Book

Stories of an influenza pandemic

19th-century doctors used to quip that it was better to have cancer than a common cold. There were dozens of remedies for cancer but none for the cold. Colds and "flu" are more-or-less interchangeable in much common speech today, even if the old joke is not much bandied about. A touch of "flu" is still a way to describe some upper-respiratory infection with a bit of fever and chills, the usual home remedy for both colds and "flu" being rest, fluids, and an antipyretic.

Most winters, influenza surfaces as a disease of seriousness in vulnerable groups, even if the diagnosis is almost always based only on signs and symptoms, and therefore slightly suspect. There is enough surveillance to keep tabs on the current strain of the virus, but "ordinary" influenza is merely one of the risks we face in our everyday lives, like viral pneumonia and automobile accidents.

Influenza isn't always ordinary, however. Several times during the 19th century, and three times in the 20th century, the disease became more than just a winter blip in the morbidity stakes. In 1957 and 1968, influenza became pandemic, with about a million deaths worldwide in each instance. Many people (including me) will remember these episodes; like veterans of World War I, those who remember the worst epidemic in human history, in 1918–19, are now few. Mark Honigsbaum interviewed one, a 96-year-old woman living in Chester, in the UK. She lost her father, mother, and a brother from the influenza, which she also contracted but managed to survive. At the funeral, her grandmother told her that her mother had gone to Jesus, but the 9-year-old's reasonable reply was, "Jesus has got plenty of people, I want my mummy."

Honigsbaum's wonderfully evocative narrative is filled with similar stories of ordinary people struck down. More than 30 years ago, Richard Collier also wrote a history of the pandemic, and he was able to collect written testimonies from many survivors. These letters are preserved at the UK's Imperial War Museum in London and Honigsbaum uses them again to full effect. He supplements them by printed sources from people who lived through the epidemic, including Vera Brittain, Robert Graves, and Wilfred Owen. He has a good eye for newspaper accounts, and gives leading doctors their due. James Niven, the Medical Officer of Health for Manchester comes out particularly well; Sir Arthur Newsholme, Chief Medical Officer with the Local Government Board (responsible for the medical services of the Poor Law, among other things), scores less well, as a cautious prevaricator. Throughout the narrative, however, Honigsbaum is sympathetic to the difficulties that doctors and public health officials faced. The cause of the disease was unknown, and treatment was no more than symptomatic: bed rest, fluids, isolation, covering the mouth when coughing or sneezing, aspirin. We are still familiar with the advice today: think common cold.

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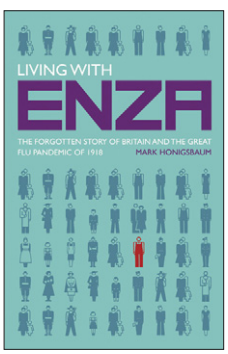
The difficulties that Newsholme and other doctors in authority faced were manifold. When the first wave struck in March, 1918 (there were three waves to the epidemic), the UK was still at war, with Zeppelins beginning to fly over, and the Western Front a reality. The civilian population had endured years of privation, and the farms and factories needed to stay operational. The Yankees may have brought the disease with them, but at least they were in the war, and "One more push" seemed a reasonable response, to troops and civilians alike. That push succeeded in the autumn, but the Armistice celebrations helped fuel the second wave of influenza, which seemed to start up from the dying embers of the earlier spike.

The third wave, in the first half of 1919, also did its mischief, including clouding the brains of those sitting down in Paris to construct the peace. The seeds of World War II were sown at Versailles, in the midst of the great influenza epidemic. How much was directly or indirectly due to sick individuals around the table, and others absent from it, is a matter of debate. The British Prime Minister, David Lloyd George, had already had his encounter with "enza", in Manchester in September, 1918, but one of his close associates, Sir Mark Sykes, MP, died in Paris of the disease a month after the deliberations began. Sykes' body is being exhumed by professor of virology John Oxford in the hope that it might yield material to allow a complete DNA analysis of the H1N1 strain that was behind the epidemic.

If the peace process was affected by the virus, so, too, were the last phases of the war itself. It is easy to write about military casualties from influenza, but more difficult to assess how much it was instrumental in the final outcome. Both sides were severely affected, and for all of the Allies' difficulties with manpower, the Germans were not immune to influenza. Honigsbaum writes well of the military campaigns in 1918, as American and Canadian troops joined their British and French comrades in the trenches. His monograph inevitably moves easily between the civilians in the UK and the offensive in France.

