

1 Frameworks of Understanding

Reconstructing the Human from Darwin to the First World War

In early 1915, as the war turned from awful novelty to the backdrop of life, Sigmund Freud (1856–1939) reflected on how the conflict had led to disillusionment about the achievements of modern “civilization”. Europeans, seduced by their own myths of unstoppable progress had been hit hard by the shock of war, he claimed. Their pre-war innocence demonstrated fundamental misunderstanding of human nature and “civilization”. No matter how “civilized”, imperishable “primitive” instincts and drives persisted within each person and fought for control of the mind. Yet “civilization” was built on the renunciation of instinctual satisfaction. All “civilized” peoples and societies, embroiled in the constant act of repression, existed in a state of perpetual tension between instinct and the higher self. This tension could not be dissolved, and the maintenance of “civilization” could never be assured. In retrospect, the outbreak of war was inevitable: it made manifest instincts and impulses simmering beneath the surface of “civilized” life even at outwardly peaceful times.¹ Freud’s ‘piece of topical chit-chat’, written to satisfy the publisher, caught the prevalent mood of anxious contemplation on the consequences of war for “civilization”.²

The broad sweep of Freud’s argument was not alien to British intellectual and scientific culture, which had long incorporated views of “civilization” as built on the conquest of individual, anti-social desires.³ In the recent past, these ideas had been reworked along psychobiological lines in Darwin’s

¹ S. Freud, ‘Thoughts for the Times on War and Death’ [1915], in *The Standard Edition of the Complete Works of Sigmund Freud* [SE], translated from the German under the General Editorship of James Strachey in collaboration with Anna Freud, assisted by Alix Strachey and Alison Tyson, vol. 14, pp. 282–6.

² D. Pick, *War Machine: The Rationalisation of Slaughter in the Modern Age* (New Haven, CT and London: Yale University Press, 1993), quotation p. 218; S. Hynes, *A War Imagined: The First World War and English Culture* (New York: Atheneum, 1991), pp. 3–24; P. Crook, *Darwinism, War and History: The Debate over the Biology of War from the Origin of Species to the First World War* (Cambridge and New York: Cambridge University Press, 1994), pp. 130–52.

³ J. Reed, *Victorian Will* (Athens, OH: Ohio University Press, 1989), pp. 18–19, 65–7.

reconstitution of man as a creature driven by the foundational, unconscious, and ineradicable force of animal instinct.⁴ For many of those who followed Darwin, his vision of instinct as at the centre of human nature trampled over meliorating dreams of “progress”.⁵ The animal within could only be policed, never destroyed. It was a necessary constituent of human identity, but one which must be constantly rejected in order to maintain the human and “civilization” itself. For late Victorians, “living self-consciously in an age of evolutionary belief”, the doubts and anxieties provoked by evolutionary theory were live matters.⁶ Men of science raised in the fervent atmosphere of the Darwinian revolution, including older “shell-shock” doctors, transmitted to younger generations both their absolute confidence in the evolutionary framework of understanding and the insecurities about “man’s place in nature” which it stimulated. The ideas about mind, nerves, and brain which doctors took into the war were formulated within this evolutionary framework of understanding, and replicated the latent pessimism and uncertainties of earlier debates on evolution and human nature.

This chapter examines forms and sites of “psychological” knowledge within pre-war medical culture, arguing that these extended far beyond specialist disciplines and institutions. In the late nineteenth and early twentieth centuries, an evolutionary framework of understanding underpinned medical approaches to mind, nerves, and brain. The evolutionary model of mind was structured by dichotomies of “high” and “low” (human/animal, mind/body, civilized/primitive), but the emphasis within evolutionism on transition simultaneously undermined these hierarchies. Because psychological medicine was infused with evolutionary assumptions, it reflected and contributed to debates about human identity and “modern civilization” which ranged across and drew together many disciplines.⁷ As a unified system underlying various models of mind, the evolutionary framework of understanding also bridged some of the main concepts of late nineteenth-century psychological medicine and later psychodynamic approaches. Awareness of the pervasive influence of evolutionism helps us to understand how British doctors responded to psychoanalysis during and after the war, and the series of transitions between

⁴ C. Darwin, *The Descent of Man, and Selection in Relation to Sex*, 2nd edn (London: Penguin, 2004) [1879], especially pp. 127–37; Crook, *Darwinism, War and History*, p. 21.

⁵ For alternative reactions to Darwinian theories of instinct, see Dixon, *Invention of Altruism*, pp. 136–40.

⁶ R. Smith, *Free Will and the Human Sciences in Britain, 1870–1910* (London and Brookfield, VT: Pickering and Chatto, 2013), pp. 14, 169–70.

⁷ Dixon, *Invention of Altruism*, pp. 152, 314.

Darwin and Freud in British psychological medicine. The evolutionary model of mind carried over into theories of “shell-shock”, which can be seen as part of the longer attempt to work out the human and animal attributes of “civilized” persons. Up to and beyond the First World War, the medical imagination was haunted by visions of the animal and the “primitive” at the heart of the human and of “civilization”.

Understanding Mind, Nerves, and Brain in Pre-War Medical Culture

If many of the doctors who treated “shell-shock” were not specialists in mind, nerves, or brain, what knowledge of these entities did they bring to their encounters with “shell-shocked” men? There were two main paths to such knowledge: practical professional experience of treating nervous and mental disorders and education (formal and informal). The most obvious location for professional practical experience was the asylum, the site of the development of the psychiatric profession in Britain. Around half of the published “shell-shock” doctors had some background in asylum psychiatry. In the absence of public provision for non-custodial treatment, the asylum remained the main site for the care of those with severe or chronic mental health problems. The period spanning the late nineteenth and early twentieth centuries is often seen as the nadir of psychiatric provision in Britain, with most asylums overcrowded and understaffed, and the overall system inflexible and insufficient to cope with the full range of mental illnesses.⁸ However, before 1914, many asylum psychiatrists vocally supported proposals for the early and non-custodial treatment of mental disorders and actively worked towards the ‘hospitalization of the asylum’.⁹ The most visible manifestation of this movement was the foundation in 1907 of the Maudsley Hospital,

⁸ A. Scull, *The Most Solitary of Afflictions: Madness and Society in Britain, 1700–1900* (New Haven, CT, and London: Yale University Press, 1993).

⁹ Quotation G.M. Robertson, ‘The Employment of Female Nurses in the Male Wards of Mental Hospitals in Scotland’, *EMJ*, 16 (January–June 1916), 203. See also Shephard, ‘Early Treatment of Mental Disorders’, 436–40; T.S. Clouston, ‘The Possibility of Providing Suitable Means of Treatment for Incipient and Transient Mental Diseases in Our Great General Hospitals’, *Journal of Mental Science (JMS)*, 48:203 (October 1902), 697–709; E.W. White, ‘Psychological Medicine in Relation to the Medical Practitioner’, *King’s College Hospital Reports (KCHR)*, 1 (1893–4), 49–54; D.G. Thomson, ‘Teaching of Psychiatry’, *JMS*, 54:226 (July 1908), 553; R.G. Rows, ‘The Development of Psychiatric Science as a Branch of Public Health’, *JMS*, 58:240 (January 1912), 26; G.M. Robertson, ‘The Teaching of Mental Diseases in Edinburgh’, *EMJ*, 21 (July–December 1918), 230; J. Mackenzie, ‘The Aim of Medical Education’, *EMJ*, 20 (January–June 1918), 35; G.L. Gulland, ‘The Teaching of Medicine’, *EMJ*, 21 (July–December 1918), 23.

intended for the ‘care and treatment of acute recoverable cases of mental disease’ – although the fact that the hospital did not open at all until January 1916, and was not open for civilian use until 1923, also points to the difficulties faced by reformers.¹⁰ While “shell-shock” undoubtedly provided an urgent impetus towards reform of the asylum system, powerful currents of change existed before the war.

Outside the asylum, doctors observed and treated temporary or less severe psychological or “nervous” afflictions at several sites. Minor nervous illnesses, such as hypochondriasis and neurasthenia, were often perceived as the responsibility of hospital physicians and neurologists. Cases of these disorders were encountered in hospitals on general wards, observation wards, and specialist wards for the treatment of ‘alcoholism, poisoning, and mental derangement’.¹¹ In addition, before 1914, outpatient departments for psychiatric and nervous illnesses had been founded at several institutions, including four London teaching hospitals.¹² Although these sites provided no opportunities for systematic study of mental disorders and their treatment, it was widely recognized among the medical profession that non-specialists had to deal with minor nervous and mental illnesses as part of their daily work. Reformers emphasized that an ideal medical curriculum would provide instruction in the diagnosis and treatment of these illnesses, not least to enable recognition and preventative treatment at an early stage of mental disorder.¹³ Medical students learnt and plied their trade in general hospitals and their attached outpatient clinics, and non-specialists among the published “shell-shock” doctors had almost certainly encountered different forms of nervous and mental disorders at these sites.

¹⁰ P. Allderidge, ‘The Foundation of the Maudsley Hospital’, in G.E. Berrios and H. Freeman (eds.), *150 Years of British Psychiatry, 1841–1991* (London: Gaskell, 1991), p. 83; A. Walk, ‘Medico-Psychologists, Maudsley and the Maudsley’, *British Journal of Psychiatry*, 128 (1976), 19–30.

