conception of space.

To see why the intellect as a faculty that glues together independent sensations will not work, for Cabot, assume for a moment that we form a conception of space by grasping relations between sensations. Cabot objected that sensations unaided by the intellect are always particular; thus one who claims that the intellect constructs an understanding of space from bare sensations must be able to specify the particular sensations whose relations constitute our conception of space. Or, such a person must show how a subject can abstract the particular visual or tactile properties away from those sensations. The first horn of this dilemma will not work. It is impossible to specify some one type of sensation that our conception of space relates, Cabot wrote.

> Evidently, however, this is a figurative way of speaking [that "we *see* the place, distance, direction, and extent of bodies"]; for it is not meant, I suppose, that Extension is an affection of the optic nerve; in other words, that it is a color. If this *is* meant, then we are entitled to ask, What color? Someone, I forget who, has suggested that Space is of a bluish tint …. (Cabot 1878, 225-226)

Claiming that space perception is a matter of relations between particular sensations requires a willingness to specify *which* sensations are thus related. Cabot ridiculed the prospect of being able to specify such sensations. In the case of a visual perception of space, this would entail that every perception of extension is also a perception of some particular color. This echoes a familiar argument from Green, that by Hume's own lights geometry must be concerned with the science of color perception.

But those who hold that our knowledge of space is acquired also have trouble claiming that the mind places *abstract* visual or tactile perceptions into relation with

one another. For this would require that space is somehow a relation between "blank perceptions," and one is left with nothing but

> the picture of a relation without related terms. Our sensations, when we have abstracted from them their special qualities, are simply nothing at all, and cannot be brought into relations with each other or with anything else; and we have to fill out their empty forms with an occult quality of *localization*, which really signifies only the exigencies of our theory. (Cabot 1878, 232)

Instead, Cabot proposed a definition of extension as "...the negation of any reality in the sensible qualities taken by themselves" (Cabot 1878, 232). He meant that extension is not a relation between self-standing perceptual objects or qualities. Instead, extension is the very concept, supplied by our intellect, that *affirms* (or constitutes) the formal reality of our scattered sensations of the physical world. In other words, external perceptions only become meaningful when they are united by an a priori, absolute conception of space.

So Cabot, like Green, insisted that psychologists cannot give an empirical account of space perception because sensations by themselves cannot give us an idea of real space relations. Careful consideration shows, Cabot thought, that a conception of space would be impossible to build out of such meaningless sensations. Instead, the existence of any real sensations—sensations that refer to an external world, in particular—presupposes an a priori conception of absolute space.

Part Three

William James's Defense of Empiricism

Chapter Four
Space Perception and the Stream of Thought

1. Introduction to Part Three

As we have seen, Idealists purported to attack the very idea of an empirical science of mind. William James took it upon himself to respond. He saw that many Idealist arguments targeted the constitutive framework on which *associationism*,[178] then the dominant school of British psychology, was built. James would rescue empirical psychology, and in turn empiricist philosophy, by replacing the old framework of 'psychological atomism' with something new.

Michael Friedman has developed a conception of *constitutive scientific principles* on which I rely in this chapter and the next. For Friedman, a sentence P constitutes (or is presupposed by) a sentence Q just in case Q is meaningless unless P is true (Friedman 2001, 74). The classic example concerns the sentence "The present King of France is bald." This sentence presupposes that there exists exactly one present King of France. Since, in fact, there exists *no* present King of France, we do not know how to assign a truth value either to this statement or to its negation[179]—in other words, the statement is meaningless. Thus, for Friedman, "There exists exactly one present King of France" is a constitutive condition of the sentence "The present King of France is bald."[180]

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[178] There is a tension between contemporary and Victorian usages of the word "associationism." I use the word in its older sense. For more on this tension, *see* fn. 61, *above*.

[179] When I write that we do not know how to assign a truth value to the negation of "The present King of France is bald," I am assuming what is controversial—that the proper negation of this statement is "The present King of France is not bald," rather than "It is not the case that the present King of France is bald." I offer a more detailed discussion of presuppositions, and of Friedman's views on this topic, in Chapter Five, Section Four, *below*.

[180] Not every constitutive condition of an empirical statement is a constitutive scientific principle, for Friedman.

In this sense, 'psychological atomism' played a constitutive role with respect to many associationist theories of cognition and perception. Associationist theories typically presupposed that experience was given in atomic units. Then, they sought to explain diverse facets of cognition and perception by postulating natural laws governing the combination of these atoms. For example, recall from our previous chapter Hume's theory of shape-perception.[181] Hume held that when we perceive the shape of a yellow triangle, we are perceiving the triangular *manner* in which a set of yellow minima sensibilia are arranged with respect to one another. If it turns out that there are no such things as minima sensibilia—that is, if one of associationism's *presuppositions* turns out to be false—then theories concerning which groups of sensibilia yield which experiences become misplaced or even meaningless.

In contrast, James's own *specific theories*, as I shall call them (*e.g.,* his theories of space and time perception, of the self, of cognition), rested on a constitutive thesis that was inconsistent with the 'psychological atomism' presupposed by associationism. James's constitutive thesis was that experience is given in a *continuous stream* rather than in discrete atoms. By using this thesis as a framework for a new, non-associationist psychology, James avoided important problems Idealists had exposed concerning the very idea of a science of mind—or so I shall argue.

I have two chief goals in this final part of the dissertation. One is to show exactly how James's notion of a stream of thought provided a framework for his psychology. The other is to show how this new framework enabled James to rehabilitate empirical psychology, and in turn empiricist philosophy, in the face of the sort of Idealist attacks we investigated in Chapter Three, *above*. I will approach these tasks in reverse order because, as I will argue, James's notion of a stream of thought emerged out of his response to Idealists, not vice versa.

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[181] For two helpful overviews of the history of associationism, *see* (Young 1968; Young 1970, 94-100); both portray Hume as an influential, early member of this tradition.

It is a commonplace to call James's notion of a stream of thought a "framework" for his psychology. But little serious work has been done to show exactly what kind of framework the stream is supposed to provide, or why James should even need a "framework" at all. So I start by showing that leading accounts of James get themselves into trouble on this score.

I then argue that our failure to understand the epistemic standing of the stream of thought is a serious shortcoming in our estimation of James's role in philosophic history. The stream was not just a tool important for his work in psychology. The notion of a stream of thought had a profound impact on the development of empiricism. Students and colleagues like C. I. Lewis, Ralph Barton Perry, and especially John Dewey (on whom I focus) saw the stream as providing an account of experience that was both philosophically fruitful, yet genuinely scientific as well.[182]

Next, I begin my own account of the *Principles's* framework (that is, the stream of thought) by examining "The Spatial Quale," James's early essay on space perception (James 1879b). The piece offered empirical evidence that sensations are spatially continuous, not granular. I show that James's evidence against 'psychological atomism' underwrote a persuasive response to Idealists.

Idealists had charged that by proto-empiricists' own lights, there could be no real ideas of space. Such ideas could not be formed in the first place until the mind added extra-sensational relations to simple ideas. Since these relations were extra-sensational, they could not be taken to correspond to anything real in the external world.

James managed to avoid these problems by denying that spatial perception begins with atomic sensations that must be actively knit together, as it were, by the mind. He provided empirical evidence that raw sensation is actually chaotic and

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[182] The influence of the stream of thought on Lewis's empiricism can be seen in his description of what is "given in experience" at (Lewis 1929/1956, 58 ff.). He characterized what is given as a Jamesean "stream of consciousness." For a similar account, *see* (Lewis 1946, 439-440). For his part, Perry characterized James's fundamental philosophical orientation as that of empiricism, in (RBP, Chs. XXVI *ff*, esp. I.466). In this connection, *also see* (Perry 1931). I will explore the significance of the stream of thought for Dewey in Section Three, *below*.

continuous, not neat and discrete. The mind only need act to *subtract* from sensation what is useless. This means that no distorting mental additives are involved in spatial ideas, on James's view.

If James's view is defensible, then contra Green, psychologists *can* account for real ideas of space, after all. Thus, James presented his work not just as a new psychological theory about space, but as a defense of empiricism too.

I then provide textual evidence that links James's work on space perception with his stream-of-thought hypothesis. At the end of the chapter, I take a short interlude to revisit a topic I first broached at the end of Chapter One—viz., the various readings that characterize James as a Kantian. We will have enough under our belt to show, decisively I think, that these readings are mistaken.

At this point in the dissertation, we will have achieved a basic understanding of the empirical evidence that supports James's hypothesis that raw sensation is a stream of thought. We will also have seen how James used this evidence to respond to Idealists. In Chapter Five, I ask whether and in what sense the stream provided a framework for James's general psychology. I revisit Friedman's notion of constitutive scientific principles, and show that his account needs to be modified if it is to fit the *Principles*.

I replace Friedman's Kantian conception of the a priori with more pragmatic conception drawn from the work of C. I. Lewis. I buttress this account by adapting H. P. Grice's work on presuppositions. Here is a sketch of the new account I develop.

Friedman's work on constitutive principles in science is designed to make sense of mature, exact sciences—particularly mathematical physics since Newton. An entire, physics-oriented literature has grown up around this notion of constitutive principles (DiSalle 2002; Friedman 1997; Friedman 1999; Friedman 2001; Richardson 2002b; Stump 2003). But these accounts are not easy to apply to an *immature*, special science like Jamesean psychology. On Friedman's account, physicists like Newton need a priori, constitutive principles because their theories employ highly abstract mathematical models that must be coordinated with

experience if the theories are to be testable. The same problem does not arise for James's psychology. His framework and his specific theories are all cast in natural language, not formalisms that need to be given empirical content.

But James faced a different problem. The boundary between metaphysics and psychology was hotly contested, as we have seen throughout this dissertation. So James's framework for psychology had to provide a basic account of sensation, but not "basic" in the sense that the account had to confer *meaningfulness* on the specific theories of the *Principles*. Instead, James's account of sensation was "basic" in the sense that it specified a legitimate end-point for the scientific analysis of experience. In other words, it functioned as a stipulated boundary between metaphysics and psychology.

It achieved this by defining certain features of experience as, in James's words, "ultimate facts" for psychology's purposes. Any further questions about these features were to be relegated to metaphysics. Thus, Green had charged that psychologists cannot study the mind without resorting to metaphysics. James responded by cordoning off a set of data that the psychologist is not obligated to explain. I will call this variety of constitutive principle a "demarcation principle."

Demarcation principles have the following interesting property—they are both open to empirical evaluation, and play a constitutive role with respect to the rest of the theory. Consider the stream of thought. *Qua* description of sensation, the account had direct empirical support (from the early work on space perception, as we will see in this chapter). But *qua* demarcation principle, the stream account simply *stipulates*, on grounds that are both pragmatic and a priori in Lewis's sense, a boundary between psychology and philosophy.

2. The Stream Thesis—Accounts in the James Literature

For now, I will use "the stream thesis" to refer to the following claim: experience, at its most basic level, is given as a continuous and chaotic "stream" that must be parsed to be made intelligible. This is a first approximation of the thesis that, I claim, provided the theoretical backbone for the *Principles*.

One of the two main tasks I have set myself is to clarify the sense in which the stream thesis provides support for certain theories of the *Principles*. Now James scholars often claim that the stream thesis provided a framework for the *Principles*. But they rarely explain what kind of support, exactly, the thesis is supposed to provide. Worse, I can find no workable accounts of what *evidence* (if any) was supposed to support the thesis in the first place.[183]

Thus, clarifying the sense in which the stream thesis provided a framework for the *Principles* naturally breaks into two smaller tasks itself. First, on what evidence does the stream thesis rest? Second, in what way does the thesis support James's various theories in the *Principles*?

These questions are surprisingly difficult to answer. An important source of the trouble is that it is unclear just what was supposed to be the epistemic status of the stream thesis. Was the thesis meant to be a priori, or a posteriori? Did James think some purely *rational* analysis showed that the 18th-century notion of 'psychological atomism' was mistaken? Or did he think he had *empirical* reasons for holding that experience is a continuous stream? A third option is that the evidence for the stream thesis may have been rather less direct. For example, maybe the notion that consciousness is a stream was meant as a rhetorical device, not a contentful hypothesis. If so, it should be evaluated in terms of its success or failure as a guiding metaphor.

I will now extract some potential answers from leading accounts of James. None of these answers are workable, but reviewing them will help highlight some pitfalls around which my own account will have to steer.

[183] For example, Seigfried discusses the thesis that for James, thought is a stream that must be parsed according to "selective interest" (Seigfried 1990, 85-92). She claims that the role of this notion as an organizing framework is evident in the *Principles*, chapters 1-2, 9, 11-14, 17, 19, 21-22, 26, and 28 (p. 86). But she does not adequately explain what kind of support the thesis is supposed to provide the various theories of the *Principles*. Neither does she adequately explain what sort of evidence the thesis has to recommend itself. I will explore Seigfried's account in more detail in this section.

The evidence for the stream thesis is often held to come from *introspection*.[184] James is supposed to have had superior powers of self-observation, and to have used these powers to discover that experience is really not composed of discrete atoms at all. For example, Andrew Reck claims that James

> employed introspection in a more thoroughgoing fashion than ever before, uncovering features of consciousness which his predecessors had omitted. In brief, James discovered that consciousness is a field, or in his word, a stream. (Reck 1979, 216)

Reck claims that James's evidence for the stream is introspective. He praises James's use of introspection as more "thoroughgoing" than earlier introspectionists. But Reck gives no argument for why we should regard James's introspective power as any more "thoroughgoing" than Locke or Hume's.

Indeed, such commentators immediately run into a problem they rarely acknowledge: James *rejected* the infallibility of introspection. One of the general lessons of the *Principles*, according to James himself, was that introspection can be fruitful, but only when we realize that it is also difficult and fallible.[185] Since James held introspection to be fallible, it behooved him to offer more in support of the stream thesis than bald introspective assertions. But commentators like Reck provide scant explanation of what other evidence James offered for the stream thesis.

Another leading account comes from (Myers 1986), who agrees that the evidence for the stream thesis was meant to be introspective.[186] Myers cites a

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[184] In addition to the examples I discuss in the text, (Goodman 2004, 138) asserts that James's evidence for the stream thesis was introspective, though the point is made in passing. Goodman goes on to focus on James's late-career views of what we now call "nonconceptual content," especially as articulated in *A Pluralistic Universe* and *Some Problems of Philosophy*. The first section of Goodman's piece grounds these later views in passages from the *Principles*. Readers interested in how James thought we *conceptualize* our experiences are well advised to consult Goodman's provocative piece.

[185] Thus, James wrote: "But, since the rest of this volume will be little more than a collection of illustrations of the difficulty of discovering by direct introspection exactly what our feelings and their relations are, we need not anticipate our own future details, but just state our general conclusion that *introspection is difficult and fallible; and that the difficulty is simply that of all observation of whatever kind*" (PP, 191). James also discussed the fallibility of introspection in (James 1884b).

[186] Technically, Myers thinks James eschewed "introspection" altogether (Myers 1997). James did claim that what we usually call "introspection" is never a matter of one mental

passage from "The Stream of Thought" chapter where James did write that rigorous introspection reveals that consciousness is continuous, not atomistic. The contrary proto-empiricist view, that mental states are composed of discrete entities, is an illusion that arises from failing to separate the *objects* of experience from experience itself, according to James. Objects of experience (like thunderclaps and thimbles) are often discreet, but experience itself never is. James claimed that the apparent plausibility of 'psychological atomism' derives from a failure to distinguish experience from its objects. I will quote this passage at length:

> Does not every sudden shock, appearance of a new object, or change in a sensation, create a real interruption, sensibly felt as such, which cuts the conscious stream across at the moment at which it appears? Do not such interruptions smite us every hour of our lives, and have we the right, in their presence, still to call our consciousness a continuous stream?
>
> This objection is based partly on a confusion and partly on a superficial introspective view.
>
> The confusion is between the thoughts themselves, taken as subjective facts, and the things of which they are aware. It is natural to make this confusion, but easy to avoid it when once put on one's guard. The things are discrete and discontinuous; they do pass before us in a train or chain, making often explosive appearances and rending each other in twain. But their comings and goings and contrasts no more break the flow of the thought that thinks them than they break the time and the space in which they lie. (PP, 233)

In this passage at least, it sounds as though the chief evidence for the continuity of thought is of an introspective character. By looking inwards, we can tell that only the *objects* of consciousness appear jointed, whereas consciousness itself appears in a continuous stream.

Now Myers is the rare commentator who *does* ask why we should trust James's introspective reports about experience (Myers 1986, 75-76). In fact, Myers shows that the alleged introspective report of the above excerpt stands in tension with what James wrote elsewhere.

Here is how the conflict arises. Consider the following question (a question by which James was increasingly troubled). When we, for example, see a blue sky,

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state observing *itself*. Present mental states can only observe *prior* mental states through memory, for James. Thus, Myers proposes the term "retrospection" to describe James's view. I think Myers is right, but to avoid cumbersome terminology I keep to the phrase "introspection" in the text.

there is no doubt that we have perceptual access to the *object* of our experience—namely, blueness. But do we have introspective access to something other than the blueness? In particular, do we also have access to the conscious state *itself*, the state that "grasps" or "perceives" this blueness?

Myers takes note of one passage in the *Principles* (1890) where James appeared to doubt that we can really observe our own mental states separately from the *objects* of those mental states. Myers could have cited (though did not cite) several other passages that raised this doubt more clearly in the *Briefer Course*, two years later.[187] James's doubt crystallized in the (1904) essay "Does Consciousness Exist," according to Myers, where James flatly rejected the view that when we introspect, we can "see" mental states themselves, above and beyond the objects of those states. James categorically denied that experience has any such "inner duplicity."

Myers is astute to point out that this move undercuts the aforementioned, introspective refutation of 'psychological atomism.' Suppose we cannot introspectively separate a thought from a thought's object. Further, suppose the *objects* of thought (thunderclaps and thimbles) appear discrete. It follows that James has no remaining ground to assert that *thoughts* of discrete objects nevertheless appear continuous (Myers 1986, 76-79).

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[187] Here is the passage Myers does cite: "…In everyone, at an early age, the distinction between thought as such, and what it is 'of' or 'about,' has become familiar to the mind. The deeper grounds for this discrimination may possibly be hard to find; but superficial grounds are plenty and near at hand" (PP, 284). Myers could also have cited passages in the *Briefer Course*, where James raised this doubt more forcefully. There, James conspicuously omitted one of the five ultimate features the *Principles* ascribed to the stream of thought. The earlier work claimed thought "always appears to deal with objects independent of itself" (PP, 220). Without explanation, this basic law is omitted in the abridgement (*see* PBC, 140). Moreover, in the chapter entitled "Epilogue," James actively voiced a doubt that explains the omission. "Everyone assumes that we have direct introspective acquaintance with our thinking activity as such, with our consciousness as something inward and contrasted with the outer objects which it knows. Yet I must confess that for my part I cannot feel sure of this conclusion" (PBC, 400). In Chapter Five, I will return to these two passages from the *Briefer Course*, as the so-called "proto-phenomenological" interpretation of the *Principles* rests almost entirely on their shoulders.

Myers does not have a solution to this problem, which only underscores what a serious tangle this standard reading gets James into (the standard reading, namely, that portrays the evidence for the stream thesis as straightforwardly introspective). The tangle is particularly troubling given that James's doubts about our introspective access to consciousness as such clearly appear in the *Briefer Course*, and are even hinted at in the *Principles* itself (*see* fn. 187, *above*)—the very same works that give the official defense of the stream thesis, in the first place.

In my view, this weakness is fatal to the standard reading. I agree (with both Myers and Reck) that the evidence in question was meant to be *empirical*. But I will argue that when one looks at the actual evolution of the stream thesis, one finds that the evidence was more sophisticated than scholars have yet recognized—it was actively experimental, not just baldly introspective. One virtue of my reading is that it helps avoid the tangle Myers has exposed in the standard reading.

I read the lengthy excerpt quoted above as a misbegotten attempt to explain the cause of 'atomists'' alleged mistakes. The passage is not an attempt—and does not *purport* to be an attempt—to spell out the full evidence in favor of the stream thesis.

It is also common for James scholars simply to assert that the stream thesis provides a framework of some kind for James's psychology, but then to fail to think through what this might mean. For example, Charlene Seigfried accounts for the stream thesis in a way that (unwittingly) portrays the *Principles* as a colossal *petitio principii*.

On one hand, she calls the notion that we use subjective attention to parse the stream of consciousness the "Organizing Principle of the *Principles*" (Seigfried 1990, 85). A page later she uses the similar phrase "structural framework of the *Principles*" (p. 86). This language suggests that James's specific theories in the *Principles* are in some way *supported* by the stream thesis. The suggestion is that in some respect, without the principle in place the theories could not stand on their own.

But she simultaneously claims that the entire body of the *Principles* is an argument that seeks to *establish* the stream thesis. She writes that the book "is largely a sustained argument, drawing on all the psychological experimental evidence available, to prove this claim," viz., the claim that experience comes in a stream that must be actively parsed (Seigfried 1990, 85). In other words, Seigfried seems to think the stream thesis is what supports the various arguments of the *Principles*, yet also that it is these very arguments taken in their entirety that support the stream thesis. This would make the *Principles* into a viciously circular affair.

Her subsequent discussion does not clear up the matter. Despite her claim that the stream thesis is supposed to be "proved" by empirical evidence, she does not tell us what that evidence is, nor in what respect the thesis is supposed to "support" James's several theories.

Here is what she does say. The stream thesis constitutes an attack on Humean "sense data theories" that hold experience to be atomic, for Seigfried. James grants that

> all claims must be experientially grounded. But what these experiential findings disclose is that 'no one ever had a simple sensation by itself. Consciousness, from our natal day, is of a teeming multiplicity of objects and relations, and what we call simple sensations are results of discriminative attention, pushed often to a very high degree.' (Seigfried 1990, 86, quoting PP, 219)

It is not clear what "experiential findings" she is referring to, nor how they all conspire to disclose that no one ever experienced a psychological atom. Perhaps the reason Seigfried quotes James at length, here, is that she thinks his poetic language constitutes some sort of proof for the stream thesis.[188] In one place, it looks like she's

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[188] I propose this reading of Seigfried because her book includes a lengthy discussion of James's "hermeneutic methods" (Seigfried 1990, 171-259), in which she argues that

> William James's use of analogy and metaphor is more than a rhetorical device. It is integral to his hermeneutics and reflects his concrete analysis of human thinking.... Minds fertile with analogies, whether artistic or scientific, will be able to recognize many more aspects of experience than those whose senses are dulled by convention.... Analogy, the recognition of similarity despite appearances, is the basis for the distinctively human creativity which characterizes and unifies both poetic and conceptual thinking. (Seigfried 1990, 209)

suggesting that the stream thesis somehow rests on James's claim that no experience can ever be exactly repeated. But this just pushes the problem back. James claimed there were no repeatables in experience; Locke and Hume claimed that there were. Seigfried does not explain why we should prefer James's view.

I have now canvassed some leading views concerning the epistemic status of the stream thesis. None of these are satisfactory. Below, I argue that James *did* offer empirical evidence in support of this thesis, but the most important evidence was experimental, not baldly introspective.

As I have said, I agree that the stream thesis provided a framework for the *Principles*. So I will need to explain why, unlike Seigfried, my view does not saddle James with a grand *petitio*. How can the thesis both rest on empirical evidence, and yet provide constitutive support for other theories? The reason is that the primary empirical evidence for the stream is not to be found in the theories of the *Principles* taken as a whole (nor, contra Reck and Myers, in pure introspection). The stream is supported by an independent, narrow set of experimental data. Those data were first set out in James's early work on space.

Before I look at James's work on space, I want to pause to explain in more detail why the stream of thought is important to the overarching story of this dissertation, about the rise of empiricism.

In light of her discussion of Jamesean hermeneutics, perhaps what she had in mind in the earlier passage is that the stream thesis is really a poetic metaphor or analogy, and that it is in virtue of James's graceful use of such linguistic devices that he is able to express the true, stream-like nature of conscious experience. I agree that the stream thesis helps James develop a rhetoric in which to discuss experience. But I do not think this rhetorical role for the stream constitutes its main evidence. Moreover, this reading would contradict Seigfried's earlier claim that the stream thesis rests on empirical evidence.

3. The Stream of Thought and James's Empiricist Legacy

In 1942 John Dewey published an article entitled "William James as Empiricist." James had been dead for over three decades. Pragmatism,[189] the philosophy James made famous, had long been an important topic of American philosophical discussion. Dewey was American philosophy's single most dominant figure,[190] and pragmatism's elder statesman. It is therefore surprising to see how Dewey described James's most important philosophical legacy.

Dewey proclaimed that it was not the project outlined in *Pragmatism*, but the scientific conception of experience developed in the *Principles* that was James's most ingenious and historically important contribution. In fact, *Pragmatism* had to be read in light of the *Principles's* account of experience, wherein James used "scientific resources … not available to his predecessors" to reconceive empiricism. Dewey named the "predecessors" he had in mind: Bacon, Hobbes, Locke, Hume, and J. S. Mill (Dewey 1942, 52).

Dewey complained that even half a decade after the *Principles* was published, critics continued to ignore the scientific details of James's reconception of experience. According to Dewey, critics continued to attack empiricism as though it were still based on an 18th century account of the mind.

> The virtual revolution effected by James in traditional beliefs about experience has provided those who would base the conclusions of philosophy upon the analysis of experience with a new and effective intellectual strategy and set of tactics. We find even today European critics of empiricism engaging in elaborate refutation of empiricism upon the basis of identification of empiricism with outmoded sensationalism. In our country, critics who have presumably read James, still criticize empirical doctrines, even those of James himself, as if an empiricist must hold that ideas are copies of compounds of sensations and hence all lacking in original and productive significance.

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[189] I will use "pragmatism" to denote an HP concept, the thesis of which is that the meaning of an idea consists in the way the idea is used, and the canonical figures who held the thesis were Peirce, James, and Dewey.

[190] In 1950, the historian Henry Commager wrote: "So faithfully did Dewey live up to his own philosophical creed that he became the guide, the mentor, and the conscience of the American people; it is scarcely an exaggeration to say that for a generation no issue was clarified until Dewey had spoken" (Commager 1950, 100). This has become a standard way to describe Dewey's influence, though the line is typically left unattributed.

> I take it for granted that the *Principles of Psychology* is the greatest among the great works of James. … The work of James replaced a dialectic analysis of experience with one based upon scientific knowledge …. (Dewey 1942, 49-50)

Here as elsewhere,[191] Dewey cited the *Principles* as James's best and most influential work. The *Principles* recalibrated empiricism so that this doctrine no longer relied on a "dialectic analysis of experience." By this phrase Dewey meant that early modern empiricists had used a form of pre-scientific analysis to portray experience as composed of ideas that were passive copies of impressions. Dewey held that James discarded this speculative view, which owed to Locke and Hume. Instead, the *Principles* developed a genuinely scientific account of experience, and did so in a way that provided new methods and new data not just for psychologists, but for empiricist philosophers as well.

The claim that James reconceived empiricism—particularly in the *Principles*—was a Deweyan refrain. He elsewhere wrote: "One will understand the philosophy of James better if one considers it in its totality as a revision of English empiricism …" (Dewey 1925, 366). Dewey's message about the nature of that revision was consistent, too. Dewey writes that in the *Principles*,

> James denies that sensations, images and ideas are discreet and … he replaces them by a continuous stream which he calls "the stream of consciousness." This conception necessitates a consideration of relations as an immediate part of the field of consciousness…. And throughout his "Psychology" James … [criticizes] the atomism of Locke and of Hume as well as the a-priorism of the synthesis of rational principles by Kant and his successors, among whom should be mentioned in England, Thomas Hill Green, who was then at the height of his influence. (Dewey 1925, 369)

James is supposed to have revised empiricism by discarding the "atomism of Locke and Hume" without resorting to the "a-priorism" of Green and the British Idealists. The most important theoretical tool James developed for revising empiricism was the notion that "thought," James's generic word for any conscious state (PP, 186, 219), was not given as a collection of discreet ideas, impressions, or minima

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[191] *E.g.*, *see* (Dewey 1930, 23-24; Dewey 1935, 30-31; Dewey 1943). For example, Dewey wrote: "…For whatever be thought about its contents from the standpoint of present-day psychology, the book [the *Principles*] takes rank as a permanent classic, like Locke's *Essay* and Hume's *Treatise*" (Dewey 1943, 121).

sensibilia. Instead, James proposed that consciousness was a continuous "stream" out of which discreet objects and relations had to be actively carved.

If this hypothesis was right, it had an important implication for philosophers who conceive their task to be the analysis of experience. Such philosophers could no longer operate by purporting to disentangle compounds of passively received, atomic ideas. They now had to conceive of distinct ideas as entities that are actively carved out of the stream of consciousness on the basis of the organism's *interests*, interests that the philosopher and psychologist must seek to understand. This is the "productive significance" of Jamesean ideas that Dewey mentioned in the first indented quotation, *above*.

These passages suggest that James's use of the stream of consciousness to revise empiricism[192] was among his most influential philosophical contributions, for leading supporters like Dewey.[193] The stream was pivotal because of its role in James's scientific reconception of experience in the *Principles* (a book which has been very influential in the history of psychology as well, I should mention).[194]

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[192] Strictly speaking, I should write "revise proto-empiricism." That construction is cumbersome, so I will drop the "proto-" when writing in connection with James. This should cause no interpretive trouble, since I take proto-empiricism to be an early version of one continuously-evolving HP concept, empiricism. Recall that James referred to his own work as a form of "revised empiricism"; *see above*, p. 135.

[193] For a similar view of James's philosophic legacy from another important admirer, *see* Perry's "The Place of William James in the History of Empiricism" (Perry 1931). Perry developed an extensive reading of James as an empiricist. *See* RBP I.449-473, I.543-585. For James's opposition to neo-Kantian, Hegelian, and Schopenhaueran idealism, *see* I.711-730.

[194] An assessment of the legacy of the stream in contemporary psychology, especially in experimental psychology and psychoanalysis, as well as in literature, music, and philosophy, is (Pollio 1990). Two helpful, article-length assessments of James's impact on psychology more generally are (Leary 2003; Taylor 1995). Both conclude that James had a profound effect on psychology. Leary argues that James helped clarify key problems for the discipline to work out. He argues that several aspects of James's positive theories were influential, as well. Functionalists and behaviorists took over James's emphasis on the role of habit in experience. Gestalt psychologists (for more on which, see Henle 1990; Woody 1999), philosophical and psychological phenomenologists, and even behaviorists (via Dewey's "reflex arc") were all impacted by James's notion of a stream of thought. Leary also discusses the influence of James's view of selfhood, and mentions in a footnote (fn. 4) the influence of James's theory of emotion. Leary also has a closer analysis of the legacy in psychology of James's interpretation of the self (Leary 1990). Taylor identifies four characteristics of American psychology that trace back to James. The leading American

I now propose to investigate the epistemic status of the stream thesis, as well as its role in James's psychology, by tracing the thesis's historical genesis.[195] Among the earliest, detailed articulations of the thesis came in James's first article on space perception. The article appeared in 1879, and was entitled "The Spatial Quale." It was partly a response to the kind of criticisms we have seen in my previous chapter on Green.

4. "The Spatial Quale"

4.1 Summary of Previous Chapters; Aim of "The Spatial Quale"

I have already done much of the historical work needed to defend my claim of what was at stake in James's early articulation of the stream thesis. So let us sum up our progress from previous chapters.

We began in Chapter One with an account of Idealist attacks on empirical psychology. Idealists sought to show that psychologists built their projects on premises that actually entail skepticism. To demonstrate that the premises entail skepticism, Idealists constructed an interpretation of the history of British philosophy. They tried to show that Hume carried to their skeptical conclusion certain Lockean premises. These Lockean premises allegedly undergirded not just Hume's philosophy, but the empirical psychology of contemporaries like Herbert Spencer and J. S. Mill as well. So by showing how Hume reduced Lockean premises to absurdity, Idealists advanced an interpretation of philosophical history that also functioned as a not-so-veiled attack on empirical psychology.

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psychologists who typify commitment to these Jamesean characteristics, according to Taylor, were Gardner Murphy, Henry Murray, and Gordon Allport. Taylor also discusses a significant faction of American anti-Jameseans, many of whom trace intellectual ancestry to Wundt's laboratory (Boring and Tichener are the most famous examples). The centenary of James's Principles sparked several collections of articles that assess various aspects of James's influence on psychology, including (Donnelly 1992; Johnson and Henley 1990). Other resources that assess the historical legacy of the Principles include a special issue of History of the Human Sciences devoted to James. One useful article contained there is (Skrupskelis 1995). One helpful collection that assessed the significance of the Principles for philosophy is (DeArmey and Skousgaard 1986).

[195] In Appendix II, I take up the objection that my method involves a confusion between the context of discovery and the context of justification.

In Chapter Two, I showed that James participated in various philosophical communities that grappled with such Idealist attacks. I highlighted two groups that provide especially important context. We met the group most relevant to James's early work on space on pp. 85-88, *above*. There, we saw that James wrote "The Spatial Quale" (James 1879b) as a response to a piece Cabot delivered to the second incarnation of the famed Metaphysical Club.

Since both Cabot's and James's paper cite mostly empirical psychologists, not philosophical Idealists, it is important to remember the following. Their club had been reading Green's "Introduction" to Hume, along with Edward Caird's book on Kant. It was in the context of discussions about these two books that the club argued over what they characterized as *Kantian* versus *empirical-psychological* views of the mind, as we saw. Cabot's paper proposed a theory of space perception from the Kantian side, the side Green and Caird were defending in print. James's "The Spatial Quale" was a response on behalf of the psychological side, which he termed "empiricism."

Soon after "The Spatial Quale" was published, James began to gain stature in international circles, and began participating particularly in an English intellectual community that was engaged in its own responses to Idealists, as we saw *above* on pp. 84 and 94-104. The community centered on a British club called "The Scratch Eight." During the early 1880s, James became a member of the prestigious group. It consisted of key contributors to *Mind*, as well as the journal's first editor Croom Robertson. Especially after Green himself appeared in *Mind* throughout the year of 1882, Robertson encouraged responses to Idealism on behalf of empirical psychology. James developed his account of the stream of thought in several subsequent articles in *Mind*, such as "On Some Omissions of Introspective Psychology" (James 1884b), which was the published version of a talk delivered at a Scratch Eight meeting (RBP, II.38-39).

I will now explain exactly how James's early work on space, the work he began in the second Metaphysical club, functioned as a response to Idealists.

In my view, the most important paper in James's early defense of empiricism is "The Spatial Quale" (EPs, 62-82). Though this essay is not anthologized in any contemporary collections of James's philosophy (save for the *Works*), its historical importance can hardly be overemphasized. The article marks the beginning of James's serious attempt to develop an empirical psychology based on a *stream of thought*, rather than on associations of atomic ideas.[196]

Let us begin our discussion by asking what "The Spatial Quale" was supposed to accomplish. We find our answer by looking at how James opened and closed the essay.

"The Spatial Quale" was written in July of 1878 (*see above*, p. 88), and published in the *Journal of Speculative Philosophy* the following January. Cabot's club paper had appeared in the July 1878 number of the same journal. So James began his piece by discussing Cabot's "hegelian" (*sic*) view of space perception. Cabot's view is made to sound remarkably like Green's. Here is how James began his essay.

> Mr. Cabot, in his acute and suggestive article on the notion of space in the July number of this journal, argues that, as it forms a system of relations, it cannot be given in any one sensation, and concludes that it is a symbol of the general relatedness of objects constructed by thought from data which lie below consciousness. …
>
> Mr. Cabot begins his article with the hegelian thesis that extension has only negative predicates; that it signifies only the indefinite "*otherness*" of all objects of perception to each other. (EPs, 62)

Both the critical and the constructive parts of Cabot's view sound like they come straight from the pages of Green, on James's description. The critical part was that space is "fundamentally" (EPs, 62) a network of related spatial positions; since we cannot have direct sensory access to relations, we cannot have direct sensory access to spatial areas or extended objects, Cabot held. This critical view echoes Green's attack on proto-empiricism.

Cabot's positive view, as James saw it, was that space must therefore be a product of the mind's *rational interpretation* of its own sensations. Specifically, the

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[196] Perry also holds that this early work on space was important in the development of James's empiricism (RBP, I.564-565).

mind tends to interpret its sensations as signs of objects existing in the external world. Spatial perception stems from our judging contemporaneous sensations to be (literally) outside of one another. For example, my perception that the ruler on my desk is extended stems from my judgment that my mental image of the ruler is composed of a set of minima sensibilia that are all separate from, or outside of, one another.[197]

Cabot called his targets "psychologists," citing people like Joseph Delboeuf, Thomas Brown, and J. S. Mill, (Cabot 1878, 226, 228-229). According to James, though, Cabot shared a pernicious assumption with those whom he criticized. The pernicious assumption was that space is necessarily composed of a network of related positions. James explained:

> Almost all those who have written on the subject [space perception] hitherto have seemed to regard it as axiomatic that our consciousness of the whole of space is formed by adding together our perceptions of particular spaces; that there can be no perception of any extent at all without a perception of particular positions within that extent, and of their distances and directions from each other.

The common assumption was that spatial perception is impossible unless one comes to perceive a network of positions standing in exact, definable relations to one another. James's project in "The Spatial Quale" was to undercut this common assumption.

In insisting that collections of sensory corpuscles must be actively "added" together to form a perception of space, Cabot was effectively granting 'perceptual atomism' at the outset. Thus James portrayed Idealists like Cabot as sharing this empiricist commitment. Crucially though, the two groups disagreed on whether reality is to be associated solely with those corpuscles—that is, they disagreed about whether to accept the reality principle.

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[197] Cabot's words: space is created by the mind, qua "… Self-consciousness … returning upon itself and its impressions, and qualifying these as true or false, real or unreal, through their rational interpretation as signs of something ulterior …" (Cabot 1878, 235-236). When he uses the phrase in this manner, Cabot capitalizes "Self-consciousness" whether or not it is the first phrase of a sentence. Green presented a similar view of space, treating existence in space as a condition that is equivalent to the mutual "outwardness" of different points (GWR, II.240-241).

When we turn to the end of James's essay, we find that he meant his attack on 'psychological atomism' to count decisively against Hegelians (or "Kantians," by the end of the article) like Cabot, but actually to bolster "empiricists."[198] Leading representatives, like Mill, of the latter group had "gone astray, like lost sheep," and James intended to shepherd them back to pasture (EPs, 79-82).

For now, I will baldly assert that the notion of empiricism at play here is an HP concept, and indeed an ancestor of our contemporary interpretation of empiricism (CIE). I will argue for these claims, later. For now, the important point is that James sided with empiricists in the argument over space perception. And the last phrase of the essay triumphantly declared that "the Kantian doctrine seems literally left without a leg to stand upon" (EPs, 82).

The essence of the dispute between empiricists and Kantians, we are there told, was a disagreement over synthetic a priori knowledge. Empiricists deny that we can have such knowledge, Kantians affirm it (EPs, 82). Thus, the claim that Kantians are left legless at the end of the article is based on James's judgment that synthetic a priori knowledge has been placed in serious jeopardy.

In fact, one of James's most important moves in this early paper was implicitly to reject Green's way of characterizing empiricism. For James, it was not the reality principle that divided empiricism from other philosophies. James thought certain empiricists (he named J. S. Mill, Bain, and Spencer) had misunderstood the essence of their own position. *Some* sort of native mental processing was certainly required for coherent perception of reality. What was really at issue was Kant's question, *is there synthetic a priori knowledge*? To count as an empiricist, it was necessary to

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[198] James apparently regarded the group he referred to at the beginning of the article as "hegelians" to be a subset of the group he later called "Kantians." James included Helmholtz, for example, under the latter category, but presumably would not have included him under the former. Green or Cabot, by contrast, would have easily fit under either category.

What ought we to make of the fact that James often left "hegelian" uncapitalized, while he capitalized "Kantian" and "Kantist"? Perhaps James meant to suggest that Idealists took their inspiration from only a loose reading of Hegel. James was no admirer of Hegel, either, so this issue should not have an impact on my reading.

deny the prospect of such knowledge, according to James (EPs, 82).[199] Accordingly, we will examine how James's anti-hegelian/Kantian account of space perception affects the plausibility of synthetic a priori knowledge.

Since denying synthetic a priori knowledge was a necessary condition for being an empiricist, let us remind ourselves to what this knowledge amounts. Recall that Kant divided judgments into those that are analytic, and those that are synthetic. Analytic judgments have predicates that are wholly contained in their subjects, and so are always a priori. Synthetic judgments are those whose predicates *add* information not contained in the subject. A chief burden of Kant's first *Critique* was to show that in addition to synthetic a posteriori judgments, there are also synthetic *a priori* judgments.

Why would James care so much about synthetic a priori knowledge? Synthetic a priori knowledge was supposed to be necessary, unchanging, and universal, like analytic a priori knowledge. But unlike analytic a priori knowledge, *synthetic* a priori knowledge was also supposed to give nontrivial information about the structure of reality.

Paradigmatically, the axioms of Euclidean geometry were supposed to be synthetic a priori. On the one hand, the axioms were supposed to be a priori and necessary (CPR, A24, B39). This is because it was impossible even to conceive of a representation of space that violated Euclidean axioms, according to Kant (CPR, A24, B39 *ff.*). But on the other, the axioms went beyond analytic truths—they were not statements true in virtue of their predicates being contained in their subjects (CPR, B16-17). The axioms were thought to be synthetic statements that describe the (necessary) structure of phenomenal space, at least for creatures with minds like ours.

Kant introduced the idea of a "transcendental exposition" in the first *Critique* precisely in his discussion of space perception. For Kant, the allegedly synthetic a

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[199] This is a view James would come to share with some logical positivists, who came to wrestle (as did James, to a lesser extent—more on this below) with the implications of the new non-Euclidean geometries for Kant's conception of synthetic *a priori* knowledge (Friedman 1992, xii-xiii; Friedman 1999, xv, 2).

priori character of Euclid's axioms could only be accounted for by supposing that space is a pure form of outer intuition.[200] This is an example of a transcendental exposition, in which we establish one proposition to be necessary by showing it to be a necessary precondition for some synthetic a priori truth already in hand.

