

#### **Chapter 4: Science, Philosophy, and Mind in the British Intellectual Traditions.**

This chapter represents an attempt to move beyond the structural picture developed in the preceding discussion into issues of intent and practice. Specifically, I will examine in detail two overarching structural – and structuring – concepts: ‘science’ and ‘philosophy’, as deployed in the eighteenth and nineteenth century discussions of mind. I will begin with a recapitulation of the use of these terms in the texts already discussed in chapter 3, paralleling the more general development of conceptual structure therein but in greater depth. Far from showing a consistent trend of increasing division between the terms, the evidence will show continued diversity of opinion over the period in question. Furthermore, the rhetorical positioning of the study of mind as interfacial between philosophy and the sciences is an ongoing theme.

The second section below will continue this discussion as it proceeded into the last third of the nineteenth century. Introducing evidence from the first volume of the journal, *Mind*, founded by Alexander Bain in 1876, I will consider the state of affairs in the British study of the mind after the combined influence of the works discussed in chapter 3 had been thoroughly absorbed. The matter of the inaugural year of *Mind* provides not only a portrait of what had then newly, but definitely, become ‘Psychology.’ It also traces a retrospective of the previous two centuries of that field of study, in Britain and elsewhere, both conceptually – through ongoing dialogue with the tradition(s) I introduced in chapter 3 and others – and institutionally – through its review of educational practices. Furthermore, the positioning work done in, and on behalf of, the journal is an interesting case study; by actively examining the identification of ‘science’ and ‘philosophy’ (rather than merely using them as background assumptions), the discussion in *Mind* helps both to police the distinction and to establish the journal itself as a conduit between the two fields.<sup>1</sup> I will demonstrate this through a review of the stated mission of Bain’s new periodical, as well as contributions explicitly concerned with the relationship of philosophy and science.

Having thus traced some of the issues involved in framing the study of the mind in terms of its contemporaneously-conceived ‘scientific’ and ‘philosophical’ character, I

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<sup>1</sup> In the current STS idiom: *Mind* both demonstrates a practice of boundary-work and serves itself as a boundary-object. See Gieryn [1995].

will briefly relate this discussion to the historiographic treatment of the science-philosophy divide developed in chapter 2. I will defend two fundamental positions: First, that the discussion of these issues in the eighteenth and nineteenth century became increasingly sophisticated over the period, and ultimately rivaled in sophistication the discourse on the issue that continues today. Second, that there is a significant reflexive aspect to the treatment I have provided. That is, in this latter regard, there is a sense in which – if chapter 2 has formed an historiographic basis for the history pursued in chapters 3 and 4 – the history in these chapters is a history *of* that very historiography that was adopted to study it. The classical British study of the mind, if I am right, constitutes an important part of the deep background of contemporary science and technology studies. In making apparent this symbiotic relationship of my tools and subject matter, I hope to demonstrate yet another level of relevance of the present study.

#### **4.1 Disciplinary distinctions in the primary texts of the traditions.**

As discussed in chapters 1 and 2, the nominal distinction between ‘philosophy’ and ‘science’ is a dynamic one. Changing linguistic practice over time, relevant within identifiable communities of thought, is the rule rather than the exception. This section will explore the various understandings of, and relations between, the two poles of the science-philosophy spectrum as indicated in the texts reviewed in chapter 3. The expression of these distinctions is a feature of both the conceptual and the textual structures already discussed. However, while the treatment of concepts in the previous chapter was relational and largely schematic, here I will show in detail the significances of the two focal terms as embedded in context.

The issue of how the study of mind should be conceived by active workers and received by their audience was a central concern of the authors in my survey. In particular, these writers uniformly address the position of their work within, and in regard to, philosophy and the sciences. Their uses of the terms ‘science’ and ‘philosophy’ (and their permutations) are rhetorical moves expressing putative intent, positioning the authors within their intellectual community. As I will now show, each of the seven figures from the previous chapter establishes a different depiction of this key concept-pair.

#### 4.1.1 Hume

‘Philosophy’ is effectively an assumed category in Hume’s *Treatise*. He uses the term frequently but largely without regard to its definition. Insofar as context can indicate, he conceives of it to be little more specific than a nexus of erudition and reasoning – a way or spirit of thinking in which discrimination and scholarship are prized. Certainly, it is not a professional category or a specific subject. Often, it appears as an effective synonym of ‘science’ – a commonplace equation in the period. Here, I will concentrate rather on Hume’s use of ‘science’ in the *Treatise*, mapping the sense of the term by direct reference to the text. Afterward, I will complete this portrait by considering his later, more explicit, juxtaposition of the two terms in his first *Enquiry*.

The first appearance of the two terms together in Hume’s work is in the opening lines of the “Introduction” to the *Treatise*. This usage is, interestingly, a characterization of the social practice of the intellectual community in which Hume participated: “Nothing is more usual and more natural for those, who pretend to discover anything new to the world in philosophy and the sciences, than to insinuate the praises of their own systems, by decrying all those, which have been advanced before them.” [Hume, *Treatise*, p.xiii] Thus, Hume introduces science and philosophy (whatever else they might be) as the sorts of enterprises in which the new tends to erase the old by attacking its credibility. Furthermore, and also of interest from a rhetorical standpoint, his ensuing discussion both deflates and instantiates this situation; Hume’s tone suggests that he finds a degree of hubris in this game of self-praise and destruction of straw-men, yet he proceeds to contribute his own depreciation of his predecessors as having led to the “present imperfect condition of the sciences.” [Hume, *Treatise*, p.xiii] Moreover, he will – he advertises – proceed to rectify this imperfection.

More to the present point, however, is the characterization of the state of the sciences that makes up the remainder of the “Introduction”, which is the most substantial evidence for Hume’s employment of the term. His first point is to centralize his own field of study as fundamental for all sciences. “Human nature,” his titular concern, is – he says – the center of gravity of the sciences.<sup>2</sup> These latter consist, for Hume, of (at

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<sup>2</sup> “‘Tis evident, that all the sciences have a relation, greater or less, to human nature: and that however wide any of them may seem to run from it, they still return back by one

least) mathematics, natural philosophy, and natural religion; logic, morals, criticism, and politics.<sup>3</sup> The former three are those less connected with our natural constitution while the latter four (his true subjects) are intimately and comprehensively bound up with it.

In either case, these sciences must be founded on “experience and observation” – they are empirical enterprises in an explicitly Baconian sense.<sup>4</sup> This orientation rules out the ascertainment of ultimate principles, but the “moral” sciences – the latter four from above – are not alone in this limitation; on Hume’s view, the experimental method has

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passage or another. Even Mathematics, Natural Philosophy, and Natural Religion, are in some measure dependent on the science of MAN; since they lie under the cognizance of men, and are judged of by their powers and faculties. 'Tis impossible to tell what changes and improvements we might make in these sciences were we thoroughly acquainted with the extent and force of human understanding, and cou'd explain the nature of the ideas we employ, and of the operations we perform in our reasonings” [*Treatise*, p.xv]

This same basic sentiment is reiterated at the close of Book I of the *Treatise*, when Hume reminds us “Human Nature is the only science of man; and yet has been hitherto the most neglected.” [*Treatise*, p.273]

<sup>3</sup> The best indication is that Hume intends this list as a compendium of the several sciences, since he shortly afterward says that “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.” [*Treatise*, p.xvi] Elsewhere in the *Treatise*, though, he adds at least anatomy to the list: “As these [immediate impressions] depend upon natural and physical causes, the examination of them wou'd lead me too far from my present subject, into the sciences of anatomy and natural philosophy.” [Hume, *Treatise*, pp.276-277]; and “In this phaenomenon are contain'd two curious experiments, which if we compare them together, according to the known rules, by which we judge of cause and effect in anatomy, natural philosophy, and other sciences, will be an undeniable argument for that influence of the double relations above-mention'd.” [Hume, *Treatise*, p.301]

<sup>4</sup> Baconian, that is, in attribution: “And as the science of man is the-only solid foundation for the other sciences, so the only solid foundation we can (live to this science itself must be laid on experience and observation. 'Tis no astonishing reflection to consider, that the application of experimental philosophy to moral subjects should come after that to natural at the distance of above a whole century; since we find in fact, that there was about the same interval betwixt the origins of these sciences; and that reckoning from THALES to SOCRATES, the space of time is nearly equal to that betwixt, my Lord Bacon and some late philosophers in *England*, who have begun to put the science of man on a new footing, and have engaged the attention, and excited the curiosity of the public. [*Treatise*, pp.xvi-xvii]

this effect on all the sciences, as well as the arts and other human employments.<sup>5</sup> It is this commonality that leads Hume to his famous consideration of causation in the first book of the *Treatise* – not only as a general principle to be adhered to in inquiry, but also as a specific defense of the prospects of his own new proposed science. This science of human nature, also advertised as moral philosophy, he recommends for its supreme utility despite the characteristic difficulties involved in it.<sup>6</sup> Indeed, the later *First Enquiry* elaborates a compensating contrast of the qualities of natural science/philosophy and moral science/philosophy, which – he says – put them on an overall par with one another.<sup>7</sup> In brief, the precision of the mathematical sciences is complicated by the

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<sup>5</sup> “But if this impossibility of explaining ultimate principles should be esteemed a defect in the science of man, I will venture to affirm, that 'tis a defect common to it with all the sciences, and all the arts, in which we can employ ourselves, whether they be such as are cultivated in the schools of the philosophers, or practised in the shops of the meanest artificers.” [*Treatise*, p.xviii]

<sup>6</sup> “None of them [*i.e.*, sciences] can go beyond experience, or establish any principles which are not founded on that authority. Moral philosophy has, indeed, this peculiar disadvantage, which is not found in natural, that in collecting its experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may be. When I am at a loss to know the effects of one body upon another in any situation, I need only put them in that situation, and observe what results from it. But should I endeavour to clear up after the same manner any doubt in moral philosophy, by placing myself in the same case with that which I consider, 'tis evident this reflection and premeditation would so disturb the operation of my natural principles, as must render it impossible to form any just conclusion from the phenomenon. We must therefore glean up our experiments in this science from a cautious observation of human life, and take them as they appear in the common course of the world, by men's behaviour in company, in affairs, and in their pleasures. Where experiments of this kind are judiciously collected and compared, we may hope to establish on them a science which will not be inferior in certainty, and will be much superior in utility to any other of human comprehension.” [*Treatise*, pp.xviii-xix]

<sup>7</sup> “The great advantage of the mathematical sciences above the moral consists in this, that the ideas of the former, being sensible, are always clear and determinate, the smallest distinction between them is immediately perceptible, and the same terms are still expressive of the same ideas, without ambiguity or variation... But the finer sentiments of the mind, the operations of the understanding, the various agitations of the passions, though really in themselves distinct, easily escape us, when surveyed by reflection... Ambiguity, by this means, is gradually introduced into our reasonings: Similar objects are readily taken to be the same: And the conclusion becomes at last very wide of the premises...[I]f we consider these sciences in a proper light, their advantages and disadvantages nearly compensate one another, and reduce both of them to a state of

chains of reasoning involved. Correspondingly, the inexactitude of the moral is compensated for by the ease with which its principles can be derived. If any inferiority remains in the moral domain with respect to the natural, it is only – according to Hume – that of greater apparent practical difficulty.