¹¹ Clouston, ‘Possibility of Providing Suitable Means of Treatment’, 703; ‘Discussion: The Training of the Student of Medicine, XLII–XLVII’, *EMJ*, 21 (July–December 1918), 246; E. Matthew, ‘The Teaching of Medicine’, *EMJ*, 21 (July–December 1918), 29.

¹² R. Mayou, ‘The History of General Hospital Psychiatry’, *British Journal of Psychiatry*, 155 (1989), 764–76; White, ‘Psychological Medicine in Relation to the Medical Practitioner’, 52; T.S. Clouston, ‘The Position of Psychiatry and the Role of General Hospitals in Its Improvement’, *JMS*, 61:252 (January 1915), 1–17.

¹³ Clouston, ‘Possibility of Providing Suitable Means of Treatment’, 703; Clouston, ‘Position of Psychiatry’, 3; Rows, ‘Development of Psychiatric Science’, 32; R.D. Clarkson, ‘The Teaching of Psychology to Medical Undergraduates’, *EMJ*, 21 (July–December 1918), 243; B. Hart, ‘Psychology and the Medical Curriculum’, *EMJ*, 21 (July–December 1918), 215; E. Bramwell, ‘The Teaching of Neurology’, *EMJ*, 21 (July–December 1918), 211.

This period also saw increased medical specialization. In the half century or so before 1914, new journals and societies focusing on the problems of mind, nerves, and brain proliferated.¹⁴ Although these forums promoted different disciplinary stances, practitioners in each field were also aware of connections between the specialisms. In its early years, presidents of the neurological section of the Royal Society of Medicine (RSM) were chosen by rotation to represent different faces of the topic: 'one year special neurology, another general medicine, another surgery, another psychology, another physiology, each with special bearing upon the subject of the nervous system'.¹⁵ When the *British Journal of Psychology* was struggling to get off the ground, the *Journal of Mental Science* called for financial and moral support for the venture, portraying the aims of the new journal as inextricably tied to those of its own subscribers.¹⁶ Specialization did not preclude interest in adjacent fields. The Medico-Psychological Association (M-PA) was "officially" the organization of asylum psychiatrists, but several psychologists and neurologists among the published "shell-shock" doctors were members or attended its meetings.¹⁷ Likewise, the British Neurological Society welcomed asylum doctors and physiologists, and the British Psychological Society held joint meetings with the psychiatric section of the RSM, the Aristotelian Society, and the Mind Association.¹⁸ Neurologists played an important part in the foundation of the section of psychiatry of the RSM in 1912.¹⁹ The personnel, subject matter, and activities of specialist organizations often overlapped. In the late nineteenth and early twentieth centuries, the boundaries between psychology, psychiatry, and neurology were porous.

In the early stages of differentiation between these disciplines, when fewer specialist forums existed, individuals congregated at any event which pursued knowledge of mind, nerves, and brain. For example, the annual meeting of the M-PA in 1900 hosted representatives of the psychiatric old guard such as the alienists Charles Mercier (1851–1919) and Robert Armstrong-Jones (1857–1943) as well as future leaders of

¹⁴ M. Shepherd, 'Psychiatric Journals and the Evolution of Psychological Knowledge', in W.F. Bynum, S. Lock, and R. Porter (eds.), *Medical Journals and Medical Knowledge: Historical Essays* (London and New York: Routledge, 1992), pp. 196, 201.

¹⁵ P. Hunting, *The History of the Royal Society of Medicine* (London: Royal Society of Medicine Press, 2002), p. 264.

¹⁶ Anon., 'A New Journal', *JMS*, 49:206 (July 1903), 523–4.

¹⁷ John Collie, David Eder, Edward Fearnside, Charles Myers, and W.H.R. Rivers were members of the M-PA; Harry Campbell, Howard Tooth, and James Purves Stewart attended meetings.

¹⁸ See lists of meetings in the *British Journal of Psychology*, 1914–19.

¹⁹ Hunting, *History of the Royal Society of Medicine*, p. 323.

British psychology including Alexander Shand (1858–1936) and W.H.R. Rivers (1864–1922).²⁰ Associations such as the M-PA played an important part in building professional networks and fostering interaction between individuals with different outlooks and interests. Shand and Rivers helped to establish the *British Journal of Psychology*. Another founder member of this journal was Charles Myers. He and Rivers were both members of the 1898 Cambridge anthropological expedition to the Torres Straits and worked alongside each other at the Cambridge experimental psychology laboratory. Both were also alumni of St Bartholomew's medical school. Myers' election to membership of the M-PA in 1909 was proposed by Rivers, the early proponent of psychodynamic psychology W.H.B. Stoddart (1868–1950), and Robert Armstrong-Jones, an asylum superintendent strongly attached to hereditary theories of mental illness. The only apparent link between Armstrong-Jones and the more sophisticated psychologists is that he was also a Barts man, roughly contemporaneous with Rivers. Rivers and Myers rarely attended the M-PA, but when its quarterly meeting was held at Cambridge in February 1909, they gave a demonstration of equipment in the psychological laboratory. Armstrong-Jones and Charles Mercier were again present.²¹ These connections between leading asylum psychiatrists and the foremost figures in academic psychology, spanning two decades, demonstrate the fluidity of relations within the fields of psychological medicine and research.

The flipside of fluidity was insecurity: free exchange of ideas and personnel was necessary while these disciplines were ill-established. Yet the differentiation and refinement of approaches to mind, nerves, and brain also point to deep engagement with these issues within parts of medical culture. Pre-war psychological medicine is often characterized as reactive or stagnant, but the inertia of the formal structures of mental health provision coexisted with supra-structural flux as new disciplines were established and sought to work out their relations to each other. Psychiatrists, psychologists, and neurologists had not yet defined their remits: sometimes, they were not even sure how to describe what they were doing. When 'psychiatry' was touted as a name for the new section of the RSM, there was confusion over how to pronounce the word until a lexicographer declared that if the society planned to adopt the term, it

²⁰ For a full list of those present at this meeting, see Anon., 'Medico-Psychological Association of Great Britain and Ireland: General Meeting', *JMS*, 46:194 (July 1900), 601.

²¹ Anon., 'Notes and News: The Medico-Psychological Association of Great Britain and Ireland', *JMS*, 55:229 (April 1919), 391–3.

could settle the pronunciation itself.²² The generalist medical press regularly printed lectures and reviewed books on psychiatry and psychology, with commentators testifying to the ‘real living interest’ in such topics.²³ Although doctors disagreed on the best way forward, the extent of debate – even the volume of complaints about the asylum system – shows that this was a moment of change within psychological medicine. These shifts arose out of dissatisfaction and despair with aspects of existing mental health care provision, but also generated much excitement and activity.

Psychology, Psychiatry, and Medical Education

Apart from practical professional experience of patients suffering from mental or nervous illnesses, doctors were most likely to have gained some knowledge of mind, nerves, and brain from their medical education and training. A fairly standardized medical curriculum had emerged by the 1890s.²⁴ This included a compulsory course in psychological medicine, and some teaching hospitals and medical schools began offering such courses as early as the 1860s.²⁵ These courses usually consisted of attendance at a series of lectures, and at clinical demonstrations held at a public asylum near the hospital.²⁶ By 1900, most newly qualified doctors had received some training in psychological medicine, but reformers argued for more extensive changes still. They complained that the fundamentals of psychological medicine could not be fully taught in

²² Hunting, *History of the Royal Society of Medicine*, p. 324.

²³ Anon., ‘Review: Modern Problems in Psychiatry’, *EMJ*, 12 (January–June 1914). For example, W.H.B. Stoddart’s Morison lectures on ‘the new psychiatry’ were delivered to the Royal College of Physicians and printed in the *Edinburgh Medical Journal* and the *Lancet* before being published in book form. W.H.B. Stoddart, ‘The New Psychiatry. Lecture I’, *EMJ*, 14 (January–June 1915), 244–60; W.H.B. Stoddart, ‘The Morison Lectures on the New Psychiatry’, *Lancet*, 20 and 27 March 1915; W.H.B. Stoddart, *The New Psychiatry* (London: Baillière, Tindall and Cox, 1916).

²⁴ A. Digby, *The Evolution of British General Practice 1850–1948* (Oxford: Oxford University Press, 1999), pp. 54–7; K. Waddington, *Medical Education at St Bartholomew’s Hospital 1123–1995* (Woodbridge, Suffolk: Boydell Press, 2003), pp. 116–17.

²⁵ White, ‘Psychological Medicine in Relation to the Medical Practitioner’, 51; J.L. Crammer, ‘Training and Education in British Psychiatry 1770–1970’, in H. Freeman and G.E. Berrios (eds.), *150 Years of British Psychiatry. Volume 2: The Aftermath* (London: Athlone, 1996), pp. 217–18.

