# Psychology, Epistemology, and the Problem of the External World: Russell and Before<sup>\*</sup> Gary Hatfield

The epistemology and metaphysics of perception were central topics in early analytic philosophy. These topics are best known through the manifold discussions of sense data, sensibilia, and sensory qualities during the early decades of the twentieth century, which continued into the second half of the century (as in Swartz 1965). In connection with the status of sense data, epistemological questions arose concerning the fallibility and directness of perception. Taking the case of vision, which was primary, these questions concerned whether we are directly acquainted with the objects of vision – whatever they may be – or instead apprehend an extra-mental world through the mediation of sensations or sense data, as in a representative theory of perception. They also concerned the nature of the mental act through which we know perceptual objects. A run through the pages of *Mind*, the *Proceedings of the Aristotelian Society*, and *Journal of Philosophy* from 1900 to 1920 reveals that perceptual acts and their objects were central concerns of anglophone philosophy, engaging Moore and Russell, as well as other noted figures including Samuel Alexander (1909–10), George Dawes Hicks (1912), and A. O. Lovejoy (1913).

In a recent study, Omar Nasim (2008) has enriched the context for understanding these discussions by examining an interchange that he calls "The Controversy," which was initiated by the Cambridge psychologist–philosopher G. F. Stout. In 1904, Stout published "Primary and Secondary Qualities" in *Proceedings of the Aristotelian Society*. Subsequent discussions by Dawes Hicks, Alexander, and T. P. Nunn (1909–10) were not

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limited to epistemological concerns regarding knowledge of external objects (although these were present). They examined the immediate object of perception and asked whether secondary qualities are mere subjective experiences or are, in one sense or another, qualities of physical objects. As to the mental acts by which objects and qualities are perceived, all agreed in distinguishing the act of sensing from the thing sensed, although they disagreed on how and when this distinction comes to self-consciousness (Dawes Hicks, 1907–08) and over its ontological implications. Indeed, the distinction between act and object (or content) allowed for a variety of metaphysical claims about the nature of the immediate object. Stout agreed with Alexius Meinong in classifying that object as a mental existent, distinct from the act by which it is apprehended. Others took the immediate object to be a mind-distinct sense datum (Moore and Russell at various times), and others (such as Alexander) held that the mental act of sensing is directed upon ordinary physical things without mediation.

Nasim seeks to widen the context for understanding Russell's "constructive" approach to bodies in the external world. In particular, he would reduce the importance of British Empiricism (from Locke through Mill) for Russell's project of constructing the external world from sense data and give greater attention to the Austrian philosophers Franz Brentano and Meinong, in part mediated by Stout. The latter authors discussed the relation between the act of sensing and its object or content, a relation that was central to the Controversy and was taken up by Russell himself. Nasim plausibly relates discussions of this relation to the reception of Brentano and Meinong in British thought at the turn of the century, although he understates the role of James Ward in this reception and bypasses discussions of the relation in earlier British figures, such as Hamilton and Mill.

Nasim's book appears in the same series as the present work. The series encourages history of analytic philosophy that looks deeply and broadly into the philosophical context of well-known figures such as Moore and Russell while also revealing the importance of lesser known figures and of larger frameworks of thought. In this spirit, I aim to broaden again, beyond the Controversy, the context for understanding Russell's middle period (after 1911), and particularly his appreciation of the relevance of psychology for the theory of knowledge. Russell wrote in 1914 that "the epistemological order of deduction includes both logical and psychological considerations" (1914b [1992, 50]). Indeed, the notion of what is "psychologically derivative" played a crucial role in his epistemological analysis (1914c, 69–70). His epistemological discussions engage psychological factors in the perception of external objects that had been closely examined in the nineteenth century, among other places in J. S. Mill's response to William Hamilton's conception of knowledge of the external world. These considerations came to Russell in various ways, including his contact with British Empiricism (Mill, with Berkeley and Hume as background), his engagement with Austrian philosophy, his close acquaintance with the philosophy and psychology of William James, and his exposure to the Controversy and to contemporary British writings concerning the problem of the external world. The latter writings, which precede and subsume the Controversy, provide a crucial context within which natural scientific psychology came to be seen as distinct from epistemology and yet as relevant to its concerns.

In widening the context for understanding Russell, I survey aspects of the history of philosophy in relation to psychology in the later nineteenth century, especially in connection with the problem of the external world as found in British philosophy.

## Historical Accounts of Philosophy and Psychology in Opposition

From the middle decades of the twentieth century, two complementary stories have described the history of psychology in relation to philosophy. Both tell of a separation of psychology from philosophy that was initiated in the latter decades of the nineteenth century and completed in the first decades of the twentieth. In each story, philosophy and psychology took on their modern identities by establishing distinct methods and problems and by enforcing strict disciplinary boundaries that entailed the mutual irrelevance of these fields to one another.

The story for psychology was set down by E. G. Boring (1929). Although recent scholarship variously challenges Boring's work, the overall shape of his picture has exhibited remarkable staying power (e.g., as in Kusch 1995). As Boring tells it, scientific, experimental psychology emerges from philosophical discussion of mental faculties and phenomena when methods from physics and sensory physiology are brought to bear. He locates the "founding of experimental psychology" in the psychophysics and sensory physiology of Fechner, Helmholtz, and Wundt. Accordingly, Brentano and Meinong, as well as Ward and Stout, are continuers of a philosophical tradition that influenced but was not a part of "real" psychology.

In Boring's story, "real psychology" is experimental psychology. In fact, historical study (O'Donnell 1979) suggests that Boring originally composed his book in order to consolidate the discipline of psychology as experimental psychology, in opposition to encroachments from applied branches, such as clinical or testing psychology, and with full separation from philosophy. In his view, no one really had been doing psychology until

experimental techniques from physics and sensory physiology were applied to questions about sense perception and cognition that had been raised by philosophers, who could not address them adequately from their armchairs. The experimentalists rose from the armchair and entered the laboratory, thereby creating psychology as it must be: an experimental science. As it happens, academic psychology today is largely defined as experimental psychology (with clinical and applied branches). Boring's 1929 history was victor's history before the fact, or to facilitate the fact.

In the history of philosophy, Passmore (1957) has characterized general trends in late nineteenth and early twentieth century philosophy. As he sees it, in the second half of the nineteenth century, philosophers focused on the "theory of inference" (1957, 174). They were skeptical of formal logic and rather viewed logic as a discipline that should examine "the human activity of inferring," that is, the mental processes by which thinkers come to new cognitive results. Passmore (1957, Chs. 1, 7) associates this attitude with Mill, Bradley, Bosanquet, and Dewey, among others, and finds it expressed earlier in Descartes, Locke, and Hume. Accordingly, philosophy pursues the psychogenesis of beliefs and attitudes, including the belief in the external world. This approach was reinforced by the tremendous growth of "genetic" sciences – viz., psychology, biology, and anthropology – in the latter part of the nineteenth century. These sciences are "genetic" through their interest in the causal origins and development of, respectively, thought and feeling, life, and human culture.

In the first decades of the twentieth century, Passmore finds a "movement towards objectivity" (1957, Ch. 8). Those moving in this direction hold that logic is concerned with implication rather than inferences, which is to say that they focus on "the formal

relationship of implying" rather than the activity of inferring. From this point of view, "we shall reject as 'psychologism' all reference to the processes of inquiry" (1957, 174). Meinong and Husserl (after his early period) belong to one stream that takes this direction. The other stream involves some main figures in early analytic philosophy: Frege, Russell, the early Wittgenstein, and the logical positivists. In either case, philosophers should eschew any concern with actual psychological or mental processes and states. To engage such concerns is to commit the fallacy of psychologism: the attempt to settle epistemological or logical questions through the empirical study of the mind and its states and processes.

