

National Health is National Wealth: Publics, Professions, and the Rise of the Public Health Journal

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The launch of a new journal frequently tempts its editor into hyperbole, and overly ambitious statements of need and purpose. For the first number of the *Journal of Public Health and Sanitary Review* in 1855, its editor and proprietor, Dr Benjamin Ward Richardson, went one step further, creating a motto, “National Health is National Wealth,” which was emblazoned on the title page, and went on to become a reforming cry for the sanitary and public health movements more generally, as they emerged in the latter part of the century (Fig 1). Although there has been considerable work on Victorian sanitary movements, little attention has been paid to the many sanitary and public health journals which sprang up in this period, and the role they played in the development of these campaigns and communities.¹ Following on from Sally Frampton’s chapter on medical journals, this chapter looks at the rise of public health and sanitary journals, from the launch of the *Journal of Public Health and Sanitary Review* in the 1850s, through to the *Journal of the Sanitary Institute* in the 1890s which carried detailed reporting of what had become, by then, huge annual congresses devoted to issues of public health. Such congresses brought together broad constituencies of both professional and lay participants, from engineers, chemists and medical officers of health through to teachers, local councillors and ladies’ sanitary associations. In this chapter I track the ways in which journals facilitated the growth of both the public health movements themselves, and that of the associated professional groupings and wider communities involved in campaigns for the improvement of “national health,” from the control of epidemics of cholera through to the monitoring of air quality, and the introduction of horticulture for women.

Public health journals in the nineteenth century played a crucial role in helping to forge new academic disciplines, like epidemiology. They also supported the development of new professional and occupational groupings, such as the medical officers of health and sanitary inspectors, giving them a sense of both communal identity and purpose, whilst also helping to define the appropriate language and subject matter of their callings. Richardson's *Journal of Public Health*, for example, was directly bound up with the development of the London Epidemiological Society, and with the emergence of the professional role of Medical Officer of Health, whilst the later *Journal of the Sanitary Institute* promoted the professional training of Sanitary Officers.

In many of its forms, the public health journal also attempted to bridge the worlds of the professional and the lay reader, enabling concerned medical professionals and sanitarians alike to extend their messages of health reform to a broader public. Although these journals overlapped in many areas with the campaigning aspects of various medical titles, most notably the *Lancet* and the *British Medical Journal* under Ernest Hart, their remit was both narrower – solely public health issues – and also broader, in their capacious definitions of what might come within the purview of public health. As Tina Choi Young has commented, “It is difficult to overestimate the elasticity of sanitary reform as a set of concerns and practices.”² Public health and sanitary journals enabled this multiplicity to flourish, offering a forum for discussion of issues as diverse as diet and education, and smoke and water pollution. Together with the local sanitary associations which they often supported, they sowed the seeds for the environmental campaigning of the present day.

Given the medical opposition to the “quasi-medical” journals, the *Hospital and Baby*, noted by Frampton in the previous chapter, it is perhaps surprising that the journals which engaged with a public readership did not attract the same forms of medical censure. In part this can be explained by the fact that the editors were generally medical men, such as

Richardson, or Ernest Hart, the editor of the *British Medical Journal*, who was also the first editor of the popular *Sanitary Record* (1874-). High profile figures medical men such as Sir Henry Acland, FRS (Regius Professor of Medicine at Oxford from 1857) gave their support as well as eminent figures in other fields, from the meteorologist G. J. Symons (FRS, and Registrar of the Sanitary Institute from 1880-95), and the sanitary engineer Sir Douglas Galton, FRS. The Sanitary Institute, and the National Health Society (with which Ernest Hart was involved), also managed to acquire aristocratic patronage to ward off criticism, and garner support for their campaigns, with the Queen herself becoming a patron of the Institute in 1882.³ Perhaps most significantly in this regard, public health and sanitary journals, were usually not focused entirely on medicine, but ranged widely across other scientific fields and social concerns, so were not construed necessarily as a direct challenge to medical authority (although many of the more unorthodox publications attracted criticism in their own right from sections of the general periodical press).

It is difficult to determine the exact numbers of public health and sanitary journals, given the uncertain boundaries with fringe medicine in the domain of “health,” but, taking a fairly inclusive approach, the number is in the region of 70-100, with the vast bulk emerging from the 1860s onwards.⁴ As with other periodical forms, the history of these journals is marked by uncertain starts, amalgamations of titles, and high mortality rates, although some titles have survived as professional journals (albeit much transformed), into the present day, with accompanying alterations of title which themselves map changing social and cultural attitudes, and professional identities. For example, *Public Health: the Journal of the Society of Medical Officers of Health* (1888-) is still published, but with the sub-title *Journal of the Society of Community Medicine* while the *Sanitary Record* (1874-), went through many titles until it ended up in the late twentieth century as *Municipal Engineering*.

Richardson's journal is generally seen as the first public health journal,⁵ although it did have various short-lived predecessors including, most pertinently, the *Journal of Public Health and Monthly Record of Sanitary Improvement* (1847-49). This journal was published, as it announced, "under the sanction of the Metropolitan Health of Towns Association" and was edited by John Sutherland, MD, a campaigning sanitarian.⁶ The establishment of the Health of Towns Association in 1844, following the creation of the Health of Towns Commission chaired by Edwin Chadwick, was part of the context for the passing of the 1848 Public Health Act, and the rise of public health journals and campaigns from the mid-century onwards.⁷ When Richardson decided to start his journal he was doing so in light of intense public interest in questions of public health, particularly in cities. The work of William Farr at the General Register Office on statistics of health and disease, from the late 1830s onwards, together with Edwin Chadwick's *Report on the Sanitary Condition of the Labouring Population of Great Britain* (1842) created an appetite (at least in some quarters) for further statistics, and greater understanding of the relationship between locality, social conditions, and problems of health and disease.⁸ It also introduced the term "sanitary" into the cultural lexicon.⁹ On a more popular front, literary works like Gaskell's *Mary Barton* (1848) or Dickens' *Bleak House* (1852-53), with their portrayals of life in the slums, or Henry Mayhew's blistering letters in the *Morning Chronicle* of 1849-1850 (subsequently published as *London Labour and the London Poor*), all galvanised public interest in what came to be known as sanitary issues.¹⁰ Such interest was intensified by the cholera epidemic of 1849 (catalyst for Mayhew's reports), and of 1853, as well as the reports of Florence Nightingale from the Crimean War (still ongoing when the *Journal of Public Health* was launched) on the colossal loss of life through lack of sanitary knowledge.

In introducing his new journal, Richardson laid stress on its social utility. "*The Journal of Public Health* is issued," he announced,

under the earnest conviction that it is a work of which the English nation has much need. During the past ten or fifteen years a new fact has opened on the English mind. *The national wealth is in a great degree dependent on the national health.* This fact, which some less civilized nations have been acquainted with for many long ages past, but which has so lately been rightly understood and valued here is already accomplishing results, which cannot in the end fail to add greatly to the happiness of our homes, to the health of all classes of community, and to our prosperity as a great people.¹¹

Interestingly, the motto of the frontispiece is here reversed, and the radical implications somewhat tempered, although the marked irony of “less civilised nations” indicates a highly critical voice. Where “National Health is National Wealth” could imply that true riches lie in improving the health of the people for its own sake, the formulation here directly links health to wealth creation and “our prosperity as a great people”. Reading through the journal, however, this particularly jingoistic formulation and sentiments are less in evidence; although there is, for instance, concern about the sanitary conditions for imperial troops, the overwhelming focus is on improving environmental and health conditions for city dwellers, without any overt reference to economic efficiency. In this introduction, Richardson celebrates the fact that science, and the understanding of physical laws, is at last entering both parliamentary legislation, and the practice of medicine. “Preventive” medicine, he argues, is emerging as a principle, with its seven elements, “Pure air – Proper nourishment – A regulated temperature – Bodily exercise – Cleanliness – Mental Education – Good morals.”¹² The sanitary agenda is here encapsulated, but again the moral proselytising strain, indicated by that final reference to “good morals,” placed in such alarming proximity to “cleanliness,” does not generally emerge within the articles themselves. There is no doubt a level of secular fervour in the pursuit of the principles of preventive medicine, but the journal does

not push any simplistic line associating dirt and poverty with low morals as can be found in many of the religious sanitarian tracts.