Although neo-Kantians like Green and Caird rejected major portions of Kant's metaphysics (in particular, they rejected the notion of a noumenal world standing "behind" the phenomenal; *e.g.,* GWR, II.9), they retained Kant's idea that Euclid's axioms were synthetic a priori, in that the axioms were held to describe conditions of any possible outer experience (*e.g.,* GWR, II.246, 248).[201] In other words, what explains the necessity of Euclid's axioms was to be that these axioms described constraints on any possible perception of space or extension. Space was still to be a pure form of intuition, a fact to be gleaned only by transcendental exposition, not empirical investigation.

Recall from Chapter Three that one of Green's chief criticisms of proto-empiricism was that the combination of its core premises—the reality principle and 'perceptual atomism'—entails an absurdity. The absurdity was that the sphere of

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[200] The argument went roughly like this. The judgment, *a straight line between two points is the shortest* is necessary. But the necessary connection between the subject and predicate cannot owe to the meaning of words, because the notion of *shortest* is not contained in the notion of *straight line between two points*. Some "pure" or a priori element had to be added for these concepts to get glued together with the force of necessity (B16). The element had to be pure because a proposition that can only be conceived as necessary, such as this geometric judgment, must be a priori (B3).

Kant argued that since all objects we perceive through the "outer sense" necessarily conform to basic Euclidean judgments like the sentence under consideration, these judgments must describe the pure, necessary form of all outer intuition. Thus, *space* turns out to be nothing but this pure form of outer intuition—in other words, space is the "form" the mind imposes on the "matter" of outer sense. This argument exemplifies Kant's notion of a transcendental exposition because it is *only* insofar as one supposes that space is a pure form of outer intuition that one can account for the synthetic a priori character of geometry (CPR, B40-41).

[201] I am papering over some complications, here, because Green denied that there is a sharp boundary between analytic and synthetic propositions (GWR, II.5-6). However, Green explicitly accepted the notion that the axioms are synthetic a priori in the sense relevant to my discussion. Green says that "Kant was quite right in saying that the judgment 'a straight line is the shortest way between two points' is synthetic and *a priori*, in the sense that" the statement is non-trivial, non-empirical, and "valid for all possible objects of experience" (GWR, II.246).

reality must be empty. Green also argued that Hume's account of space perception contradicts the copy principle (Hume's version of the reality principle). The only way to remedy such problems, allegedly, was to replace the reality principle with a full-blown, transcendental metaphysics.

That is the significance of synthetic a priori knowledge to this discussion. Those who hold that there is synthetic a priori knowledge of space (via Euclidean geometry) cannot be satisfied with an empirical account of the mind—they will insist that the synthetic a priori character of such knowledge cannot be accounted for without postulating that experience has a *necessary,* transcendental structure, for creatures like us.

This is why James held that empiricists must reject the view that we have synthetic a priori knowledge. If experience has a *necessary* structure, that structure could only be gleaned a priori, not through the kind of empirical investigations psychologists purported to undertake.

One final caveat is in order. 'Psychological atomism' was a thesis much more naturally ascribed to associationists than to Idealists like Cabot and Green. True, Cabot published a response to "The Spatial Quale," and did not take issue with the characterization. In that response, one might make the case that he tacitly espoused the commitment (Cabot 1879, 201-202). But I do not see why Idealists *need* to have been committed to 'psychological atomism.'

Indeed, Green typically wrote that space was a set of relations thought imposed on "sensible objects" (GWR, II.243), not on raw sensations or minima sensibilia. Perhaps one might argue that somehow, it was only in virtue of operating on raw sensation that thought was able to order these "sensible objects." But Green held that the mind could have no access to raw sensations that were not already "constituted" by thought (recall his catchphrase: "a consistent sensationalism must be speechless"). So it is hard to see what evidence Green could ever have had for the existence of raw, minima sensibilia in the first place. Thus, I suspect he would have rejected 'psychological atomism' outright. Green died suddenly in 1883 without having responded to such characterizations of Idealism, though.

In my view, James would have been on more firm ground had he only saddled associationist psychologists, not Idealists, with 'atomism.' This would not have required him to compromise his own argument. James's project in "The Spatial Quale" was not to *refute* Idealism, but to refigure empiricism so as to evade Idealist attacks. Rejecting 'psychological atomism' was at the center of his explanation of how *empiricism* could be rebuilt to withstand the Idealist critique. James was overreaching, I think, when he further suggested that the evidence against 'psychological atomism' also provided a refutation of Idealism as well. He need not, and should not have gone so far.

I hasten to make a similar point about what kind of impact we should take James's arguments to have on the alleged existence of synthetic a priori knowledge. His burden in "The Spatial Quale" was not to show it to be *impossible* that humans can have synthetic a priori knowledge. The challenge from Green, remember, was weaker. The challenge was merely to come up with a consistent account of space perception that did not support synthetic a priori knowledge of space. After all, Green did not work out his own constructive proof that space is a necessary form of intuition—at least not in much detail. Instead, his most famous and most sophisticated arguments for Idealism (those in the "Introduction") had the form of a *reductio ad absurdum*.

The chief targets of the *reductio* were Locke, Berkeley, and Hume. Green regarded the latter as having articulated the strongest empirical accounts available of space perception (and of many other difficult phenomena as well). Indeed, when Green finally developed his own Kantian account of space perception, his argument was that such a theory was established purely by Hume's failure.[202] Thus, if James could rescue Hume, he could avoid Green's argument for Idealism.

True, in a sense there were *two* routes to establishing the truth of Idealism, for Green. The first and most detailed was the reductio route. But I have also reviewed

[202] "So far Kant's doctrine [of space perception] seems irrefragable. It is the logical result of the failure of Hume's attempt to treat space as an aggregate of feelings" (GWR, II.242). The sense of "logic" here is Hegelian—Green often treated Kant as the necessary next stage, after Hume, in the dialectic of history. This much can safely be gleaned from (INT, §§1-5).

Kant's constructive argument for an Idealist account of space perception, an argument Green recounted, buried though this recounting was in his relatively obscure *Lectures on Logic*. According to this account, one can only explain the alleged synthetic a priori character of geometry by treating space as a necessary form of intuition. Did not this argument place a stronger burden on James than simply to develop a consistent, empirical account of space perception?

Here James had a neat response: Helmholtz's development of a consistent *non*-Euclidean geometry shows that Euclid's axioms cannot be synthetic a priori, after all (EPs, 82). They cannot be synthetic a priori because they cannot be necessary—Helmholtz's work shows that we *can* conceive of non-Euclidean space. Indeed, we can even demonstrate that the axioms describing this new space are themselves consistent.

So there is no longer any need, James seemed to think, to respond to this second argument for an Idealist account of space perception. Accordingly, his task (vis a vis Idealists) is merely to develop a consistent, empirical account of space.

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So James's goal in "The Spatial Quale" was to provide a consistent account of the mind that does not concede space to be a *necessary* form of intuition—does not concede that the mind necessarily imposes a Euclidean structure onto perceptual experience. If spatial perception comes equipped with a necessary form, this would open the door to the Kantian demand for a metaphysical (read: a priori) explanation of such necessity. Anyone, like James, who wanted to rescue empiricism had to show how there could be a coherent empirical study of the mind that was intelligible in the *absence* of any such metaphysical analysis.

James's argument can be divided into two steps. His first step was to demonstrate, on grounds empirical psychologists could themselves accept, that their core commitment to 'psychological atomism' was not empirically defensible. James cited experimental evidence against the existence of minima sensibilia. Our perceptions of extended spatial areas are demonstrably *not* built out of atomic sensory units, he showed.

James's second step was to rebuild empiricism without relying on 'psychological atomism,' and without conceding that spatial perception has a necessary structure. James did this by postulating an early version of the stream thesis, where all sensation comes to us as a chaotic stream with a native "feeling of extensity." James argued that the perception of *distinct positions* had to be explained by the prior perception of whole spatial areas, not vice versa. The mind perceives distinct spatial positions when it uses strokes of attention to focus on individual positions inside the stream that hold some emotional interest.

Since James's theory only requires the mind to *subtract* information, not to *add* any distorting relations, he thought he could preserve realism about space. Moreover, we can reflect all we like on the ways minds actually parse their respective streams of thought—this will never lead us to necessary, a priori knowledge, on James's view. *How* we come to discriminate or compare parts of our stream of consciousness is a matter of the organism's ever-changing interests and (perhaps evolutionary) needs. Thus, no present regime for parsing the stream of consciousness is universal or necessary.

I will now examine each step in detail.

4.2 Empirical Evidence Against 'Psychological Atomism' in "The Spatial Quale"

I begin with the first step, wherein James sought to undermine the proto-empiricist commitment to 'psychological atomism' on empirical grounds.

His strategy was to demonstrate that any account of space perception premised on this thesis entails two empirical predictions, both of which contradict available data. First, if perceiving space (and extension) amounts to perceiving relations between sensibilia, one would expect to find that every perception of a spatial area (and every perception of an extended object) involves a perception of at least two minima sensibilia. Second, suppose one's ability to perceive relations between spatial positions in some area is inhibited. One would expect to find that our perception of that area *as extended* would also be inhibited. Surprisingly, both predictions are violated by experimental evidence.

Consider the first prediction. James identified patches of the visual and tactile fields that we perceive as extended yet *not* as composed of any distinct positions or points. This violates the first prediction, and thereby suggests that 'psychological-atomistic' accounts of space must be incorrect. We do not perceive space and extension *in virtue* of perceiving (or imposing) relations between distinctly-perceived positions.

James used both informal experiments readers can perform on themselves, and published data from other experimental psychologists,[203] to make his case. He began with informal evidence:

> If the reader will fix his eye steadily on a distant point, and bring his hand gradually into the field of view, he will first see the hand, and see it as extended and possessing parts, but will be wholly unable to count the fingers. He will see objects on the same portions of the retina without recognizing what they are. In like manner if he turn his head upside down, or get into some unnatural position, the spatial *relations* of what he sees—distances, directions, and so forth—will be very uncertain, positions and measurements vague; but who will pretend that the picture, in losing its *order*, has become any the less spatial? (James 1983, 69)

There are two bits of evidence here. First, James pointed out that when we move our hand into the periphery of our visual field, we perceive the hand to be extended, yet we do not clearly perceive individual fingers. This is an example of an object we perceive as extended without perceiving any distinct spatial positions that compose the perceived object. This violates the first prediction of 'psychological atomism.'

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[203] A common but misguided view is that since James did not produce many experimental results of his own, and indeed hated working in his own laboratory, he was "led to reject experimental psychology" (Evans 1990, 440). Evans, for example, offers pages of evidence establishing that James did not like to *perform* experiments. Evans then proceeds to explain why James rejected experiment as a valuable tool for psychology, as though the two claims were equivalent. Evans finally wonders why American psychologists have been so impressed by James, given the latter's supposed rejection of experiment. Though I cannot undertake a study of James's multifaceted uses of experimental evidence here, I note that his work on space perception alone shows real interest and ingenuity at bringing to bear experimental evidence for theoretical needs. True, there were aspects of much "brass instrument psychology" (*e.g.*, the psychology emanating from Wundt's lab) that James rejected, particularly when experimental techniques were premised on 'psychological atomism' (as is rightly noted at Evans 1990, 441-442). But again, one should not infer that it was experiment *per se* that James rejected. James commonly put experimental results to use, often to devastating use, in the *Principles*.

If there is any doubt that we perceive the hand to be extended, a page later James suggested we try the same experiment while wiggling the fingers. We now perceive motion, which indisputably involves the perception of spatial area, for James. But we still will not perceive the individual fingers distinctly (EPs, 70).

The second bit of evidence in the passage just quoted works as follows. James pointed out that when we move our head into odd positions we seem to lose the ability to measure relations like distance, direction, and so on, in a spatial area. But we do not thereby suffer a disruption in our perception *that* what we are looking at is spatially extended. This is an example of a perceived area that violates the second prediction of 'psychological atomism.' Our perception of relations in the visual field is disrupted, but there is no effect on our perception *that* the visual field looks to be extended.

As I noted in Chapter Three, most psychologists followed Berkeley and Hume in maintaining that both the visual and tactile fields were built from minima sensibilia. Accordingly, James provided experimental evidence that neither sensory modality is, in fact, composed of minima sensibilia.

We have just seen some of his evidence concerning the visual field. Here is an important sample of his tactile evidence:

> If the reader will find a portion of his skin—the arm, for example—where a pair of compass-points an inch apart are felt as one impression, and if he will then trace lines a tenth of an inch long on that spot with a pencil-point, he will be distinctly aware of the point's motion and vaguely aware of the direction of the motion. The perception of the motion here is certainly not derived from a pre-existing knowledge that its starting and ending points are separate positions in space, because positions in space ten times wider apart fail to be discriminated as such when excited by the dividers. (EPs, 69-70)

James asked us to consider the smallest area on a subject's skin that, when stimulated, feels to the subject to be extended. Let us call this the "smallest extended area." Now consider the smallest patch on the subject's skin inside which she will be able to perceive two distinct points or positions. Let us call this the "smallest pointillistic area." The first prediction of 'psychological atomism' requires that the smallest pointillistic area be smaller than or equal in size to the smallest extended area. In fact, the reverse is true. The smallest *extended* area is smaller—ten times smaller, it turns out—than the smallest pointillistic area.

Why is any 'atomist' committed to the smallest pointillistic area being equal to, or smaller than, the smallest extended area? An 'atomist' holds that we perceive extension in virtue of perceiving relations between minima sensibilia. This means that all 'atomists' must hold that if there are zero or one sensibilia contained in some perception, that perception will not be of extension. However, 'atomists' may differ on the precise, smallest number of related sensibilia required for a perception of extension. Some 'atomists' might hold that only two related sensibilia are required for such a perception. In that case, one would expect the smallest pointillistic area (the smallest area inside which one can identify two distinct points) to be *equal* in size to the smallest extended area. But other 'atomists' might reasonably hold that at least three, perhaps, or four sensibilia, or whatever, must be drawn together in order to perceive extension. In all such cases, one would expect the smallest pointillistic area to be *smaller* than the smallest extended area. After all, the smallest extended area will now contain at least three sensibilia, or four, or whatever; but the smallest pointillistic area, by definition, contains exactly two sensibilia. In short, all 'atomists' must hold that the smallest pointillistic area should be *smaller* or *equal* in size to the smallest extended area.

Quite the opposite turns out to be true. According to James, the smallest *extended* area is about ten times smaller than the smallest *pointillistic* area, given that both measurements are taken on the same portion of skin. If true, the smallest pointillistic area would be another example of a perceptibly extended patch that does not contain at least two sensibilia, another violation of the first prediction of 'psychological atomism.' James showed how to use a simple compass to make the relevant measurements, for the case of tactile perception. How does his demonstration work?

James took the fact that we can perceive motion across a patch of skin as evidence that we feel that patch of skin as extended. So he measured the smallest extended area by measuring the shortest distance of skin across which we can feel motion. James then made another measurement on the same patch of skin. When the skin is stimulated by two compass points that are sufficiently close together,

blindfolded subjects report feeling only one impression. James measured the smallest distance at which subjects can reliably distinguish between a dual and a single impression. He took this distance to give the size of the smallest area inside which we can identify at least two separate points or positions—in my language, he took this distance to be a measurement of the smallest pointillistic area.

But when one actually takes this second measurement, one finds that such an area will be ten times *larger* than the smallest extended area—quite the opposite of what 'psychological atomism' predicts. Thus, the tactile perception of extension cannot be built from relations between minima sensibilia. James though Green, Cabot, *and* associationists were mistaken in their shared commitment to 'psychological atomism.'[204]

James held that the perception of motion also entailed the perception of *temporal* duration. He cited an experiment by the Austrian physiologist Sigmund Exner (a Helmholtz student). The experiment shows that our perception of motion through time is measurably more acute than our perception of distinct moments. Therefore, time perception cannot be broken into the perception of a collection of temporal atoms, James concluded. Thus, though the focus of "The Spatial Quale" is obviously spatial perception, James also included evidence that 'psychological atomism' cannot constitute a successful theory of *temporal* perception, either.

Exner had conducted a stroboscopic experiment. He demonstrated that we cannot distinguish which of two sparks has flashed first when their time interval is reduced to .045 seconds. James took this as an approximate measure of how fine-grained our ability is to perceive distinct *moments*, the best candidate for temporal atoms. Now, if the sparks are moved so that their respective circles of irradiation overlap for the viewer, the two events will be perceived as motion—as one spark moving from the location of the first spark's flash to the location of the second. James noted that the interval between the flashes can then be reduced all the way to .014 seconds before the viewer fails to perceive the motion. James thought this

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[204] Again, I worry that it was unfair to saddle Idealists with 'psychological atomism.' *See* my discussion of this point, *above*, at pp. 246 *ff.*

result shows that our perception of a continuous temporal duration (in this case, the time lapse between the start and end of the apparent motion in the second measurement) is over three times more refined than our ability to distinguish disconnected temporal *moments* (EPs 70-71). James concluded that our temporal experiences cannot be built out of a perception of distinct, passing moments.

In the *Principles*, James included these latter results in both the chapters on the "Perception of Space" and on the "Perception of Time." In both chapters, he supplemented these results with accounts of similar experiments (PP, 578, 811). I include the time experiment here to reinforce my claim that James's early work on space included a set of evidence against 'psychological atomism' in general, and thus provided early support for the stream thesis.

The point I want to emphasize is that James's rejection of 'psychological atomism' was based on a rich collection of empirical evidence. Since the rejection of 'psychological atomism' entails the stream thesis, this means *the stream thesis is supported by empirical evidence*.

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How does James's criticism of minima sensibilia fare with respect to Hume? Hume did not baldly assert that our visual perceptions are composed of minima sensibilia. He offered quasi-empirical evidence of his own:[205]

> 'Tis therefore certain, that the imagination reaches a *minimum*, and may raise up to itself an idea, of which it cannot conceive any sub-division, and which cannot be diminished without a total annihilation. …
>
> 'Tis the same case with the impressions of the senses as with the ideas of the imagination. Put a spot of ink upon paper, fix your eye upon that spot, and retire to such a distance, that at last you lose sight of it; 'tis plain, that the moment before it vanish'd the image or impression was perfectly indivisible.
>
> …Nothing can be more minute, than some ideas, which we form in the fancy; and images, which appear to the senses; since there are ideas and images perfectly simple and indivisible. (THN, I.ii.1, 27-28)

In the above passage, Hume offered evidence that our visual perceptions are atomic. He directed the reader to put an ink spot on a blank sheet of paper. The reader was to move away from the paper, slowly, until the ink spot disappeared from the visual

[205] I thank James Mattingly for calling my attention to this passage.

field. At the moment before the spot disappeared, Hume wrote, that spot must have been perceptually indivisible. The entire visual field was supposed to be made up of tiny, perceived spots, or minima sensibilia, each of which is the size of the smallest-perceivable ink spot.

James's data are fatal, it seems to me, to Hume's account of space, insofar as Hume's account relies on the kind of minima sensibilia we allegedly isolate using this ink-spot procedure. For Hume, it is only in virtue of perceiving relations *between* these 'perfectly indivisible" areas that we are supposed to perceive space or extension. But James's results show that when one isolates a patch of skin "perfectly indivisible" into distinct points (Hume's phrase—non-pointillistic areas, in my language), that patch *will still appear to be extended*. If it be doubted that such a patch still appears to be extended, James would have noted that we can still perceive motion inside such patches. We can experimentally isolate non-pointillistic areas in the periphery of the visual field that *do* appear to the subject to be extended. Similar results, I expect, could easily be reproduced in the center of the visual field.[206]

However, James's results concerning the periphery of the visual field by themselves provide enough empirical evidence to refute Hume. Hume claimed we perceive extension *in virtue* of perceiving the "manner" in which multiple minima sensibilia are arranged in our perceptual fields. James has given counter examples, showing that there exist some tactual and visual areas that we perceive as extended, though those areas do not contain multiple minima sensibilia. It does not matter whether these areas are in the periphery of the visual field or on the skin. Since they amount to cases of spatial perception without the perception of two or more distinct positions, the are counter-examples to Hume's view.

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[206] Here is an experiment one could run to establish this. Instead of using an ink spot on paper, one could use a white board with a hole in it, set against a black background. One could then follow Hume's suggestion and find the greatest distance at which the hole can be reliably identified by a subject. Then one could fashion a moving piece that fits inside the hole. James's view predicts that subjects will be able to perceive motion inside this hole at even greater distances—distances where a hole fit with no moving parts would be invisible to the subject. I do not have the resources to run such an experiment properly.

This concludes my review of James's empirical evidence against 'psychological atomism' in his early work on space. Let us now turn to the positive, stream-based account of space perception advanced in "The Spatial Quale."

4.3 The Stream-Based Account of Space Perception in "The Spatial Quale"

Now on to step two—James's positive account of space perception. The data I reviewed in the last section suggested to James that our perception of extended spatial areas is direct, and involves no juxtaposition of alleged atoms of experience.

Instead, James claimed that extension was a basic property of all sensation. Just as we speak of a sensation's "intensity," we should also speak of a sensation's "extensity" or "voluminousness." James wrote:

> Why should we hesitate to call it [space] an ingredient of the *sensation* yielded to us by the retina or skin, which intuits the items? Everyone will admit the degree of *intensity* of a sensation to be a part of its sensible quality. The brightness of the blue sky, as I now look at it, betrays its intensity by pricking, as it were, my retina. The *extent* of the blue which I at this moment see, seems to be an attribute given quite as immediately. A broad blueness differs from a narrow blueness as immediately as a bright blueness from a sombre blueness. (EPs, 65)

Nobody disputed that intensity is a property of sensation. James held that *extensity* is a property of sensation, as well. In fact, he held that *all* sensation had some level of extensity. He termed this property of sensation "the property of extension or spatial *quale*."

It may be useful to think of James's basic notion of experience this way. Like a portion of an actual stream, a portion of James's stream of thought has length, depth, and breadth. The length corresponds to the subject's perception of *temporal duration*. The depth corresponds to the *intensity* of a sensation. And the breadth corresponds to the *extensity*, or spatial quale, of a sensation.

In the above passage, the mention of "retina or skin" is not meant as an exhaustive list of modalities that contribute spatial qualia. James held that *all* sensation, regardless of modality, has a spatial quale:

> It seems to me that all our sensations, without exception, have this spatial quale. I am surprised that Riehl, whose article is in other respects so just, should regard it as an exclusive endowment of the retina. … The squeaking of a slate-pencil is less spatial than the voluminous reverberations of a thunderstorm; the prick of a pin less so than the feeling of a warm bath; a little neuralgic pain, fine as a cobweb, in the face, far less

> so than the heavy soreness of a boil or the vast discomfort of a colic or lumbago. (EPs, 67)[207]

So for James, all sensation seems to have a spatial quale.

We have already seen James's attack on 'psychological atomism.' So clearly, the feeling of voluminousness cannot be built out of collections of minima sensibilia. Indeed, James emphasizes that my perception of an area or object as extended is "Given all at once, if at all. Any space which I can take in at one glance comes to me as an undivided *plenum*" (EPs, 66). The key is that sensation gives us rich material that is originally "undivided."

If proto-empiricists faced the question of how distinctly-perceived points could be knit together into a perception of a whole area, James's explanatory problem ran in the opposite direction. James claimed that what is given in sensation is whole extended areas. *His* problem was to explain how subjects ever can come to perceive distinct points or positions.

His answer was that in some sense our perception of whole areas must be *carved* or *parsed* into a perception of distinct spatial positions. Thus, he wrote that the spatial component of sensation

> exists at the outset in a simple and unitary form. The *positions* which ultimately come to be determined within it, in mutual relation to each other, are later developments of experience, guided by attention. (EPs, 63)

What does James mean by saying that the perceived quality of extension "exists at the outset," though? Here it will be helpful to place James's view into context.

Early modern philosophers and scientists sought to explain how human perception works. The goal was to show how a physiological input gets converted into a particular phenomenal experience. Around the middle of the seventeenth century, a consensus emerged that this process was to be modeled as a causal chain. The starting point is a physical object that stimulates, either directly or through an intermediary such as light or sound, an organism's nerve-endings. The stimulation

[207] James appended a footnote to this passage arguing that his use of "spatial" across sensory modalities is not to be taken as a metaphor.

causes a nerve signal eventually to be sent to an organ in the brain then known as the "sensorium." The sensorium was supposed to be the organ which turned physiological signals into conscious experience.

Consider the case of vision. We can discern a *physical stage*, where light impacts the retina, and forms an image there; a *physiological* stage of neural transmission; and a *mental* stage where the sensorium stimulates conscious experience, and where conscious experiences may themselves interact or be acted upon by processes that belong either to the physiological or to the mental stage. Theorists historically clashed over what stage, if any, contains the bulk of mental processing. In particular, theorists clashed over how much work goes into creating the character of conscious experience at the physical and physiological stages (sometimes these are jointly referred to as the "psychophysical" stage), and how much work the mind performs at the mental stage. Some theorists saw little gap between the output of psychophysical processes and conscious experience, and thus held that most mental processing actually occurred at the psychophysical level. Others assigned a relatively robust role for processing within conscious experience.[208]

Though James is today remembered as an "introspectionist," it is important to see that the *Principles* relied at least as heavily on psychophysical as on introspective explanations of the character of experience. His account of space is one important example that lays heavy weight on the psychophysical stage. When James wrote that the spatial quale "exists at the outset" of our experiences, he meant that the task of perceiving the bare quality of extension is accomplished at either the physical or physiological level. By the time nerve signals are converted into conscious experience, there is always a quality of extension already present.

It is important to acknowledge that James's theory of space perception is not only formulated in opposition to Idealists. Helmholtz and Wundt were even more obvious targets. These latter two both contended that a host of "unconscious

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[208] I draw this condensed history from (Hatfield 1991, 33-34). James presented his interpretation of the causal chain of perception at (PP, 95 *ff.*).

inferences" had to be performed on the raw materials being sent down our neural pathways in order to perceive space or extension. Unconscious inferences were supposed to be processes that occurred at the mental stage, but that nevertheless went unperceived.[209] James's view was explicitly presented as an alternative to such theories. The notion that James's theory of space was to be an antidote to Helmholtz and Wundt has been well treated already, so I will not dwell on it.[210]

So James held that the bare quality of extension clings to all outer experience. However, he denied that psychophysical processes produce an awareness of either distinct positions or relations between positions—this is just another way of saying that James rejected 'psychological atomism.'

One final question is worth pursuing before discussing James's theory of how we perceive spatial position. Did James hold that we have a native experience only of two dimensions, and that the third dimension was somehow to be constructed? Or did he hold that we natively perceive the third dimension as well?

In "The Spatial Quale," James offered empirical evidence that the bare, unmapped experience of spatial extension indeed is native even in the third dimension (EPs 68-69). His evidence, however, was relatively weak. He asked the reader to sit with closed eyes, and have a friend noiselessly hold a book up to the face. The subject will be aware of the book's presence, and will be aware of its absence once it is removed. James claimed that this experience a) could not be due to education, and b) is an experience in three dimensions.

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[209] Herbert Spencer held a similar view. *See below,* Figures 6 and 7, p. 337.

[210] Reed, for example, shows that James rejected the notion of unconscious inference on the basis of introspective evidence about the nature of marginal conscious experience. For James, any data of experience worth counting as *unconscious* were really nothing but marginal experiences. James took his investigation of the "fringe" of our stream of thought, of experiences of which we are barely aware, to reveal such experiences to be vague, fuzzy, and ill-defined. Such experiential material is ill-suited to being premises in deductive inferences of the kind Helmholtz and Wundt suggested were required for space perception, James held. Premises in an inference have to contain sharply-specified data. Since James held that the only experiential data that were unconscious were vague, he rejected the claim that the mind could draw *inferences* from such data in order to produce conscious experience (see Reed 1990).

The second claim seems correct—we feel, as James wrote, "shut in" by the book when it is present, and the empty space we feel when it is removed does seem to have depth. Yet James offered no argument for thinking that this experience of depth could not possibly be due to education. He wrote that some blind people may be very good at this sort of spatial perception. But I cannot see how that supports the claim that the perception of depth must be *native*.

In fact, James himself expressed dissatisfaction with his own evidence about the experience of the third dimension in a letter to Stumpf, dated February 6, 1887 (CWJ, VI.204). Accordingly, he changed his formulation of his view on the third dimension, though I am unsure whether the change amounts to anything substantial. He later wrote that spatial qualia are better described as having a property of voluminousness, and that only by discrimination do we learn to interpret this vague voluminousness as being composed of three dimensions (PP, 778; James 1887a, 2-3). But this formulation makes it difficult to see what voluminousness could be if not a three-dimensional quality to perception. If our sensations are voluminous, why should we need to parse them to get an experience of three dimensions?

In any case, let us return to the mechanics of James's early view. Here is how he summarized his position in "The Spatial Quale."

> To sum up briefly my thesis: I say that the feeling arising from the excitement of any extended part of the body is felt as extended—why, we cannot say. The primary retinal sensation is a simple vastness, a teeming muchness. The perception of positions within it results from subdividing it. The measurement of distances and direction comes later still. (EPs, 71-2)

Again, James was using the retina only as an example. He held that sensations from *all* sensory modalities come equipped with a feeling of spatial extension. This feeling of extension is always given as a vague, jumbled, extended experience. Distinct spatial positions and relations must be actively carved into this stream of experience.

Now what is the process through which minds carve distinct positions and relations? James wrote that while the experience of the visual field as extended involves no learning, "the mapping out of retinal space involves much experience" (EPs, 72). What kind of experience, exactly, teaches us to "map" locations in our

perceptual fields? How, in other words, does the mind learn to carve the stream of experience into distinct positions and relations?

James cited two independent, factors. First, when "sensitive surfaces," like a patch of skin, are excited in a *uniform* manner, we are unlikely to perceive distinct locations or relations on that surface. For example, when floating in luke-warm water, it is difficult to feel any distinct point on our skin. However, if one is then poked with a stick, one will have no trouble perceiving the point on the skin being stimulated. So the first factor which teaches us to identify spatial positions is the *non-uniform* stimulation of a patch of our sensory surfaces. These sensory surfaces include the retina, the skin, the ear drum or taste buds, or really any part of the body, inside and out, capable of producing sensation. We learn to map related spatial positions in the "teeming muchness" of experience when we learn to separate at least three distinct points inside one patch of perception (EPs, 72).[211]

But James held that this first factor could not fully explain our ability to map our various perceptual fields. The problem is that there are cases where we sometimes identify distinct points in a perceptual field, though the identified points are qualitatively *similar* to those in the surrounding field. James gave the example of spotting a sail on the horizon. Compared to sensory contrasts we routinely ignore, the contrast of the sail against the horizon is exceedingly subtle. So there must be some further factor that explains our ability to map distinct locations in a perceptual field.

The factor James came up with was *selective attention*. Patches of our perceptual fields which have a spatial quale can often be broken into smaller, related positions by the subject's selectively *attending* to various portions of the experience.

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[211] For a recent debate over whether the *spatial position* of an item in the visual field is dependent on that position's relation to other perceived positions, see (Casullo 1986; Casullo 1989; Falkenstein 1989). Casullo holds (and Falkenstein denies) that at least some positions in the visual field are correctly described by monadic predicates, such as centrality or sinistrality. James would side with Falkenstein in this debate. Although James thinks we do have direct intuitional access to spatially-extended visual fields, the extended fields we initially perceive have no distinct positions. Positions only arise when the mind carves relations between different patches of the vague spatial field, for James.

For our purposes, this second factor in learning to parse the stream of thought is perhaps more interesting than the first.

Above all, James held that our attention is guided by "emotional interests." The relevant contrast with "emotional" is not "rational" but something like "nonpartisan" or "uninvested." Features of our environment to which we are most likely to attend are those which hold some practical interest for us.

I will quote at length the passage where James presented this second factor, because the factor is crucial for my interpretation.

> Now, the purely local peculiarities of feeling in different parts of a sensitive surface are locked into an invariable order in our experience. We should therefore naturally expect to have great difficulty in picking out any one point on the retinal surface; for example, if that surface never became the seat of other contrasts than these immutable, local differences. The difficulty would be still farther increased by the fact that, considered *in abstracto*, local differences are utterly insipid, and carry with them no difference of emotional interest. But emotional interests are the great guides to selective attention. One retinal position, therefore, could hardly be singled out from any other before an interesting object had come to occupy it. It might then share the interest of the object, and be noticed. Again, the local differences, *per se*, may be very slight quantitatively, and require an adventitious sensation, superinduced upon them, to awaken the attention. But after the attention has once been awakened in this way, it may continue to be conscious of the unaided difference; just as a sail on the horizon may be too faint for us to notice until someone's finger placed against the spot has pointed it out to us, but may then remain visible after the finger has been withdrawn. (EPs, 75)

In this passage, James argued that local contrasts inside a perceptual field may aid the subject in discriminating a particular object. But such differences cannot fully account for our ability to discriminate objects. Thus, James proposed that selective attention, which the mind deploys according to its own "emotional interests," also helps accomplish the task. We *select* parts of our perceptual field to attend to according to what is interesting or important in our environment.

Here we have the rudiments of a mental architecture James would develop and widely deploy in the *Principles*. He conceived of experience, at its most basic level, as a chaotic mass. To be made intelligible, distinct objects, positions, and relations must be discriminated via selective attention. The chaotic mass comes equipped with spatial qualia (or "feelings of extension"), but not with a clear map of distinct positions or relations.

This theory is striking because it builds a notion of *choice* or *endorsement* into the basic fabric of perception. On James's view, dispassionate observation must be a more sophisticated perceptual achievement than *interested* observation. To break up the "blooming, buzzing, confusion" of experience into distinct objects, positions, and relations, we must *take an interest* some parts of our environment, and ignore other parts.

An objection crops up here. It is hard to see how we could have emotional interest in features of our vague experience—our "teeming muchness"—*before* those features have been discriminated. James would presumably respond that the vague stream of consciousness does not require division or discrimination to be *intelligible*. For example, we can recognize a hand as such in the periphery of our visual field, even though we cannot sharply perceive the hand's constituent visual features. James must hold that this vague form of recognition provides enough information for the mind to take disproportionate interest in some parts of the blooming, buzzing confusion, even before the stream has been subdivided.

This theory bears much in common with Wilfrid Sellars's later view in *Empiricism and the Philosophy of Mind*. Sellars asked the reader to consider two varieties of perceptual claims. Statements like *x looks green to Jones* differ subtly from statements like *Jones sees that x is green*. The latter ascribes propositional content to Jones' experience, and also *endorses* that content. The former merely ascribes propositional content. Sellars's solution to problems he exposed with "traditional" empiricism (*see above*, pp. 210 *ff.*) involved treating such *endorsement* claims as logically prior to claims about what merely *seems* to be the case (Sellars 1956/1997, 40-42). For James as for Sellars, claims about what seems to be the case amount to claims about what *is* the case, *minus* the speaker's endorsement. For Sellars, this is a point about logic—*seems like* claims are to be logically analyzable into *endorsement* claims. For James, this is a point about perception—cases where

we *see that* something is the case are developmentally prior to cases where we withhold judgment (for his explicit claim to this effect, *see* PP, 917 *ff*).[212]

We have seen that James actually confronted Green's ancestral version of Sellars's critique of empiricism. We are now in a position to see James's response.

Recall that Green's version of the argument was essentially metaphysical. Science discloses a purely material world, he assumed, not a world populated with non-physical stuff like values or standards. Thus a genuinely scientific psychology could only purport to study a purely material animal—an animal that was nothing but a complex sensory mechanism rather than a genuine intellectual agent. Green argued that such a creature could never hew to standards, whether cognitive or moral, so could never be said to have real knowledge.

James responded by showing that this was a mischaracterization of science. He showed this not by giving an a priori proof, but by actually helping to build a science of mind that included normative concepts at the most basic level.[213] As we have just seen, James tried to show that perception itself is an inherently normative process, in the following sense. Organisms develop sharp perceptual maps of the world only by taking disproportionate interest in certain parts of the stream of thought. This is to say that perception itself, on James's model, involves the organism's endorsement

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[212] A troubling question is raised by the apparent similarity between James's and Sellars's respective forms of empiricism, along with the apparent similarity between *Green's* and Sellars's respective *critiques* of traditional empiricism (as noted in the last chapter). Green and James were not merely obscure figures in some corner of the history of philosophy whose views anticipate Sellars. They were arguably the two most important pillars of English and American philosophy, respectively, barely more than a generation before Sellars wrote. The troubling question is, how can such an important set of arguments from the late-19th century disappear so quickly, so that Sellars own critique and revision of empiricism could hit the philosophical scene with such a fresh scent?

[213] I devote Chapter Five to making sense of James's claim that his psychology took certain facts to be "ultimate." We will see that the stream thesis established which facts psychologists were to treat as ultimate. Here I only want to register the following. The fact that minds take a selective interest in certain parts of their environment is enshrined as the fifth postulate of the stream thesis (*see below*, p. 288). This is what I mean in claiming that normative concepts like *interest* and *choice* are employed at the most basic level of James's psychology.

(via the mechanism of selective attention) of certain parts of its perceived environment as more useful, interesting, or valuable than other parts.

James then developed a general account of science that countenances his own norm-laden project in the *Principles*. He argued that science is to be regarded as a particularly contrived form of perception. In science, the mind plays an even more radically selective role than it plays in the everyday mapping of its perceptual fields.

The *Principles* develops such a theory of science in the final chapter (PP, 1230-1236, 1258-1262). In one place (PP, 1231-1232.n), he quoted at length from an earlier article he had published, entitled "Reflex Action and Theism" (the quote comes from James 1881, 395-396). The passage helps give a broad outline of James's account of science:

> The conceiving or theorizing faculty works exclusively for the sake of ends that do not exist at all in the world of the impressions received by way of our senses, but are set by our emotional and practical subjectivity. It is a transformer of the world of our impressions into a totally different world, the world of our conception; and the transformation is effected in the interests of our volitional nature, and for no other purpose whatsoever. Destroy the volitional nature, the definite subjective purposes, preferences, fondnesses for certain effects, forms, orders, and not the slightest motive would remain for the brute order of our experience to be remodelled at all.

The passage started by discussing our capacity to think theoretically. We form abstract theories "exclusively for the sake of ends." These ends do not derive directly from the senses. They are products of our subjective preferences and interests. If we did *not* have such preferences, there would be no reason to "remodel" experience using concepts at all.

> But, as we have the elaborate volitional constitution we do have, the remodelling must be effected, there is no escape. The world's contents are *given* to each of us in an order so foreign to our subjective interests that we can hardly by an effort of the imagination picture to ourselves what it is like. We have to break that order altogether, and by picking out from it the items that concern us, and connecting them with others far away, which we say 'belong' with them, we are able to make out definite threads of sequence and tendency, to foresee particular liabilities and get ready for them, to enjoy simplicity and harmony in the place of what was chaos. …

Our subjective interests spur us—indeed, force us—to use concepts to remodel our brute sensory experience. This is because the actual contents of reality are given to us in such a chaotic manner that we cannot effectively pursue our interests unless

we attend only to features of our environments that are important or interesting to us. We thereby "break" the given order of reality, and remodel it into a more workable form. James then presented science as a form of this conceptual remodeling of experience:

> The real world as it is given at this moment is the sum total of all its beings and events now. But can we think of such a sum? Can we realize for an instant what a cross-section of all existence at a definite point of time would be? While I talk and the flies buzz, a sea gull catches a fish at the mouth of the Amazon, a tree falls in the Adirondack wilderness, a man sneezes in Germany, a horse dies in Tartary, and twins are born in France. What does that mean? Does the contemporaneity of these events with each other and with a million more as disjointed as they form a rational bond between them, and unite them into anything that means for us a world? Yet just such a collateral contemporaneity, and nothing else, is the *real* order of the world. It is an order with which we have nothing to do but to get away from it as fast as possible. As I said, we break it: we break it into histories, and we break it into arts, and we break it into sciences; and then we begin to feel at home. We make ten thousand separate serial orders of it. On any one of these, we may react as if the rest did not exist. We discover among its parts regulations that were never given to sense at all, —mathematical relations, tangents, squares, and roots and logarithmic functions, —and out of an infinite number of these we call certain ones essential and lawgiving, and ignore the rest. Essential these relations are, but only *for our purpose*, the other relations being just as real and present as they; and our purpose is to *conceive simply* and to *foresee*.

Science, history, and the arts all amount to imposing an order on reality that will suit some purpose of ours. What separates these fields of inquiry, according to James, is the different purposes each brings to bear on reality. Finally, he tells us what kind of purposes we employ in science, in particular.

> Are not simple conception and prevision subjective ends, pure and simple? They are the ends of what we call science; and the miracle of miracles, a miracle not yet exhaustively cleared up by any philosophy, is that the given order lends itself to the remodelling. It shows itself plastic to many of our scientific, to many of our æsthetic, to many of our practical purposes and ends. (PP, 1231-1232.n)

Thus, this long passage claimed that reality itself is so inherently chaotic that human minds are forced to "break it up" into more manageable parts. Just as we quietly employ our own interests in mapping our perceptual fields, so scientists must employ their own interests in breaking reality into parts that display lawful regularities. What interests do scientists employ? James cited two cognitive values (as we would now regard them): "simple conception" and "prevision." In other

words, the scientist tries to conceive of reality in a way that maximizes theoretical simplicity and predictive power. She breaks down reality into parts, parts between which she then tries to discover lawful regularities.

On the basis of this passage, we can reconstruct the following response to Green.[214] It is false that science discloses a world that is fundamentally valueless. The basic picture of the human mind emerging from empirical psychology—James's psychology, at any rate—is an organ that makes sense of the world not in the absence of, but *in virtue of* subjective interests, preferences, and values.

A critic like Green might retort that at best, James has shown how science *uses* normative concepts. He has not shown how science can be used to *account* for normativity itself. What are these mysterious values James's psychology helps itself to, and why should they so help us order reality?

Here it pays to reread the final two sentences in the passage just quoted. James claimed that the "miracle" of science is that reality itself ever *cooperates* with this process of "remodelling" our experiences according to "practical purposes and ends." Crucially, James adds that this is "a miracle not yet exhaustively cleared up by any philosophy." As we will see in Chapter Five, this was a favorite strategy of James's. He thought psychology should sidestep intractable metaphysical problems by relegating certain nagging questions to philosophy.

Now Green's argument may be given a relatively weaker or a relatively stronger reading. The weaker reading poses a challenge that James's psychology overcomes. The stronger reading poses a question that James can safely leave to philosophical speculation.

