Chapter 10

W. T. Stead’s Occult Economies

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There has been a notable recent shift in historiographic treatments of Victorian ‘sciences’ of supernatural phenomena: mesmerism, spiritualism, and psychical research. The tendency had been to regard these knowledges as pre-given pseudo-sciences, since they fused utterly incommensurate systems: surrogate faiths seeking legitimacy from scientific articulations; positivistic methods in search of spiritual reassurances. These knowledges are now conceived less in monolithic oppositional structures than as complexly interwoven networks, looping together social, institutional, epistemological, and representational resources in ways which problematize secure disciplinary demarcations. Analyses of the popularization of Victorian science have also moved away from the view that popular accounts can only ever offer ‘diminished simulacra—simpler, weaker, or distorted in proportion to the distance between the learned and lay communities’.

In this essay I want to combine these questions of the scientized supernatural and popularization by examining the career of the radical editor William Stead. Stead was electrified by the possibilities of telepathy, the term coined by the Society for Psychical Research in 1882. He became its most important, if unpredictable, proselytizer in the 1890s at the time when Stead extended his journalistic reach across the globe with his Review of Reviews and Penny Pictorial series. Yet discussions of Stead have largely adopted the strategy of dividing the practitioner of New Journalism from the crackpot occultist, as if the latter career were delusory consolation for the failure of the first, rather than running concurrently. What I want to suggest here is that Stead’s apparently diverse interests in mass democracy, spirits and phantasms, an Empire-wide penny post, telepathy, imperial federation, new technology, astral travel, and popular science were the result of individual foible than of a wider episteme, a network of knowledges in which forms of the occult promised to make revelatory connections across the territory of late Victorian modernity, rather than a consolatory exit from it.

Stead’s journalistic trajectory is well known. In 1871 he took on the editorship of the halfpenny daily Northern Echo. When the Pall Mall Gazette (PMG) changed hands in 1880, Stead was appointed John Morley’s assistant editor, becoming full editor in 1883. Between then and 1889, the PMG became the most influential newspaper in the country. In Harold Frederic’s assessment, Stead ‘came nearer to governing Great Britain than any other one man in the kingdom’. Stead was reformist domestically, but stridently imperialist. The domestic strand was
represented by repeated exposés of the extreme poverty in London, such as 'The Bitter Cry of Outcast London' and *In Darkest England and the Way Out*. Stead's most notorious campaign, 'The Maiden Tribute of Modern Babylon', forced polite England to confront networks of procurers and corrupt doctors snaring virginal young girls into sexual slavery and prostitution. The series was premised on a common Stead nexus: Christian philanthropy, radical politics, social purity, and the defence of female virtue. Despite condemnation from the 'respectable' press, Stead succeeded in raising the age of consent. The ire of the establishment at this exercise of demagoguery was expressed in Stead's prosecution over the procuration of a girl, the stunt at the heart of his exposé. Stead continued to edit the *PMG* from prison, composing the defiant essay 'Government by Journalism' in which he argued that the printing-press had 'converted Great Britain into a vast agora, or assembly of the whole community', journalists being 'nearer to the people' than the Houses of Parliament.6

This revolutionary potential was offset by Stead's imperialism, which united him with the most reactionary elements of the era. That iconic moment of late Victorian imperialism—the death of General Gordon, 'heroic' defender of Khartoum—was engineered to some extent by Stead. The *PMG* led press attacks on Gladstone's resistance to sending a relief party. Stead struck again with 'The Truth About the Navy', a panic narrative of British susceptibility to invasion. Peace arbitration through strength, however, lay behind Stead's apparent militarism. Stead advocated an imperial federation of the Anglo-Saxon races, but largely as self-governing units. Consequently, he supported the confederacy of Australian states and the same argument was behind his advocacy of Irish home rule. He opposed the Boer War for similar reasons: an Anglo-Dutch war was 'a war between brothers living together inextricably intermixed', a criminal act against white fraternity.7