Dickens, in creating those figures of “rapacious benevolence,” Mrs Jellyby and Mrs Pardiggle in *Bleak House*, established an indelible cultural association between the distribution of sanitary and health tracts, and monstrous, patronising, self-complacency, coupled with a complete disregard for the actual conditions and health and welfare of the poor.¹³ Scholarly work on the sanitarians over the last thirty years in largely Foucauldian vein has offered a similarly negative, although very differently framed, interpretation, assimilating Victorian work in sanitation and public health to technologies of surveillance and control. Peter Stallybrass and Allon White, for example, in their Bakhtinian analysis, explored how the hierarchy of the body was transcoded on to that of the city, with the sewers, slums and their inhabitants, linked to ideas of dirt, waste, and the lower bodily regions.¹⁴ In *Making a Social Body*, Mary Poovey drew on Chadwick’s work to show how regulation of the individual body was linked to the “professionalized, -bureaucratized apparatuses of inspection, regulation, and enforcement that we call the modern state.”¹⁵ More recent work in both veins can be seen in William Cohen and Ryan Johnson’s edited collection, *Filth: Dirt, Disgust and Modern Life* (2004) or Graham Mooney’s *Intrusive Interventions* (2015).¹⁶ While such work has been of immense value, it has tended to lump all sanitary activities together and hence to ignore the diverse constituencies and interests that came under this broad umbrella. In exploring the development of the public health journal, this chapter will help to restore some of that complexity, and bring to the fore forgotten voices, and elements of social and environmental campaigning which have been submerged under the overarching sanitary label. As with the other areas of science considered in this volume, it will explore the role played by the journals in bringing together, and indeed helping to create, both professional and amateur communities. At a time when public campaigns for

improvements in social health and environments were just emerging, the journals offered a space both for the recording of data, and the development of new audiences and strategies. The new science of epidemiology, based on the large-scale collection of medical data, first came into being in the pages of these journals, whilst they also helped to articulate and refine the agendas of campaign groups, and the new professional roles emerging in the field of public health.

The Journal of Public Health and Sanitary Review (1855-59): Epidemiology, Data Gathering and Medical Officers of Health

In concluding the Introduction to his new journal, Richardson observed that improved knowledge was of “limited use, unless it is largely distributed.” The aim of the journal was thus “to supply the reader with sound information on Health subjects, written in simple language, and published in such a form that all who are really anxious to possess it may obtain it without difficulty.”¹⁷ There is a hesitancy here as to the nature of the audience addressed: the seemingly admirable commitment to public dissemination, and hence to plain language, is checked by a wariness, perhaps an unwillingness to be associated with the hierarchy and condescension linked with the mass distribution of tracts. Those who wish to access the information may do so, but only if they are really anxious and determined. In format, the journal is neither a dry compilation of statistics, nor a didactic form of advice literature. Rather, it is written for experts, and interested lay people within the field, but with what might strike us now as a rather unusual blend of material, with poems and ancient history, for example, which reflected Richardson’s own literary and historical interests,¹⁸ scattered amidst reports of the progress of epidemics, or forms of occupational disease.

Before looking in depth at some of the content of the journal, it will be helpful to offer a little background on Benjamin Ward Richardson (1828-96) at this period. On his death he

was acclaimed as one who was “better and more widely known than any other living medical man,” but has tended to be relegated in recent scholarship to a footnote on other peoples’ lives.¹⁹ Richardson was not from a privileged background and had entered medicine by the traditional route of being apprenticed to a surgeon (subsequently obtaining his MD from St Andrews in 1854). In 1849 he moved to Mortlake to work in partnership with Robert Willis, librarian of the Royal College of Surgeons, who quickly introduced Richardson into the medical world of London. He subsequently moved to central London in 1854, combining over the next few years work at various dispensaries with appointments as lecturer at the Grosvenor School of Medicine, and Physician to the Royal infirmary for Diseases of the Chest. From the early 1850s he was giving papers at meetings of the Medical Society of London, the Physiological Society, and the Epidemiological Society (which was founded in 1850), and writing for the *Association Medical Journal* (the forerunner of the *British Medical Journal*), the *Medical Times and Gazette*, and the *Lancet*.²⁰ He was also introduced to more literary circles by Douglas Jerrold, joining a social group known as “Our Club” whose members included Dickens and Thackeray. Through this circle he became a life-long friend of the illustrator George Cruikshank and also George Godwin, the architect, and editor of *The Builder*, a journal which, as Ruth Richardson has rightly pointed out, played a major role in highlighting issues of public health.²¹

Richardson had also been directly caught up in epidemiological work in 1853 when cholera had broken out in Mortlake. Together with his neighbour, the anatomist Richard Owen (“a man full of energy in sanitation”), he set out to investigate its sources, founding the West Surrey Cholera Society.²² Richardson’s work on epidemiology, and also on forms of anaesthetics, brought him into close association with John Snow, who often shared his laboratory, and he was to champion Snow’s work and theories in the pages of the *Journal of Public Health*. Two further figures from this early period of immense influence on the

journal were Edwin Chadwick and William Farr – both were to remain life-long friends, and Richardson a devoted disciple. He was Chadwick’s executor, and published a biographical memoir and condensed collection of his work, fittingly titled *The Health of Nations*, after his death. Richardson also dedicated one of his own books, *Diseases of Modern Life* (1876) to Farr.²³ The *Journal of Public Health* follows the agendas of both men in its belief in the power of statistics and evidence in the pursuit of sanitary goals. With the abolition of the General Board of Health in 1854, Chadwick had stepped down from public office. Scholarship has tended to ignore his subsequent work, yet he continued to campaign vigorously on diverse areas of public health, from education to parks and gardens, and served as the first President of the Association of Public Sanitary Inspectors from 1883-1890 (to be followed in office by Richardson himself).²⁴ Many of the key issues of the public health debates in the journals over the ensuing decades bear his stamp. For Richardson, Chadwick was a man who “had not been properly understood, and, in fact, had some of his noblest ideas perverted.”²⁵ Chadwick’s reputation has inevitably been tainted by his role as architect of the 1834 Poor Law, and by some of the language and assumptions of the *Sanitary Report*, but in following through the discussions and debates of the public health journals from the 1850s to the 1890s it is possible to construct a more complex picture of his legacy.

It was not unusual for ambitious young medics to undertake a spell of editing early on in their careers,²⁶ but when Richardson convened a meeting at the house of the founder and President of the Epidemiological Society, Dr Benjamin Guy Babington, to establish the *Journal of Public Health and Sanitary Review*, he offered himself as both editor and proprietor. As a venture it was made less risky, however, by his association with the Epidemiological Society: the Society agreed that he would publish their Transactions as an addendum to the Journal, and that each member would purchase a copy (thus supplying further evidence of Csizar’s argument in this volume of the rising interest of societies in

making their papers and discussions open to a wider readership).²⁷ Richardson thus played a role in the establishment of epidemiology as a discipline in England. The Journal appeared monthly, moderately priced at 1s.²⁸ After two years the title was reversed, and it became the *Sanitary Review and Journal of Public Health*; the title change was apparently at the suggestion of the publisher and owner of the *Westminster Review*, John Chapman, which seems to tie Richardson and the journal further into the radical circles of literary London.²⁹ There was, however, no discernible change in mission or material, and one can only presume that, rather surprisingly to a modern reader, the newly-coined term “sanitary” was felt to offer a more modern and attractive package.

The journal ran until 1859, when pressures of work led to Richardson’s decision to cease publishing. The first volume of the *Journal of Public Health* set the pattern for the following volumes, with editorials, and original articles, intermixed with accounts of sanitary conditions in selected towns, details on the progress of epidemics drawn from the Registrar General’s quarterly reports, book reviews and digests of relevant news and society meetings, together with various extracts from other journals such as the *Journal of the Society of Arts*, and the *Builder*. Articles themselves ranged from discussions of hygienic rules for tropical climates, to the value of gymnastics as an essential part of education, and from work on the diseases of colliery operatives to accounts of epidemics before Hippocrates, and of the sanitary regulations of Ancient Rome. The latter two were in line with Richardson’s belief that the study of epidemics, and medicine more generally, required both detailed data from the past, and also a sense of historical trajectory. The volume opened with a lengthy article on the “Sanitary and Social Conditions of the English Poor,” by a “Practicing Physician” which addressed the same area of concerns as Chadwick, but with the emotive reporting style of Mayhew, or Dickens. The focus is on overcrowding, both in agricultural dwellings, and those of city slums, ending with the rather melodramatic claim, following the writer’s visit to

a graveyard, that “were the choice offered me to be forced either to live in the den I had previously visited, or to lie in cold oblivion amongst the sleepers around me, I should prefer the last named alternative, with the deep quiet earth for my bed, and the waving boughs for my canopy.”³⁰ Although the tone of other articles is more restrained, the romance of graveyards features quite prominently in the journal. As with Chadwick’s *Sanitary Report*, there is considerable interest in mortality rates, but in place of Chadwick’s dry figures, we are offered a series of articles by Dr John Webster on his visits to graveyards across Britain, and the evidence of longevity gleaned from gravestones. These include an article on “The Patriarchs of Pinner” in which he concludes that the numbers of centenarians demonstrate that Pinner in Middlesex had been a remarkably healthy place to live.³¹

The majority of the signed articles are by medical men, although there is a smattering of contributions by clergy, such as the Rev Charles Girdleston, whose “On the Scientific Investigation of Sanitary Questions” contained the suggestion that households should acquire gauges to measure atmospheric impurities, thus enrolling the public in the monitoring of environmental pollution.³² One of the key concerns of the journal was the role of the medical officer of health. Following the successful appointment of John Simon as the first Medical Officer of Health for the City of London in 1848, the Metropolis Local Management Act of 1855 called for the appointment of an MOH for every London district (with 47 appointed in 1856). Richardson’s journal was thus part of the ferment of debate, and indeed jockeying for position, which accompanied this development (and Richardson himself did stand, unsuccessfully, for election).³³ The first issue carried the initial instalment of “Short Notes on some of the details of Sanitary Police” by Robert Druitt (who was subsequently elected and later became President of the Metropolitan Association of Medical Officers of Health, as well as editor of the *Medical Times and Gazette*).³⁴ Druitt opens with what he terms a “burst of etymology,” to demonstrate to his readers that the term police should be

reclaimed from vulgar ideas of thief catching, to an understanding of a “liberal and ennobling” science, dedicated to the public good.