If critics of empiricism were charging that a science of mind presupposed a metaphysics that was *incompatible* with the existence of knowing agents, James can overcome this challenge. James's actual accomplishments in psychology provide an

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[214] This is one case where I do not have evidence that James was directly responding to Green's attack. In fact, "Reflex Action and Theism" was published before "Can There Be a Natural Science of Man?" was published—this was the article where Green first advanced the charge of naturalistic fallacy, publicly. So here I am reconstructing a response to Green based on theoretical resources James had been developing during the 1880s.

existence proof that science may incorporate normative concepts at its most basic level. If critics like Green where making a stronger charge—that the science of mind cannot, by itself, give a positive *account* of normative concepts like knowledge, James could safely deflect this question. In fact, this passage hints that critics like Green demand too much of psychology. Nobody, after all, can really explain why our abstract, scientific concepts should sometimes seem so accurately to latch onto the natural world.

Instead, empiricists would be vindicated if psychology actually provided some philosophically useful results about the human mind. According to James, no science—psychology included—should be hobbled by incessant demands to answer the most intractable metaphysical questions. In Chapter Five, we will look more closely at James's oft-used strategy of banishing tough questions from psychology and leaving them for philosophy to handle.

5. Analysis and Elaboration of the Stream Thesis

We now have the basics of James's account of space perception on the table. We have also seen how that account furnishes a response to Green's charge that proto-empiricists cannot account for the normativity of scientific knowledge. We now must face several further questions.

First, how does James's account provide a response to other Idealist arguments we have seen in this dissertation? Second, in what respect does that response count as an *empiricist* response? Third, what have we learned so far about the epistemic status of the stream thesis? I now devote one subsection to answering each question.

5.1 The Response to Idealists

Let us begin addressing the first question by recalling Green's argument against proto-empiricist accounts of space perception. Green saddled his opponents with two core commitments. The reality principle states that what is real is to be associated with what we receive passively through sensation. 'Psychological atomism' is the

view that *what* we receive passively through sensation are just psychological atoms—for Berkeley and Hume, these are collections of minima sensibilia.[215]

Green argued that the perception of space requires the grasping of relations *between* minima sensibilia. These relations cannot themselves be minima sensibilia, so they cannot be given passively in sensation. They have to be *added* by the intellect, Green argued. But the reality principle requires all information the mind adds to sensation to be counted as fantastical. So, Green concluded, proto-empiricists could not claim that the perception of either spatial areas or extended objects amounts to the perception of anything real.

To understand how James's account sidesteps this problem, it will be helpful to consider proto-empiricists' original motivation for espousing the reality principle. For Locke, simple ideas have a high degree of fidelity to their causes. This is because simple ideas have been stamped on the mind from without, and contain only information about whatever object is responsible for that stamping.[216] Note that what assures us of the high fidelity of simple ideas, for Locke, is that the mind cannot actively create any such idea. These ideas can only have been formed passively, by external causes. In contrast, complex ideas may have been formed by the mind's *adding* information to simple ideas, for example information concerning relations. Therefore, a complex idea may have a low degree of fidelity to its outward cause, because the idea may contain information actively contributed by the subject's own mind, not by the object or cause of the idea.

The reality principle is a theoretical tool for excluding such low fidelity ideas from our conception of reality. The proto-empiricist insists that we not regard any

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[215] Strictly speaking, Hume and Berkeley held that only the visual and tactile fields are composed of perceptual atoms. But they also held that these were the only two sensory modalities involved in space perception.

[216] For example, at (ECHU, II.xxx.2), Locke writes: "And thus our simple *Ideas* are all real and true, because they answer and agree to those Powers of Things, which produce them in our Minds, that being all that is requisite to make them real, and not fictions at Pleasure. For in simple *Ideas*, (as has been shewn,) the Mind is wholly confined to the Operation of things upon it; and can make to it self no simple *Idea*, more than what it has received."

idea as real unless we can show that it *only* contains information derived from simple ideas (or impressions).

Notice that the reality principle enshrined proto-empiricists' deep suspicions of what we might call "active mental processing." The mind actively constructs a complex idea by processing simple ideas. But this processing may involve *adding* fictitious information about the object of that complex idea, information that originates not in the object, but in the mind itself.

The heart of Green's criticism is that ideas of extension and spatial area can only be created by the mind's actively bringing distinctly-perceived spatial positions into relation with one another. This is why proto-empiricists must always regard ideas of space and extension as fictitious, according to Green's reading.

The key to James's response is that his stream-based view did not require him to treat mental processing—at least in the case of perceiving space and extension—as involving distortion. Mapping spatial positions is the main aspect of Jamesean space perception that involves mental processing. But this variety of processing never involves adding information to what is given in sensation. Mapping spatial positions requires *subtracting* information from what is given in the stream of thought. We focus on a position or relation, and ignore much of the rest of the "blooming, buzzing confusion."

Thus, when the Jamesean mind actively constructs spatial positions and relations, *those constructs need not be regarded as fictions.* The mind has not contributed any new information that was not already present in the raw material of experience. It simply ignored what was not useful.

At the end of the *Principles*, James emphasized that our ideas of space are directly "stamped" on the mind. There he contrasted ideas of spatial and temporal relations with more abstract concepts like cause and substance. These more abstract concepts must have been "spontaneously" dreamed up inside the mind, James argued. They came to form an important part of cognitive thought only because, as a matter of "good luck," they turned out to help "steer us in our active dealings" with objects (PP, 1228). In contrast, the mind's

> …*time- and space-relations*, however, *are* impressed from without—for two outer things at least the evolutionary psychologist must believe to resemble our thoughts of them, these are the time and space in which the objects lie. *The time- and space-relations between things do stamp copies of themselves within*. Things juxtaposed in space impress us, and continue to be thought, in the relation in which they exist there. Things sequent in time, ditto. (PP, 1229; *italics original*)

Again, in mapping spatial (and temporal) relations inside the stream of thought, the Jamesean mind only *subtracts*, never adds material to what is given in raw sensation. James thereby preserved the proto-empiricist notion that our spatial representations are built from sensations that are stamped on the mind from without. But he skirted the need for the mind to *add* fictitious, mind-born relations between the alleged constituents of raw sensation—minima sensibilia. He skirted this demand by showing that raw sensation is, in fact, a continuous stream.

This is not to say that Jamesean spatial perception amounts to forming a simple and direct transcript of how the world is, independent of human interests. Here it will be helpful to look at a metaphor from James's "Are We Automata." The article appeared in *Mind* the very same month "The Spatial Quale" was published (January 1879). In the *Mind* piece, James likened the work an interested mind performs on its own sensory data to the work of a sculptor who chisels away at stone. The mind is active, but only in *removing* information it does not need.

In contrast, proto-empiricists might have likened the mental processing of experiential data to a child who constructs a tower by arranging a collection of building blocks. The tower's structure was not latent in the collection of blocks. It took a child's creative imagination to design and build the tower. In contrast, the sculpture's structure was, in a sense, latent in the stone before anyone took out a chisel. The sculptor added nothing. In particular, the sculptor added no new relations between parts of the stone that were not already there. He only chiseled away shards he did not find useful.[217]

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[217] Note that this distinction between the synthesis and analysis of experience lay at the heart of James's entire methodology, which in the *Briefer Course* he termed "the 'analytic' method" (PBC, 139). There, he acknowledged that

> Most books adopt the so-called synthetic method. Starting with 'simple ideas of sensation,' and regarding these as so many atoms, they proceed to build up the higher

The text containing the metaphor was polished and reprinted in the *Principles*:

> The highest and most elaborated mental products are filtered from the data chosen by the faculty next beneath, out of the mass offered by the faculty below that, which mass in turn was sifted from a still larger amount of yet simpler material, and so on. The mind, in short, works on the data it receives very much as a sculptor works on his block of stone. In a sense the statue stood there from eternity. But there were a thousand different ones beside it, and the sculptor alone is to thank for having extricated this one from the rest. Just so the world of each of us, howsoever different our several views of it may be, all lay embedded in the primordial chaos of sensations, which gave the mere *matter* to the thought of all of us indifferently. … [T]he world *we* feel and live in will be that which our ancestors and we, by slowly cumulative strokes of choice, have extricated out of this, like sculptors, by simply rejecting certain portions of the given stuff. Other sculptors, other statues from the same stone! Other minds, other worlds from the same monotonous and inexpressive chaos! My world is but one in a million alike embedded, alike real to those who may abstract them. How different must be the worlds in the consciousness of ant, cuttle-fish, or crab! (PP, 277; *also see* EPs, 51-52)

This passage may have been written earlier than "The Spatial Quale,"[218] and it did not single out the perception of space. However, in nearby passages, both in "Are We Automata" and in reproduced portions of that article in the *Principles*, James applied the metaphor to spatial positions and relations, as well.[219] And the passage I cited directly *above* (on p. 271) very clearly shows that ideas of spatial relations are drawn purely from sensation. When the mind selectively attends to a distinct

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> states of mind out of their 'association,' 'integration,' or 'fusion,' as houses are built by the agglutination of bricks.

But James objected that this

> commits one beforehand to the very questionable theory that our higher states of consciousness are compounds of units; and instead of starting with what the reader directly knows, namely his total concrete states of mind, it starts with a set of supposed 'simple ideas' with which he has no immediate acquaintance at all….

[218] James began "Are We Automata" in 1869, when still in medical school. He apparently abandoned the essay for a while, though there is no evidence when he finally finished it. The article was accepted by Robertson for *Mind* on November 20, 1878. So we cannot be sure when this particular passage was written. *See* EPs, 395-397.

[219] For example, at (PP, 273), James wrote: "Dots dispersed on a surface are perceived in rows and groups. Lines separate into diverse figures. The ubiquity of the distinctions, *this* and *that*, *here* and *there*, *now* and *then*, in our minds is the result of our laying the same selective emphasis on parts of place and time." Clearly, James intended that we do not just selectively emphasize different the *temporal* parts of the stream (*e.g.*, we hear the clock as "tick-tóck, tick-tóck, tick-tóck," PP, 273). We also selectively emphasize, and organize, the *spatial* parts as well. *Also see* (EPs, 48-49).

position in the perceptual field, this necessarily involves *ignoring* or *discarding* other information not relevant or interesting to the organism.

Notice the way James combined a commitment to common sense realism with a deep sensitivity to the ways human interests shape our perception of reality. On the one hand, he emphasized that the mind does not fortify, amplify, or otherwise distort "the data it receives" when it comes to space perception. Our spatial perceptions are culled from nothing more than raw sensation just as the sculpture is culled from nothing more than the block of stone. But on the other hand, it took a creative subject to choose which portions of those data to ignore, just as it took an artist to choose what parts of the stone to chisel away.

If "The Spatial Quale" emphasized the role of the creative subject, "Are We Automata" emphasized the point about realism. The latter piece contains the seeds of James's theory of the perception of reality.

Consider any object, like a dinner plate. We view the plate from many different angles. In doing so, the retinal image of the plate will typically be an oval more or less elongated, not a circle. James claimed that we choose one perspective to regard as canonical. "The real form of the circle is deemed to be the sensation it gives when the line of vision is perpendicular to its centre" (EPs, 48). The real shape of the plate is given by the sensation we get when we view it from directly above.

The passage goes on to emphasize that *choice*, here, does not involve adding information not originally present in some sensation:

> But all these essential characteristics [*e.g.*, its shape when viewed from an appropriate angle, its color when viewed in an appropriate light, and so on], which together form the genuine objectivity of the thing and are contrasted with the subjective sensations we may happen to get from it at a given moment, are themselves sensations pure and simple, susceptible of being fully given at *some* other moment. The spontaneity of the mind does not consist in conjuring up any new non-sensational quality of objectivity. It consists solely in deciding what the particular sensation shall be whose native objectivity shall be held more valid than that of all the rest.

When the mind actively constructs reality, James argued, it does not add any non-sensational element to its representations. It only chooses which sensory elements to regard as canonical, as giving the "real" shape, size, color, and so on, of an object. Note, by the way, that James appended a footnote to this passage, emphasizing how

his own version of realism differed from the "old atomic doctrine of association, so thoroughly riddled of late by Professor Green" (EPs, 49). This lends further support to my claim that Green was an important critic for James to refute.

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Here it will be helpful to address a possible source of confusion. Some may be surprised to find me claiming that James's defense of empiricism required him to defend a form of "realism," as I called it in the previous paragraph. The surprise stems from the association between many 20th century empiricists and a position often called "*anti*-realism" or "*non*-realism."

For example, Cheryl Misak argues that the verificationist or empiricist must inevitably espouse an "anti-realist" conception of truth, where the true is just what we would be willing to believe if we inquired, in an appropriate manner, as far as possible. Misak calls "transcendentalism" or "realism" the contrary view, that what is true or real *transcends* actual or possible human inquiry (Misak 1995, xi, 159-162). In philosophy of science, as well, empiricism is often taken to go along with a kind of anti-realism, especially concerning unobservable entities mentioned in scientific theories. Such anti-realist empiricism is perhaps most famously defended in (Van Fraassen 1980). So is there something illicit about my placing James's defense of "real ideas about space" at the heart of his empiricism?

The answer is that the contemporary notion of "realism" in epistemology and philosophy of science is not a helpful concept for understanding the argument between 19th-century Idealists and empiricists. The contemporary notion of "realism" typically involves an affirmative answer to the question of whether we should believe that there is a reality that transcends what we can know through experience. But this is not the concept of realism I am ascribing to James.

Green simply did not *demand* that proto-empiricists give a positive proof that we can gain knowledge about mind-independent reality.[220] Rather, he demanded an

[220] If anything, he was far more inclined to launch such arguments against *Kant*, not against proto-empiricists. Though Green saw himself as modifying and extending the insights of Kant, one reason the latter's views demanded modification in the first place was that they involved a flawed division between the phenomenal world and the real, allegedly

empirical theory of space perception and a criterion concerning which ideas are to count as real, such that spatial perceptions may consistently be regarded as real ideas. (Recall that in the late 19th century, a "real idea" was an idea that had what Descartes called "formal reality." *See above*, fn. 140.)

Thus, all I mean by calling James a "realist" about space is this. James was able to develop both a definition of reality and an empirical theory of space perception, such that spatial perceptions are properly (and without logical contradiction) regarded as real ideas.

Should we *retrospectively* think of James as advocating a form of 'realism' in our contemporary sense? I can find nothing in James's explicit writing (at least before 1893, while he was working on the *Principles* and the *Briefer Course*) that positively commits him to either realism or anti-realism in our contemporary sense.[221] So I do not claim that James's stream-based account demonstrates—or even is committed one way or the other—to the view that our ideas of space and

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unknowable, noumenal world. Evidence that Green saw this division as an important flaw can be found by in his lectures on Kant. For instance, at (GWR, II.8), Green argued that Kant's notion of a "'thing in itself'" that "produces appearances" yet "remains wholly unknown" is the source of Kant's "antithesis of analytical and synthetical propositions." This antithesis "will not hold," Green wrote. At (GWR, II.58-64), he argued against the analytic/synthetic distinction in greater detail. He later cited Kant's notion that thinking can be divided into analytic and synthetic varieties as "the least true or valuable side of Kant's doctrine …" (GWR, II.161).

[221] I should acknowledge that a fine treatment of James's theory of space perception characterizes the theory as a form of what the author calls "realism" (High 1981). One of High's chief contentions is that *contra* (Pastore 1971), the empirism-nativism debate (*see above*, pp. 67 *ff.*) is not a helpful background against which to read James's work on space. Instead, High thinks James sought to develop a "realist" rather than "constructionist" account of space perception. The realist denies that anything "must be added to what is given to arrive at normal perceptual experience." In contrast, the constructionist holds that normal perceptual experience requires the psychological transformation of raw sensory data (p. 467). I agree with High that the empirist-nativist debate, particularly as contrasted with the empir*i*cist-rationalist debate, is misleading in this context. And I agree that *this* notion of realism does capture a position James was eager to defend, in developing his theory of space. But I note that High's notion of realism (which is essentially the same as my own, as far as I can tell) is quite different from our contemporary, philosophical notion of realism.

extension are accurate mental copies of mind-independent reality. Establishing *this* sort of realism was not the challenge from Idealists like Green.[222]

Now let us look more closely at the relation between James's account of reality and the older account that Green attributed to proto-empiricism. To see how James rescued empiricism, it is crucial to see that his realism about space required him to jettison not just the Lockean notion of 'psychological atomism.' He also had to jettison the Lockean criterion of real ideas—what I have called the "reality principle." In other words, James ended up rejecting both of (what Green had portrayed as) the two core commitments of proto-empiricism.

To see that James effectively gave up the reality principle, consider the following. For James, the real ideas are perceptions that the mind actively chooses to sanction, as we have just seen. He clearly did not hold (and did not have to hold) what is entailed by the reality principle—that whenever the mind is active, it distorts given sensory information. Again, this is because the Jamesean mind typically acts by *subtracting*, not adding information, to the stream of thought.

This view is clearly consistent with James's claim that spatial perception issues in real ideas. Although he portrayed the mind as *actively* carving spatial relations into vaguely-given, extended sensations (themselves "stamped" on the mind from without), this selective activity is an example of the process whereby a mind forms a representation of reality.

Note that James gave up *both* of proto-empiricism's core commitments, as Green portrayed that tradition. He clearly gave up the reality principle. But he obviously gave up 'psychological atomism' as well. After all, he argued that the

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[222] I take Misak to have shown that as a direct consequence of his pragmatic maxim, *Peirce* really was committed to a form of anti-realism—or "non-realism," as she calls it (Misak 1995, 120-127). But there would be no conflict in seeing Peirce as an empiricist, as well. After all, Peirce was a strong proponent of mental science (see Girel 2003). I suspect that James's own pragmatism probably did have similar 'non-realist' consequences as Peirce's. But James only began publicly defending pragmatism in (James 1898b). So while his earlier work no doubt had certain affinities with the later pragmatist doctrine, we should be careful in trying to assimilate such pragmatism (and attendant 'non-realism') to James's earlier psychology. Such a move only stands to obscure the historian's attempt to understand how and why James's views evolved over the years.

existence of minima sensibilia was incompatible with the available empirical data, and that raw sensation instead had to be regarded as a continuous stream.

That James gave up so much of what Green, at least, had seen as crucial to empiricism brings us to our second question: in what sense could James claim to be *defending* empiricism? I now turn to this issue.

5.2 In What Sense is James an Empiricist?

We have just seen that James gave up the two core principles with which Green saddled his opponents. So in what sense was James really "defending" those opponents?

I claimed earlier that "The Spatial Quale" suggested that a necessary condition for counting as an empiricist is that one denies that there are native principles that both govern the operation of the mind *and* license necessary synthetic judgments. James's notion of the stream of thought effectively blocked the prospect of deriving necessary synthetic *geometric* principles, because the stream can be spatially parsed in *any way that is of interest*.

The crucial point is that our interests may change both over a phylogenetic (trans-generational) and an ontogenetic (developmental) scale. As our interests change, the systems of relations we parse in our larger stream of consciousness may change as well, for James. Thus, suppose it were discovered that all humans employ some particular spatial metric (perhaps the metric described by Euclid's axioms) to map perceptual space. James would deny that we have any reason to think this metric is *necessary* for mapping perceptual space, because as our interests change, we could come to use a different metric. If this is right, then no particular metric for mapping perceptual space can be assumed to be necessary for having a spatial experience. In turn, no principles describing such a metric could be synthetic and a priori in Kant's sense.

Indeed, James concluded his paper by using Helmholtz's recent work in non-Euclidean geometry to support this claim that there exist consistent alternatives to a Euclidean metric for mapping perceptual space. If James was right, then it does not matter *what* metric we may presently be shown to use in spatially mapping the

stream of thought. One cannot conclude that any such metric will *always* be used in human space perception. This is because our interests may change, and/or our evolutionary needs may change. For all we now know, such changes could cause us to parse our streams of thought differently than we presently do. Thus, even if it were discovered that a Euclidean metric is used to map human visual space, that metric could not be used to support necessary and synthetic judgments about space—because there is no in-principle reason we could not come to employ a different metric, if that should suit our needs.

Thus, here is how James concluded his article:

> One word more about Kant. Helmholtz says: [fn: "*Mind*, vol. iii, p. 213"] "By Kant the proof that space is an *a priori* form is based essentially on the position that the axioms are synthetic propositions *a priori*. But even if this position be dropped, the space-representation might still be the necessary *a priori* form in which every co-extended manifold is perceived. This [*i.e.*, dropping the axioms][223] is not surrendering any essential feature of the Kantian position."
>
> I make bold to differ from this. The mere innateness of the spatial form of sensibility is surely not the essence of the Kantian position. Every sensationalist empiricist must admit a wealth of native forms of sensibility. The important question is: Do they, or do they not, yield us *a priori propositions*, synthetic judgments? If our 'sensation' space does this, we are still Kantians in a deeper sense by far than if we merely call the spatial *quale* a form of *Anschauung* [intuition],[224] rather than an *Empfindung* [sensation]. But if the new geometry of Helmholtz and others has upset the necessity of our axioms (and this appears to be the case; see, especially, the article just quoted), then the Kantian doctrine seems literally left without a leg to stand upon. (EPs, 82)

Helmholtz rightly pointed out that Kant based the claim that space is a necessary form of pure intuition on the proposition that Euclid's axioms are synthetic a priori. But Helmholtz's own development of a non-Euclidean geometry had forced the admission that Euclidean principles cannot, as Kant thought, be synthetic a priori. This is because synthetic a priori principles are supposed to be *necessary* rules that govern the structure of the phenomenal world. Since Helmholtz showed that there

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[223] James' insertion.

[224] Literally, "*Anschauung*" is German for "view" or "outlook." James clearly meant the word in its Kantian sense, though. Kant used *Anschauung* as a term of art conventionally translated as "intuition."

are demonstrably consistent *non*-Euclidean geometries, this undercuts the alleged necessity of Euclid's axioms.

Helmholtz was a major proponent of the so-called "Back to Kant" movement in 19th century Germany (Hatfield 1991, 109-110). Characteristically of his usual Kantian posture, Helmholtz presented his own view of geometry as not requiring a substantive abandonment of Kant. Even if the axioms that turn out to describe phenomenal space are not necessary, our general capacity to perceive space (using *some* metric or other) might still be native and necessary. In this sense, Helmholtz maintained that space was still a necessary form of pure intuition.

But James countered that Helmholtz misidentified the essence of the Kantian account of space. For James, the essence of Kant's position was not nativism—not the view that we have a native ability to perceive the property of spatial extension (that is, a native ability to perceive spatial qualia). Every "empiricist" must admit a wealth of native capacities. Rather, the essence of Kant's view was the claim that there is only one possible *metric* we can use to map our perceptual field, and that this metric gives us *necessary* knowledge of the structure of space. This is why merely calling space a *form of intuition* rather than a *sensation* does not make one a Kantian, for James. To be a genuine Kantian, one has to hold that the particular form of our actual spatial perceptions is necessary. In other words, a genuine Kantian (says James) must claim that the *metric* by which we map perceptual space is necessary.

Helmholtz's proof that there are consistent non-Euclidean geometries counts against this latter claim. His proof may not affect the view that we have a native ability to perceive extension. But it does affect the claim that there is only one conceivable set of geometric axioms, and thus that these axioms must govern perceptual space. In turn, the proof damages the claim that Euclidean axioms support universally valid, synthetic, and yet a priori judgments about the structure of our experience of the outer world. It is this last claim that James was most concerned to resist.

In short, James held that Helmholtz's geometric work supported his (James') contention that there is a serious plasticity in our ability to map perceptual space. James appears to have held that we cannot know a priori the range and limits of such plasticity.[225] Again, this is because we can measure or subdivide positions in spatial fields differently depending on our interests. James's denial of the possibility of synthetic *a priori* judgments about space is significant for our story because he tells us this denial is precisely what makes his view a form of empiricism, as I have said.

Thus, towards the end of "The Spatial Quale" James wrote:

> Such abundant room thus appears to be left for the achievements of empiricists in the study of this objective construction [of spatial positions and relations] that they need not grudge to the nativists the little gift of primordial bigness and collateral subdivision which the latter are contended to "beg" at the outset of their task. (EPs, 79-80)

James had argued that empiricists should admit that there is a native experience of spatial extension, but that they should not concede[226] that there is also a necessary metric for subdividing or mapping the spatial field.[227]

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[225] A more recent book that explores some distinctly Jamesean ideas about space perception is (Heelan 1983). Heelan argues that the metric of visual space may vary depending on items of interest in our environment. Heelan writes that "…visual space can take on any one of a family of geometries depending on the hermeneutical context of foreground and background" (p. 53). He sounds very much like James when he goes on to write that "… what is foreground and background depends from moment to moment on interest and attention, and with each change the parameters of visual space may also change" (p. 75). Heelan provides both a mathematical model and experimental support for a view very much like James's, it seems to me. James receives only the briefest mention, though (on p. 176).

[226] James's wording in this passage is a little awkward—"primordial" in the quoted passage must modify both "bigness" *and* "collateral subdivision." James was here urging empiricists not to accept the notion that our "primordial" experiences are already filled with *subdivisions*. Just because the empiricist, on James's view, should acknowledge that we have a native ability to perceive spatial qualia, she need not concede that we also have a native awareness of spatial subdivision.

[227] How far can one push James's denial that experience has a necessary structure? I have mainly considered James's denial that experience has a necessary perceptual structure, and considered the role this denial played in his psychology. For some suggestions about the implications for *philosophy* of James's denial that everyone's experience has the same form, see (Hanson 2003). Hanson emphasizes experiential differences that break along lines of race, class, and gender, and she looks (pp. 57-61) especially at the connection between temperament and meta-philosophy as presented in Lecture One of *Pragmatism* (James 1907/1975). One might reasonably see James's later rejection of necessary experiential structures as routed in his earlier work in perceptual psychology.

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What is the relationship, though, between James's use of "empiricism" in this article and the evolving, historical-philosophical concept of empiricism I have been exploring in this dissertation? I have been writing as though James's word "empiricism" in "The Spatial Quale" is intimately connected to the HP-concept. But now the time has come to defend this suggestion.

Hatfield (as we saw on p. 67) points out that there are two senses of "empiricism" relevant to theories of perception. In the first sense, "empiricism" or "empirism" contrasts with "nativism," and its advocates claim that all or most perceptual abilities are learned. I will call this "the psychological notion" of empiricism. *Philosophers* more often contrast "empiricism" with "rationalism," and typically mean to indicate the view that knowledge is justified by appeal to experience. I will call this "the philosophical notion" of empiricism. Which view did James have in mind when he claimed to be defending empiricism?

This is an urgent question for my project, because if James turns out to have been defending "empiricism" only in the psychological sense, that would be very damaging to my overall project in this dissertation. I am claiming that James's early work played an important role in the evolution of a *philosophical* notion of "empiricism." If it turns out that his "empiricism" is really just a technical thesis about the sources of perception, my claim is seriously undermined.

I argued in Chapter One that philosophers' understanding of the history of philosophy typically constrains the range of acceptable interpretations of "empiricism." Might I be able to make the case that Hatfield's distinction is not relevant to James's article, because James is using an HP-conception of "empiricism"?

No, this will not help. Philosophers' contemporary interpretation of empiricism, which I am calling "CIE," must still be contrasted with our contemporary interpretation of rationalism, not with any form of nativism. So if I am to make the case that James's work on space plays an important role in the evolution of

empiricism, I still need to grapple with Hatfield's distinction, *mutatis mutandis* the changes needed to historically infuse *his* philosophical notion of "empiricism."

Hatfield's distinction seems to provide an even bigger hurdle when we take a first look at James's text. It was Helmholtz who popularized the psychological notion of "empiricism" (Hatfield 1991, 271); and Helmholtz is one important figure who James had in view when he discussed "empiricism" in this article. Worse, several times in the essay, James contrasted "empiricism" with "nativism" (EPs, 63, 79-80). This further suggests James may be using Helmholtz's psychological notion of "empiricism."

On closer inspection, though, Hatfield's distinction is overly subtle for the purpose of interpreting "The Spatial Quale."[228] James did not draw a sharp division between a philosophical and a psychological notion of "empiricism." This is evident in a passage where James accused Helmholtz of misunderstanding the *real* nature of "empiricism":

> There are but three possible kinds of theory concerning space. Either (1) there is no spatial *quale* at all, and space is a mere symbol of succession; or (2) there is a *quale* given immediately in sensation; or, finally (3), there is a *quale produced* out of the inward resources of the mind, to envelop sensations which, as given originally, are not spatial, but which, on being cast into the spatial form, become united and orderly. This last is the Kantian view. … Helmholtz is so sententious (and vacillating?) that it is a little hard to class him distinctly, but there is no doubt that visual space, at any rate, is constructed for him out of non-spatial sensations of sight. The word "empiricist" [sic] in his optics means just the opposite of its ordinary signification. Mill, Bain, and Spencer seem all to have gone astray, like lost sheep. … (EPs, 80)

James first provided a taxonomy of theories of space perception. Theories could be classified according to whether they held (1), that there is no sensory experience of

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[228] Hatfield's distinction between two senses of "empiricism" was first popularized, to my knowledge, in an influential historical survey of perceptual theories (Pastore 1971).
A very fine article on James's theory of space perception convincingly argues that Pastore's notion of empirism (as contrasted with nativism) does not give a helpful context against which to read the *Principles* (High 1981). Pastore replied in (Pastore 1981), and High published a rejoinder (High 1981). Thus I am arguing, with High, that the 19th century empirist-nativist debate, as interpreted by Pastore (and Hatfield), is not the proper background against which to view James's theory of spatial perception. (Note that only Pastore, not Hatfield, explicitly attempts to place *James* in this tradition. High discusses the intractable problems Pastore runs into in thus placing James.)

extension at all, and the perception of space is purely intellectual; (2) that the perception of spatial extension is immediately given in sensation; or (3) that sensations are originally non-spatial, but sensations somehow goad the mind to "envelop" them in spatial relations. James then notes that Helmholtz *calls* himself an "empiricist," but that Helmholtz does not use this word in its standard way. James immediately goes on to discuss those his readers might have been more apt to call "empiricists": Mill, Bain, and Spencer.

This latter charge, that Helmholtz is using "empiricism" abnormally, does not make sense if James was using this word in Hatfield's psychological sense. This is because the psychological sense of "empiricism" was *invented* by Helmholtz. James could reasonably be read as accusing Helmholtz of using "empiricism" in a way that fails to square with some *standard* meaning. But that standard meaning, the meaning James employed in the rest of the article, could not have been the Helmholtz-invented, psychological notion of "empiricism." One cannot fail to use a term of art appropriately if that term is one's own creation.

At least, so long as one's usage is consistent and not self refuting, one cannot fail in this way. But James did not accuse Helmholtz of inconsistency, in the last passage I quoted. The accusation was that Helmholtz was too long-winded and pompous[229] in spelling out his theory of space perception. As a result, James complained, Helmholtz could not be easily classed according to James's anatomy of theories—perhaps, James speculated, Helmholtz was vacillating. But there was no doubt in this passage about how Helmholtz *used* "empiricism." James thought Helmholtz's usage of the word was non-standard, but clear.

So James expressed confusion over how to square Helmholtz's use of "empiricism" with what he regarded as the usual sense of the word. What usual sense of "empiricism" might James have had in mind?

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[229] I suppose this might not be an accurate gloss on "sententious," but it is hard to know for sure. According to the *Oxford English Dictionary,* "sententious" had the same ambiguity in the late 19th century that it has today. "Sententious" could mean either pithy and full of meaning; or it could mean aphoristic, pompous, long-winded, and overly formal. James had such a mix of reverence and disdain for Helmholtz that it is hard to know for certain which usage he had in mind in this passage.

In Chapter Two, Section Nine, we saw a multitude of ways in which James was using the word "empiricism" during the 1870s. He had originally learned the word from a book he read in the 1860s, by David Masson. During the 70s, James came to associate the word with nominalism, the denial that experience had a necessary structure, the denial that there are necessary truths about nature, and the explanatory priority of parts over wholes. He associated the word with the Mills, Bain, and Renouvier. In "The Spatial Quale," he added Spencer to the list, and by the late 1880s, Thomas Brown was added as well.[230]

So in general, James used the word "empiricism" in a loose, historical-philosophical fashion. James's usage was loose in the sense that he did not associate the word with one exclusive thesis. Also, the *group* with whom he associated the word, including those mentioned in the previous paragraph, was loosely knit as well. Like Robertson, James used the word to denote a tradition of philosophers who saw the empirical study of mind as fruitful, and who thought such empirical study held the key to philosophical progress.

Perhaps most importantly though, the specific sense of "empiricism" as James used it in "The Spatial Quale" echoed the way he used that word in his class on Locke, Berkeley, and Hume. Recall that James taught his students that an "empiricist" was one who denied that experience has a necessary structure (*see above*, p. 128).

This helps explain why James was puzzled by Helmholtz's use of "empiricist." James saw <u>empiricists</u> as people who denied that experience has a necessary structure. Such an <u>empiricist</u> would have found himself perpetually at odds with Kantians, as we have seen throughout this dissertation. So it seems that James was confused by Helmholtz because the latter both called himself an "empiricist" *and* a "Kantian" (on Helmholtz's Kantianism, see Hatfield 1991, 167-168, 276).

Thus, I wrote that Hatfield's distinction (between two conceptions of empiricism, one philosophical and the other psychological) is too subtle for my

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[230] Thus, at (James 1889, 107) James refers, derisively, to the "Brown-Bain-Spencer-Mill theory of Space perception."

purposes because James did not wield the term with that much precision. Indeed, the block quote on page 280, *above*, shows James contrasting "empiricism" with "nativism"; and the block quote on page 278, *above*, shows James contrasting "empiricism" with a position affirmed by "Kantians." Both usages occur in the same article, and it seems James took himself, in each case, to be referring to one and the same, loose-knit group of empirically-minded philosophers.

It is worth noting that the last passage I quoted was reproduced, greatly expanded, in the *Principles* (PP, 902). The sentence about Helmholtz's peculiar form of "empiricism" was deleted, and replaced with a more lengthy final assessment at (PP, 908-910). This new version substituted "empirist" for "empiricist" in the discussion. Helmholtz wrote about "e*mpiristich*" and "*nativistisch*" theories of space perception—English commentators quickly came to translate Helmholtz's word as "empirism," e.*g*. James's friend, James Sully (Sully 1878). And instead of sounding confused, in the *Principles* James sounded conclusive in his judgment that Helmholtz was guilty of an unholy mix of empirical psychology and Kantian metaphysics.

5.3 Objection: Why Think James's Work on Space Targets T. H. Green?

I will now address a related objection that may have occurred to those who have read James's work on space. If arguments from Idealists play an important role in this work, why are the likes of Green and Caird barely even mentioned in James's work? After all, "The Spatial Quale" names neither Green nor Caird as targets. This paper would receive two major expansions, first into a longer article on space perception in *Mind* (James 1887a; James 1887b; James 1887c; James 1887d), and then into Chapter 20 of the *Principles*, entitled "The Perception of Space"—the longest chapter in that already long volume.[231] Both the longer versions did conclude

[231] It is worth mentioning that James's work on space perception perhaps had a direct effect on early analytic philosophy as well as the later, indirect effect it would have through James's students (as I have discussed in Section Three of this chapter). Russell apparently read, reread, and copiously notated his copy of the *Principles*, particularly the extensive chapter on space. His notations date back to the period when he was preparing his dissertation on the philosophy of geometry. Russell had a much more favorable reaction to James's

with a discussion of Kantian views, as did "The Spatial Quale." But in the mature works, the chief Kantian representatives discussed include Herbart, his followers, and Schopenhauer (James 1890/1981, 903). So what licenses my own attempt to read James's work on space as a response to T. H. Green?

The answer is that one cannot make sense of James's own recollections of his work on space without taking Green and Idealists into account. On p. 134, *above*, I quoted one such reminiscence that deserves to be reprinted here:

> Years ago, when T. H. Green's ideas were most influential, I was much troubled by his criticisms of english [*sic*] sensationalism. One of his disciples in particular [Max Fisch claims James was talking about Cabot, here] would always say to me, "Yes! *terms* may indeed be possibly sensational in origin; but *relations*, what are they but pure acts of the intellect coming upon the sensations from above, and of a higher nature?" Well, I remember the sudden relief it gave me to perceive one day that *space*-relations at any rate were homogeneous with the terms between which they mediated. The terms were spaces, and the relations were other intervening spaces. [Here, James inserted a footnote to a portion of his work on space perception: "See my *Principles of Psychology*," PP, 790-794] For the Greenites space-relations had been saltatory, for me they became thenceforward ambulatory. (MT, 79)[232]

James claimed that he was much troubled by Green's criticisms of "English sensationalism" during the period when Green was most influential. James describes the relief he felt when he was able to overcome "Greenites" on the topic of space-relations. This passage raises a question I have tried to answer in this dissertation: how does James's work on space perception function as a response to Green?

We could brush off such reminiscences as distorted memories of old age, were it not for the fact that we have historical evidence to corroborate the story. The evidence I have in mind is that which I already presented in Chapter Two, and reviewed again in this chapter at the start of Section Four. Again, we know that James's early work on space was a response to Cabot's club paper, written when the club was debating Green and Caird.

Principles than he would later have to *Pragmatism*. For more on this interesting issue, see especially the discussion portion of (Brennan and Griffin 1997-1998).

[232] Again, Fisch's claim that James is referring to Cabot can be found at (Fisch 1986a, 149).

5.4 The Epistemic Status of the Stream Thesis

I will now address the third question I raised at the start of Section Five. What, if anything, can we glean about the epistemic status of the stream thesis from James's early work on space?

I have already presented and evaluated evidence from "The Spatial Quale" concerning the non-corpuscularity of perceptions of visual and tactile space. That evidence can only be described as empirical; *some* thesis James defended in that early work was clearly meant to be a posteriori. The question is whether the empirical thesis he defended in "The Spatial Quale" can convincingly be connected with the stream thesis. I shall argue that it can, and that therefore the stream thesis is best viewed as an a posteriori claim that rests primarily on e*xperimental* (not just introspective) evidence.

To make the connection, we must begin with a more detailed look at the stream thesis. I gave a first approximation of the thesis at the start of the chapter. According to my approximation, the stream thesis asserts that all experience is given as a continuous stream, not as a set of discrete psychological atoms.

In the *Principle*s, James's articulation of the stream thesis was far more richly articulated. He proposed *five* basic qualities psychologists should accept as ultimate features of the stream of thought. By "ultimate," James meant that only metaphysics, not science, can attempt to explain why experience should have just *these* qualities.

Here is how James first introduced the stream thesis in the *Principle*s:

> *The first fact for us, then, as psychologists, is that thinking of some sort goes on.* I use the word thinking, in accordance with what was said on p. 186, for every form of consciousness indiscriminately. If we could say in English 'it thinks,' as we say 'it rains' or 'it blows,' we should be stating the fact most simply and with the minimum of assumption. As we cannot, we must simply say that *thought goes on*.
>
> FIVE CHARACTERS IN THOUGHT.
> How does it go on? We notice immediately five important characters in the process, of which it shall be the duty of the present chapter to treat in a general way:
> 1) Every thought tends to be part of a personal consciousness.
> 2) Within each personal consciousness thought is always changing.
> 3) Within each personal consciousness thought is sensibly continuous.
> 4) It always appears to deal with objects independent of itself.

> 5) It is interested in some parts of these objects to the exclusion of others, and welcomes or rejects—*chooses* from among them, in a word—all the while. (PP, 220)

My first approximation of the stream thesis dealt only with the most famous aspect of the stream of thought—its quality of being "sensibly continuous." In fact, this is only the third of five sub-claims that compromise the full stream thesis. Henceforth, I will use "stream thesis" to refer to all five claims, together.[233] When I want to refer only to the third aspect of the thesis, I will use the phrase "continuity claim."

The task of demonstrating that all five claims rest on empirical evidence is too big to attempt here. I will, however, argue that the continuity claim rests in part on experimental evidence—indeed, the evidence we have just seen from "The Spatial Quale."

The continuity claim was perhaps the most theoretically fruitful aspect of the stream thesis. Its importance is underscored by the fact that the bulk of the chapter entitled "The Stream of Thought" is devoted to a discussion of this particular claim. Also, it was in the context of this lengthy discussion that James officially introduced the phrase "stream of thought" in the *Principles* to begin with (PP, 233).

To readers of this dissertation, the continuity claim may seem obviously to rest on James's empirical evidence from his early work on space. This impression is solidified when one finds that in the *Principles* James explicitly presented the continuity claim as the negation of "the Humian doctrine that our thought is composed of separate independent parts … not a sensibly continuous stream." He promised that his discussion of the continuity claim would show that Hume's view

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[233] In this section, I deal primarily with the continuity claim. But here is a summary of how I understand the other four claims that comprise the stream thesis. The first claim is that all thought is attached to a subject. In a lecture room, there are many thoughts—some belong to my conscious life, some belong to yours. Whether there are any thoughts merely floating around, with no connection to anyone's subjective life, cannot be determined by the psychologist, because by definition nobody could have an experience of such a thought (PP, 220). The second claim is that no state of mind is ever exactly duplicated. We have different states of mind that are *of* the same object, but no state of mind can exactly recur (PP, 224). James devoted the bulk of the "Stream of Thought" chapter, from pages 231-262, to the third claim (the continuity claim). I examine this claim in the text. The fourth claim is that thoughts know independent objects that exist in "outer reality." This claim is explicitly presented as a rebuff to "Absolute Idealists" (PP, 262). The fifth claim is that consciousness always selects some objects to attend to, and discards others (PP, 273).

"entirely misrepresents the natural appearances" (PP, 230). Similarly, I have presented "The Spatial Quale" as targeting the theory of ideas shared by a more recent group of proto-empiricists—Mill, Bain and Spencer. This latter group agreed with Hume that pointillistic ideas are prior to ideas of continuous areas (EPs, 64, 66). So in his early work on space, James seems to have begun his attack on the proto-empiricist contention that ideas are spatially discontinuous.

In short, James presented the continuity claim as the negation of the proto-empiricist commitment to 'psychological atomism'; and "The Spatial Quale" clearly provided evidence against such 'psychological atomism.' However, closer inspection reveals some hurdles that must be overcome before we can read the "The Spatial Quale" as providing support for the stream thesis.

