

# Psychology and Philosophy: Bain and Robertson's Vision, James's Revision

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## 1. *Mind* and the Pre-History of Analytic Philosophy

In the opening months of the Great War, late in autumn, Bertrand Russell found himself in enemy territory. He had travelled to Oxford to deliver the Herbert Spencer Lecture for 1914.<sup>2</sup> Calling his talk “Scientific Method in Philosophy,” Russell used the occasion to distinguish his brand of “scientific philosophy” from that of the lecture’s namesake.<sup>3</sup> Spencer had called his own system of scientific philosophy “synthetic.” But the “essence” of scientific philosophy properly conceived, for Russell, “is analysis, not synthesis” (Russell 1914/1986, 66). Along with *Our Knowledge of the External World as a Field for the Scientific Method in Philosophy*, which had been published earlier that year, Russell’s Spencer Lecture is one of the earliest works where we find Russell adopting something he called the “analytic method” in philosophy in roughly our modern sense (Russell 1914, v, 1914/1986, 70).<sup>4</sup>

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<sup>1</sup> I gratefully acknowledge financial support for the research that went into this paper from the Fulbright Foundation and from the Canada Research Chairs program.

<sup>2</sup> Throughout this chapter I reference letters from the George Croom Robertson Collection (MS add. 88/4), henceforth GCRC followed by folder number. This collection is held by London University, University College London Special Collections, and accessed through the British National Archives at Kew.

<sup>3</sup> Russell wrote that his talk was “designed to infuriate the Oxford pundits,” and in a letter to Lucy Donnelly singled out a passage in his lecture that was especially calculated to irritate—a passage ridiculing the Spencerian notion that “Organic life ... has developed gradually from the protozoon to the philosopher” (Russell 1986, 55, 62).

<sup>4</sup> Similar themes can also be found in Russell’s 1914 essay “Mysticism and Logic.” Russell discussed analysis in mathematics and geometry in earlier works, and analytic judgments especially in Kant, but the first published usages of “analytic method” to characterize what would become a genre-making style of doing philosophy come from 1914. There are less prominent antecedents to this usage, most notably his characterization of his own philosophy as “analytic realism” [*réalisme analytique*] in a French lecture published in 1911 (and reproduced in both French and English in Russell 1992). And in an 1894 student paper written for Stout’s history of philosophy course, Russell did ascribe to Descartes a basic philosophical methodology that strikingly anticipates his own analytic method from 1914 and later; see (Russell 1983, 171). Russell might have used the phrase “analytical philosophy” in connection with his response to a paper on analysis and synthesis by Karen Costelloe-Stephen (his niece through marriage) delivered a year later, at the *Aristotelian Society*, on May 17, 1915. Her paper was published as \Costelloe-Stephen, 1914-1915 #4692}, and for a fascinating treatment of the dispute, see (Vrahimis 2022, 182 – 89). Vrahimis takes an anonymous account of Russell’s (unpublished and now lost) response to Costelloe-Stephen to suggest that Russell

Much like Auguste Comte, who had employed the word “synthesis” in a similar manner, the late Spencer had envisioned philosophy as a fundamentally empirical undertaking—an attempt to build a “science of the sciences.” That is, philosophy was to be “scientific” in the sense of providing a general, yet empirically-driven synthesis of the latest results of all the special sciences. The harmonizing principles Spencer employed were evolutionary, drawn broadly from biology.<sup>5</sup>

The theme of the present volume is an examination of the British journal *Mind*, a publication whose founding can rightly be seen as part of the “pre-history of analytic philosophy.” In its early days, *Mind* expressly put itself forward as an organ of “scientific philosophy”—that phrase was even considered as a possible subtitle<sup>6</sup>—and in this broad sense the publication is clearly part of a more general trend that also would encompass “analytic” philosophy as envisioned by canonical figures like Russell.

But *Mind*’s early architects advocated an older vision of “scientific philosophy” against which Russellian “analysis” was in part a reaction. Spencer, a key representative of this older vision, was tasked with writing the first article in the first issue of *Mind* (Spencer 1876).<sup>7</sup> Against Spencer’s older vision, Russell wrote:

[T]here are two different ways in which a philosophy may seek to base itself upon science. It may emphasize the most general *results* of science, and seek to give even greater generality and unity to these results. Or it may study the *methods* of science, and seek to apply these methods, with the necessary adaptations, to its own peculiar

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characterized his own work as “analytical philosophy” (the phrase appears at Anonymous 1915, 419), though it is possible that the anonymous account is meant to echo Costelloe-Stephen, whose paper is peppered with cognates of “analysis.” I should note that Vrahimis erroneously dates this encounter to 1914, but the correct date can be found at (Anonymous 1914-1915).

<sup>5</sup> I draw this characterization of Spencer and Comte from the inaugural Herbert Spencer Lecture of 1905, delivered by the Comtean positivist Frederic Harrison (Harrison 1905, 11). The phrase “science of the sciences” comes from a review of Harrison’s lecture (Becker 1905, 695). The American John Fiske had a pithy phrase for the Spencerian vision of philosophy—philosophy was to be nothing but “science organized” (Pearce 2015, 442).

<sup>6</sup> See letter from Alexander Bain to G. Croom Robertson, December 3, 1874, at GCRC 4. Note that the first issue of Richard Avenarius’s *Vierteljahrsschrift für wissenschaftliche Philosophie* (Quarterly Journal of Scientific Philosophy) would not appear until 1877.

<sup>7</sup> For discussion of Spencer’s role in the early *Mind*, see (Neary 2001, 58). Robertson refers to Spencer as “our most scientific philosopher” (Robertson 1896, 215).

province. Much philosophy inspired by science has gone astray through preoccupation with the *results* momentarily supposed to have been achieved. It is not results, but *methods*, that can be transferred with profit from the sphere of the special sciences to the sphere of philosophy. (Russell 1914/1986, 57)

One of Russell's central objections to the older scientific philosophy is that it was fundamentally inductive. It styled philosophical theory as the product of generalization from concrete scientific results. Older scientific philosophers had different views of just what special scientific results were most relevant to philosophy. For Spencer, the facts of evolutionary biology provide the inductive basis. These facts could purportedly be generalized in a way that would cover the facts of all other special sciences. The early architects of *Mind* also held inductivist metaphilosophies. But they typically saw "mental science"—empirical psychology—as providing the inductive basis for philosophical theory.

The distinction Russell wanted to draw in the passage above—between a philosophy that draws on the *methods* versus the *results* of science—would have been invidious for *Mind*'s architects. This is because they held that the body of doctrine constituting scientific methodology and that constituting empirical psychology were mutually reinforcing. On the one hand, our scientific methodology must be informed by our conception of the knowing subject. And on the other, we get our most detailed grip on the nature of that knowing subject through the application of the scientific method in empirical psychology.

In this chapter, I will examine in more detail the metaphilosophical vision of the two Scottish figures who were the principal founders of *Mind*—the psychologist-philosopher Alexander Bain, who originally conceived of the new journal and financed it during its early years, and his protégé George Croom Robertson, the journal's first editor (from 1876 – 1891).<sup>8</sup> For both, employing scientific methods in philosophy meant relying on the latest results from "mental science." Their shared metaphilosophical vision was reflected in their plan for the new

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<sup>8</sup> On Robertson's editorship, see (Quinton 1976).

journal, so I shall begin by considering the very idea of having a “Quarterly Review of Psychology and Philosophy.” In what respect did they see psychology as central to philosophy?

I will then look at a related though an ultimately (I will argue) distinct metaphilosophy developed by William James, who was one of the journal’s frequent early contributors. James was also an empirical psychologist, and he, too, saw psychology as central to the project of building a more scientific philosophy. Bain, Robertson, and their closest allies had developed inductivist visions of both philosophy and of the associationist psychological science that philosophy was to sit atop. In contrast, James rejected the view that psychology could straightforwardly yield canons of good reasoning. This is because the psychological investigation of reason establishes a plurality of cognitive virtues, and according to James psychology alone is not capable of ordering these virtues.