Stead's anti-Boer War stance seemed perverse, not least because, as the *Westminster Gazette* put it, 'he invented Cecil Rhodes'.8 Meeting in 1889, they were both distrusted by the Establishment and formed an instant rapport. They plotted a secret society, which would use Rhodes's wealth to foster the idea of a world-wide Anglo-Saxon confederation.9 This ambition was embodied in Stead's monthly journal, the *Review of Reviews*, which began in 1890. In its opening invocation, 'To All English-Speaking Folk', Stead dedicated the journal to the 'destinies of the English-speaking man', working 'for the Empire, to seek to strengthen it, to develop it, and when necessary to extend it'. The new monthly would assist as a 'common centre for the inter-communication of ideas', providing a means of negotiating the vast archive of print culture from around the Empire.10 The appearance of the *Review* massively increased Stead's reach to new audiences, yet simultaneously blunt his influence. This was caused partly by the move to monthly publication, and partly by the split in Liberalism and the atomization of radical politics. For Grant Richards, however, 'the thing that operated most strongly in lessening Stead's hold on the general public was his absorption in Spiritualism'.11 Matthew Arnold had termed the New Journalism 'feather-brained'; this trajectory seemed to confirm it.12

The *Review of Reviews* evinced a fascination with the occult. In the second issue, Stead reviewed an edition of the *Proceedings of the Society for Psychical Research*, observing: 'This dull title covers a mine of the most sensational articles issued from the periodical press.'13 The Society for Psychical Research (SPR) had been founded in 1882 and its early experiments in thought transference and hypnosis at a distance were reported by Stead in his years at the *PMG*. When Stead announced his *WANTED, A CENSUS OF GHOSTS!* in the September 1891 edition of *Review of Reviews*, he mobilized his participatory journalism: 'I want to help the Psychical Research Society in their most useful and suggestive inquiries, and to that end I make an appeal to the half-million readers whose eyes will fall upon this page in all parts of the habitable world.'14 Tensions with exclusionary scientific frameworks of the SPR and the jargonized register of psychical research were clear from these early statements. Stead complained that the discourse of psychical research 'is somewhat difficult to translate [...] into language which can be understood by those not familiar with the technical phraseology.' Yet in 1892, Stead encouraged his readers to explore 'The Mystery of Automatic Handwriting', a gift 'very much more generally diffused than people imagine'.15 Automatic writing, messages produced whilst the conscious mind was suspended in trance or lighter modes of dissociation, had been used by mediums as a means of contacting the spirit world from the earliest manifestations of spiritualism in the 1840s. In the 1880s, the SPR had re-theorized automatism as instances of communication from what was termed the 'subliminal mind'. Stead's *Letters from Julia*, published in 1892, placed him firmly with the spiritualists. The book was a sequence of automatic scripts received from the spirit of Julia Ames, a medium who had died in 1890.16

In June 1893 Stead announced that his new journal *Borderland* would be devoted to 'the study of phenomena which lie on the borderland which Science has hitherto, for the most part, contemptuously relegated to Superstition'.17 In *Borderland* Stead frequently examined phenomena associated with 'the bifurcated telephone which we call the body'. Automatic writing through the dissociated hand was a kind of telephone through which Stead could dial up, telepathically, both the living and the dead. As Stead roved between psychical research, Theosophy, astrology, spiritualism, and Eastern magic he erased lines of demarcation and his relations with the SPR grew cooler. By 1895 Stead remarked: 'there is about the Psychical Research Society a fatal air of snobbery, as if they were too superior persons to live on the same planet with ordinary folk'. He asserted: 'science has made itself into a Brahmin caste, which holds aloof from the people'.18 After *Borderland* ceased publication in 1897 Stead's long-cherished project, the *Daily Paper*, included the promotion of 'psychometry and telepathy' in its aims for improving the mental health and physical culture of the nation.19 After *Borderland* ceased publication in 1897 Stead's long-cherished project, the *Daily Paper*, included the promotion of 'psychometry and telepathy' in its aims for improving the mental health and physical culture of the nation.20 Stead also later opened 'Julia's Bureau' in 1909, a kind of switchboard for those wishing to contact deceased relatives.

