THE EARLY BRITISH AND AMERICAN JOURNALS OF TROPICAL MEDICINE AND HYGIENE: AN INFORMAL SURVEY

by

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An old proverb tells us that "the ink of science is more precious than the blood of martyrs". Some might argue that point, but no one would deny that we have spilled vast quantities of ink into the vessels we call journals, including those concerned with tropical diseases. But before turning to those journals, we might well ask: What are the tropical diseases?

No one is quite sure how to define tropical diseases. James Lind, of scurvy fame, told of the awful toll exacted of seamen in the eighteenth century by "the maladies of the intemperate climates", that is, the tropics. Scott's history of tropical medicine comments that the "diseases met with in warm climates . . . include nearly all the flesh is heir to, except, perhaps, frostbite", and maybe that, too. Neither Lind nor Scott defined tropical diseases any more closely, nor, for that matter, did Patrick Manson, now considered the Father of Tropical Medicine, in his 1898 text *Tropical diseases*, an apparently immortal book now in its nineteenth edition. Manson said that the truly tropical diseases were few and the others one encountered encompassed nearly all of medicine, and he therefore included in his definition those diseases "specially

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¹ H. H. Scott, A history of tropical diseases, London, Edward Arnold, 1939, p. vi.

² P. Manson, Tropical diseases: a manual of the diseases of warm climates, London, Cassell, 1898.

prevalent in warm climates". It was just such climates, he argued, that favoured the survival of some pathogens and the dissemination of others by blood-sucking insects that served as their "nurses" (his word).

Tropical medicine was, from the outset, perhaps the only medical field to think of disease in ecological terms, or that focused itself on one region of the world. The word "tropical" and its cognates, incidentally, derive from the Greek *tropikos*, meaning to turn, a reference to the "turning" or declination of the sun between the "Tropics" of Cancer and Capricorn. This definition of tropical, although precise geographically, is, however, only marginally useful in defining tropical diseases and hence tropical medicine. Today's threatened "greenhouse effect" may well shift the distribution and intensity of tropical and other infectious diseases well beyond the "warm climates" of Manson's time.³

We may not define tropical medicine clearly but we usually know it when we see it, to borrow a line from a judge who was discussing pornography. One way to see tropical medicine is through the history of its journals, an approach not hitherto taken. I have elected for present purposes to confine myself to the advent of the British and American journals of tropical medicine, and to their immediate anglophone cousins, between 1898 (when they first appeared) and 1914 (when some of the latecomers arrived). It is good to escape the special language of the speciality journals and to discuss them in broader terms. Consider, if you will, this remark published thirty years ago: "Medical history", Douglas Guthrie wrote, "is perhaps now the only aspect of medicine which has not adopted a new or special vocabulary... It still speaks a language which all can understand, and thus it is perhaps the only remaining common ground on which medical men can meet ...".4

THE TROPICAL MEDICINE JOURNALS: A PREHISTORY

I will begin this brief exploration of prehistory of the journals of tropical medicine by asking: Where was recognizable tropical medicine published before the speciality journals appeared around 1900?

In the last quarter of the nineteenth century, classic papers in tropical medicine sometimes appeared in some unlikely or obscure publications. For example, A. F. A. King's provocative theoretical paper incriminating mosquitoes as vectors of malaria appeared in *Popular Science Monthly* in 1883,⁵ and Patrick Manson's seminal papers on mosquitoes as carriers of filariasis were published in the *Medical Reports of the China Imperial Maritime Customs* in the 1870s and 1880s, and, through Spencer Cobbold's intercession, in the *Journal of the Linnaean Society [Zoology]*.⁶ Timothy

³ A. Leaf, 'Potential health effects of global climate and environmental changes', New Engl. J. Med., 1989, 321: 1577-83.

⁴ D. Guthrie, 'Whither medical history?', Med. Hist., 1957, 1: 307-17.

⁵ A. F. A. King, 'Insects and disease—mosquitoes and malaria', *Pop. Sci. Mon.*, 1883, 23: 644–58. The background of this matter is discussed in detail in E. Chernin, 'Two physicians, a landscape architect, and malaria', *Bull. N.Y. Acad. Med.*, 1984, 60: 932–7. Specifically, John T. Metcalfe's (1818–1902) 23-page report, dated 25 May 1862, on the miasmic fevers, included a list of 13 precepts on malaria which served as the basis for King's later speculations.

⁶ P. Manson, 'Further observations on Filaria sanguinis hominis', Medical Reports, China Imperial Medical Customs, Special Series No. 2, 14th Issue, 1878, pp. 1-26; 'On the development of Filaria sanguinis hominis, and on the mosquito considered as a nurse', J. Linn. Soc. [Zoology], 1878, 14: 304-11.

Lewis's key discovery in 1872 of the parasitic microfilariae in the blood of humans, ⁷ an early important report on Kala-Azar by Giles (1890), ⁸ and a notable report by Ross on the malaria parasite in mosquitoes, ⁹ and many others, appeared in sundry government documents published and circulated mainly in India. In the United States, government documents were also outlets: in 1893, for example, Smith and Kilborne published their landmark study—on the first experimental transmission of a parasitic organism by a blood-sucking arthropod—in a bulletin of the US Department of Agriculture. ¹⁰ Finally, some special research centres published their own reports and reviews, as, for example, did the Wellcome Research Laboratory at Khartoum, in the Sudan; and beyond this were the technical monographs and textbooks, and the books on the tropics by missionaries, explorers, and medical topographers.