According to Boring's story, real psychology separated from philosophy in the latter decades of the nineteenth century, and good riddance. According to Passmore, analytic philosophy (just as Husserl's pure phenomenology) turns away from psychology, and good riddance again. Many historians of analytic philosophy have come to a similar conclusion. Studies of Russell's philosophy, for instance, often give little attention to his connections with James, Ward, and Stout, and may offer only brief notice of his conception, in 1913–14 and after, of the role of psychology in philosophy.<sup>1</sup>

Focusing on Russell, I want to contextualize his relation to psychology. It is well known that Ward and Stout were among his tutors, and they were psychologists as well as philosophers. Within a wider context, going back to Hamilton and Mill, the relations between philosophy and psychology were in flux, as were the disciplinary identities of the two fields (Hatfield 2010). Hamilton enlarged the domain of "psychology" (so-called) to include epistemology, while also indicating that questions of justification could not be addressed through mere empirical description of psychological processes. Subsequent to Hamilton, logic and epistemology were increasingly seen as distinct from psychology. Even so, and without denying the strong anti-psychologistic currents in early and middle analytic philosophy, the relevance of psychology to epistemology was by no means settled by Russell's middle period. Indeed, many of Russell's predecessors and contemporaries believed both that epistemology is distinct from natural scientific psychology and that the findings of the latter are relevant to epistemology. Accordingly, we should not simply read current conceptions of "psychology" and "epistemology" (or indeed of "psychologism") into these earlier periods, or suppose that these fields were teleologically tending toward one's favorite current conception of them. We must attend to the actors' own conceptions of these disciplines.

## Philosophy and Psychology in Flux

When the term "psychology" was introduced in the sixteenth century, it described the science of the soul stemming from Aristotle. In the Aristotelian discipline, study of the soul (*psyche, anima*) was a part of physics or the study of nature in general. The Aristotelian soul included not only rational, sensitive, and motor powers, but also vegetative powers (growth, nutrition, reproduction). Viewed retrospectively, ancient and medieval psychology comprised both psychological and biological phenomena. Nonetheless, the cognitive functions dominated "psychological" discussion, so-called, into the eighteenth century, when Christian Wolff explicitly narrowed the term to include only the sensitive, appetitive, and rational functions (Hatfield 1995).

In Britain, the term "psychology" was slow on the uptake, although it occurs in Hartley's well-known work of 1749 as denoting the theory "of the human mind" and "of the intellectual principles of brute animals" (1749, 354). Hartley classified psychology as a division of natural philosophy, along with mechanics. In eighteenth-century Britain, mental phenomena were studied under various headings, including the "theory" or "science" of mind in natural philosophy and, more commonly in Scotland, as a division of "moral philosophy" or the "science of man" (human beings).

During the seventeenth and eighteenth centuries, the mind and its capacities were invoked in writings that do not properly belong to the psychological traditions mentioned thus far. Descartes, Spinoza, Leibniz, and Kant used mentalistic language in their analyses of human knowledge, but they did not consider their primary accounts of knowledge to be "psychological" – whether that term is taken with its early meaning as the natural philosophy of the powers of the soul, or with a later meaning, as the empirical investigation of mental phenomena. Descartes' appeal to intellectual perception as a basis for knowledge was no appeal to empirical psychology. When Descartes invoked his clear and distinct intellectual perception that mind and matter (thought and extension) are distinct, he was not merely introspecting. He was appealing to the (allegedly) truthcertifying character of some of his mental acts – those involving clear and distinct intellectual perception of the essences of things. To categorize Descartes' philosophy as "psychologistic," as Passmore implicitly suggests, is simply to suppose that because his notion of intellectual perception no longer is deemed plausible, he must have been doing psychology by default (Hatfield 1997). In Descartes' metaphysical works, we find a concern with the mental that we should retrospectively place under the normative discipline of epistemology rather than under psychology conceived as a natural science.

Kant explicitly distinguished his transcendental investigation of the knowing capacities from what he called "empirical psychology." His analysis of space as a form of intuition was not, by his lights, an exercise in empirical psychology, but a regression to the elements of knowledge, or to the conditions that make knowledge possible. Notoriously, these investigations discovered those conditions to consist in cognitive structures and activities, including forms of intuition, categories of the understanding, and syntheses in thought. He distinguished these transcendental conditions from empirical laws, such as those of association. Kant further asserted that empirical psychology is irrelevant to logic, whether the "transcendental logic" of his critical philosophy or the "pure general logic" which concerns the "form of thought" (1781, 54; 1787, 78) or the "formal rules of all thought" (1787, ix). In effect, Kant created the charge of a "psychologistic" fallacy before the invention of the term. His transcendental philosophy concerns the basis for the cognitive validity of thought. As a description of the conditions for thought itself, transcendental philosophy constrains any possible empirical psychology of the natural laws of mind (Hatfield 1990, 101; 1992).

Kant's distinction between empirical investigation of the mind and discernment of the conditions for knowledge occurs in only some of his eighteenth century contemporaries and nineteenth century followers. In Germany, many authors of logics, including the prominent metaphysician Hermann Lotze, adopted this distinction, as did Hamilton in Scotland. But others took another path, according to which the normative powers of the mind are subject to empirical investigation modeled on the observational basis of natural philosophy. Two such were Hume and Reid. Hume (1739–40, Intro.) and Reid (1785b, Ch. 1, sec. 1) each described their investigations into human knowledge as the application of observational techniques like those in physical science to a new domain: the mental. Their resulting theories of mind differed. Hume resolved mental phenomena into least elements, perceptions and feelings as characterized by a quality with an intensity. He posited minimal perceptual and appetitive capacities, such as perception of sameness or difference and appetite for pleasure and away from pain, and sought to construct mental life by applying the laws of association to presumed or observed regularities among elemental perceptions. By contrast, Reidian psychology posited innate mental powers, innate perceptions, and innate concepts, including a conception of and a natural belief in the existence of an external world of extended matter.

Hume and Reid each addressed the difficulties in observing mental states and processes. Both affirmed that the adult mind is filled with habits that may mask its elemental contents. Reid maintained that adult mental experience is shot through with accretions of belief and memory associations from past experience, so that we cannot tell what is basic and what acquired (1785b, 7–11; 1785a, 59–64). It requires the reflective attitude of a conscientious investigator such as himself properly to describe sensations and perceptions and to uncover the "natural" beliefs inhering in the mind, such as the belief in an external world. The common sense of the "vulgar" can help, although it is not completely authoritative (e.g., the vulgar do not naturally hit upon the distinction between primary and secondary qualities, which Reid held to be fundamental: 1785b, 179, 195; 1785a, 241). Hume was more optimistic that the elementary contents of the mind can be isolated introspectively. And he held that once we are attending to simple perceptions,

their properties are infallibly known. Nonetheless, the operation of custom and habit on the imagination may generate a belief in the distinct and continued existence of bodies (independent of our perception of them), even though strict attention to our impressions and ideas would reveal this belief as a delusion (1739–40, 1.2.6, 1.4.2).

In the Scottish universities, the science of mind became a fixed part of the curriculum. Scottish authors who wrote treatises on the mind tended to hold university appointments. These included Reid at Glasgow and Dugald Stewart at Edinburgh, both appointed as professors of Moral Philosophy, as was Stewart's successor at Edinburgh, Thomas Brown, who lectured on the theory of mind (1820).

In 1736, William Hamilton was appointed to the chair in Logic and Metaphysics at Edinburgh. As befit his title, he delivered two series of lectures, the first on *Metaphysics* and the second on *Logic*. The first was the general basis of philosophy, which he equated with what he called "psychology." Whereas Brown viewed psychology as a branch of natural science, Hamilton deemed psychology to be the core of philosophy itself. He refused to call physics "natural philosophy," since in his view the term "philosophy" should be limited to the sciences of the mind (1861, 1: 63).