The effect is that for James, epistemology is (or involves) an autonomous enterprise of weighing cognitive virtues. We identify the cognitive virtues through empirical, psychological investigation. But the cognitive virtues we observe agents espousing conflict, and it falls to philosophy to weigh these cognitive virtues. In short, both camps saw epistemology as dependent in some way on psychology; but the older group often treated psychology as itself issuing epistemological principles, whereas James envisioned a more autonomous epistemology.

In Russell’s hands, “analytic” philosophy was partly a reaction against earlier visions of scientific philosophy. This chapter examines several of those earlier visions. Bain, Robertson, and James all advocated forms of scientific philosophy that were naturalistic in that they gave empirical psychology a starring role. I shall conclude by noting one respect in which Russell’s conception of analysis was actually indebted to James. Still, late 19<sup>th</sup>-century naturalism, generally, was an important foil for the logic-driven approach of early analytic philosophy. We will find that *Mind* was a premier outlet for some intriguing varieties of such naturalism.

## 2. Psychology and Logic in *Mind*

We think of the *psychologismus-streit* as heating up in Germany starting around 1890 (Kusch 2020). This was the familiar controversy over whether empirical psychology has a proper role to play in philosophy. Gottlob Frege and Edmund Husserl provided canonical attacks, each seeking to undermine the idea that logic specifically, or epistemology more generally, could be a branch of psychology (Kusch 1995, ch. 3).

Although Mill's treatment of logic influenced the development of (what would be derided as) psychologistic philosophy in Germany (Kusch 2020), we might assume that the controversy did not have an English-language chapter until Russell would begin championing Frege. But this assumption does not stand up to scrutiny.

For one thing, Russell did not begin engaging Frege's work until 1902.<sup>9</sup> But in his earliest signed publication, an 1895 book review, Russell waged an anti-psychologistic attack on Gerardus Heymans. Russell's review opened with a sustained criticism of the Dutch psychologist-philosopher's attempt to conceive of epistemology as a "psychology of thought," and of the laws of arithmetic as "purely psychological laws." Russell complained that Heymans' approach was to "account psychologically for our beliefs, instead of giving grounds for their validity" (Russell 1895, 245). Clearly, Russell was pressing this sort of criticism before being influenced by Frege.

Russell's review appeared in the journal *Mind*. This was an appropriate venue. *Mind* was conceived from its earliest days as a forum for settling what its original Scottish architects saw as a pressing controversy over psychology's scientific status, and over its potential relationship with philosophy. Its founders would presumably have had more sympathy with Heymans than Russell.

Bain and Robertson shared the view that a science of mind should play a foundational role for the rest of philosophy. *Mind* was not conceived as a partisan organ to press that perspective

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<sup>9</sup> Gregory Moore outlines Russell's early encounters with Frege in an editor's introduction (Russell 2013, xxxi ff.).

exclusively—but it was definitely conceived as an organ for publicizing that perspective and subjecting it to critical scrutiny, as we will see in this section.

In the 1870s, British idealism was on the ascendant. The very idea that there could be a natural science of mind, much less that such a purported science could seriously aid philosophy, was very much under attack (Klein 2008, 2009, 2023). Bain and Robertson felt a need to defend from attackers both psychology’s scientific legitimacy and its relevance to philosophy. Thus, *Mind* was founded amidst a controversy that we can regard as an English-language precursor to the better-known *psychologismus-streit* that would come to dominate the German-speaking philosophical world almost two decades later.

The strains of the debate are evident in two prospectuses Bain and Robertson issued, and in two early editorial statements (Robertson 1876c, 1883). The first prospectus was circulated to a select group, including Herbert Spencer, G. H. Lewes, and Henry Maudsley, in the summer of 1874 (Neary 2001). It announced the formation of a new journal, to be titled “*Quarterly Review of Mental Science*.”

Spencer immediately objected to the phrase “mental science” in the title, not because of the word “science” in this connection, which he approved of, but because there already existed a *Journal of Mental Science*.<sup>10</sup> Spencer worried the phrase could cause confusion.<sup>11</sup>

What did these figures mean by “mental science”? The *Journal of Mental Science* had been published in London since 1853, and was devoted to “the treatment of insanity,” including to the management and operations of asylums (Bucknill 1853, 2). This was an early psychiatry journal, so one might expect that the phrase was typically understood to pick out the nascent field of psychiatry.

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<sup>10</sup> The original title was *The Asylum Journal*, which changed in 1855 to *The Asylum Journal of Mental Science*, and then to *The Journal of Mental Science* in 1858, a title the publication kept for over a century. Today this publication is the *British Journal of Psychiatry*.

<sup>11</sup> See letters from Spencer to Robertson dated 15 November and 17 November 1874 (GCRP 11). Though Spencer worried about confusion between the two journals, he wrote: “I agree with you that the word ‘Science’ should be used” (17 November).

In fact, the phrase “mental science” was used quite loosely at the time, seemingly without any well-established definition. Bain himself had repeatedly described his own psychological work as “mental science,” apparently with no psychiatric connotation. An early example comes from his 1859 *The Emotions and the Will*, where he used the phrase “mental science” to cover the scientific study of mental states as such, often with reference to their physiological connections. We do well to examine Bain’s notion of “mental science” since the phrase was in the title originally proposed for what would become the journal *Mind*.

The first thing to notice is that the (now obsolete) usage of “science” to cover systematic knowledge of any kind is not what Bain meant by this term. Instead, Bain used “science” to indicate what in German would be called a *Naturwissenschaft*—an empirical, natural science. He took special pains to distinguish observation-based, scientific inquiry from other forms of inquiry (such as poetry) that allow the intrusion of emotion (Bain 1859, 48). Science so understood strives for an unbiased, unemotional accumulation of repeatable observations.

And a *mental* science is to take a natural-scientific attitude towards mental life, as revealed in consciousness, and towards what Mill had called the bodily “conditions”<sup>12</sup> of mental life:

Sciences are divided into Object Sciences—those of external nature, and Subject Sciences, or those relating to mind. ... The Subject Sciences, those of Mind proper, are grounded on self-consciousness, or introspective attention. Although the science of mind includes many phenomena of an Object character,—namely, the bodily manifestations of mind, and the actions of living beings, as prompted by their feelings,—yet the essential properties of mind are known only in each one’s self-consciousness. (Bain 1868b, 119 – 20)

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<sup>12</sup> Mill had argued that reasoning in empirical science does not require necessary connections between events in nature, but only an “invariability of succession ... found by observation” (Mill 1843/1974, 327). Later figures like Bain would frame psychology as partly concerned with the “conditions” of mental phenomena in the Millian sense—with the invariable, bodily and environmental causal antecedents and consequences of Mental states (Bain 1859, 4). This investigation is not about specifying some deeper fact *in virtue of which* (to use today’s language) a mental phenomenon necessarily occurs. It is about finding observable regularities between physical and mental events.

Thus, for Bain, “mental science” is fundamentally a natural science of the subject in that it relies on introspective observation, while also incorporating observations of objective, physiological phenomena.