While the concentrated discussion of the “Introduction” nicely encapsulates the problematic of the *Treatise*, complementary portraits of the nature of philosophy and science are scattered throughout the work. The possible content of a science is nicely demonstrated by Hume’s elaboration of his of human nature. He proposes three first principles of the enterprise early in Book I as (1) that ideas proceed from impressions [*Treatise*, p.7]; (2) that relations among ideas result in our confusing them; and (3) that impressions impart vivacity to ideas concurrent with them. These illustrate, on a practical level, some of the elements that sciences might properly consist of.

Elsewhere, he indicates by example the position of science and philosophy in his conceptual framework. The position given to the four ‘scientific’ relations (of ideas) in Figure 3.2 – with science resulting from the application of resemblance, contrariety, quality, and quantity – is affirmed by positioning mathematics as the paragon of scientific exactitude.<sup>8</sup> Relation as the fundamental principle, though, is common to both the more and the less exact sciences.<sup>9</sup> The latter, moral sciences, though – being concerned with

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equality... And if moral ideas are apt, without extreme care, to fall into obscurity and confusion, the inferences are always much shorter in these disquisitions, and the intermediate steps, which lead to the conclusion, much fewer than in the sciences which treat of quantity and number... The chief obstacle, therefore, to our improvement in the moral or metaphysical sciences is the obscurity of the ideas, and the ambiguity of the terms... And, perhaps, our progress in natural philosophy is chiefly retarded by the want of proper experiments and phaenomena... As moral philosophy seems hitherto to have received less improvement than either geometry or physics, we may conclude that, if there be any difference among these sciences, the difficulties, which obstruct the progress of the former, require superior care and capacity to be surmounted.” [*First Enquiry*, pp.60-61]

<sup>8</sup> “There remain, therefore, algebra and arithmetic as the only sciences, in which we can carry on a chain of reasoning to any degree of intricacy, and yet preserve a perfect exactness and certainty.” [*Treatise*, p.71]

<sup>9</sup> “*Reason or science* is nothing but the comparing of ideas, and the discovery of their relations; and if the same relations have different characters, it must evidently follow, that those characters are not discover'd merely by reason.” [*Treatise*, pp.466-467; emphasis added]

impressions as well as ideas – have the wider array of all seven ‘philosophical relations’ to take into account (the four above, plus identity, spatio-temporal arrangement, and causation). For this reason, Hume is skeptical of claims for complete parity between the natural and the moral domains.<sup>10</sup> Rather, he embraces the subjective character of the latter domain as adding no practical barrier to the application of science over that already present on the purely objective side; although the moral sciences are not grounded, as the natural are, on facts, they retain a similar basis in mental process.<sup>11</sup> This incipient-pragmatist move on Hume’s part reinforces his earlier rational explication of the centrality of the moral sciences. This position is further underlined by the closing lines of the *Treatise*, which hammer home the practical stakes for the development of Hume’s new science.<sup>12</sup>

In the opening passages of the *First Enquiry*, moral sciences/philosophy are/is divided along another dimension in terms of an intellectual-active distinction that will become more prominent in the later work of Reid.<sup>13</sup> Like Reid, too, Hume appears – at times – to favor the common understanding over the abstract.<sup>14</sup>

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<sup>10</sup> He begins by characterizing such claims as follows: “There has been an opinion very industriously propagated by certain philosophers, that morality is susceptible of demonstration; and tho' no one has ever been able to advance a single step in those demonstrations; yet 'tis taken for granted, that this science may be brought to an equal certainty with geometry or algebra.” [*Treatise*, p.463]

<sup>11</sup> “Nor does this reasoning only prove, that morality consists not in any relations, that are the objects of science; but if examin'd, will prove with equal certainty, that it consists not in any matter of fact, which can be discover'd by the understanding... Vice and virtue, therefore, may be compar'd to sounds, colours, heat and cold, which, according to modern philosophy, are not qualities in objects, but perceptions in the mind: And this discovery in morals, like that other in physics, is to be regarded as a considerable advancement of the speculative sciences; tho', like that too, it has little or no influence on practice.” [*Treatise*, pp.468-469]

<sup>12</sup> “An anatomist...is admirably fitted to give advice to a painter; and 'tis even impracticable to excel in the latter art, without the assistance of the former. We must have an exact knowledge of the parts, their situation and connexion, before we can design with any elegance or correctness. And thus the most abstract speculations concerning human nature, however cold and unentertaining, become subservient to practical morality; and may render this latter science more correct in its precepts, and more persuasive in its exhortations.” [Hume, *Treatise*, p.621]

<sup>13</sup> “Moral philosophy, or the science of human nature, may be treated after two different manners... The one considers man chiefly as born for action; and as influenced in his

Here, and - as I have begun to indicate - in general, the strongest impression derived from Hume's usage of 'science' and 'philosophy' is that of two terms not strongly distinguished if distinguished at all. Most often, they are either used interchangeably (in phrases of the form "a science is/contains a philosophy) or simply voiced in the same breath.<sup>15</sup> The one notable exception is an anticipation of Kant's famous invocation of the "Queen of Sciences," suggesting that philosophy proper be understood as above the sciences, but this is an isolated remark.<sup>16</sup> Perhaps even more striking, in this passage, is the explicit deference Hume gives to religion as equal to (even identical with) philosophy. This acquiescence represents a definite positioning of Hume's science relative to the existing authority of religion. This gesture, though, as we will now see, is minor compared to the full-fledged religiosity of David Hartley's associationist science.

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measures by taste and sentiment; pursuing one object and avoiding another... The other species of philosophers consider man in the light of a reasonable rather than an active being, and endeavor to form his understanding rather than cultivate his manners." [*First Enquiry*, pp.5-6]

<sup>14</sup> "It is certain that the easy and obvious philosophy will always, with the generality of mankind, have the preference above the accurate and abstruse... On the contrary, the abstruse philosophy, being founded on a turn of mind, which cannot enter into business and action, vanishes when the philosopher leaves the shade, and comes into open day." [*First Enquiry*, pp.6-7] Note, though, that we have just seen Hume proclaim the constitutive connection of the two (abstract/intellectual and practical/active) domains [see note 12, above].

<sup>15</sup> For instances of the former, see above [notes 1 and 13]. The latter juxtaposition is exhibited here: "Shall we, then, establish it for a general maxim, that no refin'd or elaborate reasoning is ever to be receiv'd? Consider well the consequences of such a principle. By this means you cut off entirely all science and philosophy." [*Treatise*, p.268]

<sup>16</sup> "Tis certainly a kind of indignity to philosophy, whose sovereign authority ought every where to be acknowledged, to oblige her on every occasion to make apologies for her conclusions, and justify herself to every particular art and science, which may be offended at her. This puts one in mind of a king arraign'd for high-treason against his subjects. There is only one occasion, when philosophy will think it necessary and even honourable to justify herself, and that is, when religion may seem to be in the least offended; whose rights are as dear to her as her own, and are indeed the same. If any one, therefore, shou'd imagine that the foregoing arguments are any ways dangerous to religion, I hope the following apology will remove his apprehensions." [*Treatise*, p.250]

#### 4.1.2 Hartley

Hartley's use of 'science' and 'philosophy' is nominally similar to that of Hume, failing to make a strong distinction between the two, but generally acknowledging philosophy *simpliciter* as more comprehensive in scope than the sciences and taking 'natural philosophy' to be one among the several sciences. Like Hume, too, Hartley speaks more explicitly of 'science' than of 'philosophy,' taking to consideration However, at another level, the two conceptions diverge entirely. Hume, with the above *apologia* [note 16] as the only exception, finds theology to be irrelevant to his account of human knowledge. Hartley – unlike his agnostic contemporary – introduces God and religion into the conceptual system so as to effect a 'metaphysical psychology' parallel to the 'metaphysical physics' Garber [1992] attributes to Descartes. That is, there is a strong element of divine teleology behind Hartley's understanding of science/philosophy, in which the development of knowledge is a microcosm of God's plan for the world.

This orientation is most evident in the catalog of sciences discussed in the *Observations*. The sciences that Hartley acknowledges there are seven in number. These are ranked in ascending order of importance as: (1) Philology; (2) Mathematics; (3) Logic; (4) Natural History; (5) Civil History; (6) Natural Philosophy; and (7) Religion. [*Observations*, I, pp.353-366; Oberg (1976)] Thus, his system makes explicit a hierarchy pointing directly to the worship of God through the rational capacities of the mind (see again Figure 3.4). Unlike Hume, Kant, or (as we shall see) Hamilton, it is religion – for Hartley – that is the queen of the sciences.<sup>17</sup> Furthermore, this religion is a quite specific one: the dissenting Protestant Unitarianism that Hartley shared with his idol, Newton, and his apostles, Erasmus Darwin and Joseph Priestley.

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<sup>17</sup> Note, too, that this classification differs substantially in content from the classical (Scholastic), the Baconian, and the Humean enumerations. See Fisher [1990] for a full discussion of pre-eighteenth century hierarchies of the sciences. Recall also that the sciences Hume mentions are not formally ordered, but rather fall into the basic categories of natural (mathematics, natural philosophy, natural religion, and anatomy) and moral (logic, morals, criticism, and politics), with philosophy – effectively, metaphysics – as an umbrella over the whole set. While Hume's list and Hartley's contain four members in common (five if we equate civil history and politics, six if we accept criticism and philology as similar), they remain quite distinct in organization (another example of the advantages of treating conceptual *systems* rather than concepts taken individually).

### 4.1.3 Reid

The virtual equation of science and philosophy, characteristic of eighteenth century terminology and common to Hume and Hartley, is evident too in the work of Reid. However, like his contemporaries, Reid's treatment shows idiosyncrasies that distinguish his orientation despite this basic similarity. In Reid's case, the peculiar system that emerges is one that is distinctly Protestant, distinctly (and directly) realist, and distinctly populist.

Reid's identity as a minister of the Church of Scotland, as well as professor of philosophy, put him in touch with a Protestant literary tradition that attended closely to the study of the human soul-mind (see section 1.2). This tradition, diffusing from post-Lutheran Germany and largely Scholastic in origin, identified 'psychology' and 'pneumatology' as distinct pursuits treating, respectively, the soul-in-general (*psyche*) and the specifically-human spirit (*pneuma*).<sup>18</sup> Introduced into British thought by such figures as Cudworth at Cambridge, this understanding of the domain of inquiry was directly influential on Reid. As Brun-Rovet [2002] insists, we must consider Reid as – by self-identified specialty – a pneumatologist. Thus, as with that of Hartley (and, very nominally, that of Hume), Reid's work stands as a contribution to the understanding of the human mind *as indicative of divine inspiration*.<sup>19</sup> However, unlike Hartley, who conceived of God as an active participant in the operations of the mind, Reid elaborates a scientific system in which God is little but prime mover. This structural difference in the system of mind makes Reid's pneumatology easily secularized while Hartley's work would require much more modification to be saved in a non-theologized context.