Beyond this miscellany lie interesting early journals, which, though heavy with tropical diseases, carried names that did not suggest tropical diseases. I have already referred to one of these, the *Medical Reports of the China Imperial Maritime Customs*, first published from Shanghai in 1871 as the *Customs Gazette*. This journal was created under the aegis of the remarkable Inspector General of the Customs Service, Robert Hart (no relation to his contemporary Ernest Hart, the editor of the *BMJ*), to gather and disseminate information about disease conditions from British medical officers stationed in some fifteen Chinese port cities. ¹¹ Patrick Manson was, from 1871 to 1883, the Customs medical officer in the sub-tropical town of Amoy (now Xiamen), one of the so-called "treaty ports" controlled for commerce after the Opium War of 1856–60. Manson expanded his half-yearly statistical reports on the health of Amoy with case histories, and he then published in the *Medical Reports* original research papers on dengue, sprue, trichinosis, paragonimiasis, filariasis, and leprosy. ¹² We need not dwell on these, except to note that Manson was soon joined by others in the Customs Service in publishing papers on tropical medicine in their Service journal.

Another "cryptic" journal of tropical medicine was the *Philippine Journal of Science*, first published in 1906 by the American-run Bureau of Science of the Philippines. The *Journal* was soon divided into sections, and *Section B—Medical Sciences*, under the editorship of Richard Pearson Strong, published a volume of 560 pages in 1907, its first year. *Section B* was heavily devoted to tropical medicine, and so it remained for the next five years; in 1912, recognizing the obvious, the *Section's* name was changed to the *Philippine Journal of Tropical Medicine*. Two footnotes: in 1913, Richard Pearson Strong left the Philippines and became the founding Professor and Chairman of the

¹⁰ T. Smith and F. L. Kilborne, 'Investigations into the nature, causation, and prevention of Texas or southern cattle fever', *Bull. US Dep. Agric.* No. 1, 1893.

⁷ T. R. Lewis, 'On a haematozoan in human blood; its relation to chyluria and other diseases', *Eighth Ann. Rept.*, Sanitary Commission, Govt. of India, 1872.

⁸ G. M. Giles, 'A report on Kala-Azar and beriberi', *Ann. Sanit. Repts*, Province of Assam, Shillong, 1890.

⁹ R. Ross, 'Report on the cultivation of Proteosoma, Labbe, in grey mosquitoes', Supt. Govt. Printing, Calcutta, 1898.

¹¹ This idea of collecting and circulating information about disease prevalence apparently surfaced again, when, as newly appointed Medical Adviser to Chamberlain's Colonial Office (1897), Manson moved to improve and circulate the medical reports from the Colonies. (E. Chernin, 'Sir Patrick Manson: physician to the Colonial Office, 1897–1912', *Med. Hist.*, forthcoming.)

¹² For Manson's bibliography, see: E. Chernin, 'Sir Patrick Manson: an annotated bibliography and a note on a collected set of his writings', *Rev. infec. Dis.*, 1983, **5**: 353–86.

new department of Tropical Medicine at Harvard; and in 1919 the *Journal's* sections were recombined with the result that the new issues featured neighbourly articles on leprosy and bees.

This prehistory would be incomplete without acknowledging that in late Victorian times, the British Medical Journal (BMJ) served, perhaps arguably—given the Lancet's strong competition—as the most important outlet for many of the historic papers in tropical medicine. Consider only that Patrick Manson published over a dozen papers in the BMJ, including the famous malaria-mosquito hypothesis of 1894, ¹³ the validity of which Ross demonstrated in 1897–98 and also announced in the BMJ. ¹⁴ It would be easy to expand the list. Suffice it to say that before 1900 or so nearly every important tropical disease and nearly every important figure in tropical medicine appeared in the BMJ. The frequency of these appearances declined when the specialist journals of tropical medicine appeared around the turn of the century. In effect, the new journals moved tropical medicine off the pages of the BMJ and into the recesses populated by specialists who wrote mainly for each other. This loss of contact with the larger medical community was regrettable, but it was a fate shared, of course, by other specialities undergoing evolution.

Through much of tropical medicine's prominence in the *BMJ*, its editor was the remarkable Ernest Hart, who argued vigorously in support of research and training in tropical medicine. He also remarked in 1894 that "when the next textbook of tropical medicine comes to be written . . . the first chapter will be a piece of natural history—the life-history of the [malaria] parasite", ¹⁵ a prescient statement made four years before Ross's dicovery and the publication of Manson's textbook. In 1898 Hart died and was succeeded by Dawson Williams, also a friend of tropical medicine, and in that same year appeared the *Journal of Tropical Medicine*, the first such journal in English, ¹⁶ a lively, articulate monthly publication, reminiscent in style of Hart's *BMJ*.

