emotional; it gripped him within hospital wards and when he was 'sitting alone in my Bedroom'. He struggled to distinguish the experience of pain from the pain of experience. On the surface, he should have been able to elicit sympathy: he was a white male who had been born into a privileged family and had served as an officer in war. In fact, his class status was a further cause for agony. As one doctor reported: 'The officer is a man of sensitive temperament and a loss of his leg affects him more than one of coarser fibre. He ... hates people looking at him and sympathizing with him.'101 Those physicians who witnessed his pain often attempted to sympathise and provide succour, but their inability to solve his crises eventually led each of them to turn away - sometimes in despair, at other times in annoyance. The invisibility of his wound – his stump seemed to be 'normal' and the limb that burned like fire did not exist – trumped all scientific theorising. Theories about physiological pain pathways, psychiatric pathologies, constitutional inheritances, psychosomatic symptoms and even 'old womanish' sensitivities failed to ease suffering that was anything but 'phantom'.

Notes

- 1. I am immensely grateful to the Wellcome Trust for its generous financial support in setting up the Birkbeck Pain Project (BPP). The research would not have been possible without the intellectual support and inspiration of my two colleagues in the BPP, Dr Louise Hide and Dr Carmen Mangion.
- 2. Filippo de Vivo, 'Prospect or Refuge? Microhistory, History on the Large Scale. A Response', *Cultural and Social History*, 7(3) (2010): 387. For good introductions, see Peter Burke, *New Perspectives in History Writing* (University Park: Pennsylvania University Press, 1991); and C. Ginzburg, 'Microhistory: Two or Three Things I Know About it', *Critical Inquiry*, 201 (1993): 10–35.
- 3. Seth Koven, 'Remembering and Dismemberment: Crippled Children, Wounded Soldiers, and the Great War in Great Britain', *American Historical Review*, 99(4) (1994): 1169.
- 4. Interview of Giles and Ben Hopkinson, 6 November 2012.
- 5. 'Report of Medical Board', National Archives WO 339/12060 (P1030322) and 'Special Hospitals for Officers', 7 March 1924, National Archives, PIN 26/21799.
- 6. Medical reports, National Archives, PIN 26/21799 Part 2 (P1040118–P1040119).
- 7. Letter from Hopkinson, 4 December 1918, National Archives WO 339/12060.
- 8. E. Muirhead Little, *Artificial Limbs and Amputation Stumps. A Practical Handbook* (London: H.K. Lewis and Co., 1922), 23. The percentage was 73 per cent. For a longer discussion of war wounds, see Joanna Bourke, *Dismembering the Male: Men's Bodies, Britain, and the Great War* (London: Reaktion, 1996).
- 9. Muirhead Little, Artificial Limbs, 24.

- 10. A.W.J. Craft, 'Amputations, Limb Fitting, and Artificial Limbs. Lecture Delivered at the Royal College of Surgeons of England on 11th April, 1949', Annals of the Royal College of Surgeons of England, 5(3) (1949): 194. See also P. Jenner Verrall, 'President's Address. Some Amputation Problems', Proceedings of the Royal Society of Medicine, 24(2) (1930): 183.
- 11. 'Proceedings of a Medical Board... Lieut. F. Hopkinson' (14 October 1918), National Archives, PIN 26/21799.
- 12. See R.D. Langdale Kelham, Artificial Limbs in the Rehabilitation of the Disabled (London: Her Majesty's Stationery Office, 1957), 82; Atha Thomas and Chester C. Haddan, Amputation Prosthesis. Anatomic and Physiologic Considerations, with Principles of Alignment and Fitting Designed for the Surgeon and Limb Manufacturer (Philadelphia: J.B. Lippincott Company, 1945), 115; 'The Weight of Limbs: Natural and Artificial Limbs Compared', British Medical Journal (24 August 1918), 202. See also Jensen J. Steen and T. Mandrup-Poulsen, 'Success Rate of Prosthetic Fitting after Major Amputations of the Lower Limb', Prosthetics and Orthotics International, 7 (1983): 119–21; and D.G. Shaw, T.M. Cook, J.A. Buckwalter and R.R. Cooper, 'Hip Disarticulation: A Prosthetic Follow-Up', Prosthetics and Orthotics International, 37 (1983): 50-7.