The flexibility of Reid's vision of the study of mind is further evident in the ontological position he takes on scientific activity. As Brun-Rovet [2002] also notes, Reid's direct realist commitments, part and parcel of the original common-sense project, lead him to conceive of pneumatology as an experimental programme rather than a

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<sup>18</sup> See Smith [1997, p.120] for a fuller treatment of this tradition.

<sup>19</sup> 'Inspiration' quite literally, taking the human spirit as breathed into us by God.

foundational doctrine.<sup>20</sup> Reid here stands much closer to Hume than to Hartley – the former’s mitigated skepticism, too, establishes a phenomenalist vision of the study of mind, while the latter’s concatenation of natural and revealed religion offers a window onto the ultimate divine order.

Reid’s populism is evident in catalog of sciences he identifies and is (like direct realism) congruent with his comprehensive embrace of a ‘common sense’ philosophy.<sup>21</sup> He distinguishes between ‘material’ and ‘intellectual’ sciences, in the Preface to his *Essays on the Intellectual Powers of Man*. [Reid, *EIP*, p.xxxviii] There, in what is apparently intended as a comprehensive listing, he counts among the former “Natural Philosophy, the mechanical Arts, Chemistry, Medicine, and Agriculture” while the latter include “Grammar, Logic, Rhetoric, Natural Theology; Morals, Jurisprudence, Law, Politics, and the fine Arts.” [*ibid*] Reid’s list thus echoes, but extends, the classical trivium and quadrivium, emphasizing strongly the practical advantages to be gained in this world by attention to material knowledge. Recalling the centrality of ‘common understanding’ in Reid’s conceptual system [see section 3.1.3], we can recognize this extension of the (honorific) attribution of ‘science’ to more common and humbler pursuits – agriculture, the mechanical arts, *etc.* – as a gesture toward social inclusiveness in the pursuit of knowledge.

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<sup>20</sup> “By refusing to distinguish between phenomena and noumena, Reid implicitly rejects the notion of an ontological realm parallel to epistemology and potentially inaccessible to it... The ontology Reid posits is that of the operations of the mind; these operations, operating on themselves and on individual conceptions by abstraction and generalization, allow the formation of a revisable, experimental, higher-order ontology of general conceptions... Reid’s analysis of the origin of philosophical terms leads him to a pre-systematic origin in which mind is assumed to be an irreducible entity. The natural progression of his works then serves as an elucidation of that concept by the determination of an exhaustive set of operations. Philosophy of mind is therefore understood not so much as a foundationalist venture, but as a scientific programme.” [Brun-Rovet, 2002, p.509]

<sup>21</sup> In this respect, too, Reid echoes Hume, whose consideration of the abstract versus the common in the *Treatise* and *First Enquiry* opens the door to an inclusive vision of knowledge. Hume, though, never goes so far as to include common pursuits in his list of sciences.

#### 4.1.4 Brown

With the work of Thomas Brown, we begin to see a latent distinction between science and philosophy, perhaps implicit in the eighteenth century model, begin to emerge.<sup>22</sup> Interestingly, this distinction hangs on an intellectual-active dichotomy that we have seen Brown reject elsewhere (see section 3.1.4). The effective difference between ‘science’ and ‘philosophy’, as evident in Brown’s *Lectures*, is that the former is practical and active while the latter is speculative and passive.<sup>23</sup> While Brown has found this division inadequate to parse the different operations of the mind, it is a perfectly valid one as a descriptor of human behavior. Furthermore, Brown indicates that the scientific is the more pressing department in this respect, since the outcome of them will fulfill a greater purpose.

This purpose remains a religious one. Science still, in Brown, is not significantly secularized. Instead it serves, if not quite as a vehicle for the fulfillment of divine will (like Hartley’s), at least as the fulfillment of human potential in liaison with the divine. This ‘co-operation with the beneficent Creator’, which study of the mind enables, appears as the latter-day equivalent of Reid’s pneumatology in the Romantic age. The romantic bent is evident also in a nod by Brown to Hume in elevating the emotional nature of man over the rational; where Hume stated, in his Enlightenment fashion, that “Reason is, and ought only to be the slave of the passions and can never pretend to any other office but to serve and obey them” [*Treatise*, p.415], Brown instead opines that “By our mental functions, we are mere spectators of the machinery of the universe, living and inanimate; by our *emotions*, we are admirers of nature, lovers of man, adorers of God.” [Brown, 1828, v.1, p.529] The advantages gained – through study of the mind – in fulfilling our potential not just in thought but in deed, and not just for ourselves but as participants in

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<sup>22</sup> There remains much fluidity in, and overlap between, the terms in Brown’s work. His treatment is nonetheless more nuanced than those of his predecessors.

<sup>23</sup> “[T]he Philosophy of the Human Mind, - not that *speculative* and *passive* philosophy only, which inquires into the nature of our intellectual part, and the mysterious connexion of this with the body which it animates, but that *practical* science, which relates to the duties, and the hopes, and the great destiny of man...by which he may have the dignity of co-operating with his beneficent Creator.” [Brown, 1828, v.1, p.2]

Note that, from outside the historical narrative, this connotation is a familiar one, having appeared already as an assumed dimension in Cunningham’s work (see section 2.4.3).

the divine, point to the centrality of mental philosophy (in both practical and speculative modes). Again echoing Hume (see note 2), Brown informs his audience that the subject he will expound plays a role in all departments of knowledge: “To the philosophy of mind, then, every speculation, in every science, may be said to have relation as to a common centre.” [Brown, 1828, v.1, p.17] Brown’s version of science, then, represents a complex fusion of religious, romantic, and practical elements.

As one aspect of practice, Brown finds classification of the sciences to be an important concern.<sup>24</sup> The Brownian philosophy of mind, for example, consists of three divisions: physiology, ethics, and political doctrines.<sup>25</sup> Furthermore, mind is a constitutive subject in the diverse departments of human social activity, including rhetoric, aesthetics, and education. [Brown, 1828, v.1, pp.30-34] Brown’s highlighting of these enterprises again indicates his concern with human personal development. Practice is emphasized too in Brown’s brief but prominent characterization of the sciences as “truly arts.” [Brown, 1828, v.1, p.25]<sup>26</sup> Here again, science subtly distinguishes itself from philosophy by identification with active engaged intervention with the world. Furthermore, in Brown’s work (extending that of Hume), the philosophy of mind takes on a vital intermediary position between science and philosophy – by virtue of both its implication in all knowledge-making enterprises and its dual speculative-practical character as an enterprise in its own right. Here, I think, we begin to see the origins of an activist social science tradition in English-speaking studies of the human mind. Another important example of this nascent activism appears in the Benthamite utilitarian movement. We will examine the systematic foray into mental philosophy by Bentham’s disciple, James Mill, in the following section.

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<sup>24</sup> “In the arrangements of every science, it is of essential consequence that the lines of difference, which distinguish one class from another, should be well marked.” [Brown, 1829, v.1, p.194]

<sup>25</sup> This division is given in Brown’s second lecture [Brown, 1829, v.1, p.16]. Brown’s *Lectures*, 100 in number, treat the first of these two divisions as taught by Brown in an annual sequence at the University of Edinburgh. At the close of the last lecture, he advertises that the third subject is treated in another of his courses.

<sup>26</sup> I read Brown here as essentially advocating a vision of science as Aristotelian *techné*.

#### 4.1.5 Mill

We might expect a trend toward the distinction of science and philosophy, and the subsumption of the study of mind under the former rather than the latter, to follow from the example of Brown and the spirit of the early nineteenth century. If so, the work of James Mill deflates such an expectation. Far from emphasizing the new ‘science’ in his 1829 *Analysis*, Mill ignores the term almost wholesale, referring instead to his concern as ‘philosophy’ or even ‘metaphysics.’ In the first volume of this work – covering physiological, linguistic, and intellectual aspects of the mind – ‘science’ appears only within the section on classification [Mill, 1869, v.1, pp.256-259]. But this passage is an extended quotation, excerpted by Mill from James Harris’s *Hermes*, in which Harris – not Mill – uses the term three times in a thoroughly non-modern sense within a discussion of Aristotle and Plato. Otherwise, Mill consistently prefers to speak of philosophy.<sup>27</sup>

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<sup>27</sup> Some examples [all emphases added, pagination from 1869 edition but text unaltered from the 1829 original]:

“*Philosophical* inquiries into the human mind have for their main, and ultimate object, the exposition of its more complex phenomena.” [Mill, 1869, v.1, p.1] Note that this is the opening sentence of the work.

“When I speak of my sense of sight, as when I speak of the attraction of the loadstone, I mean to denote an antecedent, and a consequent; the organ with its object in appropriate position, the antecedent; the sensation the consequent. This is merely the *philosophical* statement of the fact...” [Mill, 1869, v.1, p.23]

“In ordinary language, the OBJECT of taste is any thing, which, taken in the mouth, and tasted, as it is called, produces the peculiar SENSATION of this sense. Nor has *philosophy* as yet enabled us to state the object of taste more correctly.” [Mill, 1869, v.1, p.25]

“Hartley, Darwin, and Brown, are the only *philosophical* inquirers into Mind, at least in our own country, who seem to have been aware that [muscular sensations] fell within the province of their speculations.” [Mill, 1869, v.1, p.40] Note that, here, the Darwin in question is Erasmus, not Charles.

“The idea expressed by the term weight, appears so perfectly simple, that he is a good *metaphysician* who can trace its composition. [Mill, 1869, v.1, p.91]

“Yet, *philosophy* has ascertained, that we derive nothing from the eye whatever, but sensations of colour.” [Mill, 1869, v.1, p.95]

“Yet it is doubtful, whether *metaphysicians* have regarded CLASSIFICATION as an original power of the mind, or have allowed that what is included under that name might be resolved into simpler elements.” [Mill, 1869, v.1, p.247] Note that this concern introduces the section on classification in which Harris’ excerpt using ‘science’ is included.

Moreover, the sections of Mill's work that might have - in other author's hands - displayed the most prominent allusions to our two focal terms have hardly a reference to either. Mill closes his first volume with a discussion of belief, ratiocination, and evidence. These are just the topics where previous writers have advertised most strongly the origins of 'science' and 'philosophy' (as well as 'knowledge' and a cluster of related terms). Yet, Mill here is silent about science, and makes only one significant allusion to philosophy.<sup>28</sup> Thus, not only does Mill defy any expectations about a wholesale shift away from the authority of 'philosophy' toward that of 'science' in the first third of the nineteenth century, he also flies against the earlier expository tradition of the eighteenth century. What we observe here so far in Mill's *Analysis* is change, but not the obvious trend that might easily be assumed.

In other areas, Mill - still styling the work at hand as philosophical - appears to emulate Brown's turn toward the consideration of practice. Like Brown, he divides the study of mind into theoretical and practical departments, and the second volume of his *Analysis* closes with a prominent prospectus of the latter field, his consideration of the former being now concluded.<sup>29</sup> Here again, we see a mapping of the utility of mental philosophy - in logic, in ethics, and in education. The former two we recognize as part of the classical departments of philosophy, but education - also emphasized by Brown - is a new addition.