One such hurdle concerns James's rhetoric. "The Spatial Quale" does not use the *language* of the stream thesis—in particular, it does not use the phrase "stream of thought." On the surface, the language of this article suggests a narrow focus on explaining the facts of space perception, not on criticizing proto-empiricists' conceptions of ideas or on developing a stream-based alternative. Some readers may therefore find it implausible to read this early article on space as contributing direct evidence to the stream thesis.

Another hurdle concerns the scope of the continuity claim as it is presented in the *Principles*. The *Principles'* discussion of this claim clearly ascribes *temporal* continuity to our stream of thought; but it is less clear that James meant to ascribe *spatial* continuity as well, at least in the "Stream of Thought" chapter. Let us take these difficulties in turn.

First let us consider whether James's rhetoric in "The Spatial Quale" is an obstacle to connecting that work with the stream thesis.

"On Some Omissions of Introspective Psychology" is commonly cited as the place where James first introduced the notion of a stream of thought. But this article was published in 1884, more than five years after "The Spatial Quale." Some

readers might therefore worry that I am finding evidence for the stream thesis in an article written well before James had even conceived of a stream of thought.

In fact, when one surveys James's pre-1884 work, including the early work on space, one finds that "On Some Omissions" was the culmination of a critique James had been developing in various articles since at least 1878. That critique did not use the phrase "stream of thought" (at least not until 1884's "On Some Omissions"), but it did have a characteristic rhetoric. Thus, although "The Spatial Quale" did not use the expression "stream of thought," it *did* use this other characteristic rhetoric, as I will now show. It is in virtue of this shared rhetoric that "The Spatial Quale" can be tied to the stream thesis.

The most important pre-"Omissions" articles that develop the stream thesis include "Remarks on Spencer's Definition of Mind as Correspondence" (collected in EPh), "Brute and Human Intellect" (EPs), "Are We Automata?" (EPs), and to a lesser extent "The Sentiment of Rationality" (EPs). I can find four stream-related themes from these articles that also play important roles in "The Spatial Quale."[234]

The first theme concerns raw sensation, which James portrayed as a vague jumble that becomes intelligible through the selective deployment of attention. Thus, James often characterized raw sensation as a "confused unity," as an "undivided plenum," or as a "simple vague consciousness" in these articles. If we are to have coherent experiences, according to this characterization, then our chaotic sensory material must be "mentally discriminated," a task accomplished by "attention singling out" salient features of sensation. These expressions come from "The Spatial Quale" (EPs, 64, 66, 67, 71-72, 75), and the language is consistent with James's mature defense of the stream thesis.[235] Similar descriptions of raw

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[234] Readers should take care not to confuse these early themes with James's more mature, five-part articulation of the stream thesis.

[235] For example, in the chapter "Attention" (the second most important chapter that articulated the stream thesis, in my view), James argued that we have introspective access to the "confused unity" of relatively unprocessed sensation whenever we find ourselves staring vacantly off into space. This state amounts to the suspension of "attention"; when we resume attending to specific portions of our sensory fields, the state abates (PP, 382-383). In the "Stream of Thought" chapter, James characterized our feelings of relations as "vague" (PP, 246). He also called our senses "organs of selection" which choose what to attend to in the

sensation can be found in other pre-"Omissions" articles, especially in "Brute and Human Intellect"[236] and "Are We Automata?"[237] The language can also be found in notes for "The Sentiment of Rationality" (EPh, 348).[238]

The second theme has to do with James's attempt to resist *Kant's* view of experience. As James developed his conception of a stream of thought, a recurring concern was to discover the "real" a priori element in experience. We have seen that James accepted many native perceptual skills, but denied that these skills give experience a necessary structure that supports synthetic a priori knowledge. In particular, he concluded "The Spatial Quale" by arguing that if his theory of space perception is correct, then space, at least, cannot be a form of pure intuition in

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"infinite chaos," the "swarming continuum" of unprocessed experience. This is part of a lengthy passage reproduced from "Are We Automata" concerning the selection and discrimination of chaotic sensation (PP, 273-277). *Also see* (PP, 969-970) for the definition of vagueness used in both "The Spatial Quale" and "Brute and Human Intellect" (*see below*, fn. 236).

[236] For example, at (EPs, 14), James gave the same definition of vagueness as he used in "The Spatial Quale" (at EPs, 67). The former passage contained perhaps James's first published description of the baby's consciousness as an experience with "no subdivisions." He had not yet hit on the famous phrase "blooming, buzzing confusion." As in the work on space, "Brute and Human Intellect" also claimed that knowledge "begins thus with vague confusion." This "Whole of experience" is made intelligible through a process of "dissociation" (EPs, 15). He also uses the phrase "grey chaotic unity" (EPs, 19).

[237] For example, at (EPs, 49n.), James distinguished his view from the "old atomic doctrine of association, so thoroughly riddled of late by Professor Green." Associationists assumed that consciousness begins with the passive reception of intelligible sensory atoms that must be knit together, as it were, when we form an awareness of extended areas and such. But James held that quite the opposite was true. Intelligibility resulted from the mind's "progress from vagueness to distinctness." This article offered a more detailed view (compared with rudimentary remarks in "The Spatial Quale") of the *way* in which the mind "selects" features of the "swarming *continuum*" of experience. In particular, James argued that the physiological organs involved in perception form a hierarchy of selective mechanisms. For example, from the retina up through the brain's neural pathways, each higher perceptual level is responsible for filtering the relatively chaotic experiential material received from the lower. At each level, the mind attends to useful or interesting information, and discards the rest (EPs, 51). Further discussion of the sifting of chaotic sensation can be found in this article at (EPs, 46, 47, and 49).

[238] These notes are undated, so it is not clear whether James made them when he was preparing the earlier version of "Sentiment," published in *Mind*, or when he was working on the later, substantially different version published in *The Will to Believe*. For more on the history of this article, *see* (EPh, 249-253; WB 326-333; Perry and McDermott 1967, 818-819, 821).

Kant's sense (EPs, 81-82). Similar concerns arise in "Remarks on Spencer's Definition," in a discussion of the role of "selective interest" in experience. James claimed that "These interests are the real *a priori* element in cognition" (EPh, 11), but denied that the interests thereby furnish synthetic, universal truths (EPh, 20).

The third theme concerns an organism's *interests*. James often claimed that when we discriminate our chaotic sensations via selective attention, we typically attend to that in which we are interested. Thus, in "The Spatial Quale," James wrote that "…emotional interests are the great guides to selective attention" (EPs, 75). In fn. 237, *above*, I mentioned James's references to the role of "interests" in experience in "Remarks on Spencer's Definition" (*e.g.,* at EPs, 11, 18). This theme played a major role in "Brute and Human Intellect" and "Are We Automata?"[239] as well. While the early work on space cited generic "emotional interests" as guides to attention, "Brute and Human Intellect" further divided these into "practical interests" and "aesthetic interests." Each helps us "dissociate the elements of the originally vague syncretism of consciousness" (EPs, 15). He went as far as to claim that the more abundant and varied an organism's interests, the better at cognitive reasoning the organism will be, and the richer will be its experience (EPs, 16).[240]

The fourth theme concerns the sensory experience of *relations*. In "The Spatial Quale," James discussed two sorts of spatial relations. On the one hand, James denied that all experiences of extension involve systems of *clearly-grasped* relations between sharply-given relata (EPs, 70-71). But on the other, he claimed that raw

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[239] In "Are We Automata," James asserted that the study of consciousness inevitably brings us to "the mystery of *interest* and *selective attention*." Consciousness *is* "passive and receptive" in many ways; but it cannot ultimately have clear, coherent experience without deploying attention, guided by interest, "always to choose out of the manifold experiences present to it at a given time some one for particular accentuation, and to ignore the rest" (EPs, 46). We ignore, and thereby strip away, features of our stream of thought which are "valueless" for helping us operate in our environments (EPs, 47).

[240] Thus James concluded (with the sort of racism common to the era and to which James was not immune): "Man, by his immensely varied practical wants, and his aesthetic feelings, to which every sense contributes, would, by dint of these alone, be sure to dissociate vastly more characters than any other animal, and, accordingly, we find that the lowest savages reason incomparably better than the highest brutes" (EPs, 16). *Also see* (EPs, 19) for further discussion.

sensation does contain *vague* spatial relations. Sensation is given "with all its parts, alongside each other, in the full spatial collaterality which nativists claim for them" (EPs, 79). James argues that raw sensation contains an inherent set of "spatial *relations*" that appear "very uncertain" and "vague" (EPs, 69).[241] The former brand of relation—the sharply-grasped "system of related positions"—is something that the "feeling of space … may later evolve…" (EPs, 70-71). A similar view is implied in one passage of "The Sentiment of Rationality."[242] By the mid-1880s, James would come to lay greater emphasis on the notion that vague spatial relations have a sensory origin, particularly in "On Some Omissions of Introspective Psychology."

In this sub-section I have been considering the objection that "The Spatial Quale" appears not to use the rhetoric of the stream thesis, and thus cannot be viewed as offering *evidence* for that thesis. I take myself to have shown that the appearance is deceiving. I have isolated four specific respects in which "The Spatial Quale" *did* use rhetoric entirely typical of James's late 1870s and early '80s writing about (what he would only later call) "the stream of thought." Thus, I conclude the rhetoric of "The Spatial Quale" is no obstacle to seeing the evidence offered there as providing empirical support for the continuity claim.

Now let us consider the second objection I raised on p. 289, *above*. The issue is whether the continuity claim ascribes *spatial* continuity to experience, or only *temporal* continuity. I will argue that James did hold that the stream of thought was *spatially* as well as temporally continuous. Thus, to the extent that "The Spatial

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[241] James articulated his view of space relations in far greater detail in the *Principles*. There, he introduced his own view as an alternative to the "Platonizing school" (PP, 790), a school James took to be led by Green (PP, 659-660). James wrote that "*in the field of space the relations are facts of the same order with the facts they relate. If these latter be patches in the circle of vision, the former are certain other patches between them*. … [Spatial relations between positions are] simply the sensation of the line that joins the two points together" (PP, 791). Recall that towards the end of his life, James would regard this insight—that perceived spatial relations are just perceived spaces—as the fatal blow to Green's Idealism, and a crucial building-block for his own empiricism (*see above*, p. 170).

[242] He wrote that the "British school" denies that relations can be "phenomenal elements" (EPs, 39). A page later he characterized this attitude as a "*quasi*-pathological excess."

Quale" offered evidence of the spatial continuity of experience, it also offered evidence for the continuity claim.

In the *Principles*, James described the continuity claim as itself having two aspects. First, consciousness is *personally* continuous, in that experiences always form one continuous part of someone's subjective life.[243] But inside the personally-continuous stream of thought, James found another variety of continuity, which I will call "sensory continuity." The actual data of sensation are also continuous, in the sense that they originally appear to the subject as a stream, not as broken atoms or corpuscles.

Now, there are many senses in which experience might be "broken." Experience might be broken into, among other things, temporal atoms, or logical atoms, or spatial atoms, or some combination of these. And indeed, the objection I am now considering crops up because much of James's discussion of sensory continuity in the "Stream of Thought" chapter focused on the *temporal* continuity of sensory experience, as I have mentioned. Some of the discussion focused on logical continuity (i.e., the alleged experience of logical relations), but there are few examples of *spatial* continuity in this chapter.

That the stream was also meant to be spatially continuous comes out best, I think, in James's later discussion of the process through which we *parse* the stream. As in the discussion of sensory continuity from the "Stream" chapter, the continuity claim was again presented as an alternative to Hume, and here Locke was added for good measure. In the chapter entitled "Discrimination and Comparison," James wrote:

> The 'simple impression' of Hume, the 'simple idea' of Locke are both abstractions, never realized in experience. Experience, from the very first, presents us with concreted objects, vaguely continuous with the rest of the world which envelops them in space and time, and potentially divisible into inward elements and parts. These objects we break asunder and reunite. (PP, 461)

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[243] To use James's example, when Peter and Paul wake up in the same bed, Peter *remembers* his own stream of thought, but only *conceives* Paul's stream. It does not matter whether we fall asleep, lose consciousness, or what have you, "this community of self is what the time-gap cannot break in twain …" (PP, 232).

Here, James claimed that we experience objects that are vaguely continuous with broad tracts of time and space they occupy. On the following page, he elaborated:

> The baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as one great blooming, buzzing confusion; and to the very end of life, our location of all things in one space is due to the fact that the original extents or bignesses of all the sensations which came to our notice at once, coalesced together into one and the same space. There is no other reason than this why "the hand I touch and see coincides spatially with the hand I immediately feel." (PP, 462)

These passages must remove any suspicions that James did not intend our stream of thought to be *spatially* as well as temporally continuous. He wrote that the baby's raw experience—which James took to exemplify adult unprocessed sensation, like many psychologists of the day—is both temporally and spatially continuous.

I conclude that the experimental evidence from "The Spatial Quale" does provide empirical support for one aspect of the continuity claim. In particular, it provides support for the notion that raw sensation is spatially continuous.

As I have written, James offered other empirical support for other aspects of the stream thesis (e.*g.*, support that our raw sensations are temporally continuous as well). I cannot discuss such further evidence here.

6. The Secondary Literature on James

I conclude this chapter with an analysis of trends in relevant secondary literature on James. I divide my discussion into two parts. First, there is literature that deals more or less directly with James on space. My work adds, I hope, to this discussion. I find nothing in this literature that my work contradicts. Second, there is an influential literature that portrays James as a Kantian. My work does stand very much in tension with this literature. I present and refute the best available evidence proffered in favor of the various Kantian readings.

6.1 The Literature on James on Space

I can find no recent accounts that claim James's view of space perception is designed to resist Neo-Kantian attacks from the likes of Green.[244] I do not hold that James's work on space is usefully read as aimed *exclusively* at Idealists. But I cannot find commentators who even consider the way James's work on space might have functioned as a response to Green-style arguments against psychology, or even to broadly Kantian philosophical positions.

There is one work that does treat James's *Principles* as providing an argument against Green and Idealism, though it does not deal with the issue of space perception. I have in mind Howard Knox's 1914 *The Philosophy of William James*.[245]

The secondary literature on James's account of space perception can be usefully divided into two categories. In the first are articles and book chapters directly devoted to James's account of space perception. All pieces that qualify for this category that I can find include: (High 1981; Jubin 1977; Myers 1986, Chapter

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[244] By "recent" I mean since about World War I. I have checked the Philosopher's Index; JSTOR; Academic Search; Historical Abstracts; ProQuest Dissertations and Theses; PsychINFO; ScienceDirect; Web of Knowledge; History of Science, Technology and Medicine; various online card catalogues (including catalogs at Indiana University, Harvard University, and the New York Public Library); and (Skrupskelis 1977), an indispensable guide to writings about James from 1868-1974. I should note that there was certainly discussion of James's theory of space in his own day. "The Spatial Quale" elicited a response from Cabot (Cabot 1879). James's four-part *Mind* article, "The Perception of Space" (James 1887a; James 1887b; James 1887c; James 1887d), elicited a response from Robertson (Robertson 1888), and a rejoinder (James 1889). Finally, James's chapter on space perception in the *Principles* elicited a response from (Ford 1893), and another rejoinder (James 1893).

[245] I regret that I only discovered Knox's book (Knox 1914b) as I was finishing this dissertation. Knox argued a) for the philosophical significance of the *Principles*, which b) was to be found in its refutation of Idealism. Knox seems to provide a precedent for my reading of James, in some respects. Recently the book was republished as (Knox 2001), with an introduction by Ellen Kappy Suckiel. Suckiel writes that Knox first articulated his reading of the *Principles* in an essay (Knox 1909) published while James was alive (the piece is reprinted in Knox 2001). James admired this article and recommended it to students and friends, Suckiel shows (Knox 2001, ix). Note that Knox also wrote two very critical articles about Green's attack on empiricism (Knox 1900; Knox 1914a).

Four; Pastore 1971, Chapter 12; Reed 1990).[246] In the second category are articles or chapters that deal with James on space perception in some detail, though not as the primary focus of the article or book chapter in question. No list of this second category can be exhaustive, but important examples include (Ayer 1968, 218-234; Girel 2003; Giuffrida 1980; High 1978; High 1982; Madden 1963; Madden and Madden 1978; Pastore 1977; Pastore 1981; Sprigge 1993, 143-149; Woodward 1978, 581).

I will not attempt to annotate this little bibliography here. Some of these articles I have already discussed in footnotes. Here I comment on how my reading fits with a few broad trends.

The two groups of literature on James just cited is cross-cut by another distinction. Some of these pieces are produced by authors whose training is primarily in history, and others by those trained primarily in philosophy. Edward Reed is an excellent representative of the historians of psychology (Pastore, High, and Woodward are other such historians). Myers is an excellent example of work on this topic by philosophers.

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[246] A word is in order about (Jubin 1977). She claims that in "The Spatial Quale," James allowed for the mind to play a more active, "Kantian" role in constructing space perception than he allowed in the *Principles*. She wrongly claims that the *Principles* only countenanced two types of relation—purely experiential relations, and purely intellectual relations (Jubin 1977, 213). She then rightly points out that "The Spatial Quale" portrays the mind as playing an active role in mapping spatial relations in the stream of thought, even though in such cases the mind does not add anything new to raw sensation. She claims this is a third sort of relation not permitted in the *Principles*. The most important problem with her argument is that she has no good basis for showing that the *Principles* only permits two kinds of relations. Her basis for the claim that James allowed purely experiential relations is not even from the *Principles*, but a passage from *Essays in Radical Empiricism* (ERE, 42). Her basis for the claim that James allowed purely intellectual relations is taken wildly out of context from the *Principles* (PP, 1237; here he was writing specifically about relations evoked in scientific theories; he was not giving a general taxonomy of perceptual relations;Jubin 1977, 213). But she gives no indication that in either place, James claimed that these are the *only* kinds of relations he recognized. What is worse, she actually acknowledges that the very *tertium quid* kind of relation she finds in "The Spatial Quale" actually can be found in the *Principles's* chapter on space perception (Jubin 1977, 21n.n26). She does not attempt to give an interpretation of the alternative account of space perception allegedly on offer in the *Principles*. Most of the article is confined to rehashing the claims of "The Spatial Quale."

Reed places James's theory of spatial perception in the context of the history of psychology. He shows how James (along with Mach and Stumpf) argued against Helmholtz and Wundt's respective positions. These latter two held that spatial perception was only possible when the mind makes unconscious inferences on the basis of originally unextended, unspatial sensations. James was not the only one to revolt from such views. Reed writes:

> James's theory of space perception was one of several sensationalistic theories that emerged (in partial reaction against Helmholtz and his followers) at the end of the 19th Century. The fundamental idea behind all these novel theories was that stimuli could be complex and relational. Hering had studied complexes of brightness contrasts as stimuli; Mach and Exner had begun to look at motion patterns as stimuli; and Stumpf had drawn important connections between auditory and visual space perception that relied on an analysis of relational stimuli. Thus the sensationalist aspect of his work was not innovative …. (Reed 1990, 238)

Reed claims, in short, that James must be read as part of a larger revolt—other leaders of which include Hering, Mach, and Stumpf—against the influence of Helmholtz-style unconscious inference (or so-called "two-step") theories of perception.

My account contradicts nothing in Reed, nor does his account challenge anything I shall have to say. It is true that one important set of targets of James's theory of space was empirical psychologists like Helmholtz.

However, historians of psychology like Reed have been less attentive to what we now think of as more *philosophical* debates of the day.[247] It is surely reasonable for historians of science to focus on the history of more empirical work. I only want to point out that we must not unwittingly read contemporary disciplinary boundaries back onto late 19th century psychologists and philosophers.

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[247] Some historians of science do devote some attention to figures typically remembered as philosophers (*e.g.*, Pastore looks at Descartes and Locke). But they very rarely look at philosophers who were *contemporaries* of James. One notable exception is the historian David Leary, who is deft at portraying the history of psychology as interwoven with the history of philosophy. As it happens, Leary does not deal at length with James on space. I thank James Capshew for first pointing me towards Leary's work. Finally, Gary Hatfield's book on space (Hatfield 1991) is a model of historical and philosophical scholarship on space. He does not discuss James, instead focusing on the German tradition.

I claim that a full account of James's theory of space cannot be had if one focuses exclusively on the context of the history of (what we now think of as) empirical psychology. This is not so much a criticism of historians of psychology—Reed, for one, does not *claim* to have a "full account" of the relevant context of James's theory. But there is still work to be done on James's theories of perception even after the best histories of empirical psychology have been written.

The second representative piece I want to comment on from the secondary literature comes from Myers, who portrays James's theory as a reaction against two different groups. On one hand, James opposed "empiricists" like Herbert Spencer, Thomas Brown, Alexander Bain, and J. S. Mill, because this group held that sensations were given as sets of extensionless minima sensibilia that the mind has to knit together, through an act of association, in order to form an experience of space or extension. On the other hand, James opposed "Kantians" like Schopenhaur, who held that "space is generated from the mind's internal resources" (Myers 1986, 115-116). Myers does not cite any Kantians who were contemporaries of James.

Now Myers's work is a good representative of the literature on James emanating from philosophers. Those trained in the analytic tradition typically offer conceptual analyses of James's various theses, in relative isolation from analyses of the empirical results by which James supported those theses. In other words, if historians of psychology have not been alive enough to the (traditionally) philosophical problems with which James wrestled, historians of philosophy have not been alive enough to James's detailed, empirical results.

For example, consider how Myers presents James's attack on empiricists and Kantians:

> James charged that both the empiricists, with their concept of association, and the Kantians, with their concept of a priori mental machinery, had given accounts of space-perception which either had no supporting evidence or could not be tested experimentally. (Myers 1986, 116)

In fact, as I have shown in this chapter, James charged that there *was plenty* of empirical evidence that was relevant to the Kantian and proto-empiricist accounts of space. The problem was precisely that the available evidence *contradicted*

'psychological atomism,' which James held was a necessary presupposition of both views. Myers, however, does not cite any of James's empirical evidence in this regard.

6.2 Against Kantian Readings of James

The general secondary literature on James is very large, and there is no way to summarize it briefly in a useful fashion. At the end of Chapter Two, I addressed ways in which my reading departs from some broad trends in that literature. However, there is one influential trend I need to address that is profoundly incompatible with the portrait of James I am advancing.

Some scholars hold that James is best viewed as a Kantian in some important sense. There are more and less extreme versions of this view. I canvassed some of the less extreme versions of this view at the end of Chapter Two, and suggested they had failed to come to terms with James's own explicit and continual repudiations of Kant.

But there is a more extreme reading that portrays James as a neo-Kantian. This reading holds that James is best read as a "protophenomenologist" (in the words of Wilshire 1969).[248] I find Wilshire's pioneering work on this topic bold, ingenious, and spectacularly misguided.

For Wilshire, phenomenology's central thesis is that the world cannot be conceived except as it appears to the mind, and the mind cannot be conceived except as it takes the world as its object.[249] This is meant to imply that there is a

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[248] Some of the pioneering texts that portray James through a phenomenological lens, particularly of a Husserlian tint, include (Edie 1987; Linschoten 1968; Wild 1969; Wilshire 1968). I focus on Wilshire because I find his work to give the clearest, most bold account of what is at stake in reading James as an early member of the phenomenological tradition. A more moderate reading can be found in (Schuetz 1941), which suggests affinities between James and Husserl without trying to transform James's scientific enterprise into transcendental phenomenology.

[249] There is a weak and a strong way of reading this thesis. The weak reading is that there can be no thought without *some* object, and no object without *some* thought. The strong reading is that thought has a necessary structure that places non-trivial constraints on the *kinds* of objects there can be; and that objects, in turn, place other necessary constraints on the structure of thought. As a description of James's view, the weak reading is probably true, but trivial, in the sense that it does not force him to abandon empirical studies of the mind in

"necessary," "internal" connection between mind and world (Wilshire 1968, 3-4). Wilshire writes:

> To be sure, modes of being are linked with modes of being presented to mind, but this linkage is not [according to the phenomenologist] an external, contingent, or causal relationship (not merely factual), hence it cannot be the subject matter of any particular empirical science, e.g., psychology. The linkage is internal—exclusively conceptual. Truths about it [the linkage] are necessary in virtue of their very meaning, and it is apprehended by what Husserl calls a transcendental investigation. (Wilshire 1968, 4)

Husserl's notion of transcendental investigation comes from Kant (CPR, B40).[250] For Wilshire, such investigation amounts to a technique for proving that some principle *p* is necessary. One begins with another principle, *q*, which one already knows to be true. Then one shows that in order for *q* to be true, it is necessary that *p* is true, as well (Wilshire 1968, 4-5). Phenomenology is to be characterized by the way in which it uses transcendental exposition to establish the necessary preconditions of phenomenological appearances.

Husserl's technique was to begin with the evident fact that we have perceptions, and that our perceptions have some determinate character or other. He then proposed that we "bracket" questions about whether these perceptions accurately represent their objects. Instead, he proposed that we ask what are the necessary preconditions of these perceptions even appearing to us in the first place.

> Indeed, the purpose of Husserl's famous 'bracket' is to force investigations into the transcendental channel: to constrain us to give up the question, So we know this fact; now what other facts can we get on to know? And to ask instead, So we know what we take to be this fact; now how is this taking or intending—this *meaning*—possible? (Wilshire 1968, 5)

The point I want to emphasize is that Wilshire takes phenomenology to be the a priori search for necessary preconditions of experience—a task that in principle cannot be accomplished empirically. He portrays James, particularly in the

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favor of transcendental, a priori analysis. So it must be the strong reading Wilshire and others want to advance. But the strong reading of James, as I will argue, is false.

[250] Note well that Kant's chief example of a "transcendental exposition," when he introduced the term, was a transcendental argument whose conclusion was that space is a form of pure intuition. Geometry could not be synthetic a priori, Kant argued, unless space was a form of pure intuition.

Principles, as engaged in a proto-Husserlian, transcendental phenomenology of just this sort.

On first blush, this is an astonishing claim. First, the kind of transcendental exposition we are supposed to find hidden in the *Principles* is very close to the sort of project in which James's *opponents* were engaged. As we have seen in detail, it was Idealists like T. H. Green and Edward Caird who argued that a priori investigation into the necessary preconditions of cognition was needed to reveal the mind's true nature. The notion that the *Principles* actually undertakes such a priori investigation simply ignores the context in which that work was written. Specifically, it ignores the anti-psychological arguments from Idealists that James and his allies were working to refute.

Second, the notion that James held that the mind could only be studied through transcendental techniques of Kantian design (Wilshire 1969, 36) must account for passages like those I quoted at the end of Chapter Two, *above*, where James expressed unrestrained vitriol against Kant. One might also cite (PP, 341-350) for James's considered and wholesale rejection of the notion that the ultimate subject of knowledge is an Ego whose properties can only be ascertained through transcendental exposition.

Perhaps most astonishing is the suggestion that the *Principles* should be read as an argument *against* the notion that the mind can be studied scientifically (Wilshire 1968, 5-6). One need only read to page 6 of the *Principles* to find James announcing that he has "kept close to the point of view of natural science throughout the book."

Wilshire is well aware of this last problem, at least—nobody could read the *Principles* without noticing that it purports to investigate the mind scientifically. So Wilshire devises an ingenious gambit to account for the fact that the *Principles* is explicitly presented as a scientific analysis of experience. He claims that James backs into transcendental critique, as it were, by slowly showing that the empirical project as originally announced in the *Principles* is actually impossible to carry out. The final lesson of the *Principles* is supposed to be that when we try to build an empirical psychology, we find the task to be impossible until we have in hand a

workable transcendental analysis of the mind, according to Wilshire. Thus, the *Principles* is best read as a kind of crypto-phenomenology that prepares the way for such transcendental analysis by showing why a purely empirical analysis of the mind must fail.

Unfortunately, this exhilarating reading rests on one piece of crucial evidence, and the evidence collapses upon inspection. What is supposed to invite the crypto-Kantian reading is a short passage at the end of the *Briefer Course*. There, James is alleged explicitly to confess that his natural-scientific approach to mind has ultimately proved a failure.

The *Briefer Course* was published in 1892, and was James's abridgement of the 1890 *Principles*. The abridgement contained some new material, notably an Epilogue entitled "Psychology and Philosophy." It is here that Wilshire finds James's "confession," capping fourteen years and several thousand pages of psychological research.

Here is how the reading works. At the start of all those pages, in the preface to the *Principles*, James is to have announced the goal of all scientific psychology: to show how brain states correlate with mental states (PP, 6-7). At the other end of all those pages, in the epilogue to the *Briefer Course*, James is to have finally "confessed that he did not know what a mental state is" (Wilshire 1969, 26).

Mental states have intentionality, as we now call it—they point to, or cognitively take hold of their objects. James is to have finally confessed that the intentionality relation amounts to an intrinsic connection between a state of mind and its object. By "intrinsic," I mean that the concept that picks out any given mental state must necessarily pick out the mental state's object, too.

For example, the fact that my present mental state represents the toothbrush in front of me is analytic, on this view—the concept that picks out my present state of mind is supposed conceptually to contain the toothbrush. The statement "Alex's perception is of a toothbrush" becomes analytic in the same sense as "Cookie (the puppy) is a mammal" is analytic. Just as the concept *mammal* is part of the concept *puppy*, the concept *toothbrush* is contained in the concept that picks out Alex's

present perception. Both statements can be determined true or false on the basis of conceptual analysis, allegedly.

In the case of perception, what gets analyzed conceptually is Alex's present *phenomenological appearings*. As Wilshire conceives it, a phenomenon is supposed to be metaphysically neutral between a subject and object. We only get a clear concept of a subject (Alex's perception) and an object (the toothbrush) by reflecting on the *transcendental conditions* of the phenomenological appearing. This act of reflecting is a strictly a priori undertaking.

Now according to Wilshire, the "Epilogue" is supposed to contain James's confession that one cannot do empirical psychology unless one knows, in detail, how to perform this kind of a priori, transcendental analysis. Wilshire draws a dramatic conclusion:

> Notice in detail how James's belated philosophical reversal upends his whole natural-scientific program for psychology. He aims directly at the correlation of mental states and brain states. Such correlation requires that he specify what he means by mental states. But then this specification involves an internal, noncontingent relationship and a metaphysics in which a mental state and its cognitive object are discerned to be in some way identical. He is forced to conclude that such a metaphysics must be logically prior to his natural-scientific psychology, and that his psychology cannot stand by itself as an autonomous endeavor. The reversal is complete and its significance momentous. (Wilshire 1969, 27)

Wilshire says we must go back and reread the entire *Principles* in light of this alleged "reversal" in the *Briefer Course's* epilogue. Throughout, it is as though James began a race in the middle, and is running in reverse in search of the starting line, Wilshire tells us. Quite literally, we are asked to read the *Principles* as James slowly backing into Kant-style, transcendental metaphysics.

So the key question on which this entire reading turns is, can the epilogue of the *Briefer Course* be read as the kind of confession Wilshire needs? We must answer in the negative.

The first point to notice is that James did not actually claim that the only work for the empirical psychologist is the correlation of mental states with brain states. The passage Wilshire quotes (from the preface of the *Principles*) in fact only

describes the *dividing-line* between metaphysics and empirical psychology. Here is the actual passage:

> This book, assuming that thoughts and feelings exist and are vehicles of knowledge, thereupon contends that psychology when she has ascertained the empirical correlation of the various sorts of thought or feeling with definite conditions of the brain, can go no farther—can go no farther, that is, as a natural science. If she goes farther she becomes metaphysical. All attempts to *explain* our phenomenally given thoughts as products of deeper-lying entities (whether the latter be named 'Soul,' 'Transcendental Ego,' 'Ideas,' or 'Elementary Units of Consciousness') are metaphysical. (PP, 6)

Contra Wilshire, this passage does not say that the sole business of the empirical psychologist is the correlation of brain and mental states. The passage says that psychology cannot go "farther … as a natural science," once it has correlated brain and mental states.

What was the point of this comment, Wilshire might respond, if not to specify the project of the *Principles*? The point was to *rule out* certain types of explanation from the proper sphere of empirical psychology. This is clear from the gloss James gives immediately after claiming that if psychology goes beyond correlating mental and brain states, "she becomes metaphysical." He rules out attempts to "*explain*" experiences "as products of deeper-lying entities." What kinds of entities? He tells us, and the list includes, among others, "the transcendental ego"—the very entity about which transcendental speculation was traditionally supposed to teach us. Given that there is little actual correlating of brain states and mental states in the *Principles*, this passage is better read as telling us what empirical psychology *cannot* do.

Let us now look at the epilogue of the *Briefer Course*, where James is supposed to have confessed his failure at the task of correlating brain and mental states. Wilshire gives vague evidence that this is the view James meant to express. Wilshire simply claims that "James confessed that he did not know what a mental state is," and cites (PBC, 397-400).

The first thing to notice about the epilogue is the subtitle of that chapter: "Psychology and Philosophy." This is also the subtitle of the journal *Mind*. It is also the title of Robertson's essay on the relationship between empirical and

metaphysical studies of the mind, which I discussed at length in Chapter Two. The title reflects a very popular topic of discussion among James and his friends—viz., the proper demarcation of philosophy and psychology.

For example, one finds the journal *Mind* peppered with articles discussing the matter during this period. Some examples include (Bain 1888; Dewey 1886a; Dewey 1886b; Hodgson 1876; Robertson 1883; Stewart 1876; Ward 1883). In fact, we know James often read and marked up articles like these. His copy of the Stewart and Robertson pieces both show moderate markings. The Dewey piece appeared in two consecutive issues of *Mind*; the first has very heavy marginalia,[251] and the second has moderate markings (WJP, Phil 22.4.6*). In fact, in the *Principles*, James referred readers interested in "the relation between Psychology and General Philosophy" to the Ward, Robertson, and Dewey articles (PP, 184.n).

As was so common in essays written from the empiricist side, James's epilogue reflected on the proper relationship between metaphysics and psychology. Indeed, the epilogue continues the sketchy remarks from the preface of the *Principles* that I have just quoted—remarks to the effect that if one seeks certain types of explanation in psychology, one becomes "metaphysical."

So in the pages Wilshire cites from the *Briefer Course's* epilogue, James indeed confessed he could not give a full account of what a "mental state" is. But this remark comes in the context of a more complete discussion of the relation between metaphysics and philosophy. The crucial point is this. The remark is prefaced by James's explicit claim to be speaking in a metaphysical and *not* a scientific voice, in the epilogue. Far from conceding that the scientific project had failed to account for what a mental state was, in fact James was only illustrating that science must take certain metaphysical assumptions for granted. Questions about the metaphysical

[251] The marginalia—cited by permission of the Houghton Library, Harvard University—indicate that James strongly disagreed with Dewey's view of the relation between psychology and philosophy, at this early juncture. Dewey's piece praised Green's work, and carried the latter's criticisms of empirical psychology forward. Dewey claimed that it was Green and his followers who really occupied "the psychological standpoint"—empiricists had actually abandoned it.

nature of mental states are difficult to answer, James argued, but these are not matters of immediate concern for the *scientist*.

In short, James argued that we should as much as possible keep difficult metaphysical questions out of psychology, and take them up when we are doing philosophy proper. Note that this was a standard line among James's empiricist allies in their frequent discussions of the relationship between psychology and philosophy (recall my discussion of Robertson in Chapter Two, *above*).

But Wilshire writes as though the admission that there are questions properly dealt with in metaphysics, not science, amounts to the claim that science is deficient, or cannot begin without a completed, fully worked out metaphysics. But this simply ignores James's own account, in the epilogue itself, of what metaphysics is. James began that chapter by noting that scientists assume that determinism is true, and that this is a helpful assumption for their purposes. Metaphysicians reply that there must be free-will, if we are to make sense of ethics. James pointedly avoids adjudicating the debate:

> … I only mention the conflict to show that all these special sciences, marked off for convenience from the remaining body of truth (cf. p. 9), must hold their assumptions and results subject to revision in the light of each other's needs. *The forum where they hold discussion is called metaphysics*. Metaphysics means only an unusually obstinate attempt to think clearly and consistently. (italics mine, PBC, 395)

Where Robertson held psychology to supply "neutral data" to philosophy, James had a different vision. For James, "metaphysics" (which he used interchangeably with "philosophy") is the field that fosters *discussion between* the special sciences.

But the special sciences themselves can—must—put aside metaphysical deliberation if they are to make progress. James continued this way:

> The special sciences all deal with data that are full of obscurity and contradiction; but from the point of view of their limited purposes these defects may be overlooked. … A geologist's purposes fall short of understanding Time itself. A mechanist need not know how action and reaction are possible at all. A psychologist has enough to do without asking how both he and the mind which he studies are able to take cognizance of the same outer world. But it is obvious that problems irrelevant from one standpoint may be essential from another. And as soon as one's purpose is the attainment of the maximum of possible insight into the world as a whole, the metaphysical puzzles become the most urgent ones of all. Psychology contributes to general philosophy her full share of these; and I propose in this last chapter to indicate briefly which of them seem the more important. (PBC, 395)

So the special sciences, including psychology, all *set aside* metaphysical questions that are not germane to their purposes. Metaphysics is an attempt to synthesize one coherent worldview from the conflicting perspectives of the special sciences, for James. Metaphysics therefore has a markedly broader and more general perspective than the special sciences themselves. In this passage, James clearly announced that the point of the epilogue was to consider the metaphysical puzzles psychology raises. But note that metaphysical puzzles are explicitly presented as not relevant to the "purposes" of the geologist, mechanic, or psychologist. It is no mark against the geologist if she cannot give an account of "Time itself." Similarly, we are clearly not supposed to think that the metaphysical problems raised by psychology somehow show that the psychologist's scientific task cannot, after all, be carried out. Instead, psychology is like all other special sciences in "overlook[ing]" metaphysical contradictions for the sake of accomplishing its own, more "limited purposes."

The two passages I just quoted come from the first page of the epilogue, which in its entirely is only seven pages long. The passages are not buried away somewhere obscure. There simply is no good way to read the epilogue as a confession of defeat. *Contra* Wilshire, the epilogue explicitly *disavows* the notion that metaphysics is a transcendental discipline that is "logically prior" to psychology.

Lest there be any doubt, here is how James presented the discussion Wilshire cites, the discussion where James indeed confessed not to know what a mental state is:

> When psychology is treated as a natural science (after the fashion in which it has been treated in this book), 'states of mind' are taken for granted, as data immediately given in experience; and the working hypothesis (see p. 13) is the mere empirical law that to the entire state of the brain at any moment one unique state of mind always 'corresponds.' This does very well till we begin to be metaphysical and ask ourselves just what we mean by such a word as 'corresponds.' (PBC, 396)

Notice that last sentence. It is only "when we begin to be metaphysical" that the question of how to individuate mental states becomes troublesome. I repeat, this casts no shadow on empirical psychology, which like all sciences, must begin with a set of metaphysical assumptions.

Chapter Five

The Structure of Empirical Psychology: The Stream of Thought as Pragmatically A Priori

1. Introduction

Recall that we are in the middle of a sub-plot begun at the start of Chapter Four (*see* pp. 227 *ff*, *above*). I suggested that some of James's early work on space provided experimental evidence for the stream thesis. I also suggested that this thesis acted as a new framework for empirical psychology. Chapter Four discussed empirical evidence for the stream thesis, and showed how the thesis helped James respond to Idealists. I have not yet explained the precise sense in which the stream thesis actually functioned as a framework for the *Principles*, though. This is now my chief remaining task.

I will argue that the stream thesis worked as a framework in the sense that it helped constitute the scientific status of the *Principles*. The stream thesis performed this constitutive role by providing a clever definition of thought. "Thought" was James's generic word for all experience. The definition specified what psychology's legitimate object of scientific investigation was to be.

What is perhaps most interesting about the definition is its role as an instrument for crystallizing a particular social organization. A necessary (though not sufficient) condition[252] for psychology's gaining scientific status was that an agreement be forged between philosophers and psychologists on how to divide labor in studying the mind. It was not enough for James to evade Idealist attacks on psychology only in *theory*. James also needed to affect a durable cease-fire between psychology and its hostile neighbor in practice.

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[252] *Necessary condition* is not quite the right concept, but it will take some work in this chapter to explain the actual relation between psychology's scientific status and its division of labor with philosophy. I will argue that the division of labor is, in a special sense, a presupposition of psychology's scientific status.

He did this by delineating the proper territory of mental science in a way that would be agreeable to all parties, he hoped. His crucial move in formulating his definition of thought, therefore, was to identify a set of what he called "ultimate facts" about experience, facts whose further explanation was to be left to philosophers rather than scientists. So conceptualizing an object of empirical investigation, for psychology, meant identifying a non-controversial line between mental science and metaphysics. This was no small task, given the heated debates over psychology then raging.

James found his definition of thought had to be metaphysically loaded, in the following sense. The definition stipulated that thought has certain metaphysical properties that the psychologist must decline to explain. Were psychologists to wait around for a conception of the mind that was somehow metaphysically transparent or neutral, they might have waited forever. The task of specifying a proper object of scientific investigation, for psychology, therefore required figuring out which explanatory conundrums psychologists could leave aside for philosophers.

The definition of thought—the stream thesis—is also interesting because its epistemic status turns out to be mixed, in a sense to be made precise. *Qua* model of experience, the stream thesis rested on empirical data, as we saw in the previous chapter. But *qua* constitutive principle, the stream thesis was an a priori stipulation, as I will show in this chapter.

Admittedly, it seems unhelpful to explain the sense in which the stream thesis provided a "framework" for James's psychology by saying that that the thesis played a "constitutive role." If we were not sure what a scientific framework was, the notion of constitutivity seems even more befuddling. In this chapter we will work to develop a clear, precise notion of constitutivity that helps us understand the stream thesis's supporting role in the *Principles*. This task is especially challenging because the leading accounts of constitutive scientific principles are typically drawn from theoretical physics. We will find that such notions only imperfectly fit the case of early empirical psychology.

Thus, after looking more closely at the stream thesis itself, I will analyze some recent philosophical work on constitutive principles in the sciences. I show that our best available accounts do not capture the special sense in which psychology—Jamesean psychology, at any rate—employs such principles. I adapt to my own purposes C. I. Lewis's notion of pragmatic a priori principles, and H. P. Grice's account of presuppositions.

The result of my analysis is a novel account of constitutive principles designed to fit the case of a fledgling, special science like late 19th century psychology. In such a science, the privileged role of presuppositions is not due to their semantic place in a theory. It is due to their social role in making explicit agreements about how to divide labor between specialized intellectual communities.

