

SPIRITUALISM, SCIENCE, AND THE SUPERNATURAL IN MID-VICTORIAN BRITAIN*

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I: INTRODUCTION

In December 1861, a few months after he published the first instalment of his supernatural masterpiece, *A Strange Story*, the distinguished novelist Edward Bulwer Lytton told his friend John Forster that he wished

to make philosophers inquire into [spirit manifestations] as I think Bacon, Newton, and Davy would have inquired. There must be a natural cause for them — if they are not purely imposture. Even if that natural cause be the admission of a spirit world around us, which is the extreme point. But if so, it is a most impartial revelation in Nature.¹

Lytton thus expressed the dilemma of many people in mid-Victorian Britain who had experienced the manifestations of spiritualism, undoubtedly one of the most controversial aspects of Victorian culture that was reaching new heights of popularity in the 1860s. His remark implicitly represents the Victorian association of spiritualism with the supernatural but it also problematises that association by identifying the Victorian quest for order behind phenomena purporting to come from the other world—the ‘naturalization of the supernatural’ as it was called by one early historian of Victorian psychical research.² While some firmly believed that manifestations were opposed to every known natural law and by definition supernatural, others upheld the possibility that such manifestations might derive from ‘natural causes’, whether well-known mental mechanisms, new forces associated with the body, or intelligences from the spirit world.

Historians and literary scholars have long puzzled over the resurgence of interest in the supernatural in the Victorian period. This period has been called the ‘age of science’, a period of increasing belief that the cosmos was governed by immutable natural laws rather than capricious supernatural agencies or divine whim, and when supernatural beliefs were increasingly dismissed as superstition.³ It was a period in which a wide range of phenomena were brought under the realm of empirically-grounded law, and one witnessing a proliferation of laws constructed in diverse areas of scientific enquiry, including physics,

chemistry, physiology, and psychology. The formulation of laws was widely regarded as the highest goals of scientific endeavour, and those monuments of ordering physical phenomena—the laws of celestial mechanics—were upheld by Victorian scientists as the ideal to which all scientific enterprises should aspire. Moreover, since natural laws were widely regarded as authoritative accounts of the natural world, scientific practitioners, whose empirical evidence underpinned such laws, were generally seen as the supreme authorities on the natural world.

As this paper will show, it was precisely because the sciences were recognised as the most reliable means of discerning regularities beneath phenomena, that Victorian spiritualists sought to achieve the authority of scientific laws for their claims regarding the manifestations of the séance. However, these struggles occurred in a period when spirit manifestations were being blankly dismissed because of their allegedly supernatural status and moreover, when the sciences were being defined to exclude spiritualism. The apparently lawless phenomena of the séance and the interpretations of such phenomena promulgated by spiritualists had to be banished because they threatened the rapid progress of science and the stable natural order on which scientific professionalisers based their claims for cultural authority.⁴ George Carey Foster, an evangelist for the new Victorian cultures of laboratory physics teaching, spoke for many who had devoted their lives to building the intellectual and architectural spaces of the sciences, when, in 1894, he warned the psychical researcher Oliver Lodge that ‘is not the whole progress of physics based on the assumption that these [spiritualistic] things do not happen?’⁵ In articles in mass-circulation periodicals, text-books, public lectures, and in class-room teaching, Victorian professionalisers and popularisers of science enforced the contrast between science and spiritualism, and helped represent spiritualism as beyond the domain of legitimate science and supernatural *qua* beyond the domain of natural enquiry.

As historians have argued, however, since the Victorian period witnessed such fierce scientific, intellectual, and theological debates over the boundaries between science and spiritualism, science and pseudo-science, we cannot take such boundaries for granted in our historical analyses. These boundaries are the *explanans* not the *explanandum*. One of the

most important benefits of this approach is that it draws attention to the complexity of the debates out of which these boundaries emerged. Recent scholarship has demonstrated, for example, that controversies over spiritualism were not, as traditional historiography suggests, struggles between proponents of ‘science’ and ‘pseudo-science’, but fights between individuals who passionately believed in science and that their particular approach to the spirit world was scientific and the most legitimate.⁶

The new historiography of the occult sciences also challenges the use of natural and supernatural as unproblematic categories for analysing disputes over spiritualism, and prompts us to understand how boundaries between natural and supernatural emerged from disputes over spirit manifestations. Contemporary literature on the supernatural, however, testifies to the continuing usefulness and persuasiveness of classifying spiritualism as ‘supernatural’.⁷ While such classification respects the categories used by historical characters, it is not sensitive to the provisional, contradictory, or other uses to which ‘supernatural’ was put in Victorian Britain. Neither does it represent the complex *natural* interpretations of spiritualistic manifestations.⁸ This essay attempts to recover some of this complexity in the mid-Victorian controversies over spiritualism—arguably the most intense and revealing of all such controversies. The following section charts the problematic cultures and claims associated with Victorian spiritualism, and examines the ways in which spiritualists sought to achieve scientific credibility for their enquiries by promulgating the argument that manifestations would eventually be found to be results of natural laws. This was exactly the position taken by the most outspoken Victorian opponents of spiritualism—physiologists, psychologists and medical practitioners—and my examination of their competing naturalistic explanations of spiritualistic phenomena shows that the more intense disputes over spiritualism sprang from only subtle differences of interpretation. I develop this approach in the third section, which uses the clashes between two of the most eminent Victorian scientific investigators of spiritualism—William Crookes and William Benjamin Carpenter—to show that conflicts over the naturalistic provenance of manifestations were also conflicts over what constituted a proper scientific authority on spiritualism. In these clashes, judgements on the interpretation of spiritualistic manifestations were bound up with

judgments on the appropriateness and reliability of the training, experience, and expertise that informed this interpretation. Although the long-term impact of these controversies on Victorian spiritualism, the supernatural, and science falls outside the scope of this essay, I conclude by suggesting how the approaches developed here can generate new insights into old questions of the ultimate trajectory of Victorian spiritualism.