Between the first and the last third of the nineteenth century, we can observe a sea change in the images of science and philosophy. The image projected by Mill in his original edition of the *Analysis* is sharply altered by the editorial additions of his latter-

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<sup>28</sup> "It is remarked, with *philosophical* accuracy, by Condillac, that if our constitution had been such, as to give us, instead of a different modification of sight, a different modification of smell, with each variety of distance, extension, and figure, we should have smelt distance, extension, and figure." [Mill, 1869, v.1, p.357] Note that this sentence would sound far more natural to a present-day ear if 'philosophical' were replaced by 'scientific.' Note, too, that this and all subsequent quotations of Mill from the 1869 edition are unaltered from the first edition.

<sup>29</sup> "If...the *Theoretical*, or Expository part of the Doctrine of the Human Mind were perfected, the *Practical* (which, to be rationally founded, must be founded on the Theoretical) would still remain. This subject, it appears, might be conveniently treated in three Books [the Book of Logic, the Book of Ethics, and the Book of Education]." [Mill, 1869, v.2, p.403]

day disciples. The second, 1869, edition – with contributions from John Stuart Mill, Alexander Bain, George Grote, and Andrew Findlater – projects itself as a contribution to science rather than to philosophy. This shift is trumpeted on the first page of the new preface, written by the younger Mill. Here, a complete rhetorical reversal is enacted:

In the study of Nature, either mental or physical, the aim of the *scientific* enquirer is to diminish as much as possible the catalogue of ultimate truths... [T]he enquirer who has arrived at this result, considers himself to have made an important advance in the knowledge of nature, and to have brought *science*, in that department, a step nearer to perfection. Other accessions to *science*, however important practically, are, in a *scientific* point of view mere additions to the materials... The manner in which this *scientific* improvement takes place is by the resolution of phenomena which are special and complex into others more general and simple.” [J.S. Mill, ed., in Mill, 1869, v.1, p.v]

This comprehensive turn to the language of science is reflected throughout the later edition in the extensive footnotes of J.S. Mill, and Bain. Leaving the original 1829 text itself untouched, they systematically reconfigure the work as a scientific one by their own careful “clarifications.” Not only is the language that of modern science, largely as we recognize it, but the clarifications themselves are of a scientific nature – that is, they concentrate on experimentally-produced matters of fact. Thus, while the first generation of nineteenth century studies of mind had yet to transmute into a wholly ‘scientific’ frame of reference (or frame of allegiance, if you prefer), the second generation appears to accept this change in full. We will consider this shift again below in the explication of Bain’s usage in *The Senses and the Intellect* and *The Emotions and the Will*, but first I will turn to a counter-example evident in Sir William Hamilton’s published *Lectures*, in which the complexity of the transition is again highlighted.

#### **4.1.6 Hamilton**

If the contributions of Brown and Mill show a field of intellectual discourse with its accepted terms in partial flux, Hamilton’s reflects an ongoing conservatism – but only in one dimension. Hamilton eschews any distinction between science and philosophy, yet he also contributes a fairly radical re-conception of the scope, and designation, of the study of mental phenomena.

In Hamilton's view, philosophy – properly so-called – was entirely equivalent to the philosophy of mind. He expands on this view explicitly in the opening to his opening lecture on metaphysics. [Hamilton, 1877, p.1 ff.] In this discussion, he uses the terms 'science' and 'philosophy' interchangeably in the eighteenth century tradition, as when he begins his second lecture with the following sentiment: "In the perverse estimate which is often made of the end and objects of education, it is impossible that the Science of Mind, – Philosophy Proper, – the Queen of Sciences, as it was denominated of old, should not be degraded in common opinion from its preëminence, as the highest branch of general education." [Hamilton, 1877, p.14]<sup>30</sup> Hamilton of course abjures this estimation, instead advocating the highest position for philosophy or science of mind, not only as an intellectual pursuit but also in connection with the practical utility of the human sciences in professional and general education. [Hamilton, 1877, pp.3-5]

Hamilton is also, on most accounts, the first serious English-speaking advocate of the term "Psychology" for the study of mind. Here, unlike in his intricate re-designation of Reidian concepts (see section 3.1.6), his example has been highly influential. Hamilton's eighth lecture focuses entirely on the name and its utility. He begins by providing an etymology of the Greek origins of the term 'Psychology' and then openly asks "why use an exotic, a technical name? Why not be contented with the more popular terms, Philosophy of Mind, or Mental Philosophy, – Science of Mind or Mental Science?"

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<sup>30</sup> Note here too the use of the evocative and time-honored denomination "Queen of Sciences." This title has been variously deployed since the Middle Ages. Traditionally, in the Scholastic tradition, it was granted to theology. K.F. Gauss used it for mathematics. Other less eminent commentators have cited experimental science, physics, and art as aspirants to the title. However, in Hamilton's phrasing here, it is certainly intended to echo the famous lamentation in Kant's "Preface" to the *Critique of Pure Reason*: "There was a time when metaphysics was called the queen of all the sciences, and if the will be taken for the deed, it deserved this title of honor, on account of the preeminent importance of its object. Now, in accordance with the fashion of the age, the queen proves despised on all sides." [*First Critique*, A viii]. This suggested equation of metaphysics with science of mind by Hamilton is perhaps even more interesting than the general equation of philosophy and science, insofar as it presents a possible rationale for the disappearance of mental philosophy from the canon of twentieth-century philosophy of science: In the climate of logical positivism that pervaded English-speaking philosophy after 1900, metaphysics was effectively a banned attribution, and Hamilton's strong connection of the term with studies of the mind could be viewed as a serious strike against this domain of inquiry.

– expressions by which this department of knowledge has been usually designated by those who, in this country, have cultivated it with the most distinguished success.” [Hamilton, 1877, pp.91-92] To this rhetorical question, he provides four separate answers that militate for the introduction of the new designation: First, such a shift would parallel the Greek titles of the other significant branches of philosophy. Second, the other European languages already, according to Hamilton, employ the term and an English renunciation of it would be provincial. Third, he finds a single-word term superior to a descriptive phrase such as ‘philosophy of mind’. Fourth, the new term lends itself usefully to adjectival inflection. While we might find these justifications disputable, Hamilton’s example in regard to the employment of “psychology” as a designator has proven durable.

However, it is worth noting that a subtle shift of scope is involved in this change. In his previous lecture, Hamilton discusses the pursuit of naturalistic knowledge about the mind more broadly. Here, he specifically reserves his new term for *empirical* psychology, also known as “inductive philosophy of mind” or “phenomenology of mind.” [Hamilton, 1877, pp.86-90] Philosophy of mind, as we have seen in the preceding chapter, had not been delimited so strictly to this domain by Hamilton’s predecessors. While Hamilton is not going so far as to take a materialist position on the study of mind here (quite the reverse), he *is* attempting to distinguish between three domains, one of empirical psychology, another of “nomology of mind”, and a third of Ontology or Metaphysics (also occasionally labeled “*inferential* psychology”). Hamilton’s psychology – as he employs the term in the bulk of his work – thus excludes the elaboration of laws (of logic, aesthetics, politics, *etc.*) as well as the foundations of existence beyond phenomena (in a Kantian sense). This is a substantial circumscription of the domain of study, given the examples upon which he is building.

Thus, we see – I think – in Hamilton’s work another subtle but substantive change in how workers on the human mind viewed their task. While retaining the terminological equivalence of science and philosophy that was stable in the eighteenth century, he goes beyond even Hume in estimating the significance of studying the mind. For Hamilton, this subject is the *sole* proper subject of philosophy. He also argues for the introduction of the neologism ‘Psychology’ to indicate that domain of inquiry centrally concerned

with the mind. Further restricting the scope of his primary matter, he makes psychology especially an empirical, inductive enterprise – aimed at the examination of observable (whether material or mental) phenomena.<sup>31</sup> This reorientation of the field within the existing understood categories demonstrates a tension within the tradition, anticipating the lines along which science and philosophy would bifurcate in the latter half of the nineteenth century.

#### **4.1.7 Bain**

Alexander Bain's writings reveal an emerging new division between science and philosophy, both as a matter of explicit attention in a series of short articles and as a background assumption in his major works. While these do not entirely justify the strong claims made by Flesher [1986] for Bain-as-scientist, they do suggest a greater divergence of terminology than has previously been evident. These will emerge further in the following section, where I consider another aspect of Bain's influence – the first volume of the journal, *Mind*, which he founded in 1876.

Following (intentionally or not) on Brown's indication of the essential importance of classification (see note 24, above), Bain continually returned to this subject – specifically with regard to 'the sciences' – over the course of his career. As Shearer [1974] has examined in detail, Bain ultimately published three different scientific hierarchies, in 1843, 1849, and 1870. These hierarchies built directly on the conception of Auguste Comte, whose work Bain and J.S. Mill had begun studying (with an eye toward translation) in 1843.<sup>32</sup> The most conspicuous deviations from Comte's example in Bain's 1843 hierarchy are the inclusion of psychology as a department between biology and sociology in an ascending scale of generality and dependence among the 'abstract' sciences (putting psychology in a penultimate position), and the addition of a parallel

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<sup>31</sup> It is worth commenting here that Hamilton, whatever his exclusive commitments as professor of philosophy, was actively engaged in such empirical pursuits himself. Most conspicuously, he conducted rigorous measurement experiments on human brains in an attempt to refute the aspirant science of phrenology as forwarded by George Combe. See Madden [1985].

<sup>32</sup> The mid-nineteenth century witnessed the publication of many such hierarchies, with Comte, Whewell, Herschel, J.S. Mill, and Bain being conspicuous contributors.

tabulation of ‘concrete’ sciences.<sup>33</sup> This initial foray into organizing the common understanding of ‘science’ on Bain’s part indicates a tendency to globalize the term. His next attempt, in 1849, significantly curtailed the scope of acknowledged science, back toward something like the Comtean ‘abstract’ set only, with psychology again superadded. Interestingly, though, he here incorporates within sociology a number of the concrete elements he had previously distinguished; this set – including industrial, medical, moral, and theological pursuits – are, moreover, now termed ‘arts.’ The last, 1870, classification further truncates the scope of basic science, eliminating sociology entirely to install psychology at the pinnacle of a list of only seven elements, the others being (in ascending order) logic, mathematics, mechanics, molecular physics, chemistry, and biology. However, the concrete and practical sciences (in essentially the same array as the 1843 set) remain as associated enterprises dependent on this fundamental heptad. Thus, even in the mature Bain, we observe a tendency to encompass the full range of human activities under rubric of science. This, indeed, is a different idiom from those we have seen in Bain’s predecessors.<sup>34</sup>

In *The Senses and the Intellect* and *The Emotions and the Will*, we observe a similar tendency. Here – as in his and J.S. Mill’s editorial additions to James Mill – Bain inverts entirely the trend we saw in the elder Mill’s *Analysis*: where in the *Analysis* all was philosophy, in Bain’s volumes all is science. He begins the “Preface” to *The Senses and the Intellect* with the explicit object of giving “a full and systematic account of two principle divisions of the *science* of mind...endeavoring to present in a methodical form all the important facts and doctrines bearing upon mind, considered as a branch of

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<sup>33</sup> The latter, concrete class appears as a collation of the various elements we have seen so far suggested by Bain’s predecessors. Bain first incorporates the following: mineralogy, geology, hydrology, meteorology, botany, zoology, geography, statistics, archaeology, chronology, special history, morals, ethology, education, law, jurisprudence, legislation, political economy, grammar, philology, rhetoric, criticism, logic, metaphysics, natural theology, biblical theology, and ecclesiastical polity. Then, in a populist move even more sweeping than Reid’s, he further adds an additional set of more common employments including art, agriculture, mining, mechanical arts, animal husbandry, medicine, domestic management, sport, and civic administration. The scope covered here, including these latter ‘sciences,’ is so broad as to appear quite distinct from a present-day conception.

