Some scepticism has been voiced over whether the work of John Hughlings Jackson possesses any significant philosophical orientation. This article argues that Hughlings Jackson was acquainted with the work of a wide range of philosophers. In particular, certain aspects of the writings of John Stuart Mill are reflected in Hughlings Jackson’s own work. From early in his career, Hughlings Jackson adopted a critical stance in his neurological papers, seeking to expose shortcomings in the conventional practices of his peers and urging greater methodological rigour and sophistication in order to advance their science. This critical and ‘procedurist’ bias endows Hughlings Jackson’s writings with a characteristically modern character.

Keywords: philosophy; clinical neurophysiology; clinical research methods; evolution; language

Introduction

A recurrent topic in the literature surrounding the work of John Hughlings Jackson revolves around the question of to what extent—if at all—his neurological writings may be viewed as being ‘philosophical’ in character. The source of much of this debate is a brief comment in an obituary of Hughlings Jackson penned by his friend, Jonathan Hutchinson:

“When Dr. Jackson and myself first made acquaintance he had been some two or three years in the profession, and, in the belief that it did not afford attractive scope for mental powers of which he was not unconscious, he was on the point of abandoning it, intending to engage in a literary life. From this I was successful in dissuading him, and for many years I plumed myself upon this as the most successful achievement of my long life. Of late, however, I have had my misgivings, and have doubted whether—great as had been the gain to medicine—it might not have been a yet greater gain to the world if Hughlings Jackson had been left to devote his mind to philosophy. There are others who are better skilled than myself to give an opinion on this head, but at some future time I may hope to be able to produce some details in illustration of his character which may go far to justify my misgivings’ (Hutchinson, 1911, p. 952).

In a 2002 paper, George York and David Steinberg argued that little significance should be attached to this claim. They maintain that a thorough study of Hughlings Jackson’s published works shows him to have been: ‘a practical physician whose primary motivation was medical science rather than theory or philosophy.’ In particular, Hughlings Jackson’s writings show him to have been averse to ‘metaphysics’—a term which they define as: ‘the extrapolation of a scientific theory beyond the phenomena it is intended to explain.’ York and Steinberg cite various passages from Hughlings Jackson’s work, which, they maintain, support the conclusion that: ‘there is scant evidence for claims that Hughlings Jackson was driven by metaphysical concepts. He even claimed...’
that the metaphysical import of his work, if any, was irrelevant to his purpose’ (York and Steinberg, 2002).

York and Steinberg’s definition of metaphysics is somewhat tendentious and at variance with the way in which Hughlings Jackson himself employed the term. Leaving this aside, however, one may concede that Hughlings Jackson was indeed averse to the introduction of ‘metaphysical’ concepts into neurology and other branches of medicine without necessarily concluding that his work is devoid of any significant philosophical content or to deny that he had any serious acquaintance or engagement with philosophical ideas. In this article, I wish to argue that Hughlings Jackson’s work does indeed display a decided philosophical bent that distinguishes it among the neurological writings of his contemporaries. In particular, while Hughlings Jackson may have eschewed metaphysics, he took a serious interest in questions of epistemology and method. Far from this orientation being incompatible with a scientific understanding of nervous disease, Hughlings Jackson held that an explicit engagement with issues raised by contemporary philosophy was an indispensable prerequisite of the project on which he was engaged. This is not to claim that Hughlings Jackson aspired to be a philosopher; his goal was to be a physiologically informed clinician. But he did bring a philosophical attitude to his scientific and clinical endeavours. It is perhaps also worth emphasizing that in the 19th century the distinction between ‘science’ and ‘philosophy’ was less clear-cut than it is today. First, however, I will give some indication of the range of philosophical literature with which Hughlings Jackson had an acquaintance.