Although Hamilton aligned "philosophy proper" with the "science of mind" (1861, 1: 1), this science cannot simply be identified with a precursor to experimental psychology or even with empirical psychology as understood in Hamilton's day. It had various special branches, including logic, ethics, politics, and fine arts, and some connection to theology.<sup>2</sup> In Hamilton's terms, the philosophical core of these disciplines is psychology, which itself divides into three branches: "empirical psychology," or the "phaenomenology of mind," which observes and classifies the phenomena of mind; "nomological psychology," or the study of the laws of our mental faculties, both descriptive and normative; and "inferential psychology," also known as "ontology" or "metaphysics proper." The first branch divides the phenomena of mind into cognition, feeling, and the conative powers (will and desire); the second finds the laws of each division; the third considers the being of God and the existence and immortality of the soul. Hamilton's *Lectures on Metaphysics* considered cognition and its empirical laws, with a briefer look at feeling. He left to logic the elaboration of the formal laws of thought, considered (in Kantian mode) apart from any subject matter and as independent from empirical psychology (1866, 1: 17–25).<sup>3</sup>

Consciousness and introspection were the fonts of Hamilton's philosophy. He equated consciousness with "the general faculty of thought" and considered it to be "the only instrument and only source of philosophy" (1861, 1: 375). By contrast with Scottish predecessors such as Reid and Stewart, he maintained that consciousness is not a special faculty but is the root function of the mind, of which all other faculties (cognition, feeling, conation) are modifications. A significant portion of his *Metaphysics* concerns the conditions and deliverances of consciousness. Hamilton believed that it would be generally accepted that consciousness is "an actual and living, and not a potential or dormant knowledge"; that it is immediate knowledge; that it involves a discrimination or contrast that makes a conscious state be consciousness of one thing rather than another; that it involves a judgment, in which something is affirmed or denied in an act of discrimination; and that it involves memory, in which mental states are recognized as a succession that all belong to the same self. He further claimed for consciousness that its results are "clear" and "unerring" (1861, 1: 266) – that is, infallible. Finally, he purported to derive substantive philosophical conclusions from the immediate deliverances of

consciousness, including the identity of the self over time, the fact of human freedom, and the existence of the external world. His attitude combines the notion of infallible awareness of the contents of the mind as found in Hume, with the distinction between empirical psychology and logic found in Kant, with the claim that we immediately perceive an external world, which he modified from Reid. By contrast with Reid, Hamilton considered the non-ego itself to directly confront the mind, as opposed to external objects being directly perceived by means of an innate conception.

Mill advocated a different conception of psychology and its place among the sciences. In Hamilton's scheme, psychology comprised logic and metaphysics; Mill realigned these sciences. In his *System of Logic*, he described logic as "the Science of Proof, or Evidence": "In so far as belief professes to be founded on proof, the office of logic is to supply a test for ascertaining whether or not the belief is well grounded" (1872b, Intro. §4).<sup>4</sup> Metaphysics, by contrast, concerns "the original data, or ultimate premises of our knowledge." To it fall questions concerning mind, matter, the reality of space and time, and "the nature of Conception, Perception, Memory, and Belief" (ibid.), inasmuch as these pertain to the basis for knowledge. These latter topics fell within psychology for Hamilton, but Mill limits psychology to the science of the empirically determined laws of mind. These laws include the principle that impressions (in the Humean sense) produce ideas as well as the laws of association (similarity, contiguity, and intensity) (1872b, VI.4.3).

For our purposes, the most important difference between Mill and Hamilton concerns the methods of psychology. Mill did not deny Hamilton's premise that whatever is immediately and intuitively known in consciousness is known with certainty (1872a [1979, 126]). But he disputed Hamilton's claims as to what is so known. He contended that some states of consciousness which seem intuitive are actually the result of previous associative processes. What Hamilton took to be simple and evident perceptions of the self, its freedom, and the external world, Mill contended may result from psychological laws operating on previously experienced sequences of impressions and so not be instances of intuitive certainty after all – a position later echoed by Russell.

Mill called Hamilton's method "introspective," because it claimed to detect by introspection which beliefs are simple and intuitive. Mill termed his own method "psychological," because it relied on psychological explanations (based on observation and the laws of association) to show how apparently intuitive beliefs might be the product of previous experience. As an illustration, Mill took up the problem of the external world.

### Hamilton and Mill on the External World

Hamilton's doctrine concerning our perception of an external (material) world exemplifies the role of consciousness in his philosophical (and therefore psychological) method. Mill disputed both the method and its results.

Hamilton appealed to the unerring deliverances of consciousness to establish that we are immediately aware of both ego and non-ego (1861, 1: 288, 292). By ego and nonego he did not mean mental and material substance as they are in themselves. These are unknown. The mental and the material are known only through their phenomena or qualities, as experienced. Nonetheless, we are correct in dividing mental from material qualities and in seeing them as manifestations of distinct, but otherwise unknown, underlying substances (1861, 1: 138). Consciousness displays the subject's mental acts and the various objects of those acts, including feelings and sensations as states of the subject and material objects as distinct from the subject.

In external perception, or perception of material objects, we are in every instance immediately aware both of our act of perceiving and of an object perceived. Accordingly, at least with the primary qualities, we do not perceive representations or subjective mental states such as sensations but are directly aware of a material object. In support of this claim, Hamilton appealed to the (allegedly) manifest fact that perceptual consciousness divides into act and non-mental object. This appeal illustrates his precept "that we must look to consciousness and to consciousness alone for the materials and rules of philosophy" (1861, 1: 288). The "Duality of Consciousness" as act and material object is "clear and manifest":

When I concentrate my attention in the simplest act of perception, I return from my observation with the most irresistible conviction of two facts, or rather two branches of the same fact; – that I am, – and that something different from me exists. In this act, I am conscious of myself as the perceiving subject, and of an external reality as the object perceived; and I am conscious of both existences in the same individual moment of intuition. The knowledge of the subject does not precede, nor follow, the knowledge of the object, – neither determines, neither is determined by, the other. (1861, 1: 288)

Hamilton contends that other philosophers, such as Berkeley and Hume, experienced this duality in consciousness but then denied their own experience. His disagreement with them, he believes, does not concern the basic facts but arises from their unwillingness to stick with those facts; instead, they end up "distorting or mutilating" them (ibid.).

On this basis, Hamilton swiftly resolves the problem of the external world, and he just as quickly dispatches a representative or mediate theory of perception:

Such is the fact of perception revealed in consciousness, and as it determines mankind in general in their almost equal assurance of the reality of an external world, as of the existence of their own minds. Consciousness declares our knowledge of material qualities to be intuitive or immediate, – not representative or mediate. (1861, 1: 288–9)

In external perception, consciousness not only presents a division between act and object, but it reveals the object to be material and therefore the external world to exist.

The object in question, as it turns out, is not the distant object, the table and chair or the sun or the moon. Hamilton rejects awareness at a distance. The senses all function as modifications of touch: we directly perceive only what is in immediate contact with our sense organs. In vision, the light on the retina is the immediate object:

Through the eye we perceive nothing but the rays of light in relation to, and in contact with, the retina; what we add to this perception must not be taken into account. The same is true of the other senses. Now, what is there monstrous or inconceivable in this doctrine of immediate perception? The objects are neither carried into the mind, nor the mind made to sally out to them; nor do we require a miracle to justify its possibility. (1861, 2: 130)

Consciousness comes into contact with the external world in the organs of sense. In this way, the relativity of perception is easily explained. The table appears to diminish as we recede from it because of how the reflected rays entering the eye change (the retinal image of the table diminishes). Hamilton disarms the relativity of perception as an objection to

the immediacy of perception; in his account, what we directly perceive changes as we change our relation to the distal object. Through the retinal presentation we are able to perceive, mediately, the distance, size, and shape of non-retinal objects. Whether this occurs through our learning to interpret cues for distance or by innate processes and mechanisms, Hamilton does not decide (1861, 2: 179–84).