Richardson himself also contributed to discussions of the role and purposes of the Medical Officer of Health. In “Medical Police of London” he outlines the areas of expertise and personal skills the successful applicant should possess. The passage is worth quoting in full since it also encapsulates the subject matter and range of the journal itself:

He should have a knowledge of practical chemistry; of the symptoms, causes, and treatment of disease; of physiology, or the laws of life; of pathology, or the laws of morbid action; of forensic medicine, or the connection that exists between science of medicine and the law; of various matters of a mechanical kind, bearing on sewerage, house-building, street-cleansing, and water supply; of meteorology, or the effects of climate, weather, and atmospheric influences on the body; of the physical characteristics or dynamics of the atmosphere; of ventilation; of statistics of life and mortality; of the literature of epidemics, and of all sanitary improvements. Lastly he should possess sound logical faculties, so that in dealing with facts and opinions he may neither mistake coincidences for causes, nor build up great theories on insignificant data, nor from great facts deduce absurd conclusions.³⁵

The list is demanding indeed, but it offers a clear sense of the ambitions and agenda of the emerging sciences and professional bodies within the sphere of preventive medicine. It also rightly signals necessary caution as regards the implementation of the new science of statistics. Richardson’s prescriptions aroused considerable interest, and were taken up by the Board of Health in their instructions to those applying for the posts.³⁶ Richardson goes on to suggest that when appointed the medical officers of health would form a wonderful scientific Council, who, together with the Epidemiological Society, would be well placed to advise the government. His vision is that of a close and growing interchange between this new field of

experts, and the making of government policy. In the event, the MOH met the following year and decided to form an independent organisation, under the presidency of John Simon. Tellingly, although they published annual reports, and *Transactions* from 1875, they did not start their own journal, *Public Health*, until 1888 – a lag that speaks volumes about the difficulties of starting and maintaining a journal amidst the crowded market that was emerging at this time.³⁷

In concluding his article, Richardson offers a grandiose vision of the contribution the Medical Officers of Health could offer to medicine through the writing of reports: “A yearly report of the sanitary state of all London, drawn up by scientific and independent men, would in twenty years throw more light on the general causes of disease, and on the principles of prevention, than all the stray medical writings on these subjects which have appeared since the days of Hippocrates.”³⁸ Allowing for the rhetorical flourish, the observation was nonetheless well-founded, giving voice to the excitement felt in these early days of epidemiology at the possibilities offered by the collective investigation of disease. It was duly decided that the Medical Officers of Health should each individually produce annual reports, thus creating an extraordinary wealth of data that has since proved invaluable to historians, and epidemiologists.³⁹

Richardson shared with Druitt, Farr, Chadwick and others an enthusiastic vision of the potentiality of coordinated data-gathering in the field of health. He used the journal as a basis for setting up his own nationwide network of investigation of disease, to supplement the records of the Registrar General which focused solely on mortality. His article in the January 1858 issue of the journal, “The Registration of Disease in England,” describes how the journal, when it commenced, “took as one of its leading objects the collection of the histories of epidemics from various observers.”⁴⁰ Richardson used the journal both as a means of recruitment of his “staff of observers,” and also as a conduit for publishing the

results, thus paralleling practices explored elsewhere in this volume in societies and journals in the natural sciences. By 1858 Richardson had created a network of forty observers, who recorded not only the instances of human disease, but also animal and plant diseases, along with meteorological conditions. Ideally, he hoped to extend his system to include all the 3233 parochial medical officers in England and Wales. Inevitably, the labour proved too much for him, and his application for support to Benjamin Hall at the Board of Public Health was rebuffed, with the observation that his plans, though laudable, were a century ahead of their time.⁴¹

Richardson nonetheless continued to champion the cause for the next forty years. In this early work he took his model from astronomy which also studied what he termed the “fleeting” phenomena of nature: “If we would unravel the mysteries of either class of these phenomena, we must do so by the agency of a multitude of minds...In the investigation of the fleeting phenomenon, the single individual becomes a nullity; and the difficulty of discovering its nature can only be overcome by bringing the whole competent mental strength of the time to bear upon it.”⁴² His vision is that of large-scale, concerted observations, conducted across time, considering the phenomenon of disease both when they were absent as well as present: “We have often thought that if the eclipses of the sun or moon had always been observed in the same manner as physicians observe transient diseases, the nature of an eclipse would have remained as yet an unsolved problem.”⁴³ Epidemiology was to follow the lead of astronomy, bringing together the individual records of multitudes of observers which, once amalgamated, could help to yield understanding of the laws governing the progress of epidemics, both past and present. Although the experiment did not yield lasting results, given the volume of records which would have to be collated by one individual, the journal played a role in articulating the emerging principles of epidemiology, drawing attention to the need to think historically when considering the spread of epidemics. It was also well ahead

of its time in calling for coordinated records of diseases across human, animal and plant life, in order to consider the potential intersections of disease across species barriers, and within wider environmental contexts.

In addition to obtaining and coordinating field observations from its readers, the journal also took on the role of public advocacy, championing in particular the work of John Snow, commonly labelled the “father of epidemiology,” whose theories with reference to the causation of cholera were at that point still highly controversial. The first issue of the *Journal of Public Health* closely followed the outbreak of cholera in 1854, and John Snow’s now legendary intervention with reference to the Broad Street pump. Yet, at the time, scientific and public health specialists were by no means convinced. Richardson contributed to the June 1855 issue a signed review article, “Water Supply in Relation to Health and Disease,” which focused primarily on Snow’s *On the Mode of Communication of Cholera* (1855). It offers strong support initially, whilst later slightly distancing itself, clearly trying to mollify the unbelievers (of which Chadwick was one), by referring to Snow’s “peculiar views” and suggesting that cholera could be both water-borne, and also “wafted into the lungs by the medium of the air.”⁴⁴ Numerous other supportive references occur through the early issues,⁴⁵ and in October 1856 Snow’s own lengthy paper, “Cholera and the Water Supply in the South Districts of London, in 1854” was published.⁴⁶ In addition, the *Transactions of the Epidemiological Society of London* appended to the Journal also carried in its first issue Snow’s paper, “On the Comparative Mortality of Large Towns and Rural Districts.”⁴⁷ Snow unfortunately died in 1858, and Richardson, who was his close friend, appended to his edition of Snow’s papers on chloroform a memoir in which he noted it was his duty, as Snow’s biographer, “to claim for him not only the entire originality of the theory of the communication of cholera by the direct introduction of the excreted cholera poison into the alimentary system; but, independently of that theory, the entire originality of the

discovery of a connection between impure water supply and choleraic disease.”⁴⁸ The battles for acceptance of Snow’s theory initially conducted in the pages of the *Journal* are here continued in a form which, coupled with Richardson’s dramatic telling of the tale of the “stranger” who entered the Vestry meeting and offered the astounding suggestion to the “incredulous” committee that the Broad Street Pump handle be removed, have played a significant role in constructing Snow’s current status as an iconic, heroic figure in medical and epidemiological history.⁴⁹

***Social Science Review* (1864-66) and the Rise of Public Health Journals in the 1860s**

Despite his decision to terminate the *Journal of Public Health* in 1859 due to pressures of work, by 1864 Richardson was up and running again with a new journal, the *Social Science Review and Journal of the Sciences* which, despite its title, was still largely focused on public health issues. In format it was fairly similar to its predecessor, but with less focus on reports of the progress of disease and local sanitary conditions, and more on discursive articles. The first issue reports on attempts by the National Association for the Promotion of Social Science (NAPSS, founded in 1857) to establish London premises and lectures, and it is clear that Richardson’s choice of title is linked to the emergence of ‘Social Science’ as a new and powerful framework for social reform. Richardson’s agenda overlapped with that of the NAPSS (and he was subsequently to be President of its Health Section), but his focus was more medical, and also more idiosyncratic.⁵⁰ In part, the journal served as a vehicle for Richardson’s own work: the first volume opens with the first of his series on ‘Diseases of Overworked Men’, which were to be collected subsequently in his work 1876 volume, *Diseases of Modern Life*. Covering both mental and physical strain, the essays contributed substantially to the growing discourses on occupational health, and also to the emerging concerns about mental stress and strain which were subsequently popularised by George Beard and Silas Weir Mitchell in America under the label neurasthenia.

Like the NAPSS, the journal was supportive of a range of reforms, pressing, for example, for an end to both corporal and capital punishment, more sensitive handling of prostitution, and the development of female medical education.⁵¹ The first issue also saw articles on “Crime and Insanity” by Mackenzie Bacon, and an interesting article (by JTD) on the hardships in the lives of “The Cabmen of London” which argues: “Every grade in society is represented among them. Men drive cabs who have been physicians, clergymen of the Established Church, lawyers whose legal experience proved unfortunate, merchants and tradesmen, and artisans and mechanics of every kind. One or two baronets are stated to have driven cabs.”⁵² Allowing for street legends, and the amplifying effects of rumour, the article nonetheless gives a fascinating insight into the perceived instabilities of the middle-class professional order in the mid-century, and the threats of economic reversals.