Hughlings Jackson and the philosophers

Even a casual survey of Hughlings Jackson’s writings will reveal frequent allusions to a wide range of philosophers and evidence that he had some familiarity with their writings. Hughlings Jackson was a neurologist who read Mind as well as Brain—the journal of which he was, of course, one of the founding editors (Hughlings Jackson, 1898, p. 86). The list includes some of the major figures of the Western philosophical canon, such as Descartes, Leibniz and Kant—although it is unclear how deep was Hughlings Jackson’s acquaintance with their works. He had, however, evidently read closely the work of certain more contemporary philosophers. Hughlings Jackson’s reading was wide ranging and by no means confined to philosophy. It is, however, with the philosophers that he read, which this article is particularly concerned.

The most prominent of these is Herbert Spencer (1820–1903) whom Hughlings Jackson often acknowledged as a major influence on his own work. He was, he professed, ‘under very heavy obligations to Herbert Spencer.’ (Hughlings Jackson, 1874–76, p. 167) The relationship between Hughlings Jackson’s and Spencer’s ideas has been ably treated by Smith and others (Smith, 1982a, b). Here it is only necessary to note that key Jacksonian concepts relating to the evolution and dissolution of the nervous system, as well as the doctrine that nervous function was exclusively sensomotor in character, can be traced back to Spencer’s work, in particular to his Principles of Psychology. Hughlings Jackson made a point of mentioning that the first edition of this work predated Darwin’s Origin of Species, and there is little doubt which book Hughlings Jackson regarded the more significant for his purposes (Hughlings Jackson, 1889, p. 395). Moreover, the admiration was mutual. A footnote in the 1870 edition of the Principles drew attention to: ‘papers in the Medical Times and Gazette, for December 14 and December 21, 1867, in which Dr. Hughlings Jackson has published some facts and inferences that quite harmonize with these interpretations, in so far as the common function of the great nervous centres is concerned’ (Spencer, 1870, p. 62).

Other names that often occur in Hughlings Jackson’s papers include Alexander Bain (1818–1903), George Henry Lewes (1817–78) and, less frequently, William Kingdom Clifford (1845–79). Bain and Clifford may be viewed as likely sources of the psycho-physical parallelism that Hughlings Jackson was to espouse as a means of segregating physiological from psychological phenomena (Berrios, 2000). Lewes had insisted that all levels—including the highest—of the nervous system operated according to uniform principles, a doctrine that was crucial to Hughlings Jackson’s own understanding of nervous functions. All these figures can be viewed as representative of a tendency in the 19th-century British thought to try to revise philosophical discourse in the light of the findings of modern natural science, a movement with which Hughlings Jackson evidently identified.

Hughlings Jackson’s philosophical reading extended to works in French and to topics that might seem tangential to his central neurological concerns. Thus, when in an 1880 discussion of epileptic seizures he broached the subject of whether dreamless sleep was possible, Hughlings Jackson contrasted the opinions of Descartes, Leibniz and Kant on the subject with those of two early 19th century French philosophers, Georges Cabanis (1757–1808) and François-Pierre-Gonthier Maine de Biran (1766–1824). Hughlings Jackson manifested some erudition concerning the status of such figures when he opined that Maine de Biran enjoyed the posthumous reputation: ‘as the master of official French spiritualist philosophy’ (Jackson, 1880, p. 206). In the same passage, Hughlings Jackson also alluded to another member of the ‘spiritualist’ school, Théodore Simon Jouffroy (1796–1842) who had also contributed to the debate about the nature of the dream state (Carroy, 2006).

Hughlings Jackson’s allusions to these authors figure almost as a casual aside in a text with a primarily clinical and physiological focus. The works of John Stuart Mill (1806–1873) appear, however, to have played a more significant role in shaping Hughlings Jackson’s own project. Thus, he relied on a passage from Mill’s Auguste Comte and Positivism (1866) to clarify the relationship between psychological and neurological enquiry (Hughlings Jackson, 1874–6, p. 191). He was, moreover, also acquainted with Mill’s magnum opus, A System of Logic. In an 1875 discussion of the localization of movements in the brain, Hughlings Jackson referred to this work when discussing the ambiguities of the term ‘sensation’ (Hughlings Jackson, 1879, p. xxxii).