In any case, Bain and Robertson were ultimately moved by Spencer’s objection to the original title. Robertson proposed the alternative title “Mind.”<sup>13</sup> The title struck Bain as “on a par with ‘Nature’, in everything except being perhaps a little more affected and assuming, and open to sarcastic wits.” In correspondence, James Martineau professed that he would be embarrassed to ask for a journal called “Mind” in a bookstore, but acknowledged that *Nature* had paved the way for this new style of journal title.<sup>14</sup> W. S. Jevons wrote that the title “seems too short,” but recalls having the same reaction to *Nature*.<sup>15</sup>

The comparisons *Mind* drew with *Nature* were apt for more reasons than just the style of the title. *Nature* had been founded in 1869 (by Norman Lockyer) with a primary aim of quickly sharing new empirical results in “any branch of natural knowledge” with “scientific men,” as well as to advance the influence of science in education and in society more generally (Baldwin 2015, 29). *Mind* was designed to play a similar role with respect to psychological science, with Bain and Robertson particularly emphasizing the need to foreground the role psychology could play in education.<sup>16</sup> What is more, like *Nature*, *Mind* was also closely associated with various members of the X-Club, a group of influential Victorian scientists that included Herbert Spencer and T. H. Huxley (Baldwin 2015, 25).

So the journal would offer a survey of recent European, British, and American results in the “scientific investigation of the mind.” But the first prospectus immediately highlights a central theoretical issue—a central *philosophical* issue—as an important focus for the journal:

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<sup>13</sup> See letter from Bain to Robertson of October 1874 (GCRP 4). Bain writes that he is prepared to “take your title ‘Mind.’”

<sup>14</sup> Letter to Robertson, January 29, 1875 (GCRP 11). Martineau had been vying for the Chair in Mental Philosophy and Logic at University College Long that Robertson had landed in 1866; see (Neary 2001, 57), who quotes from the letter just referred to at (Neary 2001, 61).

<sup>15</sup> Letter to Robertson, February 1, 1875 (GCRP 11).

<sup>16</sup> Both the first and second prospectus announce applications of psychology to education as an important focus for the journal (GCRP 11).

The fact that Mind is now made the subject of positive scientific inquiry, like any aspect or department of external Nature, may be assumed as the ground for establishing such a periodical, without pausing to show how, after all the efforts of speculative reason to deal with mind otherwise, it has come to pass. Yet it would be vain to pretend to ignore the expressions of doubt or denial as to the possibility of a phenomenal science of mind, that are heard not more from representatives of the older philosophical methods, on the one hand, than from scientific specialists, on the other. It is for those who maintain the possibility, to make it manifest by submitting their inquiries to every test suggested by the procedure of recognised sciences; and there is not a more signal test than the publication of a continuous record of fresh results cohering alike with one another, and with facts known or principles allowed, before. The new Review will have done something to determine a question of the highest moment for science in general, if it succeeds, and, if it fails, may not have done nothing. (GCRP 11, 1)

The question of whether a genuine science of mind is even possible hung over many of the journal's early articles, as we will see in more detail. Indeed, in the editorial introduction to the journal's first issue, Robertson expressly identified the settling of this question as one of the new journal's chief aims (see below, p. 17).

The status of psychology was not the only philosophical question Bain and Robertson thought a scientific journal on mind must address. The first prospectus went on to refer to the *Quarterly* as "a scientific journal" that "will not exist for the sake of promoting what is commonly known as general philosophical discussion;" however, Bain and Robertson quickly allow that even if it is to remain scientific, psychology must still involve some philosophical discussion.

... Psychology, ranking among the sciences in respect of method, has not the limited scope of any other science. It, so to speak, faces all the others, because its subject, Mind, does, literally and in every other sense of the word, comprehend the subjects of

them all. The psychologist cannot work out his special results, but these are at once seen to have a general import, involving the conditions and aims of all other special knowledge. The question, then, is not how the discussion of properly philosophical topics may be excluded, for it cannot be excluded, where *Mind* is concerned, but in what manner it should be included in a Review professing to be scientific. (GCRP 11)

The results of mental science have an “import” for other areas of inquiry, especially logic, aesthetics, and ethics. The prospectus here rehashes an idea that would have been familiar to Bain’s readers. Bain had long argued for a division of mind into three faculties—intellect, feeling, and willing. For Bain, logic, aesthetics, and ethics are concerned with the “regulation” of each respective faculty—logic being concerned with the regulation of the intellect, aesthetics with the regulation of feeling, and ethics with the regulation of willing or acting.

The second version of the prospectus summarizes the view compactly:

Beyond Psychology proper, the Review will be occupied with questions of Logic, Aesthetics, and Ethics; the theory of intellect, feeling, and will being naturally followed by the doctrine of their regulation. (GCRP 11)

So *Mind* will not just deal with psychology, but also with three philosophical topics—logic, aesthetics, and ethics, conceived of as inquiries into how best to regulate intellect, feeling, and willing.

When we consult Bain’s influential book *Logic*, two aspects of his conception of this philosophical discipline are noteworthy. First, he understood logic to encompass scientific methodology. He saw logic as split into three divisions (Bain 1873, 36 – 40): the theory of definition or classification (Bain 1873, bks. I, IV), the theory of deduction (Bain 1873, bk. II), and the theory of induction (Bain 1873, bk. III). Following Mill, Bain understood the theory of induction to cover scientific methodology generally, including issues like causal reasoning (Bain 1873, bk. III, chs. iv – v), chance (Bain 1873, bk. III, ch. ix), laws of nature (Bain 1873, bk. III,

chs. ii, xi),<sup>17</sup> and scientific explanation (Bain 1873, bk. III, ch. xii). In short, the study of scientific methodology is part of logic, for Bain.

Second, he argues that all of logic—including the study of scientific methodology—“involves frequent references to the laws and workings of the mind” (Bain 1873, 1). Thus, an introductory chapter lays out the “doctrines of psychology” that are “preparatory to the understanding of what follows” (Bain 1873, iii). He characterizes these psychological doctrines as providing the “groundwork of Logic” (Bain 1873, 1).

In what sense is psychology to provide a “groundwork” for logic? Consider an example. Bain argues that the psychological law of “Relativity” grounds the distinction between propositional content and affirmation or negation of that content. The Law of Relativity says the following.

As we can neither feel, nor know, without a transition or change of state,—every feeling, and every cognition, must be viewed as in relation to some other feeling, or cognition. The sensation of heat has no absolute character; there is in it a transition from a previous state of cold, and the sensation is wholly relative to that state. It is known, with regard to the feelings generally, that they subsist upon comparison; the pleasure of good health is relative to ill health; wealth supposes comparative indigence. Also, as regards knowledge, everything known, is known in contrast to something else; ‘up’ implies ‘down;’ ‘black’ presumes ‘white,’ or other colours. There cannot be a single or absolute cognition. (Bain 1868b, 83, also see Bain 1873, 2)

The Law of Relativity says that perception requires diachronic change of stimulus. Bain elsewhere offers as an example our “partial unconsciousness” of the feeling of our clothing on our skin, presumably when not moving our bodies (Bain 1859/1865, 568). He routinely extends this purported psychological law to cognition, contending that we cannot comprehend any thing or property without at once also comprehending that thing’s place in a wider contrast class of

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<sup>17</sup> Bain calls laws of nature, such as Newton’s universal law of gravitation, “secondary laws”; he contrasts these with “primary” laws of thought such as the law of excluded middle (Bain 1873, vol. 1, 94; vol. 2, 102).

things or properties. The Law of Relativity is psychological, but it pairs with the metaphysical view that all properties are relational, so that even apparently monadic predicates like “red” make disguised reference to an ultimately relational property, like a position on a color wheel.

Bain offered an illustration of how this law grounds the distinction between propositional content, on the one hand, and the affirmation or denial of that content, on the other. His example was being in a state of possessing £1,000. What the *feeling* of wealth will be depends on what was in the bank account recently—if the account was recently empty, the subject will feel differently than if the account had had £10,000. This is meant to be an instance of the Law of Relativity because the feeling at play must be understood in terms of stimulus change.