Mill framed his attack on Hamilton's introspective method as a dispute over the scientific basis for knowing the external world. Although allowing that the definition of "science" remains provisional as the sciences progress, he regarded all sciences as inductive. Intuitive knowledge, which precedes science, is limited to immediately experienced sensations and feelings (Mill 1872b, Intro. §4). The inductive sciences, which extend beyond immediate consciousness, include: logic; metaphysics; mathematics; physical, chemical, and life sciences; psychology; moral sciences; and history. Metaphysics contains "that portion of mental philosophy which attempts to determine what part of the furniture of the mind belongs to it originally, and what part is constructed out of materials furnished to it from without" (ibid.). Mill thus classified his dispute with Hamilton over the basis for a belief in an external world as "metaphysical," and he contrasted the introspective and psychological methods "of metaphysical inquiry" (1872a [1979, 148]). Hamilton would have agreed with the classification but disagreed with Mill's psychological theory and his use of it, since, in Mill's scheme, Hamilton's allegedly intuitive knowledge isn't intuitive at all.

Mill accused Hamilton of accepting the duality of consciousness as a simple, intuitive fact on insufficient grounds. Hamilton purported to find the experience of material existence as a simple and ineliminable (or "necessary") fact of consciousness. In this appeal to what is "necessary" in consciousness, Mill groups Hamilton together with Reid, Stewart, Victor Cousin, William Whewell, and Kant, and he indicts the lot:

The test by which they all decide a belief to be a part of our primitive consciousness – an original intuition of the mind – is the necessity of thinking it. Their proof that we must always, from the beginning, have had the belief, is the impossibility of getting rid of it now. This argument, applied to any of the disputed questions of philosophy, is doubly illegitimate: neither the major nor the minor premise is admissible. For, in the first place, the very fact that the questions are disputed, disproves the alleged impossibility. Those against whose dissent it is needful to defend the belief which is affirmed to be necessary, are unmistakable examples that it is not necessary. It may be a necessary belief to those who think it so; they may personally be quite incapable of not holding it. But even if this incapability extended to all mankind, it might merely be the effect of a strong association; like the impossibility is, for the time, real, it might not, as in that case, be overcome. (1872a [1979, 143–5])

According to Mill, the origin of a belief is of direct metaphysical relevance because it can reveal the quality of the support for the belief (intuitive certainty vs. habitual affirmation). The origin is decided by psychological investigation. Those beliefs that are explicable as arising through association from psychologically basic elements should be classified as acquired:

These philosophers, therefore, and among them Sir W. Hamilton, mistake altogether the true conditions of psychological investigation, when, instead of proving a belief to be an original fact of consciousness by showing that it cannot, by any known means, have been acquired, they conclude that it was not acquired, for the reason, often false, and never sufficiently substantiated, that our consciousness cannot get rid of it now. (ibid., 145–6)

This of course raises the question of how psychological investigation is to sort out those beliefs that are properly based on simple, intuitive apprehensions, and those that are acquired but are now so firmly fixed as to seem originally "necessary."

Mill's argument against Hamilton unfolds in three steps. First, he invokes widespread disagreement among previous theorists over whether a "non-ego" (an external world) is directly intuited in consciousness (1872a, Ch. 10). In assessing Hamilton's history of the question, he maintains that not even Reid, to whom Hamilton assigns his own position of natural dualism or natural realism, subscribed to that position. Further, he observes that, in the case of memory, Hamilton himself acknowledges illusions in immediate consciousness. We seem, in memory, to be immediately aware of past events, and yet Hamilton allows that we are aware only of a present representation of a past event. These considerations aim to show that the introspective method is not reliable for solving the problem of how and whether we perceive an external world.

Second, Mill argues that the belief in an external world can be explained as the product of known psychological processes, namely, the laws of association along with the capacity of the human mind to form expectations about future or "possible" sensations.

Setting out from these premises, the Psychological Theory maintains, that there are associations naturally and even necessarily generated by the order of our sensations and of our reminiscences of sensation, which, supposing no intuition of an external world to have existed in consciousness, would inevitably generate the

belief, and would cause it to be regarded as an intuition. (1872a [1979, 178]) He explains that a belief in the permanent possibility of sensation is equivalent to what we mean when we say that "the objects we perceive are external to us, and not a part of our own thoughts" (ibid.). Having seen an object, if we take it to be an external object and not a mere "phantom," then we believe that if we returned to its location we should see it again, that is, we should have sensations similar to those that we experienced earlier (assuming the object hasn't been moved, etc.). We take these possibilities for sensation to be independent of our own minds and to be available to other observers. That is enough, Mill contends, to account for what can be properly defended in our conception of an external object (although he goes on to explain how we form the conception of a transcendent object, which conception he believes is not justified).

Third, Mill argues that his account is preferable to Hamilton's on the latter's own principle of parsimony. Mill's account explains the belief in an external world by appealing only to known causes: the ability to form expectations, and the operation of the laws of association on series of sensations. Mill further contends that Hamilton's reliance on intuition is in effect an appeal to an "original principle of our nature" that is applied *ad hoc* to account for our belief in an external world (1872a [1979, 182]). Hamilton might rejoin that Mill must assume sequences of sensations to have occurred in childhood that he cannot now remember. The argument perhaps does not come out even, because Mill effectively shows that there is no agreement on what Hamilton says are immediate deliverances of consciousness and he provides a plausible explanation for how the belief in an external world could seem intuitive when in fact it is acquired.

Passmore (1957, 28) suggests that Mill's *Examination of Sir William Hamilton's Philosophy* (1872a) buried that philosophy, but he allows that Mill's work, despite a challenge from British Idealism, continued to be read (1957, Ch. 7). In fact, although Hamilton's philosophy fell from the dominant position it had held into the 1860s, it also continued to be read. Hamilton's *Metaphysics* was cited both positively and negatively by Brentano (1874), as well as by Ward (1886) and his student Stout (1896, 1: 39, 113), who together helped bring Brentano's work, and that of his associate Meinong, to the attention of British philosophers, including the young Russell. The continuing controversy concerning psychological vs. intuitive (or introspective) accounts of belief in an external world provides background for Russell's subsequent discussion of the topic.

Ongoing Controversy over Psychological Theories of the External World Mill's response to Hamilton on consciousness and the external world ranged over many topics and themes that continued to be discussed into the first decades of the twentieth century. These included representative as opposed to directly intuitive theories of perception; the history of such doctrines since Berkeley and Hume; the distinction between primary and secondary qualities, which was often invoked in connection with the first topic; the distinction in consciousness between act (or ego) and object; and the proper analysis of the notion of an external world. These ongoing discussions frequently referred to Mill's "psychological" theory of the belief in an external world and sometimes invoked Hamilton,<sup>5</sup> or at least an "intuitive" theory of the awareness of an external world.

Ward's frequently cited article on "Psychology" in the ninth edition of the *Britannica* offered an analysis of the perception of material things that framed subsequent

discussions. Ward (1886, 60–2) proposed five factors that must be included in a psychological account of the perception of things: (a) reality, in the sense of being material rather than merely mental, being existent, and being actual as opposed to merely possible; (b) solidity or impenetrability, as discovered especially through resistance to the subject's motor efforts as accompanied by a tactual sensation of the resisting object; (c) unity, as the object to which the subject refers multiple sensory impressions; (d) temporal continuity, discovered first with respect to the subject's own body and then attributed to other bodies that act upon it; (e) substantiality and the distinction between substance and attribute, including the distinction between primary qualities (persisting physical solidity in space) and secondary qualities (varying qualities such as temperature, color, tastes, and smells). Ward treated these topics as those that a psychological theory must account for; the list is one that a philosophical theory of external objects might also address. More generally, the article ranges across topics concerning knowledge and the self that possess both psychological and philosophical aspects. Ward (1890) himself held that both logic and epistemology or theory of knowledge are distinct from psychology, while also suggesting that logic and epistemology (like psychology) had become disciplines of their own, independent of philosophy itself (which, in his view, primarily examines metaphysical questions concerning being) but still retaining intellectual ties.