In the positions it adopts, the journal is in general more radical in orientation than the NAPSS itself. Thus, unlike the NAPSS, the journal is openly critical of the middle-class bias in the vision of education offered by Matthew Arnold.⁵³ Rejecting calls for middle-class only schools, it argues, “Our own impression is that the encouragement of middle-class schools will have a tendency to perpetuate and aggravate that class-feeling, so akin to caste-feeling, which is one of the greatest evils of our social economy. It adds the difference of education to difference of occupations in life, erecting social barriers which neither the instincts of humanity nor the authority of religion can break down, so that there is division and consequent weakness in our commonwealth.”⁵⁴ The article is anonymous, so it is unclear whether it is by Richardson, but its powerful egalitarian thrust is at one with the overall stance of the journal which undercuts any presumption that reforming public health journals were necessarily condescending or patronising (at best) towards the working classes. Richardson’s decision to close the *Social Science Review* in 1866 was probably linked to the launch that year of *Social Science: Transactions of the National Association for the*

Promotion of Social Science, edited by George Hastings, which, although broader in focus, carried on much of the campaigning work highlighted in Richardson's journal.⁵⁵

The Journal of Public Health and the *Social Science Review* were part of a wave of new public health related journals which became, by the late 1860s, a veritable flood, with innumerable journals started in the field (many of them disappearing within an issue or two, or subsequently amalgamating with other titles). They attempted to tap into rising concerns with public health, but also the new industries and occupations related to the creation of sanitary infrastructures. Some, despite general titles, were very specific in their remit. Thus the *Sanitary Reporter* (Jan 1863- Feb 1864, and subsequently the *Sanitary Review* (Oct 1864 – Jan 1865), started ambitiously as “a weekly record relating to gas, water, sewerage and general science,” was largely related to new gas installations, in the vein of the trade and technological journals discussed by Gooday in this volume, but it could not sustain an audience. The even more short-lived, *The Chloralum Review: a Sanitary Journal* (July 1871-Jan 1872) was directed at both medical and general readers with a particular focus on the use of antiseptics, but over-estimated public interest in this topic. Another evanescent journal was *The Sanitary Record and Social Observer* which endured for a year in 1869 (and in turn incorporated *Public Health, a Record and Review* (1868-69). Fairly radical in orientation, the first number opened with Charles Drysdale (a noted proponent of contraception), and included an editorial which was highly critical of Burdett Coutts' dwellings for the poor, and a hard hitting article by J. De Blaine on the unacceptable health conditions for workers in London Printing Offices.⁵⁶ The appeal, in the second number, for all who were interested in sanitary matters to take out an annual subscription (6s post free), suggested, however, the inevitable fate of this title.

***The Sanitary Record* (1874-): Public and Domestic Health, and “informed local action”**

Far more successful was another journal of the same title (but an entirely separate venture), the *Sanitary Record : A Journal of Public Health* (1874-), edited for the publishers Smith, Elder by the indefatigable Ernest Hart, alongside his long and highly successful editorship of the *BMJ*.⁵⁷ Hart, who was medically trained, had had a successful early career as a surgeon, and had been on the staff of the *Lancet* before taking up in 1867 the editorship of the *BMJ*, which he proceeded to transform into a flourishing title. Fairly astonishingly, Hart used his magic touch to produce the *Sanitary Record* on a weekly basis until July 1879, when a new series was initiated, and it became a monthly. In his opening “L’Envoi,” Hart drew on the statistics of Farr to present a formidable picture of disease and mortality which could be prevented by greater knowledge and “informed local action.”⁵⁸ The object of the journal, he announces, is to be the “organ of intercommunication for the many thousand persons who are now officially employed in helping to advance the interests of health,” a category which ranges from officers of sanitary boards and inspectors of mines and factories, to medical officers of health, and “members of health associations, visitors of the poor [and] managers of public institutions.”⁵⁹ Moving beyond specific interest groups, or occupational groupings, Hart tries to embrace both the burgeoning new professions linked to areas of public health, and also those involved in local and voluntary initiatives, who are to be brought together in a community both of readers and activists fostered by the journal. The extensive list unites professional and voluntary workers, the public sphere and the domestic, picking up on one of the primary messages of the sanitary movements, that women, as custodians of household hygiene and health, held the keys to successful reform. “The house,” Hart observes, “is the unit of sanitary administration, and household hygiene will be the theme which we shall treat as fully as the larger questions of public health.”⁶⁰ With its explicit targeting of women and health within the home, the journal appears to move into territory associated later with the

journal *Baby*, discussed in the previous chapter, but Hart's own medical credentials and standing in the community clearly deflected any potential criticism on this front.

The *Sanitary Record's* emphasis on the domestic aspects of sanitary reform was reinforced by Hart's close association with the National Health Society, an organisation set up in 1871 by a group of radical reforming women, which included Elizabeth Blackwell, with Fay Lankester (daughter of the sanitary reformer, Edwin Lankester) as Secretary and Ernest Hart as Chair.⁶¹ Although the balance of the *Sanitary Record* was undoubtedly towards the public and more professional aspects of reform, women were given a clear voice in its pages. The first number, for example, had an article by Dorothea Beale, Principal of Cheltenham Ladies College, on "Health and Education" in which she argued fiercely against suggestions that overwork and mental pressure were bad for women. It was mental idleness, rather, which would destroy them. Mrs Edmund Maurice also contributed a series of articles on "Playgrounds for Poor Children," suggesting, in a decidedly gentle attempt at social reformism, that London squares could be opened to the poor when the rich were at the seaside.⁶² More radical in its social implications was the suggestion that there were possible career openings for women in analytical chemistry.⁶³

Given the rapid demise of so many predecessors and emerging rivals in the field of public health, how did Hart manage to create and sustain a weekly audience for his new periodical? In part, the answer lay in the constant shifting of tone and address, and the crossing of generic borders. The first number opens not with the "L'Envoi", but rather with an article on arsenic poisoning, thus playing on associations with sensation fiction and police reports, although the subject matter is not deliberate murder, but rather the more insidious form which could take place in homes with poisonous wallpapers and other arsenic-drenched household items.⁶⁴ The attractions of the periodical lay in the combination of the macabre and the mundane, as in the article, for example, on "Putrid Cauliflowers," a title which, while

playing on its associations with putrid corpses, almost compels reading by its seeming heightened intensification of the triviality of the quotidian.⁶⁵ There was also the fascination of the defiantly local: those tired of the “Eastern Question” in their daily newspapers might take a vicarious thrill in reading about the “Goole Sewage Question,” or, even closer to home, “Tea Poisoning,” which, it was claimed, could be even worse than that of alcohol or tobacco.⁶⁶ The body, in all its needs, ailments, and excretions, was set centre stage in the eclectic mix of the journal. There were lots of warnings about the adulteration of food, or hints about where to take holidays, away from sanitary pollution. From the relaunch as a monthly in July 1879, attractiveness was increased with the use of more pictorial material, including illustrations of rational dress, or the use of “vegetable substances” such as “Patent Pulp” for domestic utensils or “life saving buoys” (Fig 2).⁶⁷

From the second volume Hart ran an invitation to Secretaries of Sanitary Associations and Kindred Societies, which was to become a permanent feature: “The Editor will be glad to receive, with a view to publication, announcements of meetings, reports of proceedings, abstracts of, or originals of papers read before the members of any sanitary or kindred association.”⁶⁸ The net was cast deliberately wide, and from this point on Hart solved (at least temporarily) the problem of creating weekly copy by publishing both short abstracts and lengthy papers from a wide range of societies and meetings. Volume two, for example, contained extensive coverage of the Birmingham conference “On the Sanitary Condition of Large Towns,” including reports of papers and discussions, and the entire speech of the Mayor of Birmingham, a youthful Joseph Chamberlain, who delivered an impassioned call to end the social inequalities which produced the problems of slum housing. It was no longer possible to ignore such an evil he argued: “To do so would not only be a shameful dereliction of our duty, but a positive danger to the state: for there is danger in the continuance of this ever-widening contrast between the wealth and luxury of a few individuals and the deepening

squalor and the wretched misery of a large class of the population.”⁶⁹ In all the reports of society meetings and campaigns there were repeated calls to action, whether on housing, air and water pollution, or social inequality. Concern about the material environment extended in multiple directions, including to the loss of open spaces. Thus Francis George Heath from the Park Preservation Society entered a “Plea from East London” to save land “from the dread encroachment of bricks and mortar.”⁷⁰ Although the aims and orientations of the societies and individuals brought together in the pages of the journal could vary widely, there was an emphasis throughout on the need both to monitor social developments and to bring about social and environmental change.