THE BRITISH JOURNALS

The years around 1898 made up an interesting historical period, as far as tropical medicine was concerned. At its meeting in Edinburgh, for example, the British Medical Association organized, for the first time, a section on tropical diseases, over which Manson presided. In 1897, Manson became the influential Medical Adviser to Chamberlain's Colonial Office, and the fascinating but ill-fated Mary Kingsley published her *Travels in West Africa*, a book that stimulated the cause of training in tropical medicine. In 1899 the Liverpool and London Schools of Tropical Medicine opened, while the Boer War was beginning its harvest of disease and death. The United States, victorious over Spain, took control of the Philippines, Cuba, and Puerto Rico, and so gained access to a greater store of riches in tropical diseases than its own South

¹³ P. Manson, 'On the nature and significance of the crescentic and flagellated bodies in malarial blood', *Br. med. J.*, 1894, ii: 1306-8.

¹⁴ R. Ross, 'On some peculiar pigmented cells found in two mosquitoes fed on malarial blood', *Br. med. J.*, 1897, ii: 1786–8.

¹⁵ E. Hart, 'An address on the medical profession in India', Br. med. J., 1894, ii: 1469-74.

¹⁶ The vanguard German and French journals should not go unmentioned: Revue de Médecine et de Hygiène Tropicales (Paris, 1904); Bulletin de la Société Pathologie Exotique (Paris, 1908); Archiv für Schiffs-und Tropen-Hygiene (Leipzig, 1897).

afforded. At about this same time also, the Empire was celebrating Queen Victoria's Diamond Jubilee and the continued expansion of Colonial power. Because of this colonialism, in the late 1890s over 6,000 qualified British doctors were working abroad, mainly in the tropics, and these represented about one-fifth of all British medical men.¹⁷ The concern over Britain's capacity to cope with the special needs and peculiarities of medical practice in the tropics helped fuel the drive for better training in tropical medicine and better communication of research. Against this general background, or perhaps as a result of it, appeared the first journal devoted to tropical medicine.

The Journal of Tropical Medicine

In 1898, James Cantlie (later Sir James; 1857–1926) founded the *Journal of Tropical Medicine*, with his co-editor, W. J. Simpson (1855–1931), former Health Officer for Calcutta and the former editor of the *Indian Medical Gazette*. In the mid-1880s Cantlie worked with Manson in Hong Kong, and together with Manson founded the College of Medicine there. Cantlie remained a life-long friend and colleague of Manson's, helped him create the London School of Tropical Medicine, and in 1907 was the prime mover in the formation of the Society of Tropical Medicine and Hygiene (later Royal). In 1896 Cantlie and Manson even took on the Chinese Legation in London, and collaborated to free Dr Sun Yat-Sen, a former student of theirs, who had been kidnapped and held by the Chinese for shipment back home. Cantlie was also an outspoken editorialist; for example, he strongly defended Waldemar Haffkine, who had been unjustly accused by the Government of India of producing a batch of tetanus-contaminated cholera vaccine that killed villagers in the Punjab. 19

Cantlie owned the independent Journal of Tropical Medicine and he bore its expenses personally for nearly a decade. ²⁰ (In this regard, Cantlie was acting in an old tradition, for Henry Oldenburg, the first Secretary of the Royal Society, published the Society's Philosophical Transactions on his own initiative, and the venture was his financial responsibility for many years.)²¹ Sir Joseph Fayrer wrote the opening editorial for Cantlie's Journal: "The object of the Journal", he said, "is the consideration and discussion of tropical diseases and of questions of aetiology, hygiene, and preventive medicine, or any cognate scientific subjects affecting so large a part of our empire." Ronald Ross is said to have observed that the empire had contributed more to tropical medicine than had tropical medicine to the empire. Clearly, however, empire and its perceived needs powered much of the research that appeared in Cantlie's

¹⁷ [British Medical Association Report], 'Tropical diseases', *Lancet*, 1898, ii: 376. Also: P. Manson, 'An introductory address on the necessity for special education in tropical medicine', *Lancet*, 1897, ii: 842-5.

¹⁸ For details of the life and career of Simpson, see: R. A. Baker and R. A. Bayliss, 'William John Ritchie Simpson (1855–1931): Public health and tropical medicine', *Med. Hist.*, 1987, 31: 450–65.

¹⁹ E. Chernin, 'Ross defends Haffkine: the aftermath of the vaccine-associated Mulkowal disaster of 1902', J. Hist. Med., 1991, 46: 201-18.

²⁰ J. C. Stewart, *The quality of mercy: the lives of Sir James and Lady Cantlie*, London, Allen & Unwin, 1983, p. 107.

^{21'} J. L. Thornton and R. I. J. Tully, Scientific books, libraries and collectors, London, The Library Association, 1962, pp. 224, 240. See also A. J. Meadows, ed., Development of scientific publishing in Europe, Amsterdam, Elsevier Science, 1980, p. 66.

²² J. Fayrer, 'Introductory remarks [Opening editorial]', J. Trop. Med. Hyg., 1898, 1: 1.

Journal and in the others that followed on both sides of the Atlantic. Ross's cynical remark is, however, belied by one of his own favourite quips, to the effect that the Panama Canal had been dug with a microscope.