What has this example to do with propositions? Bain presented the *understanding* of one’s possession of £1,000 as a single mental state that can be inflected by either a positive or negative valence, depending on the subject’s financial history. What is more, he held that these inflections must come in “opposite” pairs—if possessing £1,000 can make one feel rich, then in principle it must be possible for possessing £1,000 also to make one feel poor.

Similarly, he proposed that “one effort of understanding serves for” grasping the content of a proposition in either its affirmative or negative form (Bain 1873, vol. 1, p. 83). For example, suppose one understands that being found guilty of some accusation involves a £5 fine. That understanding must also involve at least an implicit understanding that absolution exempts one from the fine. He writes, “by the Law of Relativity, to every affirmative form there corresponds a negative form, both understood if one is” (Bain 1873, vol. 1, p. 84). Bain is giving a psychological grounding for our ability to make a logical distinction between the *content* of a proposition from *affirmation* or *negation* of that content.

Is this psychological account also meant to provide some sort of justification for the logical distinction in question? Bain could be arguing for a claim that is slightly stronger than the one expressed in the last paragraph—that content and affirmation/negation can be distinguished in *all* propositions we can understand. For the feeling of wealth example could suggest that any mind that conforms to the Law of Relativity will have the cognitive resources to make this distinction

(between content and affirmation/negation). He also seems to regard the Law of Relativity as governing all actual human minds, and this would establish a strong conclusion—that we humans *always* have a capacity to distinguish propositional content from affirmation/negation whenever we can grasp any propositional content (though we will see some problems with this interpretation, in a moment).

In any case, Bain also puts psychological principles to use directly in articulating best practices of scientific methodology. For example, Bain thought experimental methodology was typically focused on distinguishing real from merely apparent causal factors. What he called “the method of agreement” (following Mill 1843/1974, 388 ff.) involves reproducing a phenomenon of interest on several occasions—if the experimentalist finds that there is “only one circumstance in common” on these different occasions, then “that circumstance is the cause (or effect) of the phenomenon” (Bain 1873, vol. 2, pp. 49 – 50). But the method of agreement is basic to scientific methodology in part because what Bain elsewhere calls “consciousness of agreement” and “consciousness of difference” are both “fundamental propert[ies] of Intellect” (Bain 1855/1868, 457). In other words, one basic cognitive awareness we have is awareness of both agreement and difference in repeated experiences—as when I have a basic “shock or feeling of *agreement*” when presented with a lit candle on two different occasions (Bain 1873, vol. 1, p. 3); and “the method of agreement” is portrayed as good experimental technique precisely because it amounts to a methodical exploitation of our basic cognitive skills, skills we know about through psychological investigation. So the psychological claim (that we can be made aware directly of agreement and difference) grounds the proposed scientific methodology in the sense of showing that the methodology relies on, and does not outstrip, our actual cognitive capacities.

A critic might contend that in psychology we learn about our actual cognitive capacities only by applying good experimental technique, including the method of agreement; but we only take such methods to be *good* methods on the basis of already accepting the psychological results in question. We need not be troubled by the air of circularity. If this is a circle, it is a wide circle with opportunities for cross-check and revision. For example, different empirical methods could

be employed to study our capacity for perception of agreement and difference, and different considerations, including a priori considerations, could be appealed to in support of the method of similarity.

For Bain, then, logic is a philosophical investigation of how best to regulate the intellect; but we must look to mental science for a fundamental account of this thing or capacity being regulated. Hence, he understood logic as a philosophical discipline that could not afford to ignore the concrete results of mental science. And in turn, mental science could not afford to ignore logic insofar as it is in this latter, philosophical discipline where we refine our conception of proper scientific methodology. If psychology purports to be a true science, its methods must take account of the latest results in (inductive) logic.

This is why *Mind's* architects would have regarded Russell's later distinction between drawing on scientific *methods* and drawing on scientific *results* as invidious—cutting-edge scientific methodology must square with the latest results of empirical psychology, and vice versa, on the older view. And so we get a journal ostensibly devoted to mental science that is crammed full of articles on logic, right from the start.<sup>18</sup> In fact, during Croom Robertson's tenure as *Mind's* first editor, we find him contributing a series of notices on logic, himself.<sup>19</sup>

One might reasonably wonder, at this point, how viable this proposed alliance of logic and psychology really is. Consider Russell's anti-psychologistic attack on Heymans. Per Russell, Heymans' approach was to construe the law of non-contradiction and the law of the excluded middle as both exceptionless psychological laws. That we are purportedly unable to entertain contradictory propositions is meant to support the use of thought experiment as the central method for philosophizing, for Heymans. But Russell contends that we have no assurance that a thought experiment will turn out the same way on successive occasions, perhaps because two propositions we find it impossible to entertain together today could seem compatible tomorrow.

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<sup>18</sup> Some central examples include (Adamson 1878, Bain 1878, Bosanquet 1886, Bryant 1888, Carveth 1877, Davidson 1887, Davidson 1881, Franklin 1890, Halsted 1878, Hodgson 1881, Keynes 1879a, b, Land 1876, Levy 1885, Mahaffy 1876, Martin 1883, McColl 1880, Murphy 1877, Peirce 1876, Robert 1879, Sidgwick 1878, 1879, Strachey and Jevons 1878, Tarbell 1883, Venn 1876a, b, 1877, 1879, 1880, 1888).

<sup>19</sup> For example, see (Robertson 1876a, b, 1877, 1878a, b).

Another way to put this worry is that we can get no real assurance that any supposed law of thought really is exceptionless, so that claims that we *must* think or reason *this* way lack the certainty needed to provide a foundation for epistemology.

Thus, Russell complains that Heymans' proposed psychological laws tell us how an "intellectually ideal man" might think, but those laws do not take account of "emotional and pathological" factors that infect real world cognition (Russell 1895, 246). Perhaps surprisingly, one of Russell's central worries is that in his quest to ground epistemology in psychology, Heymans is forced to give an idealized, insufficiently empirical psychology.

One could level a similar objection against Bain. Consider his Law of Relativity, again. Even if this has been exceptionless in the past, what assures us that it will be exceptionless in the future?

One could defend Bain by providing a slightly different reading than I have so far developed. It is possible that he took the law of relativity to be a heuristic generalization rather than an exceptionless rule applying with the force of necessity. On this reading, Bain was not, in fact, "grounding" the universal intelligibility of the philosophical distinction between content and affirmation/negation in some feature of our psychological capacities, as I suggested above. Instead, we could take seriously his claim that logic is the art of regulating reasoned thought. He may see the goal of forming, say, a theory of judgment—replete with distinctions like that between content and affirmation/negation—as being to help channel reasoned thought in fruitful directions. Assembling informed, empirical generalizations concerning how reasoned thought *typically* proceeds—even if these generalizations are merely heuristic—would be a prerequisite to doing logic under this understanding of logic's proper aim. Perhaps that is all we need for an art of regulated thought.

A part of Russell's criticism of Heymans could still be applied to Bain, though. If logic is an aid to regulating reason, then we presumably need an account of divergent, including pathological, ways that humans in fact reason. If Bain can be fairly charged with ignoring divergent forms of cognition, we shall see in section five that this is an issue to which James will

be more attentive—and indeed, it is an issue that leads him to envision a fundamentally different sort of relationship between psychology and philosophy.

### 3. Psychology as Science: Robertson's Vision

*Mind's* founders saw intimate links between psychology *qua* scientific examination of intellect, feeling, and will, on one hand, and philosophy *qua* examination of how these faculties are best regulated. But what about the aforementioned controversy over psychology's scientific status? Intellect, feeling, and will are ineffable—how *can* they be subject to rigorous scientific study?

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. 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” as not properly scientific:

Our use of the term Science in this Report is limited, by the scope of the duties assigned to us, to the Sciences of Organic and Inorganic Nature, including under that general designation the Sciences of Number and Magnitude, together with those which depend on Observation and Experiment; but excluding the Mental and Moral Sciences, as well as all those parts of human knowledge and culture which are not usually regarded as having any scientific character. (The Royal Commission on Scientific Instruction and the Advancement of Science 1873, vii).