- 13. 'Forthcoming Marriages', The Times, 15 January 1919, 11; and 'Forthcoming Marriage', The Times, 20 November 1928, 19.
- 14. Interview with Giles and Ben Hopkinson, 6 November 2012.
- 15. Letter from Hopkinson to the Minister of Pensions, 1 January 1919, National Archives, PIN 26/21799, emphasis in original.
- 16. 'Special Hospitals for Officers', 7 March 1924, National Archives, PIN 26/21799 and Report in National Archives PIN 26/21799 part 2 (P1040144). See also the report dated 12 August 1917, National Archives PIN 26/21799 part 2 (P1040144).
- 17. 'Medical Care Sheet', National Archives PIN 26/21799 part 2 (P1040121-P1040122).
- 18. Ibid. He was dismissed from Palace Green on 19 February 1918.
- 19. Ambrose Paré, quoted in Thomas Johnson, The Works of that Famous Chirurgion, Ambrose Parey [sic], Translated Out of Latine [sic] and Compared with the French (London: n.p., 1649). See also Ambrose Paré, Oeuvres Complètes (ed. J.F. Malgaigne), vol. 2 (Paris: 1840), 221–31.
- 20. S. Weir Mitchell, Injuries of Nerves and their Consequences (Philadelphia: J.B. Lippincott and Co., 1872), 348.
- 21. Lieutenant Colonel Guy C. Randall, Jack R. Ewalt and Lieutenant Colonel Harry Blair, 'Psychiatric Reactions to Amputation', Journal of the American Medical Association, 128(9) (1945): 645-52.
- 22. See W.R. Henderson and G.E. Smyth, 'Phantom Limbs', Journal of Neurology, Neurosurgery, and Psychiatry, 11 (1948): 89-92; and Bertram Feinstein, James C. Luce and John N.K. Langton, 'The Influence of Phantom Limbs', in Paul E. Klopsteg and Philip D. Wilson (eds), Human Limbs and their Substitutes. Presenting Results of Engineering and Medical Studies of the Human Extremities and Application of Data to the Design and Fitting of Artificial Limbs and to the Care and Training of Amputees (New York: McGraw-Hill, 1954), 80–1. See also John C. Wellons, John P. Gorecki and Allan H. Friedman, 'Stump, Phantom, and Avulsion Pain', in Kim Burchiel (ed.), Surgical Management of Pain

- (New York: Thieme, 2002), 427; 'Phantom Limbs', Journal of the American Medical Association, 125(9) (1944): 633-4.
- 23. 'Phantom Limb Syndrome', Journal of the American Medical Association, 128(12) (1945): 904.
- 24. J. Lawrence Pool, 'Posterior Cordotomy for Relief of Phantom Limb Pain', Annals of Surgery (1946): 386; Murray A. Falconer, 'Surgical Treatment of Intractable Phantom-Limb Pain', British Medical Journal (1953): 299-304; Wellons et al., 'Stump, Phantom, and Avulsion Pain', 424; Kelham, Artificial *Limbs*, 137.
- 25. Unnamed Medical Officer, Ministry of Pensions, Medical Case Sheet, 6 November 1951, National Archives, PIN 26/21799.
- 26. Bertram Feinstein, James C. Luce and John N. K. Langton, 'The Influence of Phantom Limbs', in Klopsteg and Wilson (eds), Human Limbs and their Substitutes, 85.
- 27. Thomas and Haddan, Amputation Prosthesis, 59–60.
- 28. Richard A. Sherman, 'History of Treatment Attempts', in Richard A. Sherman (ed.), Phantom Pain (New York: Plenum Press, 1997), 143.
- 29. Unsigned medical report for the Ministry of Pensions, 5 October 1937, National Archives, PIN 26/21799.