Journals, the Growth of Health Professions, and the Sanitary Congress

By the time *Sanitary Record* moved to a monthly format in 1879, it was competing with a plethora of popular health journals, as well as the emergence of journals targeted specifically at emerging professional cohorts. Thus the first volume of the *Transactions of the Sanitary Institute*, which aimed, amongst other goals, to provide training for Sanitary Inspectors, was published in 1879, whilst the Medical Officers of Health finally published their own dedicated journal, *Public Health* in 1888. As noted earlier, both journals are still in publication today, although the associated professions have undergone considerable change.⁷¹ *Public Health* was very much one of the new breed of professional journals, designed to build solidarity in the ranks. As the first editor, Dr A. Wynter Blyth, observed in the Preface to the opening number, “Its object is to maintain and strengthen the existing bond of unity and sympathy between the various grades of officers of Sanitary Authorities.”⁷² Its aims were to keep its readers up to date with developments in legislation, sanitary architecture and engineering, and relevant research abstracted from foreign periodicals. As Margaret Pelling has noted, it was wide-ranging in content but “never tried to reach or to proselytise among a wider public.”⁷³ Its editors were unpaid, and generally active Medical Officers of Health,

drawn from the Council of the Society; they also tended to be members of other professional groupings such as the Sanitary Institute, and the Epidemiological Society.⁷⁴ My focus in this final section will be on the more eclectic *Transactions of the Sanitary Institute* which offers detailed insight into the range and diversity of sanitary and public health movements and professions in the last decades of the nineteenth century.

The Sanitary Institute itself had been formed in 1876, following the passing of the Public Health Act in 1875. Its stated aims were to create a London base and national network of local branches, to monitor and push for further legislative changes in public health provision, and to create a system of examinations and qualifications for ‘Surveyors of Sanitary Districts and Inspectors of Nuisances’.⁷⁵ It was a voluntary organisation, with the backing of the Duke of Northumberland who served as first President, that financed itself through subscriptions. Benjamin Ward Richardson was involved from the start, and following his election as Chairman of the Council in 1877, he presided over the first Congress at Leamington Spa. The first publication of the *Transactions* followed the third Congress held at Croydon in 1879, again under the presidency of Richardson (Edwin Chadwick had presided over the intervening conference at Stafford in 1878).⁷⁶ Richardson had evolved from the ambitious young medic who had started the *Journal of Public Health* to a leading medical health campaigner, the “prince of popular exponents,” in the words of his obituary in *Public Health*.⁷⁷ His popularity following his 1875 lecture on “Hygeia” in 1875, an outline of an ideal city of health which had received international acclaim, made him an invaluable asset for the new organisation.⁷⁸

Given his enthusiasm for journals, it is slightly surprising that Richardson did not edit the *Transactions* (although he did start yet another journal in 1884, the *Asclepiad*, which ran until 1895, with all content composed entirely by himself). The initial editors of the *Transactions* were the enterprising hospital administrator, Henry Burdett (who subsequently

edited from 1886-1920 the weekly journal *The Hospital*, discussed in the previous chapter), and Francis De Chaumont, who was Professor of Military Hygiene at the Army Medical School.⁷⁹ Both of them were also active contributors to the journal; the first issue, for example, had an article by De Chaumont on drinking water, while Burdett offered a piece on “The Unhealthiness of Public Institutions” which made the, to our eyes, rather startling claim that since prisons had “come under the control of Government, they have gradually been made probably the healthiest residences in the United Kingdom.”⁸⁰ The journal opened, however, with Richardson’s Presidential Address, “Salutland: an Ideal of a Healthy People,” which followed the popular vein he had pursued with “Hygeia”. The lecture is an engaging vision of a future utopia, when people would live out their natural life span of 100 or more years, in a city filled with parks and gardens; when long distance telephone calls would end feelings of separation, and polluting coal-powered locomotives would be replaced by aerial locomotion.⁸¹

The general tenor of the journal, however, was more directly practical. The Sanitary Institute existed in part to develop sanitary education, and particularly examinations for sanitary officers, but more broadly it set out to promote the diffusion of sanitary knowledge. The Institute, annual congresses, and journal worked in consort, developing a public and readership which went well beyond the immediate audience of sanitary inspectors. By the time the Congress met in Leeds in 1897, it attracted 1380 attendees, and encompassed individual conferences for Medical Officers of Health; Municipal Representatives; Municipal and County Engineers; Ladies on Domestic Hygiene; and a conference on River Pollution.⁸² The growth of the Congress is a measure of the increase of public health professions, as well as voluntary organisations, which were in turn fostered by the journal which took pains to include not merely the main papers, but also the debates which followed, giving voice to many who might otherwise elude the domain of print. In their careful record of the

contributions to the Congress, the *Transactions* and *Journal* open up a neglected area of both social and scientific history, offering insight into the preoccupations and participants of these annual events which, while not quite rivalling the British Association for the Advancement of Science in size, were undoubtedly more socially diverse.⁸³

The *Journal* by this stage was edited by a committee, with J. F. J. Sykes, Medical Officer of Health for St Pancras, in the chair. The 1897 issue, which I take as my final case study, contains papers delivered at sessional meetings during the year, and full and abstracted papers from the annual Congress, as well as details of the range of participants, and associated activities. Readers are informed that over 300 local authorities sent delegates, as well as numerous school boards, and representatives from over 70 societies, including universities, the Royal Colleges, and organisations such as the Cremation Society and St John Ambulance Association.⁸⁴ The editors carefully record that the Health Exhibition attracted over 75,790 visitors in the three weeks in which it was open, and include lists of prize-winning sanitary wares and domestic goods on display (from Cadbury's Cocoa through to the intriguing "Fin de Siècle Bath"). The level of community involvement is also emphasised, with accounts of 620 school children demonstrating Physical Drill, cooking competitions and nursing demonstrations (in a temporary hospital constructed for the purpose). Demonstrations of the very latest scientific developments, from Rontgen X-rays to the cinemetograph (sic) are also proudly recorded.⁸⁵ Both for attendees, and those readers coming fresh to the material, the detailed publication of papers, discussions and events was designed to build a sense of the social importance of the work, and to foster a sense of membership within an ongoing community which spread beyond the various local sanitary organisations, or the diverse campaigning or public health bodies and occupational groupings which came together for the Congresses.

The voices captured in the *Journal* offer sharply variant tones and politics. The initial address by the President, Robert Farquharson (a doctor turned Laird and MP) was uncompromisingly patrician. The working classes, he announced, “as much as their employers are beginning to be connoisseurs in the quality of atmospheric conditions [and] enjoy a good wash as much as a university graduate.”⁸⁶ A more democratic and indeed defiant note was struck in discussion by Councillor B. Womersley (Chairman of the Sanitary Committee of the Leeds City Council) who called for more local control in decision making, arguing that the representatives of the people in our City “understand far better the conditions and requirements of their town than a few members of Parliament, promiscuously brought together.”⁸⁷ The journal also gave a voice to women, albeit corralled within the Ladies Conference on Domestic Hygiene, a title that suggests committees packed full of Mrs Jellybys and Pardiggles. The reality proves more interesting, and subtly subversive. Thus Alice Ravenhill, in a talk on “Women as Hygiene Teachers,” argued that women with their “love of detail and quick perceptions” were eminently suited to fulfil this role, and called for them to be given full-time remunerated employment as Factory and Sanitary Inspectors, as well as made members of School Boards, and Urban and Rural Councils. The Congress duly passed a resolution that Leeds City Council be urged to appoint Women Sanitary Inspectors.⁸⁸

In his opening speech, Farquharson had foregrounded one of the dominant health concerns of the 1890s: that mind and body were being stretched too far in modern society. Ada Goodrich-Freer, Honorary Secretary of the Horticultural College, Swanley, seized upon the notion, in order to make her case regarding, “The Sanitary Aspects of Gardening as a Profession for Women.”⁸⁹ Gardening, she argued, afforded the “soothing and calming influences” that were much required at “the present stage of our social evolution.” Such a beguiling prelude does not lead, however, to traditional pieties regarding women’s place

within domestic flower gardens, but rather to an argument for a rigorous scientific training for women in Horticulture, a profession to which they were peculiarly suited: “Horticulture, besides the art of gardening, includes some knowledge of chemistry, botany, entomology, geology, of surveying and mensuration, of light and heat, of horticultural building, of book-keeping and of many other applied sciences.” Her college, she boasted, had trained over 100 women, who had taken the highest places in external examinations, including the Gold Medal of the Royal Horticultural Society, and were now head gardeners in private estates, or in market gardens, and were employed as teachers in various institutions, including the Royal Horticultural Gardens at Kew, and Edinburgh.⁹⁰ Goodrich-Freer claims for women both a high degree of scientific mastery, as well as the physical strength required to undertake all the demanding manual labour of a gardener, citing the support of both Sir Edward Sieveking and Elizabeth Garrett Anderson, for her position regarding the “healthfulness of gardening as an occupation for women.”⁹¹ “Health” becomes the banner under which a radical call for women’s scientific training, and wider entry into the employment market, can be packaged as a social good.

In bringing together the diverse aspects of the Congress into the pages of the Journal, the editors created a wonderful cross-section of public health activity at the time, producing an in-depth picture which varies markedly from that created by subsequent scholarly accounts which focus on parliamentary legislation, or only one aspect of the closely interwoven sets of activities and concerns. Metropolitan bias is undercut, and significant local initiatives, and scientific figures, are given space and prominence. Papers selected for print in the “Chemistry, Meteorology and Geology” section, for example, included one by the naturalist and Curator of the Leeds City Museum, Henry Crowther, in partnership with the eminent Leeds chemist (and pioneer of X-ray photography), Richard Reynolds, on ten years of meteorological observations of sunshine by the Leeds Philosophical and Literary Society

which had been undertaken to measure air pollution in the city.⁹² Based on daily readings in the city centre (at the Museum), and stations one and a half miles out, and four miles out respectively, the research found a considerable diminution of sunshine in the centre, with figures improving at the weekends (following a reduction in manufacturing activity). These records, from over 10,000 observations, the authors noted, will be of “prospective rather than retrospective” interest, pointing the way forward for action to be taken to diminish the amount of “unconsumed carbon” in the atmosphere, both from industry and household coal fires.