<sup>34</sup> It would be valuable to compare this discussion of the sciences with Bain’s 1850 article, “What is Philosophy”, to ascertain what the explicit distinction might be. Unfortunately, I have been unable to obtain a copy of this work for examination.

*science.*” [Bain, 1855, p.v; emphasis added]<sup>35</sup> Science, distinguished from art but not philosophy, also appears in this volume, and the subsequent *Emotions and the Will*, as a remarkable *outcome* of mental activity.

The same language is sustained throughout these works. Another significant early passage demonstrates, by example, the way Bain understands the field he is exploring:

As regards gravitation...Newton and his followers went no deeper than the observed movements, describing as best they might the uniformities or general rules that these movements follow. There is still, it is true, a class of less *scientific* and more fanciful spectators, who are disposed to regard gravity as the direct emanation of a mind or will. Yet even they are obliged to speak of the laws in the same way. But in regard to mental actions the practice is otherwise. There we descend for an explanation into the laws of feeling or emotion, – into the sensations and various affections that work within the animated creature. We cannot trace any uniformity in the operations of a human being by merely looking at the actions themselves, as we can in the fall of a stone or the course of a planet. It is the unseen feelings that furnish the key to the vast complication of man’s works and ways. [Bain, 1855, p.3; emphasis added]

Bain, in this introductory statement, not only recapitulates the standard pattern of deference to Newton that we have come to expect in the period, he also efficiently argues for a non-materialist conception of science that leaves room for his own pursuits. We have already seen natural and moral philosophy distinguished, by Hume and his contemporaries, as differing in complexity and method. Bain here condenses this difference down to that between material and mental phenomena. While denigrating the extension of natural scientific hypotheses into unobservable causes (with apparent reference to the follies of German Idealism), Bain ends by defending this very method as a practical necessity in the study of the human mind. This peculiarity was, for Bain, no bar to the scientific status of his chosen subject. Indeed, when he undertook an

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<sup>35</sup> Later in the same passage, as Flesher [1986] has emphasized, Bain registers his intention to “construct a Natural History.” [Bain, 1855, p.vi] The distinction between natural history and natural philosophy, before both were folded into science, is another (here, underexamined) issue in constructing the history of intellectual activity in this period.

abridgement of his two salient volumes for use in secondary schools and colleges in 1870, he published it as *Mental Science*.<sup>36</sup>

#### 4.1.8 Synopsis

In short, a survey of the deployment of the designators ‘science’ and ‘philosophy’ in eighteenth and early-to-mid-nineteenth century studies of the mind reveals a complicated situation. The stable equation of the two terms had begun to disintegrate by the time Bain’s major works appeared, but no completely definitive split had yet been established. While Bain prominently advocated a ‘scientific’ conception of the human world, his immediate predecessors maintained – even more strongly than had the eighteenth century traditions – an identification of the subject matter with philosophy rather than science. Even by the 1850’s, the understood scope of science was broad and contested. Present evidence indicates that, rather than coalescing as a distinct and circumscribed category, ‘science’ appeared on the scene in this context by simply replacing ‘philosophy’ as a synonym for inquiry. Nonetheless, there remains little question that the balance of intellectual authority had shifted to the ‘scientific’ over the ‘philosophical’ by the time of Bain’s work.

Furthermore, the identified scope of inquiry into the mind appears to be in constant flux. All the writers who I have considered attribute to this subject a great measure of importance as underlying inquiry in general, but each demarcates it differently. Hume’s ‘science of man’ – for example - eschews the physiological domain, and ventures into only a single practical application in morals (encompassing, more or less, the origin of law and politics). In their turns, Hartley, Reid, Brown, Mill, Hamilton, and Bain each situate their concerns in a distinct fashion. The conceptual distinctions differentiating these several systems are sometimes those of simplicity-complexity, sometimes specificity-generality, sometimes inductive-inferential, and so on. More work remains necessary to pin down the exact ground that mental inquiry was generally supposed to cover.

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<sup>36</sup> Interestingly, Bain here (and in the 1855 “Preface” above) hesitated to adopt Hamilton’s ‘Psychology’ as a title, although it does appear in his catalog of sciences

While some recent historical work on the end of this period (see Rylance [2000] and Dixon [2001]), has indicated in the study of mind a distinct shift from a religious standpoint to a secular one, the actual situation appears more complex. Well into the 1800's, with no exceptions, we have observed each author identifying their work with its religious merits, although to vastly differing degrees and with divergent understandings of the religion in question. The centrality of religion to the various systems is also somewhat difficult to correlate with the personal identification of the author; Hartley, a devout layman, militates most strongly for a theological perspective, while the intellectual system of the Scottish minister, Reid, can be easily divorced from religion. The most secular of all in rhetoric, James Mill, was himself an ordained minister. Neither in secularization, nor in any other single dimension, is an unambiguous trend evident that allows us to differentiate work in the mid-eighteenth century from work in the mid-nineteenth.

This section has, I hope, served to open up a valuable set of questions about the professed identity of the authors and the scientific-philosophical categories employed in their work. However, to really understand the situation that emerged from work in this tradition, we must turn to additional resources. The next section will apply a retrospective lens to these several studies of the human mind. Using the discussions active in the founding volume of the first English-language journal for mental inquiry as evidence, I will now turn to examine the fate of 'science', 'philosophy', and associated terms, in the period following the work of Hamilton and Bain. Taking this work as the endpoint of the trajectory I have already described, we will be able to assess better the impact of this intellectual tradition.

#### **4.2 Science versus philosophy in the inception of the journal, *Mind***

The foundation of the journal, *Mind*, is a convenient marker for the emergence of psychology as a recognized enterprise in the English-speaking world. Bain however, the prime mover in the establishment of the journal, conceived it – he says – as a journal of philosophy.<sup>37</sup> In the event, the journal that appeared bore the title, *Mind: A Quarterly*

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<sup>37</sup> “While in London, in summer [1874], I talked over with Croom Robertson the project of a Philosophical journal, into which he entered cordially, and consented to be editor. I

*Review of Psychology and Philosophy*.<sup>38</sup> As we will see, the demarcation and policing of this interface between science and speculative inquiry was from the outset an important and explicit issue. Nonetheless, Bain and his cohorts were at pains to make clear that they intended no ideological bias to intrude on an open dialogue on questions of the study of mind. The mission statement of the journal, appearing on its opening page and written by the editor, George Croom Robertson (though undoubtedly approved by Bain), reads as follows, in full:

MIND will be an organ for the publication of original researches, and a critical record of the progress made, in Psychology and Philosophy.

Psychology, while drawing its fundamental data from subjective consciousness will be understood in the widest sense, as covering all related lines of objective inquiry. Due prominence will be given to the physiological investigation of Nerve-structures. At the same time, Language and other natural expressions or products of mind, Insanity and all other abnormal mental phases, the Manners and Customs of Races as evincing their mental nature, mind as exhibited in Animals generally – much of what is meant by Anthropology and all that is meant by Comparative Psychology – will come within the scope of the Review.

The practical application of psychological theory to Education will receive the attention it so urgently claims at the present time.

Beyond Psychology, account will be taken of Logic, Æsthetics and Ethics, the theory of mental functions being naturally followed by the doctrine of their regulation.

For the rest, MIND will be occupied by general Philosophy. Even as a scientific journal, it cannot evade ultimate questions of the philosophical order, suggested as these are with peculiar directness by psychological inquiry. There is, also, a function truly philosophical which only the investigator of the mind is in a position to discharge, the task, namely, of collating and sifting the results of the special sciences with a view alike to insight and conduct. But MIND will, farther, expressly seek to foster

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also mentioned it to Herbert Spencer, who highly approved of it; and further I went down to Cambridge and saw the two most prominent professors of Philosophy there, Messrs. Venn and Sidgwick, who promised their co-operation. A great deal had to be done in arranging the plan and finding a publisher, as well as in corresponding with expected contributors over the country; but there were hopes of bringing out something in 1875. The ultimate resolution was to start in January 1876.” [Bain, 1904, p.327-328]

<sup>38</sup> This remained the official masthead of the journal up until volume 83 of the second series in 1974, ninety-eight years after the foundation of the enterprise. Since then, *Mind* has been dubbed instead a “Quarterly Review of Philosophy.” While the current advertisement of the journal expresses a continuity of mission with the original conception, the scope is now explicitly limited to the coverage of “epistemology, metaphysics, philosophy of language, philosophy of logic, and philosophy of mind.”

thought of bold sweep – sweep that can never be too bold, so be that it starts from a well-ascertained ground of experience, and looks to come again there to rest.

Nor, in this connection, will the History of Philosophy be overlooked: whether as it involves the critical appreciation of the systems of thought, more or less speculative, which eager minds in every age have been impelled to frame; or as it seeks to understand important thinkers in the record of their lives; or finally, as it may take note of what is being done or left undone in the present day at the intellectual centres where thought and inquiry should be most active.

MIND will include among its contributors some of the foremost workers in psychology and philosophy on the Continent and in America.

Writers will sign, and be alone responsible for, their contributions. MIND will not be the organ of any philosophical school, unless it be held the mark of a school to give prominence to psychological inquiry.

Correspondence will be printed if it communicates new facts of scientific importance or expresses *reasoned* opinions.

[Robertson, 1876a, unnumbered]

We thus see a multifaceted mission established for the new journal. Not only is its basic matter two-fold, being ‘psychological’ *and* ‘philosophical’; but it is also at once an organ and a critique: a record of subjective and objective researches, of the normal and the abnormal, the local and the foreign, the practical and the theoretical, the historical and the contemporary. In short, it will serve as a comprehensive arbiter at the head of an intellectual movement straddling the scientific-philosophical divide.<sup>39</sup> We will now see, in part, how well this aspiration was achieved.

The set of authors contributing to the first volume of *Mind* represents a powerful gathering of the thinkers actively involved in the study of the mind in the third quarter of the nineteenth century.<sup>40</sup> Substantial articles were written by such prominent thinkers as Hermann Helmholtz, Shadworth H. Hodgson, F.M. Müller, Henry Sidgwick, Herbert Spencer, John Venn, and Wilhelm Wundt. Bain himself contributed three pieces,

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<sup>39</sup> There is by 1876, clearly, such a divide. Just what it is like, we shall soon see.