²⁶ For descriptions of typical courses, see White, ‘Psychological Medicine in Relation to the Medical Practitioner’; St Bartholomew’s Hospital Archive (SBHA): MS 20, *St Bartholomew’s Hospital and College Sessions 1875–1876*, p. 41; *St Bartholomew’s Hospital and College Sessions 1892–1893*, pp. 52, 68; *St Bartholomew’s Hospital and College Sessions 1894–1895*, p. 61; King’s College Hospital and Medical School Archive (KCHMSA): KH/SYL1/2: *King’s College Hospital Medical School 1911–1912 Abridged Syllabus*, p. 18; KH/SYL1/1: *The Medical School of King’s College Hospital 1910–1911*, p. 54.

the time available, that the advanced cases of insanity students saw in asylums bore little relation to the ‘borderland and incipient cases’ more often found in general practice, and that examining bodies did not consistently and rigorously enforce assessment in psychological medicine.²⁷ Yet psychological medicine did make solid gains within medical education in the decades before the war. In 1885, the M-PA set up a certificate of efficiency in psychological medicine. Although this certificate never really took off among medical students, in London and the four Scottish universities those studying for the degree of doctor of medicine could specialize in psychiatry if they wished. By 1914, it was also possible to take a postgraduate diploma in psychiatry at the universities of Durham, Edinburgh, Manchester, Leeds, and Cambridge.²⁸ As courses proliferated, universities set up lectureships and chairs in psychiatry and related disciplines.²⁹ Although only highly committed students opted for specialist courses, these decades nevertheless saw solid increases in provision for education in psychological medicine.

Even medical students who did not pursue specialist training or pay close attention to compulsory lectures and demonstrations would have found it difficult to avoid acquiring some “psychological” knowledge in the course of their studies. Because psychiatry shared territory with many other branches of medicine, instruction in mind, brain, and nerves was scattered throughout the curriculum.³⁰ At Barts in the 1880s, the course on ‘principles and practice of medicine’ dealt with diseases of the brain and spinal cord, as well as chorea, epilepsy, hysteria, and delirium tremens. Over the decade, the content of this course gradually expanded to encompass everything from headache to sleep problems, stammering, and writers’ cramp.³¹ In lectures on anatomy and physiology, students were introduced to the structure and functions of the nervous system, and to ‘the Physiology of the MIND’.³²

²⁷ Thomson, ‘Teaching of Psychiatry’, 552; Clouston, ‘Position of Psychiatry’, 8–9; Clarkson, ‘Teaching of Psychology’, 241; Robertson, ‘Teaching of Mental Diseases’, 227; G. Newman, *Recent Advances in Medical Education in England: A Memorandum Addressed to the Minister of Health* (London: HMSO, 1923), pp. 139, 141; Matthew, ‘Teaching of Medicine’, 25.

²⁸ Clouston, ‘Position of Psychiatry’, 7–8; Crammer, ‘Training and Education in British Psychiatry’, pp. 220–3; Digby, *Evolution of British General Practice*, p. 61.

²⁹ S.T. Anning and W.K.J. Walls, *A History of the Leeds School of Medicine: One and a Half Centuries, 1831–1981* (Leeds: Leeds University Press, 1982), p. 109; Robertson, ‘Teaching of Mental Diseases’, 225.

³⁰ Crammer, ‘Training and Education in British Psychiatry’, 213.

³¹ SBHA: MS 20, *St Bartholomew’s Hospital and College Sessions 1878–1879*, p. 30; *St Bartholomew’s Hospital and College Sessions 1881–1882*, p. 33; *St Bartholomew’s Hospital and College Sessions 1887–1888*, p. 33.

³² SBHA: MS 20, *St Bartholomew’s Hospital and College Sessions 1876–76*, pp. 32, 44.

This included instruction on the relations of physiology to psychology and body to mind, ‘functions associated with mind’ such as ‘consciousness, perception, and will’, and even ‘unconscious cerebration’.³³ Meanwhile, courses on forensic medicine and medical jurisprudence routinely dealt with insanity, malingering, and the relation of unsound states of mind to criminal acts.³⁴ Medical students did not have to be committed to a career in psychiatry to acquire a passing acquaintance with some of its key concepts, diagnostic practices, and treatments.

For students actively interested in psychological medicine, there were several less formal avenues to knowledge within their teaching institutions. Hospital medical societies fostered cross-generational links and served as potential conduits for the vertical transmission of knowledge. The cohort of “shell-shock” doctors mostly took an active part in the associational life of their educational institutions, whether as students or teachers, and their paths sometimes crossed at pre-war meetings of student medical societies.³⁵ The records of student medical societies and in-house journals suggest a growing appetite for papers on “psychological” subjects in the late nineteenth and early twentieth centuries. The St Barts’ Abernethian Society and *Hospital Reports* often hosted discussions of functional and neurotic disorders, including hysteria and neurasthenia, and of matters such as ‘mental disturbance after operations’ or ‘medicine and the mind’.³⁶ When the Abernethian Society put on papers on ‘manifestations of hysteria’ or ‘the psychology of dreams’, respectable numbers attended (respectively, twenty-four and sixty-five listeners). But when the speaker was well known, such as the neurologist Henry Head (1861–1940) or Robert Armstrong-Jones, the number of attendees could climb to more than 200.³⁷

³³ P.H. Pye-Smith, *Syllabus of a Course of Lectures on Physiology Delivered at Guy’s Hospital* (London: J. & A. Churchill, 1885), pp. 2, 43, 47.

³⁴ SBHA: MS 20, *St Bartholomew’s Hospital and College Sessions 1875–1876*, p. 38 and *St Bartholomew’s Hospital and College Sessions 1886–1887*, p. 40. KCHMSA: KH/SYL1/1: *The Medical School of King’s College Hospital 1910–1911*, p. 54. Guy’s Hospital Medical School Archive (GHMSA): G/PUB/6/1: Guy’s Hospital Examination Papers 1889–1890.

³⁵ For example, between 1884 and 1914, seven doctors from the cohort published in the *St Bartholomew’s Hospital Reports* or gave papers to the Abernethian Society (Howard Tooth, W.H.R. Rivers, Harry Campbell, Charles Myers, Robert Armstrong-Jones, Adolphe Abrahams, and Anthony Feiling); seven more published in the *Guy’s Hospital Reports* or gave papers to the Pupil’s Physical Society (Harry Campbell, E.A. Peters, A. W. Ormond, Arthur Hurst, George Savage, J.L.M. Symms, and Laughton Scott).

³⁶ W.P. Herringham, ‘Cases of Mental Disturbance After Operations’, *SBHR*, 21 (1885), 165–7; S. West, ‘Five Cases of Functional Nervous Disorder’, *SBHR*, 21 (1885); F.A. Bainbridge, ‘Some Neuroses of Children’, *SBHR*, 37 (1901). See also lists of proceedings of the Abernethian Society, *SBHR*, 27 (1891), 285; *SBHR*, 29 (1893), 350; *SBHR*, 39 (1903), 239; *SBHR*, 44 (1908), 217.

³⁷ See lists of proceedings of the Abernethian Society, *SBHR*, 48 (1912), 167; *SBHR*, 49 (1913), 111; and *SBHR*, 50:2 (1914), 176.

The associational life of other teaching hospitals in the thirty years or so before the war shows similar patterns. The Medical (later Listerian) Society of King's College Hospital heard papers on insanity,³⁸ malingering,³⁹ functional nervous disorders (including hysteria and neurasthenia),⁴⁰ and Freud.⁴¹ At Guy's, the Pupil's Physical Society, the Physiological Society, and the *Guy's Hospital Reports* covered topics including insanity and related disorders,⁴² the nature of mind (in its conscious and unconscious aspects, its material and other manifestations, and normal and abnormal psychology),⁴³ and sleep and dreams.⁴⁴ There was a notable increase in the number of papers on hypnotism and suggestion, perennial favourites of student medical societies, from around 1900. These usually attracted higher than average audiences.⁴⁵ In a record for the Medical Society, eighty-six people

³⁸ KCHMSA: KHU/C1/M7, Mr Distin, 'Medical Experiences in a Lunatic Asylum' (3 February 1893); KHU/C1/M8, Dr White, 'Epilepsy Associated with Insanity' (27 January 1899); R.P. Williams, 'Insanity and Crime' (19 March 1901).

³⁹ KCHMSA: KHU/C1/M7, Mr Birch, 'Malingering' (27 January 1887); KHU/C1/M8, A.H. Cheatle, 'Malingering in Ear Disease' (4 March 1910).

⁴⁰ KCHMSA: KHU/C1/M7, Dr Dent, 'Hysterical Dyspnoea with Some Remarks on [Ospahectomy?]' (3 December 1885); KHU/C1/M8; F.W. Mott, 'On the Causation of Nervous Diseases' (16 February 1900); Mr Whittington, 'A Case of Traumatic Neurasthenia' (21 January 1910); unnamed speaker, 'A Case of Functional Paraplegia' (27 October 1911).

⁴¹ KCHMSA: KHU/C1/M8, W. Brown, 'Freud's Theory and Its Uses in Diagnosis' (21 January 1913).

⁴² GHMSA: G/S7/55, W.A. Slater, 'The Medico-Legal Aspects of Insanity' (7 October 1882); G/S7/1, printed card advertising Pupil's Physical Society session 1889–90, E. Goodall, 'Mental Diseases'; G/S6/7, A.H. Gool, 'The Physiological Aspects of Lunacy' (undated, 1907–8); G.H. Savage, 'Suicide as a Symptom of Mental and Nervous Disorder', *Guy's Hospital Reports*, 50 (1893).