However, it will be important to see that these presuppositions are chosen for social, yet *rational* reasons. In James's case, the particular presuppositions he accepted grew out of detailed debates with Idealists over the philosophical foundations of psychology. James had good reasons for the way he formulated the stream thesis. But his reasons were not ones that would compel anyone, anywhere, at any time, to conceive of psychology's proper object in just the way he did.

Instead, his reasons were rational given the state of debate over psychology in the late 19th century. He defined "thought" in a way that relegated to philosophy the explanation of some specific experiential features that late 19th century Idealists were actually challenging psychologists to explain. Were psychology actually confronted with wholly different challenges, James's definition of thought might not have been appropriate. But given the context in which he actually worked, James's choice of how to demarcate philosophy and psychology represented a rational, practical choice.

In the penultimate section of the chapter, I sketch some epistemological implications of my analysis. James's task of establishing a boundary between neighboring disciplines—especially philosophy—was a social, pragmatic problem. But the exigencies of this problem actually (and rightly, I will argue) influenced the shape of James's scientific theory, itself. Philosophers like Helen Longino have

argued that the objective analysis of scientific theories requires certain social structures among the community of inquirers. If my analysis is right, we have before us an example of an even more profound connection between science and social factors. Sometimes, the very content of scientific theories are designed to affect social results, and ought to be evaluated accordingly. In James's case, I suggest that his stream thesis was successful in its constitutive role just to the extent that it actually helped establish a demarcation between the community of philosophers and psychologists.

2. "A Plea for Psychology as a 'Natural Science'"

The proto-phenomenological reading will continue to provide a useful foil for our discussion. Recall that Wilshire's version of this reading takes off from the claim that James made a shocking confession in the *Briefer Course's* epilogue. The confession, allegedly, was that James's own account of mental states had proved unworkable for the purposes of empirical psychology.

At the end of Chapter Four, I offered some reasons to reject this reading. But the final blow comes from an essay James published within two months of the *Briefer Course*.[253] The *Principles* had occasioned a negative review by George Ladd, an Idealist (Ladd 1892). Ladd had complained that the *Principles* merely pretended to develop a legitimate science of mind. "A Plea for Psychology as a 'Natural Science'" was James's response (James 1892). The article is useful to us because it helps establish James's views about the role of metaphysical presuppositions in science.

In this article, James explicitly contradicted two of Wilshire's crucial claims. The first is the claim that James "confessed" that he had no account of the mental state, or at least no account workable for the purposes of empirical psychology. The second is the claim that James held empirical psychology to be impossible until we

[253] The *Briefer Course* shipped to booksellers on January 11, 1892 (PBC, 473). "A Plea for Psychology as a 'Natural Science'" appeared in the March issue of *Philosophical Review*.

answer a set of metaphysical questions about the mind, questions that can only be approached through transcendental exposition.

Let us look at "A Plea for Psychology." James began by claiming that he only hoped to help psychology advance in the direction of natural science. He denied having claimed that psychology was already a full natural science. "I wished, by treating Psychology *like* a natural science, to help her to become one" (EPs, 270). This is presumably why he placed "Natural Science" in scare quotes in the essay's title.

The rest of the essay explained and defended what his particular strategy had been, in the *Principles*, for treating psychology like a natural science. Natural science is "a mere fragment of truth broken out from the whole mass of it for the sake of practical effectiveness exclusively," James wrote (EPs, 271). So for psychology to become a natural science it, too, had to break off a "fragment of truth" for practical purposes. He explained this idea further:

> 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. Thus physics assumes a material world, but never tries to show how our experience of such a world is 'possible.' It assumes the inter-action of bodies, and the completion by them of continuous changes, without pretending to know how such results can be. Between the things thus assumed, now, the various sciences find definite 'laws' of sequence; and so are enabled to furnish general Philosophy with materials properly shaped and simplified for her ulterior tasks. (EPs, 271)

So every special science begins with a number of "convenient assumptions," according to James. He then gave examples of such assumptions, all of which are metaphysically loaded. What do I mean by "metaphysical," and what do I mean by "loaded"? First, the assumptions are *metaphysical* in the following sense. What the scientist assumes is that there exists some good answer to a nagging question that has actually been posed by metaphysicians. For instance, the physicist assumes there exists a material world, and that we have genuine knowledge of it. External-world skepticism is an issue that metaphysicians really worried (and continue to worry) about. Second, the assumptions are *loaded* in the sense that the scientist "declines to be responsible" for them. The physicist does not try to give evidence

that there exists an external world. She simply assumes that skepticism is false, as far as her purposes go, and gets on with the task at hand—"practical prediction and control" of nature (EPs, 272).

Notice that James saw a benefit to making such metaphysical assumptions, in science. The assumptions were supposed somehow to facilitate what we might call the construction of scientific objects. "…The things thus assumed"—that is, the things our metaphysical assumptions have helped us pick out—become the subjects of natural laws, according to the passage I just quoted.

This account raises three important questions that I will now address. First, did James think psychology, too, must make metaphysical assumptions? Second, if so, what are to be psychology's "things thus assumed"? In other words, what are the scientific objects psychology is to construct? And third, how are metaphysical assumptions involved in their construction?

The answer to the first question is not far to seek:

> If, therefore, psychology is ever to conform to the type of the other natural sciences, it must also renounce certain ultimate solutions, and place itself on the usual common-sense basis by uncritically begging such data as the existence of a physical world, of states of mind, and of the fact that these latter take cognizance of other things. What the 'physical world' may be in itself, how 'states of mind' can exist at all, and exactly what 'taking cognizance' may imply, are inevitable further questions; but they are questions of the kind for which general philosophy, not natural science, is held responsible. (EPs, 271)

Like other natural sciences, psychology begins by accepting certain metaphysical assumptions "uncritically." These assumptions include that there are mental states, and that these states "take cognizance of other things." So James held that psychologists, like other scientists, must begin with metaphysical assumptions.

The first sentence of this passage is a conditional claim—*if* one wants psychology to become a natural science, psychology must begin with metaphysical assumptions. Wilshire suggests that James actually rejected the antecedent. James's admission that empirical psychology must make metaphysical assumptions shows, according to Wilshire, that psychology is somehow untenable as a science.

In fact, James affirmed the antecedent of the aforementioned conditional. He argued that it really is desirable for psychology to be a natural science. The reason

he gave is that if psychology succeeds, it will be able to provide valuable assistance to certain authority figures who have a practical need for help "improving the ideas, dispositions, and conduct" of those in their charge. James cited authority figures like educators, jail-wardens, doctors, clergymen, and asylum-superintendents (EPs, 272).

The first question I raised just before the last block quote was whether James held that empirical psychology must make metaphysical assumptions. We now have an affirmative answer. The second question was *what* assumptions the empirical psychologist has to make. We know that the psychologist must assume that there exist mental states that "take cognizance" of the world, according to James. But there is more to say on this topic.

For James, those studying the mind could be broken into two groups. One group consisted of biologists, naturalists, doctors, physiologists, and psychical researchers, who "already form a band of workers" producing practical results. "…Almost all the fresh life that has come into psychology of recent years has come from" this group. A second group was more philosophically inclined. James certainly did not dismiss the metaphysicians—but he argued that a "division of labor" was needed to free up the more scientifically-inclined to produce results of practical benefit (EPs, 272-273). Of the scientists, James wrote:

> …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. (EPs, 273)

Metaphysical assumptions were to help perform the task of "carefully" demarcating mental science from metaphysics. Instead of assailing psychologists for having unfounded metaphysical assumptions, James urged that philosophers simply grant psychologists certain assumptions for the sake of scientific progress.

Later in the paragraph, James gave a better sense of what specific assumptions he wanted philosophers to grant to psychologists:

> We need a fair and square and explicit *abandonment* of such questions as that of the soul, the transcendental ego, the fusion of ideas or particles of mind stuff, *etc.*, by the practical man; and a fair and square determination on the part of the philosophers to

> keep such questions out of psychology and treat them only in their widest possible connections, amongst the objects of an ultimate critical review of all the elements of the world. (EPs, 273)

It is crucial to see that James did not arbitrarily choose the metaphysical assumptions he wanted philosophers to grant to psychologists. Each assumption he mentioned in this passage, too, involved questions to which philosophers were actually demanding that psychologists answer. Indeed, the second question James cited in this passage directly concerns the Idealist critiques of psychology that we met with in Chapter Three, *above*. Idealists argued that empirical research could never shed light on the transcendental preconditions of experience—that is, on the structure of the transcendental ego. In this passage, James urged that psychologists be allowed to leave aside such issues.

At least from what we have seen so far, it appears that James sought to create a demarcation between philosophy and psychology by the judicious use of metaphysical assumptions. The metaphysical assumptions functioned to specify questions the scientist is not responsible to answer. Again, if the scientist is to get on with empirical work, she must be released of the responsibility to give a metaphysical account of some basic set of data.

James suggested that metaphysical assumptions not only help demarcate science from metaphysics; as we saw above, he also suggested that they are somehow involved in helping construct scientific objects. This is the third issue I proposed to address.

We have seen that for James, scientists use metaphysical assumptions when they conceptualize the entities that will be the subjects of their empirical hypotheses. As he put it, scientific laws are relations between "things thus assumed" (*see* the passage quoted on p. 313, *above*).

Now, what are the "things thus assumed" for psychologists? In other words, what kinds of scientific objects are created by psychologists' metaphysical assumptions? Here we find another tension with Wilshire, who claimed that the epilogue of the *Briefer Course* finally abandoned mental states as legitimate objects of empirical inquiry. To the contrary, in this article James argued that

metaphysicians and psychologists should agree at least on the following point: psychology's proper object was precisely the "mental state."

> Cannot both ["philosophers and biologists"] forego ulterior inquiries, and agree that, provisionally at least, the mental state shall be the ultimate datum so far as psychology cares to go? (EPs, 274)

A page later, James acknowledged that the *Principles* sometimes engaged in metaphysical disputes. But he offered the following explanation:

> …but these unfortunate episodes are for the most part incidental to the attempt to get the undivided 'mental state' once for all accepted by my colleagues as the fundamental datum for their science. To have proposed such a useful basis for united action in psychology is in my own eyes the chief originality and service of the book …. (EPs, 275)

This was a strong claim about the significance of the *Principles*. James held that his chief contribution was to have helped establish the mental state as the proper object of scientific investigation, in the field of psychology. How did he do this? By helping, he hoped, to forge a consensus. Philosophers should not demand that psychologists take responsibility for a certain set of metaphysical assumptions that are admittedly built into the notion of a mental state.

What have we learned from "A Plea for Psychology as a 'Natural Science,'" then? First, James held that science requires metaphysically-loaded assumptions. Second, these metaphysical assumptions are involved in constructing the objects about which science theorizes. Third, the assumptions are to be taken on "uncritically" by the scientist. Fourth, *psychology* ought to strive to be a legitimate natural science. To do this, it must also take on metaphysical assumptions. Fifth, the scientific objects the psychologist uses these assumptions to construct are mental states. Sixth and finally, we learn that one role of metaphysical assumptions in science is to help divide labor with "general philosophy." In taking on these assumptions uncritically, the scientist agrees to leave responsibility about contemplating metaphysical questions about mental states more or less to philosophers.

Several issues remain, however. It may still be unclear how, exactly, metaphysical assumptions are involved in constructing a scientific object. We might

also wonder *why* such assumptions should be needed in science. Does their being "uncritical" require them to be irrational? In other words, what do these assumptions do to our conception of scientific rationality? Finally, James wrote the article I have been considering only after both the *Principles* and the *Briefer Course* were both published. So one might wonder whether James's retrospective description of his own project was accurate. I will take up the last of these issues first, by turning directly to the *Principles's* use of the stream thesis to construct the mental state as a legitimate object of scientific inquiry.

As far as Wilshire's reading goes, recall from the end of Chapter Four that he makes the following claim. In the epilogue to the *Briefer Course*, James confessed not to have an answer to the metaphysical question of what a mental state is, or of how mental states come to know their objects. Wilshire claimed that this amounts to a confession that the entire scientific project of the *Principles* ultimately collapsed. I do not think Wilshire's claim can be reconciled with the passages I have quoted in this section. In fact, James characterized science as necessarily involving metaphysically-loaded assumptions—metaphysical questions purposefully left unanswered. What is worse, consider the specific metaphysical questions James explicitly set aside for the purposes of psychology. These include the very unanswered questions Wilshire contends are to bring the collapse of the *Principle's* scientific project. James claimed to have set aside the questions of how to give a metaphysical analysis of the mental state, and of how to explain what it is for the mind to "take cognizance of" its objects.

Is it possible that James changed his mind after penning the epilogue, so that this article represents a modified view from what the *Briefer Course* articulated? I have already noted that the article was published within months of the *Briefer Course*. But to make matters worse for Wilshire, the article refers readers interested in the relation between metaphysics and psychology to the epilogue of the *Briefer Course* (EPs, 271)—the very place where Wilshire has James confessing that psychology cannot be a science. It does not make sense to suppose that in arguing for psychology's legitimate progress towards becoming a natural science, James

appealed to a chapter of the *Briefer Course* that argued for exactly the opposite conclusion. But Wilshire would have to make just such an unsupportable claim if he is to defend his reading.

3. The Stream Thesis and the Ends of Empirical Inquiry

The notion that science requires metaphysical assumptions was not just an *ex post facto* claim. This idea was incorporated into the *Principles* from the start. In fact, this was the first substantive claim of the entire book.

The opening paragraph of the preface contains preliminaries about the book's structure. In the second paragraph, James announced his intention to treat psychology as a natural science. I will now go through the entire paragraph, though I have quoted parts of it already. I do this in order to bring out an interpretive difficulty concerning James's views on presuppositions.

Here is how the paragraph began:

> I have kept close to the point of view of natural science throughout the 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. (PP, 6)

James explained that keeping to the methods of science required accepting "uncritically" a basic description of entities that will be the subject of natural laws.

He continued by specifying the basic elements of psychology:

> 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. (PP, 6)

The data of psychology are "thoughts and feelings," and a physical world. Moreover, mental states have a cognitive grasp of the world in which they exist. This is a basic property of mental states, a brute datum to be assumed "uncritically." James admitted that the characterization of mental states—of the basic objects of psychology—includes metaphysical assumptions that are "discussable." But he claimed that such discussion is part of philosophy, not psychology.

The passage continued with sentences I quoted at the end of Chapter Four:

> This book, assuming that thoughts and feelings exist and are vehicles of knowledge, thereupon contends that psychology when she has ascertained the empirical correlation of the various sorts of thought or feeling with definite conditions of the brain, can go no farther—can go no farther, that is, as a natural science. If she goes farther she becomes metaphysical. (PP, 6)

Psychology cannot go further than correlating mental states with brain states, James claimed. Again, if the field tries to go further, it becomes metaphysical.

This is to be avoided, according to James:

> All attempts to *explain* our phenomenally given thoughts as products of deeper-lying entities (whether the latter be named 'Soul,' 'Transcendental Ego,' 'Ideas,' or 'Elementary Units of Consciousness') are metaphysical. This book consequently rejects both the associationist and the spiritualist theories; and in this strictly positivistic point of view consists the only feature of it for which I feel tempted to claim originality. (PP, 6)

Here is where this paragraph becomes difficult to interpret. On one hand, James had just asserted that science begins by making metaphysical assumptions. But on the other, he here claimed that *some* metaphysical assumptions are not to be allowed. Specifically, the psychologist should not posit a transcendental ego, a soul, or even the existence of simple ideas or sensations. This is puzzling. Why, the reader wonders, should James be permitted to make his own "uncritical," metaphysical assumptions (viz., that there are *thoughts and feelings* that coexist in and know a physical world)? How can he condemn metaphysical assumptions about transcendental egos and simple ideas, but permit metaphysical assumptions he happens to prefer?

His position only becomes more surprising in the remainder of this pregnant paragraph:

> Of course this point of view [the "strictly positivistic point of view"] is anything but ultimate. Men must keep thinking; and the data assumed by psychology, just like those assumed by physics and the other natural sciences, must some time be overhauled. The effort to overhaul them clearly and thoroughly is metaphysics; but metaphysics can only perform her task well when distinctly conscious of its great extent. Metaphysics fragmentary, irresponsible, and half-awake, and unconscious that she is metaphysical, spoils two good things when she injects herself into a natural science. And it seems to me that the theories both of a spiritual agent and of associated 'ideas' are, as they figure in the psychology-books, just such metaphysics as this. Even if their results be true, it would be as well to keep them, *as thus presented*, out of psychology as it is to keep the results of idealism out of physics. (PP, 6)

James claimed that psychology, when treated as a natural science, takes on a point of view that is "anything but ultimate." People can and must take a broader perspective on the mind, sometimes, than the psychological perspective. But when they do this, they should be clear that they are doing metaphysics, not psychology. James admitted that metaphysics *could* sometimes overhaul the basic conceptions of a science. But he held this to be a rare and drastic occurrence, a task performed only with a clear understanding of the stakes.

The most surprising part of the passage just quoted comes in the final two sentences. James singled out two groups whom he accused of performing the bad kind of "half-awake" metaphysics. It is not surprising that he singled out the first group—old-fashioned, rational psychology that posits a supernatural "soul." But James singled out a second group of half-awake metaphysicians—associationist psychologists. This would have been a shocking allegation to James's peers. Most of his allies from the *Mind* community in England, for example, would have fallen under this category—including Robertson and Bain. So the preface leaves one wondering what grounds James could have had for dismissing what was then the most well-established school of empirical psychology as nothing but half-awake metaphysics, while in the same paragraph gladly accepting that his own psychology rested on metaphysical assumptions of its own.

James must have thought that making metaphysical assumptions was not the same as being engaged in "half-awake" metaphysics. In the latter case, one perhaps makes assumptions without being aware of it; in the former, one makes assumptions self-consciously, and for good reason. But then what did James mean by calling his own metaphysical presuppositions "uncritical"? And how could one have good reason for uncritically taking on metaphysical assumptions?

As we read on in the *Principles*, these questions grow more pressing. In some passages, James reiterated that the psychologist must make uncritical presuppositions (*e.g.*, PP, 141, 177-178, 184, 185, 212, 214-215, 219-220, 350n.). Yet in other passages, he argued against other groups—particularly transcendentalists and associationists—precisely on the grounds that they make

unwarranted metaphysical assumptions (*e.g.*, PP, 141, 148, 331-332, 334, 349-350). How can these two attitudes—that science requires metaphysical presuppositions, and that it ought to shun them—be reconciled?

We can answer these questions by taking a closer look at the actual role James's own uncritical assumptions played in his psychology.

In the 1892 essay I reviewed above, James held that things he called "mental states" were to be the fundamental objects of psychological investigation. In the *Principles's* preface, we just saw James use the phrase "thoughts and feelings" to describe psychology's fundamental objects. Later in the *Principles*, the reader discovers that these two sets of expressions were meant to be synonymous. James did not like the phrase "mental state," because there are no verbs associated with it. He settled on "feeling and "thought" as two phrases both meant to be synonymous with "mental state." The former two expressions are preferable to "mental state" for their useful verb forms ("feel" and "think"). Here is James's conclusion:

> *My own partiality is for either FEELING or THOUGHT*. I shall probably often use both words in a wider sense than usual, and alternately startle two classes of readers by their unusual sound; but if the connection makes it clear that mental states at large, irrespective of their kind, are meant, this will do no harm, and may even do some good. (PP, 186)

Thus, James used both "feeling" and "thought" as rough synonyms for "mental state." So if we want to learn more about the metaphysical assumptions packed into James's notion of a mental state, we must also look at his basic account of what he calls "feelings" or "thoughts."

That basic account is most fully articulated in the *Principles* chapter entitled "The Stream of Thought." James began that chapter by returning to the theme of uncritical assumptions:

> The only thing which psychology has a right to postulate at the outset is the fact of thinking itself, and that must first be taken up and analyzed. …
>
> *The first fact for us, then, as psychologists, is that thinking of some sort goes on.* I use the word thinking, in accordance with what was said on p. 186 [where "thought" is defined as synonymous with "feeling" and "mental state"], for every form of consciousness indiscriminately. If we could say in English 'it thinks,' as we say 'it rains'

> or 'it blows,' we should be stating the fact most simply and with the minimum of assumption. As we cannot, we must simply say that *thought goes on*. (PP, 219-220)

James claimed that psychology's first assumption concerned the existence of thought, where "thought" is understood in the general sense I just described. Here, James gave more detail than he had in the preface concerning psychology's basic assumption.

Not only should the psychologist simply assume that thought exists, James now claimed, but she should assume that thought has five basic properties that we "notice immediately":

> How does it ["thought"] go on? We notice immediately five important characters in the process, of which it shall be the duty of the present chapter to treat in a general way:
> 1) Every thought tends to be part of a personal consciousness.
> 2) Within each personal consciousness thought is always changing.
> 3) Within each personal consciousness thought is sensibly continuous.
> 4) It always appears to deal with objects independent of itself.
> 5) It is interested in some parts of these objects to the exclusion of others, and welcomes or rejects—c*hooses* from among them, in a word—all the while.

I take it that each of these postulates is to be a metaphysical assumption in the sense first depicted in the preface to the *Principles*. The "Stream of Thought" chapter went on to describe each of these postulates in more detail, in some cases providing introspective evidence that thought really has the ascribed properties. But the properties are described, not explained in terms of some deeper or more basic psychological fact.

Later, James would refer to the stream of thought as the "ultimate fact for psychology" (PP, 341). It seems that the metaphysical assumptions provided in the "Stream of Thought" chapter thus provide a detailed characterization of psychology's ultimate fact—the stream of thought, or mental state. An "ultimate fact" in psychology appears to be a fact such that, when we try to explain it, we are being "metaphysical," to use the language I have already quoted from James's preface. "Ultimate facts," especially the facts described by the stream thesis, specify a legitimate stopping-point for scientific analysis. When we analyze a complex phenomenon into "ultimate facts," we have taken the analysis as far as possible without becoming metaphysical. Thus, we may postulate perceptual laws that

ascribe some particular relation between swaths of the stream of thought. But we cannot then ask why there is a stream of thought, or why it always has the five basic features cited above.

I take myself to have shown that if we want to understand the way James actually used metaphysical assumptions, we ought to look at the basic postulates of the stream thesis. Recall now the question at hand (from p. 322, *above*). We wanted to know whether it was defensible for James to use metaphysical assumptions himself, given that he criticized his opponents for serving up unholy mixtures of metaphysics and science. Let us look more closely at one postulate to see how metaphysical assumptions are built into the notion of a mental state, these "ultimate facts" of Jamesean psychology.

The stream thesis's first postulate stated that all thought is part of some personal consciousness. There are several important points to bring out about this postulate. First, note that in keeping with his own claims about metaphysical assumptions, James's further discussion of this point (at PP, 220-224) did not explain *why* thought should tend to a personal form. The discussion only offered evidence *that* this is the case. Second, I call this assumption "metaphysical" because it was designed to skirt an Idealist attack that was itself metaphysical in nature. To see how uncritical assumptions are involved in James's response, I now turn to the attack this particular postulate was designed to skirt.

The language James used in articulating this first feature of the stream of thought makes it clear that the assumption was meant to guard specifically against Kantians. James described the first postulate of the stream thesis this way: "The universal conscious fact is not 'feelings and thoughts exist,' but 'I think' and 'I feel'" (PP, 221). James often used the phrase "I think" to evoke Kant's notion of a transcendental self as well as Green's similar notion of a transcendental ego. For instance, James called the transcendental unity of apperception—an important feature of Kant's transcendental self—an attempt to explain the fact that "The awareness that *I think* is … implied in all experience" (italics original; PP, 342).

The language was not James's invention. Kant famously wrote that "It must be possible for the 'I think' to accompany all my representations …" (CPR, B131). Roughly, his point had been that for anything to be a mental representation, it had to belong to *someone's* conscious life. Mental representations cannot simply float free of any subject. For instance, were I to have a mental representation of a particular sculpture, I would have to be able to represent myself as thinking of that sculpture. This is what Kant meant by saying that it must be possible for "the 'I think' to accompany" any legitimate representation.

To understand how James's first postulate was related to this Kantian claim, it is crucial to see that Kant went further than merely pointing out that representations must always be binded to someone's mental life, however. Kant also tried to give an account of *how* such a unified conscious life was possible in the first place. He called "pure apperception" the kind of consciousness that generates "the 'I think.'" He then argued that such self-consciousness is made possible by pure apperception's "transcendental unity" (B132). Put briefly, it is necessary that there be some unified subject in relation to whom our scattered, outer perceptions can be brought together in one conscious life, Kant argued (B136-137). This subject, the transcendental self, must (for reasons I must leave aside, here) stand outside of space and time, and is what makes possible the transcendental unity of apperception.

Now my point is that in articulating the first postulate of the stream thesis, James used the phrase "I think" to evoke Kant (*see* the passage quoted three paragraphs *above*). Specifically, he used the phrase as a kind of loose shorthand for Kant's notion of the transcendental unity of apperception.

If there is any doubt that James used the phrase "I think" to evoke Kant, one might consult some of James's unpublished notes, where it is transparently clear that he used the phrase with this connotation. His detailed notes on Kant's *Prolegomena to Any Future Metaphysics* can be found at the Houghton Library. Some of the notes deal with Victor Cousin's criticisms of Kant, and in this context James wrote:

> "Transcendental unity of apperception" wh. comprehends all other acts of union wh. the understanding performs, including those of matter given by the "Inner sense. [*sic*] The "conscience" Cousin says Kant makes empiric is merely the unity of the different intuitions of the Inner sense. The transcendental unity aforesaid ("I think") dominates these as well as all other intuitions. (WJP, bMS 1092.9 (4448); emphasis original; by permission of the Houghton Library, Harvard University)

Notice that last sentence. James introduced "I think" as a shorthand for "the transcendental unity aforesaid." This phrase refers back to the first sentence quoted, where James mentioned the "transcendental unity of apperception." Whether or not these phrases were meant to be precisely synonymous, it is clear that James used the phrase "I think" at least to evoke the transcendental unity of apperception. It is reasonable also to read the occurrence of "I think" in the description of the stream thesis's first postulate in a similar way—as calculated to evoke the transcendental unity of apperception.

I will now argue that the point of evoking the unity of apperception in that first postulate was twofold. First, James meant to accept Kant's claim that all representations are in fact binded together in someone (or other's) conscious life. But second, James wanted to deny Kant's further attempt to *explain* this bindedness in terms of the synthetic unity of a deeper-lying, transcendental self. It is not that James thought he could refute the existence of a transcendental self standing behind all experience. Rather, James denied that the psychologist needed to accept the burden of explaining the bindedness of experience at all. This was the point of building self awareness—the capacity to say "I think" along with any mental representation—into the first postulate of the stream of thought. James's move was to acknowledge this self-conscious aspect of representation as a brute fact of mental life, but to decline to give a metaphysical explanation of it.

Let us look at how James took up this issue with respect to neo-Kantian Idealists, who had adapted Kant's line into an argument against empirical psychology. Green claimed that psychologists, with their purely empirical methods, could not explain why all our several experiences should be bound into one unified life. Consider one passage where Green focused on the temporal character of experience. He argued that there must be a part of the mind, itself existing outside

of time, which binds together fleeting perceptions into one continuous "plot," so to speak:

> …Every object we perceive is a congeries of related facts of which the simplest component, no less than the composite whole, requires in order to its presentation the action of a principle of consciousness, not itself subject to conditions of time, upon successive appearances, such action as may hold the appearances together, without fusion, in an apprehended fact. (Green 1882b, 185)

Without getting bogged down in Green's obscure prose, the gist of his argument was that there must be a "principle of consciousness" that lies outside of time, in order that all our successive appearances *in* time can be bound together into one continuous life. He connected this principle of consciousness with what he called an "Ego" (e.g., at Green and Bradley 1882, 338, 346). Transcendental analysis was supposed to reveal that our perceptions of scattered, temporal events (as well as of scattered, extended objects) were impossible unless we postulated an Ego standing outside of time (and space), that binds together all perceptions into one personal experience.

This point was important to Green because the Ego, standing as it does outside of time and space, has no observable properties, so cannot be an object of empirical investigation. The Ego is what makes empirical observation possible in the first place, allegedly. Thus, the existence of a transcendental Ego would mean that empirical psychology could never reveal the true nature of the mind.

So by building the notion that "thought tends to personal form" into his fundamental definition of the mental state, James was rejecting Green's question (What binds experiences into a single conscious life?) as too metaphysical for the psychologist to bother with. This did not mean that Green's question was meaningless or uninteresting or even unimportant. It just meant that the psychologist was not to take responsibility for answering it. Instead, the psychologist should proceed by simply acknowledging the fact that our experiences are binded into one conscious life, and then by insisting that this fact is "ultimate," and admits no further scientific explanation.

Indeed, in the *Principles* chapter entitled "The Consciousness of Self," James considered the "transcendentalist theory," and made this point explicitly, against both Kant and Green. He began with Kant:

> Kant starts, as I understand him, from a view of the Object essentially like our own description of it on p. 265 ff., that is, it is a system of things, qualities or facts in relation. … But whereas we simply begged the vehicle of this connected knowledge in the shape of what we call the present Thought, or section of the Stream of Consciousness (which we declared to be the ultimate fact for psychology), Kant denies this to be an ultimate fact and insists on analyzing it …. (PP, 341)

In this passage, James claimed that the psychologist simply observes that experiences always appear binded together, and treats this bindedness as an ultimate feature of the stream of thought. But Kant insisted on going further by *explaining* this bindedness in terms of a deeper ego that stands behind experience.

Then, citing the passage from Green that I reproduced just above, James made a similar point about the *neo*-Kantian conception of a transcendental ego.[254] James again argued that further metaphysical explanation of the binded character of consciousness was not likely to be profitable to the psychologist. Instead, the psychologist had simply to assume at the outset that thought exists in a personal form. After quoting Green, James wrote:

> Were we to follow these remarks, we should have to abandon our notion of the 'Thought' (perennially renewed in time, but always cognitive thereof), and to espouse instead of it an entity copied from thought in all essential respects, but differing from it in being 'out of time.' What psychology can gain by this barter would be hard to divine. (PP, 347-348)

There is no potential profit for the psychologist, James argued, in accepting responsibility for explaining the binded character of conscious life particularly if that means speculating about a metaphysical entity like a transcendental ego.

So the first postulate of the stream of thought was an assumption in the sense that it simply stipulated that the personal character of experience is an "ultimate fact" for the scientist, and not subject to further psychological explanation. The assumption was *metaphysical* in the sense that the personal character of consciousness featured prominently in metaphysical attacks from Idealists.

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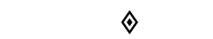
[254] The reference comes at (PP, 348).

Several pages back, I asked why James should have wanted uncritical assumptions in his project at all. We can now answer this question. As was so often the case, these Idealist attacks were meant to show that mental science was an oxymoron. Any attempt to explain the personal character of consciousness would require a transcendental analysis of the ego, Idealists argued. Such an analysis had to be a purely a priori undertaking, and thus had to outstrip the broadly empirical methods to which psychologists purported to confine themselves. James did not directly answer the attack, however. Instead, he declined the demand for an explanation of consciousness's personal (or "binded," as I have been writing) character. This is where metaphysical assumptions were useful. James carved out an object for psychology, the mental state, which was *defined* as appearing bound up in one person's conscious life. This was to be an "ultimate" feature of the mental state, not a fact that demanded further explanation.

On p. 317, *above*, I asked what the connection could be between metaphysical presuppositions and the construction of scientific objects, in James's psychology. The answer is that any science must decide what the ultimate features are of the objects that will figure in its theories. An ultimate feature is a feature the scientist declines to take responsibility for explaining. James's insight was that in the case of a young science like psychology, it is especially pressing that the science's basic objects be defined in a way that makes *clear* these objects' ultimate features. This was made pressing by metaphysicians who tried to have a turf war with psychologists over the study of the mind, a study that allegedly could not proceed until certain metaphysical puzzles were solved. Stipulating a set of ultimate features of mental states was a way for James to launch his science without waiting for a proof of first principles. Yet making such features *explicit* in the basic definition of a mental state was a way to acknowledge that metaphysicians had a legitimate business to transact, too. He accomplished this by cleanly showing where labor was to be divided among those studying the mind.

Notice that the choice of which features are to be treated as ultimate is not an empirical matter. Empirical data cannot, by itself, establish which demands for

explanation a scientist ought to take responsibility for, and which she should feel comfortable parrying. Instead, this choice must be made on the basis of non-empirical reasons. This seems to raise a problem for my reading of James, which I will now try to resolve.



I characterized the debate between Idealists and empirical psychologists as a debate over the question of whether the mind can be studied via empirical techniques, or whether one must ultimately resort to some a priori form of investigation. In effect, I have just claimed that James did not see this as a forced choice. A priori investigation of the mental state is legitimate, but such investigation should be relegated to philosophy, while the psychologist is to focus on its empirical study. The problem is whether this way of striking a "division of labor" can be reconciled with the notion that the scientist must also rely on some form of non-empirical reasoning when figuring out where to draw the line with metaphysics.

The problem is even more troubling when one considers that it is in virtue of "uncritical assumptions," as James called them, that the psychologist is to differentiate her work from that of the philosopher. This suggests that drawing a division between mental science and metaphysics requires a particularly bad *form* of non-empirical reasoning—namely, the bald, unsupported, a priori assumption.

The first problem can be dispensed of more easily. The division between psychology and philosophy, for James, is not simply a division between a priori and empirical investigations of the mind *simpliciter*. Instead, the division concerns how the mind is to be conceptualized by each field. Psychologists are to keep strictly to the study of the mental state (or what is equivalent, the stream of thought). They are to concentrate on empirical questions concerning the stream, to be sure. But as "A Plea for Psychology" made clear, what distinguishes psychology is its focus on the mental state as such. So there is no tension in my claim that James saw non-empirical reasoning as figuring into the practice of psychology.

But the second problem is more delicate. It brings us back around to a more general question I raised on p. 317, *above*: How can a science that relies on

uncritical assumptions produce theories it would be rational to believe? If uncritical assumptions are permitted into science, that seems to put science on a footing with myth.

To answer this question, one must first distinguish different senses in which an assumption might be called "uncritical." Consider the following, very crude distinction:

	Defensible	**Indefensible**
Empirical assumptions		x
A Priori assumptions	x	x

On one hand, one typically wants to guard against empirical assumptions wherever possible. By "empirical assumption," I mean a descriptive claim made without evidence, where "evidence" is construed broadly.[255] Such assumptions deserve to be called "uncritical," and in this case the word should have negative connotations. For instance, imagine a patient who complains he has trouble sleeping, is unable to concentrate, and sometimes feels as though worms are crawling under the skin of his legs. His doctor thinks to herself, "aha, restless leg syndrome," and quickly records in her notes a collection of symptoms common to this disorder: "patient reports trouble sleeping, feeling of worms crawling under the skin of legs, and that leg movement alleviates other symptoms." The problem is that the patient did not actually report that leg movement alleviates the other symptoms. The rushing doctor simply made an unwarranted assumption about the patient's symptoms. After months of strong medication meant to curb restless leg syndrome, the patient is finally diagnosed correctly: he actually suffers from a psychiatric condition called "delusional parasitosis," which must be treated differently. The doctor's empirical assumption turns out to have been a costly mistake, as the painful symptoms of

[255] Nobody can personally verify every descriptive claim she makes, but every responsible knower should want to be in a position where she knows how to *find* evidence, should her descriptive claims be challenged. I am being purposefully agnostic about what constitutes empirical "evidence," as this is not the place to enter into debates about this disputed concept.

restless leg syndrome, but not of delusional parasitosis, are alleviated by leg movement (Klein 2007).[256]

On the other hand, an *a priori* assumption may also be pernicious if it has not been argued for. For instance, if a biologist assumes without argument that every trait has an adaptive origin, the biologist may legitimately be criticized.[257] This bad sort of a priori assumption amounts to cases of bias.

However, there are also *defensible* cases of a priori assumptions. We will see (in the next section) other examples where a priori assumptions play a crucial and justifiable role in scientific theories, and should not be regarded as cases of bias. One example I will consider is Einstein's definition of simultaneity. He himself described this definition as an a priori stipulation, rather than an empirical result. However, Einstein did not accept this assumption willy nilly, but crafted it for the purposes of developing his theory of relativity. If philosophers like C. I. Lewis and Michael Friedman are correct, there need be nothing untoward about this variety of a priori assumption.

Now when James recommended that the psychologist accept "uncritical assumptions," what sort of assumption did he have in mind? I will now argue that insofar as the stream thesis played an empirical role in James's psychology, it is not an assumption at all. But it also played an important a priori role, and it is in virtue of this second role that James called it an "uncritical assumption." I will try to show that though the assumptions are uncritical, they are more like Einstein's definition of simultaneity than like an adaptationist bias in evolutionary biology or a hasty medical diagnosis. I will also argue that the salubrious kind of a priori assumptions used in James's psychology functioned quite differently from the kind of assumptions

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[256] One might argue that James held there to be defensible empirical assumptions, too. Faith in God's existence might count as a kind of empirical assumption, and James's argument in "The Will to Believe" might be read as seeking to establish that such assumptions really are warranted. This does not affect my point about "uncritical assumptions" in the *Principles*. I am only interested in distinguishing a pernicious variety of empirical assumption that James avoids, and a fruitful variety of a priori assumption that he embraces. In any case, a clear and helpful starting point for readers interested in "The Will to Believe" is (Jackman 1999).

[257] Biologists (Gould and Lewontin 1979) and philosophers (Lloyd 1993; Lloyd 2005), for example, have made such a case against what they call an "adaptationist" bias.

used in physics. However, I will not discuss this last point further until Sections Four, Five, and Six, *below*.

◈

I believe that each postulate of the stream thesis played dual roles, one empirical and the other a priori. I cannot consider every postulate in detail. But to better understand the a priori role, it should be enough to focus on the third postulate of the stream thesis.

The third postulate stated that "Within each personal consciousness thought is sensibly continuous." I called this "the continuity claim" in Chapter Four. In that chapter, I take myself to have explained the empirical evidence on which the continuity claim rests. In one sense, the continuity claim was important to James as a description of experience. Recall that James showed how both Idealists and associationist psychologists relied on a basic description of experience that was contradicted by available evidence, evidence that supported the continuity claim rather than 'psychological atomism.'

But that solution was tenuous, in a way. Suppose associationists responded that the continuous character of perception is itself a fact that needs to be explained. Indeed, they did make such arguments, and we are about to see that James actually cited and responded to them. It is true that as a description of experience, the continuity claim rested on sound experimental evidence. However, from saying that this claim rested on experimental evidence, it is quite a leap to saying that this feature of experience should be considered an "ultimate fact" for the psychologist. This is exactly the leap James took when he made the continuity claim the third postulate of his stream thesis. He defined sensory continuity as an explanatorily basic feature of the stream of thought. So there is no logical reason an associationist could not posit *minima sensibilia* as theoretical entities that, in some sense, stand behind our apparently continuous experience.

An associationist who made just such a case was the eminent evolutionary psychologist Herbert Spencer, who argued as follows. Helmholtz and others had shown that when sound pulses are repeated *less* than sixteen times a second, this

results in the perception of a string of distinct tones. But when one increases the sound pulses to *more* than sixteen times a second, the sound is perceived as one continuous tone. In a passage James quoted at length in the *Principles*, Spencer tried to extrapolate a robust 'psychological atomism' from this result:

> Can we stop short here? If the different sensations known as sounds are built out of a common unit, is it not to be rationally inferred that so likewise are the different sensations known as tastes, and the different sensations known as odours, and the different sensations known as colours? Nay, shall we not regard it as probable that there is a unit common to all these strongly-contrasted classes of sensations?(Spencer, quoted at PP, 155)

Spencer was even more radical in his 'atomism' than Hume. The latter held that only our senses of sight and touch are built from minima sensibilia. In contrast, Spencer argued that all senses produce fundamentally atomic perceptions. Spencer even held that there was ultimately one conscious unit common to all sensory modalities, a unit he called a "nervous shock" (quoted at PP, 155).

James responded by pointing out that in the case of tone perception, Spencer had only identified a correlation between a continuous experience and a discrete *outward* cause.

> Somewhere, then, there *is* a transformation, reduction, or fusion [of discrete sound pulses into a continuous tone perception]. The question is, Where?—in the nerve-world or in the mind-world? Really we have no experimental proof by which to decide; and if decide we must, analogy and *a priori* probability can alone guide us. (PP, 157)

James illustrated the point with two diagrams I have reproduced as Figure 6 and Figure 7, *below*. He granted that somewhere, the discrete tone pulses were transformed into a continuous perception. But he denied that this transformation took place inside the conscious, mental state—that is, inside the province of psychology. Instead, he held that the transformation took place at the level of nerve cells and fibers.

Now in one sense this is a purely empirical claim. I reviewed evidence in Chapter Four that the spatial and tactile fields, at least, cannot be composed of minima sensibilia that are synthesized into continuous experiences. And in fact, even Spencer seems to accept that in any sensory modality the basic "nervous shock," his version of a minima sensibilium, is not something that can be directly

experienced, but rather is a (psychic? material?) entity that we only uncover in the context of a controlled experiment.[258]

But in another sense it really is an a priori matter, as James emphasized in the last quoted passage, whether we regard the transformation from discrete sound pulse to continuous tone perception as occurring within the mental state. For this transformation to occur inside the mental state *just means* that it occurs inside psychology's proper sphere of investigation. The decision to draw a line, so to speak, around mental states in a way that excludes any unobservable experiential items standing behind our perceptions is an a priori, stipulated decision.

[258] See the start of the passage James quoted:

> Although the individual sensations and emotions, real or ideal, of which consciousness is built up, appear to be severally simple, homogonous, unanalyzable, or of inscrutable natures, yet they are not so. (Spencer, quoted at PP, 154; italics mine)

Spencer granted that even on more serious introspection, continuous tone perceptions produced by discrete sound pulses really appear in consciousness as continuous. It is only in the context of "experiments" (quoted at PP, 154) that we can resolve continuous perceptions into their discrete components. It is not clear to me whether Spencer might have had independent reasons for regarding these discrete components nevertheless as *experiential* components.