The Journal of Hygiene and Parasitology

Clifford Allbutt was responsible for bringing George H. F. Nuttall to Cambridge University. Nuttall (1862–1937) was a transplanted American physician, zoologist, and microbiologist, who founded two of Britain's most distinguished journals, the *Journal of Hygiene*, in 1901, and its offshoot, *Parasitology*, in 1908. Nuttall was chief editor of the *Journal of Hygiene* for 37 years and of *Parasitology* for 25 years, and he, in the spirit of Cantlie, "made himself personally responsible for [the finances] of both *Journals*... until each began to pay and was taken over by the Cambridge University Press." Unlike most editors then or since, Nuttall felt that an essential role of the editor was educational—teaching the inexperienced to write, a view for which I have considerable empathy since I have been trying to teach that for some twenty years.

Nuttall's *Journal of Hygiene* aimed (he said in its Introduction) not to limit itself to observations and experimental work, but to "accept and encourage discussion of administrative and practical questions, the importance of which is apt to be overlooked in scientific journals", ²⁴ an outlook that related journals did not share and that was gradually lost as specialism grew. Nuttall's bent for the practical carried over to *Parasitology*, which he hoped would encourage the study of parasitism "especially in relation to disease". ²⁵ Nuttall's influence extended beyond his journals and personal research. In 1904, for example, he and Manson helped establish at Cambridge the first Diploma in Tropical Medicine and Hygiene, and, years later, Nuttall's initiative brought about the creation, again at Cambridge, of the famous Molteno Institute for Research in Parasitology.

The Annals of Tropical Medicine and Parasitology

Ronald Ross (1857–1932) was the founding editor of the Annals of Tropical Medicine and Parasitology, serving from 1907 to 1912 when he resigned as Professor at the Liverpool School of Tropical Medicine to begin practice in London. Ross, born in India but schooled and trained in England, came to the new Liverpool School in 1899 after eighteen years in the Indian Medical Service. It was during his last four years in India that Surgeon Major Ross validated Manson's mosquito-malaria hypothesis, a work that earned him the FRS in 1901, the Nobel Prize in 1902, and in later years a knighthood and other honours. Ross was a driven, complicated, troubled character whose interests extended beyond medicine to mathematics, epidemiology, poetry, and literature.

The main publication of the Liverpool School for seven years after its founding was a series of scientific *Memoirs*, based on the work of its medical expeditions. In 1906, the decision was taken to publish the School's reports, and other original papers, in a new

²³ G. S. Graham-Smith, 'George Henry Falkiner Nuttall [Obituary]', J. Hyg., Camb., 1938, **38**: 129-39, p. 131.

p. 131.

²⁴ G. H. F. Nuttall, J. Haldane, and A. Newsholme, 'The Journal of Hygiene, Introduction', J. Hyg., Camb., 1901, 1: 1-2.

²⁵ G. H. F. Nuttall and A. E. Shipley, 'Parasitology, Introduction', *Parasitology*, 1908, 1: 1-2.

journal issued from the School, the quarterly Annals of Tropical Medicine and Parasitology. ²⁶ Thus, while Cantlie's Journal of Tropical Medicine and Nuttall's two journals were under their owner-editors' control, the Annals came on the scene as a house journal and it remains an official publication of the Liverpool School.

No journal is launched without its share of contretemps, and the *Annals* was no exception. It was to have been called the *Annals of Tropical Medicine and Hygiene*, and a proof of the cover was printed with that title.²⁷ Learning of this, the publisher of Cantlie's *Journal of Tropical Medicine and Hygiene* (the "Hygiene" had been added in 1907) wrote to Mr A. H. Milne, secretary of the Liverpool School, pointing out the similarity in titles and that Cantlie's was copyright.²⁸ While the events that followed are not documented, it is obvious that the now-familiar title *Annals of Tropical Medicine and Parasitology* was born of a compromise. Under Ross, the *Annals* published technical papers exclusively, mostly on malaria and African trypanosomiasis, thus reflecting the main interests of the Liverpool staff and of the times.

Annals of Tropical Sanitation: a journal aborted

In his *Memoirs* of 1923, Ross declared with his customary conviction: "Great is sanitation—the greatest work except discovery, I think—that a man can do",²⁹ an assertion that underscores Disraeli's clever paraphrase of *vanitas*: "Sanitas, sanitorum, omnia sanitas". In December 1911, four years after the advent of the *Annals*, Ross informed the Liverpool School that he planned to establish a journal of tropical sanitation. He asked whether it could be issued under the School's imprimatur, but said he would assume financial responsibility for it.³⁰ When the School approved his request,³¹ Ross recruited two experienced India hands, Col. W. G. King and Professor William J. R. Simpson, (who we have observed was also Cantlie's co-editor) to assist him with the quarterly he called the *Annals of Tropical Sanitation*.³²

²⁶ Historical Record, 1898-1920, Liverpool School of Tropical Medicine, Liverpool, The University Press, 1920.

²⁷ Annals of Tropical Medicine and Hygiene. Proof copy of proposed cover. London School of Hygiene and Tropical Medicine Library, Ross Archives, 32/157.

²⁸ John Bale to A. H. Milne, 17 January 1907, Ross Archives, 32/160.

²⁹ R. Ross, Memoirs, London, John Murray, 1923, p. 186.