⁴³ GHMSA: G/S6/3, H.O. Brookhouse, 'Unconscious Mentality – Its Existence and Value' (4 December 1902); G/S6/5, S.S. Brook, 'The Force of Mind' (undated, 1904–5); G/S6/6, J.L. Atkinson, 'The Ignorance of Science, Especially as Regards the Physical Basis of Mind' (12 March 1906); G/S6/10, G.S. Miller, 'Volition and Will' (undated, 1909–10); G/S6/12, W.W. Payne, 'Abnormal Psychology' (undated, 1912–14).

⁴⁴ GHMSA: G/S7/1, printed card advertising Pupil's Physical Society session 1910–11, J.L.M. Symms, 'Night Terrors' (29 January 1913); G/S6/6, G.H. Haycraft, 'Dreams and Delusions' (undated, 1905–6); G/S6/4, L. Mandel, 'Sleep' (27 January 1904); G/S6/7, A. Neville-Cox, 'Sleep' (undated, 1906–7); G/S6/9, W.S. George, 'Sleep' (30 November 1908); G/S6/11, F.V. Bevan, 'Sleep' (undated, 1910–1911); G/S6/13, T.L. Heath, 'The Physiology of Sleep' (9 February 1914).

⁴⁵ KCHMSA: KHU/C1/M8, Dr Milne Bramwell, 'Hypnotism' (31 January 1902); GHMSA: G/S7/1, printed card advertising Pupil's Physical Society session 1907–8, Douglas Bryan, 'Hypnotism' (27 November 1907); H.D. Rolleston, 'Treatment by Hypnotic Suggestion', *SBHR*, 25 (1889), 115–26; G/PUB 1/1/1/2, G.L. Scott, 'Ten Consecutive Cases Treated by Hypnotism', *Guy's Hospital Neurological Studies*, 67 (1913), 114–19; see also lists of the proceedings of the Abernethian Society, *SBHR*, 34 (1898), 328; *SBHR*, 48 (1912), 169; *SBHR*, 51 (1915), 56.

attended one such lecture at King’s.⁴⁶ The opportunity for showmanship formed part of the appeal of hypnotism, with more than one set of minutes recording the excitement of practical demonstrations.⁴⁷ However, hypnotism also afforded students the chance to explore topics covered only sketchily on the formal curriculum: dreaming, memory, the existence of the unconscious, the influence of the mind on the body, the role of the doctor’s personality in healing, the fine lines separating normal and abnormal psychological processes, and the limits of free will and individual autonomy.⁴⁸ Little wonder, then, that such papers often stoked lively discussions.⁴⁹

The formal and informal structures of medical education offered many opportunities to find out about psychological matters. Diligent scholars, or those heavily involved in the associational life of colleges and hospitals, would undoubtedly have acquired some such knowledge, albeit in an unorganized and piecemeal fashion. In this way, non-specialists could obtain some basic knowledge of nervous and mental disorders. Perhaps more importantly, the evolutionary framework which shaped specialist understandings of mind, nerves, and brain also formed the foundation of approaches to mind and body within medical education. Via the influence of evolutionary forms of understanding, specialists and non-specialists had access to some similar kinds of psychological knowledge, although these were elaborated more explicitly and in greater detail within specialist disciplines. This evolutionary model of mind was carried over into constructions of the diagnosis of “shell-shock”, and is crucial to understanding commonalities between apparently different conceptualizations of the disorder.

The Evolutionary Model of Mind in Pre-War Psychological Medicine

By the end of the nineteenth century, evolutionary frameworks of understanding dominated British intellectual and scientific culture. The author of the essay on ‘Evolution’ in the 1911 edition of the *Encyclopaedia*

⁴⁶ KCHMSA: KHU/C1/M8, Dr Bramwell, ‘Hypnotism and Treatment by Suggestion’ (15 October 1909).

⁴⁷ KCHMSA: KHU/C1/M8, J. Woods, ‘Treatment by Suggestion with and without Hypnosis’ (25 March 1908); Anon., ‘The Medical Society’, *KCHR*, 5 (1897–8), 237.

⁴⁸ See, for example, GHMSA: G/S6/4, C.A.L. Meyer, ‘Animal Magnetism’ (undated, 1903–4); G/S6/5, S.S. Brook, ‘The Force of Mind’ (undated, 1904–5); G/S6/11, J. Stevenson, ‘Hypnotism’ (undated, 1910–11).

⁴⁹ See comments on H. Wingfield’s paper on ‘The Nature and Phenomena of Hypnotism’ in lists of proceedings of the Abernethian Society, *SBHR*, 27 (1891), 284.

Britannica commented that in the space of only two editions, since Huxley's exposition of the topic in 1878, 'the doctrine of evolution has outgrown the trammels of controversy and has been accepted as a fundamental principle'.⁵⁰ In the half-century leading up to the First World War, when "shell-shock" doctors undertook their professional training, evolution gradually permeated the preclinical medical curriculum. Most topics invited an evolutionary standpoint or required some engagement with evolutionary theory. The examination questions at St Barts on comparative anatomy, biology, morphology, embryology, physiology, and botany demonstrate that by the 1880s at the latest, evolution was firmly entrenched in the mainstream of medical education.⁵¹ In the same decades, evolutionary principles structured the course of physiology lectures at Guy's, which began with 'distinctions between man and the lower animals', and then provided evolutionary-infused overviews of comparative anatomy, morphology, and individual and racial development.⁵² In 1918, when the Edinburgh Pathological Club hosted an extensive enquiry into the ideal training of medical students, many different specialists still emphasized the role of evolutionary theory in their subjects, including botany, zoology, anatomy, and general medicine.⁵³ The evolutionary framework of understanding underpinned most aspects of formal medical education in the opening decades of the twentieth century.

The less formal elements of medical education also immersed students in evolutionary thought. In the two decades before the war, several of the papers delivered to the Guy's Hospital Physiological Society that tackled mind or related topics explicitly referred to Darwin or alternative theories of evolution.⁵⁴ The evolutionary account of mind in one paper on

⁵⁰ P.C. Mitchell, 'Evolution', *Encyclopaedia Britannica*, 11th edn, 29 vols. (Cambridge: Cambridge University Press, 1910), vol. 10, p. 34.

⁵¹ See SBHA: MS 20, *St Bartholomew's Hospital and College Sessions for 1878–1879 and 1897–1880*. Compare the annual *St Bartholomew's Hospital and College Sessions* from 1875–95 for further examples of questions employing an evolutionary framework.

⁵² Pye-Smith, *Syllabus of a Course of Lectures*, pp. 2, 5, 44–5.

⁵³ B. Balfour, 'Botany in Medical Education', *EMJ*, 20 (January–June 1918), 115; J.C. Ewart, 'The Connection of Zoology with Medicine', *EMJ*, 20 (January–June 1918), 118, 121; D. Waterson, 'The Teaching of Anatomy', *EMJ*, 20 (January–June 1918), 184; Prof. Robinson, 'The Place of Anatomy in the Medical Curriculum', *EMJ*, 20 (January–June 1919), 185; D.E. Dickinson, 'The Training of Medical Students for General Practice: Recollections and Reflections', *EMJ*, 21 (July–December 1918), 364.

⁵⁴ GHMSA: G/S6/3, Russell, 'Origin of Life' (undated, 1902–3); G/S6/5, E.M. Lobb, 'Temperament' (October 1904), 10; G/S6/6, W.L. Hibbert, 'Crime and the Criminal' (October 1905), 4, 13; H.W. Heasman, 'The Cerebro-Spinal Nervous System' (27 November 1905), 7; G/S6/9, J.A. Bullbrook, 'Instinct and Reason' (2 November 1908), 7, 13–15, 19; G/S6/11, R.O.H. Jones, 'The Physiology of the Child' (undated, 1910–11); W.E. James, 'The Biological Aspect of Socialism' (13 March 1911); G/S6/12,

‘Consciousness’ stressed racial hierarchy, with the speaker claiming that ‘the difference between the consciousness of the dogs, apes, etc., and between that of the lowest races of mankind such as the Aztecs, the Veddahs, and the Polynesians, is a great deal less than the corresponding difference between these uncivilised races, and the higher specimens of thoughtful genius in man, such as Shakespeare, Darwin, Goethe, Milton, and Pope’.⁵⁵ This explicit statement on the evolutionary hierarchy of mind articulated and systematized the implicit assumptions scattered throughout other student papers.

At every stage in their training, doctors were taught to conceptualize the human body and mind as shaped by a long process of evolution. When the circumstances of war forced doctors who were not specialists in mind, brain, or nerves to take responsibility for treating “shell-shocked” men, they fell back on the knowledge of mind and its workings gleaned from their medical education. When doctors reflected on the development of psychology in Britain, they usually credited Darwin with originating a truly scientific (by which they meant biological) approach to the subject. In the words of one “shell-shock” doctor, Darwin had ‘rescu[ed] psychology from the thralldom of medieval thought’ and shown ‘its true ancestry, coeval with animal life’.⁵⁶ The way of seeing fostered by the evolutionary framework of understanding united surgeons, ophthalmologists, gastroenterologists, medical psychologists, psychiatrists, and neurologists. Although there were many distinctions between practitioners from different disciplines and traditions, this shared mode of thought makes it possible to set out some general features of an evolutionary model of mind common to psychiatrists, psychologists, and neurologists as well as doctors from other specialisms.