Mill’s System was at once a prescriptive and a descriptive endeavour. On the one hand, he sought to establish the sound rules according to which science should progress—to distinguish, for instance, the respective roles of inductive and deductive reasoning.
On the other hand, Mill maintained that scientific investigation was merely a refined version of the ways in which humans as embodied beings were naturally endowed to gain knowledge of the world. Mill’s was therefore a decidedly naturalistic understanding of logic. ‘A right understanding of the mental process itself,’ he declared, ‘of the conditions it depends on, and the steps of which it consists, is the only basis on which a system of rules fitted for the direction of the process, can possibly be founded’ (Mill, 1850, p. 2). Mill’s naturalism accorded with Hughlings Jackson’s own outlook. Moreover, Hughlings Jackson adopted a similar critical stance in seeking to prescribe methodological rules.

Logic, therefore, supplied a tool whereby the rules of inference that human beings customarily used might be refined. Moreover, ‘the far greatest portion of our knowledge, whether of general truths or of particular facts, is avowedly matter of inference, nearly the whole, not only of science, but of human conduct, is amenable to the authority of logic’ (Mill, 1850, p. 5). Mill pointed out that the business of the physician, for example, was to: ‘ascertain certain facts, in order that they may afterwards apply certain rules, either devised by themselves, or prescribed for their guidance by others; and as they do this well or ill, so they discharge well or ill the duties of their several callings’ (Mill, 1850, p. 6). Logic constituted therefore an ars artium. It did not supply the facts on which to base inferences, but it did provide rules and principles that stipulated how those facts were to be treated in order to provide conclusions on which the greatest reliance could be placed. Thus:

‘Logic does not pretend to teach the surgeon what are the symptoms which indicate a violent death. This he must learn from his own experience and observation, or from that of others, his predecessors in his peculiar science. But logic sits in judgment on the sufficiency of that observation and experience to justify his rules, and on the sufficiency of his rules to justify his conduct. It does not give him proofs, but teaches him what makes them proofs, and how he is to judge of them’ (Mill, 1850, p. 6).

The practical function of logic was, therefore, to promote methodological rigour, to enable workers in any field to refine and sharpen their inferential techniques. Hughlings Jackson was to adopt a practical philosophical stance of this kind in his own writings.

Hughlings Jackson’s ‘Method of Science’

From early in his career, in his published writings Hughlings Jackson adopted what might be characterized as a ‘critical’ stance. That is, he was not content simply to seek through his papers to make substantive contributions to clinical medicine and physiology; he endeavoured to reform and improve the way in which such investigations were conducted. Instead of taking for granted the tacit conventions and presumptions that went unchallenged by his colleagues, he sought to expose shortcomings, confusion and loose reasoning that he maintained were detrimental to the progress of science and medicine. In particular, Hughlings Jackson insisted on a degree of terminological and methodological rigour that was foreign to most of his contemporaries. Such a critical posture is generally seen as definitive of modern philosophical discourse and is especially associated with the work of Immanuel Kant (1724–1804).

In an 1864 lecture on ‘On the Study of Diseases of the Nervous System,’ Hughlings Jackson relied, however, not on Kant but on the words of Francis Bacon (1561–1626) to validate the unusual exercise on which he proposed to embark. He quoted Bacon’s dictum that: ‘It is easier to evolve truth from error than from confusion.’ Hughlings Jackson maintained that if his audience were to reflect honestly upon their own intellectual processes, they would be obliged to admit: ‘of our mental culture that the great want was not a want of industry, nor of opportunities, but of method’ (Hughlings Jackson, 1903, p. 367).

It was such a method that Hughlings Jackson presumed to provide, maintaining that it was preferable: ‘to have even a mechanical arrangement than to work without a plan’ (Hughlings Jackson, 1903, p. 367). By ‘mechanical arrangement’, he seems to have had in mind an entirely artificial set of protocols, which, even if arbitrary, would serve a salutary purpose in regimenting the mental processes of his colleagues. But he added that: ‘I hope that the method I am about to submit to you is in some sense a natural system, rather than an artificial scheme’ (Hughlings Jackson, 1903, p. 367). The allusion here seems to be to the distinction between ‘natural’ and ‘artificial’ systems of classification in botany.