*Borderland*, Stead hoped, would 'mark an epoch in the investigation of the unknown forces which surround us'.21 Whereas Stead's *Real Ghost Stories* had bowed to the SPR's position that inquiries into telepathy and the occult were 'distinctly for the few who [had] leisure, culture and intellectual faculties
indispensable for the profitable conduct of such investigations’, 22 Borderland advocated wide democratic participation. He hoped readers would form ‘study circles’, create a forum for exchange, an open university, and an archive of psychical facts. The model for this participation might appear to be the ‘democratic epistemology’ of plebeian spiritualism. 21 In fact, Stead’s idea for democratic ‘circles’ derived just as much from his conception of the New Journalism.

In ‘The Future of Journalism’, Stead emphasized the importance of being in ‘touch with the public’, across the ‘extremity of the social system, and with all intermediate grades’. He proposed that the editor should follow Oliver Cromwell’s system of government, in which delegates would spread across the land, acting as ‘the alter ego of the editor’, gathering the views of the people by holding polls. These would bring in others ‘sufficiently in sympathy’, creating a network that could deliver a national plebiscite within three days. A newspaper on these lines would come close to being ‘the very soul of our national unity’. 24 This plan was rehearsed in nearly every project initiated by Stead. The Link, ‘primarily intended to be a link of communication between the Circles which [were] being established in connexion with the Law and Liberty League’, contained the most worrying resonance. Although the circles were described as being constituted of ‘earnest men and women’, the models here were Fenian ‘circles’, cells of ‘terrorists’ working autonomously to restrict knowledge of Fenian actions against the colonial British state. 25 Three years later Stead’s philanthropic journal, Help, proposed exactly the same ‘medium of intercommunication between all Helpers’, but this time in the service of cross-denominational charity. 26 Help’s campaigns were for Christian education and the sentimental gathering of ‘Flowers for the Little Slum Dwellers’. This journal’s attempt to establish ‘a central nucleus of earnest and intelligent workers in every town’ emerged as a result of the Association of Helpers that Stead launched in the Review of Reviews. 27 The Review began with the familiar vision of ‘associates in every town, and its correspondents in every village’ of the Empire. 28 Stead was sufficiently overwhelmed by ‘the flood of correspondence, returns, suggestions, and information’ to set up Help. The Daily Paper was also envisaged as ‘a living link between its subscribers, constantly suggesting to them that they are all members one of another’. 29