Ward's discussion provided a reference point on the external world from 1890 forward. In that year, Julius Pikler, of Budapest, published a slim volume on *The Psychology of the Belief in Objective Existence*. He divided the problem of the external world into three (1890, 2–4): (1) the *meaning* of asserting the existence of an objectively existing external world; (2) the *genesis* of the belief involved in this assertion; and (3) the *truth* of that belief. He took the first two questions to be primarily psychological and the third to belong to "philosophy proper, or metaphysics" (1890, 4–5). At the same time, he held that the first two questions are relevant to the third, since the interpretation of the belief is relevant to assessing its truth, and its genesis may also be relevant. He advanced an account that was similar to Mill's permanent possibilities of sensations, with some important differences. First, existence in space became the key factor in belief in an external world. Second, he emphasized the role of will (interpreted as desire) in the development of the belief. Third, he held that only a subset of the possibilities of sensation imply an external world, namely, those that can be obtained merely through volitional motions of our bodies or sense organs, which unleash one stream of possible sensations rather than another. He set his theory in opposition to Ward's view – as reaffirmed by Stout (1890) – that the notions of self and non-self arise correlatively.

Stout published a series of articles and chapters on the problem of the external world from 1890 to 1913 (and beyond), largely following Ward. He treated the problem primarily from a psychological point of view, as concerning the genesis of the belief in an external world. He emphasized the role of the active self, whose movements are impeded by an external agency; who thereby distinguishes self from non-self; who gains the notion of a persisting thing first from his own body and then transfers it to external objects; and who, by a process of ideal construction that interpolates objects into spatial, temporal, and causal sequences, moves beyond objects as experienced to posit the same object as existing when not perceived and other objects existing that are never perceived (1890; 1899, III.ii.2, IV.6; 1903, Ch. 14). These points primarily address Pikler's second question, although they touch on his first question and might rule out some answers to his

third. Another paper by Stout speaks more exclusively to the first question (Stout 1900–01), another recounts how sensations represent an external world (1904), and another (1911)<sup>6</sup> responds to Joseph's philosophical criticisms (1910).

Shortly after Pikler and Stout published their works in 1890, the Aristotelian Society held a symposium on the "Origin of the Perception of an External World." The Society's President, Shadworth Hodgson, analyzed the problem into philosophical and psychological issues. Here is his division:

1. Analysis of the perception of an external world, i.e., combination of its sufficient and necessary constituents (as just explained).

2. Epoch and conditions of its arising as an event or existent in a percipient's development (as just explained).

3. Analysis of the perception that an external world exists as the real object of the perception of it.

4. Epoch and conditions of this latter perception of reality (No. 3) arising as an event or existent in a percipient's development. (Hodgson et al. 1891–2, 26–7)

As regards (1) and (2), Hodgson has "just explained" that (1) is the primary philosophical problem of the external world, and that (2) is a psychological question which is irrelevant to it. He also takes (3) to depend on (1). Hodson further contends that the concept of the self does not play a role in the concept of the external world, a point that the first respondent, Vice President Bernard Bosanquet (ibid., 34), connected to Stout's (1890) claims. Bosanquet observed that in pursuing (1), Hodgson's analysis drew on psychological facts concerning the spatiality of touch of vision (Hodgson et al. 1891–2, 33). In reply, Hodgson remarked that the words used to describe consciousness may be

ambiguous as to whether they describe "some function of a Subject" (psychological sense) or "some content of sensibility" (an object of philosophical analysis). He concedes that, in addressing philosophical questions concerning the external world, he makes use of "the psychological knowledge, be it more or be it less, which is at my command" (ibid., 41). The second respondent, David G. Ritchie, maintains that the problem of the origin of the perception of the external world is "primarily a psychological one, as it concerns the origin, and not the philosophical implications of our perception of an external world" (ibid., 36), while making clear that he considered philosophy and psychology each to be relevant to the other. An upshot of the symposium was to distinguish philosophical and psychological aspects of the problem of the external world, and to acknowledge their mutual relevance.

The problem of the external world was regularly taken up by philosophers, with great attention to psychogenetic theories of how the concept of the external world arises. Dawes Hicks (1900–01) examined the works of Pikler and Stout, generally favoring Stout. However, he did not stay with Stout's view that resistance to motor volitions is the initial spur to distinguish self from non-self and eventually to perceive an external world; he assigned the initiating role to feelings and desires arising from external objects. The Oxford philosopher L. T. Hobhouse (1896) wrote an extensive treatise on *Theory of Knowledge*, including a chapter on the "Conception of External Reality" that showed his awareness of the psychogenetic approach. Hobhouse adopted a direct realism that was similar to Hamilton's in affirming that, in perception, we are directly acquainted with an external reality.<sup>7</sup> However, he rejected Hamilton's view that we know this to be so immediately via the deliverances of consciousness (1896, 537). To distinguish illusion

from veridical perception, we must fit our current perception into a coherent scheme. Hodgson (1903–4) pursued the psychogenesis of the concept of reality, and specifically of material reality, as distinct from the consciousness that knows it. In distinguishing sensation from thing sensed, he found that the development of spatial representation and the impact of other solid bodies on our own are the crucial elements (as opposed to Stout's self-oriented theory). Joseph (1910) criticized Stout's psychogenetic theory for its internal coherence; while invoking elements of philosophical analysis, his criticism remained in Stout's psychological domain. For better or worse, philosophers found that the content and so the origin and of the concept of an external world were relevant to arguments concerning our knowledge of its existence. Russell was no exception.

#### Russell's Epistemological Turn

Russell's early and middle career as a philosopher is divided into his idealist phase, up to 1898; his *Principia* period, through 1910 (divided into subperiods by the appearance of "On Denoting" in 1905); followed by a middle period (from 1911), which may be thought to end with his adoption of James's neutral monism ca. 1919. Early in his middle period, he undertook a new project on the theory of knowledge, in the course of which he announced a new "logical analytic" method of philosophizing, which would make philosophy "scientific" (a modest, piecemeal, cooperative venture). During this early part of his middle period, he discussed the relation of philosophy to psychology.

By way of further background,<sup>8</sup> we may note that during the mid 1890s Russell was trained in philosophy at Cambridge by McTaggart, Ward, and Stout. As his commitment to idealism ended, Russell conceived an ambitious philosophical project

concerning the analysis of the fundamental concepts of the sciences, starting with physics and the notion of matter. A need to examine mathematics first led him into Principia Mathematica (via Russell 1903). During these years he reviewed several of Meinong's works and responded to them in a three-part article. After the *Principia* years, in 1912 he came back to the problem of matter but decided that he needed to achieve a wider examination of the theory of knowledge. He began by rereading (unspecified) past philosophers on knowledge, and then, from 7 May to 7 June 1913, he composed part of a book on the Theory of Knowledge (TK). At this time, Wittgenstein visited and criticized his theory of propositions, which ultimately caused him to abandon the book and to question the value of some of the later parts of his extant manuscript. He nonetheless continued to value the first part of the work, "On the Nature of Acquaintance," and from January 1914 to April 1915 he published six chapters in the *Monist* (in somewhat revised versions). These included Chapter 4, "Definitions and Methodological Principles in Theory of Knowledge," in which Russell discussed the place of psychology in theory of knowledge.