In either event, he commended this method merely as a heuristic device, not as a dogma. The scheme in question consisted in the insistence that the clinician should systematically explore three aspects of every case; namely,

‘as presenting: (i) disease of tissue (changes in tissue); (ii) damage of organs; and (iii) disorder of function’ (Hughlings Jackson, 1903, p. 368).

The details of this scheme need not detain us here—although it is worth noting that he thought it applicable to all branches of medicine, not merely to neurology. This lecture serves, however, to show Hughlings Jackson’s early commitment to a reflective, critical consideration of procedure and principles as a necessary prolegomenon to productive empirical work.

A similar critical stance is evinced in Hughlings Jackson’s insistence throughout his career on linguistic precision and intellectual rigour. Thus in 1879 he cautioned: ‘We must be very careful how we use the word “cause” with regard to disease and symptoms’ (Hughlings Jackson, 1879, p. 337). Unmethodical medical thinking amounted for Hughlings Jackson to: ‘the very worst form of slovenliness’ (Hughlings Jackson, 1903, p. 378). The epistemic virtues that he extolled thus amounted to the intellectual equivalent of the rules of hygiene that should at all times apply in the clinic.

In matters of terminology and usage, Hughlings Jackson was an unabashed elitist. In 1880, he observed in a condescending fashion that: ‘The peasant supposes redness, sweetness, heat, &c, to be in external objects, although, inconsistently, he does not
He was unconscious was to explain nothing: say that a comatose patient was unable to move his limbs because abnormal psychical states. But, in Hughlings Jackson’s view, to men to ‘explain’ abnormal physical conditions: ‘as being owing to such vulgar notions. It was, for instance, commonplace for medical men to ‘explain’ abnormal physical conditions: ‘as being owing to abnormal psychical states.’ But, in Hughlings Jackson’s view, to say that a comatose patient was unable to move his limbs because he was unconscious was to explain nothing:

‘It may pair-off with such a pseudo-explanation as that a patient does not move a limb because there is loss of volition, or with that which accounts for an aphasic’s inability to speak, or for his speaking badly, by saying that it is “because he has lost the memory of words.” It belongs to a whole family of psychologico-materialistic confusions; it is akin to that which has it that ideas or sensations (psychical states) produce movements (physical states); to that also which declares that the mind affects the body’ (Hughlings Jackson, 1881, pp. 439–40).

Hughlings Jackson characterized his stance on the mind/body question by reference to the doctrine of psycho-physical ‘concomitance’—which he maintained, in characteristically pragmatic fashion, was: ‘at any rate, convenient in the study of nervous diseases’ (Hughlings Jackson, 1884, p. 72). The doctrine in question denied that psychical states could cause any physical state. Mental states were merely ‘concomitant’ with certain states of the body. Those who adhered to this view: ‘would not say that an hysterical woman did not do this or that because she lacked will; that an aphasic did not speak because he had lost the memory of words; and that a comatose patient did not move because he had lost consciousness.’ They would instead seek to provide: ‘materialistic explanations of physical inabilities’ (Hughlings Jackson, 1884, p. 706). Hughlings Jackson gave a long list of philosophers who, he claimed, had adhered to the doctrine of concomitance, including Spencer, Clifford, Mill and Bain. It is worth noting that he also added indiscriminately to this catalogue clinicians and scientists, such as Thomas Laycock, Thomas Henry Huxley, David Ferrier and Emil Du Bois Reymond—an indication that he saw no need to make any strict distinction between the two classes of intellectual worker.