II: THE CULTURAL AND THE NATURAL IN VICTORIAN SPIRITUALISM

In June 1853 the *Illustrated London News* regretted that the ‘matter-of-fact people of the nineteenth century’ were ‘plunged all at once into the bottomless deep of spiritualism’. This popular weekly newspaper believed it had good reason to lament the state of the public mind. ‘Railroads, steam, and electricity’, it continued,

and the indubitable wonders which they have wrought, have not proved powerful enough to supersede and destroy that strong innate love of the supernatural which seems implanted in the human mind. Thousands of people in Europe and America are turning tables, and obstinately refusing to believe that physical and mechanical means are in any way connected in the process. Hats, too, are turned, as well as the heads that wear them.

Thousands of people seemed to be exploring the table-turning and spiritualistic phenomena that had arrived in England from America and the Continent in late 1852. In a country already weakened by recent outbreaks of mortal diseases, the ‘epidemic’ of table-turning and of spiritualism had seized on ‘not only the ignorant and the vulgar, but the educated and the refined’ like a ‘grippe or the cholera-morbus’.⁹

The *Illustrated London News* was not alone in comparing spiritualism to a recrudescence of the supernatural in an apparently enlightened age. Throughout the mid- to late Victorian period, spiritualistic phenomena were associated with a wide range of contemporary and ancient supernatural phenomena, including Christian miracles, witchcraft and sorcery, apparitions of the living and dead, haunted houses, fairies, and second sight. Neither was the *Illustrated London News* alone in likening spiritualism to a disease or

something similarly despised, and throughout its Victorian heyday, spiritualism was condemned as the work of Satan, a sordid commercial ‘business’, an ‘epidemic delusion’, a ‘wretched superstition’, ‘filth’, and humbug.¹⁰ The vehemence and frequency with which hostile remarks were levelled at spiritualism reflects its popularity in mid-Victorian Britain. By the 1860s spiritualism had become a conspicuous, and to many, lamentable part of Victorian cultural life, with its mediums, its specialist newspapers, pamphlets, treatises, and societies, and its private and public séances.¹¹ Its rapid spread had manifold causes but it certainly owed much to widespread and long-established preoccupations about the afterlife and the immortality of the soul, as well as pre-existing cultures of religious nonconformity and mesmerism (from which spiritualists borrowed such notions as the magnetic fluids by which disembodied intelligence was supposedly transmitted). Its growing presence in Victorian culture also owed much to the fact that it could serve a wide range of religious, intellectual, emotional, and social interests: for example, spirit manifestations furnished powerful empirical proofs of Scriptural miracles for those Christians whose faith had been undermined by Higher Biblical Criticism and startling new biological and geological evidence for human origins, but manifestations were also used by anti-clerical plebeian spiritualists for building democratic alternatives to Christianity and furnished rich sources for scientific research into abstruse physical, psychological, and physiological phenomena.¹²

It was in the domestic séance, typically in the presence of a spiritualist medium, where most people gained their experiences of spiritualistic manifestations. Those attending séances in Britain during the early 1850s could expect to experience such remarkable phenomena as clairvoyance, tables rapping out coded messages from professed spirits of the dead, and the levitation of objects by ‘spirits’. By the early 1870s, however, the mediumistic repertoire had been vastly enriched with such feats as mediums who levitated around the séance, direct and mediated ‘spirit’ writing, and most spectacular of all,

the materialisation of fully-formed spirits. The most controversial aspect of spiritualism was undoubtedly the interpretation of such manifestations, whether the higher ‘mental’ or the cruder ‘physical’ phenomena. Most spiritualists insisted that manifestations furnished proof of one or more of the following claims: the independence of spirit and matter, the survival and immortality of the spirit following bodily death, the eternal progress of all in the other world, and the possibility that under certain conditions spirits of the dead could manifest themselves to the living. For many enquirers, assent to these interpretations was based on an elimination of trickery, self-delusion, and other ‘physical’ mechanisms as plausible hypotheses: although intellectually more difficult to accept, the ‘spiritual’ theory was simply better at explaining the ‘facts’ of the séance.¹³

While there were many Victorians who used spiritualism to support Christianity, and to combat atheism, agnosticism, materialism, and rationalism, many other Christians believed spiritualist activities threatened cherished Protestant beliefs. They lambasted spiritualists’ abolition of the boundary between this world and the next, their rejection of eternal damnation, their exchanges with spirits who were most likely to be evil, their use of crude mediums and vulgar spirits in matters of pure faith, and their subversion of Scriptural and clerical authority, as morally perilous and unholy.