Not much argument is given here—the Commission simply appeals to a purported consensus that the “Mental and Moral Sciences” are not truly scientific.

For Robertson, one of the journal's chief aims was to help settle the question of psychology's scientific status. Echoing the first prospectus, Robertson described *Mind's raison d'être* this way:

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 1876c, 3)

Robertson presented *Mind* as aiming 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.

Robertson gave his own rationale for why *Mind* had to be a review not just of psychology, but of philosophy as well, and here we get a vision of the relationship between these two disciplines that is distinct from but friendly to Bain's vision. In Robertson's view, psychology had an objective and a subjective component. The objective arm investigated "the Nervous System in man and animals," a practice that 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 1876c, 3-4).

But psychology had another arm, also, and again we pick up themes from the first prospectus:

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 1876c, 4)

Robertson claimed that psychology may be objective in its methodology, but that 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 *in one sense* a natural object, but it also stands above nature in that it is only *through* mind that we can understand natural objects to begin with. To investigate both aspects of the mind, psychology needs to employ both objective and subjective methods.

The passage just quoted continues with the suggestion that the study of mind in its subjective aspects 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.<sup>20</sup> (Robertson 1876c, 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, for Robertson. 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

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<sup>20</sup> The view that all natural facts must have an "expression in terms of thought" was an echo of Bain; see (Bain 1873, 10).

Helmholtz who started as physiologists, but now are doing “some of the best philosophical work” (Robertson 1876c, 2). Both Helmholtz and Wundt appeared in early issues of *Mind*.

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 like Bain, 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 1876c, 5)

Psychology is not just philosophy’s intellectual neighbor. Psychology is a propaedeutic for rigorous philosophic work. Robertson suggested that the (supposed) philosophical neutrality of psychological facts meant psychology could provide a broadly acceptable framework for philosophical deliberation, providing a basis for transforming philosophy’s characteristic “secular strife” into more productive, science-like modes of progress.

In short, Robertson saw psychology as studying subject matter that leads into philosophy. And he saw philosophy as benefitting from antecedent psychological work in that psychology could allegedly provide a neutral framework inside which meaningful philosophical dispute could progress. 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*

William James's 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 1880s, when he was publishing articles that came to be incorporated into his monumental *Principles of Psychology* (1890). James's position with respect to British philosophy, in particular, was more than that of external observer. He was participating at the center of important debates as they were happening, especially during the 1880s. And the most important locus for James's participation in British philosophy was Robertson's *Mind*.<sup>21</sup>

James's rise in the British philosophical scene accelerated during a trip to Europe from August 1882 to March 1883. He spent most of his time in England. James's biographer Ralph Barton Perry writes that the effects of this visit on James's philosophical thinking were "the most important in all James's European adventures ..." (Perry 1935, I.586). He met J. S. Haldane at the recently-formed Aristotelian Society, and made connections with another London intellectual club, Leslie Stephen's Sunday 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'" (Perry 1935, I.596).

The Sunday Tramps convened on long walks through the countryside,<sup>22</sup> while the Scratch Eight more commonly met over dinner at a member's house (Perry 1935, I.595 – 96). The latter group consisted of some prolific writers for *Mind*, as James recorded in a letter to his wife dated December 16, 1882: Robertson himself, along with Edward Gurney, Shadworth Hodgson, James Sully, Carveth Read, Frederick Pollock, Leslie Stephen, "& a certain Maitland, he being, so far as I know, the only one not known to fame" (James 1992-2004, V.332).<sup>23</sup> 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.

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<sup>21</sup> For an account of James's relationship to Croom Robertson, see (Perry 1935, I.596-606).

<sup>22</sup> For more on the Sunday Tramps, see (Whyte 2007).

<sup>23</sup> Frederic William Maitland was a legal historian who contributed several early *Mind* articles; (Whyte 2007) confirms that Maitland was a member of the Scratch Eight.

Importantly for our story, Scratch Eight members collectively contributed almost a quarter of all substantive pages *Mind* published during the journal's early years (Staley 2009, 294). What is more, by a considerable margin, *Mind* published the most of James's own substantive writing during the years when he was preparing what would become *The Principles of Psychology* (1878 – 1890), a period during which Robertson was at the journal's helm.

Figure 1 offers an overview of James's substantive publications in English during the run-up to the *Principles*. I include under "substantive publications" all his essays on any topic, from psychology to philosophy to psychical research.<sup>24</sup> Out of all James's substantive publications, 47% of his total pages during this period were published in *Mind*, across 14 articles (James's *Principles* reproduced much of this material).<sup>25</sup> Harris's *Journal of Speculative Philosophy* came in a distant second, with just 17% of his total number of substantive pages during this period.

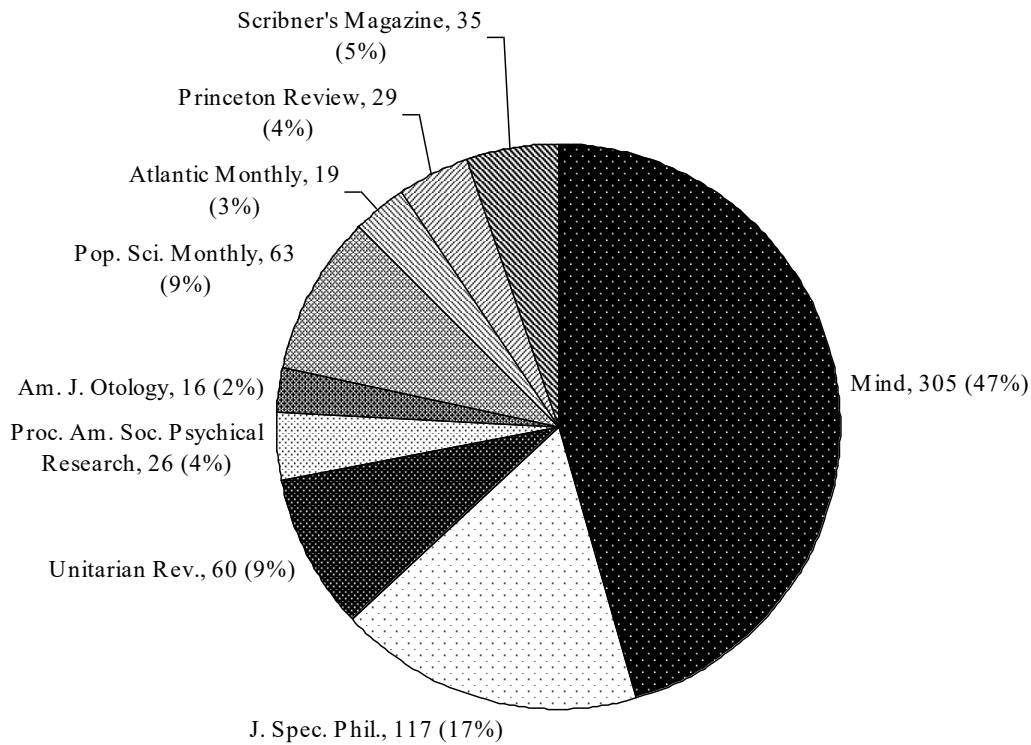
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<sup>24</sup> I include reports on conferences, but exclude letters to the editor, notes, and book reviews. James published a large number of very short such contributions, which I exclude because I want to give a sense of where he was sending his most carefully-written work during this period. I note two important trends in James's publishing record during these years that

Figure 1 does 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 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. For an excellent discussion of James's relationship with Renouvier, see (Girel Forthcoming).

<sup>25</sup> Four of these constitute "The Perception of Space," which was published in four consecutive issues (James 1887b, c, d, e).