During 1912, Russell agreed to give the Lowell lectures at Harvard. In March, 1913, he proposed to lecture on good and evil in the universe, but this topic was rejected and in July he proposed the topic of the external world. During September, 1913, he completed a draft of *Our Knowledge of the External World* (OKEW, 1914c), the text of the Lowell lectures (delivered in Boston in March and April, 1914). Especially in Chapter 3, "Our Knowledge of the External World," he invokes psychology in his analysis. He also gave a seminar at Harvard during this time, in which he used some of the *Monist*  articles. In January 1914, he completed "The Relation of Sense Data to Physics" (1914e), which he used in the seminar and in revising Chapter 3 of the Lowell lectures.

Epistemology, Logic, and the Psychologically Primitive in Russell In the preface to OKEW, Russell describes the work as "an attempt to show, by means of examples, the nature, capacity, and limitations of the logical-analytic method of philosophy" (v). In Chapter 2, he announces that logic is "the essence of philosophy" and that every philosophical problem is "logical" (33). The chapter explains that the relevant forms of logic concern probability as a relation of evidence to assertion and, more emphatically, the new mathematical logic or logistic, which catalogues the forms of propositions and makes some general assertions about the truth of all propositions of a certain form (57). Only the beginnings of mathematical logic are directly relevant to philosophy (41). These beginnings include the logic of relations, which Russell considered to be a philosophically important advance over traditional syllogistic logic.

In saying that logic is the essence of philosophy and that all philosophical problems are logical, Russell manifestly did not mean that every philosophical problem is a problem in mathematical logic. Rather, he meant that analysis using logical forms is an essential tool of philosophy; it serves as an "instrument of discovery" in epistemology, but is not the only one (OKEW, 65, 68). In Chapter 1 of OKEW, Russell asserts that "philosophy is not a short cut to the same kind of results as those of the other sciences: if it is to be a genuine study, it must have a province of its own, and aim at results which the other sciences can neither prove nor disprove" (17). The other sciences have charge of many questions of intrinsic human interest, such as the future of humankind. What

remains to philosophy? It can "help us to understand the general aspects of the world and the logical analysis of familiar but complex things" (17). As he further explained (Ch. 3), philosophy takes as its "data" (in a general sense) the beliefs found in "common knowledge," including everyday beliefs as well as those of the sciences (65–6).

Russell denies that philosophy has its own "superfine brand of knowledge," by which it can overturn the "facts of experience" and "laws of science" (66–7). The most the philosopher can do "is to examine and purify our common knowledge by an internal scrutiny, assuming the canons by which it has been obtained, and applying them with more care and with more precision" (66–7). Philosophy must seek the firmer portions of its data and use them to criticize and reformulate the other portions. That is the task of the logical-analytical method as applied to the problem of knowledge. The method is stated in OKEW, and it had been applied in TK. (The method was adumbrated in Russell 1912a; Russell 1900 used it, on which see Beaney's chapter, this volume.)

The firmest sorts of knowledge are "hard data," consisting of "the particular facts of sense and the general truths of logic" (OKEW, 70–1). However, what counts as the "particular facts of sense" is not immediately clear. In our common knowledge, we may take ordinary objects such as table and chairs, and their specific properties, such as size and shape, to be the immediate objects of sense and thus as prime examples of "particular facts" of sense. In that we are mistaken. How does Russell know? Here he enlists the aid of another part of common knowledge, the findings of natural scientific psychology.

Russell was clear in TK and OKEW that psychology is of great importance for epistemology. In Chapter 4 of TK, he ascribes the difficulty in defining "epistemology" or "theory of knowledge," in part, to its overlap with psychology and logic. It is obvious that much of epistemology is included in psychology. The analysis of experience, the distinction between sensation, imagination, memory, attention, etc., the nature of belief or judgment, in short all the analytic portion of the subject, in so far as it does not introduce the distinction between truth or falsehood, must, I think, be regarded as strictly part of psychology. (1914b [1992, 46])

The notions of truth and falsity, in his view, belong to logic, and logic has much to contribute in analyzing the forms that judgments may take (subject–predicate, relational, etc.). But the "analytic" part of epistemology draws upon what is properly psychology. This does not mean that epistemology becomes psychology; rather, it means that analyses that are fundamental for epistemology are aided by or initiated within psychology. These analyses aim at finding epistemologically basic premises: those premises that can be "known without inference" (ibid., 50).

Russell developed the notions of "logically primitive" and "psychologically primitive" beliefs and knowledge in OKEW, Chapter 3. Logically primitive beliefs are those not reached by logical inference, whereas logically derivative beliefs are reached by inference or by logical construction. Psychologically primitive sensory beliefs are those not caused by other beliefs or by any other fact of sense except what the belief asserts. Psychologically derivative beliefs may result from these other causes, including logical derivation. But they also may arise without logical derivation, "merely by association of ideas or some equally extra-logical process" (69). As with Mill's apparently but not actually intuitive beliefs, before epistemological analysis many beliefs about sensory things are logically primitive (because not reached through logical derivation) but psychologically derivative (because caused by extra-logical psychological processes, such as association – or by "inferences" undertaken without conscious logical scrutiny). We discover, upon reflection, that we have less confidence in beliefs that are logically primitive but psychologically derivative (69–70). Among facts of sense, those that are both logically and psychologically primitive provide the "hard data" for our knowledge (as in Mill's actually intuitive knowledge of basic elements). One aim of epistemology is to replace beliefs that are logically primitive but psychologically derivative with corresponding beliefs that have been logically derived from data that are both psychologically and logically primitive.

Russell praised psychology for discovering that many of our beliefs about the spatial properties of external objects are psychologically derivative:

Psychologists, however, have made us aware that what is actually given in sense is much less than most people would naturally suppose, and that much of what at first sight seems to be given is really inferred. This applies especially in regard to our space-perceptions. For instance, we instinctively infer the "real" size and shape of a visible object from its apparent size and shape, according to its distance and our point of view. (OKEW, 68)

Russell presents a psychologically derivative belief that is, prior to analysis, logically primitive: our belief that we directly perceive an object, say, a table, as three feet high with a rectangular top, when what is really "given in sense" is a trapezoidal top and an image that varies in size inversely with our distance from the table.

This conception of size and distance perception was widely repeated in the psychological literature on perception. Textbook accounts described a process of inference or association from a two-dimensional sensory core to the real size of the object (Le Conte 1881, 157; Stout 1913, 502–3). James explained that the same retinal image produces an experience of a larger area when the area is seen as being farther away (1890, 2: 231), and he recounted how a circle may appear elliptical. He attributed to "experience and custom" the recollection of the "true" shape from the elliptical appearance (ibid., 239). Russell operated at this level. Some perceptual theorists had rejected an original sensation of a two-dimensional form. Thus, although Helmholtz famously held that we infer sizes and shapes from sensations via unconscious inference (1867, sec. 26), he argued that this process moves from nonspatial sensations to three-dimensional structures (Hatfield 1990, Ch. 5). Hering (1868) rejected Helmholtz's sensations and inferences, contending that three-dimensional visual structures are directly produced by physiological processes. Nonetheless, Russell's starting point of phenomenally given perspective images<sup>9</sup> reflected the commonly received science of his day. Beyond size perception, we have seen that Mill, Stout, and others examined the psychological development of belief in external objects as permanently existing and distinct from the subject. For Russell, that was another logically primitive but psychologically derivative belief needing analysis and reconstruction.

In the quoted passage, Russell speaks of the real size as being "inferred" from apparent size. At first blush, this seems to undermine the example, which should show that beliefs about real size and shape are psychologically derivative but logically primitive, that is, not produced by logical inference. There are two ways to understand Russell's use of the word "infer" in the quotation. He might be loosely describing psychological theories in their own terms, which sometimes (as in the case of Helmholtz 1867, sec. 33) equated "inference" with association (an equation Russell did not accept). Or he might consistently hold that the "inference" here is not a purified, epistemically certified logical inference, and so must count as an "extra-logical" psychological process. Indeed, Russell subsequently speaks of "unconscious inference" as filling in gaps in our sensations during a conversation. Because we are less adept at this process when listening to a foreign language, we have trouble hearing the language and so must sit nearer the stage when attending a play (OKEW, 68). Our belief that the problem is with the intensity of the sound (rather than with our comprehension) might well be logically primitive, because we are unaware of the extra-logical inferential processes that must take place and so do not take account of them epistemically.