It was the presence of notoriously tricky and avaricious mediums, the questionable reliability of witnesses, and other contingencies of the séance that many enquirers into spiritualism believed threatened the objective reality of spirit manifestations. The *Saturday Review* spoke for many Victorians when in 1871 it criticised the way in which spiritualistic manifestations only occurred ‘in the most capricious manner’ rather than appearing on demand and, five years later, it argued that spirit manifestations could not be reduced to a ‘true’ ‘law of nature’ because they were ‘never performed in a straightforward open way, like any honest experiment. They are either done in the dark, or only before known

believers and confederates, or within a specially prepared place; and even when they are done in the daylight, the operator is full of tricks to distract attention, and to produce mysterious bewilderment.’¹⁴

For many séance-goers, the only circumstances under which manifestations appeared were those that mitigated against the very idea of rational scientific enquiry. Henry Dircks, an eminent civil engineer and the co-inventor of the popular theatrical illusion, ‘Pepper’s Ghost’, neatly expressed this in letters to *The Times* in 1872, correspondence that developed a long-established distinction between the regularity, utility, and sanitised wonder of enlightened scientific enquiry with the caprice, gratuitousness and dangerous spectacle of early modern preternatural philosophy.¹⁵ He contrasted science, which ‘always brings its miracles to the light of day’, which concerns reproducible and useful ‘wonders’, and which relates to ‘certain laws of nature’, with spiritualism, which not only ‘shrouds itself in dark chambers, has its special mediums, and shuns the light’, but has not led to any ‘practical results’, contains ‘an amazing amount of childish jugglery’, ‘relates to the supernatural, and is opposed to every known natural law’.¹⁶

The views of Dircks and, as we have seen, Lytton, illustrate the centrality of questions of natural and supernatural in debates over spiritualism. In many ways, these debates intersected with the much wider intellectual and theological controversies over the meanings of the terms supernatural and natural law, the plausibility of Biblical miracles, and the bearing of the claims of ‘modern science’ on other Christian teachings. Nevertheless, a survey of books, pamphlets, and articles on spiritualism from the mid-Victorian period underlines the lack of consensus on the provenance of spiritualistic manifestations, with works upholding a range of natural and supernatural explanations including evil spirits, angels, conscious acts of trickery, unconscious psychological and physiological mechanisms, or hitherto unknown forces associated with the human body. A sense of the

complexity of the debate is evident in an 1859 work on natural law and revelation by Baden Powell, an eminent Oxford mathematician and ‘Broad Church’ clergyman. Anticipating the remarks of Dircks quoted earlier, Powell insisted that ‘In so far as [spiritual phenomena] are alleged to be of a supernatural kind, not referable to some physical laws, they must be absolutely discarded from all philosophical enquiry’.¹⁷ But having allowed for the possibility that spirits might be miraculous, Powell was confident that “‘spirit-rapping”, table-turning and the like’ would ‘be ultimately found perfectly conformable to some great determinate laws, which the science of the future will elicit’.¹⁸

Although Powell was hostile to spiritualism and favoured the physiological theories of ‘spirits’ advanced by mid-Victorian medical practitioners (see below), his naturalistic interpretation of spirits closely resembles the positions adopted by British and American spiritualists to defend their activities from the kinds of criticism represented by the *Saturday Review* and Henry Dircks.¹⁹ The views of Robert Dale Owen, Alfred Russel Wallace, and William Henry Harrison powerfully illustrate how leading Victorian spiritualists argued for the ultimately law-like nature of manifestations, and therefore sought to persuade sceptical Victorian audiences that spiritualism was a subject fit for what Powell called ‘philosophical enquiry’.

In his widely-read *Footfalls on the Boundary of Another World* (1860), Owen, a radical American politician who had been converted to spiritualism in the late 1850s, lamented the fact that in an age where ‘modern science’ had subsumed most phenomena under general laws of the universe, the tendency was to reject ‘evidence for a modern miracle’ because these alleged occurrences violated natural laws and thus what could be taken as possible.²⁰ Like many Victorian spiritualists, Owen engaged with the eighteenth century philosopher David Hume’s notorious argument against miracles which insisted that it was more likely that witnesses to such events were mistaken than the laws based on

“firm and unutterable experience” had been violated. Owen retorted that since ‘no experience is *unalterable*’ in a ‘world all over which is stamped the impress of progress’, then experience and the laws built from experience were only provisional and not reliable guides to what was naturally possible and impossible. He also dismissed Hume’s argument that miracles were ‘an effect of the special intervention of God’ because we could have no conception of ‘His thoughts’ and what we took to be miracles might be God ‘employing natural causes and general laws to effect His object’.²¹ For Owen, there was enough well-attested evidence for hauntings, apparitions of the living and dead, and related spontaneous spectral occurrences to suggest that they were ‘ultra mundane phenomena [...] governed by laws yet unknown or obscurely discerned’ but which deserved ‘thorough, searching, sedulously accurate, and in the strictest sense of the term impartial’ inquiry.²²