³⁰ Ross to [A. H. Milne] Secretary, Liverpool School of Tropical Medicine, 20 December 1911, Ross Archives, 33/102.

³¹ Minutes of the Committee, Liverpool School of Tropical Medicine, 8 January 1912, Ross Archives, 33/104.

³² R. Ross to W. G. King, 21 February 1912, Ross Archives, 33/107, and reply 22 February 1912, Ross Archives, 33/108; R. Ross to W. J. Simpson, 24 February 1912, Ross Archives, 33/109; and reply 26 February 1912, Ross Archives 33/110. Walter Gawen King (1851–1935) joined the Indian Medical Service in 1874. He arrived in Madras, India that year where he remained until his transfer in 1905 to Burma; he retired in 1910. Colonel King was considered the father of public health in South India. In addition to reorganizing the Sanitary and Vaccination Departments of the Madras Presidency, he established a vaccine institute where high grade animal lymph was produced. See A. J. H. Russell, '[Obituary] Walter Gawen King', Trans. R. Soc. Trop. Med. Hyg., 1935, 29: 95–6. Sir William Simpson (1855–1931) devoted his life to public health after receiving his MD at Aberdeen University. He worked as Health Officer for the City of Aberdeen before being appointed Health Officer to Calcutta in 1886. After his return to London in 1898, he became Professor of Hygiene at King's College and in 1899 Lecturer on Tropical Hygiene at the London School of Tropical Hygiene. Thereafter, he visited the tropics on various commissions and wrote two extensive books on tropical hygiene, and served as co-editor of the Journal of Tropical Medicine and Hygiene. See R. Ross, '[Obituary] Sir William John Ritchie Simpson', J. Trop. Med. Hyg., 1931, 34: 333–4; Colonel W. G. King, '[Obituary] The late Sir William Simpson', Br. med. J., 1931, ii: 682; '[Obituaris]

Ross advertised the new journal in the medical press, but because he was worried about finances, he inquired whether the Colonial Office "might possibly be willing to help poor Liverpool in the matter of this little ewe-lamb of ours". Specifically, he asked whether the Colonial Office would persuade the various colonies to underwrite subscriptions to the journal for their Health Officers. 33 The Colonial Office, however, would go no further than to notify the Colonies that the journal would appear.³⁴ In declining support, the Office was backed by the Management Committee, whose chairman voiced concern over the prospect of a Government-sponsored journal which might criticize the policies and practices of the Colonial or Indian Governments.³⁵ By August 1913, Ross, now living in London, expressed some frank thoughts about his unborn journal in a private letter to Arthur Bagshawe, 36 head of the Tropical Diseases Bureau:

If [The Annals of Sanitation] is brought out as a Government publication it is sure to succeed . . . as everyone will be obliged to buy it [my emphasis]. If it is brought out as a private venture the sales are sure to be much less, and, after consideration, we do not think we will undergo the large amount of trouble and monetary risk involved in it. We have therefore definitely abandoned the whole business.

While Ross was losing the potential editorship of his "ewe-lamb", he gained the editorship of another and far different journal called Science Progress.

Science Progress

In July 1913, John Murray of the publishing house appointed Ross editor of the quarterly journal Science Progress, a modestly-paid post Ross held until his death in 1932. This influential publication ran papers in the sciences, published reviews, and under Ross's broad embrace, it included articles on "scientific thought, work, and affairs". Science Progress served as a widely read, convenient platform for Ross's views on everything from science to spelling, but his most frequent and pungent pieces dealt with the social and political aspects of science and tropical medicine, and with his persistent efforts to gain a pecuniary reward from Government for his discovery of the malaria-mosquito link.³⁷ Ross coupled these efforts on his own behalf with a stated—apparently altruistic—concern about the Government's policy of "sweating" (underpaying) the scientist. Through his editorship of Science Progress, Ross probably drew more public attention to the needs of science and tropical medicine than any other contemporary figure with the possible exception of Manson. At all events. Ross was an interesting editor: one might not agree with him or his sometimes intemperate pen, but he refused to be ignored or to back down, and in furthering his causes he was not beyond excoriating sitting Chancellors and Prime Ministers, and

Professor Sir William J. R. Simpson', Trans. R. Soc. Trop. Med. Hyg., 1931, 25: 212-13; '[Obituary] Sir William Simpson', Lancet, 1931, ii: 712. See also note 18 above.

³³ R. Ross to H. Read, 19 March 1912, Ross Archives, 33/123. ³⁴ H. Lambert to R. Ross, 15 May 1912, Ross Archives, 33/132.

³⁵ Agenda and Minutes of the Fourth Meeting of the Tropical Diseases Bureau Managing Committee, 21 February 1913, Colonial Office 885/22, p. 57-8.