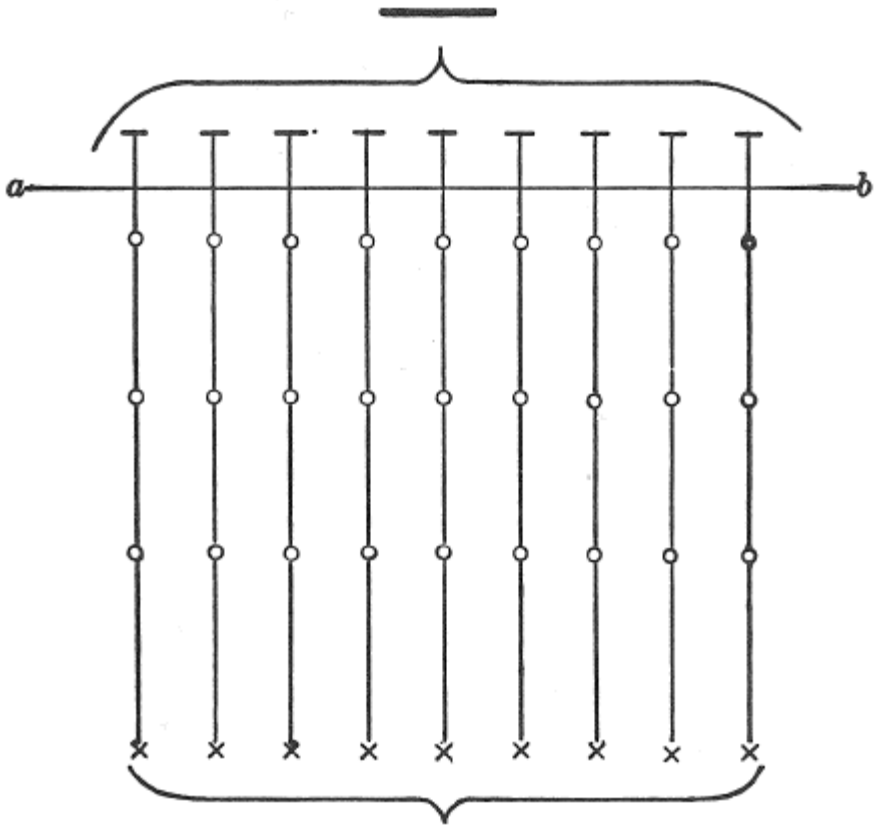

FIG. 25.

Figure 6: Spencer's model of tone perception. The line *ab* represents the threshold of consciousness. Spencer held that the synthesis of tone pulses into one continuous perception occurs above the threshold of consciousness. The circles represent cells, the vertical lines represent nerve fibers. (PP, 157)

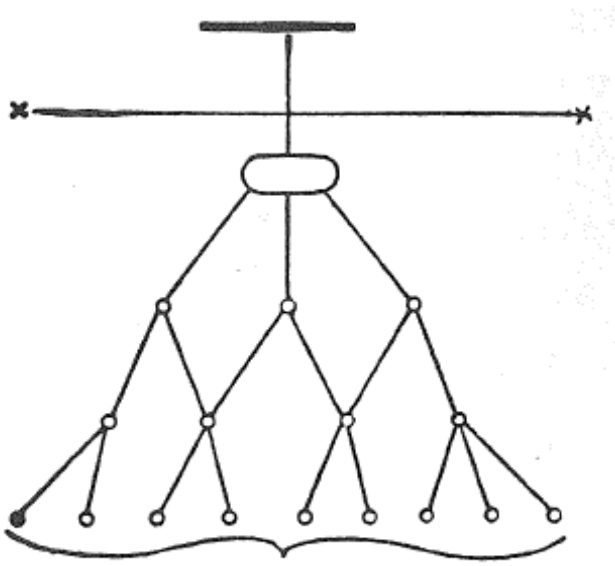

FIG. 26.

Figure 7: James's model of tone perception. The synthesis of tone pulses happens at the level of physiology, not experience. (PP, 159)

James seemed to hold psychologists responsible for giving empirical evidence for all descriptions of experience. Even when it came to perceptual continuity, one of thought's ultimate features, James sought to supply evidence that this feature correctly described experience (as we saw in Chapter Four). But there is not any empirical evidence that could support the choice of *which* features of experience one should then peg as ultimate, in James's sense. In other words, *qua* description of experience, the postulates of the stream thesis rested on empirical evidence. But *qua* criteria for drawing a division between psychology and metaphysics, the postulates did not—could not—rest on empirical evidence at all.

This is not to say that *qua* criteria for demarcating psychology and metaphysics, or psychology and physiology, James's assumptions were not rational. They were certainly not *logical*, in the strict sense of the word. Logic alone cannot establish whether unobservable entities like minima sensibilia belong in psychology.

And James's assumptions were not empirical, either. No experiment can show us where psychology ends and metaphysics or physiology begin. After all, the

Principles are rife with features of experience that James *did* try to explain (such as the perception of distinct position). Why should he have chosen just the five features outlined in the stream thesis as the "ultimate facts" psychology was *exempt* from explaining? Whatever James's reasons, they could not have been empirical. I now want to suggest that his reasons were *pragmatic*, but rational nevertheless.

So we have a tentative answer to the question I raised on p. 322, *above*. If James held that uncritical, metaphysically-loaded assumptions are necessary to practice science, what license does he have for deriding Hume, for example, as "at bottom as much of a metaphysician as Thomas Aquinas" (PP, 334)? We should not ascribe to James, on the basis of such quips, the view that psychologists are to have metaphysically pure assumptions. After all, he clearly denied such a view.

Rather, we should read James as insisting that when psychologists purport to *describe* experience—as Hume did when he claimed that there exist minima sensibilia—they should provide empirical evidence for their descriptions. This is why Hume is supposed to have been guilty of the sort of "half-awake metaphysics" James mentioned in the passage cited on p. 320, above. Hume's conception of simple perceptions amounted to an empirically unsupported description of experience—a hasty mistake of a piece with the case of the hasty physician I described *above*.

James's choice of how to define the "ultimate facts" of psychology grew out of extensive deliberation with his peers. We have reviewed some of James's disputes with philosophers and psychologists towards whom he was mostly hostile, such as Green and Spencer. But it is important to acknowledge that the kind of deliberation over how to peg the ultimate facts of psychology raged inside James's own group of friends, not just between enemies. In fact, some important arguments with Robertson apparently figured into James's choice of how to demarcate psychology.

After James's long space perception article appeared in *Mind*, his old friend issued a critical response (Robertson 1888). Robertson's chief complaint was that making extension a native quality of perception was tantamount to admitting

"psychological impotence" (Robertson 1888, 418). He meant that James was ceding too much ground to Idealists like Green.

> The effort … to construct a psychological theory of Extension has so far had results that appear to be hardly more satisfactory to those who may be supposed to maintain than to those who discount the enterprise in principle. . . .
>
> … [William James and his ally James Ward have been] driven to make assumption of an inherent character in sensation that brings them perilously near, if it does not quite carry them over, to the position of those who contend that a psychological theory must always include among the elements of the explanation, though it may be under some disguise or other, the very fact of extension to be explained. (Robertson 1888, 418-419)

"…Those who discount the enterprise" of constructing a psychological theory of extension were Idealists.[259] James was confessing impotence, according to Robertson, by admitting extensity to be a native property of all sensation—that is, to be an ultimate feature of mental states that cannot be further explained. As Robertson rightly pointed out, in a sense this *was* Green's position—that any empirical explanation of spatial perception would have to beg the explanatory question at the outset, and begin with extended ideas already in hand.

This is not the place to pursue the details of James's response to Robertson. I only want to register that the particular way the stream thesis demarcated psychology from metaphysics was the result of debate not just between James and his enemies, but within his own community of friends, as well.

We now can sketch an answer to a persistent question that has been lingering since the beginning of Chapter Four—in what sense did the stream thesis provide a *framework* for the principles?

The stream thesis provided a framework in the sense that it enabled the construction of legitimately scientific theories about the mind. It achieved this by specifying a loose set of rules for theory construction, rules that were actually built

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[259] This point comes out clearly in Robertson's own psychology textbook. After discussing the "Empiricist" position, that there is "a psychological explanation" of the facts of spatial perception, Robertson acknowledged that "some schools deny that this is possible," citing Kant in particular (Robertson 1896, 105). On the following page, he reiterated his claim that James's attempt to carve a middle path between these two "suggests to me Don Quixote tilting at windmills" (p. 106).

into the basic definition of the mental state. Recall that James stipulatively defined the mental state in terms of ultimate features. Once he decided which features of mental states were to be ultimate, he then had a kind of negative guideline for what sorts of mental facts demand explanation. Attempts to "explain" the thesis's five postulates James relegated to metaphysics or other neighboring disciplines. So in the sense that the basic objects of Jamesean psychology were defined in terms of ultimate features, the guidelines for how to construct a legitimately scientific theory about the mind were built into the very fabric of the objects themselves.

Thus, I want to claim that the stream thesis was constitutive of the scientific status of the *Principles'* specific theories. I quickly explained what constitutive scientific principles are at the beginning of Chapter Four. We are now ready to refine this account to fit the case of Jamesean psychology.

4. Friedman on Constitutive Principles

Early in Chapter Four, I asked what the epistemic status of James's stream thesis is. I canvassed leading accounts of James, and found them wanting in two respects. They lack a viable account of the *evidence* on which the stream thesis rests. And they lack a viable account of the sense in which that thesis might provide a *framework* for the specific theories of the *Principles*—surprising, since it is a commonplace in the secondary literature to call the stream thesis a "framework."

At this point, I have only sketched the sense in which the stream thesis provided a framework for James's *Principles*. In the remainder of this chapter, I turn the sketch into a more complete drawing.

Here is a summary of the evidence on which the stream thesis rests. I proposed that some evidence for the stream thesis was experimental, and came from James's early work on space perception. But the stream thesis rests on empirical evidence only insofar as it functions as a description of experience, I have suggested.

The stream thesis also functioned as an a priori definition, and thereby played a constitutive role of some sort with respect to James's psychology. So far, I have focused on primary sources to establish that James really intended the stream thesis

to play an a priori role in his psychology. The role was to help demarcate psychology from neighboring disciplines, particularly from philosophy.

But I have not given much explanation yet of how it is the stream thesis, *qua* definition of psychology's proper object, helps *constitute* the scientific status of James's special theories. We are now ready to develop a more precise account of this constitutive role. To do this, I will draw on theoretical resources from more recent philosophy of science and epistemology.

I have alluded to Michael Friedman's work on constitutive scientific principles, and suggested that the stream thesis might be constitutive in a related sense. To what extent can we apply Friedman's model to James's work in psychology?

Friedman developed his account to help analyze the structure of theories in the exact sciences—particularly in Newtonian and Einsteinian physics. It is thus not surprising to find that as it stands, Friedman's model needs to be modified if it is to fit an immature, human science like Jamesean psychology. By "immature science" I mean one still struggling for institutional and intellectual autonomy, particularly autonomy from philosophy. Friedman himself acknowledges the need for further work if his model is to be adapted to the special sciences (see the last chapter of Friedman 2001). Accordingly, my analysis is an attempt to extend Friedman's account to the case of early empirical psychology.

I begin with a summary of Friedman's view, from which I extract a crucial insight—that in science not all parts of a given theory can face empirical evidence "symmetrically," to use his phrase. This is because some empirical claims in a given theory *presuppose* (or are *constituted* by) other claims which cannot themselves be subject to empirical disconfirmation, for reasons we will examine. I will argue that the stream thesis does play a constitutive role in James's psychology, but we will have to develop a different notion of *presupposition* to grasp the sense in which this is so.

We will find three payoffs for examining Friedman's theory in some detail. First, his theory calls our attention to some constitutive features of psychology that have not yet been noticed by philosophers of science. Second, this notion of a constitutive

part of psychological theories will help us understand the structure and function of James's scientific conception of experience, which influenced later empiricists.[260]

Third, Friedman's conception of constitutive a priori principles plays a crucial role in his attack on Quinean naturalism. The modifications I propose to Friedman's view thus have ramifications for his attack.

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Friedman has been drawing on his historical scholarship both to criticize Quine's account of scientific rationality and to provide a positive alternative.[261] For Friedman, Quinean naturalism comprises four theses. First, there can be no principled distinction between analytic and synthetic statements.[262] Second, the collapse of the analytic/synthetic distinction is supposed to show that all statements in our scientific theories are synthetic and a posteriori, in the following sense. The conjunction of our scientific statements faces empirical evidence as a whole. Recalcitrant evidence, in principle, can count against any conjunct we choose, including even the laws of logic.

Third, scientific beliefs are organized into a vast web. Some beliefs sit closer to the center, others closer to the periphery, of our belief web. The more central beliefs are more costly to revise, in the sense that such revision requires corrective adjustments in large portions of the rest of our belief web. Peripheral beliefs can be adjusted with less demand for correlative belief revision (Friedman 2001, 28, 32-25).

Fourth, since all statements are subject to empirical confirmation, there is no longer any specially secure knowledge philosophy can employ for justifying natural science. Therefore, philosophy is to conduct its business inside the same empirical

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[260] *See above*, pp. 236 *ff*.

[261] *See* especially (Friedman 1997; Friedman 2001). The "Preface" of the later work provides a succinct summary of the relation between Friedman's historical work and his critique of Quine. For another revisionist historian sympathetic to Friedman's critique of Quine, *see*, *e.g.*, (Richardson 2002b, 270).

[262] Friedman thinks this is fundamental for Quine's naturalism. It is fundamental in the sense that Quine's rejection of the analytic/synthetic distinction is what supports his subsequent claim that no belief, in principle, is immune from revision.

framework as science. In short, philosophy becomes continuous with science (Friedman 1997, 7-8).

I will return to the fourth claim below. The upshot of the first three is this, for Friedman:

> Our reasons for adopting one or another system of geometry or mechanics (or, indeed, of mathematics more generally or of logic) are at bottom of the very same kind as the purely empirical considerations that support any other part of our total theory of nature. (Friedman 2001, 28)

For Friedman's Quine, all parts of our scientific theories, from abstract mathematical structures to concrete empirical statements, are to be supported or disconfirmed by considerations that are ultimately empirical. There are to be no a priori elements to our scientific knowledge.

This aspect of Quinean naturalism is its chief defect, for Friedman. As a preferable alternative, he seeks to revive Rudolph Carnap's view about the way various parts of scientific theories confront experience.

Carnap did draw a distinction between an analytic and a synthetic element of scientific theories (Friedman 2001, 33). The analytic element is composed of mathematical structures that are true in virtue of the meanings of the terms employed. These structures make possible the meaningfulness of precise empirical assertions. The synthetic element of theories is composed of properly empirical assertions. Such assertions come in the form of empirical laws. As we shall see, the analytic or a priori part of scientific theories itself breaks into two parts.[263]

Friedman uses Newtonian physics as an example. The law of universal gravitation cannot be formulated without two a priori structures already in place. The first is the calculus, then a new form of mathematics dealing with infinite limits and instantaneous rates of change. The calculus made it possible for Newton to formulate physical notions like *force* with mathematical rigor. For example, the second law of motion defines force as the product of mass and acceleration. Acceleration is defined as the instantaneous rate of change in velocity; and velocity

[263] A helpful summary of Friedman's tripartite division of theories can be found at (Friedman 2001, 79-80.)

is defined as the instantaneous rate of change of position. But without the mathematics of the calculus, the notion of instantaneous change cannot be formulated precisely enough for the laws of motion to have a precise empirical content (Friedman 2001, 35). Friedman thus calls the mathematics of the calculus a "presupposition" or "condition" of even formulating the laws of motion.

In turn, these laws of motion play their own constitutive role with respect to Newton's universal law of gravitation. Since Newton, the trend in physics has been towards ever more abstract representations of empirical laws. Newton himself was faced with the problem of how to specify which concrete, observable phenomena his radically abstruse laws are supposed to describe. Friedman here draws on Hans Reichenbach's notion of *coordinating principles* to characterize the part of physical theories that coordinates abstractly-formulated laws with observable magnitudes. In Newtonian physics, the laws of motion play such a coordinating role by giving rules for comparing concrete measurements (for example, of planetary motion) with predictions made by the universal law of gravitation. The universal law is highly abstract, and the coordinating principles are needed to generate predictions about what will happen not in some theoretical realm, but in the world of our actual experience (Friedman 2001, 76-77).

It is important to note that Carnap and Reichenbach, as Friedman points out, held that the constitutively a priori parts of scientific theories were actually *revisable*, not necessary as Kant had taught. For Positivists, this is the great lesson of the development of non-Euclidean geometries, and of Einstein's application of such geometry to nature. Kant had argued that Euclidean geometry was a constitutively a priori part of Newton's physics. So when Einstein developed a theory of gravity based on a *non*-Euclidean framework, this helped destroy the idea that science rests on necessary, unrevisable principles.

However, Positivists prised apart two different meanings of the Kantian a priori, discarded one, and salvaged the other. On the one hand, Kant held synthetic a priori principles (chief among them, the principles of Euclidean geometry) to be necessary and unrevisable. This is the notion Positivists discarded in the wake of turn-of-the-

century developments in math and physics. But Kant also held that synthetic a priori principles gave conditions for the empirical meaningfulness of scientific theories. Positivists—particularly Reichenbach—argued that science still employed constitutive a priori principles in this second sense (Friedman 2001, 30-31).

For example, the general theory of relativity describes trajectories through variably-curved space. But this notion of a variably-curved space could not have been precisely articulated without the formal results of non-Euclidean geometries in the late 19th century. In particular, it could not have been articulated without Riemann's pioneering work in the theory of manifolds. So while the theory of manifolds is not constitutively a priori in the sense of being a necessary component of *any* conceivable physical theory, it is constitutively a priori with respect to *Einstein's* particular physical theory (Friedman 2001, 38).

So Friedman follows Carnap and Reichenbach in holding that science indeed employs constitutively a priori principles. But unlike in Kant's day, we now know these principles to be *dynamical* or *relativized* in the sense that they change along with new developments in the exact sciences.[264] They are still constitutive in the sense that they make possible the precise, meaningful articulation of empirical claims within given scientific theories.[265]

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[264] What can make us change our a priori principles? Consider the case of Einstein's prediction of the advancement of Mercury's perihelion. Friedman claims it is a "profound mistake of Quinean holism" to view trials like this as providing empirical tests of all components of Einstein's theory symmetrically. The empirical part of the theory is what is tested. The mathematical structures by themselves are surely not (Friedman 2001, 80-82). Friedman *does* allow that in special cases we can put empirical pressure even on the constitutive a priori parts of our theories, though; but we cannot see such tests as logically rigorous. If we do revise the a priori component of our theory, that revision will be "purely pragmatic" (Friedman 2001, 71 ff.). His extensive discussion of this point comes at pp. 83-92.

[265] *Also see* (Friedman 2001, 73) for discussion of the similarities and differences between the Carnap/Reichenbach notion of constitutive a priori principles, and Kant's notion of synthetic a priori principles.

Now Quine, by denying a distinction between analytic and synthetic statements, is unable to capture the asymmetric way[266] in which these various parts of physical theories confront empirical evidence. This is one of Friedman's major complaints against Quinean naturalism. It is not appropriate to describe the calculus together with Newton's laws of motion and the universal law of gravitation as three conjuncts all facing empirical evidence in the same fashion, with some conjuncts more deeply "entrenched" than others. This is because one can drop or revise the laws of motion without having any effect on the meanings of statements in the calculus, for example—but the reverse is not true. Without the calculus, the laws of motion simply have no determinate meaning. And without the laws of motion, the universal law of gravitation also cannot be given empirical meaning (Friedman 2001, 35-36).

Friedman further argues that the entrenchment metaphor not only fails to capture the constitutive role of certain parts of scientific theories, it also contradicts what we know about scientific revolutions. When physicists go so far as to revise the mathematical parts of their theory, the new mathematical parts are certainly not distinguished by their being deeply entrenched in a web of belief, as Quine would have it. In fact, the mathematical parts can be among the most controversial, least accepted parts of the theory. For example, the calculus was highly controversial when Newton employed it. So its special status in Newton's theory of gravity certainly does not stem from its have been widely-believed[267] or deeply-entrenched

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[266] The word "symmetric" is Friedman's: "The combination of calculus plus the laws of motion is not happily viewed, therefore, as a conjunction of elements symmetrically contributing to a single total result" (Friedman 2001, 36).

[267] Friedman is on secure ground when he glosses "entrenchment" in terms of beliefs that are widely shared in a community. Quine says that the way to "distinguish between information that goes into understanding a sentence"—presumably, these are the more entrenched beliefs—"and information that goes beyond" is to appeal to statements that are "subscribed to by all fluent speakers in the community." Famously, though no one would treat it as analytic, "there have been black dogs" is a Quinean example of a deeply entrenched statement among English-speakers. It would be hard to find someone fluent in the language who denies this statement, even though it is not an analytic truth. Friedman is right to point out that in Newton's day the mathematics of the calculus could not be described as entrenched in *this* sense. It could not be described as thus entrenched even in the community of physicists.

(Friedman 2001, 39). Rather, its special status comes from its being presupposed by the properly empirical parts of Newton's theory.

Quine is not remembered for contributions to the philosophy of physics. Since one thing he *is* remembered for is advocating that epistemology become a branch of empirical psychology, one might expect that his general claims about science are better suited to this latter field. We will find related but distinct reasons why Quinean holism cannot, in fact, account for the stratification of psychological theories any better than it can account for stratification in physics.

Friedman's account of science does not perfectly fit the case of empirical psychology, either. But his account gives us a more helpful starting point for understanding the role of metaphysical assumptions in James's work. At the start of Chapter Four, I gave a brief explanation of Friedman's notion of *presupposition*. We must now probe deeper into this troublesome concept if we are to see to what degree Friedman's model fits the case of James's psychology.

Recall from Chapter Four that on Friedman's view, a sentence P constitutes (or is presupposed by) a sentence Q just in case Q is meaningless unless P is true. Of course, not every presupposition of an empirical statement is constitutively a priori in the sense in which Friedman is interested.[268] Genuine, constitutively a priori principles of a theory must belong to the theory in question. Friedman thinks all such principles turn out to fall under one of the two categories described above—they are all either mathematical or coordinating principles.

How one cashes out the presupposition relation is an important question, for Friedman, because the constitutively a priori parts of a theory are supposed to take on a special status *in virtue* of playing a presuppositional role. Understanding this relation is also important to my story, because I will argue that *no* part of James's theory plays exactly the presuppositional role of mathematical or coordinating principles in physics. In other words, an important kernel that needs to be modified

[268] For example, all logical truths will be presupposed by any given statement that is meaningful, on Friedman's view.

in Friedman's view, if it is to fit James's psychology, is precisely the way we cash out the presupposition relation.

Let us begin our analysis of this concept by noting that there is something unexpected about the conception of presupposition I have attributed to Friedman. Let B stand for the sentence "The present King of France is bald." Let A stand for "There exists exactly one present King of France." For Friedman, B presupposes (is constituted by) A just in case B is *meaningless* unless A is true (Friedman 2001, 74—he also uses the expression "empirically meaningless"). This is a stronger notion of the presupposition relation than is usual, as I will now show.

The "present King of France" example is originally due to (Russell 1905), who posed the following paradox. B is obviously not true (uttered in 1905, say). Suppose we render the negation of B "The present King of France is not bald." This statement appears also to be false, since there is no present King of France. But then assuming that B is logically simple (as it looks to be), we seem to have a violation of the law of the excluded third, which requires either B or its negation to be true.

Here is Russell's solution. Consider statements of the form "X is φ," where X is understood to be a denoting phrase like "the term having the property m." Russell argued that the real meaning of such a phrase is given by the following beastly construction: exactly one term has the property m, and that one term also has the property φ (Russell 1905, 490). For example, the real meaning of an expression like "the present King of France is bald" would then be given by the following conjunction, on Russell's view:

there exists exactly one King of France, and he is bald.[269]

We can then allow that B is clearly false, because the first conjunct of its real meaning is false.

[269] I am simplifying. Actually, "there exists exactly one present King of France" must itself be analyzed into two simpler claims, in classical logic: "there exists at least one present King of France" and "there exists at most one present King of France." This does not affect the point about bivalence.

Russell argued that the negation of B is ambiguous, though. "The present King of France is not bald" may mean the denial of the first or the second of the above conjuncts. If it is the first conjunct that is denied (so the intended statement reads "It is false that there exists a present King of France who is bald"), then ~B has the value true. If it is the second conjunct that is denied ("There exists exactly one present King of France, and he is not bald"), then ~B has the value false.

Russell's analysis solves the paradox—that is to say, it shows how to analyze B without sacrificing the law of the excluded middle (or the principle of bivalence, either). Russell could admit that "The present King of France" is meaningful, even though both it and its denial *appear* to be false. Why? Because the appearance that ~B is false is an illusion. The real, meaningful way to deny B is to deny its first conjunct, Russell argued. This makes B have the value true, and ~ B have the value false—exactly the desired outcome. B only appears to violate the law of the excluded third when we fail to appreciate its real meaning.

Though Russell did not use the expression, we might say that the first conjunct—there exists exactly one present King of France—is a "presupposition" of B. Then we can give the following, Russellian view of presuppositions: B presupposes A just in case if A is false, then B is false.[270]

This view received an influential criticism in (Strawson 1950). It simply does not fit ordinary language, Strawson argued, to insist that the "real meaning" of a statement like B is given by what I called Russell's "beastly construction," above. If someone really uttered B, our natural reaction would *not* be to say that the statement is *false*, as Russell would have it. We would want to say that the question of B's truth or falsity simply "doesn't arise," because it has a false presupposition (Strawson 1950, 330). For Strawson, the false presupposition prevents B from being a candidate for truth or falsity at all.

However, note that Strawson's analysis has its own drawback. He must either deny that B is a meaningful statement, or he must give up the principle of bivalence.

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[270] Strictly speaking, Russell is only committed to this view in cases where B is a declarative statement whose subject is a denoting phrase.

The first option is untenable, because when someone utters B we have no trouble understanding what he means. But suppose B is meaningful. On Strawson's analysis, B must then be a statement that cannot be assigned a truth value. This would entail that meaningful statements can be true, false, or neither, and so the principle of bivalence must be given up.

He chose this second option, insisting that when A is false, B is still "significant" or meaningful (Strawson 1950, 330), though B can be assigned no truth value. Hence, for Strawson, if some sentence Q presupposes another sentence P, if P is false, then Q is a "misplaced"[271] (but meaningful) statement.

Finally, a semantics for a formal language containing presuppositions of a roughly Strawsonian sort was developed in (Van Fraassen 1968), and on first blush this seems to be the conception of *presupposition* on which Friedman relies (he cites Van Fraassen at (Friedman 2001, 74)).

However, Friedman thinks that, in the case of a scientific theory T and a presupposition P, if P is false, that renders T outright meaningless, not either false (as Russell might have held) or misplaced (as Strawson and van Fraassen do hold). This is a subtle but important point. Remember, Friedman holds that the a priori part of a scientific theory literally *gives meaning* to the empirical part. Without the calculus and the laws of motion, the universal law of gravitation actually becomes meaningless, not just misplaced. Thus, Friedman's appeal to Van Fraassen's work on presupposition actually turns out to be a red herring.[272]

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[271] This is my word, not Strawson's.

[272] Friedman is explicitly indebted to the interpretation of Kantian constitutive conditions developed in (Brittan 1978), and to van Fraassen's semantic notion of presupposition (Van Fraassen 1968). I note that Brittan vacillates on the question of whether a statement with a false presupposition is only misplaced, or altogether meaningless. Like Friedman, Brittan wants to apply van Fraassen's notion of the presupposition relation to Kant—the primary discussion is on pp. 35-42. Brittan first argues that like van Fraassen, Kant gives up bivalence (p. 36-38). Now, van Fraassen must give up bivalence because he allows that a statement can be *meaningful*, yet not a candidate for being assigned a truth value. (Meaningless statements already cannot be assigned truth values—this is no challenge to bivalence.) So when Brittan argues that Kant gives up bivalence for similar reasons as van Fraassen, this suggests that a statement with a false presupposition, for Kant, is meaningful but in some way misplaced. But several pages later, Brittan writes that if some synthetic judgments presuppose true synthetic a priori principles, this guarantees that the synthetic

Friedman faces a dilemma, although I do not think the dilemma is fatal. He must either give his own account of presuppositions that does not appeal to van Fraassen's or Strawson's work (or to Brittan's, who is himself indebted to van Fraassen; *see* fn. 272). Or Friedman must concede that in science, false presuppositions do not after all render the empirical parts of theories outright meaningless, but only misplaced.[273]

Now what is the significance of all this?

Friedman attaches far-reaching consequences to his notion of constitutive principles. He thinks that historical analysis reveals such principles to be the hallmark of science itself:

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judgments can be assigned a truth value—"i.e., [this guarantees] their meaningfulness …" (p. 41). This statement treats "meaningfulness" as a synonym for "being a candidate for having a truth value." But in that case, Kant does not need to give up bivalence, because any statement with a false presupposition will simply be rendered meaningless. Bivalence places no constraints on meaningless statements. Moreover, the appeal to van Fraassen's work on presupposition thereby becomes irrelevant to Kant. So I am not wholly clear on what presupposition relation Brittan is ascribing to Kant. The point is relevant to my story because *Friedman* cites Brittan's and van Fraassen's respective discussions of the presupposition relation. Unlike Brittan, Friedman does consistently stick to the view that a statement with a false presupposition is thereby rendered meaningless—so perhaps the reference to van Fraassen's work, in this context, is simply not needed. But this raises problems of its own. *See below,* fn. 273.

[273] The first horn seems unattractive because it cuts Friedman off from more familiar examples of statements with false presuppositions (such as the Present King of France example, which Friedman himself uses). We have a clear idea of how *those* kinds of presuppositions work. But without those familiar examples, the sort of presuppositions Friedman claims to find in science seem ad hoc, possibly mysterious. Do we have other examples where the falsity of one statement really renders another statement outright meaningless? The second horn also comes with risks. Friedman's basic critique of Quinean naturalism turns on the claim that various parts of scientific theories face evidence asymmetrically. But as we have seen, Friedman portrays the asymmetry as arising because the empirical part of a given theory turns out to be *meaningless* unless one has certain a priori principles already in hand. Perhaps this critique can be maintained if Friedman substitutes the actual presupposition relation van Fraassen and Strawson actually developed. But this will take some work. Friedman's own strong reading of the presupposition relation is precisely what gives bite to the critique of Quinean naturalism, after all. It is not simply that some statements in a scientific theory are necessary conditions of other statements in the sense of *entailing* them. Rather, some statements render others *meaningful* in the first place—this is what Quinean naturalism allegedly cannot make sense of.

> Quine is correct that pure formal logic is insufficient to characterize the relativized and dynamical, yet still constitutive notion of a priori principles Carnap was aiming at. … Although Carnap may have failed in giving a precise logical characterization or explication of such principles, it does not follow that the *phenomenon* he was attempting to characterize does not exist. On the contrary, everything we know about the history of science, I want to suggest, indicates that precisely this phenomenon is an absolutely fundamental feature of science as we know it—and a fundamental feature, in particular of the great scientific revolutions that have eventually led, in our time, to the Carnap-Quine debate. (Friedman 2001, 41)

Our best history, Friedman writes, reveals that science itself is characterized by the use of constitutive a priori principles to formulate precise empirical theories. Friedman grants that Quine's attack on the analytic/synthetic distinction did show Carnap's *formal* account of constitutive principles to be a failure. But Friedman holds that the lesson is only that "pure formal logic" is not enough to characterize constitutive scientific principles. He maintains that even if Carnap's formal characterization failed, these principles are nevertheless the very hallmarks of science as we know it.

In other places, Friedman softens his rhetoric, restricting the claim that relativized a priori principles characterize all science. For example, at (Friedman 2001, 71) these principles are presented as characteristic features of "advanced theories in mathematical physics." He uses similar language eight pages later. Indeed, he eventually acknowledges that his analysis of constitutive principles in Newton and Einstein's physics in fact do not obviously fit revolutions in the history of other sciences. He discusses quantum physics, chemistry, and the Darwinian revolution. In the latter case, he acknowledges that there is relatively little

> of a direct connection with our present philosophical framework. The primary innovations in this case were not mathematical in nature, and so there is no question at all here of coordinating or (more generally) constitutive principles in our sense. (Friedman 2001, 126)

In the end, Friedman gives an intriguing analysis of mathematical physics that is put to use in a suggestive attack on Quinean naturalism. But we are left with an uncertain picture of how to understand the presupposition relation between parts of scientific theories, and with an uncertain picture of how to extend the analysis to other sciences.

We are finally ready to see that the stream thesis cannot be constitutive of James's specific theories in Friedman's sense. The stream thesis obviously cannot be constitutive in the sense of being a "mathematical part" of the empirical theories of the *Principles*, and it cannot be a "coordinating principle" either.

The reason is entirely straightforward. Both the stream thesis and the special theories of the *Principles* are cast *in natural language*. They require no abstruse mathematics at all to be given empirical content. If James participated in a revolution in the science of mind, he certainly did not do so in virtue of bringing a new mathematical formalism to bear on empirical studies, like Newton or Einstein.

So the theories of the *Principles* surely do not have what Friedman calls a special "mathematical part." *A fortiori*, there is no mathematical part to give an "empirical part" precise meaning. All parts of James's various theories, I want to suggest, "get" their meaning from one place—the plain English language as it was spoken and written in the late 19th century.

True, we have seen that when appropriate, both the specific theories and the stream thesis are supported by quantitative evidence. But in counting the quantitative data as evidence for his theory, James faced nothing like Newton's or Einstein's problems. We need nothing more than basic arithmetic to see how the quantitative evidence supports James's theories. Unlike Newton or Einstein, James therefore required no a priori coordinating principles to connect his theories with observation. Remember, what motivates the need for constitutive a priori principles, on Friedman's view, is not the mere use of quantitative data. It is the use of formal models that are so abstract they have no straightforward fit with experience, and thus no precise empirical meaning, until we find appropriate a priori principles.

Now none of this would surprise Friedman, who would certainly deny that only theories with highly abstract mathematical components count as genuinely scientific.[274] Nevertheless, his neo-Carnapian analysis is meant to get at *something* fundamental about science itself. I now develop an analysis that seeks to preserve

[274] See his discussion of chemistry and biology (Friedman 2001, 124, 126).

what I take to be Friedman's most important insight about general science, but that can help make sense of the structure of James's psychology.

If it is abstract, formal structures that create a need for constitutive principles in the exact sciences, what creates a need for constitutive principles in James's psychology? In a word, the answer is *demarcation*.

A major theme of this dissertation has been that psychology was under *philosophical* attack in James's day. But this was a philosophical attack with practical consequences. Particularly in Britain and the United States, various groups struggled to establish themselves in the new research universities. Idealist attacks amounted to a direct challenge to psychology's bid for a legitimate place inside these universities. And the attacks could not be brushed aside, because they had a broad appeal. Not only did Idealists purport to show that the crass materialism psychologists allegedly peddled was inconsistent. Idealists went as far as to present their own alternative—transcendental metaphysics—as a path to intellectual or even spiritual enlightenment. As we saw in Chapter Two, Idealist philosophy became widely popular in universities of the period. Psychologists had to respond.

I contend that this dynamic forced empirical psychologists to fight a war on two fronts. They had to produce enough explanatory successes to underwrite their claim to be a legitimate, if fledgling science. This was their ticket to intellectual respect in universities. But psychologists simultaneously had to rebut Idealists, who claimed to reduce the very idea of a science of mind to absurdity.

In my view, James's single greatest accomplishment was to have successfully prosecuted both wars at once in the *Principles*. If James deserves to be called a grandfather of empirical psychology, it is in virtue of his ability to generate Janus-faced theories that both advanced the empirical successes of psychology and at the same time engaged in subtle philosophical rebuttal.

We have already seen one way in which he accomplished these tasks in tandem. On one hand, James's work on space was a major contribution to empirical theories of perception, as historians of psychology have noted (e.g., Pastore 1971, Chapter

12). But on the other, the work on space also functioned as a philosophical response to Idealists like T. H. Green, as I tried to show in Chapter Four.

In this chapter, I am claiming that James had another Janus-faced strategy for responding to Idealists. His definition of the mental state stipulated what was to constitute a legitimate endpoint for empirical-psychological analysis. The effect was to divide labor with philosophers, so that certain pesky arguments about the mind could be kept out of psychology. James used the stream thesis to establish this demarcation of psychological from philosophical explanation.

Borrowing a page from Friedman, I want to claim that *qua* demarcation criterion, the stream thesis did not face empirical evidence symmetrically with respect to the special theories of the *Principles*, in the following sense. A workable demarcation criterion is a presupposition of psychology's scientific status. This is to say that if a given demarcation criterion is rejected, then empirical psychology cannot advance legitimately scientific theories at all. But the reverse is not true. If any of psychology's scientific theories turn out to be false, this does not force us to reject our demarcation criterion.

So with Friedman and against Quine, I hold that scientific theories are often stratified in the sense that not all parts face empirical evidence symmetrically. Even empirical psychology, if James's case is an indication, is stratified in an important respect.

Yet as I have said, we cannot use Friedman's analysis of presuppositions in physics to explain the precise respect in which James's theory is stratified, because the *Principles* incorporates no abstruse mathematical models that need to be coordinated with observation. We thus need a different analysis of the presupposition relation if we are to see how early empirical psychology is stratified. Towards this end, I will now explore some of H. P. Grice's work on presuppositions.

Friedman also raises the question of how a priori presuppositions can be adopted for good reason. He answers this question by adapting a Habermasean account of communicative rationality. I will be altering Friedman's account of the presupposition relation enough that I shall have to look elsewhere for a useful

account of how a priori stipulations in psychology can be rational. We will find that C. I. Lewis's account of pragmatic a priori principles will provide helpful insights.[275] But first I turn to Grice.

5. Grice on Presuppositions

In the last section, I began a discussion of the *presupposition* relation. Recall that Strawson had been dissatisfied with Russell's analysis of denotation.

Let us call "vacuous statements" those which make claims about non-existent objects. "The present King of France is bald" is an example of a vacuous statement.

Strawson argued that Russell's analysis failed to do justice to our most natural reaction to vacuous statements, which is to deny that the question of truth or falsity can even arise. Strawson's explanation of vacuity was that some meaningful statements have presuppositions. A meaningful statement with a false (Strawsonian) presupposition is misplaced.

Grice was sensitive to cases where our best logical analysis of a given sentence fails to match neatly with our intuitive sense of what that sentence actually means in natural language. But Grice did not conclude that our best logical analyses should be amended or jettisoned on that account. He held that we could account for this divergence by attending to the conversational context in which natural-language statements are uttered. In the case of denoting phrases, Grice wanted to preserve Russell's logical analysis. But this meant finding a way to deal with presuppositions that (unlike on Strawson's account) preserved bivalence.

Grice's solution was to distinguish between the literal meaning of a sentence, and the meaning speakers will often attach to sentences in the context of an actual

[275] One shortcoming of Lewis's work, for our purposes, is that he did not have a very clear notion of the presupposition relation. In fact, he claims that presupposition is equivalent to the implication relation in classical logic (Lewis 1929/1956, 200-201). Accordingly, though he does discuss cases where a priori definitions literally give meaning to empirical statements (e.g., Lewis 1929/1956, 230), he does not regard this relationship as one of presupposition. So we still need an interpretation of presupposition that will suit James's psychology—this is why my discussion of Grice is necessary.

conversation. For example, consider the following exchange. Evan is standing next to his car, which is obviously not working. Evan's friend Jeff happens by.

Evan: I am out of gas
Jeff: There's a gas station around the corner (my words, adapted from Grice 1989, 32)

Jeff does not literally say that Evan is likely to be able to get gas from the station around the corner. Neither does Jeff literally say that the gas station is likely to be open, to have gas to sell, and so on. But these meanings are nevertheless communicated. Grice called these unspoken meanings "conversational implicatures."

He argued that rational speakers have certain expectations, which he described via a series of maxims or rules of thumb. For example, he proposed a "maxim of relation": Be relevant. Since Evan and Jeff are both rational speakers, they (according to Grice) both expect discourse to be relevant. In virtue of this expectation, Jeff's expression conversationally implicates that Evan is likely to be able to get gas from the station. A rational speaker would presumably not have told Evan about this particular gas station unless this information were relevant to Evan's predicament. And the information is only relevant if Evan could actually get gas at this particular station (now or soon).

Here is how Grice used implicatures to preserve Russell's analysis of denoting phrases, while doing justice to Strawson's concerns[276] about natural language. He argued that vacuous statements like B ("The present King of France is bald") presuppose statements like A ("There exists exactly one King of France") in the sense of conversationally "implicating" them. Unlike on Strawson's view, for Grice the literal meaning of B does *not* entail A.[277] Rather for Grice, a speaker who utters B under normal conversational conditions will implicate A.

To see how Grice's analysis works, we must look at the maxim he proposed to deal specifically with presuppositions—"Frame whatever you say in the form most

[276] Strawson was Grice's student, so I do not mean to imply that Grice learned such concerns through his student. He might have, but I do not know that this is the case.
[277] On Strawson's view, when Q presupposes P, Q also *entails* P. This is because Q is only a candidate for truth or falsity when P is true. So if Q is true, then P must be as well.

suitable for any reply that would be regarded as appropriate" (Grice 1989, 273). I will call this Grice's "presupposition maxim." Here is how the maxim helps account for presuppositions.

> … It is quite natural to say to somebody, when we are discussing some concert, *My aunt's cousin went to that concert*, when we know perfectly well that the person we are talking to is very likely not even to know that we have an aunt, let alone know that our aunt has a cousin. So the supposition must be … that it is noncontroversial, in the sense that it is something that we would expect the hearer to take from us (if he does not already know). That is to say, I do not expect, when I tell someone that my aunt's cousin went to a concert, to be questioned whether I have an aunt and, if so, whether my aunt has a cousin. This is the sort of thing that I would expect him to take from me, that is, to take my word for. (Grice 1989, 274)

One typically will only say things like "my aunt's cousin went to that concert" when the existence of the aunt or her cousin are not issues on which one expects to be questioned. The statement is framed in a way that facilitates certain appropriate responses ("how did she like the concert?" or "when did she go?"). But by the same token, the statement is framed in a way that makes other responses more awkward—such as challenges to the very idea of the aunt or aunt's cousin's existence. Grice thus regards the existence of the aunt and of her cousin as presuppositions of the statement in question. This is because the statement conversationally implicates the aunt's cousin's existence via the presupposition maxim. In other words, the statement is framed in such a way that the speaker appears to take the aunt's cousin's existence as "noncontroversial."