The doctrine of psycho-physical parallelism, sometimes identified as the most popular medical view of mind–body relations, formed an important common ground in mainstream approaches within neurology, psychiatry, and psychology.⁵⁷ As employed by doctors in this period, psycho-physical parallelism meant that mental and physical processes were viewed as occurring in tandem with each other and as in some

P.G. McEvedy, ‘The Origin of Life’ (24 January 1913); G/S6/13, Anon., ‘The Origin of Life’ (undated, 1914–16); Anon., ‘Vitalism and Mechanism’ (undated, 1914–16); G/S6/14, R.S. Ralph, ‘The Vertebrate Character of Man’ (undated, 1917–19).

⁵⁵ GHMSA: G/S6/2, G.W. Rontley, ‘Consciousness’ (undated, 1901–2), 6–7.

⁵⁶ J.H. Parsons, *Mind and the Nation* (London: Bale, Sons and Danielsson, 1918), p. 4.

⁵⁷ T.C. Shaw, *Ex Cathedra: Essays on Insanity* (London: Adlard and Son, 1904), p. 113; M. Craig, *Psychological Medicine: A Manual on Mental Diseases for Practitioners and Students*, 3rd edn (London: J. & A. Churchill, 1917), p. 1; J.R. Lord, ‘Psychology the Science of Mind’, *JMS*, 73:314 (July 1930), 544.

way connected, but the nature of the causal relation was not specified.⁵⁸ Psycho-physical parallelism allowed psychiatrists to identify their relatively insecure discipline with more established and scientifically reputable neurological and physiological approaches.⁵⁹ It also meant that doctors could justify focusing on mind *or* body without denying the importance of either. Joseph Ormerod (1848–1925), a specialist in nervous disorders with a particular interest in hysteria, compared physiologists and psychologists to men looking at a coin from opposite sides and arguing whether it was heads or tails: ‘the two sides are indissolubly connected, just as there is some unknown but certain connection between mind and matter’.⁶⁰ The psychologist William Brown, meanwhile, argued that as doctors knew more about mental processes than corresponding brain activities, it made sense to explain mental disturbances in terms of ‘memory, ideas, imaginations, desires, and wishes’ rather than through reference to ‘hypothetical nerve cells and nerve fibres’.⁶¹ The disciplines of mind, nerves, and brain were therefore linked by the doctrine of psycho-physical parallelism, uses of which both reflected the incomplete separation of these fields and glossed the differences between them. As will be seen in the next chapter, the use of ambiguous concepts and strategies to justify particular stances or to forge practical working theories was central to the practice of pre-war British psychological medicine.

Although the doctrine of psycho-physical parallelism was not universally accepted, it was widely believed that the evolution of mind and nervous system proceeded hand in hand. The foremost British neurologist of the nineteenth century, John Hughlings Jackson (1835–1911), argued that the nervous system consisted of ‘levels’ laid down at different evolutionary moments which corresponded to functions rather than anatomical structures. The functions performed at the most ancient levels were simple, highly organized, and automatic. At the higher levels,

⁵⁸ This departs from current standard use, which denies a causal relation. See the definitions in E.J. Foley, ‘Consciousness and Sensation’, in G. Rhodes (ed.), *The Mind at Work: A Handbook of Applied Psychology* (London: Thomas Murby, 1914), pp. 58–66, 64–5; Craig, *Psychological Medicine*, 3rd edn, pp. 1–2.

⁵⁹ M.J. Clark, ‘The Rejection of Psychological Approaches to Mental Disorder in Late Nineteenth-Century British Psychiatry’, in A. Scull (ed.), *Madhouses, Mad-Doctors and Madmen: The Social History of Psychiatry in the Victorian Era* (Philadelphia, PA: University of Pennsylvania Press, 1981), pp. 283–4.

⁶⁰ J.A. Ormerod, ‘The Lumleian Lectures on Some Modern Theories Concerning Hysteria. I’, *Lancet*, 25 April 1914, 1164.

⁶¹ W. Brown, ‘Freud’s Theory of Dreams’, *Lancet*, 19 April 1913, 1115. See also W.A. White and S.E. Jelliffe, ‘Preface’, in W.A. White and S.E. Jelliffe (eds.), *The Modern Treatment of Nervous and Mental Diseases, by American and British Authors* (London: Henry Kimpton, 1913), p. v.

which provided the basis for consciousness, activity was less organized, more complex, and more voluntary. The higher levels controlled the lower levels. Any impairment of the higher levels released the lower levels from this control and resulted in the development of pathological conditions such as aphasia (a partial or total loss of the ability to produce or to comprehend language). Jackson named this process ‘dissolution’ and believed that as disease or injury stripped back the higher levels of the nervous system, behaviour characteristic of an earlier stage in the evolution of the species could be viewed. The ‘pathological’ symptoms and behaviours released by dissolution represented what was once the highest level of phylogenetic development.⁶²

Jackson’s influence was felt across the other disciplines of mind, nerves, and brain. The psychologist William McDougall (1871–1938) described ‘each step of mental evolution’ as ‘the effect or expression of a corresponding step of nervous evolution’.⁶³ For the physiologist Edward Schäfer (1850–1935; later Sharpey-Schafer), all human mental achievement resulted from ‘the acquisition by a few cells in a remote ancestor of a slightly greater tendency to react to an external stimulus’.⁶⁴ Robert Cole (1866–1926), a specialist in mental diseases and author of a well-received textbook of psychiatry, concluded that mind was best regarded from ‘the Evolutionary standpoint’ because study of the animal kingdom demonstrated ‘the gradual development of Mind *pari passu* with the evolution of the Brain’.⁶⁵ On the eve of the First World War, Cole’s statement described the outlook of most medical men on the origins and evolution of the mind and nervous system.

The Faculties of Mind: Thought, Emotion, and Will

The evolutionary model prevalent within the pre-war disciplines of mind, nerves, and brain depicted mind as a unified and integrated structure consisting of three basic faculties: emotion, thought, and volition.⁶⁶

⁶² Young, ‘W.H.R. Rivers and the War Neuroses’, 363.

⁶³ W. McDougall, *Psychology: The Study of Behaviour* (London: Williams and Norgate, 1914), pp. 73–4, 140–1.

⁶⁴ E. Schäfer, ‘Presidential Address on the Nature, Origin, and Maintenance of Life’, *Lancet*, 7 September 1912, 676, 682.

⁶⁵ R.H. Cole, *Mental Diseases: A Text-Book of Psychiatry for Medical Students and Practitioners* (London: University of London Press, 1913), pp. 14–15.

⁶⁶ A. Bain, *The Emotions and the Will* (London: John W. Parker and Son, 1859), p. 3; G. Rhodes, ‘Introduction’, in Rhodes (ed.), *Mind at Work*, pp. 1–13; W.C. Coupland, ‘Philosophy of Mind’, in D.H. Tuke (ed.), *A Dictionary of Psychological Medicine*, 2 vols. (London: J. & A. Churchill, 1892), vol. 1, pp. 27–49; Cole, *Mental Diseases* [1913], p. 14; McDougall, *Psychology*, p. 63.

Healthy mental functioning was conceived as a matter of balance between these faculties: their interdependence meant that disorder in any part affected all the other aspects of mind. These faculties of mind were also aligned with nervous processes and incorporated into a hierarchical model of nervous evolution.⁶⁷ Authors of works on psychological medicine continually calibrated the degree to which each faculty of mind was animal or human, “primitive” or “civilized”, and dependent on nature or nurture. Within this model of mind, individuals and races were deemed more or less “civilized” to the extent that their behaviour was dominated by the “higher” faculties of reason or will, or the “lower” faculty of emotion. However, the animal and the “primitive” were constituent parts of even the most “civilized” human and could rise to the surface at any time. Although the “civilized” was defined through its opposition to the “primitive”, and these conditions marked different ends of the evolutionary spectrum, because the same scale instituted a series of transitional steps between the two positions, evolutionism underlined the precariousness of “civilization” and even the human itself.

The instability of established understandings of human nature in the post-Darwinian world is evident in late nineteenth-century psychological accounts of reason and instinct. Conventionally, reason had been viewed as a unique attribute which separated human behaviour from the instinct-driven actions of animals. The Liberal philosopher L.T. Hobhouse (1864–1929), born in the middle of the decade separating *Origin of Species* from *The Descent of Man*, dimly recalled being taught as a child ‘that man had reason, while animals had instinct’. By the time he reached adulthood, this conception had broken down. Instead, Hobhouse recounted, it was now known that ‘no impassable gulf’ separated instinct from intelligence and that intelligence actually evolved out of instinct. All human behaviour, including reason, was based in heredity and instinct. Although man benefitted from ‘the guidance of experience and reflection’, it was impossible to completely separate out instinct from intelligence. Man was ‘no more regulated by pure reason than animals by pure instinct’.⁶⁸ The British psychologist Conwy Lloyd Morgan (1852–1936) confirmed this view of intelligence as little more than modified instinct: instinct was ‘inherited adaptation’, while intelligence was an ‘inherited power’ which permitted reasoned adaptation within the lifetime of the individual.⁶⁹ Another psychologist, James Sully (1842–1923), marvelled

⁶⁷ Cole, *Mental Diseases* [1913], pp. 69–70.