36 R. Ross to A. Bagshawe, 27 August 1913, Ross Archives, 33/154.

³⁷ E. Chernin, 'Sir Ronald Ross, malaria, and the rewards of research', Med. Hist., 1988, 32: 119-41.

the nation itself; a couplet from one of his poems reads, "Who stands upright in Britain falls/He wins the prize who crawls." 38

Transactions of the (Royal) Society of Tropical Medicine and Hygiene

The Transactions of the Royal Society of Tropical Medicine and Hygiene was born when the Society itself was organized in 1907 at a meeting convened by James Cantlie. Manson was elected the Society's first president and Ross the vice-president, and a distinguished group of nineteen men was elected to the Council.³⁹ Papers by Fellows were to be submitted to the Joint Secretaries, and, "if accepted by the Council [sic], the communications will be read at a [monthly] meeting and published in the Transactions." According to a later Year Book, the Joint Secretaries, appointed by the Council for two-year terms, "act as Editors and Publishers of the Transactions". 41

It was in the tradition of transactions that they had no visible editor; indeed, as late as 1939, the retiring president of the Society, Col. S. P. James, expressed his thanks to "the members of the Editorial Panel whose labours are done in secret, as well as to the junior helpers of the gentler sex who work to blush unseen or blush to work unseen, whichever you prefer." It was not until the 1970s that the names of the Editor and of the Editorial Board appeared on a published masthead in the *Transactions*. Given the circumstances and want of records, little can be said about the early "secret" editorial history of the journal, but it is no secret that by 1914 the Society was well grown, and the *Transactions* had established itself as a pre-eminent serial in tropical medicine.

In Memoriam: two journals

I will mention two journals only in passing because they suffered neonatal death and because both were edited by Patrick Manson whose career was not marked by many other failures. In 1886 Manson organized and presided over the Hong Kong Medical Society, the first such society in China, many of whose sixty members—Cantlie among them—were interested in diseases of the warm countries. The first and only volume of the Society's *Transactions*, edited by Manson, contained twenty-six papers of which no fewer than nine were written by Manson. To this day, one sometimes wonders who edits the editors. Be that as it may, Manson's departure from China in 1889 deprived the journal of both his inspiration and his contributions—and it expired.

The Hong Kong journal really belongs to prehistory, but not so the little-known Journal of the London School of Tropical Medicine. By 1911, when the London School

³⁸ Ibid., p. 137.

³⁹ G. C. Low, 'The history of the foundation of the Society of Tropical Medicine and Hygiene', *Trans. R. Soc. Trop. Med. Hyg.*, 1928, **22**: 197–202.

⁴⁰ The Society of Tropical Medicine and Hygiene 'Year Book', Trans. R. Soc. Trop. Med. Hyg., 1909, 3: ii-iii. The Year Book of the Royal Society of Tropical Medicine and Hygiene was published separately from the Society's Transactions from about 1910 on, with the first one covering the years 1910–11. The Year Book was devoted to the business of the Society, containing information on its purpose, structure, meetings, publications, etc., as well as the annual reports of its Council and its Treasurer, and a list of its officers and fellows. The Year Book continued to be published in separate format until the late 1950s, and perhaps afterwards.

⁴¹ The Society of Tropical Medicine and Hygiene 'Year Book', *Trans. R. Soc. Trop. Med. Hyg.*, 1910, 4: iii. ⁴² S. P. James, 'Remarks of the retiring President', *Trans. R. Soc. Trop. Med. Hyg.*, 1939, 33: 137.

had trained over 1,200 post-graduates and produced a large body of research, there developed (according to Manson) an insistent demand within the School for a periodical of tropical medicine. The School's *Journal* first appeared in 1911–12, its papers contributed by past or present students, and its staff. Manson contributed no papers, and the *Journal* ceased publication after two volumes, but it is not clear whether this was for lack of interest or because Manson retired in 1912 due to age and infirmity.

THE AMERICAN JOURNALS

The American Journal of Tropical Medicine and Hygiene

The American Journal of Tropical Medicine and Hygiene had its genesis in 1903 when Thomas H. Fenton, an ophthalmologist-surgeon, sparked the creation of the Society of Tropical Medicine of Philadelphia. The Society's twenty-eight founders were local practitioners bereft of any experience in tropical medicine, but they made up for this by their interest and by their wisdom in electing as honorary members the likes of Manson, Ross, and Nuttall. The United States had recently become a tropical colonial power, the Panama Canal was in progress, and the transmission of malaria and yellow fever had been explicated. No surprise then, that within a month of its birth the Society dropped the parochial "Philadelphia" and became the "American" Society of Tropical Medicine. By coincidence, on 21 March 1903, the day the "Philadelphia" became the "American" Society, the Journal of the American Medical Association published an editorial underscoring the importance of tropical medicine and its place in future programmes of the American Medical Association.⁴³

In 1905, the fledgling Society issued the first volume of its idiosyncratic "Transactions" or "Papers". The editor, if any, rightly remained anonymous, because the "Transactions" comprised collected reprints of papers published by members in many different journals. This bound collectanea was distributed to members and libraries, but it was not an original publication. In 1913, however, the Society sponsored as its official organ the American Journal of Tropical Diseases and Preventive Medicine, under the editorship of the colourful Creighton Wellman of Tulane University. This Journal featured not only papers, but discussions, news, commentaries, and summaries of current literature; it went through three volumes (to 1916) before ceasing publication, whereupon a modification of the old "Transactions" was revived and published until 1921; when the American Journal of Tropical Medicine appeared, essentially as we know it today.