Alfred Russel Wallace undoubtedly agreed. In 1866 this eminent naturalist and co-inventor of the theory of evolution by natural selection was so impressed with his experiences in séances that he followed Owen’s example of buttressing a philosophical argument for the naturalistic status of strange spectral phenomena with the testimony of putatively trustworthy witnesses for such phenomena.²³ Wallace admitted that miracles had ‘no place’ in ‘modern science’ which had engendered ‘a firm conviction in the minds of most men of education, that the universe is governed by wide and immutable laws’, but emphatically warned that ‘*The apparent miracle may be due to some undiscovered law of nature*’.²⁴ Wallace went much further than Owen, however, because he held that miracles *per se* and the alleged miracles of disembodied spirits could be accommodated within the bounds of modern scientific enquiry. There was no reason, he argued, why anybody ‘acquainted with the latest discoveries and the highest speculations of modern science’ should deny the ‘*possibility*’ of the existence of invisible intelligent beings capable of acting on matter. The discovery of Foraminifera, ‘those structureless gelatinous organisms which

exhibit so many of the higher phenomena of animal life without any of that differentiation of parts' deemed essential for life, made possible the existence of 'sentient beings unrecognisable by our senses'. Similarly, one of the 'grandest generalisations of modern science'—the attribution of 'all the most powerful and universal forces of nature' to the 'minute vibrations' of the 'almost infinitely attenuated form of matter', the 'space-filling ether'—made possible the action of immaterial spirits on 'ponderable bodies'.²⁵

Like many spiritualists, Owen and Wallace used historical testimony of spectral phenomena and the ongoing observational evidence from contemporary séances to support the argument that there was order behind the apparent caprice of spirit manifestations. Few spiritualists articulated this position and its implications for the progress of spiritualism more vigorously than William Henry Harrison, a scientific journalist who in 1869 became the founder-editor of one the most successful of all Victorian spiritualist periodicals, the *Spiritualist*. His optimism for the naturalisation of séance manifestations was apparent from the opening editorial which boasted that

Not much observation of the phenomena of spiritualism is necessary to learn that the manifestations are governed by physical and mental laws, though very few of these laws are at present known. Systematic, scientific research applied to Spiritualism would therefore [...] be sure to give very valuable results, by clearing away much of the mystery overhanging the border land between this world and the next, and by strengthening the conditions which now enable spirits to communicate.²⁶

Harrison believed that abolishing 'the words "miracle" and "supernatural" as applied to Spiritualistic phenomena' would help make such phenomena legitimate subjects for 'scientific research', and would also fulfil the crucial goal of preventing 'the public' from believing that spiritualism was a baseless superstition or that 'the phenomena we know to be true, are based upon the same evidence as that which [...] satisfies the Jews that Joshua made the sun stand still'.²⁷ The steps of Harrison and other spiritualists towards the naturalistic basis of spirit can also be traced in their use of 'spiritual' analogues to electrical and magnetic forces in explanations of how spirits manifested themselves, their concerted

attempts to turn séances into scientific sites for probing connections between the known physical and the unknown ‘spiritual’ forces, and their strong hope that their new ‘scientific religion’ would become a branch of existing scientific disciplines including psychology, physics, and physiology.²⁸

However, the argument that the ‘supernatural’ phenomena of spiritualism could be reduced to natural causes was shared by popular conjurors who sought to show how mediumistic feats were ‘really done’ with legerdemain and concealed machinery.²⁹ Moreover, this interpretation was fiercely upheld by medical practitioners, physiologists, psychologists, and other scientists and intellectuals who shared conjurors’ profound hostility to spiritualism. Drawing on studies of ‘altered’ mental states, empirical research in human physiology, and much older philosophical and psychological works, these explorers of spiritualism also naturalised spirits, but did so by rejecting the ‘spiritual theory’ and promulgating arguments that well-known psychological and physiological causes were sufficient to explain what happened in the séance.³⁰ For physiologists and medical practitioners, what spiritualists attributed to agencies outside the body were well known to medical practitioners as consequences of agencies within the body, and it was their extensive knowledge of a wide range of mental disorders including insanity, hysteria, and somnambulism that underpinned such a naturalistic interpretation.

The anti-spiritualist position was vigorously upheld in the periodical articles, public lectures, and textbooks by William Benjamin Carpenter, a distinguished Victorian physiologist, medical practitioner, and zoologist, whose influential interpretations of spiritualism are fairly representative of the mid-Victorian medical response to spiritualism.³¹ A staunch Unitarian, Carpenter believed that the laws of the material universe were direct expressions of God’s will and that natural laws could not be broken without His will. Carpenter had strong metaphysical grounds, therefore, for doubting the plausibility of