- 30. Ibid.
- 31. Letter from Hopkinson to the Secretary of the Ministry of Pensions, dated 1 January 1938, National Archives, PIN 26/21799. For the physician's response, see his letter dated 10 January 1938, National Archives, PIN 26/21799 part 2 (P1030659).
- 32. "Patent Medicines" in New York', British Medical Journal (1915): 601–2.
- 33. 'The Nostrum Nuisance', British Medical Journal (1910): 1073-4.
- 34. 'Patent Medicines', British Medical Journal (1903): 1654; and 'The Nostrum Nuisance', British Medical Journal (1910): 1073-4. Cyanosis is dangerously low levels of oxygen in tissues near the skin surface.
- 35. Murchell in 'Ministry of Pensions Medical Case Sheet', 17 July 1938, National Archives, PIN 26/21799.
- 36. Unnamed Medical Officer, report to the Ministry of Pensions, 3 October 1939, National Archives, PIN 26/21799. None of these physicians disputed the phantom pains, simply their cause: see also Unnamed Medical Officer, report to Ministry of Pensions, 13 October 1939, National Archives, PIN 26/21799.
- 37. Reported in a letter from F. Murchie of the Director General of Medical Services, 20 December 1935, National Archives, PIN 26/21799. See also memo dated 12 August 1932, National Archives PIN 26/21799 part 2 (P1030703); memo 1 August 1932, National Archives PIN 26/21799 part 2 (P1040099); 16 January 1936, National Archives PIN 26/21799 part 2 (P1030705).
- 38. See report of 3 February 1936, National Archives PIN 26/21799 part 2 (P1040090).
- 39. Medical Board report, 2 January 1936, National Archives, PIN 26/21799 part 2 (P1030636).
- 40. Unnamed Medical Officer, Ministry of Pensions, 19 July 1939, National Archives, PIN 26/21799 part 2 (P1030606).
- 41. Unnamed Medical Officer, Ministry of Pensions, Medical Case Sheet, 6 November 1951, National Archives, PIN 26/21799.

- 42. Unnamed Medical Officer, Ministry of Pensions, Medical Case Sheet, 6 November 1951, National Archives, PIN 26/21799.
- 43. Unsigned medical report, 1 December 1952, National Archives, PIN 26/21799. For physicians who made this argument, see Falconer, 'Surgical Treatment', 301.
- 44. Report dated 28 August 1954, National Archives PIN 26/21799 part 2 (P1040086).
- 45. Report by Hopkinson, 7 February 1940, National Archives, PIN 26/21799 part 2 (P1030597) and Report by Chief Regional Officer, dates 8 February 1940, National Archives, PIN 26/21799 part 2 (P1030595).
- 46. Thomas and Haddan, Amputation Prosthesis, 59.
- 47. J.R. Ewalt, G.C. Randall and H.D. Morris, 'The Phantom Limb', Psychosomatic Medicine, 9 (1947): 118-23.
- 48. Kelham, Artificial Limbs, 131 and 139.
- 49. W.F. Tissington Tatlow and J.L. Oulton, 'Phantom Limbs (with Observations on Brachial Plexus Block)', Canadian Medical Association Journal, 73 (1955): 173.
- 50. J.E. Pisetsky, 'Disappearance of Painful Phantom Limbs after Electric Shock Treatment', American Journal of Psychiatry, 102 (1946): 599-60. For other advocates of ECT for phantom pains, see 'Electric Shock in Painful Phantom Limb', Journal of the American Medical Association, 131(11) (1946): 942; and Lothar B. Kalinowsky and Paul H. Hoch, Shock Treatments, Psychosurgery, and Other Somatic Treatments in Psychiatry, 2nd revised edn (New York: Grune and Stratton, 1952), 204.
- 51. Leon Gillis, Amputations (London: William Heinemann Medical Books, 1954), 266.
- 52. Leon Gillis, 'Pain in Phantom Limbs', British Medical Journal (1948): 1108.