**JOURNALS PUBLISHING JAMES'S RESEARCH,  
BY TOTAL PAGES PUBLISHED: 1878-1890<sup>26</sup>**



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

<sup>26</sup> 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, 811-58).

Above we examined Bain and Robertson's proposal that *Mind* should provide a forum for weighing criticisms of psychology's scientific status. One group that would prove to be persistent critics of psychology's scientific status is British idealists. Though Robertson did not yet identify idealists as key opponents of psychology in his inaugural editorial of 1876, he soon would. T. H. Green's lengthy "Introduction" to Hume's *Treatise*—which was designed as an attack on the scientific aspirations of Victorian-era psychology (Klein 2009, 2023)—had been published less than two years before *Mind*'s first issue appeared. And by the early 1880s, idealists began taking the fight against psychology to the pages of *Mind*, where James would sit at the eye of the storm.

We can get a sense of the strife by consulting some of the James-Robertson correspondence, much of which suggests that sides had been drawn between supporters of empirical psychology and their idealist critics (James 1992-2004, e.g., V.38, V.182, V.226, V.484, VI.62, VI.262-63, VI.88, VI.429). In late 1881, for example, James submitted to *Mind* an essay that attacked idealism. The piece was entitled "On Some Hegelisms." In a November 11 letter, 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 [Seth 1881]. 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. (James 1992-2004, V.181 – 82)

In this letter, Robertson told James that *Mind* would finally publish Hegelians. The January 1882 issue included their leader, “Green himself,” along with the American idealist 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.<sup>27</sup>

“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.”<sup>28</sup> The essay itself characterized “Hegelism” as “one of the most potent influences of the time,” and went on to ridicule this school for reflexively objecting “if perchance we essay to do some small bit of psychological detail-work for ourselves” (James 1882, 186). James was firmly planted in the camp of *Mind* writers defending empirical psychology from idealism.

“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. He claimed the only time he ever felt he understood Hegel was when intoxicated by the substance (James 1882, 206-08).<sup>29</sup>

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<sup>27</sup> According to James, Seth at least would come to be more friendly to psychology, at least in later writing; see (EPs 1892, 273 – 274). A curious testament to how thoroughly the climate shifted in *Mind* by the end of the century is an anonymously-published spoof thought to have been written by F. C. S. Schiller (Anonymous 1901). Schiller 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 serious presence in *Mind* before 1882.

<sup>28</sup> This is from James’s letter to G. H. Howison, dated September 30, 1881 (James 1992-2004, 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.

<sup>29</sup> 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;

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 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. (James 1992-2004, V.226)

In the correspondence from this period in general, these two often refer to a struggle with idealists. 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, which is how Robertson apparently saw James.

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

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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, 307-08)

The first sentence perhaps refers to the long footnote in "On Some Hegelisms." This latter article was reprinted in *The Will to Believe* in 1897 with the footnote intact. The footnote apparently elicited a letter from an anonymous British reader who had had similar revelations while using nitrous oxide; the following year James published the anonymous reader's account (in James 1898). James also 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).

Psychology,” which included criticism of Green and other idealists. Robertson wrote that he would print the piece (along with James’s now-famous “What Is an Emotion?”),

...because I desire nothing better than to keep at them. Your *Schlagfertigkeit* [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. (James 1992-2004, V.484)

The fact that he was eager to have more work from James, despite the apparent inconvenience James’s impatience apparently caused, 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.

For his part, James’s letters also show deep hostility towards Hegelians. 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? (James 1992-2004, VI.62)

The correspondence between the two continued in this fashion until Robertson’s death in 1892.

We 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

Spencer on “The Comparative Psychology of Man,” Bain on James Mill, and Hodgson on philosophy of psychology. Hodgson’s piece was continued in the April issue, where G. H. Lewes wrote 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.<sup>30</sup> But the only real *Mind* discussion of idealism during that decade came in October of 1876, when Sidgwick offered a critical, five-page review of Bradley’s *Ethical Studies* (Sidgwick 1876).<sup>31</sup>

To be sure, there were 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 1876b, 51-52).<sup>32</sup> 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, as Robertson himself admitted (Robertson 1883, 3).

In short, arguments between two camps were flaring up in *Mind* during the 1880s. James was a frequent and important collaborator on Robertson’s side in these debates—the side that wanted to defend psychology’s scientific status, and to so defend it from Hegelian attacks in particular.

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<sup>30</sup> An essential resource on the grand arc of British idealism is (Mander 2011).

<sup>31</sup> Thus, I cannot wholly 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). Whether or not Robertson sought a wider range of contributors, *Mind*’s first six years were dominated 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.” In fact, all these figures shared the view that psychology and philosophy are intimately connected; critics of this position were more or less absent.

<sup>32</sup> For more on Venn’s appeals to psychology within the context of logic, see (Verburgt 2022, 167, 173).

## 5. From Psychologism to Cognitive Pluralism

We have seen that James was an important member of *Mind's* anti-Hegelian infantry during Robertson's tenure (especially relevant essays include James 1882, 1884a, 1893a, b). It should be said that his contributions to the journal during this period went beyond criticizing idealism. His *Mind* articles also developed the following: an evolutionary account of consciousness, in "Are We Automata?" (James 1879a, see Klein Forthcoming); a psychological account of cognition, including scientific and philosophical cognition, in "The Sentiment of Rationality" (James 1879b);<sup>33</sup> a new account of introspection and a critique of associationism, in "On Some Omissions of Introspective Psychology" (James 1884b); a landmark account of emotion, now known as the James-Lange theory, in "What Is an Emotion" (James 1884c); two of the earliest, major articulations of his pragmatist epistemology (*avant la lettre*) concerning knowledge, acquaintance, representation, belief, and judgment, in "The Function of Cognition" and "The Psychology of Belief" (James 1885, 1889b); and a four-part, empirically-driven series (plus two subsequent responses to criticism) laying out his nativist, psychological theory of "The Perception of Space" (James 1887a, 1889a, 1893c; see Hatfield Forthcoming, Klein 2009). A summary statement of his landmark account of volition from (James 1880) also appeared (as Robertson 1880).

When we survey these works, we find that James's scientific methodology and his vision of psychology's relationship to philosophy both departed from the older orthodoxy represented by Bain and Mill. James positioned himself as presenting a new vision. "Bain and Mill have in a few short years come to appear altogether childlike, old-fashioned, and quaint," he wrote in an 1888 review of the idealist Andrew Seth, intimating that a "psychology born anew out of the physiological laboratories" might be the way forward (ECR 1888, 410).

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<sup>33</sup> Note that James used the same title for an essay in his 1897 collection, *The Will to Believe*. Only about a fifth of the 1879 essay, by Perry's estimate, made it into the later version; see (James 1897/1979a, Perry and McDermott 1967, 10).

One occasion for this departure was the need to rethink psychology's relationship to philosophy in response to the idealist onslaught, which mostly postdated Bain's most formative work. James's alternative metaphilosophy would be washed away with the rise of Russell and other analytic figures early in the twentieth century. But his vision was representative of an interesting and largely forgotten strain of thought in *Mind* during Robertson's tenure. In this final section, I offer a brief sketch of that vision especially as it appeared in "The Sentiment of Rationality." This is the second major essay James published in *Mind* (James 1879b).

The essay is framed by a question: *what is it like to conceive rationally?* This is an important question if one thinks (as James does) that we recognize the rationality of ideas or theories in virtue of some distinctive phenomenology. This kind of view assumes that there is not only something it's like to have this or that sensory experience, but also something it's like to be in this or that cognitive state.<sup>34</sup>

James's answer is that the phenomenology of rationality amounts to "the absence of any feeling of irrationality," and he proposes that the feeling of irrationality is one kind of feeling of the "arrest, impediment, or resistance" of our "tendency to action" (James 1879b, 317). Rationality does not have a *sui generis* phenomenal character, for James, but instead stems from a lack of another kind of feeling—a lack of a feeling of action impedance.