⁶⁸ L.T. Hobhouse, *Mind in Evolution* (London: Macmillan, 1901), pp. 46–7.

⁶⁹ C.L. Morgan, ‘Instinct’, *Encyclopaedia Britannica*, 11th edn, 29 vols. (Cambridge: Cambridge University Press, 1910), vol. 14, p. 650.

that the development of ‘the most ordinary child’ revealed ‘the points of contact of man’s proud reason with the lowly intelligence of the brutes’ and demonstrated ‘the great cosmic action, the laborious emergence of intelligence out of its shell of animal sense and appetite’.⁷⁰

In the evolutionary model of mind, the position of reason as the most “human” mental attribute was determined by its relation to other elements. Volition, or reasoned will, stood at the apex of human mind, and the inherited racial attribute of emotion at its base. The hereditary, biologically inscribed attribute of emotion was closely aligned with instinct, and sometimes even portrayed as little more than a basic nervous reflex.⁷¹ Commentators contrasted emotion with the acquired (and therefore more *human*) characters of reason and will, as in Darwin’s claim that the main emotions were ‘innate or inherited’, and therefore beyond ‘the will of the individual’.⁷² Other authors portrayed emotion as the direct opposite of volition.⁷³ The American psychologist William James (1842–1910) went so far as to deny any separation of emotion from the body. In ‘What is an emotion?’ (1884), James argued that bodily changes do not take place as a consequence of emotion: rather, the perception of bodily change *is* the emotion. He stated that a ‘purely disembodied human emotion’ was inconceivable: if a strong emotion was analysed and its ‘characteristic bodily symptoms’ abstracted, there was ‘nothing left behind, no “mind-stuff” out of which the emotion can be constituted’. A ‘cold and neutral state of intellectual perception is all that remains’.⁷⁴ Although James’ theory was far from universally accepted, it was seen to prove ‘the capital importance of physiological factors in emotion’.⁷⁵

⁷⁰ J. Sully, ‘Introduction’, in B. Perez, *The First Three Years of Childhood* (London: Swan Sonnenschein, 1889), pp. vi–vii.

⁷¹ For definitions of instinct and reflex, see G. Romanes, ‘Instinct’, in Tuke (ed.), *Dictionary of Psychological Medicine*, vol. 2, p. 704; E.J. Foley, ‘Cognition and Ideation’, in Rhodes (ed.), *Mind at Work*, p. 156; Anon., ‘The Science and Philosophy of Instinct’, *Nature*, 92 (September 1913–February 1914), 627. For the alignment of instinct with emotion, see T. Ribot, *The Psychology of the Emotions*, 2nd edn (New York and Melbourne: Walter Scott Publishing, 1911), pp. vii–viii; A.F. Shand, *The Foundations of Character: Being a Study of the Tendencies of the Emotions and Sentiments* (London: Macmillan, 1914), pp. 188–92; Cole, *Mental Diseases* [1913], pp. 55, 59.

⁷² C. Darwin, *The Expression of the Emotions in Man and Animals*, 2nd edn (London: Fontana Press, 1999) [1889], pp. 348–9; see also Coupland, ‘Philosophy of Mind’, pp. 39–40.

⁷³ See, for example, T.C. Shaw, ‘Suicide and Sanity’, *Lancet*, 20 April 1907, 1067.

⁷⁴ W. James, ‘What Is an Emotion?’, *Mind*, 9 (1884), 188–93.

⁷⁵ Ribot, *Psychology of the Emotions*, pp. 93–97; Cole, *Mental Diseases* [1913], pp. 49–50; S.S. Colvin, ‘Education’, in White and Jelliffe (eds.), *Modern Treatment of Nervous and Mental Diseases*, p. 89.

This association of emotion with the body demonstrates its status as a “primitive” faculty of mind. The psychiatrist W.H.B. Stoddart claimed that emotion always operated in essentially the same way, whether it expressed the ‘sensations of a cat when she sees a mouse’ or the ‘sensations of a lover who sees his sweetheart walking with another man’.⁷⁶ Emotion was characterized as a product of the earliest stages of human evolution, and individuals or groups apparently ruled by emotion were perceived as “backward” or “uncivilized”. To observe emotion in its purest, unmediated state, Darwin studied four main groups: ‘the commoner animals’, ‘savage’ races, the insane, and infants.⁷⁷ Along similar lines, medical commentators described emotion as a prominent feature of the mental life of women and the working classes.⁷⁸ The social and racial prejudices of these assessments of ‘emotionality’ depended on circular reasoning: the behaviour of these groups was dominated by emotion and instinct, and so they must be located at a lower point on the evolutionary scale; because they were less highly evolved, the actions of these groups must be governed by emotion and instinct, rather than reason and volition.

As a manifestation of the lower levels of mind, emotion required strict control by the higher faculties. Uncontrolled or overabundant emotion was undesirable, and actions based on unmediated emotion were seen as uncritical, impulsive, and driven by “primitive” suggestion and belief rather than reasoned volition.⁷⁹ There was no substantial difference between the actions of a person in a state of uncontrolled emotion and those of a lunatic.⁸⁰ While doctors acknowledged emotion as a necessary element of life, which imbued the world with ‘warmth’ and ‘human value’, they also insisted that it was valuable only in proportion to intelligence.⁸¹ Authors constructed elaborate hierarchies of affective states organized by the degree to which cognition and volition entered into their constitution. The lowest level was feeling, a reflex reaction to simple

⁷⁶ W.H.B. Stoddart, *Mind and Its Disorders: A Text-Book for Students and Practitioners*, 2nd edn (London: H.K. Lewis, 1912), p. 69.

⁷⁷ Darwin, *Expression of the Emotions*, pp. 20–4. See also Bain, *Emotions and the Will*, pp. 4–6.

⁷⁸ Cole, *Mental Diseases* [1913], pp. 50, 53, 71; Stoddart, *Mind and Its Disorders* [1912], p. 103.

⁷⁹ McDougall, *Psychology*, p. 239; R.C. Temple, ‘Administrative Value of Anthropology’, *Nature*, 92 (September 1913–February 1914), 208; Cole, *Mental Diseases* [1913], p. 122.

⁸⁰ T.C. Shaw, ‘A Lecture on the Mental Processes in Sanity and Insanity’, *Lancet*, 27 January 1912, 213.

⁸¹ Colvin, ‘Education’, p. 87; H. Campbell, ‘The Feelings’, *JMS*, 46:193 (April 1900), 226; T.C. Shaw, ‘A Lecture on the Special Psychology of Women’, *Lancet*, 2 May 1908, 1265.

corporeal pleasure or pain; then came emotion, still ‘reflexly and involuntarily aroused’, but provoked by ‘a perception or idea’ rather than mere sensation; finally, in the highest affective level of sentiment, voluntary attention was directed to ideas. In the ‘intellectualised emotions’ of sentiments, such as truth, justice, duty, conscience, and aesthetic taste, feeling was attached ‘to an object of pure intellect’.⁸² As emotion was incrementally augmented by reason and volition, it was gradually “civilized”. The ideal development of emotion was therefore a movement further and further away from reflex and the body, until the animal was entirely written out of its definition.

In contrast to emotion, the perfectly directed will represented the apex of human mental achievement. Evolutionists’ veneration of free will might be seen as logically inconsistent with determinist views of the human mind as the outcome of material processes, and as subject to the same laws which determined the motions of all other physical matter.⁸³ If will were a natural phenomenon like any other, then there could be ‘no such thing as liberty of will even in man: man is simply the slave and the obedient slave of his nerve cells’. Indeed, the human will had ‘no more freedom than that of the higher animals’, from which it differed ‘only in degree – not in kind’.⁸⁴ The removal of will from the mystical realm of the soul, and of man from his status as divinely appointed lord and master of all creation, was a dangerous assault on comforting fictions of human power.⁸⁵ A thoroughgoing determinism should have levelled all the faculties of mind and retained no special place for will. In practice, however, doctors went to some lengths to retain the higher status of will, even while recasting its power in naturalistic terms.⁸⁶ Medical psychologists continued to insist that volition was the highest product of evolution, even while elaborating rejections of metaphysical notions of will which ran to several hundred pages.⁸⁷ This feat was achieved through the construction of evolutionary scales of development tracing the growth of will from the instinct of ‘the simplest microscopic animalcule’ up to ‘the most truly purposive actions of man,

⁸² Cole, *Mental Diseases* [1913], pp. 47–8, 53–4; Coupland, ‘Philosophy of Mind’, pp. 39–40; Stoddart, *Mind and Its Disorders* [1912], pp. 59, 93.

⁸³ Dixon, *Invention of Altruism*, p. 179.

⁸⁴ GHMSA: G/S6/2, G.W. Rontley, ‘Consciousness’ (undated, 1901–2), 10–11.

⁸⁵ M. Wiener, *Reconstructing the Criminal: Culture, Law and Policy in England, 1830–1914* (Cambridge: Cambridge University Press, 1990), pp. 159–71, 184; Smith, *Free Will and the Human Sciences*, pp. 7–8.

