CONCLUSION

This book has examined how the body and its constituent parts were investigated in the late nineteenth-century asylum. It has focused particularly on one institution, the West Riding Asylum in Yorkshire. There, staff took especial interest in the body and employed a variety of clinical and pathological techniques in their attempt to find a physical explanation for mental disease. Investigating the Body in the Victorian Asylum has demonstrated the value of studying the body in the history of psychiatryparticularly when it is the nineteenth century that is under discussion, a period when asylum doctors were dedicating significant time and resources to establishing a link between the body and mental disease. In 'surfacing' the body in the West Riding Asylum, I have also tried to 'surface' the institution's practices. Looking at the skin, for example, led to a consideration of photography in asylums as well as the performance of surgery. By examining the bones, I was able to consider pathological techniques, the role of coroners' inquests, and the training of asylum attendants. Throughout this book I have focused primarily on general paralysis, seen by many asylum doctors as a model of mental disease which, if its mysteries were solved, could inform the treatment of many other diseases besides. Knowledge about general paralysis was gathered and developed incrementally-informed by wider theories about localisation or infection, for example-and dependent on available ways of seeing and knowing the disease in the fabrics and fluids of the body.

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Bodies and Practices

Several patients' bodies have been presented and discussed in this book: William T., whose psoriasis was vividly captured by the Asylum photographer in "Skin"; Michael D., in "Muscle", who described the progress of his seizures to the doctor; and Elizabeth Ann A., in "Fluid", who found herself undergoing trepanation that seemed to have a profound effect on her subsequent mental health. Each of these patient's bodies can be considered a "body multiple." This term, used by anthropologist Annemarie Mol in The Body Multiple (2002), refers to how the body and its diseases are visualised or rendered.¹ At the West Riding, each patient's body was visualised and rendered in a number of ways: in photographs, in the inscription of footsteps on large sheets of paper, or in the cells sketched in postmortem and microscopic records. These ways of seeing the body, whether disseminated in journal articles or pasted into the pages of the pathology lab's album, were a crucial part of knowledge production. Not only did they allow doctors elsewhere to witness the work done at the West Riding, but they were also a means for the West Riding staff themselves to gather information about the possible links between the physical fabric of the body and mental disease, also sometimes using these to inform clinical practice.

Such visualisation was, of course, just one element of the Asylum's work. This book has explored administrative practices, too: the taking and cataloguing of large numbers of photographs, the process of holding inquests, and the evolution of case records from large free-form books to smaller, and sometimes more limiting, case files. It has considered how asylum doctors integrated methods and instrumentation from outside alienism into their practice. These were important in establishing alienism's 'scientific' credentials, but could also be crucial in day-to-day asylum management. As well as methods and instruments taken directly from physiology -such as the dynamometer of "Muscle"-we have seen how simpler methods could be used to great effect, such as asking a patient whether they stood on board or carpets in order to test sensation. Of all the asylum's practices, the postmortem examination has been central to much of the work described in the latter half of this book. It is clear that the postmortem did not always offer a straightforward narrative of death or disease. In the case of bone fracture, postmortem findings, however meticulously detailed, were complemented with sometimes very thorough written records recounting a patient's behaviour, or the evidence of

witnesses. This does not mean that we should dismiss the postmortem as a practice that had little relevance to clinical medicine. In the case of fracture, though, while postmortem findings may not have solved the problem, they nevertheless had a direct impact on patient care. The concern to prevent fracture, and to detect it when it had occurred, was built into training manuals for attendants and into postmortem administration—the slips of papers that directed the pathologist to record something about the state of the ribs.

The clinical or pathological facts of the disease of general paralysispsoriasis, disordered gait, weak ribs, sprawling spider cells, and prolific bacteria-were both dependent upon, and interacted with, ways of seeing them. These ways of seeing were numerous, from the camera to the reflex test, the instrument to measure breaking strain of bone, and the microscope. But we should not fall into the trap of technological determinism here, imagining a one-way process in which a new piece of equipment leads to a quick reorientation of research. As we have seen throughout Investigating the Body in the Victorian Asylum, technologies interacted with bodies and could also be shaped by them. The bodily fabric had to be made legible before it could form the basis of any meaningful scientific enquiry, and-as detailed in "Brain"-this could prove a time-consuming exercise. The softened substance of the general paralytic brain necessitated novel techniques such as the use of the acid bath to facilitate its study, and also complicated the use of the tephrylometer and the microtome. Many of the techniques and instruments discussed in this book were considereddespite their potential for uncovering new information about mental disease-limited in their utility, as they were often frustrated by the degenerated fabric of the body itself. Doctors thus remained enthusiastic about such methods as naked-eve observation and the sense of touch for determining the extent of degenerative change in the brain substance, while new technologies like the breaking-strain instrument ("Bone") were not unthinkingly incorporated into practice.