supernatural phenomena and for locating them within the known laws of the universe. Building on the researches on bodily and mental reflexes of such early Victorian physicians as Marshall Hall and Thomas Laycock, the associationist psychology of David Hartley, and his own extensive studies of mesmerism, table-turning, spirit-rapping, somnambulism, and hysteria, Carpenter developed the notion that all mental activity was, in the first instance, automatic or spontaneous, and that the more developed the species, the more unconscious mental reflexes could be regulated by the will. For Carpenter, contemporary and historical ‘epidemic delusions’ were propagated by individuals who, under the influence of erroneous ‘dominant ideas’ from within or suggestions from without, had become the sorry victims of their automatic mental reflexes and thus experienced sensations and motor responses (‘ideo-motor’ actions) that were entirely dependent on false ideas and stimuli. While maintaining that witnesses to such extraordinary and unlikely phenomena as ‘spirits’ were honest in reporting what they experienced, he disagreed on their interpretations of the phenomena. Their interpretations could not be trusted because they usually entered séances already possessed by the ‘dominant idea’ of disembodied spirits, a strong expectation that severely weakened their ability to control unconscious mental and physical responses with educated judgement, and thus made them highly susceptible to self-delusion, lapses of memory, hallucination, observational errors, and mediumistic jugglery. Accordingly, from the early 1850s, Carpenter argued that the ‘so-called spiritual communications come from *within*, not from *without*, the individuals who suppose themselves to be the recipients of them’ and that such communications were governed by ‘laws of mental action’.³² Like other Victorians who participated in the lengthy mid-Victorian debates about national education, Carpenter’s solution to such worrying examples of public ignorance as spiritualism was, unsurprisingly, proper mental training, because such discipline would control mental reflexes and enable

people to make sound judgements about the sensory world automatically and thus avoid the mistakes made by séance-goers.

This did not, however, perturb spiritualists and many other Victorians who simultaneously denied that physiologists and medical practitioners had the requisite séance experience to make these apparently authoritative claims, and rejected the claim that their evidence for extraordinary manifestations could be reduced to the unconscious actions of mind and body: for example, they fiercely denied that unconscious muscular action could explain spirit photographs or the levitation of bodies with which séance-goers had no contact. It was to explore the alternative laws of spirit, mind, and body suggested by their own séance experiences that prompted spiritualists and other enquirers to launch a plethora of new spiritualistic and psychological societies in mid- and late Victorian Britain, of which the Psychological Society of Great Britain (f. 1875) and the Society for Psychical Research (f. 1882) are outstanding examples.

III: SENSE OR SENSES? CONTESTING THE NATURAL AND THE AUTHORITATIVE IN VICTORIAN SPIRITUALISM

In 1877 Carpenter concluded a public lecture on spiritualism by warning that when assessing the extraordinary phenomena of the séance, ‘we should trust rather to the evidence of our *sense* rather than to that of our *senses*’. Carpenter thus reiterated his belief that common sense, achieved through proper mental education, was the ultimate court of appeal for sensory experience, which was ‘liable to many fallacies’ resulting from the unconscious operations of the mind. It was for this reason that we earned ‘the right to reject the testimony of the most truthful and honest witnesses’ regarding phenomena that violated common sense and the ‘‘Laws of Nature’’.³³ Carpenter’s claim neatly illustrates the

intimate connections between what was sensed regarding spiritualism and who had the sense to judge manifestations. Victorian disputes over the interpretation of spiritualistic manifestations were therefore also disputes over authority. Thus, the conflicts that we have described between spiritualists and medical practitioners stemmed not simply from differing ‘naturalistic’ interpretations of spirits, but from rival notions of what constituted the mental training, experience, and ‘scientific’ expertise needed to make such interpretations authoritative.

This section shows how this approach can illuminate the controversies surrounding the researches of one of the most celebrated of all Victorian investigators of the ‘supernatural’, William Crookes.³⁴ Throughout the 1870s Crookes’s researches sparked heated exchanges in a wide range of public and private forums, notably with William Benjamin Carpenter. We might see the conflict between Crookes and Carpenter as a straightforward contest between on the one hand, the pseudo-scientific, spiritualistic and supernatural, and on the other hand, the scientific, the psychological, and natural. Like the earlier comparison between spiritualists and medical practitioners, however, the analysis here emphasises the agreement as well as disagreements between Crookes and Carpenter. Both promoted non-spiritual theories of manifestations and both sought control of the séance, but their different notions of the natural causes of manifestations and of authority sparked bitter and prolonged exchanges.

By 1870, the year that he first publicly announced his intentions to conduct a scientific investigation of spiritualism, Crookes had established himself, despite a chequered education, as a leading analytical chemist and respected editor of several specialist scientific periodicals. He was also known as the discoverer of the element thallium, an achievement based on his skill in the new technique of spectrum analysis and which bolstered this entrepreneurial chemist’s conviction that putatively anomalous phenomena (including

spectral lines) were potentially rich sources for building a fortune and scientific fame. As editor of the *Quarterly Journal of Science* (henceforth *QJS*), Crookes encouraged contributions that discussed the startling new frontiers of science and emphasised the crucial role that scientific practitioners could play in the solution of such social problems as food adulteration, water pollution, and disease. In 1870 Crookes used his periodical to confront another subject that was a social problem containing potentially rich sources for extending the authority of science—spiritualism. Crookes appears to have begun investigating in 1867, and while this move may have been prompted by a family bereavement, it probably owed more to the positive séance experiences of close scientific colleagues, and the example set by Michael Faraday, Robert Hare, and other scientific investigators of spiritualism who, as far as Crookes was concerned, had made spiritualism a legitimate scene of scientific enquiry. Moreover, Crookes saw the séance was a potential site for solving problems of the natural order. ‘New Forces must be found’, he explained in 1871, ‘or mankind must remain sadly ignorant of the mysteries of nature. We are unacquainted with a sufficient number of forces to the work of the universe.’³⁵ By mid-1870 Crookes had evidently had enough séance experiences to convince him of the existence of phenomena that ‘cannot be explained by any present law at present known’, but that the earlier investigations of Faraday and others had not fulfilled public calls for a decisive scientific verdict on spiritualism. Accordingly, in his first *QJS* article on spiritualism, he insisted that this latter approach would establish ‘a class of facts [...] upon which reliance can be placed’ and ‘drive the worthless residuum hence into the unknown limbo of magic and necromancy’.³⁶ Crookes was satisfied that the ‘pseudo-scientific spiritualist’, with his sloppy séance protocols and vague physical theories of manifestations, could not undertake ‘investigations which so completely baffle the ordinary observer’: rather, this task was for the ‘thorough scientific man’ who was trained in ‘care and accuracy’ and skilled in using