Russell relies on scientific psychology to reveal the psychologically primitive "appearances" that serve as the basis for psychologically derivative perceptions such as that of the "real" size and shape of the table. These appearances are the hard data of sense, or sense data. The sense data for a table vary depending on our point of view, while our psychologically derivative belief anent the size and shape of the table remains constant. Russell considered his analysis of the table into a sequence of sense data, taking into account multiple points of view, to be a substantial breakthrough (1914e; OKEW, Ch. 3). He then spoke of a process of construction, in which any notion of the table as a material object – as a "thing in itself" beyond the sense data and inferred from them – is replaced by an explicit logical construction. In this construction, beliefs about the table are now logically derivative, but they are derived by logical construction using only data that are both psychologically and logically primitive. This construction replaces our previously logically primitive conception of the table as a material object with logically certified

constructions. These constructions have the further benefit of avoiding epistemically shaky inferences to material things behind the sense data.<sup>10</sup>

Russell's "analysis of experience" (TK, Ch. 3) concerns the structure of experience itself. Russell contends that we find in experience two factors: an act of experiencing (by a subject), and an object experienced. The immediate objects of sense (sense data) are not mental, not part of the mind. Russell (1912b) previously had written as if non-mental sense data are intermediaries (third things) by which we know physical objects as ordinarily conceived: a representative realism. His conception that physical objects are constructions out of sense data alleviated this representative realism (about which he expressed grave doubts in 1912a). In the new conception, in external perception there are only two things: selves and non-mental sense data (OKEW, 85; 1914e). The physical object as ordinarily conceived has been excised.

Early in TK, Russell described a "dualism" of act and non-mental object. He reports that "dualists" who believe "that we know by introspection things having the character we call 'mental' have urged that we also know other things not having this character" (1914d [1992, 7]). The position he describes is the "natural dualism" of Hamilton (1861, 1: 293), which claims introspective awareness of the act of consciousness and of the fact that its object is non-mental. (Russell does not name Hamilton.) This "natural dualism" does not purport to establish by introspection that mind and body are distinct substances, but it does claim to reveal a dualism of mental act and object (1861, 1: 288). (Neither Hamilton nor any other author considered herein held that introspective awareness extends to the ego as bare subject.) Hamilton supported his dualism directly by intuition or introspection. Russell reluctantly denies that the distinction between act and object is immediately evident. He found it nearly "obvious" that we directly experience our experiencing of objects, but he knew that James and the American Realists, in their position of neutral monism, rejected any awareness of the mental act of perceiving or of "consciousness" as its agent. Because they could deny intuitive knowledge of a really distinct actor who enters into the act–object distinction, Russell (echoing an argument that we have seen in Mill) conceded that the distinction is not patent (1914a [1992, 33]).

But Russell endorsed an epistemological dualism nonetheless. He did not say how he knew that perceptual objects are non-mental and so different in kind from the act of perceiving them. In OKEW, he simply announces this position: "A patch of color, even if it exists only when it is seen, is still something quite different from the seeing of it: the seeing of it is mental, the patch of colour is not" (84–5). The patch of color is a sense datum, an item among the "hard data" that underlie his epistemological reconstructions.

In fact, the view that act and object are distinct was widely but not universally held by philosophers whose work Russell knew or may have known. Hodgson (1896), as we have seen, held that act and object are distinct and that the immediately known object is non-mental, but he denied Hamilton's view that this is known by introspection. Rather, this conclusion is reached by theoretical reflection. Moore, who espoused a naïve realism regarding the perception of physical objects in his "Refutation of Idealism" (1903 [1922, 29–30]), subsequently distinguished sensible qualities both from the perceiving of them and from physical objects as described by science. In accepting that some of the "sensible qualities which we perceive as being in certain places, really do exist in the places in which we perceive them to be" (1905–6 [1922, 95]), he accepted that some sensible qualities (or the particulars that possess them) are non-mental. These positions are to be distinguished from the views of Brentano, Ward, Stout, and Meinong, who agreed in distinguishing mental act from apprehended object, but then rendered the object as mental (as a "content" or "presentation"), and either (as in Brentano 1874) left aside systematic examination of the question of a mind-independent object corresponding to this content, or posited such an object at least provisionally (Ward, Stout, Meinong).

Russell held other aspects of scientific psychology to be relevant to epistemology, including the relation between sensation and imagination, the phenomena of memory, and the role of attention, to name only three. I have considered his use of psychology in an epistemological analysis of the problem of the external world. This use bears strong similarity to Mill's "psychological method." Further, he appears to have followed Mill in rejecting the Hamilton-like view that introspection establishes epistemological dualism.

### Psychology, Philosophy, and Psychologism

As Russell began his epistemological project in 1912, the notion that psychology was relevant to epistemology was commonplace. This outlook, which was shared by Hamilton and Mill, despite their other differences, had been challenged by British Idealism. Be that as it may, during the 1880s and 1890s, the relevance to epistemology of psychological considerations concerning the structure of experience, the processes of perception, and the belief in an external world was widely endorsed. More generally, the newly founded *Mind: A Quarterly Review of Psychology and Philosophy* (Robertson 1876, 1883) declared the mutual relevance of philosophy and scientific psychology.

We have seen this outlook espoused not only by Stout and Ward, who bore witness to Brentano in their broad conceptions of psychology's relation to philosophy, but also by thinkers as diverse as Hobhouse and Hodgson. Indeed, Hodgson, in *Mind*, summed up the prevailing attitude as follows:

The title Psychological Philosophies may, not improbably, suggest the objection – But are not all philosophies of necessity psychological? And it is true, that any philosophy must include some psychological theory or other, inasmuch as, being or aiming at being a Knowing of the most comprehensive kind, it would be incomplete without taking account of the Subject, process, and function of

As the twentieth century turned, this outlook came to be questioned, in an off-hand way by Moore (1899, 193), and then by H. A. Prichard (1907), who argued that psychology was of no use to philosophy and questioned its viability as a science. Nonetheless, Prichard acknowledged the prevailing view of psychology's relation to philosophy:

Knowing, as well as of its content or object known. (1899, 433)

in the case of knowledge, psychology seeks to show how it is that a life which begins with sensation and feeling comes to acquire the articulated knowledge of the world which we now possess. Its results are considered not only to be of intrinsic importance but also to bear in an important way on the problems of other subjects, and especially on those of metaphysics. We even find it said that the future of philosophy is obviously with psychology. (1907, 27)

As it happens, this last prediction turned out not to be true for the short-term, especially in Britain and especially at Oxford, so that retrospectively some may see Prichard's article as a clarion call that foreshadowed the proper separation of philosophy from all psychological concerns. Of course, the attitude of complete separation, so dominant in the middle decades of the twentieth century, was not itself eternal (Hatfield 2006, 2009a, b). In his own time, Prichard's criticisms of the prevailing view were immediately met by Stout (1907) and Schiller (1907). Even Joseph's (1910) criticism of psychological theories of the external world remained on psychological ground.

The historiography of this issue is muddled by a too-common assumption that Prichard and others were engaged in a righteous battle to save philosophy from the fallacy of psychologism. Leaving aside the false teleology of this view, to make historical sense of it we need a definition of the term "psychologism." The term itself apparently was introduced by J. E. Erdmann (1870, 2: 636), who used it to characterize F. E. Beneke's attempt to ground philosophy, and especially the theory of knowledge, on psychology. The Dictionary of Philosophy and Psychology drew on this usage in defining "psychologism": "The doctrine of Fries and Beneke (see the histories of Falckenberg and Windelband), which translates the critical examination of reason (of Kant) into terms of empirical psychology" (Dewey 1901). The definition is vague, or it relies on prior knowledge of the relation between Fries and Kant. Historically, Fries held that Kant had intended, and should have intended, his critical philosophy to rest entirely on empirical psychology. The "translation" that Dewey speaks of should thus be understood as the full assimilation of philosophical problems to psychology; the belief that empirical psychology can solve (or define) the problems of philosophy.