Occult communication promised to be the medium by which such affective ties might be fulfilled. The distant touch of telepathy meant limitless intimacy; the fugitive, ecstatic union with the other; the underlying affective law that bound the universe together. Julia Ames wrote through Stead that ‘auto-telepathic writing’ put ‘mind in contact with mind all over the world. Anyone to whom you can speak if you were within range of the physical senses you could speak to mentally wherever he is’. 30 Stead was enthralled by Theosophical theories of the astral body, the psychic double of the body, which could travel across vast distances through the higher reaches of the ether. Clairvoyance, the ability to view events at distance, was a power ‘fashioned out of strong affection or some other relation’, and might be made to work as an intelligence-gathering device. 31 Stead’s New Journalism required only slight redefinition before it became wedded to these occult notions. The journalist was commanded: ‘touch life at as many points as you can, always touch it so as to receive and retain its best impressions’. Like the sensitive, this would make the writer ‘a part of the sympathetic nerve of civilisation’. 32 Just as his journals were envisioned as the ‘centralisation of the nervous system’, and his local circles ‘as so many nerve-centres’, so theorizations of telepathy were propped on neurology, advances in which were closely reported in the occult press. 33 Even Stead’s dismissive commentators used the language of occult influence to discuss the New Journalism. Stead’s endeavours in the 1880s and 1890s took place against the first serious medical acceptance of hypnosis (as opposed to mesmerism), and panic narratives over the powers of suggestion prompted by the disputes between different schools of hypnosis. 34 Gustave Le Bon’s influential account of the crowd regarded the subsumption of individuality into the suggestible mass as similar to ‘the state of fascination in which the hypnotized individual finds himself in the hands of the hypnotizer’. 35 The threat of mass print culture was similarly regarded by contemporary commentators; highly suggestible masses could be shaped by any editor who wanted to act as demagogue. Contemporary commentators such as Arthur Shadwell held that the press ‘fairly hypnotise[d]’ the ‘less educated’. Frank Taylor asserted: ‘the newspaper press is the most potent of all the permanent forces acting on the public mind. The subtle and often indefinable process by which it acts has been several times suggested’. 36 Aled Jones has read the anxiety over the New Journalism in the light of concerns over ‘the susceptibility of the human mind to external forces of influence’. Victorian commentators ‘moved more or less effortlessly between spiritualism, psychology and social science’ as frameworks for understanding the powers of influence. 37 For Le Bon, democracy risked the tyranny of the ‘psychological crowd’, one that was open to the occult forces of mind being demonstrated by the leading psychologists of the time. Stead’s interest in ‘sympathetic consciousness’ was no surprise to some commentators. The Spectator’s view was that if telepathy aimed ‘to confuse the boundaries between mind and mind’, then it was equivalent to socialism, which aimed ‘to confuse the boundaries between mine and thine’. 38 Stead, with his uncanny abilities to read the popular mind, had a touch of the mesmerist about him: Garvin, a subsequent editor of the PMG, recalled Stead’s piercing stare, a ‘daunting expression of “nerve-force”’. 39

Telepathy was not just an absorbing object or passionate belief for Stead, but a promissory vehicle of transmission, a means of intensifying the affective bond with a mass readership. Telepathy was a democratic prosthesis, existing somewhere between an emerging organic potential and a new fin-de-siècle technology. Occult and technological communication were inextricably intertwined in Stead’s imagination, something he shared with the wider culture. When he described the body as a ‘two-legged telephone’, he borrowed from an established conjuncture. Psychical communications were not secondary analogies, weakly propped on ‘proper’ science: inventors and technologists often initiated investigations inspired by the promise of rendering apparently ‘supernatural’ means of communication mechanically possible. The telephone was an exemplary instance of this. Avital Ronell suggests that Alexander Graham Bell, a seance-goer after a number of familial deaths, attempted to communicate with his dead brothers. The first words heard on Bell’s line were addressed to Thomas Watson, Bell’s assistant, who was also a medium. From a dreamy, visionary childhood to spirit circles in the 1870s,
Watson moved into a career in that ‘occult force, electricity’, since he ‘felt sure that spirits could not scare an electrician and they might be of some use to him’. Some of the central figures in the SPR were leading specialists in these new electrical technologies. Oliver Lodge, who wrote extensively on experiments in thought transference and telepathy in the SPR Proceedings, explored ‘signalling without wires’ by Hertzian waves in the years before Guglielmo Marconi secured wireless communications between ship and shore. Lodge was also one of the first scientists in England to explore the medical uses of X-rays in 1896. The chemist William Crookes had explored anomalous transmissions of electrical signals in vacuum tubes in the 1870s—in parallel with his notorious investigations of spiritualist mediums and their apparent use of what he termed ‘psychic force’. The technology of Crookes’s radiometers promised to reveal ‘matter in its fourth state’. These instances of magical technologies seem to confirm Friedrich Kittler’s argument that ‘technological media turn magic into a daily routine’.

Stead also borrowed from discourses of the body electric. As the popularity of electro-therapeutics grew in the latter half of the century, George Beard, a proponent of ‘general electricalization’, linked his interests in psychical trance-states to investigating the ‘electrical’ nature of nerves in the body. In certain hysterical states, he asserted, ‘the reflex effect of the current is so exalted as to excite reactions that in a normal condition of the body never appear’. Hyperaesthesia, even telepathy, could be inserted into this scale of sensitivity. Walford Bodie, for instance, proprietor of the Bodie Electric Drug Company and a mesmeric stage-performer, associated the ‘magnetic touch’ of his telepathic and clairvoyant curative powers with the new technologies—the telegraph, the telephone, the wireless message of Marconi, the X-rays. Hypnotic phenomena, mesmeric rapport at a distance, tele-technologies and the occult transits of electricity were bound together in Bodie’s discourse.