Medical technologies, too, do not perform themselves: they require the body of the doctor (and the patient) to carry out their work, to become 'instruments.' Although the primary rationale of this book has been to consider the investigation of *patients*' bodies, throughout we have also seen glimpses of the body of the asylum doctor. With the acquisition of more and more pieces of new technology in the nineteenth century (microtomes, X-ray equipment, lamps for phototherapy, microscopes), it is easy to forget about the physical body of the doctor. Yet the practices the doctor engaged

in, and the technologies that he employed, were constantly mediated by his own body, whether that was the performance of reflex tests or the delicate work of making brain sections with a razor blade. Although this embodied experience is particularly hard to get at—particularly as some doctors strove to *dis*embody their observations in line with ideals of 'gentlemanly' practice —there were instances in which the bodily skills and subjective experiences of the doctor were explicitly discussed. William Bevan Lewis advised students to examine the brain with their fingers as well as visually; A.H. Newth bemoaned the scrivener's palsy he had developed as a result of writing so many casebook records; and several doctors, in describing the odour of the skin in general paralysis, made clear that their own senses were a vital, if untranslatable, part of the physical examination.

Equally difficult to access is the subjective experience of the asylum patient. Though I do not claim to recover this, I do believe that focusing on the body in asylum practice need not eclipse the patient as an individual, feeling, and active, being. As several instances in this book have shown, patients could be active participants in the work of the asylum. Their life stories, their hallucinations, their bodily sensations, and their responses to physical examination, could all shape and disrupt practice at the same time that they informed contemporary theories of mental disease. Hallucinations were a reason for rescheduling the physical examination of Benjamin U. in "Skin", who was judged by the doctor to be experiencing too much emotional pain (as a result of his hallucinations) to continue. For William Julius Mickle, his patients'hallucinations told him, he believed, a great deal about the connections between the body and the brain, and he went so far as to use these to question localisation theory ("Brain"). In physical examination, but also in the process of admission to the asylum, many patients collaborated with doctors to some degree: writing or drawing in the casebook to supplement their record, and evaluating the reasons for committal as set out in their reception order. In this book, then, I have found myself considering patients' experiences in much more detail than I ever did when attempting to construct a social history of asylum life that was not explicitly focused on the body.

The Spaces of the Asylum

Taking a practice-oriented approach in this book has highlighted the need to more fully investigate the asylum as a scientific space. The investigation of the body, especially the dead body and its constituent parts, often

required new and specialised spaces. The practices employed at the West Riding Asylum suggest the centrality of the mortuary and pathological laboratory in this endeavour, but other spaces as well. Physiological examinations took place in offices and wards as well as in recognisably 'scientific' spaces, shifting the methods of the physiological laboratory into new arenas. Eric Engstrom's study of imperial German psychiatry pays particular attention to this issue of multiple spaces, considering the ward and lecture hall as well as the laboratory.² Likewise, in the West Riding Asylum, ways of knowing disease were dependent upon certain spaces, with the structure and organisation of the asylum itself part of the process of knowledge production. The staff library was attached to the pathological laboratory, for example, allowing staff to compare their findings with those recorded in contemporary literature (although it was noted in 1895 that the stock of this library hardly compared with that of a German asylum that one staff member had recently visited).³ Rather than a single regime and a unified site, the asylum was an institution where medical knowledge was spread across multiple sites, each of which had a different way of seeing: the photographer's studio, the ward, the laboratory bench, and the mortuary. The work of the West Riding Asylum especially complicates the notion of a simple laboratory/clinic split, with the findings of postmortems informing clinical interventions in wards just a few metres away from the mortuary table.

The different spaces of the asylum were increasingly necessary as doctors there took part in more and varied research. There was a strong desire amongst the West Riding staff to draw upon the work of other fields: dermatology, physiology, osteology, and so on. Although it is difficult to draw clear boundaries between the various concerns of the Victorian medical profession at this time, and the work of asylum doctors was not necessarily easily accepted by others, this integration of methods and practices from elsewhere is important. It complicates the notion of the late nineteenth-century asylum as an isolated 'backwater,' bereft of innovation or drive for change. As an institution housing a large number of patients, often for extended periods of time-many of whom were seriously physically as well as mentally ill-the West Riding staff were compelled to look beyond the psychological in their day-to-day work. This investigative enterprise led to various forms of practical innovation. The pathological laboratory and other sites, including the mortuary, were "toolshops" as well as places of discovery.⁴ They were the places where Herbert Major perfected his tephrylometer, where William Lloyd Andriezen broke ribs

using the breaking-strain instrument, and where Edwin Goodall mixed his glue and treacle to make casts of the brain. They were spaces that allowed for "new configurations for research, for the understanding of disease, and for the formation of new disciplines."⁵