The uncertain beginnings of the first and only American journal of tropical medicine contrast with the unbroken records of the British *Transactions* and the *Annals*. Perhaps the difference lay partly in the relative size of the memberships. In 1914, for example, the active membership of the (Royal) Society of Tropical Medicine and Hygiene was about 600, and of its American counterpart only 115, barely a sustaining number of subscribers. The cohesiveness of the two communities of tropical medicine also differed: in Britain, geographic scale encouraged monthly meetings of the parent Society, while in the United States meetings were and still are annual affairs.

⁴³ Q. M. Geiman, 'A half century of tropical medicine', Am. J. trop. Med. Hyg., 1954, 3: 397–411, p. 400.

The Journal of Parasitology

The Journal of Parasitology, first published in 1914, was founded by the Germantrained "Father of American Parasitology", Henry Baldwin Ward. Ward personally bore the Journal's financial and editorial responsibilities until 1932 when he made a gift of the Journal to the American Society of Parasitologists, then in its seventh year. To mark this transfer, Professor W. W. Cort of Johns Hopkins published a history of the Journal in which he emphasized the great influence Ward's innovative publication had exercised on the development of American parasitology, many of whose prominent practitioners associated themselves with tropical medicine.⁴⁴

The Tropical Diseases Bulletin

I will conclude this consideration of individual journals by calling attention to the *Tropical Diseases Bulletin (TDB)*, which draws its material from journals worldwide and provides abstracts of key papers to the tropical medicine community.

Abstract journals—so-called "secondary" journals—were not new to medicine, when, in 1912, the Tropical Diseases Bureau, a creation of the Colonial Office, merged its Sleeping Sickness Bulletin (of 1908) and its Kala-Azar Bulletin (of 1911), both abstract journals, and expanded its disease coverage in the new Tropical Diseases Bulletin. The Tropical Diseases Bureau (after 1926 called the Bureau of Hygiene and Tropical Diseases) was directed from its inception until 1935 by Sir Arthur Bagshawe, who recruited professionals of high calibre to scour the world's literature for relevant papers, to prepare the abstracts, and—most unusual—to comment critically (within signed brackets) on the works abstracted. Ronald Ross, not known for sparing anyone his own acerbic comments, found himself complaining to the Colonial Office "that some of the criticisms made by younger men were directed against persons of great reputation", 45 but the critiques remained. Extended review articles also appeared in the TDB from the beginning. These were noteworthy in themselves, but review articles also suggest the rapid growth or maturation of sub-fields. Note also that the TDB appeared only a dozen years after tropical medicine itself emerged, an indication of the depth and scatter of its literature, and of the need to gather the diffused information.⁴⁶

The Tropical Diseases Bureau also influenced education and research in a less conspicuous manner. In 1920, in exchange for space in the London School, the Bureau gave the School's Library its own collection of some 2,000 bound volumes (including 213 periodicals), 3,000 pamphlets, and 1,300 reports, plus new material

⁴⁴ W. W. Cort, 'Professor Henry Baldwin Ward and the *Journal of Parasitology'*, *J. Parasit.*, 1932, 19: 99–105. According to Cort, the *Journal* was intended by its founders to be international in scope, in part because it would need international support to survive. And, at one time early on, foreign subscribers outnumbered those from the United States. Furthermore, the variety and breadth of the field was always represented in the *Journal of Parasitology*; it did not focus on one speciality and exclude others. Approval of the Editorial Board was the overriding consideration in accepting papers for publication.

⁴⁵ Op. cit., note 35 above, p. 58. The quotation is from the Minutes, not from Ross directly.

⁴⁶ When Arthur Bagshawe first proposed the Bureau's expansion and the new *Tropical Diseases Bulletin*, Manson thought the scheme questionable because the primary journals might lose subscriptions and go under. He abandoned this argument when he learned that money toward costs was already forthcoming and that the Secretary for the Colonies favoured the scheme. Minutes of the Thirty-Second Meeting of the Managing Committee of the Sleeping Sickness Bureau, 27 February 1912, p. 46.

annually.⁴⁷ This arrangement doubled the Library's holdings and in time helped make it "the leading Library of Tropical Medicine in London, if not the world".⁴⁸ One can no more doubt the quiet influence of this Library on students, scientists, and visiting scholars at the London School, than one can deny the influence of John Harvard's bequest of 400 books to the struggling college in colonial New England that adopted his name.

SOME GENERALITIES

The primary journals of tropical medicine all began publication with highly principled editorial statements that underscored the perceived need for their creation. These principles and needs have not changed much, apparently, because seven of the primary journals, and the TDB, all founded between 1898 and 1914, have survived to date. By 1914, tropical medicine had not yet grown or differentiated sufficiently so as to beget the splinter journals in medical entomology, protozoology, and helminthology that came in due course. Except for presidential addresses (some of which were memorable), technical correspondence, and book reviews, most of the journals purveyed to their readers—as they still do—an unvarying diet of research papers devoted to the small subjects of which all science has been made up since 1665. Most editors of speciality journals, in or out of tropical medicine, avoided getting themselves or their journals involved in any larger affairs; such matters were and continue to be left to the large-circulation general journals. Whatever one may think of this in principle, in my view most speciality journals make for a dull read. In truth, I think that the founding editors of the tropical medicine journals were more interesting than their journals, which, with one exception, were locked into the speciality mould from the start. The exception was Cantlie's Journal of Tropical Medicine and Hygiene, in which one found original articles, editorials, reports of the British Medical Association, health reports from the Colonies, reviews, announcements of births, marriages, and deaths, and the single instruction to authors: please write clearly. The Journal, incidentally, also carried many advertisements that are interesting as social and medical indicators of the time: for example, Pulverwacker's Galvanic Bands, Admiral Soap for Reducing Corpulency, and Brandt's Fever Food, all surrounding the staid advertisement of the London School of Tropical Medicine.