the sensitive instruments needed to produce, under test conditions and independently of spiritual or other any theory, decisive evidence of the physical manifestations of the séance.³⁷

By the time *QJS* readers digested this pronouncement on the proper authorities on spiritualism, Crookes was already trying to implement his ideas in an extensive series of séances with the celebrated medium D. D. Home held in Crookes's London residence. Over the next few months, Crookes became increasingly impressed by the medium's apparent ability to levitate objects and relay spirit communications, but also his willingness to submit to close scientific investigation and insistence on holding séances in the light. For Crookes, a medium of this power and apparent probity was exactly the resource he needed for his spiritualistic enterprise, and in the summer of 1871 he constructed several mechanical instruments for registering the power that seemed to emanate from Home's body, and then used them in test séances conducted with the assistance of the astronomer William Huggins and other scientific colleagues who sought to settle the matter of spiritualism with their particular skills. Satisfied that Home had not secretly manipulated the apparatus or performed any other trickery, Crookes was confident that his apparatus had registered the existence of a 'new force, in some unknown manner connected with the human organisation', a capricious 'Psychic Force' which produced kinetic and audible effects beyond the body of the medium.³⁸

Although Crookes failed to convince highly sceptical Royal Society referees of the merits of his research, his decision to publish reports on the experiments in the *QJS* won him a much larger audience than he would have gained through Royal Society publications. Indeed, according to one report, Crookes's reports 'set all London on fire, and the Spiritualists rabid with excitement'.³⁹ The response was certainly mixed. Several commentators accused Crookes of giving scientific respectability to a disreputable subject,

of being taken in by mediumistic jugglery and of making fatal experimental blunders, while others were startled by the research and saw it as a sign for a decisive investigation of spiritualism.⁴⁰ Spiritualists were also divided. Many congratulated Crookes for providing weighty confirmation of their fireside séance experiences, but others argued that his research showed that scientific men had nothing to show spiritualists that they did not already know through their own experience. No spiritualist was more critical than James Burns, the leading plebeian spiritualist, journalist, and publisher, who denied that Crookes had explained ‘the nature of the power which produces the phenomena’ and earlier challenged the very basis of the chemist’s claims to authority in the séance: ‘Could all the paraphernalia of Mr. Crookes’s workshop’, he asked in 1870, ‘reveal to him the presence of a spirit?’, and he proceeded to explain that the individuals best able to discern the ‘laws and conditions for the regulation of the phenomena’ and the ultimate psychological cause of spirits were not the victims of ‘a “long line of learning”’ but those who possessed ‘senses and forms of consciousness’ adapted to the psychological ‘plane’. It was these individuals who were building the ‘science of spiritualism’. Like many spiritualists, Burns agreed that physical scientists could indeed illuminate the ‘material phenomena developed by spirit power’, but their mental training made them inferior to spiritualists in discerning the psychological laws of the séance.⁴¹

While Crookes appears to have ignored these attacks on the authority of physical scientists on spiritualism, he certainly did not dismiss the hostile responses from fellow scientists. Penetrating criticism from the physicist George Gabriel Stokes, for example, prompted him to attempt to display psychic forces independently of mediums and therefore the dangerous world of spiritualism, and for this he turned to highly sensitive vacuum apparatus he was developing to explore an apparently anomalous force associated with radiation. However, no criticism hurt Crookes more than William Benjamin Carpenter’s.

In late 1871, the exasperated physiologist published a scathing article in the *Quarterly Review* which angrily reiterated the psycho-physiological theories of spirits he had been promulgating for over twenty years, and castigated scientific witnesses to ‘powers unknown to men of science’ as unprofessional, self-deluded and poorly educated converts to spiritualism. ‘[S]uch scientific amateurs labour’, he argued, ‘under a grave disadvantage, in the want of that broad basis of *general* scientific culture, which alone can keep them from the narrowing and perverting influence of a limited *specialism*’. Crookes’s want of the disciplining effects of a broad scientific education was apparent from the fact that he had seemingly entered his investigations already prejudiced in favour of the objective reality of spiritualistic phenomena and was not ‘acquainted with what had been previously ascertained in regard to the real nature of kindred [spiritualistic] phenomena’. Carpenter was clearly annoyed that Crookes had not deferred to the authority of those with greater experience of psychological disorders (notably himself and the physician Thomas Laycock) because this ‘specialist of specialists’ would have trusted medical common sense rather than his own senses, guarded himself against self-deception and other sources of error, and recognised that psychic force was nothing more than known mechanical forces cunningly exerted by Home out of sight of the experimenters. The case of Crookes dramatically illustrated how ‘a man may have acquired a high reputation as an investigator in one department of science, and yet be utterly untrustworthy in regard to another’.⁴² Thus Carpenter, like his spiritualist enemies, denied that expertise in the physical laboratory meant expertise in the séance, but unlike the spiritualists, believed that the only forces suggested by Crookes’s investigations were those psychological forces which clouded Crookes’s judgement.