Traditional accounts of the epidemic suggest that American troops



Living with Enza: the Forgotten Story of Britain and the Great Flu Pandemic of 1918
Mark Honigsbaum.
Palgrave Macmillan, 2008.
Pp 256. £16·99.
ISBN 978-0-23021-774-4.

actually brought influenza to Europe. Certainly there were outbreaks in the USA before troops embarked, and civilian cases routinely occurred in the UK just after American troops landed. Following the speculations of John Oxford, Honigsbaum singles out possible cases at Etaples, France, in 1917. Etaples was a major staging post for Allied troops, and there is some evidence that influenza became established there, months before the epidemic proper began. If so, Case Zero was not Albert Gitchell, the American soldier who reported ill on March 4, 1918, in Fort Riley, Kansas. If it was not Gitchell, we shall probably never know Case Zero's identity, for the prehistory of the epidemic is shrouded in mystery.

Whether that mystery can be elucidated by modern techniques remains unclear, but influenza is a disease whose history cannot be understood without knowledge of the causative virus, its behaviour, and mutations. It is to Honigsbaum's credit that he so seamlessly interweaves the scientific and the social history of influenza. His volume teaches us much about the virus and reminds us why influenza is still much in the news. The last quarter of his book is about today, in Vietnam, in 2005 and, hypothetically, in the UK in 2012, at the beginning of the London Olympic Games. He examines current thinking about the H5N1 strain, and looks at what the UK has done to prepare for another epidemic like 1918–19. That one epidemic killed more people worldwide in 12 months than 4 years of war had done, is an ironic coda to World War I, in which casualties of war had outnumbered casualties from the diseases of war. Honigsbaum's analysis makes sober reading.

Thus, a book about the UK actually ends in Vietnam, and even in his account of the epidemic proper, Honigsbaum moves regularly between the UK, the USA, France, Germany, and India. "No man is an island", the poet John Donne reminded us four centuries ago. He was correct, of course, but we must go further: No island is an island.

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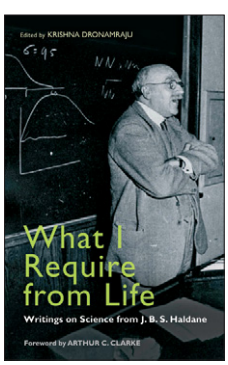

What I Require from Life: Writings on Science and Life from J B S Haldane
Krishna Dronamraju, ed.
Oxford University Press, 2009.
Pp 256. £14·99.
ISBN 978-0-19-923770-8.

In brief

Book Haldane's period pieces

John Burdon Sanderson Haldane was a man of many parts. Scion of a family distinguished equally in science and politics, an enthusiastic soldier in World War I and strong advocate of the use of chemical weapons, he was a leading figure in the British Communist party during the 1930s and 1940s, allowing his membership to lapse only in the aftermath of the Lysenko imbroglio of the late 1940s.

In his final years (he died in 1964), Haldane moved to India and embraced non-violence. In science he was by turns physiologist, biochemist, and geneticist, and made major contributions to each field. His seminal ideas in the 1930s on the biochemical origin of life paralleled those of the Russian Alexander Oparin, and he was, with Ronald Fisher in the UK and Sewall Wright in the USA, responsible for the integration of Mendelian genetics and Darwinian natural selection which has become known as the Modern Synthesis.

Haldane was also a compelling public speaker and a brilliant communicator of scientific ideas to the public. The left-wing scientists of the 1930s were committed politically to making science accessible to a wide audience, and Haldane was prominent among them. For many years he contributed a regular science column to the *Daily Worker*, writing on issues as varied as cosmology, the physiology of breathing, his own terminal cancer, and the differential calculus. Krishna Dronamraju, himself a geneticist, was one of his students during Haldane's final India period, and this edited collection of some of his long out-of-print essays is manifestly a labour of love. Any selection is bound to be arbitrary, so I missed some of my favourites, such as the classic "On being the right size", but Dronamraju has included some lesser known pieces from Haldane's time in India.

The selection inevitably raises the question of how well, apart from their historical significance, have the essays survived the passage of time? I have long been a Haldane fan, and am the proud owner of a number of previous anthologies. But rereading Dronamraju's selection I was struck by how dated the essays appeared, not so much in terms of science but of style. Unlike today's more critical lay public, many of Haldane's contemporary readers would have been almost entirely convinced that science was a progressive force on the side of the hoped for revolution. So the essays are largely didactic, unqualified by doubt, and altogether lacking in the discursive curlicues of modern-day science writers, such as the late Stephen J Gould, who has often been described as a latter-day Haldane. The appearance of this selection will hopefully introduce the original Haldane to a new and wider audience, but the essays should be read and enjoyed as period pieces, telling us more about the author and his times than his ostensible topics.

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