<sup>40</sup> The entire first series of *Mind*, 16 volumes from 1876 to 1892 with Robertson as Editor, is a fascinating resource for the study of late nineteenth century thought and deserves more attention than I can give it here. It will be sufficient for present purposes to examine the content of the first volume, wherein the intended scope indicated by Robertson above is amply demonstrated. Some later reference to the following three volumes (up to the end of 1879) will flesh out the trends that can be established from there.

including a review of recent work by Sidgwick and a substantial portion of his own biography of James Mill (later published in its own right in 1882). Bain's handpicked editor, George Croom Robertson, professor of mind and logic at University College, London, contributed three more. Other topics covered in this inaugural volume ranged from pure logic through experiments on nervous tissue to the relationship of evolutionary theory to morality. A series of lengthy pieces – by Robertson, Sidgwick, and others – began a survey of the state of education in England and Scotland, with the first four issues containing up-to-the-moment histories of the professoriates and curricula of, respectively, Oxford, Cambridge, the University of Dublin, and University College, London.<sup>41</sup>

In addition to such longer pieces, a series of notes, reviews, reports, and correspondence assayed the current state of affairs of the field. An array of books and journals on the study of mind – broadly conceived – were critiqued, summarized, or advertised. These included work produced in Great Britain, France, Germany, and Italy. Initial experimental results in mental physiology and pathology were also incorporated, as well as summations of the careers of prominent contributors. In all, among the 578 pages of volume one of *Mind*, there appeared critical reviews of 13 books (including the recent publications of Spencer and Brentano); 24 experimental reports (covering color blindness, bifurcation of memory, sleep, epilepsy, contagious insanity, *etc.*); 21 surveys of the contents of 9 other periodicals (among them, *Giornale Napoletano di Filosofia e Lettere*, *Die Neue Zeite*, *The Journal of Speculative Philosophy*, and *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*); and 48 brief notices of new books.

However, the most interesting aspect of this first volume of *Mind* for present purposes is the recurring issue of how to conceive of science and philosophy as related fields of inquiry intersecting in the study of mind. Here, I will concentrate on a set of contributions that address these topics most clearly. We have already seen the basic formulation of a philosophy-psychology interface in Robertson's mission statement for the journal. Robertson continues and expands this depiction in some "Prefatory Words"

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<sup>41</sup> In the succeeding three volumes, the net was widened to include higher education in Scotland, Germany, France, Italy, and the United States. This review of pedagogical practice represents the fruition of a concern with education we have seen growing in the work of Reid, Brown, Mill, and Bain.

that open the first issue of this venture that he describes as “devoted to Psychology *and* Philosophy.” [Robertson, 1876a, p.1; emphasis added]. Robertson’s example is quickly taken up by other contributors, establishing a pattern of attention to the issue that was characteristic of *Mind*’s early days. Shadworth H. Hodgson offers a three-part series of articles on the topic of science and philosophy that sets up a basic distinction between the two, continues to focus specifically on psychology, and concludes with a consideration of ontology.<sup>42</sup> From another perspective, John Alexander Stewart offers a methodological interpretation of the significance of psychology.<sup>43</sup> Together, these several articles indicate the understanding the community of *Mind* had of how science and philosophy differed, and the position of psychology in this respect.

Robertson’s preface is very much a manifesto for the journal and its subject, and indicates an interesting self-consciousness on the part of British students of the mind with respect to their emerging discipline. Among the topics he addresses are the professionalization of psychology, the role of publication in this process, the role of philosophy versus that of science, and the role of theory versus that of practice. He begins by expressing concern over the lack of discipline in past British inquiry into the mind, noting the same basic set of figures we already discussed in chapter 3.<sup>44</sup> In this respect, says Robertson, the field of study has likely been hampered relative to other

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<sup>42</sup> Shadworth H. Hodgson [1832-1912] was a prominent figure in late nineteenth century British philosophical circles, being co-founder and first President of the Aristotelian Society and author of several books on metaphysics and the mind. His work, synthesizing German and British antecedents, drew strongly on that of James Ferrier, and he contributed the notion (if not the term) of ‘epiphenomenalism’ to philosophy. Some have taken his work as presaging that of Husserl. I will try to show that he deserves more contemporary attention in what follows, especially as a kindred spirit to Wilfrid Sellars.

<sup>43</sup> John Alexander Stewart [1846-1933] was an Oxford professor of philosophy and notable commentator on Plato and Aristotle.

<sup>44</sup> “Long as English inquiry has been turned on the things of mind, it has, until quite recently, been distinguished from the philosophical thought of other countries by what might 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, 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... If their work had been academic, it would probably have been much more sustained... *The informality of their thought has undoubtedly prevented philosophy from obtaining the scientific consideration that it holds elsewhere*” [Robertson, 1876a, p.1; emphasis added].

nations where such pursuits are more organized. Britain could rectify this issue by encouraging the academic study of the philosophy of mind.<sup>45</sup> Robertson phrases this notion in such a way as to indicate one specific relationship between science and philosophy – that there can be a ‘scientific’ philosophy. Furthermore, Robertson identifies this as a desideratum, and one that can be realized through professional-academic organization. The lack of such organization has put study of the mind in a backward position relative to other special disciplines, so that it has fewer workers, fewer positive results, and less of a claim to scientific legitimacy.<sup>46</sup> On Robertson’s view, the establishment of a journal has the potential to encourage professionalization and change the public image of the subject. Fortunately, he says, the time is ripe for such a shift. His assessment of the present situation in Britain is that the study of the mind is coming into full flower, emerging as a conduit *between* science and philosophy. This special role of psychology puts it in a position to effect a new unity of knowledge.<sup>47</sup>

While this philosophical mission is a fundamental benefit of psychological professionalization, more directly practical concerns must be recognized as well. First, we must fulfill philosophy’s need for the results of scientific work; the journal will sponsor the dissemination of these as a sort of fuel for the progress of philosophy as

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<sup>46</sup> “[O]f 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 not commend itself either to those who are in the habit of declaring with great confidence that their can be no science in such matters, or to those who would only play with them now and again.” [Robertson, 1876a, p.2]

<sup>47</sup> “It certainly can no longer be said, even by candid friends at home, that English inquirers and thinkers are not active in every field of philosophical effort, and it has been said abroad that, however it be with physical science, at least in psychology and philosophy the countrymen of Locke are leading the van... The need is everywhere felt, as where in Germany some of the best philosophical work is being done by men like Helmholtz and Wundt who began their career as physiologists, but it has nowhere been more signally manifested than in England. *The unity that belonged to human knowledge under the name of Philosophy, before the special sciences were, is now, when the sciences stand fast, again sought for under no other name than Philosophy.*” [Robertson, 1876a, p.2; emphasis added]

umbrella-discipline.<sup>48</sup> A secondary outcome of this sustained coupling of speculation and experiment in the same publication will be that psychology will be able to resolve its legitimacy claims.<sup>49</sup> Further, this will have a positive impact on national education, which can serve as a testing ground for, and beneficiary of, new theory.<sup>50</sup> Yet a final result of the journal's publication will be a tendency towards greater unity in the domain of inquiry, although Robertson is of two minds on this.<sup>51</sup> On the one hand, this will be to

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<sup>48</sup> "The projectors of the new journal had little doubt as to the form it should assume. However deeply impressed with the need for an organ that should leave the freest scope to general philosophical thinking, they were not prepared to be responsible for a publication that would display only or chiefly the speculative differences of individual thinkers...[O]ther work, still more pressing, stood waiting to be done. Philosophical work in England has for the most part been based on psychology, when not wholly merged in it; and psychology, pursued as a positive science, ought to yield a continuous harvest of results, coherent among themselves and standing in relation with other results garnered in the scientific field." [Robertson, 1876a, p.3]

<sup>49</sup> "[I]f there were a journal that set itself to record all the 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 pass in time 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 into the scientific standing of psychology.*" [Robertson, 1876a, p.3; emphasis added] Robertson leaves little doubt as to the positive outcome of this test.

<sup>50</sup> "Considering how much attention has been given to psychology in England, it is somewhat remarkable that so little reference has been made to Education, whether in view of the immense practical importance of the subject, or as a means of testing the truth of psychological theory. The more scientific doctrine of mind which, we are apt to boast, has always been sought after in England, has borne little educational fruit, compared with the speculative theories of mind that have grown in rank profusion on German soil." [Robertson, 1876a, p.4] Note how the superiority of scientific British thought over the speculative German is subtly introduced here; this positivist orientation is characteristic, although still without the full-fledged rejection of metaphysics that will emerge in the following decades.

<sup>51</sup> "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. Strife, no doubt, is wasteful, and cannot be too quickly allayed; but it is well there should be no mistake, so far as this particular charge against philosophy is concerned. The kind of agreement that is possible in the special branches

the advantage of philosophy, in shoring up its reputation versus that of science; the relative impracticality and wastefulness of philosophical disagreement is a point of particular concern.<sup>52</sup> Psychology, as it matures, will form a “common ground” – a unified paradigm – for the resolution of such philosophical issues. Nonetheless, the fundamental generality of philosophy will – says Robertson – resist this centripetal tendency. Special scientific subjects have different scopes and different success criteria than does philosophy.<sup>53</sup> Above all, Robertson’s depiction emphasizes the locality, historicity, and social engagements of the study of mind. He demonstrates a simultaneous consciousness of the work itself, its position within a set of human activities, and the relationship between these.

Hodgson takes up the specific issue of distinctions between science and philosophy in even more detail. The first of his three articles on the subject voices the opinion that a proper understanding of the project of philosophy is impossible without examining its interface with science.<sup>54</sup> He is careful here to identify the problem as one of ‘distinction’ over ‘definition’; sensitive to the perils of demarcation, he suggests that

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of physical science, is not possible in the region of general philosophy. How should it be possible, when the conditions of verification are so utterly different? It is almost absurd to think of it even as desirable. Physical science itself, as it becomes more general, grows to be contested: neither the word “science” nor the word “physical” has virtue to charm away the possibilities of dissension that generality enfolds... To bring philosophical inquiries, as far as possible, to their psychological base, seems the most that can be done to procure agreement in a sphere of thought where there must always be the widest scope for difference of opinion.” [Robertson, 1876a, p.5]

<sup>52</sup> Unity versus diversity of opinion here becomes, for the first time, a differential authority claim for science over philosophy. This distinction is retained 100 years later by Kuhn.

<sup>53</sup> Here, Robertson clearly anticipates the Sellarsian notion of philosophy as umbrella-discipline.