Ignoring Ross's Annals of Tropical Sanitation that died in utero, and Manson's two that died aborning, consider that of the eight surviving journals no fewer than four originated under personal sponsorship (Journal of Tropical Medicine and Hygiene, Journal of Hygiene, Parasitology, Journal of Parasitology), while two were society-sponsored (Transactions of the Royal Society of Tropical Medicine and Hygiene, and American Journal of Tropical Medicine and Hygiene), one was school-sponsored (Annals of Tropical Medicine and Parasitology) and one was government-sponsored (Tropical Diseases Bulletin). According to a list compiled by Stephen Lock of all the British speciality journals that appeared in the late nineteenth and early twentieth

⁴⁷ C. C. Barnard, *History of the Library*, London School of Hygiene and Tropical Medicine, 1947, p. 7. ⁴⁸ P. Manson-Bahr, *History of the School of Tropical Medicine in London (1899–1949)*, London, H. K. Lewis, 1956, p. 90.

century, ⁴⁹ only fifteen or so have survived and four of them are journals of tropical medicine, or five if you count the TDB (Transactions of the Royal Society of Tropical Medicine and Hygiene, Annals of Tropical Medicine and Parasitology, Journals of Tropical Medicine and Hygiene, and Journal of Hygiene).

Lock points out that the Science Citation Index gives some measure of an article's impact, and that the same approach has been used to measure the impact of journals as a guide for library acquisitions. Only 136 current medical journals in all fields boast a citation rate of over two per cent, and, of these, three are in the field of tropical medicine: the Annals of Tropical Medicine and Parasitology, the Transactions of the Royal Society of Tropical Medicine and Hygiene, and the Journal of Parasitology. These journals, the argument goes, together with the other 133 on the list, should be considered for the "core" of a medical library limited in its purchasing power.

Assuming that one can identify the speciality journals considered the "leaders", we might ponder what "leading" implies. Does a leading journal really "lead" its field in some way, or does "leadership" reflect the quality of its technical papers? In other words, is a leading speciality journal the beneficiary of the "Matthew Effect" (the rich get richer; good papers drive out bad papers) or does it devote serious editorial attention to matters other than shuffling and anointing papers? My impression is that workers in the speciality trenches do not look to their journals for "leadership" except to monitor the drift and content of papers. To put the worst construction on the matter, what would happen to a speciality if its "leading" journal went out of business? Does the field become "leaderless", or are the exemplary papers picked up by some other journal(s)? And given today's practices of refereeing, one can only marvel at the body of knowledge built up in the early British and American journals that operated without visible systems of refereeing submissions. Nevertheless, much of the information published has proved valid and valuable. Some of it, of course, proved humdrum or worthless, but then the effluent of poor papers is not wholly stemmed by today's peer-processing, either.

An interesting instance of peer review involved Ronald Ross and the BMJ. In 1897 Ross submitted a brief paper when he discovered in India "peculiar pigmented cells" of malaria in two mosquitoes.⁵⁰ Ross's paper is followed by a bracketed editorial insertion that reads: "Surgeon Major Ross has been good enough to forward to us the preparations he describes. We have submitted them to Dr. Thin, Mr. Bland Sutton, and Dr. Patrick Manson, who report as follows." The three independent evaluations, which together are as long as Ross's paper, concluded that he had probably found the extra-human form of malaria. This was peer review of the original experimental material, and hence more discriminatory than any possible reviews of the paper itself. Does this episode have implications for special cases in today's world?

The late Derek de Solla Price once remarked that "In a sense, science is a sort of conspiracy that makes knowledge run faster than people."51 In that race nothing is

⁴⁹ S. P. Lock, 'Medical journals', in: J. Walton, P. B. Beeson, and R. B. Scott, eds, *The Oxford* Companion to Medicine, Oxford University Press, 1986, pp. 746-54, on p. 749.

R. Ross, 1897, Op. cit., note 14 above.

⁵¹ D. de Solla Price, 'The development and structure of the biomedical literature', in: K. S. Warren, ed., Coping with the biomedical literature, New York, Praeger, 1981, chapter 1, pp. 3-16, on p. 7.

more difficult than assessing certainty and value, whether one alludes to journals, science, or people. There are good and poor facets to most of our efforts, sometimes mixed in unexpected ways. At about the time the first journals of tropical medicine appeared, for example, Rudyard Kipling unfurled his overtly jingoistic poem called 'The White Man's Burden'. That poem has another, overlooked, facet, for in it Kipling also exhorts men: "Fill full the mouth of famine/And bid the sickness cease", words that marked the ascendancy of tropical medicine.