Stead adored machines. Despite the antiquated printing press at Mowbray House, the office was full of new technology. ‘There were typewriters’, Grant Richards reported. ‘I had not seen such a machine before. Also there were young ladies to operate them […] There was a telephone which was for the first year or two hardly if ever used.’ Stead connected the office by telephone to his inner sanctum at home in Wimbledon. This ensured speedy contact, but it was put to the test by the rival occult systems. Stead’s secretary Edith Harper viewed Stead’s telepathic transmissions as inseparable from other tele-technologies: ‘I suddenly felt conscious that he wished to ask me something. So strong was this impression that I at once went to the nearest telephone […] ‘Oh, I am so glad you rang up. I was just going to send you a telegram’.’ Stead later published the autobiography of Vincent Turovey, a man blessed with ‘phone-voyance’—the ability at times to give clairvoyance through, or when using, the telephone.

The speculations of inventors and engineers reported so enthusiastically by journalists further encouraged Stead. Edison or his onetime assistant Nikola Tesla were entrepreneurs, uninterested in conveying a pristine image of science cloistered from the market. In the new-style ‘chat’ with the inventor, interviewer and subject had an interest in generating sensational copy. One of the first items in the opening issue of the Review of Reviews was entitled ‘The Miracle of Electricity’, in which cross-continental ‘photophones’, trains travelling at 300 miles per hour, and telegraphing without wires were soon promised. When Borderland began in 1893, Stead merely summarized what was reported elsewhere. The McClure’s Magazine series, ‘On the Edge of the Future’, interviewed Edison about his new system for signalling without wires, and included Bell’s speculations on technologies that would allow ‘seeing by electricity’ at great distances, and even ‘thought transference by electricity’. Bell was experimenting with helmets designed to transmit ‘cerebral sensations’ to distant receivers and Stead reported that Tesla was investigating the transmission of thought by ether.

The Review of Reviews looked to the future. Stead warned readers: ‘we have yet to open our eyes to the extent to which Electricity has re-energised the world’. He reported that William Crookes was anticipating the ability ‘to telegraph without wires in any direction’ very soon. When Marconi succeeded in transmitting wireless signals between Dover and Calais, Stead had moved on: ‘glimpses of the possibility of telepathy’, he wrote, ‘will never be recognized at their full value until some Marconi of the mind produces a mechanical appliance by which it will be possible not merely to receive but record the impact of the thought waves which at present only leave their impress upon the brain of the sensitive.’ Borderland promised the best framework for hybridizing technology and the occult. It included haunted telephones, psychically sensitive photographic plates, and spirit-operated typewriters. Stead held that ‘the latest inventions and scientific discoveries [made] psychic phenomena thinkable’: the human brain was ‘singularly like a central telephone exchange’ and memory ‘a storage room of photograph and phonograph records’.

Tele-technologies provided the immediate resources for Stead to think through the mechanisms of the affective bonds he sought through Christian brotherhood, telepathy, or mass democracy. Stead’s sincerity was never in doubt when it came to the other emotional tie that tele-technology could secure. Electricity, Stead hymned, ‘has annihilated time, abolished space, and it will yet unify the world. By making all the nations in all the continents next-door neighbours, it has already revived the ideal of human brotherhood’. Empire was the other thread tying this economy together. In his first speech as Colonial Secretary, Joseph Chamberlain spoke of the Empire as:

a slender thread that binds us together. I remember on one occasion having been shown a wire so fine and delicate that a blow might break it; yet I was told that it was capable of transmitting an electrical energy that would set powerful machinery in motion. May it not be the same with the relations which exist between the colonies and ourselves?