The editors of the *JSI* devote considerable space to the ensuing discussion on air pollution which was harshly critical of manufacturing interests. Walter Rowley of Leeds (who was, interestingly, probably a mining engineer) argued that manufacturers’ outcries against legislation designed to prevent air and water pollution, on the grounds that “they were hampering and fettering trade” was a major obstacle for sanitarian activity. He questioned employers’ rights to inflict “these great acts of injustice [on] the community at large. To plead the requirements of industry was no justification for polluting the air or the stream common to all alike.”⁹³ Similarly, Dr J. B. Cohen, a lecturer in Organic Chemistry at the Yorkshire College, argued that “persons who sent smoke into the atmosphere unnecessarily were really poaching on other people’s preserves; an offence of this kind was quite unexcusable (sic).”⁹⁴ In his own paper on “Air Pollution in Towns” Cohen also argued that it was not the people themselves but “air pollution” which was “largely responsible for the squalid conditions of urban habitations among the poorer classes.”⁹⁵

The papers, and subsequent exchanges, captured in the journal highlight both the interconnected nature of sanitarian concerns, and also the strong environmental consciousness which underpinned early work in public health. Issues of housing, physical health, and air and water pollution were all perceived to be inter-related, and members of the

largely middle-class public health organisations spoke out in defence of the rights of all to unpolluted air and water. The Coal Smoke Abatement Society (1898) has been described as one of the world's oldest environmental organisations, but it traces its roots to the earlier Smoke Abatement Societies run in Leeds and Manchester and other northern cities, and to the labours of the individuals who painstakingly took daily recordings of sunlight, or air pollution.⁹⁶ By printing the papers and discussion of the annual Congresses, the *Journal of the Sanitary Institute* enabled local societies to keep abreast of what was happening in other towns, while also fostering a sense both of community and common cause for those who were labouring, in diverse societies and multiple scientific and practical fields, to improve public health.

Conclusion

From the *Journal of Public Health and Sanitary Review* and its involvement with the early days of the Medical Officers of Health in the 1850s, through to the *Journal of the Sanitary Institute* in the 1890s and the consolidation of the role of the Sanitary Officer, one can track the interdependence of the public health journals, and the rise of associated professions. As we have seen, however, these journals also fostered growing public interest and engagement in the domains of public health, from local Ladies Sanitary Associations, to Smoke Abatement Societies. Ironically, the very growth of professional groupings fostered by the journals, in turn led to a lessening of public involvement, and a decline in the twentieth century of journals focused on broad readerships. Instead one finds in the early decades of the twentieth century a narrowing of focus as journals survive, but turn inwards to a captive professional audience. For some titles, such as *Public Health* itself which had from the start been oriented to a professional audience, the story is one of triumphant survival. But it is also one of loss, with popular, large-scale involvement in issues of public health declining, once journals, and their associated domains, come under the control of professional bodies.

The story of the rise of public health in the nineteenth century has been told many times, but if we place the various public health journals centre stage a rather different picture emerges – one where dominant figures (such as John Simon and Joseph Bazalgette) appear almost to drop from sight, and those with bit parts elsewhere assume far larger importance. The names also proliferate, as the focus shifts from the metropolis to include influential campaigners in towns and cities across Britain, who often do not merit a footnote in more mainstream histories; or alternatively, figure in scholarly historical accounts, but in very different areas.⁹⁷ Thus George J. Symons, for example, remembered primarily for his work on meteorology, and the British Rainfall observers, emerges as an absolute stalwart of the Sanitary Institute; he was Registrar for fifteen years between 1880-95, with prime responsibility for devising and overseeing the new professional exams for Sanitary Inspectors.⁹⁸ His address as President of the Meteorology, Geology and Geography Section at the third Congress (held at Croydon in 1879), for example, is a wonderful demonstration of his sense of the importance of engaging with a wide general audience. He anticipates the sceptics' questions: "what is the use of making three days of it, and having a lot of dry scientific papers of no use to anybody, and incomprehensible by any but dreadfully scientific people?"⁹⁹ His answer is a firm rebuttal of this view. There is no such thing, he argues, as a separation between "science and practice" and he goes on to show how meteorological understanding is fundamental to daily life, from ventilation in theatres to the positioning of houses. His vision is of a general public deeply engaged in issues of health and the environment, and willing to give their own time to help record and improve their environmental surroundings. He depicts experiments where householders were given ozone test-papers to record air quality, and advocates a further development of such a system which could produce "a rough-and-ready test of the purity and healthiness of the air in different localities."¹⁰⁰ As Christopher Hamlin has argued in his excellent short introduction to

Sanitary Reform in the Provinces, the history of such reforms is one of local action and empowerment, and also of equity since the stories of local engagement are “about the extension of biomedical rights, which include rights to environmental determinants of health and amenity.”¹⁰¹

Public Health journals in all their diversity, from publications of local sanitary groups to professionally-oriented titles, capture the depth and range of engagements in the fields associated with public health. They chronicle, not just the major advances in science or legislation, but the forms of argument of the day. They also capture the closely interwoven networks of figures in diverse fields, from engineering to education, who worked together, both locally and nationally, to bring about change. The long lists of prize winning exhibits at the Sanitary congresses are testimony to the endless resourcefulness of the Victorians in their attempts to promote healthy living, while the detailed figures of observations of air pollution conceal behind them the long hours devoted, often over decades, to making daily recordings which would be of value not just to their contemporaries, but to posterity, and thus to the climate scientists of today. One finds in these pages a level of ambition and optimism which is at odds with the general picture of dour, controlling sanitarians, and the rise of state intervention. Instead, what emerges is a highly dynamic model and understanding of the interactions between mind, body and environment.

Sally Shuttleworth

¹ Even the superb six volume, *Sanitary Reform in Victorian Britain*, 6 Vols (London: Pickering and Chatto, 2012) edited by Michelle Allen Emerson *et al*, has tended to publish articles in their stand-alone, pamphlet form, thus losing the context in the sanitary journals where they often first appeared. Tom Crook’s excellent *Governing Systems: Modernity and*

the Making of Public Health in England, 1830-1910 (Oakland, California: University of California Press, 2016), makes excellent use of sanitary journals, but does not consider them in their own right.

² Tina Young Choi, ed., “Introduction,” *Medicine and Sanitary Science*, Vol 1 in Emerson, *Sanitary Reform in Victorian Britain*, xiii.

³ Louis C. Parkes, *Jubilee Retrospect of the Royal Sanitary Institute, 1876-1926* (London: Sanitary Institute, 1926), 25.

⁴ Public Health and Sanitary Journals are best tracked through W. R. Lefanu, *British Periodicals of Medicine: A Chronological List, 1640-1899*, revised edn, ed Jean Loudon (Oxford: Wellcome Unit for the History of Medicine, 1984), which helpfully lists medical, and some medically-related titles in order of publication. A rough count suggests 69 titles here, but this does not include more social science oriented journals which are to be found in John North, ed., *Waterloo Directory of English Newspapers and Periodicals: 1800-1900*. A search here yields 60 journals under Sanitary journals, and 47 under Public Health. The best introduction to the overall field of medical periodicals remains W. F. Bynum, Stephen Lock and Roy Porter eds., *Medical Periodicals and Medical Knowledge: Historical Essays* (London: Routledge, 1992).

⁵ Gowan Dawson, “Richardson, Benjamin Ward (1828-1896)”, in *Dictionary of Nineteenth-Century Journalism in Great Britain and Ireland*, eds. Laurel Brake and Marysa Demoor (Ghent and London: Academia Press and the British Library, 2009), 541.

⁶ *Journal of Public Health and Monthly Record of Sanitary Improvement*, ed., John Sutherland, MD. Sutherland had previously edited the Liverpool “*Health of Towns Advocate*.” The journal lasted from November 1847 to October 1849 (Lefanu). There had previously been a *Journal of Public Health; or Family Guide to Medicine* edited by James

Scott, which had a brief life in 1823, but was more of a family medical compendium, as its subtitle implies, and not part of the sanitarian agenda which emerged from the 1840s.

⁷ See Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick. Britain, 1800-1854* (Cambridge: Cambridge University Press, 1998), 243-64. Hamlin offers the best overview and analysis of the early growth of public health campaigns. See also Norman Parkinson, “The Health of Towns Association and the Genesis of the Environmental Health Practitioner,” *Journal of Environmental Health Research* 14:1 (2014), 5-16.

⁸ For details on the work of William Farr and the General Register Office see John M. Eyler, *Victorian Social Medicine: The Ideas and Methods of William Farr* (Baltimore: Johns Hopkins University Press, 1979). M. W. Finn offers an excellent and extensive introduction to Chadwick’s report in, Edwin Chadwick, *Report on the Sanitary Condition of the Labouring Population of Great Britain* (1842; Edinburgh: Edinburgh University Press, 1965), 1-73.