This phenomenological account makes sense for figures like James who follow Bain's account of belief in terms of readiness to act. Believing *P*, for Bain, amounts to being ready to act as though *P* were true (Bain 1868a).<sup>35</sup> James voiced his support for this view in *Mind*, also echoing Bain's view that the opposite of belief is not disbelief but doubt (James 1889b, 322; both understand disbelief to be just a different, stable, habit of action).

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<sup>34</sup> More recent philosophers have taken up this issue again; consult (Bayne and Montague 2011) for a range of relevant discussions.

<sup>35</sup> Famously, and following Peirce, James contends that the irritated sense of "unrest" that Bain had identified as characteristic of doubt tends to trigger *inquiry* (James 1889b, 322). This proto-pragmatist extension of Bain is what has earned the latter the appellation of the "grandfather of pragmatism." The phrase comes from a well-known passage where Peirce was describing the influence of both Bain and Nicholas St. John Green on pragmatism. Though Peirce himself apparently meant to call Green the grandfather of pragmatism, not Bain, Fisch provides references to those who have taken the label to apply to Bain, along with a discussion of the proto-pragmatist elements of Bain's view (Fisch 1954, esp. 416 – 17).

Both think that doubt has a characteristic phenomenology of “perturbation” that goes along with repugnant emotions like fear (Bain 1859, 574). James apparently matches the phenomenology of an idea’s being rational or irrational with the phenomenology of belief and doubt, respectively (James 1879b, 317). Thus, the phenomenology of irrationality stems from anxiety concerning the suitability of some particular idea as a basis for action, for James; and he holds that the phenomenology of rationality is characterized by the absence of, or “relief” from, this sort of anxiety (James 1879b, 317).

If one accepts (with both Bain and James) a role for cognitive phenomenology in the recognition of rationality, then psychology immediately has a role to play in epistemology. For psychologists can then inquire about the causal antecedents that tend to produce these feelings of rationality and irrationality. Identifying such causal conditions is a central project of “Sentiment of Rationality.”

But James develops a strikingly different view from Bain of the causal conditions of feelings of rationality (and in turn of the relationship between psychology and philosophy). Bain envisions particular types of intellectual causal conditions as producing, in a lawlike way, experiences of rationality (or irrationality), so that the same intellectual causal conditions will produce the same feelings of either rationality or irrationality. In contrast, James argues that particular types of intellectual causal conditions can produce different combinations of rationality or irrationality feelings, depending on other aspects of the agent’s mental constitution. The effect is to give Jamesian epistemology an independence from psychology that it appears not to have for Bain. Let me unpack this difference.

For Bain, there are two basic types of consciousness—intellectual and emotional (Bain 1859/1865, 565.n). He writes that “[i]n proportion as a mental experience contains the facts named discrimination, comparison, and retentiveness, it is an Intellectual experience ...” (Bain 1855/1868, 5 – 6, 1859/1865, 566). I use the phrase “intellectual causal condition” for an intellectual experience, in roughly Bain’s sense, that causes either feelings of rationality or irrationality. Here is an example of such a condition. “Contrary statements,” Bain writes,

“operate on the mind as a painful jar, and stimulate a corresponding desire for a reconciliation” (Bain 1859/1865, 168). I take the awareness of contrary statements to be an intellectual causal condition of the “painful jar,” which I take to be an instance of the feeling of doubt or irrationality just discussed.

Such feelings of irrationality—which I take to attach to intellectual experiences—appear to be produced in a lawlike way, on Bain’s picture. For he holds that discrimination, comparison, and memory all amount to “fundamental” (Bain 1855/1868, 457) mental capacities operating in lawlike ways. He calls these capacities “Consciousness of *Difference*, Consciousness of *Agreement*, and *Retentiveness*” (Bain 1855/1868, 321). Indeed, Bain presents the law of relativity (which we have discussed above) as summarizing the lawlike operation of our Consciousness of Difference. The law can be understood to assert that when presented with sensible differences, we have a consciousness of difference. And the laws of association—by contiguity and similarity—reflect the lawlike operation of our retention, or in other words of memory (Bain 1859/1865, 321 – 26).

Despite his official views on philosophy as in the business of “regulating” mental faculties (discussed above), Bain often writes as though knowledge can in some sense be explained by direct appeal to the lawlike operation of the intellect. Knowledge—or what he elsewhere calls “sound belief”—is caused by “consciousness of Agreement” and of “Difference.” For example, “our knowledge of man is the sum of the points of contrast between a man and all other things, and the sum of the points of identity on comparing men with one another” (Bain 1855/1868, 457, also see Bain 1859/1865, 592 – 93). Hence a causal explanation of our “knowledge of man” will take the form of a psychological account of our consciousness of relevant points of agreement between all humans, and our consciousness of relevant differences between humans and non-humans. Given the lawlike operation of our consciousness of similarity and difference, in Bain’s psychology, it is not surprising to find him using the definite article in asking for “*the*

circumstances that favour, and those that thwart” (Bain 1855/1868, 326, my italics) the production of intellectual experiences (Bain 1855/1868, 6).<sup>36</sup>

We have seen that James, like Bain, accepted a basic phenomenology of irrationality (and a derivative phenomenology of rationality). But James is most interested in what he calls “theoretic” causes of these feelings, skipping quickly over contributions made by “custom and congruity with our native impulses” (James 1879b, 318), the latter of which I take to be Bain’s focus.

Let us call a causal factor that always tends to produce a feeling of rationality “univocal,” and let us use the same term for a causal factor that always tends to produce a feeling of irrationality. Call a causal factor “multivocal” if it can produce either feelings of rationality or irrationality, depending their admixture with other causal factors. Bain might be thought to assume that intellectual causal factors are ultimately or at least typically univocal. But James emphasized the multivocality of causal factors in feelings of rationality or irrationality.

He specifically focused on two such theoretic factors in “The Sentiment of Rationality.” One is theoretic simplicity or economy; the other is theoretic detail or (as he calls it) “clarity.” Both are supposed to be multivocal.

Exemplars of theoretic simplicity, for James, include explanations that subsume apparently diverse phenomena under a common heading by isolating an *identical* element shared by group members. Classification schemes are said to exemplify identity-based explanations in science, as when we treat “a frog, a man and a lizard ... as one” because they all have “the same back-bone” or because they are “all offspring of one parent” (James 1879b, 328). But James sees identity-based explanations as more common in philosophy, and singles out so-called dual-aspect theorists as leading examples—for instance, G. H. Lewes, who “asserts in one place that the nerve-process and the feeling which accompanies it are not two things but only two ‘aspects’ of

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<sup>36</sup> The passage that uses the definite article specifically discusses “retention,” which is one of three “primitive properties of Intellect” that Bain recognizes; the other two are, again, agreement and difference (Bain 1855/1868, 325).

one and the same thing.” Lewes even identifies “the cognitive feeling and the outward thing cognized” (James 1879b, 321). And James offers this example from physics:

The softening of asphalt pavements in August is explained first by the empirical law that heat, which is the essence of August, produces melting, which is the essence of the pavement’s change, and secondly this law is inwardly rationalised by the conception of both heat and melting being at bottom one and the same fact, namely, increased molecular mobility. (James 1879b, 330).

An explanation that unites apparently different phenomena in virtue of one identical property exhibits theoretic simplicity *par excellence*.