Chamberlain’s analogy shows how the ideal of imperial federation became intertwined with new communication technologies. The federation movement sought institutional means to bind the sympathies of the white diaspora more firmly together. The movement was anxious to seek a supplemental sentiment, in excess of mere utilitarian commercial interest, a patriotic sympathy in which
British hearts beat in unison throughout the world, whatever the distances that separate us'. Stead, although he became a critic of Chamberlain, shared his federating fervour. He professed himself less interested in constitutional proposals of the Imperial Federation League than in 'rousing the interest of the masses at home and in the colonies'. He praised John MacDonald, Henry Parkes, and Cecil Rhodes for their federal aims in Canada, Australia, and South Africa, regarding them as filled with 'rude daring' compared to the 'over-civilised products of the West-End club'. Stead also saw communication technologies further afflicting ties. He campaigned for the penny post to be extended across all imperial territories, seeing it as an expression of 'the vital principle of the solidarity and unity of the English-speaking race.' He later extended this campaign to cheap telegrams, a further means for the '340 millions of human beings within the Empire to keep [...] in touch and sympathy'.

By the 1890s, however, the principal technological vehicle for the expression of this sympathy was cable telegraphy. It was the 'quintessential technology of Empire'. Before the cable to India via Gibraltar was built in 1870, a telegram between London and India took one week, was routed overland, and translated by operators in rival, enemy, or native territory. The underwater route took five hours. Technological innovations also reduced times between England and Australia. The four months the packet ship took in 1850 was reduced by the first telegraph link to fifteen hours. In the 1890s, at a time of rivalry over Pacific spheres of influence, it was the British Empire League that took up the call for 'all-Red' telegraph routes, a campaign strongly supported by Stead. The last link, across the Pacific between Canada and New Zealand, was connected in 1903, completing the matrix of communications.

As agents of enlightenment, railway and cable were supposed to work to defeat superstition in primitive lands. David Tennant, writing in support of Rhodes's ambitions for a rail and telegraph route through Africa, suggested: 'the African continent will no longer deserve the prefix “Dark” when the electric current flashes news from north to south of it, along its entire length [...]. African aborigines will, with wondering gaze, behold the results produced by the discoveries of science, and learn to appreciate the advantages of civilization.' As the mixing of technological and occult influences has displayed, this separation of Eastern superstition from Western rationalism was not easily sustained. Telegraphic and spiritualist communication were consistently yoked together. Soon after the first demonstrations of telegraphy in the 1840s, Bishop Copleston remarked: 'It far exceeds even the feats of pretended magic and the wildest fictions of the East.' Later in the century, popular beliefs in 'magical' communication shadowed the lines of imperial communication very precisely. Theosophical wisdom came from the terra incognita of Tibet, sandwiched between the British and Russian empires. Letters arrived from the Brotherhood, guaranteed fast delivery on the astral plane, fluttering very materially to Blavatsky's feet to the astonishment of her followers. Psychical researchers delivered a contemptuous report on Blavatsky's claims, yet their own 'phantasms of the living' frequently travelled imperial distances to communicate. Phantasms leapt the eighty miles between Carmarthen and Monmouthshire, further from ship to shore, then across the globe from China to Toronto, Shorncliffe to Nagpore, criss-crossing the planet like desperate telegrams. The proof that phantasms appeared at the moment of the loved one's death tended to be provided by the arrival of a telegram, sluggish in comparison to the flash of the traumatized brain.

The acceptance of margins of error, partial answers, curious time delays, and frequent failures in telepathic experiments also owed much to the realities of telegraphy. At 4s. per word to Australia, or 5s. to Nigeria in the 1890s, jargons for condensing information emerged, without standardization, making it a complaint that decoding messages consumed hours of time. Such problems caused resistance to telegrams in the Colonial Office, but imperial federalists argued that the sympathy between Anglo-Saxons could be fostered by reducing telegraphic rates:

In the present circumstances no one ever dreams of communicating to another across the high seas on a purely private matter unless it be of the greatest urgency [...]. We ought to achieve that state of things by which one member of a family in England can communicate with another in an outlying portion of the Empire as readily as could be effected if they were both in the Mother Country.