Predictably, Crookes was furious and presented his first retort in *Psychic Force and Modern Spiritualism* (1872), an explosive defence of his scientific credibility and a fierce denial of Carpenter’s apparently disingenuous claim that he was a spiritualistic convert.

Although Crookes was clearly dissatisfied with Carpenter's explanations of spiritualism and irritated with Carpenter's apparently delusive attachment to his pet theories, he was struck by the similarity between himself and Carpenter. He emphasised that both he and Carpenter believed in 'a *new force*', although Carpenter was apparently resisting attempts to displace the forces associated with 'unconscious cerebration' and the "ideo-motor principle" with psychic force—a force that, in the opinion of Crookes and his allies, was better than rival psychological theories at explaining the types of spiritualistic phenomena they had encountered.⁴³ But what infuriated Crookes was Carpenter's general critique of his experimental abilities and particular dismissal of specialist technical expertise as a qualification for authority on spiritualism. Crookes retorted that since the production of 'broad, tangible, and easily demonstrable facts' about Home's alleged power turned on the 'question of apparatus' used to register such powers then it was precisely 'one "who is trustworthy in an enquiry requiring technical knowledge"' who could best undertake this task.⁴⁴ Accordingly, Crookes was baffled by the implication that the technical knowledge that had earlier given scientists confidence in his claims about the capricious physical phenomena of spectra, also weakened their trust in his claims about the no more capricious physical manifestations of psychic force.⁴⁵ Like Carpenter, Crookes was at this time participating in the larger debates about scientific education in British schools and universities and as editor of scientific periodicals he regularly championed the virtues of a specialist rather than general scientific training. While Carpenter believed that a 'broad basis of *general* scientific education' furnished Britons with the soundest mental discipline and the best weapons against popular fads, Crookes retorted that the very specialist technical skills that apparently threatened his authority on spiritualism were 'just those of the highest value in this country. What has chiefly placed England in the industrial position she now holds by technical science and special researches?'.⁴⁶

This was by no means the end of the controversy. Between 1872 and 1877 Crookes and Carpenter published a stream of articles in specialist and generalist periodicals in which their rival ‘natural’ solutions to the problems of spiritualistic phenomena were bound up with their competing claims to authority in the séance. Thus in 1876, Carpenter criticised Crookes in a way that asserted the plausibility of his psycho-physiological theory of alleged manifestations and again implicitly represented Carpenter and his medical allies as the authorities on the thorny subject. Like most other witnesses to the ‘supernatural’, Crookes had undoubtedly been ‘honest’ in reporting manifestations, but his reportage was still unreliable because he had been influenced by a ‘strong “prepossession” to believe in the creations of [his] own visual imagination’.⁴⁷ Although Carpenter identified Crookes as one of the many deluded witnesses to the ‘supernatural’, his main problem was Crookes’s attempts to smuggle apparently bogus new *natural* forces into elite scientific forums, forces which threatened to displace his own. Thus, in articles and correspondence in the *Nineteenth Century* and *Nature*, Carpenter compared Crookes’s research on a new radiation force to his work on psychic force. In his opinion, both showed Crookes to have been the sorry victim of the automatic actions of his mind—engendered by a delusion about new forces—although the subsequent history of Crookes’s radiation experiments showed the chemist to have ‘evinced the spirit of the true philosopher’ and eventually corrected his erroneous inferences in line with common-sense kinetic theories of gases.⁴⁸

In the context of such damaging criticism, it was crucial for Crookes to defend his reliability as an experimenter and to distance himself from dangerous associations with supernaturalism and spiritualism. Thus in 1874 he represented himself to *QJS* readers as a scientific ‘traveller’ in the land of the ‘Phenomena called Spiritual’, a traveller who had ‘endeavoured to trace the operation of natural laws and forces where others have seen only the agency of supernatural beings’ and upheld his conviction that mediums and indeed,

everybody at séances, possessed ‘a force, power, influence, virtue or gift’ which ‘intelligent beings’ use to ‘produce the phenomena observed’. This was distinct from the supernatural—because the force proceeded somehow from ‘nerve organisation’—and spiritualism: while advocates of psychic force held that there was ‘as yet insufficient proof’ that the force was directed by spiritual agents rather than the ‘Intelligence of the Medium’, the spiritualists believed in such agents without proof.⁴⁹ But like Carpenter, Crookes’s naturalistic interpretation of spiritualistic manifestations continued to depend on a particular idea of the mental education and skills that would qualify somebody as an authority on spiritualism. Thus, in 1877 Carpenter insisted that ‘a knowledge of the physiology and pathology of the Human Mind, of its extraordinary tendency to self-deception in regard to matters in which its feelings are interested, of its liability to place undue confidence in persons having an interest in deceiving, and of the modes in which fallacies are best to be detected and frauds exposed’ enabled him to reliably discriminate the ‘genuine from the false’ in spiritualism. In the same year, Crookes, basking in the warm scientific reception accorded to his researches on a new radiation force, maintained that the ‘man of disciplined mind and finished manipulative skill’ was best able to investigate ‘unanticipated phenomena’ that appeared to defy common sense, but which formed the basis of ‘new elements, new laws, possibly even of new forces’.⁵⁰ The implication was that those skilled in manipulating instruments could be trusted to produce evidence for new forces—psychic, radiative, or otherwise—and thus breach the boundaries of common sense but extend the boundaries of science.