In considering the spaces of the asylum, it is also necessary to consider the various roles and duties of the staff working within it. This is particularly pertinent when it is the late nineteenth century that is under discussion, with medical men both inside and outside the asylum often dipping their toes into several research areas and carrying out multiple roles at once. For some in this period, specialisation could prove inhibiting; we may discern a divide, for example, between pathologists and those primarily engaged in clinical medicine. In L. Stephen Jacyna's study of the Glasgow Western Infirmary, pathologists had a fairly limited role. They might be asked for their opinion in an unusual or contested case, but in general their judgement was assumed to be subordinate to that of the doctor or surgeon. At Glasgow pathological work was a "postscript" to a broader enterprise, and the pathologist "incidental to the clinical process."⁶ The West Riding Asylum fostered a much closer working relationship between pathology and clinical medicine: the suggestion of weak bones at postmortem directly informed patient care, and the discovery of large amounts of CSF in the skull led to at least one instance of trepanation. The tendency for asylum doctors to perform multiple roles-for an individual to simultaneously hold the position of medical officer and pathologist, for example-was likely one factor that had an impact upon the way in which pathological findings informed clinical practice at the West Riding.

At the same time, though, I am cautious about portraying the asylum as some kind of scientific utopia where doctors effortlessly worked together across the pathological and clinical realms, their observations in one arena easily and usefully informing the other. In "Bone" I discussed how some asylum doctors frustrated collaborative research, by keeping data to themselves or using private symbols in their notes that rendered their work useless to colleagues in the same institution. Episodes like this make it rather difficult to credit Michel Foucault's notion of the asylum as a "panoptic utopia" where doctors were united in a lesion-oriented investigative enterprise.⁷ Mental science was a constantly evolving field, and one in which—like the rest of the medical profession—we can discern differences of opinion. As Thomas Smith Clouston's address to the Medico-Psychological Association suggested in "Fluid, he saw himself standing apart from a younger generation who were too preoccupied with pathology, and who neglected older methods of investigation. Asylum doctors varied, then, in their precise preoccupations and approaches to their work, even if most found themselves in agreement with the idea that there was a physical basis to mental disease.

An Old Disease Resurfaces

Investigating the Body in the Victorian Asylum has focused on a nineteenth-century institution, but the disease it has discussed—general paralysis—continues to have relevance in light of the re-emergence of syphilis and neurosyphilis in the present day. Although my concern has not been to prove that general paralysis and neurosyphilis are one and the same, a significant proportion of general paralytic cases were likely neurosyphilis as we understand it in current medical terminology. However, neurosyphilis still tends to be thought of as an old disease that was wiped out for good with the advent of penicillin in the mid-twentieth century. Our perception of syphilis as a long-gone condition owes something, too, to the rising concern for HIV and AIDS from the 1980s. As more men and women fell victim to AIDS, syphilis was no longer, in comparison, the dreaded disease it had been only a few years previously. Yet cases of neurosyphilis have recently been reported both in the UK and elsewhere.

Reading clinical accounts of these recent neurosyphilis cases—and even more so watching film footage of these patients—has an uncanny quality for me. The West Riding casebooks were immensely detailed in their accounts of patients' physical and mental symptoms, and as many patient records contained photographs I could just about conjure up a picture of the disease as it looked to the asylum doctor. But to see those same symptoms that were set down in a 150-year-old casebook described in a modern research paper (albeit in rather different language), or captured on camera, is particularly jarring. Relating the case of a man in his forties who had undergone personality change and developed an obsession with money, medics in Japan in 2015 described their process of investigation: the man was examined for scars and skin rashes and a "tap test" (lumbar puncture) was performed.⁸ Here we see symptoms very similar to those set down by late-Victorian asylum doctors and the same basic forms of investigation being carried out: checking the skin and assessing CSF.

Just as late nineteenth-century methods and technologies shaped approaches to and understandings of disease, in the present day our understandings of neurosyphilis continue to evolve. Whereas for the West Riding Asylum doctors the degree of brain atrophy could only be revealed via postmortem examination, today MRI scans can do this during the patient's lifetime. Although new technologies like MRI may have expanded the range of tests that can be carried out to detect neurosyphilis, today's medical professionals still find themselves grappling with similar questions to those that dogged Victorian asylum doctors. Technical advances may have got around many of the physical obstacles to the study of the brain that we saw in "Brain", but neurosyphilis continues to pose significant challenges. The efficacy of the Wassermann test, for example—widely used to detect syphilis via the blood or CSF—has long been a point of contention due to its ability to produce false positives and false negatives, as well as relying on the technical prowess of the person carrying it out.⁹ In modern as well as Victorian medicine, then, medical technologies and tests are not static, nor are they end points; they evolve, they are contested, and they are not perfect routes to bodily truth.