<sup>54</sup> “Distinctions, not Definitions – such is and must be the primary basis of all Philosophy... It is different with what are called Systems of Philosophy. There the work of distinction is supposed complete, and you begin with applying them to the phenomena; your country is already mapped, and you proceed to measure its divisions. Systems of philosophy which have not thoroughly done the preliminary work of distinction cannot be permanent... System then or no system, the first thing to be done and done thoroughly in philosophy is to distinguish, – to distinguish in order to know what to define and what sort of notions to employ in defining it; and *the first distinction to be established, and one which is a pre-requisite of all the rest, is between Philosophy and Science.*” [Hodgson, 1876a, pp.67-68; emphasis added]

mapping unknown intellectual territory requires a tentative survey before precise divisions are drawn. He then proceeds with such a survey, noting first that the two domains of science and philosophy are inextricably connected.<sup>55</sup> What is less clear, according to Hodgson, is the character of this connection. He proceeds to articulate four possibilities, which he denominates as: (1) “English Positivism,” with philosophy as “preliminary guesses at truth which men have made before striking into the true methods of discovery”; (2) “Comtean Positivism,” which regards philosophy as treating the “co-ordination and systematization of all” the sciences; (3) the “Hegelian view” that philosophy precedes science as “the discovery of Absolute Existence”; and (4) the view of Lewes, which adds to the Hegelian mission the “negative task” of “keeping out of science all ontological entities” [Hodgson, 1876a, pp.68-69]. His own view is yet a fifth possibility, in which “[p]hilosophy is more than the co-ordination and systematization of the second head, and more than the negative function of the fourth head; it has a positive content and a positive method of its own, and yet a content and a method which are in no sense ontological or transcendent” [Hodgson, 1876a, p.69]. Thus, Hodgson articulates a basic position for philosophy in terms of existing systems. Next, we need to consider what the terrain he has chosen looks like.

Taking up again Robertson’s expressed concern with diversity of opinion in philosophy, Hodgson derides the view that this is a result of indiscipline.<sup>56</sup> He then proceeds to sketch the history of philosophy in stages. The first stage he characterizes as exploratory, geared to the speculative extension of knowledge.<sup>57</sup> The next, he says, is

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<sup>55</sup> “This distinction cannot be a total separation; an unscientific philosophy would be no philosophy at all. But the distinction may be drawn in many ways.” [Hodgson, 1876a, p.68]

<sup>56</sup> “[W]hat meets us most prominently when we first turn our attention to philosophical subjects is the *apparent absence of a philosophy, the obvious presence of a multitude of competing systems*. What is the explanation of these two facts? The readiest explanation is offered by the first of the views enumerated above; the systems are present because undisciplined minds have abounded, the philosophy is absent because it is non-existent. But on the view which I am about to maintain, this easy explanation of the facts cannot be the true one.” [Hodgson, 1876a, p.69; emphasis added]

<sup>57</sup> “Philosophy, then [*i.e.*, originally], was conceived as a further search, a pioneering expedition into realms as yet unknown, in order to bring them under laws of the same kind as those which constituted the knowledge already discovered.” [Hodgson, 1876a, p.71]

that in which philosophy becomes an umbrella over, and clearing-house for, the special disciplines.<sup>58</sup> The original investigatory task is coupled with this unifying one, the two forming together the mission of philosophy. Indeed the latter is, properly seen, an extension of the former one, since it constitutes an exploration of the dynamically changing human part of the world. Philosophy provides, for science as for everything else, what Hodgson calls an ‘ultimate subjective analysis’ – a depiction of what Sellars would later nominate the ‘manifest image’ of the world.<sup>59</sup>

The various sciences all relate to this central ground of philosophy, but in identifiably different ways. The distinction between the physical-mathematical sciences and philosophy can be encapsulated as one of objectivity versus subjectivity, but this does not hold for the sciences of humanity.<sup>60</sup> These latter, therefore, are sometimes conflated with philosophy. Hodgson suggests instead a more sophisticated division. Both the natural and moral sciences, he says, depend on philosophy for an ultimate ground, which is in some sense an ontological one.<sup>61</sup> To understand what Hodgson

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<sup>58</sup> “[T]he distinct scope of philosophy takes, as it were, a second step towards its manifestation... Philosophy appears in this second stage of its life, so to speak, as taking the results acquired by each of the special sciences, and endeavoring to frame hypotheses which should unite them into a single system, and make them serve as a guide suggestive of new hypotheses.” [Hodgson, 1876a, p.72]

<sup>59</sup> “[H]ere I must content myself with indicating, and cannot pretend to demonstrate, the general nature of the analysis which these notions [*i.e.*, the ultimate ones of science] receive in philosophy. That analysis is a final one, in the sense that there is no further conceivable limit the removal of which would throw open another field, as the removal of the objective limit unbarred the entry into the field of subjectivity. The analysis is also an analysis of the *nature* of the things analysed, not an account of how they arise or what are their antecedents. Ultimate subjective analysis of the notions which to science are themselves ultimate, – such is the answer which I have to give to the question, What are the features which distinguish philosophy from science.” [Hodgson, 1876a, p.78]

<sup>60</sup> “Up to this point...we have been occupied with the relation of philosophy to one class of sciences only, the physical and mathematical. When we come to the other classes...a similar conclusion will be forced upon us...because in these classes of sciences, the Moral and the Logical, the ultimate notions which are their distinguishing and characteristic marks are already subjective; for which reason it is that these sciences are most usually treated as forming a part of philosophy as distinguished from science.” [Hodgson, 1876a, p.78]

<sup>61</sup> “The several sciences then, in every case, yield us notions, their ultimate bases, which are susceptible of a further subjective analysis, whether these notions are themselves objective as in the physical and mathematical sciences, subjective as in the practical, or

intends here, we must attend to his further development regarding the positions of psychology and ontology in this schema.

Hodgson shifts the discussion to psychology in the second of his three connected articles. He begins by noting an apparent, but deceptive, redundancy in the projects of philosophy and psychology.<sup>62</sup> The similarity of the two in addressing subjective matter leads to their confusion, but psychology – for Hodgson – is a science, strictly speaking, while philosophy (however scientific) is not. For a start, psychology restricts itself to the consideration of observables and their causal connections while philosophy does not.<sup>63</sup> Yet this might suggest to us that philosophy is subsidiary to psychology, serving only as its theoretical ground, and making psychology a new, and sole, sovereign over the other objective disciplines. Hodgson objects to this position too, on two accounts. His first contravention is historical – since philosophy preceded the birth of psychology, it cannot

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both at once as in logic. But besides these ultimate notions of the several sciences, there is yet one notion to be mentioned, a notion not peculiar to any one science, but common to all, and involved in the particular ultimate notions of each. This notion is that of Existence... It clearly belongs to philosophy; first, because the notion of existence is more general and abstract than any of the ultimate notions of the physical or mathematical sciences; and secondly, because subjective existence, a notion which emerges first in philosophy, is an included part of the general notion which embraces existence both subjective and objective.” [Hodgson, 1876a, pp.79-80]

<sup>62</sup> “[T]here has been an important omission in my enumeration of the sciences which run up into philosophy. I have omitted all mention of the science of Psychology. This omission I am about to rectify. Psychology has all states of consciousness for its object-matter; and so far it has precisely the same object-matter as that attributed here to philosophy. Now psychology is a science... It would seem then that, by simply adding the science of psychology to the list of the other sciences, we cover the same ground and perform the same service as we should do by superposing philosophy on the sciences, as something generically different from them. One or the other appears superfluous.” [Hodgson, 1876b, p.223]

<sup>63</sup> “Psychology...in seeking the conditions *existendi* of subjective states, seeks them in the laws or in the nature of substances... Psychology passes in this way beyond the field of mere subjective-objective analysis, and envisages the particular relations of dependence which particular portions of the subjective aspect have to particular portions of the objective. And it is therefore not permitted, like philosophy, to abstract from the substrate or agent which has the states of consciousness; for it is only in and by such a substance or agent that the causal nexus in its sequences and the dependence in its co-existences can be accounted for.” [Hodgson, 1876b, p.224]

be regarded as a part of the project thereof.<sup>64</sup> Hodgson finds a second issue even more fundamental: the reference-frames of the two are incongruent.<sup>65</sup> While psychology always relates its results to the organism, philosophy relates to the world at large. That is, while psychology is confined within the special subject-matter of mental agents, philosophy pursues the broader question of ‘how things hang together.’ The upshot of this difference is that psychology, unlike philosophy, is able to depend on a subjective-objective distinction.<sup>66</sup>

The otherwise intimate connections between the two suggest a special relationship. Indeed, Hodgson finds, in the problem of properly situating psychological work with respect to philosophical, the central issue of modern philosophy.<sup>67</sup> The problem is how to maintain the interface between the two enterprises for the mutual benefit of both. Hodgson’s solution is, first, to attend closely to the set of distinct orientations already described – as simultaneously ultimate, subjective, and analytic, philosophy covers a territory different from any other intellectual pursuit.<sup>68</sup> Nonetheless,

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<sup>64</sup> “May not philosophy, then, be regarded as a part, the analytical part, of a larger whole, psychology? There are two main reasons against so regarding it. The first is drawn from another application of the remark above made: to do so would involve an inversion of the logical and historical relations between the two.” [Hodgson, 1876b, p.225]

<sup>65</sup> “The analysis of states of consciousness as given in philosophy takes those states in connection with their objective aspects; these objective aspects it is which give us the states to be analysed; but in psychology it is in reference to their conditions in the organism...[I]n philosophy we look for features which reproduce the world at large, in psychology for features which we can connect, as dependents, with qualities or properties of the conscious organism, or other substrate of consciousness; disconnecting them from their objective aspects in the world of existences, and thus assuming the *separability* of the subjective and objective aspects.” [Hodgson, 1876b, p.225]

<sup>66</sup> *Pace* Quine.

<sup>67</sup> “Sooner or later an exclusive philosophy is wrecked on the rocks of science; and an exclusive psychology on the rocks of philosophy. To discover a *modus vivendi* between the two principles, then, and thus to form a single philosophical whole, with its two doctrines, philosophical and psychological, contra-distinguished and yet combined, so that each may illumine, control, and support the other – this has been and is the problem of philosophy from Kant’s time to ours.” [Hodgson, 1876b, p.232]

<sup>68</sup> “[W]e may define Philosophy, in contradistinction to Psychological Science, as the ultimate analysis of states of consciousness in conjunction with their objective aspects, abstracting from their conditions in the organism; and in contradistinction to Science in general, as the subjective analysis of the ultimate notions of the Sciences. In both alike it

the intrusion of psychology into philosophical concerns makes the subjective-objective boundary especially problematic.