Grice argues that if this maxim describes a rational expectation of typical interlocutors, we can surmise that one who utters B takes A to be noncontroversial, as well. We can surmise this not because B logically entails A, on Grice's reading, but because B conversationally implicates A via this maxim.

Now Grice used his account of presuppositions to argue against Strawson's analysis of B. Recall that Strawson had argued that Russell's analysis of B must be abandoned, because the appropriate response to that statement is not to deny it, but to treat it as misplaced in the sense of not being a candidate for having a truth value at all. According to Grice, on the other hand, Russell really did give the correct

logical analysis of B. If we accept this, then with Russell we can preserve bivalence at least in the face of this particular paradox.

But Grice also tried to accommodate Strawson's intuition by using this new, conversational-implicature account of presuppositions. For Grice, B *seems* misplaced because it has a false presupposition. But a false presupposition, for Grice, is not one that renders another statement false or misplaced. Rather, a false presupposition places another statement in violation of the conventions of rational conversation. The fact that "there exists exactly one present King of France" is false means that one who utters B has violated the presupposition maxim.

Again, this is because a reasonable response to a statement like B would be denial. But the way in which B is framed makes it more convenient for an interlocutor to deny the King's baldness than to deny his existence.[278]

Now despite the differences between Russell, Strawson, Van Fraassen, and Friedman's respective views of presupposition, notice that their respective notions of presupposition all make this a *semantic* relation. Grice, on the other hand, makes the relation *pragmatic*. Under the construals of each in the former group, if a statement Q presupposes another statement P, then certain semantic relations must hold between these two. In particular, Q must also *entail* P (*see above,* fn. 277, where I discuss Strawson; the point holds with respect to the others in the group, as well). But for Grice this is not the case. For Grice, if Q presupposes P, then one who hears Q uttered may rationally *expect* that P is noncontroversial. But this expectation is due to conversational convention, not to logical implication.

Henceforth, I will use "conversational presupposition" to refer to Grice's notion of a presupposition. I will use "semantic presupposition" to refer to presuppositions like those advocated by Russell, Strawson, Van Fraassen, and Friedman.

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[278] The original theory of conversational implicature (I happily note) was developed in Grice's William James lecture at Harvard in 1967. The lecture was first published as (Grice 1975; also see Grice 1978). The theory of presupposition was first published in (Grice 1981). All three articles are collected in (Grice 1989).

Here is what I am finally driving at. I want to claim that the stream thesis was a conversational presupposition of James's psychology. Specifically, the *scientific legitimacy* of James's psychology conversationally presupposed the stream thesis.

I hope I have made clear that the stream thesis was not a presupposition in the sense of bearing any special semantic relationship to any of James's special theories—it could not be said to confer meaning on those theories. Perhaps this is an important way in which human sciences are different from exact sciences like theoretical physics. Instead (and to repeat), I claim that the stream thesis was a presupposition in the sense of having given *scientific legitimacy* to James's psychology. It conferred scientific legitimacy precisely by playing the role of a conversational presupposition.

To see that this is the case, compare Grice's treatment of utterance B, "The present King of France is bald," with the case of James's theory of space perception. Grice holds that B is framed in a reasonable way if rational interlocutors are likely to take the conversational presupposition A, "There exists exactly one present King of France," to be noncontroversial. Similarly, James's theory of space perception is reasonably framed as a *scientific* theory if the stream thesis's acceptance by qualified colleagues is (more or less) noncontroversial.

One can think of James's theory of space perception as loosely adhering to Grice's presupposition maxim, with respect to the stream thesis, in the following manner. Chapter 20 of the *Principles* advanced a rich theory of how the mental state—that is, the stream of thought—is "mapped" into distinctly-perceived positions and spatial relations. But one may reasonably purport to give a scientific theory of mental states, I submit, only where there is agreement among relevant inquirers that mental states are legitimate objects of scientific investigation.

One would not typically say "my aunt's cousin went to the concert" if one expected to be challenged on having an aunt. Similarly, one would not typically purport to have a scientific theory of how the mental state is mapped if one expected to be challenged on the very existence of mental states, or on their status as legitimate objects of scientific inquiry. So James's theory of space perception is

framed in such a way as to facilitate further debate about how the stream is actually mapped. By the same token, the theory is also framed in a way that *discourages* challenges to the very existence of mental states as such.

If the stream thesis is false, then generating scientific theories about how mental states are mapped is something like speculating about how the present King of France is wearing his hair. My point is not that if the stream thesis is false, this makes James's theory of space perception false as well—the theory would, indeed, be false, but that is just because the theory of space perception entails that there really are mental states. This does not capture the sense in which the stream thesis was a presupposition of, or provided a framework for, the theory of space perception.

Instead, if the stream thesis is false, then James's theory of space perception would be in danger of losing its credibility as a *scientific* theory. I write "would be in danger of losing" rather than "would lose" because scientific legitimacy in this case demands *some* stipulation of what the ultimate features are to be of mental states. But there may well have been other ways of defining the mental state that would have served this purpose just as well as the stream thesis.

My account entails that the problems Friedman diagnosed with Quinean naturalism cannot be confined to the failure of Quinean analyses of the history of physics. These problems extend all the way to the science closest to the Quinean heart: empirical psychology. If my own analysis is correct, then even psychological theories have privileged parts that do not face empirical evidence symmetrically. For James's psychology at least, the stream thesis must be noncontroversially established among relevant inquirers before the rest of the theories can have scientific legitimacy. But if any of James's specific theories (*e.g.*, about how the mind identifies spatial and temporal relations in the stream of thought) turn out to be false, this *need* have no bearing on the truth or falsity of the stream thesis. This is because the stream thesis provides a scientific framework for (in other words, is a Gricean presupposition of) the specific theories of the *Principles*.

We must now wonder, though, what evidence *could* bear on the truth or falsity of the stream thesis (qua demarcation criterion). This finally brings us back around

to the question of how, if at all, an uncritical stipulation like the stream thesis could ever be a rational part of a scientific theory. To answer this question, I turn to C. I. Lewis.

6. The Stream Thesis as Pragmatically A Priori

I have already shown that *qua* demarcation criterion, James took the stream thesis to be an a priori stipulation. The question of how a priori stipulations could ever be rational, particularly in the context of science, is a question that James and his friend Charles Peirce both sought to answer.[279] C. I. Lewis further developed a James and Peirce-flavored account of the a priori.[280]

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[279] James's account of a priori truths in science can be found in the final chapter of the *Principles*, particularly at (PP, 1255-1264). James was concerned to fit a robust account of a priori truth into the *Principles's* conception of the mind as a product of Darwinian natural selection. This is a fascinating part of James's response to Idealists. Cheryl Misak has written about Peirce's important work on the role of regulative a priori assumptions in science (Misak 1991, 140 ff.). Peirce held that rational inquiry requires regulative assumptions, such as the assumption that we may someday find a good answer to whatever question we are inquiring about. But he distinguished his view from "a transcendentalist" who would attach greater weight to such presuppositions. Unlike the Kantian, Peirce held that the indispensability of presuppositions was not good grounds for believing them true. He wrote:

> …I do not admit that indispensability is any ground of belief. It may be indispensable that I should have $500 in the bank—because I have given checks to that amount. But I have never found that the indispensability directly affected my balance, in the least. (Peirce 1931, 2.113)

Nevertheless, to deny a regulative assumption is to block inquiry. What justifies us in adopting regulative assumptions is "the justification of desperation," as Peirce called it. We simply have no hope of "know[ing] anything of positive fact" unless we adopt such assumptions (Peirce 1931, 5.603). James might have said something similar about the stream thesis, qua demarcation criterion. It is indispensable to scientific inquiry that we adopt some such criterion. However, demarcation criteria are different from Peircean regulative assumptions in an important respect. Demarcation criteria are simply stipulations, so our "desperate" gamble is not that they will prove to be true. Rather, we must gamble that our demarcation criteria specify a disciplinary boundary that will prove stable and practically workable. We have no sure way of knowing, in advance.

[280] I am obviously developing theoretical tools for understanding James, tools that James himself did not have at his disposal. However there is a good case to be made that James's own conception of the a priori was an important source for Lewis's (admittedly more developed) work on this topic. In addition to the final chapter of the *Principles*, James dealt at length with the genesis of a priori knowledge in the in his posthumously published *Some Problems of Philosophy*. Like Lewis, James held that a priori truths are necessary in the sense of being unrevisable. But James also held that which a priori truths we choose to use

At this point in the dissertation, I am attempting to draw general epistemological lessons from my study of how James's psychology actually functioned. Lewis's work on the a priori turns out to be more suited than James's to drawing out those lessons.

In some ways, Lewis's model is remarkably similar to the (neo)Positivist view we have already sketched.[281] For Lewis, science relies on two varieties of a priori truth: purely abstract truths such as those in mathematics (Lewis 1929/1956, 239-249), and truths based on "definitive concepts," which make empirical tests possible. An example of this second type is Einstein's definition of simultaneity. If we want to measure whether two bolts of lightning strike at once, we need to *stipulate* a definition of simultaneity before we can have a standard by which to make a meaningful measurement (Lewis 1923, 173-174; Lewis 1929/1956, 230-231, 254-258). So Like Friedman, Lewis portrays scientific theories as having three parts—one empirical, and two a priori.

But Lewis's notion of the a priori departs from the (neo)Positivist account in some important respects. Lewis argued that a confusion lay at the heart of traditional notions of a priori knowledge. What is a priori is typically thought to be necessary. But "necessary" is an ambiguous word. Sometimes this word is contrasted with "contingent," but sometimes it is contrasted with "voluntary" (as in, "it is necessary for anyone who understands P to believe P," Lewis 1929/1956, 196).

Lewis accepted that a priori knowledge is necessary in the first sense—or in other words, true "come what will" (Lewis 1929/1956, 231). This is different from the (neo)Positivist view of relativized or dynamical a priori principles that are only necessary with respect to a particular scientific theory. But Lewis denied that a priori truths are necessary in the second sense, where what is necessary is sometimes held to coerce belief.

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is a pragmatic matter. An under-appreciated article on this topic (Pancheri 1971) documents important affinities between James's conception of the a priori and Lewis's.

[281] For an intriguing paper that argues for deep pragmatist similarities between Carnap and Lewis, *see* (Richardson forthcoming).

Lewis took definitions in Whitehead and Russell's *Principia Mathematica* as exemplars of a priori truths (Lewis 1929/1956, 239-240, 244-245). These definitions are necessary (unrevisable) because they are *stipulated*. Once a definition is established in this fashion, no future experience can un-make the definition. However, whether or not we *accept* or *use* a definition is an entirely different matter. Just because a definition is necessary, this cannot force anyone actually to use it. For Lewis, only *experience* can coerce belief, not what is a priori (Lewis 1929/1956, 196-197).

It is instructive that Lewis thought of definitions in the *Principia* as exemplars of the a priori. Lewis was famously unhappy with Whitehead and Russell's logic, particularly with their definition of the conditional. The *Principia* employed what is now called the material conditional.[282] Lewis built his own logic that instead employed the *strict* conditional,[283] a relation which maps more naturally onto the English "if … then …." Lewis regarded both his own logic, which he called "System S," as well as the logic of the *Principia* as consistent. But which system one chooses Lewis regarded as a pragmatic matter. He thought there was no conceivable fact that could truly *coerce* anyone into choosing one system over the other. This is one reason he regarded the a priori element in knowledge—exemplified by logical definitions—to be characteristically voluntary.

For our purposes, the important point is that our choice of what a priori principles to employ may be voluntary, but the choice remains rational, according to

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[282] This is the conditional of classical logic, which is true whenever the antecedent is false or the consequent true (or both).

[283] The strict conditional is true just in case the following holds (to use anachronistic but illustrative terminology). In every possible world in which the antecedent is true, the consequent is true as well. For example, consider the sentence "if Lincoln survives his second term, then William James is never born." This sentence is *true* when "if … then …" is construed as the classical, material conditional. Lincoln did not survive his second term, so the antecedent is false, and the conditional statement is true. The problem is that in regular English, the actual sentence appears to be false. Whether or not Booth actually succeeded in assassinating Lincoln has no bearing on whether James ever lived. If we construe the Lincoln conditional using Lewis's notion of strict implication, the sentence does turn out to be false, for the following reason. There are possible worlds in which Lincoln did survive his second term, but where James was never born. So on this reading the conditional statement is false, just as common sense would dictate.

Lewis. In the case of purely abstract principles, we are bound by consistency in choosing what principles to accept. In the case of applying abstract principles to experience, we typically have some "practical business to perform," and those principles most helpful to our task are to be preferred (Lewis 1929/1956, 237-238).

Lewis also characterized the a priori element of general knowledge, not just of scientific knowledge. Like James, he held that for there to be genuine knowledge, the mind must in some way impose a conceptual order on the chaos of sensory experience. This conceptual order is a priori, but again, a priori in an unusual sense. Any given conceptual framework we use to organize the stream of thought is a priori in the sense of being freely created and adopted by the mind, not in the sense of being such that an organism is coerced into accepting it. Lewis wrote:

> It is given experience, the brute-fact element of knowledge, which the mind must accept willy-nilly. The a priori represents the activity of the mind itself; it represents an attitude in some sense freely taken.
>
> And the a priori is independent of experience, not because it prescribes a form which experience must fit or anticipates some preestablished harmony of the given with the categories of the mind, but precisely because it prescribes *nothing* to the content of experience. (Lewis 1929/1956, 197)

For Lewis, the a priori element in knowledge amounts to a set of concepts we use to organize our chaotic sensory (and scientific) experiences. But what makes these concepts a priori is that we can freely adopt or discard such conceptual frameworks *for pragmatic reasons*. Thus, the "Pragmatic Element in Knowledge" alluded to in the title of one of Lewis's famous papers is precisely the *a priori* element of knowledge (Lewis 1926).

In fact, Positivists may well have accepted many features of the a priori I have attributed to Lewis. But the important difference, for my purposes, is that Lewis was operating with a different notion of what it is that *makes* certain principles—including principles in a scientific theory—a priori. For Lewis, a principle counts as a priori in virtue of being a principle that we freely stipulate, and then adopt for pragmatic reasons.

Similarly, I want to claim that *qua* demarcation principle, the stream thesis represents a stipulated boundary between mental science and neighboring disciplines (primarily metaphysics). What finally makes the stream thesis a *rational*,

yet stipulated assumption, is that the thesis was adopted for good pragmatic reasons. When I say that James had "pragmatic reasons" for demarcating psychology and metaphysics in the manner specified by the stream thesis, I mean that James had a pressing task to accomplish, and the thesis was rational to adopt just to the extent that it helped him accomplish this task. To borrow Peirce's phrase, James's justification for adopting the stream thesis was the "justification of desperation" (*see above,* fn. 279).

The task at hand was to provide enough insulation from metaphysicians' arrows so that psychology could start producing real empirical successes without having to be bogged down in a priori speculation. But James had to provide insulation for psychology in a way that did at least some justice to metaphysicians' widely influential criticisms. To the extent that the stream thesis actually stood to help affect this cease fire, we should think of the thesis as rational.

It will not do to insist that one pronounce the stream thesis either rational or irrational independently of what anyone happened to think of it. This is because it was precisely by *actually persuading* warring factions—persuading them how to divide labor between mental science and metaphysics—that the thesis could function to secure psychology's scientific legitimacy. Thus I repeat, James had good reason to demarcate psychology and philosophy in the way specified by the stream thesis only to the extent that the stream thesis stood actually to be accepted as noncontroversial by disputants.

In fact, I think we really *do* have grounds for seeing James's choice of how to demarcate psychology and metaphysics as rational, because James's choice really did stand to satisfy these disputants.[284] This is because the stream thesis was the product of a kind of negotiation between them.

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[284] I confine myself to the claim that this thesis was well *suited* to affect a cease-fire between philosophy and psychology. A full assessment of the *actual* impact of James's stream thesis in psychology would be a very large task indeed, one that I cannot take up here. Luckily, others have begun to show that James's stream thesis really was influential in psychology (*see above,* fn. 194).

I do not mean that the stream thesis was the result of negotiation in the manner of a political treaty, where representatives literally sit together and hash out an agreement. Rather, it was one product of a more remote form of negotiation. Looking back over this dissertation, I hope it is clear what a wide variety of concerns James actually took account of in building his psychology. He may have stipulated a boundary between mental science and metaphysics. But in doing so he took account of a complicated set of concerns from either side.

There were historical and meta-historical disputes that had to be quelled if psychology was to claim the status of a legitimate science, as we saw in Chapter One. The tradition of conceiving of the mind as a legitimate object of empirical study, a tradition allegedly founded by Locke, had to be shown not to dead-end in Humean skepticism.

In Chapter Two we saw that there were professional, social, and even spiritual concerns that psychologists had in some way to accommodate. For instance, the viability of psychology was closely connected with debates over how to make *philosophy* more rigorous. Green and Robertson agreed that British philosophy was marked by amateurism, but they disagreed on a solution. Robertson advocated that philosophy should become professionalized, and should do this by appropriating the methods of science. He also held that it should hitch itself to the fledgling science of mind by incorporating data from the new psychology. Green agreed that British philosophy needed to be professionalized, but held that any alliance with psychology was a recipe for spiritual and intellectual decay. Psychology, he argued, was an attempt to make a science out of Locke's form of "popular philosophy," a set of general principles that were fundamentally incompatible with human enlightenment. Instead, Green advocated that the path to both rigor and enlightenment led directly through the kind of academic metaphysics flourishing in 19th-century German universities.

Psychology's prospects of demarcating itself from philosophy hinged on even more than the fate of rival conceptions of intellectual history, rival conceptions of philosophical rigor, and rival conceptions of spiritual enlightenment. It also hinged on

the need for persuasive responses to Green's highly influential philosophical arguments. In Chapter Three, we saw in close detail how Green attacked the philosophical foundations of empirical psychology.

I do not claim that the stream thesis magically solved all these disputes at once. Some of the disputes were not really dealt with in the *Principles* at all, but were put off for future research. For instance, I think *The Varieties of Religious Experience* is best read as an attempt to accommodate Idealist concerns about spirituality given the naturalistic worldview of mental science. But in any case, I review the disputes we have met with in this dissertation to reinforce my claim that the boundary James drew between mental science and metaphysics was a boundary whose position was shaped by a dizzying variety of concerns among mental scientists and metaphysicians.

Some may object that there is something untoward about my claim that the stream thesis was a concept that was at once "stipulated" *and* "negotiated." My response is that we routinely use more prosaic concepts that have both these properties.

For example, my friend Jon may stipulate different roles for his children in the kitchen—Emelia Jane will bus the table, say, and Gregory will wash the dishes. But the children may still have a say in which tasks each prefers. Maybe Gregory will hate scrubbing silverware, and will be able to convince Jon to leave this task to Emelia Jane. Perhaps Emelia Jane will then have leverage for placing responsibility back on Gregory for wiping the table.

Similarly, James also got to stipulate the *Principles'* definition of the mental state (because he was the author of that book, after all). But this does not mean he may stipulate his definition in a way that ignores the much more complicated negotiations that had been raging between metaphysicians and psychologists.

As a parent, perhaps Jon is at liberty to stipulate chores for the children without listening to negotiation, if he is in an authoritarian mood. But this is where the analogy ends. James was not at liberty to stipulate a definition of the mental state in

any old way he pleased. He had to find a way to stipulate a boundary between psychology and metaphysics that would help affect a cease-fire between these warring factions.

The compliment I am paying James is much like the compliment one might pay to an engineer who figures out how to build a better bicycle. For instance, in the 1890s bicycles began being mass produced with pneumatic tires, for the first time—an invention (by John Boyd Dunlop) that made for greater traction and a smoother ride. Dunlop's new design was rational not because it revealed some fundamental truth about nature. It was rational because it provided an ingenious solution to problems inherent in older bicycle designs. Similarly, I want to claim that James's stream thesis was rational in that it was an ingenious invention for quelling the metaphysical squabbling that had hobbled earlier psychology—it provided, as it were, greater traction and a smoother ride for empirical psychology.

Philosophers and sociologists of science have been interested in the so-called "demarcation problem" since at least Karl Popper. It will be helpful here to compare James's demarcation problem.

We now think of the demarcation problem as the challenge of finding abstract criteria for distinguishing science from pseudo-science. Popper argued that science's intellectual authority stems from the fact that it makes risky, empirically-falsifiable claims, whereas pseudo-science does not. This view has been subject to a battery of criticism that I cannot review in detail.[285]

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[285] To my knowledge, the article most responsible for igniting debate about the so-called "demarcation problem" was (Popper 1962). A philosophical history of other attempts to demarcate science from non-science can be found in (Laudan 1983), which concludes that a priori attempts to demarcate science from non-science are ultimately futile. Laudan argues that we should instead be concerned with the difference between well-founded and non-well founded beliefs, and that concepts like "unscientific" play only an emotive role in our vocabulary. Some, especially sociologists of science, have maintained that the demarcation problem is still worth pursuing because science plays such a distinctively influential role in modern societies. For example, *see* (Fuller 1991, 175-189; Gieryn 1983). Gieryn emphasizes the flexibility of criteria scientists have historically used to distinguish their practice from non-science. I have considerable sympathy with his claim that scientists

But notice that James's demarcation problem was starkly different from Popper's. James's burden was not to distinguish all science from non-science, but to erect a practical boundary between philosophers and scientists studying the mind. Popper proposed a philosophical theory about science from the top down. But James did not need a general philosophical theory, per se. He needed to solve a problem that was far more practical and local.

If one thinks that only a general rule about what shall constitute Science can settle whether some enterprise is genuinely scientific, then one must see James's demarcation solution as patently irrational. But I suggest that there is no good reason to take such a severe position.

Just as early psychologists ought not to have put off empirical investigation until they had a completed account of the transcendental ego, so they would have been foolish to wait around for an ideal criterion for distinguishing all science from non-science. They faced an engineering problem that needed to be solved quickly. James's stream thesis was rationally formulated, in my view, because it ingeniously solved the problem of how to engineer a legitimate social boundary inside which psychologists could pursue scientific work.

Some readers will raise the following worry. Perhaps the task of quieting the front between psychology and philosophy was necessary for creating conditions conducive to empirical-psychological research. But this is different from the stronger claim I seem to be making, that quieting the front between psychology and philosophy actively conferred scientific legitimacy on psychology. How can a mere social boundary between groups of inquirers serve as a license for intellectual authority?

There is much debate over the significance of social structures to the production of knowledge. I can at least address the objection by tethering my account of James to other, more fully articulated accounts of the social production of knowledge.

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typically distinguish their own practice from non-science in whatever way is best suited to help establish intellectual authority.

At some point, psychologists had to build for themselves the kind of social conditions conducive to objective research—social conditions of the sort philosophers like Helen Longino have emphasized. Psychologists had to establish recognized avenues for criticizing the work of other psychologists, for example. They also had to establish shared standards that applied to everyone inside the specialized community. And so on.[286]

But social epistemologists and philosophers of science have been less attentive to what is required for a sub-community—well structured as it might be *internally*—to establish intellectual authority in the larger academic world.[287] For example, the social structures that Longino proposes as requirements for objective, scientific research (*see above,* fn. 286) are all internal structures of sub-communities in this respect.

To see that establishing these structures is not sufficient for establishing intellectual authority, consider the more recent case of intelligent design. One might argue that advocates like Michael Behe or Phillip Johnson have managed to establish a kind of intellectual subcommunity with many of the trappings of legitimate science. For example, they have scholarly institutes (the Discovery Institute, the Center for Science and Culture), peer-reviewed journals (*Creation*

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[286] For the argument that the rationality of theory choice requires at least shared "maxims" or "values" among scientists, *see* (Kuhn 1977). All things considered, the Kuhnian scientist values (and should value) theories that are relatively more accurate, consistent, simple, fruitful, and that have a broader scope than rival theories. Longino expands on Kuhn's insights, developing a social theory of scientific objectivity (Longino 1992; Longino 2002). On her view, objective inquiry is a property of well-organized communities, rather than a matter of an individual's intellectual hygiene. Objectivity is only possible in a community that meets at least four criteria. First, there must be recognized avenues for criticizing a theory or method. Second, the community must actually take such criticism seriously by responding. Third, there must be some shared standards to which critics can appeal—standards like those Kuhn articulated. And fourth, qualified members of the community must share intellectual authority in a just fashion. Two important volumes that collects articles on the social dimensions of epistemology, particularly in the case of science, include (McMullin 1992; Schmitt 1994b). The Schmitt volume contains an influential criticism of Longino (Kitcher 1994), as well as a helpful overview of the literature on social factors in epistemology (Schmitt 1994a).

[287] A summary of existing work on "the organization of cognitive labor" can be found at (Schmitt 1994a, 18-19). None of the cited projects consider the significance of boundaries between intellectual subcommunities.

Research Society Quarterly Journal), and theories that display the kind of intellectual virtues Kuhn advocated—they (at least claim to be) accurate, consistent, fruitful, simple, and so on. But intelligent design has not been able to establish itself as a functioning subcommunity inside the larger academic world.[288]

If one grants, with philosophers like Longino, that a scientific community *only* needs to be well structured from the inside, one is perilously close to admitting that fringe sciences like intelligent design deserve scientific authority. Indeed, it was not enough for early psychologists to organize *them*selves as an isolated island of people studying the mind objectively, in Longino's sense. Psychologists had to establish themselves as a legitimate scientific community inside the larger intellectual world. This meant establishing criteria for how to demarcate empirical psychology from neighboring disciplines. But crucially, the demarcation criterion had to be respected both inside *and outside* the fledgling science.

So while I am deeply sympathetic to Longino's analysis of social structures in scientific communities, I think her account needs to be supplemented with an explanation of how the *community* of all these academic communities (scientific and otherwise) fit together to produce intellectual authority. Part of this explanation must address legitimate ways a contested boundary between communities can be replaced by a peaceful division of intellectual labor. I propose that demarcation criteria of the sort we have seen in this chapter are one good way to affect such divisions.

In any case, I am defending the view that the stream thesis conferred scientific legitimacy on James's psychology by specifying a noncontroversial boundary between mental science and metaphysics. My response to the objection at hand is that establishing a noncontroversial social boundary can be a legitimate source of scientific authority because it is in virtue of such boundaries that subcommunities find a place of respect and acceptance inside the larger academic world.

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[288] Just one piece of evidence of this is Richard Sternberg's decision to publish a pro-intelligent design article when he was editor of *Proceedings of the Biological Society of Washington*. The article had been peer-reviewed, but the outcry by other scientists was loud and lengthy. See (Hagerty 2005).

I acknowledge that the case of early empirical psychology is unlike the case of intelligent design in one respect. The early controversies about empirical psychology were not between psychology and other established sciences, but rather between psychology and philosophy. Still, even in our own day the struggle for scientific authority is not always confined to struggles between accepted and aspiring sciences. For instance, *evolutionary* psychology is now struggling to establish its scientific credibility in the face of criticism not (mainly) from psychologists and biologists, but from philosophers.[289] So as a matter of historical record, I do not think scientific authority need be regarded as concerning relations between established and aspiring sciences only.

If the *Principles* is any indication, establishing a new science requires establishing a stable, conversational presupposition among qualified inquirers about where demands for explanation may legitimately end, when it comes to the fledgling science. Such conversational presuppositions are typically pragmatically a priori, in Lewis's sense. They are stipulated, social conventions that are adopted for rational, yet pragmatic reasons. These conversational presuppositions are, to borrow a phrase,[290] a pragmatic element in *science*.

7. Suggestions for Future Research

There are several issues I have raised in this dissertation that I hope to flesh out more fully in future research. One such issue is the historical relationship between philosophy and fledgling, human sciences.

By all accounts, the publication of the *Principles* in 1890 was a pivotal moment in the history of psychology (e.g., see Leary 2003). It set the agenda for the so-called "New Psychology" in America, and indeed in the entire English-speaking

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[289] For example, evolutionary psychology's claim to be a legitimate science have come under philosophical attack from (Buller 2005; Lloyd 1993; Lloyd 1999; Lloyd 2001; Lloyd 2003; Lloyd 2005). Evolutionary psychologists will have to find responses to such criticism if they are to establish their own credentials as real scientists, if our study is any indication.

[290] Lewis wrote an early, influential paper on the pragmatic a priori entitled "The Pragmatic Element in Knowledge" (Lewis 1926).

world. Psychology was in its infancy at the time, and James helped it take a major step away from philosophy, and towards becoming a legitimate science.

But the impact of psychology's separation from philosophy has been virtually ignored by historically-inclined philosophers interested in the sciences. Such philosophers have typically focused on the relationship between philosophy and *mature* sciences, especially mathematical physics.[291]

I suggest that fledgling sciences may be more profoundly shaped by disputes with philosophers than are more mature sciences, based on the analyses of this dissertation. And in turn, *philosophy itself* tends to be more profoundly shaped by interaction with fledgling sciences than it is by interaction with mature sciences. Historically, philosophers have tended to grapple with mature sciences on a purely theoretical level. But in a debate with a fledgling science, there may be far more at stake.

For example, we have seen that the concept of empiricism, which is often used to signal one's most basic philosophical commitments, was originally forged in an argument between philosophy and the fledgling science of mind. That debate was over nothing less than the future character of the entire philosophic enterprise. When it came to secular studies of the mind, philosophers could traditionally lay claim to being the ultimate arbiters. The rise of psychology forced them to grapple with the prospect of sacrificing a piece of themselves, very literally. Early empiricists like James and Robertson advocated a particular view about how philosophy should remodel itself.

James saw choices like this—choices about what kind of *character* one wants to develop—as having weighty, even moral implications:

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[291] In general, historically-inclined philosophers have neglected relationships between philosophy and fledgling, human sciences, such as psychology was in the late 19th century. Hatfield's work on the history and philosophy of space perception and Wilson's work on early modern microscopy are notable exceptions. Another exception is (Pojman 2000), a doctoral dissertation on Mach that looks at the relationship between philosophy and the infant science of mind. Also, I should note that scholars trained as *historians* have looked in some detail at relations between the history of philosophy and of the human sciences. A few leaders in this area in include Michael Ash, Kurt Danziger, David Hollinger, David Leary, Timothy Lenoir, Robert Richards, Michael Ruse, Daniel Wilson, and William Woodward.

> To sustain the arguments for the good course and keep them ever before us, to stifle our longing for more flowery ways, to keep the foot unflinchingly on the arduous path, these are characteristic ethical energies. But more than these; for these but deal with the means of compassing interests already felt by the man to be supreme. The ethical energy *par excellence* has to go farther and choose which *interest* out of several, equally coercive, shall become supreme. The issue here is of the utmost pregnancy, for it decides a man's entire career. When he debates, Shall I commit this crime? choose that profession? accept that office, or marry this fortune?—his choice really lies between one of several equally possible future Characters. What he shall *become* is fixed by the conduct of this moment. … The problem with the man is less what act he shall now choose to do, than what being he shall now resolve to become. (PP, 276-277)

"The ethical energy *par excellence*," for James, is most needed when one chooses "which *interest* out of several, equally coercive, shall become supreme."

James was making a point about morally-pregnant choices made by individuals, but the point can be extended to collective choices like those faced by academic disciplines. As it was confronted with psychologists' separatist ambitions, philosophy itself had to muster "the ethical energy *par excellence*." It had a far more difficult choice than simply figuring out the next move in an ongoing intellectual game. This was a kind of "critical ethical moment" in which philosophers had to figure out how to modify the game itself, since a whole group of players were leaving and taking part of the deck with them.

Figuring out how to proceed in such desperate moments is a question that ultimately has a moral dimension, I am suggesting, because it amounts to a choice of what kind of *character* a discipline shall cultivate. How and why entire intellectual communities come to make such weighty choices is a difficult question that I leave to future research.

This study also raises a question about the fate of empiricism. Why did the meaning of this HP concept evolve into its contemporary interpretation?

What has changed is not so much the way we formulate empiricism as an HP concept (recall my discussion of Robertsonian empiricism). What has changed is what we now understand to be *at stake* in defending empiricism. The concept used to signal a special affinity between philosophy and empirical psychology, along with the notion that the mind is a legitimate object of scientific investigation. In contrast,

today we are typically interested in empiricist epistemology either because we want to give a theoretical account of knowledge that will resist skeptical challenges, or because we want to give a theoretical account of science that does justice to actual practice.

The shifting stakes of philosophical empiricism are relevant to a question I raised in the introduction. There, I asked what accounted for the popularity of empiricism in the American 1930s. I take myself to have shown that James was instrumental in protecting empiricism's reputation in the face of Idealist attacks. But what I have not ventured to explain is why the stakes of empiricism should have shifted away from James and Robertson's interpretation.

I suspect that the 1930s vision of empiricism had already moved closer to our contemporary interpretation. By that time, the struggle over psychology had died down, and the science was firmly entrenched in American and British universities. Perhaps philosophical concepts like empiricism were no longer needed to fight battles over the now-established science of mind. But then one wonders why the concept should have been retained at all.

In Chapter Two, I wrote the following lines about empiricism's fate, but we must read this passage in a new light if the analyses of the present chapter are accurate:

> … As mental science matured, it splintered off from philosophy and became an independent field. But philosophy did not then draw on the new psychology's empirical research, as Robertson had hoped. It *consigned* empirical research to its increasingly-estranged sister field. In the wake of empirical psychology's exodus, English-speaking philosophers began to see their work as confined to non-empirical issues. Thus, even as British philosophers of the next generation (led by Russell and Moore) abandoned Idealism, the surviving conception of what it was to *be* a philosopher was largely Green's, by default. Though they abandoned the Hegelian vocabulary, philosophers of Russell's generation became academics whose specialty was a priori deliberation. Robertson died in 1892, but he, James, and most other *Mind* empiricists would have lamented this development had they lived to see it flourish. (*See above*, p. 78)

What casts this passage in a new light is that James himself directly contributed to the splintering of philosophy and psychology, a splintering that considerably narrowed philosophy's—and therefore philosophical empiricism's—legitimate subject matter.

Thirteen years after the *Principles* appeared, James published a well known essay entitled "The Ph.D. Octopus" (James 1987, 67-74). In it, he complained that the professionalization of philosophy had made the field sterile and increasingly irrelevant to the actual human plight. But some blame for philosophy's narrowing probably lays at James's own feet, insofar as the narrowing was a direct result of psychology's departure.

It is hard to know whether James had some responsibility only for the separation of philosophy and psychology, or whether he also has some responsibility for the subsequent *estrangement* of philosophy from psychology. Recall that Robertson held that philosophy should take its basic description of the mind from psychology, on the grounds that psychology offered a "neutral" (rather than philosophically controversial) description of experience. But this was a point on which James deeply disagreed with Robertson. Indeed, James held that psychology could only progress if it made philosophically *loaded* assumptions about the mind. Philosophy's job was to probe those assumptions in a more thorough fashion.

I suspect that as empirical psychology matured, its practitioners less and less saw the need to lay out its metaphysical presuppositions for the scrutiny of philosophers as neatly as James had. And for their part, philosophers bothered less and less to engage with the latest empirical research, probably because that research was increasingly impenetrable to them. Here is Ralph Barton Perry's reflection on the separation of philosophy and psychology, which I quoted in fn. 67, *above*.

> The to me regrettable chasm between the first and third floors of Emerson Hall, Cambridge [where Harvard's Psychology and Philosophy Departments were housed, respectively], is symbolic of a change in the relations between philosophy and psychology which has taken place during my own professional life-time. Time was when the difference was one of emphasis, but now it is a difference of vocation, profession, problems and technique. We came to the parting of the ways when, some years ago, the philosophers were asked to sit in judgment on a series of candidates whose doctoral dissertations dealt with the a-mazed rodent. Feeling ourselves to be rank amateurs in the field, we sat in silence and accepted the expert judgment of our junior colleagues who, having been reared in a new age, were as ignorant of philosophy as were we of what is now called 'psychology.' … William James was at one and the same time one of the first of the scientific psychologists and one of the last of the philosophical psychologists. (Perry 1943, 122)

A third issue for future research concerns the 1950s resurgence of criticisms of empiricism. The case against empiricism at the end of the 19th century closely resembles the more famous attacks on analytic and logical positivist philosophy—against, that is, their shared empiricism—brought by the likes of Quine and Sellars in the 1950s. In both the 1870s and in the 1950s, empiricism was accused of failing to supply an account of the sensorily-given that was robustly normative, as we saw in Chapter Three. Empiricism was also accused, in both eras, of drawing an overly-sharp, untenable distinction between analytic and synthetic statements.

Though I have not reviewed his argument in this dissertation, Green (like Quine) attacked the analytic/synthetic distinction at length, arguing against both Kant and Mill that which statements counted as analytic and which synthetic depended on the context in which a statement was put forward (GWR, II.58-64, II.221-232). So the idea of separating knowledge into a purely intellectual component and a purely sensory component was, for Green, futile. One upshot was to be that psychology was also futile, because it purported to investigate the mind's sensory capacities without reference to its intellectual capacities. This is a mirror-image of the lesson Quine learned from the collapse of the analytic/synthetic distinction.

Green took the collapse of this distinction to entail that empirical psychology really dissolves into transcendental philosophy. If all mental representations have some intellectual component, then purely empirical techniques for studying the mind, Green thought, failed. Quine, in contrast, took the collapse of the distinction to entail that a priori epistemology really dissolves into empirical psychology. If there are no purely a priori contributions to our representations of reality, then the best epistemological insights we can hope to achieve will come from empirical study, Quine held (Quine 1969).

The reappearance of these similar criticisms, even if the criticisms were taken to have quite different import, provides very tentative support for a hypothesis about empiricism's evolution. In the introduction, I noted that A. J. Ayer is often cited as having pushed logical positivism towards more overt forms of empiricism in

the 1930s. I suggested that whether or not this was Ayer's intention, framing positivism as a form of empiricism was a move sure to play well in North America, where James-inspired forms of empiricism had long-flourished.

Ayer and his ilk may have been happy to piggyback analytic philosophy and logical positivism on the by-then philosophical respectability of empiricism. But perhaps they cashed in on the reputation of a bastardized *form* of the philosophy James and his allies had worked so hard to set on sound footing. Indeed, one of the two quotes I used as an inscription to this dissertation was written by Dewey in 1942. He complained that the empiricism then in vogue was premised not on the best scientific account of experience (which came from James, he held), but on an atomistic account of mind so stale it dated back to the 17th and 18th centuries.

If I am right that these two sets of critics (in the 1870s, and in the 1950s, respectively) diagnosed similar flaws in traditional empiricism, then we stand to learn a great deal from looking at James' response to these problems. The details of James' response have been largely forgotten. But in this dissertation I hope to have taken a small step towards recovering some important aspects of that response.

More work needs to be done to see whether James had a reply, for example, to Green's arguments about the collapse of the analytic/synthetic distinction. And more work needs to be done to see whether an empiricism immune to Green's criticisms would also be immune to Quine's or Sellars's.

Although the similarity between criticisms of empiricism during these two eras has not often been noted, a few others have seen a similarity. Alan Gewirth wrote a 1953 summary of what had become a heated controversy over the nature of the analytic/synthetic distinction:

> It should come as no surprise, therefore, that many of the contentions of the contemporary opponents of the analytic-synthetic distinction echo the arguments of such idealists as Hegel, [fn. omitted], T. H. Green, [fn. omitted], Bradley, [fn. omitted] and Bosanquet, [fn. omitted] who held that the distinction is one of degree rather than of kind, that it reflects the growth of our knowledge rather than any fixed dichotomy and is therefore relative to the knower, and that indeed every judgment is both analytic and synthetic. While the pragmatists did not discuss the distinction as fully as did the idealists, similar assertions can be found in Peirce [fn. omitted] and Schiller [fn. omitted]. Thus what is represented by the current recrudescence of opposition to the distinction is that the victory of the atomistic empiricist interpretation

> (as against its technical development) of logic in the twentieth century is being challenged, and inevitably that challenge is marked by a return to the arguments over logic which divided the analytical atomists ["those … like Locke, Hume, and Mill, who … draw a sharp distinction between two realms, the one 'logical,' … the other 'physical' …"], the idealists, and the pragmatists around the turn of the century. (Gewirth 1953, 399)

For Gewirth, the new debate over analyticity marks a "recrudescence of opposition" to this distinction for the first time since the late 19th-century. He might have noted that like Peirce and Schiller, James also held that a clear analytic/synthetic distinction could not be maintained (PP, Chapter XXVIIIn.23). With Gewirth, I am struck by the similarity between attacks on "atomistic" empiricism during these two eras. This similarity deserves further investigation.

For those still troubled by Quine and Sellars's attacks on empiricism, I hope in the future to develop the following response. Some still worry that these critics destroyed the prospect of building a skeptic-proof epistemology that shows knowledge claims to be based on incorrigible sense experience. But if my analyses are substantially correct, then the concept of empiricism is a tool invented for radically different purposes than for refuting the skeptic. True, many epistemologists will reasonably insist that any attempt to historicize the project of empiricist epistemology is to confuse the context of justification with the context of discovery (for more on my response, *see* Appendix II). But I suggest that philosophers sometimes invent problems for themselves by appropriating conceptual tool for tasks those tools were not designed to perform.

Imagine someone trying to drive screws with a hammer. We should council that person to go get a screwdriver, a tool actually designed for the task at hand. Suppose that person responded that the question of whether the hammer actually works well for driving screws is logically independent of whether the hammer was originally *designed* to drive screws. That person would be correct, but foolish. If the hammer is not turning out to be adaptable to this new task, one does better to go find a different tool.

I submit that empiricist epistemologists still fretting over Quine and Sellars' attacks are like our tool-wielder. They are using a historical-philosophical concept—empiricism—to accomplish a task it is not well suited to perform.

For my part, I find James and Robertson's original vision of empiricism more compelling. In their hands, empiricism amounted to having an empirical attitude about philosophical problems. These old-school empiricists held that philosophy is an enterprise closely related to, but not a part of, the human sciences. They found empirical findings in such sciences to provide a useful starting point for philosophical investigation, particularly when those findings shed light on the human mind.