In contrast to the discussion about general paralysis in the early twentieth century-within which over-rather than under-diagnosis tended to be a key concern, as we saw in "Fluid"-the perception of neurosyphilis as an 'extinct' disease has led many current clinicians to view any cases passing under their notice as anomalies. In consequence there is a relative lack of information about the condition in recent clinical literature. Like their nineteenth-century counterparts, many present-day patients may not seek help until the disease is far advanced, having assumed that the disappearance of the initial sores means the condition (not necessarily recognised by them as syphilis) has cleared up of its own accord. And with neurosyphilis no longer in the forefront of many doctors' minds, a number of these patients may indeed find themselves admitted, in the late nineteenth-century tradition, to psychiatric wards rather than receiving the intensive antibiotic treatment that can arrest the progress of the disease. As one recent article cautions: "Missing the diagnosis of syphilis is a serious medical mistake that may affect a long-term outcome."¹⁰ A 2016 survey of the medical literature also suggests that the latency period between initial syphilitic infection and the development of neurological symptoms is now much shorter than in previous periods, averaging just 11 years.¹¹ Some research indicates that neurological complications may develop even more quickly than this, possibly due to the coexistence of syphilis and HIV.¹²

Neurosyphilis is a condition that continues to present serious diagnostic difficulties. It requires several ways of seeing for its definitive diagnosis: clinical observation of psychiatric disturbance, lumbar punctures, and brain

scans. Like the body of the late-Victorian general paralytic patient, the body of the twenty-first century neurosyphilitic patient is a multiple one, dependent on many different practices and ways of seeing. It is also a condition that requires to be looked at, like general paralysis, both socially and scientifically. The shame or embarrassment of seeking out treatment for the early signs of syphilis today, for example, has serious implications for exactly what science will be able to do for the sufferer in the event of the development of neurological complications. Just as in the nineteenth century, when general paralytic patients were regarded as dissolute individuals responsible for their own disease, or when men tried to hide their condition from doctors and go on working to provide for their families, social attitudes determine how a disease is detected, perceived, and treated. In closing, I hope that Investigating the Body in the Victorian Asylum has demonstrated the value of 'surfacing' scientific practices alongside social histories, that the two are intertwined, and that we should not be afraid of bringing them together.

Notes

- 1. Annemarie Mol, *The Body Multiple: Ontology in Scientific Practice* (Durham: Duke University Press, 2002).
- 2. Eric Engstrom, *Clinical Psychiatry in Imperial Germany: A History of Psychiatric Practice* (Ithaca: Cornell University Press, 2003).
- WYAS C85/1/13/6 Medical Director's journals (1895–1902): Notes of quarterly meeting 17 Jun. 1895.
- 4. On laboratories as toolshops, see Karin Knorr Cetina, *Epistemic Cultures: How the Sciences make Knowledge* (London: Harvard University Press, 1999), 85.
- 5. Keir Waddington, "More like Cooking than Science: Narrating the Inside of the British Medical Laboratory, 1880–1914,"*Journal of Literature and Science* 3, no. 1 (2010): 51.
- L. Stephen Jacyna, "The Laboratory and the Clinic: The Impact of Pathology on Surgical Diagnosis in the Glasgow Western Infirmary, 1875– 1910," *Bulletin of the History of Medicine* 62, no. 3 (1988): 395, 391.
- 7. Engstrom, Clinical Psychiatry in Imperial Germany, 120.
- 8. Hideharu Hagiya et al, "Neurosyphilis is a long-forgotten Disease but still a possible Etiology for Dementia," *Internal Medicine* 54, no. 21 (2015): 2769.
- 9. On this see Ludwik Fleck, *Genesis and Development of a Scientific Fact*, trans. Fred Bradley and Thaddeus J. Trenn (Chicago: University of Chicago Press, 1979).

- Liis Sabre, Mark Braschinsky and Pille Taba, "Neurosyphilis as a Great Imitator: A Case Report," *BMC Research Notes* 9, no. 372 (2016). doi: 10. 1186/s13104-016-2176-2.
- 11. F. Drago et al, "Changes in Neurosyphilis Presentation: A Survey on 286 Patients," *Journal of the European Academy of Dermatology and Venereology* 30, no. 11 (2016): 1896.
- 12. J.A. O'Donnell and C.L. Emery, "Neurosyphilis: A Current Review," *Current Infectious Disease Reports* 7, no. 4 (2005).