Although Crookes and Carpenter never resolved their differences, they did not engage in any direct public fights after 1878, a development that owes much to the fact that by this time, Crookes was devoting most of his research to radiation and vacuum phenomena rather than spiritualism, although his dwindling explorations of spiritualism

owed more to a want of time and reliable mediums, than a lack of interest in spiritualism *per se*. His first publication on spiritualism, in fact, appeared five years after Carpenter's death in the *SPR Journal* for 1889–90, and consisted of his notes on the Home séances of the early 1870s.⁵¹ In many ways, the 'psychic force' interpretation that Crookes maintained for these investigations fitted well with the non-spiritualistic interpretations of solicited and spontaneous psychic related phenomena forged by the intellectuals and scientists who dominated the SPR, an organisation of which Crookes was a loyal member and President. Keen to forge and maintain a respectable scientific front, these practitioners worked hard to rid their enterprises of the intellectually and theologically controversial associations with the supernatural and spiritualism. Accordingly, they invented and promulgated such terms as 'supernormal' and 'supersensory' as more accurate and safer ways of interpreting the telepathic, spiritualistic and other strange psychological phenomena on which they worked, a development informed by their belief that, in the words of its leading researcher, 'By far the larger proportion' of spiritualistic phenomena 'are due to the action of the still embodied spirit of the agent of the percipient himself'.⁵² This collapse of spirits into the body did not, of course, please spiritualists who upheld the abundant evidence for spiritual intelligences beyond those of séance-goers and mediums, and either fiercely criticised, or resigned their membership of the organisation they hoped would have provided them with crucial support.⁵³ However, like other controversies and 'opposing' positions in Victorian spiritualism, the differences were not simple matters of natural and supernatural, but of competing and, in many cases, irreconcilable, versions of what could be taken to be natural.

CONCLUSION

This essay has demonstrated the complexity of Victorian controversies over spiritualism and the need to be more sensitive to the terms in which these controversies were conducted. It

is tempting to reduce these controversies to simple matters of ‘science versus spiritualism’, ‘science versus pseudo-science’, ‘natural versus supernatural’, ‘law versus caprice’, not least because many participants in these controversies used these kind of binary oppositions. Closer analysis of several spiritualistic controversies, however, suggests that matters were not so straightforward. What was at stake were rival notions of the scientific, the natural, and the lawful, with participants agreeing implicitly that spirits were natural and lawful, and agreeing implicitly that their own approaches were the most scientific, but with participants fiercely disagreeing over what exactly counted as natural and lawful, and who counted as scientific. Far from providing straightforward resolutions to mid-Victorian problems of spiritual manifestations, these terms were as much the subject of dispute as the reality of manifestations themselves. Although this essay has, for reasons of space, not explored the impact of these negotiations on the *long-term* trajectory of Victorian spiritualism and on its relationships with the sciences and the supernatural, it has suggested that one of the most fruitful ways of addressing such important questions will be through a deeper understanding of the ways in which Victorians distinguished, related, and negotiated such terms as natural, supernatural, law, and authority. Systematic studies of the changing Victorian uses of this potent language are long overdue and will greatly advance historical debates on the cultures and natures of Victorian spiritualism and the Victorian supernatural.

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³ David M. Knight, *The Age of Science* (Oxford: Blackwell, 1986).

⁴ Frank M. Turner, *Contesting Cultural Authority: Essays in Victorian Intellectual Life* (Cambridge: Cambridge University Press, 1993), 131–228.

⁵ George Carey Foster to Oliver Lodge, 25 October, 1894, Oliver Lodge Papers, University College, London, MSS. Add 89/33. Foster's emphasis.

⁶ Richard J. Noakes, 'Telegraphy is an Occult Art: Cromwell Fleetwood Varley and the Diffusion of Electricity to the Other World', *British Journal for the History of Science* (Vol. 32 (1999), pp. 421–459); Logie Barrow, *Independent Spirits: Spiritualism and the English Plebeians, 1850–1910* (London: Routledge and Kegan Paul, 1986). For examples of revisionist historical and sociological approaches to other 'pseudo-sciences' see H. M. Collins and T. J. Pinch, *Frames of Meaning: The Social Construction of Extraordinary Science* (London: Routledge and Kegan Paul, 1982); Roger Cooter, *The Cultural Meaning of Popular Science: Phrenology and the Organisation of Consent in Nineteenth-Century Britain* (Cambridge: Cambridge University Press, 1984); Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (Chicago: Chicago University Press, 1998).

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