⁸⁶ L.J. Daston, ‘The Theory of Will versus the Science of Mind’, in W.R. Woodward and M.G. Ash (eds.), *The Problematic Science: Psychology in Nineteenth-Century Thought* (New York: Praeger, 1982), p. 111; Smith, *Free Will and the Human Sciences*, pp. 43–4, 138–9.

⁸⁷ H. Maudsley, *Body and Will* (London: Kegan Paul, Trench, 1883), p. 295.

actions sustained and renewed through long years by a firm self-conscious resolution to achieve some clearly conceived end'.⁸⁸ The evolutionary narratives created by psychologists, psychiatrists, and neurologists used the language of natural science but tenaciously clung to the possibility of free and inviolate will.⁸⁹

In some ways, fears within medical culture about the pernicious effects of theories and practices which seemed to undermine the will were tiresomely repetitive: responses to Darwin echoed earlier disquiet around mesmerism and anticipated the uneasiness provoked by psychoanalysis.⁹⁰ Nevertheless, the encounter with Darwinism did alter concepts of will. As doctors and other theorists emphasized the animal origins of will, they simultaneously undermined the potential of its reach and underlined the potency of the forces it had to contain. Like thought and emotion, will was simultaneously linked to and divided from instinct. It developed out of instinct, but existed to police and contain lower forms of activity.⁹¹ The crucial mediator between instinct and volition, as between emotion and sentiment, was intelligence: the French psychologist Théodule Ribot (1839–1916) described the relation between will and intelligence as 'the robust blind man carrying on his shoulders the paralytic who sees clearly'.⁹² The perfect direction of will depended on harnessing intelligence to determine the right end of action, and suppressing emotion which might interfere with judgement or the execution of an action. The precise deployment of will, on which "civilized" human identity hinged, involved forbearance as well as positive action, and could even be defined as the power *not* to act.⁹³ Because human development depended on the suppression of instinct and emotion, the capacity for repression proved the measure of man.⁹⁴

⁸⁸ McDougall, *Psychology*, pp. 152–3; see also Stoddart, *Mind and Its Disorders* [1912], p. 70; Cole, *Mental Diseases* [1913], p. 55; Coupland, 'Philosophy of Mind', pp. 41–2.

⁸⁹ L.S. Jacyna, 'Somatic Theories of Mind and the Interests of Medicine in Britain, 1850–1879', *Medical History*, 26 (1982), 240, 244; Clark, 'Rejection of Psychological Approaches', pp. 275–7; L.J. Ray, 'Models of Madness in Victorian Asylum Practice', *Archives Européennes de Sociologie*, 22 (1981), 243, 251–2.

⁹⁰ D. Pick, 'Maladies of the Will: Freedom, Fetters and the Fear of Freud', in R. Bivins and J.V. Pickstone (eds.), *Medicine, Madness and Social History: Essays in Honour of Roy Porter* (Basingstoke: Palgrave Macmillan, 2007).

⁹¹ Colvin, 'Education', p. 96; Stoddart, *Mind and Its Disorders* [1912], p. 70; Coupland, 'Philosophy of Mind', pp. 41–2; Cole, *Mental Diseases* [1913], pp. 61–2; McDougall, *Psychology*, p. 154.

⁹² Ribot, *Psychology of the Emotions*, p. 440.

⁹³ T. Ribot, 'Will, Disorders of', in Tuke (ed.), *Dictionary of Psychological Medicine*, vol. 2, p. 1367; Stoddart, *Mind and Its Disorders* [1912], p. 71; Reed, *Victorian Will*, p. ix.

⁹⁴ Bain, *Emotions and the Will*, pp. 404, 407–8.

The heightened emphasis on will as perhaps the most important aspect of human identity is even perversely reflected in the late nineteenth-century creation of aboulia, a disorder defined as the absence of will (and deemed to be more common in women than men).⁹⁵ The will shaped by ‘education and experience’ was the cornerstone of character and the most distinctively “human” of all mental faculties.⁹⁶ As the ‘force in Nature in which consciousness reaches its acme’, humans achieved ‘the dignity of personality’ and dominion over the earthly universe through the exercise of will.⁹⁷ Yet if the special character of man was that ‘racially and personally he has grown into the habit of inhibiting himself from brutishness’, this only underscored that he had ‘*much*, complex and various, *to inhibit*’.⁹⁸ Reformulations of will enabled man to cling to a distinctively human status, but only by the skin of his recognizably canine teeth. Will both defined human identity and performed an essential social function: it restrained individual desire, prevented anarchy, and formed the foundation of “civilization” itself.⁹⁹ Without will, there could be no duty and responsibility, only the selfish indulgence of individual desire.¹⁰⁰ The dark shadow of impairment of will was the precarious status of all human achievement.

Mind and Its Disorders

The incorporation of mind in the evolutionary scale of development meant that any disorder of its faculties could be construed as a perilous return to “primitive” origins. Although disorder might originate in any of the three faculties of mind, its existence always demonstrated the slackening of ‘the vigilant control of the will’, the highest coordinating faculty of mind.¹⁰¹ All disorders of mind were therefore also disorders of will. As one of the most recent acquisitions of the human mind, any

⁹⁵ Ribot, ‘Will, Disorders of’, 1366–7; G. Van Ness Dearborn, ‘Kinesthesia and the Intelligent Will’, *American Journal of Psychology*, 24:2 (April 1913), 227.

⁹⁶ Stoddart, *Mind and Its Disorders* [1912], p. 71; G.H. Savage, ‘An Address on Mental Disorders’, *Lancet*, 26 October 1912, 1134–7; Coupland, ‘Philosophy of Mind’, p. 42; Rhodes, ‘Mechanism of the Will’, pp. 188, 191; Bain, *Emotions and the Will*, p. 340; Cole, *Mental Diseases*, pp. 55–7.

⁹⁷ Cole, *Mental Diseases* [1913], pp. 56, 61–2; Colvin, ‘Education’, p. 99; E.J. Foley, ‘Modes of Consciousness’, in Rhodes (ed.), *Mind at Work*, p. 90; Reed, *Victorian Will*, p. 130.

⁹⁸ Van Ness Dearborn, ‘Kinesthesia and the Intelligent Will’, 235–6 [emphasis in the original].

⁹⁹ E. Buttar, ‘Physiology of the Brain and Nervous System’, in Rhodes (ed.), *Mind at Work*, pp. 31–2.

¹⁰⁰ Smith, *Free Will and the Human Sciences*, p. 3.

¹⁰¹ Coupland, ‘Philosophy of Mind’, p. 29; A.J. Brock, ‘Habit as a Pathological Factor’, *EMJ*, 13 (July–December 1914), 142.

impairment of will constituted a regression; because it harnessed and directed all the “lower” faculties of mind, loss of will unleashed primal traits and testified to the animal origins of man. In the 1870s, psychiatrist Henry Maudsley (1835–1918) interpreted the ‘brute-like characteristics’ of the insane as reminders that every man had ‘the brute nature within him’.¹⁰² Forty years later, Robert Armstrong-Jones reaffirmed this view. As ‘a vertebrate animal with the instincts of the animal’, man attained the ‘veneer of civilization’ only through the ‘the power of inhibition’ and ‘the influence of his environment’. In insanity, all the accoutrements of “civilization” were shed ‘in inverse order of their acquirement’, ‘until at last a man is left a wreck barely above the level of the animal’.¹⁰³ For both alienists, madness meant reversion to mental states characteristic of earlier stages in individual development and racial evolution.

Thomas Clay Shaw (1841–1927), whose professional career spanned most of these forty years, put forward a similar view of insanity. From the early 1870s until his retirement in 1911, Clay Shaw was superintendent of Banstead Asylum and lecturer in psychological medicine at St Bartholomew’s Hospital.¹⁰⁴ He described madness in Jacksonian terms as ‘dissolution’ or ‘devolution’ from ‘the highest state of the individual’.¹⁰⁵ Volition, a recently acquired and highly elaborate aspect of mind, was shed first in mental illness.¹⁰⁶ In turn, ‘intellectual comprehension’ shrank, emotion ran riot, and ‘the type of early, undeveloped life’ dominated: hence, the insane resembled ‘uncivilized persons’, ‘savages’, ‘islanders’, ‘primitive races’, children, and even ‘the brute creation’.¹⁰⁷ As dissolution showed, man’s original nature was still that of ‘a wild beast, impulsive and liable to explode’. Indeed, the ‘readiness with which civilized man reverts to the savage type shows simply that the original ferocity is only tamed, not changed’. Although modern societies were built on ‘the cultivation of inhibition’, at the current stage of evolution, this could only ever be an ‘artificial restraint’.¹⁰⁸ For Clay Shaw, the

¹⁰² H. Maudsley, *Body and Mind: An Inquiry into Their Connection and Mutual Influence, Specially in Reference to Mental Disorders* (New York: D. Appleton, 1871), p. 51.

¹⁰³ R. [Armstrong-]Jones, ‘An Address on Temperaments: Is There a Neurotic One?’ *Lancet*, 1 July 1911, 5–6; R. [Armstrong-]Jones, ‘Para-Myo-Clonus Multiples and Insanity’, *SBHR*, 46 (1910), 28–9.