⁹ The ODNB cites Chadwick’s report as first usage. There were other uses beforehand, however, such as the *Annual Report of the Local Government Board for Ireland* (Dublin, 1834), which had sections on sanitary improvements.

¹⁰ See Henry Mayhew, *London Labour and the London Poor*, ed. Robert Douglas-Fairhurst (Oxford: Oxford University Press, 2010), xliii-xliv.

¹¹ [B. W. Richardson], “Introduction,” *Journal of Public Health and Sanitary Review* 1 (1855), 1.

¹² *Ibid* p. 2.

¹³ Charles Dickens, *Bleak House* (London: Bradbury and Evans, 1853), Ch. 8, 71, 71.

¹⁴ See, for example, Peter Stallybrass and Allon White, *The Politics and Poetics of Transgression* (Ithaca: Cornell University Press, 1986), ch. 3 “The City: the Sewer, the Gaze and the Contaminating Touch,” 125-148.

¹⁵ Mary Poovey, *Making a Social Body: British Cultural Formation, 1830-1864* (Chicago: University of Chicago Press, 1995), 116.

¹⁶ William A. Cohen and Ryan Johnson, *Filth: Dirt, Disgust and Modern Life* (Minneapolis: University of Minnesota Press, 2004); Graham Mooney, *Intrusive Interventions: Public Health, Domestic Space, and Infectious Disease Surveillance in England, 1840-1914* (Rochester, NY: University of Rochester Press, 2015).

¹⁷ Richardson, "Introduction," p. 2.

¹⁸ Richardson produced various poems and other literary productions, including a historical novel, *The Son of a Star* (1888). He published a series of histories of early medical men, which appeared in his later periodical, the *Asclepiad* (1888-95), which he wrote and produced single-handedly. He was an active member of the Society of Antiquaries, becoming a Fellow in 1877.

¹⁹ Anon., "The Late Sir Benjamin Ward Richardson. An Appreciation," *Public Health* 9 (Oct 1896-Sept 1897), 122.

²⁰ See Patrick Wallis, "Richardson, Sir Benjamin Ward," *ODNB*; Arthur Salusbury MacNalty, *Sir Benjamin Ward Richardson* (London: Harvey and Blythe, 1950), and Richardson's autobiography, *Vita Medica: Chapters of Medical Life and Work* (London: Longmans, Green and Co, 1897), 40,158.

²¹ "Our Club" MS, Royal College of Physicians, 520/26, p. 10. Ruth Richardson, "'Notorious Abominations': Architecture and the Public Health in *The Builder* 1843-83," in Bynum et al, *Medical Periodicals*, 90-107. *The Builder* was launched in 1843, and George Godwin was to edit it from 1844 to 1883.

²² Richardson, *Vita Medica* p. 228.

²³ Benjamin Ward Richardson, *The Health of Nations. A Review of the Works of Edwin Chadwick, with a Biographical Dissertation*, 2 vols. (London: Longmans, Green, and Co,

1887). Richardson notes in his introduction that his friendship with Chadwick began in 1853-54 “in the early days of the Epidemiological Society,” I, 1.

²⁴ The Association has transformed over the years into the current Chartered Institute of Environmental Health. Richardson was President from 1890 until his death in 1896. See http://www.cieh.org/about_us/history.html. Accessed 1 Nov, 2017.

²⁵ Richardson, *Vita Medica*, 235.

²⁶ Bynum and Wilson, “Periodical Knowledge,” 41-43. They note, for example, that John Conolly, W. B. Carpenter, and E. A. Parkes all put in 3-5 year stints as editor of the *British and Foreign Medico-Chirurgical Review*.

²⁷ Richardson, *Vita Medica*, 231.

²⁸ The price of the weekly *Lancet* was 6d. For details of pricing of medical journals at this time see Jean and Irvine Loudon, “Medicine, Politics and the Medical Periodical 1800-1850,” in Bynum et al, *Medical Journals*, 59.

²⁹ Richardson, *Vita Medica*, 231.

³⁰ This article, and its sequel are signed simply R. This is unusual in that most of the material is either unsigned, or signed with accompanying detail as to professional position. It is possible that the R is Richardson himself, although much of the unattributed material is probably his, and some of the “original communications” are signed in full Benjamin Ward Richardson, p. 17.

³¹ John Webster (1794-1876) MD, FRCP, FRS. Webster wrote a work on the Cholera Epidemic of 1832, and published regular reports on the state of health in London, and on the conditions he encountered in lunatic asylums and prisons across Europe. See

<http://munksroll.rcplondon.ac.uk/Biography/Details/4674>, and also

<https://www.wikitree.com/wiki/Webster-5142>.

³² Rev. C. Girdleston, "On the Scientific Investigation of Sanitary Questions," *Journal of Public Health and Sanitary Review* 1 (1855), 29-31.

³³ See Francis J. Allan, "The Early Days and Early Work of the Society, with Special Reference to the Registration of Disease," *Public Health* 13 (Oct 1900-Sept 1901), 76, where he notes that "There were many good men who were unsuccessful, including B. W. Richardson."

³⁴ Robert Druitt, "*Journal of Public Health and Sanitary Review* 1 (1855), 15-22. For details of Robert Druitt (1814-83), see <http://munksroll.rcplondon.ac.uk/Biography/Details/1341>.

³⁵ [B. W. Richardson] "The Medical Police of London," *Journal of Public Health and Sanitary Review* 1 (1855), 325.

³⁶ Allan, "Early Days," 74-75. See also Richardson's return to the issue in the first volume, under the general section "Hygienic Jurisprudence: Progress of Sanitary Legislation: Medical Officers of Health." Here he notes that his recommendations have been taken up, but fulminates against the narrow interpretation taken as to which grades of medical men would be suitable (thereby, presumably, excluding him), 428-29.

³⁷ Margaret Pelling, "'Progress, Difficulties, Suggestions and Reforms': *Public Health* 1888-1974," *Public Health* 102 (1988), 212; "Society of Medical Officers of Health," *Lancet* (May 19, 1906), 1392-94.

³⁸ "Richardson, "Medical Police," 325.

³⁹ The problem has been, however, the sheer volume of material which has made the reports rather daunting and therefore inaccessible. The recent digitisation of the London reports by the Wellcome has helped to open them up for scholarly use. See the website for "London's Pulse: Medical Officer of Health Reports 1848-1972," <http://wellcomelibrary.org/moh/>.

⁴⁰ [Benjamin Ward Richardson], “The Registration of Disease in England,” *Sanitary Review and Journal of Public Health* 3 (1857-8), 317-26, p. 322.

⁴¹ Richardson, *Vita Medica*, 231-33.

⁴² Richardson, “Registration of Disease,” 317.

⁴³ *Ibid*, 320.

⁴⁴ B. W. Richardson, “Water Supply in Relation to Health and Disease,” *Journal of Public Health and Sanitary Review* 1 (1855), 130-140, p. 134.

⁴⁵ See “Cholera – Water Supply,” 396, and “The Propagation of Cholera,” which opens with the declaration that “The theory first advanced by Dr Snow regarding the mode of propagation of cholera is, with certain modifications, the value of which has been already discussed in the Journal, becoming very widely known and accepted.” 402.

⁴⁶ John Snow, “Cholera and the Water Supply in the South Districts of London, in 1854,” *Journal of Public Health and Sanitary Review* 2 (1856), 239-57.

⁴⁷ John Snow, “On the Comparative Mortality of Large Towns and Rural Districts, and the Causes by which it is Influenced,” *Journal of Public Health and Sanitary Review, and Transactions of the Epidemiological Society of London* 1 (1855), 16-54.

⁴⁸ John Snow, *On Chloroform and other Anaesthetics, with a Memoir of the Author by Benjamin Ward Richardson* (London: John Churchill, 1858), xxii.

⁴⁹ *Ibid*, xxi. The *Memoir* is the main biographical source for Snow, and it is Richardson’s version of Snow’s intervention in the Vestry meeting which is replayed in all the popular accounts, creating, as Christopher Hamlin observed to me, the “myth of the Broad Street Pump.”

⁵⁰ Richardson’s famous talk on the ideal city of health, Hygeia, was given at the Social Science Congress in Brighton, 1875, when he was President of its Health section. It was printed in the NAPSS *Transactions* and also published separately in 1876, with a dedication

to Edwin Chadwick. The *Social Science Review* itself ranged widely, like its predecessor, including articles in its first volume, for example, on “Forgotten Treasures – the Vision of Hystapses,” 12-21 and “Art among the Buddhists,” 124-35.

⁵¹ See for example, “Capital Murder,” I, 150-160; “Legislation and Prostitution,” I, 26-30; “The First Female Medical Practitioner in England,” I, 476-77.

⁵² G .Mackenzie Bacon, “The Relation of Crime and Insanity: Illustrated by Recent Cases,” I, 431-47; J. T. D., “The Cabmen of London,” I, 410-16, p. 411.

⁵³ As Goldman argues, “to the Social Science Association, as to Victorians in general, the question of secondary education meant ‘middle-class education,’” *Science, Reform and Politics*, 237.

⁵⁴ “Middle-Class Schools,” I, 327-35, p. 328. The article was in response to a recent piece by Matthew Arnold in *Macmillan’s Magazine*.