This is quite different from holding that all meaningful concepts must be reduced to concepts derived from sense data, or from holding that all knowledge is ultimately sensory. So it seems to me that the real question concerning Quine and Sellars' critique of empiricism is not how to respond directly. Rather, the question is whether we have come to use our concept of empiricism for a task it was ill-designed to perform.

Appendix I

Historical Study of Dictionary Definitions of "Empiricism"

Key

AM = American Dictionary

BR = British Dictionary

1841

(1) AM. (Webster 1841, vol. I, 582)

Em-Pir'I-Cism, n. Dependence of a physician on his experience in practice, without the aid of a regular medical education.

2. The practice of medicine without a medical education. Hence, quackery ; the pretensions of an ignorant man to medical skill.

Shudder to destroy life, either by the naked knife, or by the surer and safer medium of *empiricism*. Dwight.

1850

(2) BR (Boag 1850)

Empiricism, … n. Dependence of a physician on his experience in practice, without the aid of a regular medical education. The practice of medicine without a medical education; quackery.

1860

(3) AM (Webster 1860, 391)

[Definition: identical to (1)]

1883

(4) BR (Ogilvie and Annandale 1883, 155)

Empiricism (em-pi'ri-sizm), n. 1. The quality or method of being empirical; reliance on experience and observation rather than on theory. –2. The practice of medicine founded on experience and neglecting the aid of science; hence, quackery; the pretensions of an ignorant man to medical skill.

Shudder to destroy life, either by the naked knife, or by the surer and safer medium of *empiricism*. Dwight.

1885

(5) AM (Stormonth and Phelp 1885)

***empiric*, n.** … [… Gr. Empei'rikoi, physicians who followed a system based on practical experience alone—from Gr. em, in ; peira, an effort, a trial] one whose knowledge and practice are founded on experience; one who practises medicine without being regularly educated; a pretender to medical skill; a quack; … **empir'icism**, n. –sĭzm, reliance on observation and experience without rational theories as to the cause; the practice of medicine without a medical education; quackery.

1889

(6) AM (Whitney 1889, 1903)

empiricism … , n. … 1. The character of being empirical; reliance on direct experience and observation rather than on theory; empirical method; especially, an undue reliance upon mere individual experience.

[examples] …

What is called *empiricism* is the application of superficial truths, recognized in a loose, unsystematic way, to immediate and special needs.

L. F. Ward, Dynam. Sociol., II 203.

2. In med., the practice of empirics; hence, quackery; the pretension of an ignorant person to medical skill.

[example] …

3. The metaphysical theory that all ideas are derived from sensuous experience—that is, that there are no innate or a priori conceptions.

The terms *Empiricism*, Empiricist, Empirical, although commonly employed by metaphysicians with contempt to mark a mode of investigation which admits no higher source than experience (by them often unwarrantably restricted to Sensation), may be accepted without demur, since even the flavor of contempt only serves to emphasize the distinction.

G. H. Lewes, Probs. Of Life and Mind, I. ii. §14.

Empiricist …, n. … **1.** One who believes in philosophical empiricism; one who regards sensuous experience as the sole source of all ideas and knowledge.

Berkeley, as a consistent empiricist, saw that Sensation shuts itself up within its own home, and does not include its object. The object must be supplied from without, and he supplied it provisionally by the name of God. N. A. Rev., CXX. 409

The empiricist can take no cognizance of anything that transcends experience.

New Princeton Rev., II. 169.

1891

(7) BR (Murray and Bradley 1891, 129)

Empiricism (empi·risiz'm). [f. EMPIRIC + -ISM.] The method or practice of an empiric.

Med. Practice founded upon experiment and observation; ignorant and unscientific practice; quackery. Also transf.

[examples] …

a. The use of empirical methods in any art or science. **b.** Philos. The doctrine which regards experience as the only source of knowledge.

1803 Edin. Rev. I. 257 Made acquainted with the division of empiricism and rationalism. **1817** JAS MILL Brit. India I. II. Ix. 399 Mere observation and empiricism, not even the commencement of science. **1872** MINTO Eng. Lit. II. Viii. 547 The empiricism popularly associated with the name of Locke. **1881** Huxley in Nature No. 615. 343 All true science begins with empiricism.

concr. A conclusion arrived at on empirical grounds

1846 MILL Logic III. Xii. §5 The instances of new theories agreeing with .. [stet]old empiricisms, are innumerable.

Empiricist (empi·risist). [f. as prec. + IST.]

An upholder of philosophical empiricism. **b.** One who follows empirical methods.

1857 T. E. Webb Intell. Locke i. 17 Kant. .regarded Aristotle as the head of the Empiricists. **1875** N. Amer. Rev. cxx. 469 Berkeley. .a consistent empiricist. **1876** tr. Wagner's Gen. Pathol. 5 Medical men have been designated as Empiricists and Rationalists in matters of pathology."

1906

(8) AM (Whitney 1906, 1903)

[Definition: identical to (6)]

Appendix II

Context of Discovery vs. Context of Justification: A Methodological Objection Addressed

Given the strategy I have followed throughout this dissertation, some may accuse me of confusing the context of discovery with the context of justification. For example, in Chapter Four, I began by asking what justifies the stream thesis. I then announced my intention to investigate the historical genesis of that thesis. This second task appears to be logically irrelevant to the question of whether the thesis itself is justified.

My response is that evaluating a philosophical thesis typically requires evaluating whether the thesis succeeds in accomplishing some particular intellectual task. But figuring out just what task a thesis ought to be required to accomplish can be deceptively difficult, particularly when studying dead philosophers. In the case at hand, I think commentators have struggled to see James's evidence for the stream thesis because they have too quickly assumed they understood what the thesis asserted. In my view, one cannot fully understand what a thesis is supposed to assert—and thus what evidence might be adduced in its support—unless one looks closely at what task the thesis was supposed to accomplish.

In this case, I have argued that the stream thesis was supposed to postulate an empirically defensible framework for mental science that could help draw a stable line between philosophy and psychology. But if one did not know about the context in which James developed this thesis—especially about the context of Idealist attacks on psychology—one could easily miss the tasks for which that thesis was designed, and thus could miss the evidence on which it rested.

I have tried to make a similar case about the concept of empiricism. Without knowledge of 19th-century arguments over psychology, one easily assumes that the epistemology then associated with empiricism was primarily intended to advance the theory of knowledge. Instead, I have argued that defenders of empiricism were more

interested in vindicating the fledgling science of mind than in developing a theory of knowledge for its own sake.

There is a good explanation for why one must sometimes work hard to uncover what was at stake in defending a philosophical or scientific thesis. Professional intellectual communities typically share extensive, specialized knowledge of intellectual terrain. Community members usually leave the contours of that terrain unspoken in their publications. This is because the contours are tacitly understood by most anyone who might be interested in the thesis in the first place. Qualified community members share extensive background knowledge acquired through similar professional training, so they do not need to be told what is at stake in defending a particular thesis. This makes technical discussions inside intellectual communities more efficient. But it makes it difficult to study debates from outside those communities.

To see the point, think of contemporary philosophy. We easily and silently understand the explanatory tasks contentious theses are supposed to accomplish. We gain such understanding through professional training and through participation in a community of philosophers. But the sort of knowledge we gain is richly shaded, and is usually left in the background of published material. Indeed, this is what typically makes professional philosophy unintelligible to those without graduate training. Even with a handbook to explain relevant terms of art, the uninitiated do not possess the background knowledge needed to understand *what is at stake* in a philosophical debate.

Consider an example with special resonance for this dissertation: the recent debate among analytic epistemologists over empiricism and the status of a priori knowledge. One camp, led by people like Albert Casullo and Lawrence Bonjour, call themselves "rationalists." They criticize a position they call "empiricism," and typically try to parlay that attack into a defense of a priori knowledge (for an assessment of this strategy, see Casullo 2000). Now I think this debate would remain perfectly obscure to someone who does not understand that "rationalism" denotes a far richer set of commitments than simply to the existence of genuine a priori knowledge. Rationalism is what I have called an HP concept, a concept that relies on a particular reading of

history to efficiently call to mind a range of philosophical positions at stake in defending some thesis. Thus, the chief thesis a neo-rationalist affirms is clearly that there is robust a priori knowledge. But by espousing the label "rationalist," such philosophers call to mind a set of positions variously articulated by people like Descartes, Spinoza, Leibniz, and in this context Kant. Rationalists who see themselves as part of such a tradition take characteristic positions in areas ranging from epistemology to metaphysics to philosophy of religion.

Suppose someone claimed to defend neo-rationalism by arguing that we have genuine a priori knowledge, but only in basic arithmetic, and never in logic or metaphysics. That person would hardly be taken seriously, because he or she would have failed to understand what is at stake in the debate to begin with. The point of the debate is to establish a lynchpin claim for an entire family of philosophical theses that we associate with Descartes, Spinoza, Leibniz, and Kant (a point acknowledged by Casullo 2003, 3). Though those projects are rarely mentioned in the literature, I claim that one simply is not a qualified judge of such epistemological arguments unless one sees what is at stake more broadly.[292]

Further evidence of this point can be had by comparing a debate over what is ostensibly the same thesis being carried out in a different philosophical sub-community. Philosophers of science are also engaged in a debate over whether there is robust a priori knowledge. One finds neo-Kantian critics like Michael Friedman on one side, and "naturalists" like Philip Kitcher on the other. If one does not understand something about Quine's criticism of Carnap, and how (Quine 1969) changed the face of philosophy, one will simply not be able to join this debate.[293]

These philosophers of science and analytic epistemologists *appear* to debate more or less the same thesis—the claim that there is legitimate, non-trivial, a priori knowledge. But what is at stake in each debate is very different. For philosophers of

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[292] Some important pieces in the literature I have in mind include (Bealer 2000; Boghossian 1996; Boghossian 2003; Boghossian and Peacocke 2000; BonJour 1998; Casullo 2000; Casullo 2003; Van Fraassen 2000; Van Fraassen 2002).

[293] Some important pieces in this literature include (Devitt 1998; DiSalle 2002; Friedman 1997; Kim 1994; Kitcher 1992; Richardson 2002b; Stump 2003; Van Fraassen 1995).

science, the key question is whether various conceptions of the a priori can make sense of actual science as it has historically been practiced. For analytic epistemologists, the key question is whether one can give an account of knowledge strong enough to resist a much-feared interlocutor, The Skeptic. One has only to imagine an undergraduate fresh from a course in analytic epistemology walking into a debate over naturalism among philosophers of science. If the student complained that some account of the a priori failed to refute the Skeptic, that student's question would be politely ignored.

My claims are that a) what is at stake in a philosophical debate is typically left unspoken among participants in a specialized intellectual community; b) what counts as appropriate evidence in such a debate depends on what is at stake; and c) without appropriate background knowledge, it may be difficult to discern what is at stake in such a debate, and thus to discern what counts as appropriate evidence.

If these claims are correct, there are important implications for historical methodology. How is one to evaluate theses that were advanced in the context of debate among some long-dead intellectual community? Since we have an education in philosophy ourselves, we should begin with the assumption that we *do* understand the stakes of a historical debate. But when we have trouble seeing how some historical arguments were supposed to work—trouble seeing, for example, what evidence James took himself to have for the view that consciousness is a "stream"—we should then ask whether we have rightly understood what was at stake in the debate. We sometimes[294] need, in other words, to extract the richly shaded background knowledge we might have had if we actually attended the philosophical clubs and lectures of our historical subjects.

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[294] I do not claim that we must *always* begin doing the history of philosophy by probing the historical context in which someone wrote. That suggestion threatens to dissolve philosophical history into the history of ideas. Philosophers must *somewhere* rest with a workable interpretation of history, so they can go on and analyze arguments. My suggestion is that historians resort to the history of ideas only when the arguments under study prove recalcitrant to reasonable interpretation. The catch is that some of the most interesting puzzles in the history of philosophy are cases where arguments advanced by someone long-dead prove recalcitrant to reasonable interpretation.

Appendix III
The Impact of North American Philosophy on Positivism

In the introduction, I conjectured that the popularity of empiricism in American philosophy through the 1930s may have influenced the subsequent development of logical positivist and analytic philosophy. Particularly after many positivists became refugees in the United States, I speculated that their shift towards empiricism may have been a product of their new intellectual environment.

This is a causal conjecture that will not be convincing until it receives evidentiary support. In this appendix, I first outline a set of evidence that, if proffered, would make the causal claim plausible. The task of supplying this full set of evidence is too big to take on here, but I do provide a subset of this evidence. I also explain what work remains in order to make my causal conjecture persuasive.

I will refer to the following three claims as my "causal conjecture":

1) Up through the 1930s, empiricism was disproportionately popular in the United States as compared to Great Britain, Germany, or Austria.
2) The disproportionate popularity of empiricism among American philosophers owes something substantial to William James's earlier defense of this historical-philosophical concept.
3) The disproportionate popularity of empiricism among American philosophers came to influence the subsequent development of logical positivism and analytic philosophy.

This conjecture can be made convincing by providing evidence against a set of objections one might have to the three sub-claims. I will label the objections (a) – (c).

(A)

The first claim refers to a disproportionate popularity of empiricism in the American 1930s. In my introduction, I cited a large set of literature that portrays early positivists and analytic philosophers as more engaged with neo-Kantian than with empiricist philosophy (*see above,* fn. 5). However, I have only provided sketchy evidence (*see above*, Chapter Four, Section Three) that 1930s Americans really

were heavily engaged with empiricism, and only sketchy evidence (*see above*, Introduction, Section Two) that they were *more* heavily engaged with empiricism than their European colleagues during this period.

Moreover, while the secondary literature I cited in the Introduction covers the context of German-language philosophy through the 1920s, the literature I cited on early analytic philosophy covers a period in Britain that ends considerably earlier. For instance, Hylton's work on Russell, Moore, and British Idealism ends around 1913. Thus, some may wonder whether between 1913 and the early 1930s some form of empiricism may not have rocketed to popularity in Britain, and thereby provided a more important influence on the development of positivism. This is a legitimate worry that I cannot adequately address here.

However, even if some form of empiricism can be shown to have been on the rise in Britain during this period, this does not absolve historians of analytic philosophy of the need to explore the pre-1930s North American context. As I wrote in the introduction, it is naïve to portray North American philosophy departments of the era as empty greenhouses ready to nurture transplanted European philosophies without affecting their subsequent development.

(B)

The first two claims both refer to "empiricism." One wonders whether there is a legitimate link between the notions of empiricism at play in each claim. James and his psychologist-philosopher allies defended one version of this concept, and later advocates like John Dewey, Charles Morris, and Ralph Barton Perry defended other versions. So to bear out the causal conjecture, one would ideally like to have evidence of a historical and philosophical link between these two notions of empiricism.

We have seen preliminary evidence of such a link in Chapter Four, Section Three (*above*). We saw that Dewey advocated a position he called "empiricism," and credited James as a chief source. More work is needed to show what Dewey meant by "empiricism," and whether his debt to James was more than a matter of

convenient rhetoric. Similar studies of other American empiricists who might have influenced the development of logical positivism are also needed.

(C)

The third claim requires showing that positivists really did change the way they did philosophy after they arrived in the United States. It also requires showing that upon their arrival, positivists really were constructively engaged with Americans, particularly with Americans who advocated forms of empiricism.

Finally, given that the form of empiricism that came to be associated with positivism and analytic philosophy (roughly the empiricism of CIE) was quite different from the empiricism I have ascribed to James, one would hope for an explanation of how empiricism evolved from the form James and his allies advocated into CIE. Again, I offered only conjecture about the post-Jamesean evolution of empiricism (at the end of Chapter Five).

In the remainder of this introduction, I will principally offer evidence that helps answer objection (c), though more work is obviously needed to meet this and the other two objections more thoroughly.

◈

For preliminary evidence that positivists did, in fact, change the way they did philosophy upon arrival in North America, *see* (Giere 1996, 337-339). Giere points out that positivism's most important founding texts from the '10s and '20s—Carnap's *Aufbau*, Reichenbach's work on relativity theory, and Schlick's *Allgemeine Erkenntnislehre*—were not even translated into English until the 1950s (Reichenbach), 60s (Carnap), and 70s (Schlick)—*see* (Carnap 1929/1967; Reichenbach 1920/1965; Reichenbach 1924/1969; Reichenbach 1928/1958; Schlick 1918/1985). This suggests a serious disconnect between the projects positivists developed in Europe and those that came to be influential in North American philosophy, at least during the first few decades after the positivists' arrival.

What accounts for this disconnect? Giere writes,

> My hypothesis is that the scientific philosophers, such as Carnap and Reichenbach, realized that their future, if they were to have a future, lay in North America. And they realized, quite rightly, that works like the *Aufbau* and *Relativitätstheorie*, which were written in the context of a cultural, scientific, and philosophical tradition that did not then exist in North America, would not be much appreciated in the north American context (Giere 1996, 337).

With Giere, I hold that important changes in positivism starting in the 1930s must be understood in light of the fact that many positivists became refugees during this period.[295] Their professional, and even their personal survival depended on the challenge of successfully integrating into North American philosophy departments.

Giere's claim is consistent with the overall arc of recent scholarship on early logical positivism (*see above*, fn. 5). This scholarship suggests that before the 1930s, positivists were more heavily engaged with neo-Kantian philosophy than with empiricism.

As far as the American influence on post-migration positivism goes, my chief hypothesis is that philosophers on this continent had been far more steeped in Jamesean empiricism than their Continental peers. Empiricisms with distinct Jamesean imprints were propagated up through the 1930s by students and sympathetic colleagues. John Dewey was, among other things, one main carrier of such an empiricism. C. I. Lewis and R. B. Perry were important in this regard, as well.[296]

There is evidence that 1930s American philosophers greeted logical positivism by trying to assimilate it to the framework of American empiricism. That is, the Americans understood positivism to be a movement in scientific philosophy of the

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[295] Giere's treatment of the American context is brief, however, and shows an assumption that I find dubious (as does Richardson 2003, 2-6)—that positivism eventually conquered or eliminated pragmatism.

[296] Some of his polemical articles on the revived empiricism he gave James so much credit for sparking include (Dewey 1906; Dewey 1917; Dewey 1935; Dewey 1940), and (Dewey 1905b), which instigated the following letters and responses: (Bakewell 1905a; Bakewell 1905b; Dewey 1905a). Aside from pragmatism, other movements that propagated forms of empiricism influenced by James include radical empiricism, new realism, and critical realism. *See above*, fn. 13.

sort pioneered by Locke, Berkeley, and Hume, and advanced by James, Peirce, and Dewey. One example comes from the American-trained Ernest Nagel.

The fifth *International Congress for the Unity of Science* was held at Harvard University in 1940, the first of the Vienna Circle's congresses to be convened in the United States. Nagel gave a lecture entitled "Charles S. Peirce: Pioneer of Modern Empiricism." The piece argued that unlike in Europe, empiricism had been thriving in America since the time of Peirce. Nagel remarked that

> One is not minimizing the contributions of the Vienna Circle by pointing out that many of its recent views have been taken for granted for some time by American colleagues, largely because the latter have come to intellectual maturity under the influence of Peirce.

Peirce's influence was "propagated by William James and Josiah Royce," since Peirce lived out his life in relative obscurity (Nagel 1940, 69-70). Nagel saw positivism as continuing a form of empiricism he associated with Peirce and James, among others.

In 1942, Nagel would acknowledge James's original contribution to American empiricism:

> It is true that not all the positions for which [James] fought in psychology and philosophy have become widely accepted; nor did he leave behind him a sizable following of disciples who subscribed to the essential details of his thought. But the larger features of his work—its voluntaristic naturalism and empiricism, its distrust of dogmatic claims to final truth, whether in science, philosophy or religion, and its emphasis upon the novelties and contingencies which characterize the operations of nature—have been intimately absorbed into our own modes of thought …. (quoted at Myers 1986, 483n.483)

Nagel overlapped as a student at Columbia with Dewey during the latter's long tenure there. So I take these passages as initial evidence that philosophers educated in America tried initially to fit logical positivism into the context of homegrown varieties of empiricism.

Another example of Americans assimilating logical positivism to more familiar forms of empiricism comes from a 1936 reflection on the *International Congress for the Unity of Science* by John Sommerville, a philosopher at City College of New

York. Sommerville noted that the name "logical positivism" had fallen out of favor, and former members of the *Wiener Kreis* now preferred

> "scientific empiricism" or "logical empiricism." These terms may call to mind the "Radical Empiricism" of William James, and appropriately so, for this movement has significant connections, some premeditated and some unconscious, with the pragmatic thought of James and Dewey. (Sommerville 1936, 296)[297]

"Scientific empiricism" was actually Charles Morris's term, which the latter meant to be an umbrella that covered both pragmatism and logical positivism. Morris was a student of Mead's at Chicago, and was perhaps the major American figure to try to synthesize pragmatism and positivism (in works like Morris 1937; Morris 1938; Morris 1963). Thus Carnap would later write:

> Logical empiricists from Berlin and from the Vienna Circle came into closer contact with pragmatism chiefly after they had come to the United States. A mutual understanding between the two schools was mainly fostered by Charles Morris and Ernest Nagel. Both attended the International Congress of Philosophy in Prague in 1934, where I became acquainted with them, and where they met their colleagues from Vienna and Berlin. Nagel was influenced by both movements, but avoided the application of any school label to his own view. Morris had the explicit aim of merging the two philosophical movements into one to which he sometimes applied the term "scientific empiricism." (Carnap 1963, 860)

Carnap went on to acknowledge that his views had "clearly been influenced by pragmatist ideas" after emigrating, particularly when it came to issues surrounding the social factors of language, "… and upon the fact that all knowledge begins with and serves the relations between a living organism and its environment." Carnap here also cited the pragmatic influence of C. I. Lewis and Sidney Hook.

For his part, Morris wrote that his own thought is

> near to that of Mead and the pragmatists. At first sight there seems to be an unbridgeable gap between the bio-social orientation of a Mead and the logico-analytical orientation of a Carnap. But at that time [the 1930s] it appeared to me that pragmatism and logical empiricism had many features in common and much to contribute to each other, and that the further growth of each would be such that the two movements would become convergent. In a number of articles written at that period I tried to analyze some of the similarities and differences between the two groups, and to outline a position (called scientific empiricism) toward which they might converge. (Morris 1963, 87).

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[297] My attention was called to this article by reading (Wilson 1990, 132).

In short, Morris was optimistic that a shared empiricism could unite pragmatism with logical positivism.

Morris was perhaps the most important American contact for Vienna Circle members looking to move to America in the late 1930s, eventually helping Carnap land a job at the University of Chicago. He managed to play such a role through his close association with Neurath, becoming one of the editors for the latter's *Encyclopedia of Unified Science*. In fact, Morris provided crucial personal links to one of the *Encyclopedia's* main sources of funding: the Rockefeller Foundation.[298]

Morris himself pitched logical positivists to American audiences as sharing pragmatists' empiricism. For example, in response to a query from *The New York Times's* science writer Waldemar Kaempffert, Morris wrote a letter that gave a brief history of the Unity of Science movement. He wrote that the movement grows out of a variety of empiricism that combines attention to the latest advances in science and logic, citing Peirce, James, and Dewey as key forerunners (along with Mach, Avenarius, and others).[299]

The letter was never published, but Kaempffert used it to write two articles about positivism in the *Times*. In the articles, he repeated the story that American empiricism was a precursor to the Unity of Science movement. In one piece, on Philipp Frank, Kaempffert wrote that the Vienna Circle

> seeks to strike the metaphysical shackles from science. Our own William James had the same object in view when he laid the foundations of what he called 'pragmatism.' (Kaempffert 1937)

A year later, Kaempffert wrote:

> At Harvard Peirce had been preaching what he called 'commonsenseism' and William James 'pragmatism' long before the Viennese Circle came into existence." (Kaempffert 1938)

What I want to emphasize is not just the sense that logical positivists and scientifically-minded American philosophers saw themselves as fellow-travelers in

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[298] *See* (Galison 1996, 35-40) for a fascinating discussion of Morris' influence on logical positivism.

[299] Letter to Waldemar Kaempffert, June 17, 1935 (CMP; cited by permission).

the 1930s—this is both true, and still not widely enough recognized.[300] I want to emphasize the *way* in which the Americans saw logical positivists as fellow travelers. What they were supposed to have in common, from the American perspective, was a shared commitment to empiricism—at any rate, to *some* position they called "empiricism."

Several other documents highlight this point. The first article to announce the arrival of logical positivism in America, by Feigl and Blumberg, presented the movement as attempting a synthesis of Kantian and empiricist philosophies, much as Kant had tried to synthesize older rationalist and empiricist traditions himself (Blumberg and Feigl 1931). For Feigl and Blumberg, the pragmatists fit with a long line of empiricists who had fallen "into the error of carrying their empiricism too far" by neglecting the strong role of logic in human knowledge (Blumberg and Feigl 1931, 282). In contrast, the logical positivists wanted to develop a more moderate version of empiricism that incorporated a Kantian emphasis on rationality. But positivists also wanted to avoid Kant's excesses. Kant "concedes too much to rationalism by assuming the existence of synthetic a priori truths" (Blumberg and Feigl 1931, 282). Feigl and Blumberg thus presented logical positivism as a movement that mixes a brand of empiricism shared by pragmatists with more Kantian sensibilities.

Several years later, Reichenbach published another programmatic announcement. He echoed the notion that pragmatists had developed a form of empiricism that logical positivists[301] sought to refine (Reichenbach 1936). And the point was echoed from the American side. C. I. Lewis would later reflect that "empiricism" was "the point of clearest agreement amongst the pragmatists

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[300] However, scattered works are beginning to appear that emphasize this point. See the works I cite *above*, at fn. 8. I would also like to single out (Wilson 1990), which is a neat, turgid summary of the case for a shared scientific outlook between pragmatists and positivists.

[301] Reichenbach called his position "logical empiricism" rather than "logical positivism." Perhaps the name was designed to emphasize commonality with his (hoped for) American colleagues.

themselves." This is important for understanding pragmatism's relationship to logical positivism because "both movements present themselves as forms of empiricism" (Lewis 1941/1970, 93).

Finally, there is evidence that American empiricism may have exerted perhaps a mild, earlier influence on positivists, even before their migration. Hans Hahn, Philipp Frank, and Otto Neurath were each admirers of American pragmatism in one form or another, but especially of Dewey's version of this doctrine, as Thomas Uebel has documented. Uebel writes that Neurath "was immensely pleased to have won over Dewey to contribute to the *International Encyclopedia of Unified Science* in the late 1930s" (Uebel 2004, 266).

The admiration for Dewey among the so-called "left-wing" of the logical positivists apparently is related to James's earlier pull on this group during the 1910s and '20s. Uebel argues that James' *Pragmatism* had been widely discussed, and widely dismissed, in Germany and Austria between about 1908-1910. Thus,

> Championing preferred views as 'pragmatist' was yet another way for Hahn and Frank to signal dissent from the Germanic *Sonderweg*, the self-styled cultural separatism celebrated by much of the German professoriate at the time, and instead declare their own allegiance to the Western scientific enlightenment tradition. (Uebel 2004, 266)

Uebel argues that the left-wing of the Vienna Circle regarded James and Dewey's pragmatism as first steps towards building what Frank called a "scientific world-conception" (Uebel 2004, 263).

So positivists found more common ground with their new colleagues than we have come to think. Scores of American philosophers already shared a modernist aspiration to develop what Richardson has lately called a "scientific philosophy," for example.[302] That is, many American philosophers in the pragmatist tradition (for

[302] A general history of scientific philosophy in late 19th century Europe can be found in (Richardson 1997). The analysis is extended in (Richardson 2002a; Richardson 2003) to the case of American philosophy in the early 20th century.

example, John Dewey) were, like their European colleagues, pursuing the utopian goal of using science to transform both philosophy and the society at large.[303]

But this shared background puts into stark relief substantial differences between the American and German-Austrian traditions—differences with which job-seeking immigrants would have been at pains to come to terms. These differences slowly disappeared, as the two traditions fused.[304] In some cases, it was the European vision that came to dominate mainstream philosophy. But in other cases, it was refugee Europeans whose projects apparently shifted towards characteristically American views.

I must acknowledge some examples where the European vision came to dominate. Pragmatists like C. I. Lewis and John Dewey followed James in insisting that a theory of cognition is impossible without a theory of how valid judgments of value are possible (e.g., see Lewis 1970, 112). Many positivists, on the other hand,

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[303] The issue of theoretical similarities between pragmatism and logical positivism has begun to be treated by several commentators. For a sketch of how the debate over protocol-sentences led certain logical positivists towards forms of pragmatism, *see* (Misak 1995, 89-96). She offers references to publications by positivists in the 1930s that explicitly acknowledged shared ground with pragmatists, at (Misak 1995, 216n.212). For a detailed evaluation of the form of pragmatism Carnap eventually espoused, particularly as it relates to Dewey's pragmatism, *see* (Richardson forthcoming). For documentation of the reception of pragmatism in Germany during the 1910s and 20s, and Hahn, Frank, and Neurath's sympathies with pragmatism, *see* (Uebel 2004, 263-267). Russell Goodman argues (in Goodman 2002) that William James provided a non-trivial influence on Ludwig Wittgenstein. Finally, Ayer himself came to see a deep affinity between positivism and pragmatism, eventually publishing a volume on the latter movement (Ayer 1968).

[304] Note my claim that the two traditions *fused*, rather than that one conquered the other. Some evidence for my position comes from tracing the academic ancestry of leading 20th-century philosophers. It is not only characters like Carnap, Reichenbach, Moore, and Russell who can count their philosophical descendents as leading lights of the next generation. Many pragmatists can too. For example, James and Royce had C. I. Lewis as one of their many influential students. Lewis (who also spent much of the 1920s working with Peirce's unpublished papers at Harvard) went on to teach Quine, Goodman, Frankena, Chisolm, and Firth. It is not clear in what sense positivism can be taken to have *killed off* pragmatism, as the popular story has it, given that these leading 20th-century figures trace both a historical and a philosophical lineage to James, Royce, and Peirce. Richardson (at Richardson 2003, 2-6) also argues against the view that positivism simply vanquished pragmatism. He emphasizes the coexistence of many varieties of scientific philosophy in 1930s America—not just pragmatism and positivism, but also New and Critical Realism as well.

wanted to set aside the theory of value as metaphysical confusion (c.f. Reisch 2005; Richardson 2002a, S46 ff.). Dewey and Lewis clearly lost this fight, as most philosophers of science came to follow the positivists' view (or, as Reisch argues, the view of an eventually-dominant faction of positivists centering around Reichenbach and Feigl).

Similarly, there had been a long-standing debate in America over the viability of formal techniques in philosophy (Lewis 1970, 96-99; Richardson 2002a; Wilson 1990, 121-179). Perhaps positivists helped tip the balance on this issue, too, as their arrival coincided with a shift towards a formal mode of scientific philosophy in America.

But there were other issues where American views seem to have prevailed. I claim, of course, that one distinct philosophical trend (with respect to European philosophy of the period) was the Americans' widespread focus on something they called "empiricism." In fact, empiricism was not just a banner that united analytic philosophy and logical positivism. *Pragmatists* saw themselves as united with positivists, almost as soon as the latter group migrated to the United States, under the shared banner of empiricism. So I suggest that positivism's shift towards empiricism may be an important example of North American philosophy influencing the post-migration development of logical positivism.

Note on Typography

The chapter headings of this work are set in Linotype's digital version of Centaur, a font originally designed by Bruce Rogers in 1914. The text is set in Bitstream's digital version of Bookman.

The earliest avatar of Bookman was Alexander Phemister's Antique Old Style, published in 1858. Antique Old Style was first issued in Edinburgh, where Phemister was working as a punchcutter (see Bringhurst 2002, 131-132). He eventually moved to Boston. Antique Old Style was later reworked by a Kentucky printer and salesman named Chauncey H. Griffith, who renamed the font "Bookman" when it was published in 1936.

A modernist spirit swept across 1930s printmaking just as it had swept across 1930s philosophy. Historians typically cite Germany as the center of a "new typography" during the period (e.g. Kinross 1992, 85-90), where Bauhaus designers like Maholy-Nagy were issuing manifestos on how to employ science for socially useful printmaking (c.f. Galison 1996). But United States typographers of the era like Rogers and Griffith also fashioned their own modernism.

Like many *Wiener Kreis* philosophers, Bauhaus designers such as Maholy-Nagy were forced out of Europe by the rise of Nazism. While Carnap and his American ally Charles Morris were continuing the Vienna Circle's *Encyclopedia of Unified Science* in Chicago (*see above,* fn. 7), Maholy-Nagy set up a school called the "New Bauhaus" just across town. Subsequent American typography would blend such European and American influences, just as American philosophy would blend positivist and pragmatist influences.

There were distinct differences between American and European forms of typographic modernism, though. American typography in the early 20th-century had been fueled by an exploding advertising industry (Loxley 2004, 72). Often reacting against this consumerist ethos, a group of American iconoclasts emerged styling

themselves craftspeople and artists rather than industrialists (Loxley 2004, 93, 95-96). Frederic Goudy was perhaps the most influential figure in this movement.

German typographers of the era were emphasizing mannered sans-serif designs (as in the stark geometry of Paul Renner's Futura). But Goudy articulated a distinctively American vision:

> Fine printing demands a type without mannerisms, one that is easily and pleasantly readable, … its forms distinct and not made to display the skill of their designer, but instead to help the reader. Type must be … decorative, but not ornate; … simple in design, but not with the bastard simplicity of form which is mere crudity of outline; … and above all it must possess unmistakably the quality we call "art"—that something which comes from the spirit the designer puts unconsciously into the body of his work. (From Goudy's 1940 Typologia, quoted at Bruckner 1990, 38)

In this spirit, Griffith's Bookman—the font used in this dissertation—shows a graceful, human sensibility that echoes the art deco aesthetics of 1930s jazz culture.

So Bookman is a font invented in Victorian Britain and restyled in America during a remarkable period for art, science, and philosophy. The legacy of such fonts can be seen in the later work of typographers like Robert Brownjohn, who would create title sequences for stylish films and record covers during the 1960s. Brownjohn was a New Bauhaus student who combined European constructivist influences with the homegrown sensibilities of American jazz.

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AREAS OF COMPETENCE:

Philosophy and History of Science (Esp. Psychology and Biology), Philosophy and History of Perception, British and American Idealism, General Philosophy of Science, History of Modern Philosophy

DISSERTATION:

The Rise of Empiricism: William James, Thomas Hill Green, and the Struggle over Psychology. Committee: Elisabeth Lloyd (dir.), Karen Hanson, Cheryl Misak, Frederick Schmitt, Joan Weiner

EDUCATION

Indiana University, Bloomington. Bloomington, Indiana
Ph.D., Philosophy—May 2007
M.A., History and Philosophy of Science—December 2003
M.A., Philosophy—November 2003

Wesleyan University. Middletown, Connecticut
B.A. with *High Honors,* Philosophy—1998

- Senior thesis on the epistemic features of mental states. Sanford Shieh (dir.)

EMPLOYMENT, TEACHING EXPERIENCE

Postdoctoral Fellow—2006-present
University of Toronto; Philosophy Department, Faculty of Information Studies (joint appointment)

Instructor—Spring 2006
Indiana University, Bloomington; Philosophy Department
P100: *Introduction to Philosophy* (syllabus available)

Instructor—Fall 2005
Indiana University, Bloomington; Philosophy Department
P100: *Introduction to Philosophy* (syllabus available)

- Supervised teaching assistant and delivered bi-weekly lectures for 65 students

Instructor—Spring 2003
Indiana University, Bloomington; Philosophy Department
P100: *Introduction to Philosophy* (syllabus available)

Associate Instructor—1999-2000, Fall 2002
Indiana University, Bloomington; Philosophy Department
Introduction to Existentialism (with Paul Spade); *The Dark Side of Rationality* (with Linda Savion); *Who Am I?* (with Dennis Senchuk)

Visiting Lecturer—Fall 1998-Summer 1999
Fuzhou University; Fuzhou, China. Foreign Languages Department
- Taught American literature, British literature, composition, conversation, and American and British culture, to classes of 80 students (4/4 load). Designed, graded, and taught courses with limited textbook and material availability. Supervised 20 senior theses.

Teaching Assistant—Fall 1997
Wesleyan University; Philosophy Department
Introduction to Philosophy (with Jeff Kasser)

Fellowships, Honors, Awards

National Endowment for the Humanities Summer Seminar for College and University Teachers—July 2007
University of New Mexico; *Pragmatism: A Living Tradition*. Russell Goodman (dir.)

Rodney G. Dennis Fellowship in the Study of Manuscripts—July 2005
Houghton Library, Harvard University
- Financial support to spend one month in residence conducting research in Harvard's William James archives

William James Prize—December 2004
American Philosophical Association, Eastern Division
- The William James Prize is awarded to the best paper accepted to the Eastern Division Meeting in the area of American philosophy. The author must have received a Ph.D. within five years, or be a graduate student.

APA Student Travel Stipend—December 2004
American Philosophical Association, Eastern Division

Conference Travel Award—December 2004
Indiana University, Bloomington; College of Arts and Sciences

James B. Nelson Dissertation Fellowship—September 2004-May 2005
Indiana University, Bloomington; Philosophy Department

Kira Institute Fellowship—July-August 2000
Kira Institute Summer School. Amherst, Massachusetts

- Funded by the Fetzer Institute to attend summer school, hosted by Professors Roger Shepard, Piet Hut, Arthur Zajonc, Steven Tainer, and Bas van Fraassen.

Lectures, Conference Papers

Response to Rob Sinclair's "Quine and Conceptual Pragmatism"—May 2007
Canadian Philosophical Association Meeting, Saskatoon

"On Empiricism and the Philosophy of Science: William James Responds to T.H. Green"—June 2006
Peer-Reviewed Conference Paper
HOPOS (The International Society for the History of Philosophy of Science); École Normale Supérieure, Paris
- Part of symposium featuring Alan Richardson and Gary Hatfield

"James and Green"—November 2005
Peer-Reviewed Conference Paper
The Society for Classical Pragmatism Studies; University of South Florida, Tampa

"Normativizing Naturalism"—April 2005
Invited Conference Paper
Life among the Living: Perspectives on our Human Stance towards Nature; California State University, Fresno

"Empiricism's American Rebound: James's Response to Green"—December 2004
APA Symposium Paper, Peer-Reviewed
American Philosophical Association, Eastern Division Meeting, Boston

"Empiricism's American Rebound: James' Response to Green"—November 2004
Nelson Fellow Lecture; Indiana University, Bloomington

Response to Rory Kraft's "In Defense of Nothing"—March 2004
NYU/Columbia Graduate Student Conference in Philosophy

"Popular Philosophy or Philosophical Populism?: William James, Evolution, and the 'Seriously Inquiring Amateur'"—September 2001
Peer-Reviewed Conference Paper
Society for the Advancement of American Philosophy, *Midwest Reading Group*; Loyola University, Chicago

"Popular Philosophy or Philosophical Populism?: William James, Evolution, and the 'Seriously Inquiring Amateur'"—September 2001
Philosophy Department Graduate Colloquium; Indiana University, Bloomington

"How William James' Rhetoric Exemplifies His Anti-Rationalism"—April 2001
Philosophy Department Graduate Colloquium; Indiana University, Bloomington

Publications

(2005). Review of *The Philosophy of William James: An Introduction*, by Richard M. Gale, in *Society for the Advancement of American Philosophy Newsletter*, 101, June.

(2002). "The Human Meaning of Science," Review of *Labyrinth: A Search for the Hidden Meaning of Science*, by Peter Pesic, in *Essays in Philosophy, 3* (1). http://www.humboldt.edu/~essays/kleinrev.html#1

Other Professional Activities

Panel Organizer—December 2006
Committee for Public Philosophy; American Philosophical Association, Eastern Division Meeting

- Organized APA panel on the history of public philosophy, featuring Alan Richardson, Naomi Scheman, and Alan Ryan.

Panel Co-Organizer—December 2005
Committee on Public Philosophy; American Philosophical Association, Eastern Division Meeting

- Helped organize APA panel on the future of public philosophy, featuring Martha Nussbaum, Arthur Danto, and Cornel West.

Committee on Public Philosophy—July 2005-June 2007
American Philosophical Association

- Appointed to new APA committee dedicated to expanding the presence of philosophy in public life.

Conference Co-Organizer—December 2004
"Self Consciousness and Personal Identity in Modern Philosophy." New York University

- Helped Professors Don Garrett, Béatrice Longuenesse, and John Richardson to organize the first NYU conference on issues in modern philosophy.

Manuscript Editor—Spring, 2003
For Professor Elisabeth A. Lloyd, Arnold and Maxine Tanis Chair; History and Philosophy of Science Department. Indiana University, Bloomington

- Helped Professor Lloyd edit *The Case of the Female Orgasm: Bias in the Science of Evolution* (Harvard University Press)

Research Associate—Spring 2002
Richard Lewontin's Population Genetics Laboratory; Department of Organismic and Evolutionary Biology; Harvard University

- Helped Professor Elisabeth Lloyd with research and editing while she was visiting in Professor Lewontin's lab.

Research Assistant—Fall 2000-Spring 2002
To Professor Elisabeth Lloyd; History and Philosophy of Science Department. Indiana University, Bloomington

- Helped Professor Lloyd research and edit *The Case of the Female Orgasm: Bias in the Science of Evolution*, among other projects. Lloyd was then the Chair of the History and Philosophy of Science Department.

Referee, *Philosophy of Science*

President, Graduate Association of Philosophy Students—Fall 2002-Fall 2003
Philosophy Department; Indiana University, Bloomington
Student Representative, Graduate-Curriculum Committee—Fall 2002-Fall 2003
Philosophy Department; Indiana University, Bloomington

Founder, Director—2000-2001
The Thought Exchange; Bloomington, Indiana
- Founded and directed weekly forum for public, philosophical discussion

Founder, Director—1997
Wesleyan University Undergraduate Philosophy Club

Non-Academic Publications

(Forthcoming). "On Cheating," *Toronto Star*.

(1998). "Pop-Mart Religion," *The Other Side Magazine, 34*(4): 34-35.

(1997). [Untitled Editorial], *Morning Edition*, dir. Bob Paquette, WFCR-FM, Amherst, MA.

(1997). [Various original features, interviews, editorials, and 'vox populi'], *The Live Wire*, dir. Phyllis Jaffe, WESU-FM, Middletown, CT.

(1994-1995). [Various short pop-music reviews], *Interview Magazine*.

Reading Languages

French; German

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