Hughlings Jackson was sufficient a realist to accept that such sloppy use of language was unavoidable and perhaps even innocuous in everyday clinical speech. In medicine, as in other spheres of social interaction, there were various contexts in which different linguistic conventions applied. ‘It would be as absurd,’ he averred, ‘to judge of a medical man’s opinions as to consciousness by the terms he uses for describing the states of his patients as it would be to judge of a botanist’s opinion on biology by considering only the terms he used in speaking of plants in his kitchen garden’ (Hughlings Jackson, 1874–76, pp. 187–8). In 1888, Hughlings Jackson employed a different, perhaps more telling, metaphor to characterize the distinction between a ‘scientific’ and an ‘empirical’ understanding of disease. ‘We should,’ he declared, ‘try to know diseases as the hunter knows his lions and tigers, but I think we should endeavour to know them also as the zoologist knows his species, etc’ (Hughlings Jackson, 1888, p. 58).

What Hughlings Jackson did strenuously object to, however, was the detrimental effect such solecisms could have upon any attempt to arrive at a genuine explanation of the phenomenon in question. It was, he declared, ‘to say the very least, inexpedient in a scientific exposition to attempt to explain physical conditions by invoking crude popular psychological doctrines’ (Hughlings Jackson, 1881, p. 440).

In the case in question, immobility—a physical state—must be accounted for in terms of physical causes. ‘Surely the patient’s not moving,’ Hughlings Jackson argued,

‘if it be not owing to exhaustion of nervous arrangements, is at any rate owing to some negative physical condition; this negative physical condition is not loss of consciousness, but is only correlative with that negative psychical condition, if one may be allowed to speak of two negative conditions being correlative’ (Jackson, 1881, p. 440).

Hughlings Jackson proceeded to ‘submit,’ in a quasi-legalistic fashion, a set of propositions about how the clinical phenomena in question—and by extension all other neurological conditions—should be explained. His main concern was to insist upon an ‘absolute distinction betwixt mind and body’. This distinction was crucial ‘in order that we may be thoroughly materialistic in our dealings with disease, and that we may methodically consider the nervous system from top to bottom as a mere sensorimotor mechanism’ (Hughlings Jackson, 1881, pp. 444–5). Hughlings Jackson made it clear that ‘materialism’ of the type he advocated was a pragmatic methodological stance, not an ontological commitment. Again he made a distinction between vulgar and philosophically informed use of language:

‘Scientific materialism is quite a different thing from crude popular materialism. Scientific materialism distinguishes betwixt mind and nervous system in order to study each thoroughly. Popular materialism does not separate the two, and mixes up in its “explanations” psychical factors and physical factors. Scientific materialism is only materialistic as to what is material, the nervous system’ (Hughlings Jackson, 1881, p. 445 footnote).

As physicians, neurologists were to concern themselves only with accounting for the phenomena they encountered at the bedside exclusively in terms of nervous, not of psychic states. Such an orientation was the logical consequence of the doctrine that: ‘we may methodically consider the nervous system from top to bottom as a mere sensorimotor mechanism’ (Hughlings Jackson, 1881, p. 445). Hughlings Jackson demonstrated his commitment to a rigorous application of this principle by using it to explicate the so-called ‘mental’ disorders. He did not: ‘shirk the logical consequences of the doctrine that the highest centres are, like all lower centres, sensorimotor—that from loss of function of more or fewer of them there is paralysis’. It followed that all cases of insanity
must involve both an impairment of consciousness and some loss of motor function’ (Hughlings Jackson, 1881, pp. 441–2).

Rather than continuing to muddle along in their current uncritical fashion, Hughlings Jackson urged his colleagues that: ‘we should follow the method of science, and investigate by the use of hypotheses’ (Hughlings Jackson, 1886, p. 16). He thus saw hypothesis as central to the scientific method. Hughlings Jackson realized that this was a somewhat controversial position. In the 19th century, ‘hypothesis’ was viewed in some quarters as synonymous with speculation and therefore as incompatible with sound science, which was deemed to rely upon the accumulation of ever more empirical facts from which natural laws could eventually be inferred by a process of induction. But even such philosophers as Mill who were firmly of the view that induction was central to the scientific method, acknowledged that hypothesis was indispensable (Jacobs, 1991).