⁵⁵ The previous year Richardson’s friend, the doctor and sanitarian campaigner, Edwin Lankester, had launched the *Journal of Social Science* which ran between Nov. 1865 and Oct. 1866. For details on the founding of the *Transactions*, see Lawrence Goldman, *Science, Reform, and Politics in Victorian Britain: The Social Science Association 1857-1886* (Cambridge: Cambridge University Press, 2002), 87-89.

⁵⁶ Charles R. Drysdale, “Arguments for and Against Acclimatisation”; “Editorial: Improved Dwellings for the Poor”; J. De Blaine, “The London Printing Offices”; “An Appeal,” *The Sanitary Record and Social Observer, with which is incorporated The Public Health*, I (1869) 1; 14; 33; 42.

⁵⁷ Ernest Hart edited the *BMJ* from 1867 until his death in 1898, and the *Sanitary Record* from 1874-1887.

⁵⁸ “L’Envoi,” *Sanitary Record: A Journal of Public Health* 1 (July 4, 1874), 8-9.

⁵⁹ *Ibid*, 8.

⁶⁰ Ibid, 8.

⁶¹ See “Obituary of Fay Lankester,” *British Medical Journal* (June 21, 1924), 1117; and Ernest Hart, “Objects of the National Health Society of London,” *Public Health Papers and Reports* 19 (1893), 71-73. The Society organised health lectures and training across England, and quickly acquired aristocratic patronage, becoming an uneasy mix of radical and conservative individuals and policies. It distributed numerous health pamphlets, and instituted training courses, with examinations and certificates, in the more domestic aspects of sanitation and health.

⁶² Dorothea Beale, “Health and Education,” and Mrs Edmund Maurice, “Playgrounds for Poor Children,” *Sanitary Record* 1 (1874), 6; 60. Mrs Maurice was here drawing on the example of the Ladies Sanitary Association which had been organising “Park Parties” for poor children.

⁶³ “A Lady Analyst,” *Sanitary Record* 1 (August 1, 1874), 129.

⁶⁴ George Johnson, “On Some Common Sources of Poisoning by Arsenic,” *Sanitary Record* 1 (July 4, 1874), 1-2. The article was spread over a series of issues, and had originally been delivered as a talk to the National Health Society on June 18, 1874.

⁶⁵ “Putrid Cauliflowers,” *Sanitary Record* 7 (Nov. 23, 1877), 335.

⁶⁶ “The Goole Sewage Question,” *Sanitary Record* 1 (Sept 26, 1874), 228; “Tea Poisoning,” *Sanitary Record* 1 (Sept 26, 1874), 227.

⁶⁷ E. M. King, “Dress Reform,” *Sanitary Record* ns 2 (June 15 1881), 443-45. King was Honorary Secretary of the Rational Dress Society. “Vegetable Substances for Domestic Articles, Life Saving, and Sanitary Purposes,” ns 3 (June 15, 1882), 528.

⁶⁸ [Ernest Hart], “To Secretaries,” *Sanitary Record* 2 (Jan. 2, 1875), 7.

⁶⁹ Joseph Chamberlain, “On the Sanitary Condition of Large Towns,” *Sanitary Record* 2 (Jan. 23, 1875), 51.

⁷⁰ Francis George Heath, "A Plea from East London," *Sanitary Record* 1 (Aug. 22, 1874), 147.

⁷¹ As noted earlier, *Public Health* still carries the same title (with the new subtitle *Journal of the Society of Community Medicine*); the *Transactions* changed to the *Journal of the Sanitary Institute* in 1894 and is currently published as *Journal of the Royal Society for the Promotion of Health*.

⁷² [A. Wynter Blyth], "Preface," *Public Health, the Journal of the Society of Medical Officers of Health* 1 (May 1888), p. 1.

⁷³ Pelling, "Progress, Difficulties", 213.

⁷⁴ Pelling, "Progress, Difficulties," 211.

⁷⁵ Louis C. Parkes, *Jubilee Retrospect of the Royal Sanitary Institute, 1876-1926* (London: Sanitary Institute, 1926), 1-2.

⁷⁶ "Congresses and Officers," *Transactions of the Sanitary Institute of Great Britain. A Report of the Third Congress held at Croydon, 1879*, 1 (1880), xiv. The Duke of Northumberland was President of the Sanitary Institute itself, with Vice Presidents including William Farr, Richardson and Chadwick. The Council was chaired by Richardson.

⁷⁷ "The Late Sir Benjamin Ward Richardson," 122.

⁷⁸ Parkes, *Jubilee Retrospect*, 23.

⁷⁹ De Chaumont had been a major contributor to the *Sanitary Record* which had serialised his lectures on Hygiene, from October 31 1874.

⁸⁰ F. De Chaumont, "On Certain Points with Reference to Drinking Water," and Henry C. Burdett, "The Unhealthiness of Public Institutions," *Transactions*, 1 (1879), 64-70; 95-100.

⁸¹ B. W. Richardson, "Salutland: an Idea of a Healthy People," *Transactions* 1 (1879), 1-37.

⁸² "Annual Report: Congress and Exhibition," *Journal of the Sanitary Institute* 19 (1898), 186-89.

⁸³ By the 1880s, BAAS meetings were attracting over 3000 participants. There has been a lot of work on the BAAS, since Jack Morrell and Arnold Thackray's, *Gentlemen of Science* (1982), and Louise Miskell has recently looked at the development of the scientific congress more generally, but did not include the Sanitary Congress in her examples, see *Meeting Places: Scientific Congresses and Urban Identity in Victorian Britain* (Farnham, Surrey: Ashgate, 2013).

⁸⁴ "Programme of Leeds Congress," *JSI* 18, 237-39.

⁸⁵ "Leeds Exhibition, 1897 – List of Awards," *JSI* 18, 369; "The Exhibition," *JSI*, 19, p. 135; "Annual Report: Congress and Exhibition," *JSI* 19, p186. The reporting of the Congress spread over two successive volumes of the *Journal*.

⁸⁶ Robert Farquharson, "Inaugural Address," *JSI* 18 257-76, p. 259. Farquharson (1836-1918), trained in medicine but abandoned it when he became of Laird of Finzean in 1878. He became an MP in 1880 and used his position to champion various public health causes. See "Obituary: The Right Hon. Robert Farquharson, P.C.," *British Medical Journal* (June 15, 1918), 684.

⁸⁷ B. Womersley, "Presidential Address: Conference of Municipal Representatives," *JSI* 18, 327-34, p. 333.

⁸⁸ A. Ravenhill, "Women as Hygiene Teachers," *JSI* 19, p. 126. "Resolutions passed at the Congress held at Leeds, 1897," *JSI* 19, 132-34.

⁸⁹ [A.] Goodrich-Freer, "The Sanitary Aspects of Gardening as a Profession for Women," *JSI* 19, pp. 129-30. On the Swanley College see Donald L. Opitz, 'A Triumph of Brains over Brute': Women and Science at the Horticultural College, Swanley, 1890-1910," *Isis* 104:1 (March 2013), 30-62. Goodrich-Freer is now better known for her interest in spiritualism, than for her support for female horticulture.

⁹⁰ Goodrich-Freer, p. 130.

⁹¹ *ibid*

⁹² Henry Crowther, FRMS and R. Reynolds, FCS “A Decade of Sunshine Observations at Leeds,” *JSI* 18, 601-07.

⁹³ “Discussion of papers by H. Crowther and R. Reynolds and J. B. Cohen,” *JSI* 18, 608-11, p. 609.

⁹⁴ *Ibid*, p. 611.

⁹⁵ J. B. Cohen, “Air Pollution in Towns,” *JSI* 18, 607-08. Julius Berend Cohen (1859-1935) went on to become a Professor of Inorganic Chemistry at the University of Leeds from 1904-24, and is seen as one of the founders of the field. He was also a founder of the Leeds Smoke Abatement Society in 1890, and subsequently a leading figure in the national Coal Smoke Abatement Society when it was founded in 1898. For an excellent history of the campaigns against smoke pollution see Peter Thorsheim, *Inventing Pollution: Coal, Smoke, and Culture in Britain since 1800* (Athens, Ohio: Ohio University Press, 2006).

⁹⁶ See, for example, the University of Leeds School of Earth and Environment website page on Professor Julius Cohen: <http://www.see.leeds.ac.uk/research/essi/cohen-research-group/prof-julius-cohen/>.

⁹⁷ As Tom Crook has argued in *Governing Systems*, public health in Victorian England witnessed “centralization *and* localization; bureaucratization *and* democratization” 288.

⁹⁸ See Katharine Anderson, *Predicting the Weather: Victorians and the Science of Meteorology* (Chicago: University of Chicago Press, 2005), 99-105.

⁹⁹ G. J. Symons, “Presidential Address, Section III, Meteorology, Geology and Geography,” Third Congress, Croydon 1879, *Transactions of the Sanitary Institute of Great Britain I* (1880), 173-89, p. 173.

¹⁰⁰ Symons, “Presidential Address,” 178.

¹⁰¹ Christopher Hamlin, ed. *Sanitary Reform in the Provinces*, Vol 2 of Michelle Allen Emerson, ed., *Sanitary Reform in Victorian Britain*, ix-x.