- 53. 'Doyen of Neurosurgeons', British Medical Journal (1960): 1788; and Peter H. Schurr, So That Was Life: A Biography of Sir Geoffrey Jackson (London: Royal Society of Medicine Press, 1997), 114 and 131.
- 54. The original spelling was 'chorotomy', but 'cordotomy' (the American spelling) has become more common. As a Greek word, 'ch' is a more accurate transliteration.
- 55. Lambert Rogers, 'Refresher Course for General Practitioners: The Surgical Relief of Pain', British Medical Journal (1952): 383.
- 56. Murray A. Falconer, 'Surgical Treatment if Intractable Phantom-Limb Pain', British Medical Journal (1953): 301. For another positive assessment of its effectiveness, see 'Chordotomy for Painful Phantom Limb', Journal of the American Medical Association, 132(2) (1946): 112; and J. Lawrence Pool, 'Posterior Cordotomy for Relief of Phantom Limb Pain', Annals of Surgery (1946): 390.
- 57. Schurr, So That Was Life, 255.
- 58. Geoffrey Jefferson speaking at 'Second Plenary Session: The Relief of Pain', British Medical Journal (1952): 147.
- 59. J. Donaldson Craig, 'Pain in Phantom Limbs', British Medical Journal (1948): 904; J.D. Parkers, 'Diseases of the Central Nervous System', British Medical Journal (1975): 92; Rogers, 'Refresher Course', 383; P. Jenner Verrall, 'War Surgery of the Extremities: Amputations', British Medical Journal (1942): 677; 'Intractable Pain', British Medical Journal (1968), 513–14; 'Surgical Relief of

Intractable Pain', British Medical Journal (1961): 663–4; John C. Brocklehurst, 'Old Folks in Wet Beds', British Medical Journal (1962): 115. For other negative assessments, see J.A.W. Bingham, 'Pain in Phantom Limbs', British Medical Journal (1948): 52; Gillis, Amputations, 266; Kelham, Artificial Limbs, 143; Thomas and Haddan, Amputation Prosthesis, 60; Wellons et al., 'Stump, Phantom, and Avulsion Pain'; James C. White, 'The Problems of the Painful Scar', Annals of Surgery, 148(3) (1958): 422-31.

- 60. Geoffrey Jefferson, 'Report of Specialist', 24 November 1943, National Archives, PIN 26/21799. Jefferson's address was 3 Lorne Street, Manchester.
- 61. Geoffrey Jefferson, 'Treatment of Trigeminal Neuralgia', British Medical Journal (1932): 223.
- 62. There had been concerns about Hopkinson's drug habit in 1932 and 1936. See National Archives PIN 26/21799 part 2 (P1030703), (P1040099) and (P1030705). The fear that chronic sufferers would 'become narcotic addicts' was frequently repeated: see Thomas and Haddan, Amputation Prosthesis, 59.
- 63. Ministry of Pensions, 'Pensioner's Medical Record', 1 March 1949, National Archives, PIN 26/21799.
- 64. See report dated 13 October 1939, National Archives, PIN 26/21799 part 2 (P1030600)
- 65. 'Nitro-Glycerine in Trench Feet', British Medical Journal (1917): 513; and Matthew B. Ray, 'Physical Methods of Treating Rheumatism', British Medical Journal (1936): 1310.
- 66. Verrall, 'War Surgery of the Extremities', 677.
- 67. Ray, 'Physical Methods', 1310.
- 68. Medical Officer report to the Ministry of Pensions, 10 August 1949, National Archives, PIN 26/21799.
- 69. 'Intractable Pain', 84. See also W. Ritchie Russell, 'Painful Amputation Stumps and Phantom Limbs: Treatment by Repeated Percussion to the Stump Neuromata', British Medical Journal (1949): 1024. He was a neurologist who also wrote on facial palsy, poliomyelitis, head wounds, amnesia and multiple sclerosis. In 1975, he wrote Explaining the Brain (Oxford University Press).
- 70. Kelham, Artificial Limbs, 141.
- 71. *Ibid*.