The nature of those urgent communications is indicated by the 'Social Code' handbooks of the time. 'Via Eastern' offered fifty-three condensed code words for news of a death, ranging from 'Coepiscopi' ('death occurred from cholera') to 'Cogitantor' ('Deeply regret to convey the sad news of the death of your wife'). Given the high death rates amongst colonial emigrants, it is no surprise that many people reported phantasms projected across impossible distances at the moment of death. These ghostly communications inhabited the networks of empire.

Stead was the presiding figure over these cross-fertilizations, making ingenious connections across the cultural landscape of the late Victorian era. For Kingsmill, Stead's range of activities was driven by a 'desire to embrace in his unifying clasp every element in the modern chaos.' The kind of resources compacted into telepathy—the physics of imponderables, the positivist proof of the existence of supra-material forces, the technology of tele-communication, the potentia of subliminal subjectivity, the power of affect between kith and kin—gave Stead every reason to make it the switching-centre between the diverse strands of his career. Through telepathy, Stead could hope to bind the world psychically, technologically, and affectively to the imperial centre, stabilizing it within the flux of modernity.

Notes
2 Alison Winter, Mesmerized: Powers of Mind in Victorian Britain (Chicago, 1998); Richard 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 32 (1999), 421–59; Bruno Latour, Pandora's Hope: The Reality of Science Studies


5 Whyte, I, 114.

6 A Journalist on Journalism: Being a Series of Articles by W. T. Stead (London, n.d.), 28 and 29; the article initially appeared in 1885 in the Contemporary Review.

7 War Against War in South Africa, 20 October 1899, p. 8.

8 RR 23 (1912), 488.


10 RR 1 (1890), 15 and 16.

11 Grant Richards, Memories of a Misspent Youth, 1872–1896 (London, 1932), 306.

12 Nineteenth Century 21 (1887), 638.

13 RR 1 (1890), 111.

14 RR 2 (1891), 257.

15 RR 1 (1890), 111.

16 RR 3 (1892), 44.

17 Borderland 1 (1893), 8.

18 Borderland 2 (1895), 346.

19 RR 1 (1890), 537.


21 Borderland 1 (1893), 7.

22 RR, Christmas Number (1891), x and xi.


24 A Journalist on Journalism, 62, 68, 72, and 82.

25 Link, 4 February 1888, p. 1.

26 Help 1 (1891), 2.

27 Help 1 (1891), 100.

28 RR 1 (1890), 20 and 53.

29 Daily Paper, 4 January 1904, p. 10.

30 Borderland 1 (1893), 50.

31 RR, Christmas Number (1891), 53.

32 A Journalist on Journalism, 22–23.

33 Link, 2 February 1891, p. 2; Daily Newspaper, 9 February 1904, p. 6.


37 Ibid., 79 and 85.

38 Borderland 1 (1893), 203.

39 Robertson-Scott, 78.


41 Oliver Lodge, Signalling Across Space Without Wires, 3rd edn (London, 1900).

42 Nature 20 (1879), 419.

43 Friedrich Kittler, Gramophone Film Typewriter (Stanford, 1999), 35–36.

44 George M. Beard and A. D. Rockwell, A Practical Treatise on the Medical and Surgical Uses of Electricity, 4th edn (London, 1884), 259.


46 Richards, 125.


49 RR 1 (1890), 32–33.

50 McClure’s Magazine 1 (1893), 41; Borderland 1 (1893), 51.

51 RR 1 (1890), 230.

52 RR 3 (1892), 182.

53 RR 19 (1899), 315.

54 Borderland 1 (1893), 61.

55 Borderland 3 (1896), 400.

56 RR 1 (1890), 230.


59 RR 5 (1894), 26; 2 (1891), 356; 1 (1890), 377; 10 (1899), 566.


64 Charles Bright, Imperial Telegraphic Communication (London, 1911), 100.