Although he took a similar view of the matter, Hughlings Jackson did not cite Mill in this context; instead he relied on the authority of Thomas Henry Huxley (1825–95). Given the suspicion that hypothesis engendered among some of his peers, Hughlings Jackson may have thought that the opinion of a scientist would carry more weight than that of a philosopher (Hughlings Jackson, 1889, p. 355). In an 1887 article, Huxley had argued that all the natural sciences shared the same basic methodology. In order to advance, the sciences were dependent on the use of hypothetical assumptions that were amenable to subsequent empirical verification. It followed that: ‘a great condition of [science’s] progress has been the invention of verifiable hypotheses’ (Huxley, 1887, pp. 61–2). Huxley maintained that it was a ‘popular delusion’ that scientists were ‘under a sort of moral obligation to abstain from going beyond that generalization of observed facts which is absurdly called “Baconian” induction’. Those who engaged in scientific work, on the other hand, were aware that: ‘those who refuse to go beyond fact, rarely get as far as fact; and any one who has studied the history of science knows that almost every great step therein has been made by the “anticipation of Nature”, that is, by the invention of hypotheses…’ (Huxley, 1887, p. 62). Prominent among the hypotheses that had in recent times led to fundamental advances in various branches of natural science was, according to Huxley: ‘the doctrine of evolution’ (Huxley, 1887, p. 66).

Hughlings Jackson recognized that his call for the use of hypothesis in order to elucidate nervous disease might seem: ‘a strange remark to those who erroneously suppose an hypothesis to be a conclusion in which we may rest.’ Hughlings Jackson, on the other hand, proposed to use hypothesis as a tool: ‘for the methodizing of work by observation and experiment’ (Hughlings Jackson, 1886, p. 16). Hypothesis was thus to be considered not as a constraint upon or substitute for empirical enquiry, but as an instrument for directing and shaping investigation. In order to advance the scientific understanding of the nervous system, Jackson had a particular hypothesis in mind: ‘I submit that we should adopt the hypothesis of evolution, according to which the whole nervous system is a sensorimotor system representing all parts of the body’ (Hughlings Jackson, 1886, p. 16).

It is worth emphasizing that, on this view, the doctrine of evolution was a hypothesis rather than an article of faith or an established law. Jackson’s contention was that this hypothesis was to be entertained purely because of its instrumental value. ‘I submit,’ he wrote, ‘that on the principle of evolution we have the widest basis for rational generalizations of diseases.’ The hypothesis of evolution: ‘simplifies our empirical studies, and gives harmony to what, without it, are crude heaps of facts’ (Hughlings Jackson, 1888, p. 59). Moreover, from this basal doctrine it was possible to deduce various subsidiary hypotheses that could then be subjected to empirical verification.

In particular, the doctrine of evolution had, as its corollary the principle of ‘dissolution’. The structural and functional sophistication and complexity that the human nervous system had acquired in the course of evolution could, through disease or injury, be reversed. This hypothesis, according to Hughlings Jackson, helped to give sense and order to a mass of clinical phenomena that might otherwise defy any attempt at generalization. In an 1879 paper, for example, Hughlings Jackson set out to show that in certain cases of aphasia: ‘the retention of recurring utterances, other than “yes” and “no”, although apparently is not really exceptional to the principle of Dissolution’ (Hughlings Jackson, 1879, p. 324). He did this by systematically deploying a series of subsidiary hypotheses to account for the phenomena in question in order to demonstrate that in such cases there had been ‘interference’ with the principle of dissolution, which nonetheless retained its overall validity. In a show of scrupulousness, Hughlings Jackson felt obliged, however to: ‘mention that there are observations on record which perhaps run counter to the hypothesis’ (Hughlings Jackson, 1879, p. 337).