- 72. Russell, 'Painful Amputation Stumps', 1024-6.
- 73. 'Pain in Phantom Limbs', British Medical Journal (1949): 1132.
- 74. Wellons et al., 'Stump, Phantom, and Avulsion Pain', 425.
- 75. Kelham, Artificial Limbs, 141.
- 76. From W. Ritchie Russell, to Dr R.D.L. Davies, 7 December 1951, National Archives, PIN 26/21799.
- 77. Kelham, Artificial Limbs, 143.
- 78. Note by R.D.L. Davies, dated 12 October 1956, National Archives, PIN 26/21799.
- 79. Dr Harbour, in Ministry of Pensions and National Insurance report, dated 12 October 1958, National Archives, PIN 26/21799 part 2 (P1030498).
- 80. Illegible signature, dated 12 November 1958, National Archives, PIN 26/21799 part 2 (P1030499).
- 81. René Leriche, The Surgery of Pain (trans. Archibald Young) (London: Ballière, Tindall and Cox, 1939), 202.

- 82. Leon Gillis, Artificial Limbs (London: Pitman Medical Publishing, 1957), 437.
- 83. This was also the concern of Randall, Ewalt and Blair, 'Psychiatric Reactions to Amputation', 645.
- 84. D.S. McKenzie, 'The Elderly Amputee', British Medical Journal (1953): 153–5.
- 85. Signature illegible, 15 August 1956, National Archives, PIN 26/21799.
- 86. Gillis, Amputations, 339.
- 87. Note by Leon Gillis, dated 17 October 1956, National Archives, PIN 26/21799.
- 88. Tristram Samuel (Medical Superintendent, Queen Mary's Hospital), 'Summary of Case', 16 November 1956, National Archives, PIN 26/21799.
- 89. 'Sonalgin' (advertisement), Transactions of the Association of Industrial Medical Officers, 7(3) (1957): vi.
- 90. Samuel, 'Summary of Case', 16 November 1956, National Archives, PIN 26/21799.
- 91. Ministry of Pensions and National Insurance, examination, signature illegible, 12 November 1958, National Archives, PIN 26/21799.
- 92. Letter from Dr I.H.M. Curwen to Dr Bryans, 20 March 1964, National Archives, PIN 26/21799.
- 93. Dr Ian Curwen's report, dated 27 May 1964, National Archives, PIN 26/21799.
- 94. Report from Queen Mary's Hospital, 22 July 1964, National Archives, PIN 26/21799.
- 95. W. Ritchie Russell presenting his research in 'Discussion on the Treatment of Intractable Pain', Proceedings of the Royal Society of Medicine, 52 (1959): 984–7.
- 96. Dr G. Caithness in assessment report, 29 January 1973, National Archives, PIN 26/21799.
- 97. Letter from Dr G. Caithness to Dr I. Curwen, dated 21 February 1974, National Archives, PIN 26/21799; letter from Hopkinson to the Welfare Officer, Irene House, Balham, dated 21 July 1974, National Archives, PIN 26/21799; letter from Ian H.M. Curwen to Dr G. Caithness, 10 April 1974, National Archives, PIN 26/21799; Medical Report by Dr Bell, 29 July 1974, National Archives, PIN 26/21799.
- 98. C.G. Stringer, of the Ministry of Social Security, 13 February 1974, National Archives, PIN 26/21799.
- 99. Letter from Hopkinson to Mr Baker, 15 January 1974, National Archives, PIN 26/21799. See also National Archives PIN 26/21799 part 2 (P1030840).
- 100. 'Medical Report on an Officer or Nurse Claiming Disability in Respect of Service in the Great War... Lieut. Hopkinson', 4 September 1932, National Archives, PIN 26/21799. He makes a similar statement about pain making him 'shout out' on 3 October 1939, National Archives, PIN 26/21799 (P1030602)
- 101. 'Supplementary Report to be Completed in Mental and Neurological Cases', 2 January 1934, National Archives PIN 26/21799 part 2 (P1040104-P1040106).