On this definition, Russell's appeal to psychology in his theory of knowledge does not count as psychologism.<sup>11</sup> We have found that Hodgson, Hobhouse, Russell, and others recognized the *relevance* of psychology to epistemology, while also contending that philosophy has its own concerns that transcend those of psychology. If admitting the relevance of psychology to epistemology amounts to psychologism, then many

philosophers at the turn of the twentieth century were guilty of that alleged fallacy, even those who explicitly distinguished – as did Hodgson, Hobhouse, and Russell – the aims of psychology from those of philosophy and theory of knowledge. But that seems too wide a criterion for psychologism, on both philosophical and historiographical grounds. As a specific conception of psychologism, it stems from Frege's and Husserl's belief that any appeal whatsoever to subjective or mental processes in logic is illegitimate. On this conception, psychologism does not consist in confusing psychological processes with justification; it consists in treating thought as mental in any way.<sup>12</sup>

In the end, there wasn't anything novel in Russell's appeals to psychology in his epistemological work. In developing his theory of knowledge, he would have found the relevance of psychology to be widely acknowledged. So too with his finding separate aims for psychology and epistemology. If his appeal to psychology seems somehow philosophically surprising, I take that to be a sign that Prichard and others were, for a time, successful in their efforts. But to follow the history of their efforts would take us beyond Russell's middle period, during which he continued to follow developments in psychology, resulting in his *Analysis of Mind* (1921), which marked a change in his philosophical outlook and an expansion of his psychological interests, responding to but not fully adopting the outlook of American behaviorism and working out his own version of the neutral monism of James.

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<sup>&</sup>lt;sup>1</sup> Fritz (1952, 99) characterizes Russell's (1914c) introduction of psychological considerations as "aside from the point" (110). Hylton (1990, 330–1) acknowledges but downplays the psychological considerations in Russell's work of 1913–14. Eames (1989, Ch. 8) gives greater attention.

<sup>2</sup> Hamilton's "science of mind" is comparable in extent to Mill's (1872b) "moral sciences" and to the German category of the *Geisteswissenschaften*.

<sup>3</sup> In distinguishing logic from empirical psychology, Hamilton quoted liberally from Krug (1819) and Esser (1830), who generally adopted the Kantian view of logic as formal.

<sup>4</sup> The question of logic's relation to psychology in Mill's thought is vexed, partly by his seemingly contradictory pronouncements (Godden 2005). Mill distinguished the prescriptive function of logic from the descriptive task of psychology, and he (typically) viewed the object of logic "objectively," as concerning the most general laws of the world (as opposed to the most general laws of the mind). Accordingly, his claim that logic is empirically based is not in itself psychologistic. Skorupski (1998) argues that Mill's epistemology of logic was not psychologistic in the sense of equating logical laws with psychological laws or limiting judgments to relations between mental contents, but that his ultimate justification of induction was psychologistic in stemming from reflection on the mind's actual practices in reasoning. By contrast, Godden (2005) finds that Mill's phenomenalism, in limiting the objects of thought to phenomena, renders his epistemology psychologistic. For our purposes, it is enough to note that Mill clearly distinguished the prescriptive function of logic from the descriptive task of psychology.

<sup>5</sup> R. Hodgson (1885) related his position to Hamilton (1861) and, more extensively, to Herbert Spencer's (1870–2) "transfigured realism." Case (1888, 21–8) and Hobhouse (1896, 537) each contrasted his position with Hamilton's. Abraham Wolf (1908–09) defended a version of Hamilton's natural realism. Russell (1983, 358) read Hobhouse's book upon publication and cited Wolf (Russell 1914e, sec. 12).

<sup>6</sup> In the articles listed thus far, Stout writes as a realist who posits spatially extended matter as distinct from minds; his position in the cited materials underwent small modifications that we can safely ignore. His deeper metaphysical commitments changed during this period, as he testifies (1911, 9 n. 1), but we are focusing on his writings on the origin of the conception of a mind-independent material world.

<sup>7</sup> Metz (1938, 46) observes that "the little which is still alive of the Scottish school," of which Hamilton was the leading exponent, appears in the "new realism" of "J. C. Wilson, G. F. Stout, G. E. Moore, J. Laird, and C. E. M. Joad," Metz subsequently classes Wilson as an "old" realist and treats Stout separately, as he does Hobhouse, classifying his position as "critical realism" (1938, 157). Passmore (1957, 310) classifies Stout as an idealist based on Stout's later works and overlooks Hobhouse, who was in the 1890s an Oxford realist, indebted to Case's teaching on the external world (Hobhouse 1896, 517).

<sup>8</sup> The events and dates in the next two paragraphs are drawn largely from Eames (1992).

<sup>9</sup> Perhaps in response to Whitehead's comments (Lowe 1974) on sense data in *Problems* (Russell 1912b), Russell developed his six-dimensional account, which relates multiple perspective images to one another through viewing positions (1914e; OKEW, Ch. 3). This account distinguishes between physical and psychological space, and it treats psychological space as phenomenally three-dimensional in that the data are perceived as being at some distance from the subject. But the penny is still treated as appearing elliptical under certain perspectives (1914e, sec. 7; OKEW, 90), rather than as a circle-at-a-slant in three dimensions (or, regarding size, as possessing a constant size-at-a-distance). We cannot enter here into the interesting intricacies of Russell's construction. The notion that our visual experience is fundamentally of perspective images was subsequently challenged by Gestalt psychology (e.g., Koffka 1935) and by Gibson (1950). <sup>10</sup> Many interesting questions arise about this logical construction and Russell's appeal to unsensed sensedata (or sensibilia) in it, but they are not directly pertinent to the place of psychology in Russell's epistemology. See Nasim (2008) for discussion and additional references.

<sup>11</sup> Hylton (1990, 330) acknowledges Russell's "turn towards the psychological" after his *Principia* period, characterizing it thusly: "Philosophical theories therefore appear to be answerable to the data of experience, to facts about what is or can be plausibly supposed to be present to our minds. This is clearly a considerable concession to psychologism." He does not say what he means by "psychologism"; if it amounts simply to the claim that philosophical theories should be answerable to the data of experience, even Moore and Prichard are guilty of psychologism. Hylton further suggests that Russell's theories were nonpsychological because "the objects of acquaintance themselves are not in general mental," including the objects of perception (sense data). Here, Hylton appears to adopt the Frege–Husserl conception that psychologism consists simply in viewing the objects of thought as mental (subjective), on which, see the text below and the subsequent note. Russell separates philosophical from psychological subject matter by assigning the analysis of experience in general to psychology and reserving the notions of truth and falsehood and of the logical forms of judgment for logic, with philosophy using the latter to construct a theory of knowledge that yields beliefs that are both justified and true (or that suggests how to attain such beliefs).

<sup>12</sup> Passmore's reference to psychologism (1957, 174), quoted in the first section, also assumes that the charge applies for merely considering psychology as relevant to, in his case, logic. His conception (1957, 150) may rest on the tendency, during the middle decades of the twentieth century, to adopt a Frege–Husserl notion of "psychologism." Anderson (2005) usefully examines two types of psychologism: the neo-Kantian charge of confusing normative rules with descriptive claims about how the mind in fact works, and the Frege–Husserl charge of making thought subjective. Further investigation is needed of the historical interplay between the original Kantian notion of psychologism and subsequent notions. Kusch's (1995) sociological study makes the "objectivity" (Frege–Husserl) case primary and does not systematically consider the Kantian notion.