¹⁰⁴ R. Armstrong-Jones, ‘In Memoriam: Thomas Clay Shaw’, *SBHR*, 60 (1927), 1.

¹⁰⁵ Shaw, *Ex Cathedra*, p. 94.

¹⁰⁶ Shaw, ‘A Lecture on the Special Psychology of Women’, 1266; Shaw, ‘Suicide and Sanity’, 1068.

¹⁰⁷ T.C. Shaw, ‘On Degradation of Type in the Insane’, *SBHR*, 20 (1884), 169, 170–3, 177.

¹⁰⁸ T.C. Shaw, ‘A Contribution to the Analysis of the Mental Process in Criminal Acts’, *Lancet*, 9 November 1907, 1307; T.C. Shaw, ‘On the Forecast of Destructive Impulses in the Insane’, *SBHR*, 21 (1885), 11.

extent of mental instability in modern life demonstrated the inevitable appearance of ‘throw-backs or reversions, failures and impossibilities’.¹⁰⁹ Moreover, in practice, mankind could not be divided into the definitively mad and the absolutely sane. Individuals perpetually seesawed above and below an average level of sanity, and any ‘phonographic repetition of the day’s sayings and a cinematographic representation of the day’s doings would show many ups and downs in the levels of development’.¹¹⁰ Ultimately, the evolutionary framework of understanding undermined the boundaries between animal and human, “primitive” and “civilized”, insane and sane.

This construction of mental disorder as regression, a slippage down the evolutionary scale of development, carried over into conceptions of war neurosis. “Shell-shock” doctors imbibed these ideas from the culture around them, but more specifically from their formal and informal education. These influences were direct and indirect. Although he published extensively on insanity, belonged to many medical societies, and merited obituaries in leading medical journals, Clay Shaw was not a great psychological theorist or even one of the leading psychiatrists of his day. Yet he was deeply immersed in the institutional and associational life of one of the great teaching hospitals: an ‘attractive’ lecturer with ‘well-attended’ classes, who favoured rising juniors at the Abernethian Society with his patronage and contributed an article to almost every volume of the *St Bartholomew’s Hospital Reports* published between the mid-1870s and 1900.¹¹¹ As such, Clay Shaw’s influence on psychological medicine extended over several decades. During his tenure as lecturer in psychological medicine at Barts, several “shell-shock” doctors passed through the school, including Armstrong-Jones, Charles Myers, and W.H.R. Rivers, the three doctors to publish most extensively on the disorder.¹¹² We cannot know how, or even if, Clay Shaw influenced the intellectual development of these students. However, the concept of mental illness as regression recurs in different ways in the work of all three physicians.¹¹³ The constellation of future “shell-shock” doctors at Barts offers an intriguing insight into potential mechanisms for the

¹⁰⁹ Shaw, ‘Contribution to the Analysis of the Mental Process’, 1307.

¹¹⁰ Shaw, *Ex Cathedra*, p. 110.

¹¹¹ Anon., ‘Obituary: Thomas Clay Shaw’, *BMJ*, 22 January 1927; Armstrong-Jones, ‘In Memoriam: Thomas Clay Shaw’, 3. See lists of proceedings of Abernethian Society, *SBHR*, 32 (1896); *SBHR*, 33 (1897), 231; *SBHR*, 40 (1904), 157; *SBHR*, 46 (1910), 199. For his articles, mainly on insanity, see *SBHR*, 1874–1900.

¹¹² The others are Adolphe Abrahams, Harry Campbell, Alfred Carver, Anthony Feiling, Robert Hotchkis, John Herbert Parsons, Howard Tooth, and William Aldren Turner.

¹¹³ On ideas of the “primitive” and “civilized” in the work of Rivers and Myers, see M. Thomson, “‘Savage Civilisation’: Race, Culture and Mind in Britain,

transmission of knowledge within medical schools, and the influence of medical education on the later careers of students, in a period when evolutionary frameworks of understanding shaped many aspects of the medical curriculum.

Conclusion

In the final decades of the nineteenth century, British doctors, like their contemporaries in other fields, revised their visions of human nature in the wake of the Darwinian revolution. This involved the reconfiguration, rather than erasure and reinvention, of earlier ideas of mind, brain, and nerves. After Darwin, the traditional boundaries of high and low which governed western thought were reconstituted as gateways between the categories they delineated. The evolutionary framework of understanding came to dominate medical education. During their training, doctors were exposed to a model of mind in which human mental faculties were perceived as repositories of earlier stages of evolutionary development, overlaid by the fragile acquisitions of “civilization”. Volition was the cornerstone of human identity and the controlling mechanism of the mind, but it also grew out of instinct and attested to man’s animal origins. As an insecure attainment, will was liable to waver in the course of everyday life, but under extreme strain it could even break down completely, unleashing the “primitive” forces it contained. When doctors trained in this tradition tried to explain “shell-shock”, they fell back on this conception of mind, and depicted the nervous and mental disorders of war as painful failures of will.

In its barest outlines, this evolutionary model had much in common with Freud’s representation of mind in his 1915 paper on war and death. Freud argued that “civilization” was superficial: scratch the surface of the “civilized” mind, and an ineradicable mass of primitive drives and instincts pulsates beneath. “Civilization” demanded the repeated renunciation of instinctual satisfaction from each of its members, and so survived on the shakiest of foundations. Freud’s paper recapitulated the dominant themes of late nineteenth-century intellectual and scientific culture. Indeed, in the view of ophthalmologist John Herbert Parsons (1868–1957), the Freudian-derived “New Psychology” [had] its origin in the “Origin of Species”.¹¹⁴ The evolutionary framework of understanding instituted points of

1898–1939’, in W. Ernst and B. Harris (eds.), *Race, Science and Medicine, 1700–1960* (London and New York: Routledge, 1999), pp. 235–58.

¹¹⁴ Parsons, *Mind and the Nation*, p. 8.

exchange for ideas about human mind, body, and culture across medicine and the human, social, and natural sciences.

Across several domains of thought, individuals raw with the abrasions of the post-Darwinian universe niggled away at the dangerous proximity of the human to the animal. Anthropological expeditions which set out to confirm ‘biologically based otherness and inequality’ ended by revealing ‘the “savage” and “primitive” basis of the “civilized” mind’.¹¹⁵ Psychological investigations attempted to establish what made a coherent and rational person, but instead tore open the unstable borderlines between consciousness and the ‘obscure recesses’ of the mind.¹¹⁶ In this way, the conceptual gateways that evolutionary theory instituted between “high” and “low” also constituted a different, historical point of exchange, between the psychological medicine of the late nineteenth-century and the psychodynamic approaches to mind which gained medical and scientific purchase in Britain in the interwar period. The Freudian theory of the unconscious drew on ‘well-known theories of the pervasive influence of unconscious mental processes’, but it also transformed them.¹¹⁷ The concept of organic memory – the transmission of thoughts, memories, and cultural achievements across generations – permeated Freudian psychoanalysis. Only the belief that ontogeny recapitulates phylogeny (that individual development repeats racial development) allowed Freud to ‘view human history through the child and through the neurotic as well as through the unconscious of the “normal” individual’.¹¹⁸ The same concepts of evolution, inheritance, and “civilization” that saturated psychological culture in Britain also formed the backdrop of psychoanalytic theory, against which Freud formulated his more radical ideas.

These interfaces demonstrate the existence of shared questions and concerns about the fundamental make-up of human nature, although the answers were very different. Freudian psychoanalysis is often viewed as the main intellectual resource of psychodynamic medical psychologists in the years around the First World War, but it was not the only form of knowledge that forced reappraisal of established certainties. The evolutionary framework of understanding which pervaded intellectual and

¹¹⁵ Thomson, “Savage Civilisation”, p. 236; M. Thomson, ‘Psychology and the “Consciousness of Modernity” in Early Twentieth-Century Britain’, in M. Daunt and B. Rieger (eds.), *Meanings of Modernity: Britain from the Late-Victorian Era to World War Two* (Oxford and New York: Berg, 2001), pp. 100–5.

¹¹⁶ J.B. Taylor, ‘Obscure Recesses: Locating the Victorian Unconscious’, in J.B. Bullen (ed.), *Writing and Victorianism* (London and New York: Longman, 1997), pp. 143, 157.

¹¹⁷ *Ibid.*, p. 140.

¹¹⁸ L. Otis, ‘Organic Memory and Psychoanalysis’, *History of Psychiatry*, 4 (1993), 372; L. Otis, *Organic Memory: History and the Body in the Late Nineteenth and Early Twentieth Centuries* (Lincoln, NE and London: University of Nebraska Press, 1994), pp. 1–49.

scientific culture in the early twentieth century also encouraged reassessment of the constituents of human identity and workings of mind. This framework of understanding shaped medical approaches to the bodies and minds of “shell-shocked” soldiers. As will be seen, concepts of emotion, will, and animal inheritance dominated understandings of the disorder until the end of the war and beyond. The evolutionary model of mind remained integral to medical understandings of mental breakdown. But in the decades before the war, as the disciplines of mind, nerves, and brain gradually separated and defined their own territories, attempts to understand the relations between animal and human, body and mind, and the individual and the social also led to flux and mutation within medical culture.