The manner in which Hughlings Jackson deployed hypotheses is as noteworthy as their substance. He made a show of rigour and fairness that often gives his writing a quasi-legalistic character. Thus when in 1881 he outlined the details of a case, he insisted upon: ‘intercalating hypothetical explanations in brackets, and thus keeping them separate from the facts’ (Hughlings Jackson, 1881, p. 438) Thus, the case history reads:

’a patient subject to epileptiform attacks ‘having permanently a local “discharging lesion”’ has no obvious paralysis “since if the nervous arrangements, their cells being highly unstable, are useless for normal function, there is large Compensation by neighbour bouring parts”. One afternoon, she has a fit ‘an excessive discharge, beginning from the part of the cortex the cells of which are unstable’, the spasm affecting chiefly the right arm ‘brutal, that is excessive development and more nearly simultaneous development of the movements which the unstable cells discharging represent than would occur in healthy operations’; after the fit, the arm is absolutely paralysed ‘exhaustion of central nerve fibres has been effected by the discharge’; all paralysis is gone in 5 h ‘there being only exhaustion, recuperation is soon complete’ (Hughlings Jackson, 1881, p. 438).

There is a temptation to dismiss such exercises as showing an excess of scruple and perhaps even as amounting to pedantry. But they are better understood as evidence of the degree of Hughlings Jackson’s commitment to following to the letter the ‘method of science’ that he advocated. To this end, considerations of fluency and felicity of style took second place to the overriding imperative of, in this instance, preserving the distinction between empirical
observations and hypothetical explanations of those phenomena. More generally, the ‘difficult’ or ‘obscure’ aspect that some commentators have detected in Hughlings Jackson’s way of writing should be regarded as the result of an unwavering commitment to the view that the exposition of scientific truths required a specialized—sometimes uncouth—form of language.

Conclusion

I have in this article tried to show that there is a serious philosophical content to John Hughlings Jackson’s work. The numerous references to a wide range of philosophers in Hughlings Jackson’s writing is no mere empty display of erudition. On the contrary, at least some of these citations are evidence of a genuine engagement with certain key issues that Hughlings Jackson found relevant to the neurological enterprise that was his central concern.

Moreover, the kind of philosophy to which he was evidently most drawn possesses a distinctly modern aspect. It was a form less concerned with making metaphysical assertions about the ultimate nature of things than with seeking to stipulate the rules that should regulate the quest for knowledge. On this model, philosophy is an essentially critical exercise that seeks to establish sound principles to facilitate and remove obstacles to the advance of science.

Recognition of this orientation helps to place Hughlings Jackson and his work in a broader historical context. In a recent paper, Paul Forman has defined modernity as that: ‘historical-cultural era in which means had primacy over ends. Modernity placed its faith in rule-following, in proceeding methodically according to proper method, as surely leading to the optimal end in every cultural endeavour and, more generally, in the individual’s conduct of life’ (Forman, 2010, p. 161). The pursuit of natural science was held to epitomize this ideal: ‘Procedurism was the defining feature of the modern scientist even as science became modernity’s prime example of progress through procedurism’ (Forman, 2010, p. 162).

Hughlings Jackson’s work may be seen as exemplifying this kind of procedural bias. His overarching message is that if neurologists were supplied with and adhered to the appropriate set of methodological rules, they would eventually arrive at a scientific understanding of the physiology and diseases of the nervous system. Indeed, rigorous observance of such a ‘method’ was a condition of neurology progressing from being a merely empirical undertaking to becoming a genuinely scientific exercise.

Viewed in this context, the ‘modesty’ and self-effacement that some have seen as definitive of the persona Hughlings Jackson projected through his writings becomes fully intelligible. A procedurist view of the scientific endeavour leaves little or no room for personal charisma, flashes of intuition or genius. Indeed, any hint of such qualities and pretensions would be viewed with extreme suspicion. The converse of this disparagement of individual qualities is a promotion of the virtues of collective endeavour. The procedural orientation of Hughlings Jackson’s work endows it with an implicit communitarian agenda. By urging his colleagues to adopt a common method, Hughlings Jackson was seeking to unite their energies in the pursuit of a shared goal.

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