Explanation by association is the main exemplar of theoretic clarity. James’s chief interest, here, stems from “empirical parallelism” style psychological explanations, as he elsewhere calls them—explanations that do not identify mental states with brain states, but that merely chart regular ways “the succession of states of consciousness” are associated with “the succession of total brain-processes” (James 1890/1981, 182).<sup>37</sup>

James draws a striking lesson from the identification of these two intellectual causal factors: “Clearness versus Simplicity is then the theoretic dilemma, and a man’s philosophic attitude is determined by the balance in him of these two cravings” (James 1879b, 322). For James, in contrast to Bain, at least some intellectual causal factors (such as those involved in our grasp of various theories) are such that they bear no univocal connection to feelings of either rationality or irrationality. Some theories will prioritize simplicity or clarity, and will trigger feelings of rationality or irrationality differently depending on the relative intensity of the “passion for simplification” versus the “passion for distinguishing” in different cognitive subjects (James 1879b, 322).

For James, it is an empirical matter of fact that intellectual causal factors are multivocal. His evidence for this idea comes from undertaking something like a psychology of science and of

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<sup>37</sup> On Mill’s preference for explanation by association, see fn. 12, above.

philosophy, albeit in a casual fashion.<sup>38</sup> The difference between overriding passions for distinguishing versus for simplifying are allegedly exemplified in “the mind of Cuvier *versus* St. Hilaire, of Hume *versus* Spinoza” (James 1879b, 322). Indeed, “Sentiment of Rationality” goes on to discuss theories by a range of other figures in support of this observation. Bain, Mill, Sièrebois, Czolbe, Huxley, Agassiz, Owen, Kant, and “the anatomist Luys” are all considered at various points of the essay as valuing clarity over simplicity. On the other hand, Schopenhauer, Hartmann, Spencer, Lewes, Clifford, Taine, Fechner, Zöllner, and G. S. Hall are all said to exemplify an overriding passion for simplicity.

Set against the backdrop of Bain and Robertson’s way of viewing the relationship between psychology and philosophy, James drew a new, importantly different lesson from this foray into the cognitive psychology of science. He held that no bare psychological investigation can tell us how *best* to weigh these passions—that is a matter for philosophical reflection. This is what he meant by defining a person’s entire “philosophic attitude” in terms of how he or she thinks it is best to balance the sometimes competing demands of theoretic simplicity and theoretic clarity. We arrive at a principled way of balancing competing theoretic demands—if we arrive at a principled way of doing this at all—in philosophy, for James, not psychology.

Indeed, in his psychological work James would repeatedly promote the idea that philosophy takes as its subject matter theories not just from psychology, but from all the special sciences, and then engages in *autonomous* reflection on basic assumptions involved in those theories (Klein 2008). In effect, James shared Bain’s view that philosophy of mind must start with the observation of how people in fact achieve rationality experiences through theorizing; but unlike Bain, he thought such observations yield a pluralistic picture of ways people achieve rationality experiences through theorizing. It falls to philosophy, for James, to reflect on how *best* to balance the different intellectual factors that tend to trigger feelings of rationality and irrationality.

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<sup>38</sup> Compare recent work in the cognitive science of science, e.g. in (Thagard and Findlay 2012).

This is a theme James would amplify in later work. Notably, in his “Will to Believe” essay almost two decades later, avoiding error and seeking truth are two guiding principles of inquiry that may reasonably be weighted differently by different inquirers (James 1897/1979b, 24). How best to balance these principles cannot be read off observations of actual cognizers; it is a matter for philosophical reflection.

As I read it, “The Sentiment of Rationality” ultimately has two main targets: Hegelian idealists and advocates of “The Philosophy of Evolution,” Spencer in particular. James holds up Hegel as making notorious use of explanation by identification (James 1879b, 341). And Spencer is said to seek above all “to show how the world at any given time may be conceived as absolutely identical, except in appearance, with itself at all past times” (James 1879b, 321). The suggestion in the final section of the essay is that the (alleged) matter of fact that there is widespread interest in explanations of clarity, and not just in explanations of simplicity, means that neither Hegelian idealism nor Spencer’s evolutionism will be rationally satisfying in a final way.

This point brings us back, finally, to Russell. Recall that he had contended (*pace* Spencer) that it “is not results, but *methods*, that can be transferred with profit from the sphere of the special sciences to the sphere of philosophy” (Russell 1914/1986, 57). I have argued that Bain and Robertson cannot accept Russell’s sharp distinction between our knowledge of methods and of the results of the special sciences. For *Mind’s* architects, the boundary between methods and results is porous. Our grasp of scientific methods must be informed by the results of an empirical psychology of the cognitive subject, which in turn must be guided by good scientific methods.

James’s cognitive pluralism reflects skepticism about the sufficiency of psychological observation for establishing canons of scientific method. But the structure of his argument in “The Sentiment of Rationality” suggests that he thinks a psychology of cognition is at least necessary for establishing a proper scientific methodology. In this respect, James is closer to the vision of Bain and Robertson than to Russell—our knowledge of the best scientific methods comes from philosophical reflection on the results of psychological investigations of cognitive

subjects, for James, an investigation that should presumably employ the best-known scientific methods.<sup>39</sup>

There is another respect in which James can be considered a more transitional figure to analytic philosophy, however, particularly in the years he was most active in *Mind*. Spencer's synthetic, evolutionary philosophy is, for James, a paragon of an over-reliance on simplicity-maximizing explanations—on explanations that seek to *identify* rather than merely *associate* apparently disparate phenomena. In fact, James presents clarity-maximization as a matter of analyzing (rather than synthesizing)—these explanations appeal to “the passion for distinguishing,” to our “impulse to be acquainted with the parts rather than to comprehend the whole” (James 1879b, 322).

James's conception of analysis apparently did influence Russell. Consider a second of the latter's objections (in “Scientific Method in Philosophy”) to Spencer. Russell accused Spencer of being unduly systematic. The output of Spencerian synthesis is a “block” theory of everything that is either absolutely true or else completely false (Russell 1914/1986, 66). Russellian analytic philosophy was instead meant to discriminate distinct parts that make up complex phenomena.

Russell's reference to Spencer's “block” theory was drawn directly from James, who had long rebelled against “block universe” philosophies (the term can be found in James 1897/1979b, 139.n, 202). According to James, a “block universe” is the output of monistic metaphysics of the sort popular among neo-Hegelians and evolutionary philosophers (like Spencer), alike.<sup>40</sup> Again, James had rejected monists' over-reliance on synthesizing arguments on grounds that they do nothing to appeal to a “passion for distinguishing,” or as he also calls it a “[I]oyalty to clearness” driving many cognitive agents' phenomenology of rationality.

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<sup>39</sup> It should be acknowledged that “The Sentiment of Rationality” can hardly be said to employ the best scientific methods. At best, the essay offers a sketch of a program for more rigorous work in the cognitive psychology of science.

<sup>40</sup> For more on the apparent paradox that James was a philosopher who was both deeply influenced by evolutionary science and intensely critical of “evolutionary philosophy,” see (Pearce 2018).

In the dispute between Spencer and James on the proper role of analysis and synthesis in philosophical explanation, Russell is plain about which side he is on. “[Th]e right method,” he writes, “has been indicated by William James” (Russell 1914/1986, 100).

Russell’s reasons for championing analyzing over synthesizing explanations are not James’s reasons. We have seen that the latter appealed the cognitive phenomenology of science and philosophy for establishing the importance of analysis, and from Russell’s perspective these considerations would have amounted to mere scientific “results” that should be kept separate from philosophy.<sup>41</sup>

Still, Russell plainly saw himself as building on an already ongoing revolt *inside* scientific philosophy, the revolt against an over-reliance on synthesizing explanations. That revolt had been fomented by James, in the pages of *Mind*.

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<sup>41</sup> I do not think Russell was consistent in eschewing psychological “results” in philosophy; *Our Knowledge of the External World*, which was published the same year as “Scientific Method in Philosophy,” in fact relies in important ways on psychology in formulating an account of acquaintance (Klein 2017).

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