Hodgson's final consideration of ontology appears as an answer to this concern. Ontology is that department of philosophy that he identifies as concerned with, among other things, the contrast between subjective and objective realities.<sup>69</sup> As a transcendent enterprise, Hodgson is entirely skeptical of ontology, yet he retains a place for the questions it asks within a naturalized philosophy. We have already seen Hodgson's identification of the proper matter of philosophy. Here, he emphasizes that it is essentially a reflective method, and one that is characteristically broad in scope.<sup>70</sup> Within this horizon, it can be divided into analytic and constructive parts, with the former situated in an objective frame and the latter in a bimodal (subjective-objective) one.<sup>71</sup>

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has the three characteristics of being ultimate, subjective, and analytic." [Hodgson, 1876b, p.235]

<sup>69</sup> "Is it possible to transcend the distinction between the subjective and objective aspects, resolving them into something which is neither of them actually, and yet which is both of them potentially? Or again, Is it possible to exhibit the genesis of these two aspects if not from a common source, yet of either of them from the other? Or again, Can we hope to assign a reason why there should be consciousness and existence at all, or why there should be consciousness and existence only?... These are statements of what is properly and strictly the problem of Ontology." [Hodgson, 1876c, p.352]

<sup>70</sup> "The facts of Reflection, as I contend, make the method of philosophy what it is, and inevitably render its object-matter larger than the object-matter of science. Of course I do not deny that reflection enters into the special sciences and into psychology; they could hardly have been constituted without it... But philosophy elevates this common thread of reflection into a *method*; and it is its method founded on reflection that at once distinguishes philosophy from the sciences and gives it a larger field." [Hodgson, 1876c, p.359]

<sup>71</sup> "We must...distinguish two legitimate branches of philosophy, the analytic and the constructive. But the analytic branch has already been provided with a name; it is that which I at least have always spoken of by the name of METAPHYSIC. The constructive branch may remain at present undesignated... All I say is, that theoretically a legitimate place is open for it in the whole of philosophy; that philosophy has such a branch, clearly distinguishable from Science on the one side and Metaphysic on the other. And we can see already, in a very general way, what sort of a content it will have. It will consist in the combination of an hypothetical psychology with Metaphysic. It will be hypothetical psychology, psychology carried up into more general regions, because it can only advance by assuming consciousness to be separable from its objects and conditioned by its organism, whatever that organism may be. It cannot, like the analytic branch, *begin* with the objective aspect, but must begin with the subjective as the only one which is known to it." [Hodgson, 1876c, p.360]

That is, the analytic – or metaphysical – philosophy has the task of assessing things, including the matter of the sciences, with a view toward establishing objective truth. Constructive philosophy, on the other hand, abstracts from subjective psychological phenomena to provide not truth as much as an equilibrium along the objective-subjective, or analytic-synthetic, interface. In this goal, it is more modest than the classical enterprise of ontology, for it seeks not to unify the two domains but rather to maintain a perspective that incorporates both on equal terms.<sup>72</sup> It is here that we find a ground for the pursuit of normative human questions, which is the real substantive concern of philosophy.<sup>73</sup> These philosophical considerations, in which actuality is combined with potentiality (the indicative with the subjunctive), rely for their solution on the extension of the known into the unknown.<sup>74</sup>

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<sup>72</sup> “The constructive branch of philosophy is accordingly to be regarded as a philosophized psychology, or the return of Metaphysic upon psychology. Yet the constructive branch is not a higher branch of philosophy than the analytic. This Ontology professed to be. But it is clear that, however large and sweeping we may suppose the constructive branch to be, as it has now been sketched, still it is and must always be impossible for it to transcend the ultimate distinction of subjective and objective aspects, or to resolve these into a higher unity; for this would overpass the very limits, to abolish the very distinction, to the establishment of which it owes its own existence as a branch of philosophy.” [Hodgson, 1876c, p.361] There is a strong suggestion, here, of the stereoscopic combination of scientific (objective) and manifest (subjective) images that Sellars later proposed as a reconciliation of science with philosophy.

<sup>73</sup> “Science has its existence and development assured to it by the various utilities which it procures, as well as by the satisfaction which it affords to the deep-rooted passion for pure knowledge. Philosophy has this latter guarantee in common with science, but the utilities which it procures are not so obviously and inevitably manifest. They are, nevertheless, equally real and equally necessary, that is to say, depend solely on philosophy as much as the others depend solely on science. They belong to the moral more than to the physical world. All the moral sciences, the sciences of Life and Manners, depend upon philosophical analysis in the last resort; the philosophies of Religion, of Morals, of History, of Law, of Æsthetics, seek the definitions, the divisions, and sub-divisions, of their object-matter in the distinctions which general subjective analysis alone supplies.” [Hodgson, 1876c, p.361]

<sup>74</sup> “The problems of the constructive branch of philosophy suppose the solutions of some at least of the problems of the analytic branch. This analytic branch, then, which I call Metaphysic, has the key, *if there be a key*, to the questions which concern that larger imagined whole of which the actual world, as science discovers it, is a part, the sea of possibility out of which the island of actuality rises.” [Hodgson, 1876c, p.362; emphasis in original]

Hodgson's work thus provides a comprehensive model of the interrelationships, and individual necessity, of an array of intellectual enterprises. He formalizes many of the concerns that we have seen lingering in the study of mind since the eighteenth century, as the earlier unified truth-complex came into question. Note too that his conception is entirely secularized and naturalized, but that it need not fall back onto single-minded materialism or positivism. As such, Hodgson's proposals represent a significant advance over the treatment previously available in British mental science/philosophy.<sup>75</sup> A great part of this advance is bound up with his intermediate positioning of psychology as unique conduit between philosophy and the several sciences, anticipating the trajectory of Continental phenomenology from Husserl to Merleau-Ponty and beyond.

Likewise, J.A. Stewart's article, "Psychology – A Science or a Method?," recommends that we attend closely to the proper intellectual locus for psychology. His primary concern is to reverse the observed trend of psychology toward a materialist basis that he pinpointed as stemming from emulation of the natural sciences.<sup>76</sup> The science (if it be one) of the mind shows itself inadequate to the task of producing a systematic classification of lived experience in the same sense as other specialist enterprises have systematized their matter.<sup>77</sup> While this might indicate a degree of inferiority for

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<sup>75</sup> They are too, I think, as sophisticated as the treatment that the same topic currently receives in most philosophical circles.

<sup>76</sup> "The modern psychologist is profoundly dissatisfied with his subject; the exact and the classificatory sciences, by the brilliance of their methods and results, fill him with envy; he is painfully conscious that mental phenomena are not definite enough to be the objects of a science; he must therefore connect them with other phenomena which are. Hence the "Physiological Psychology" of our day. But surely this is not psychology, or the study of experience, but physiology." [Stewart, 1876, p.445]

<sup>77</sup> "At first sight it may appear that the objects of mental science may be classified; but the classification of one's own experiences is not one which bears any real resemblance to a classification of organs or organisms revealing genealogical connections, and thus opening up a history of development... The genealogies made out by comparative psychology strike us as extremely unsatisfactory... It is not a science in the same sense in which comparative philology, for instance, is a science. Here the results are not only numerous, but as definite as those of any other classificatory science; and moreover the comparative philologist has certain principles – *e.g.*, Grimm's law – derived from his comparative studies, which enable him to proceed deductively... But our knowledge of the laws of mental association was not derived from the comparative study of mind, but

psychology, Stewart suggests that this is not a failure of the enterprise, but rather a failure to understand it. It is true, he assents, that the subjectivity of mental phenomena precludes them from full-fledged scientific status, and has resulted in a retreat from real psychology to physiology.<sup>78</sup> But this is no solution.

Undeterred by the possible devaluation in status that might ensue from such a shift, Stewart instead recommends psychology as a non-scientific *method* underwriting the analytic domain. That is, on the one hand, he follows Hume and the post-Humean traditions in claiming for the study of mind a controlling and central role in philosophy.<sup>79</sup> On another, he mirrors Hodgson's concern with preserving a domain for philosophy outside of science. While the earlier period could happily ignore this issue, the divergence of the scientific and philosophical had – by the time Hodgson and Stewart wrote – become sufficient for battles over intellectual authority to emerge. Hodgson found a solution in demarcating psychology within the scientific domain and then transporting it into philosophy as part of a subjective normative project. Stewart instead positions psychology as intrinsically philosophical, and then asserts the dependence of the scientific (among other cultural domains) on it. For him, psychology is definitively a method rather than a subject. It consists in a critical attitude of introspection, and as such enters into all departments of human activity.<sup>80</sup> These dissimilar paths lead Hodgson and

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from the introspection of our own consciousness. They were formulated long before the days of comparative psychology.” [Stewart, 1876, p.446]

<sup>78</sup> “Because there can be no science of subjective experience, they [*i.e.*, psychologists] show a tendency to ignore it, and to stamp introspection, as compared with physiology, as a waste of time.” [Stewart, 1876, p.446]

<sup>79</sup> “Locke, Berkeley and Hume supplied what we may call critical prolegomena to the Logic of our day. They showed once for all that we must use our senses; that we must acquiesce in the order of sensible phenomena; that correct reasoning is the exact mental reproduction of this order; and that we must not try to explain particular connections, or render them plausible to ourselves by postulating general propositions or a metaphysical bond.” [Stewart, 1876, p.449]

<sup>80</sup> “Now, as the physiology of the nervous system is obviously not the study of Mind, what becomes of the *science* of Psychology?...Psychology..., if we retain the word, is a *critique*, a Method, a certain thoughtful attitude in science, morals, and literature. It is the critical examination of my own adult opinions, desires and tastes in relation to present objects. *Culturgeschichte* leads me away from this contemplation of myself. No amount of information respecting the evolution of belief or sentiment, and no amount of mental

Stewart to a common outcome – the preservation of a role for philosophy in the face of encroachment by science, with psychology as the contested ground.

If the two approaches differ, it is perhaps most centrally because of, first, Hodgson and Stewart’s respective antagonists and, second, their respective attitudes to science. Hodgson’s *bête noire* is an overreaching ontology, which he proposes to replace with psychology properly construed. Stewart’s is, instead, the Germanic *Culturgeschichte* project stemming from the work of Hegel. Further, Hodgson cedes a rather larger amount of presumed authority to science, while Stewart deflates the notion that a subject, to be laudable, must be scientific. Neither psychology nor the competing ‘scientific history of culture’ (for that is what *Culturgeschichte* was intended as) require, in his eyes, affirmation as sciences to be vital enterprises (the former even more so than the latter).<sup>81</sup>

As a whole, then, the content of *Mind* highlights the contested ground upon which science and philosophy were diverging. The dimensions of theory versus practice, general versus specific, subjective versus objective, and univocality versus dialogue have emerged from the nineteenth century study of mind to take part in the classification of intellectual activity as either scientific or philosophical. *Mind* itself appears as a boundary-object in this contest, delineating and modulating the issue at hand. Its central position as the sole journal dedicated to the confluence of philosophy and psychology, with that latter field itself identified as the linchpin of human intellectual activity, made it a powerful resource for sculpting the identities of these various pursuits in the period following the efflorescence of the Associationist and Common Sense traditions.

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physiology can ever take the place of acquaintance with my own real opinions and desires. Modern works on mental science, with very few exceptions, forget this.” [Stewart, 1876, pp.450-451; emphasis added, except for italicized German in original]

<sup>81</sup> “The laws extracted from *Culturgeschichte* constitute, perhaps, a Philosophy of History of Civilisation – an extremely wide subject – too wide to be called Psychology, we think, and too vague to rank as a science. The growth of religious, moral and scientific ideas is certainly an important and interesting study. But it is not a science because it is interesting, nor is it practically so important as the thoughtful introspection of our on common experience which can be carried out very well without its aid.” [Stewart, 1876, p.450]