

Sir Ronald Ross and his contemporaries¹

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Sir Ronald Ross (Figure 1) left behind him the reputation of being conceited, quick to take offence and greedy for fame and money. He was, to a certain degree, all of those things, but they were not his only characteristics nor his most dominant ones. The Ross Archives at the London School of Hygiene and Tropical Medicine give a more rounded and more attractive picture of the man. The bulk of the published material about him gives little information after

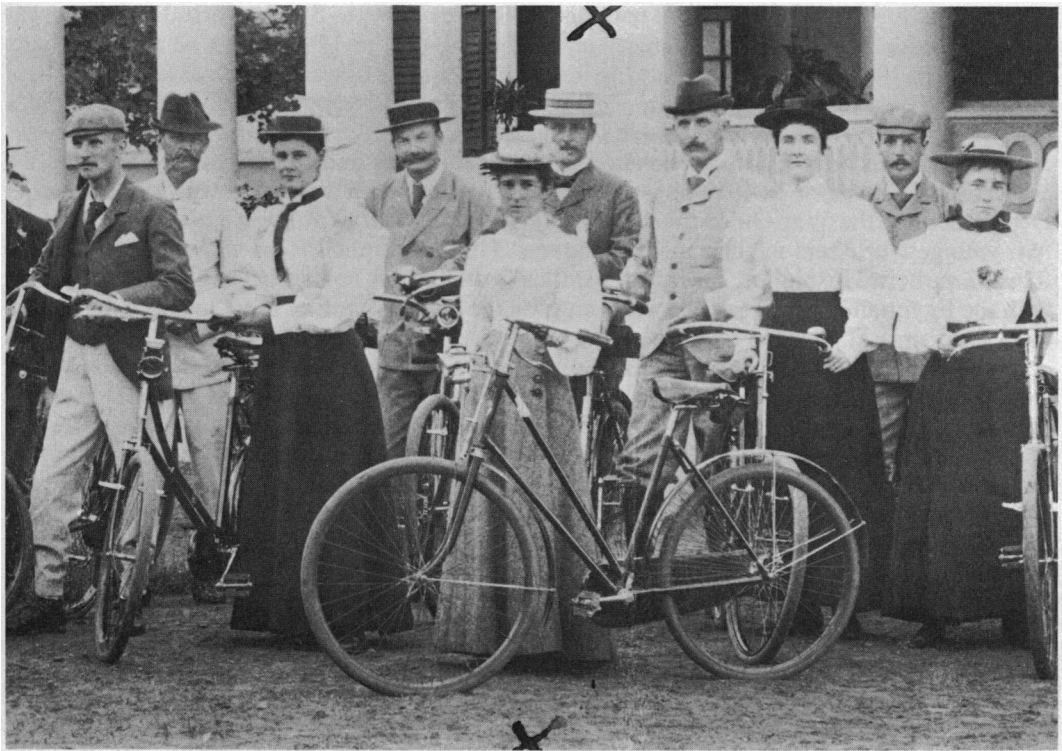


Figure 1. Major and Mrs R Ross at a meet of the bicycle club at Bangalore, about 1896. (Courtesy, Library, London School of Hygiene and Tropical Medicine)

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his famous discovery of 1897–1898. The exceptions to this are the mathematical section of the so-called biography by Rudolph M  groz (1931) and his own autobiography (Ross 1923a). The autobiography, for which he won the James Tait Black Memorial prize, gives the fullest and most accurate account of his life, but over two-thirds of it is devoted to his malaria research in India and his quarrels with the Italians. It effectively ends in 1920, although it was not published until 18 May 1923, so it does not give any information about the founding of the Ross Institute nor Sir Ronald's final visits to India, Ceylon and Malaysia.

Ross was born in 1857 and was a 'mutiny baby'. He was the eldest of ten children and eighteen years separated him from the two youngest boys who were twins. Despite being the eldest, at least five of his brothers and sisters predeceased him as well as his wife and two of their children. It would appear from the few family documents in the Archives that his marriage was extremely happy and that the Ross family was a close-knit one. Ross certainly seemed eager for his wife and occasionally their daughters to travel with him on his journeys abroad. He tried to arrange for Mrs Ross to join him at his various postings in India and one of his complaints during his six month posting in Kherwara in 1897 to 1898 was that he was unable to make arrangements for his family before he had to leave them in Secunderabad and on his arrival at Kherwara was refused leave to settle his personal affairs.

After the Ross family's return to England in 1899 there were family holidays in Scotland, Wales and Ireland in which friends such as Anton Breinl were sometimes included. There is a bill dated 26 July 1910 for a month's holiday at Aberfoyle, including a chauffeur and car, for Ross, his daughters and younger son and for three weeks for Mrs Ross and their elder son. The cost was £49!

Ross also tried to take his wife with him on some of his journeys either at concessionary rates or as part of his fee. Mrs Ross went with him to Sierra Leone, to Sweden in 1902 when he was presented with the Nobel prize, Greece in 1906 and Berlin in 1907. When he returned from Mauritius in 1908 he telegraphed asking her to meet him in London with suitable clothes for himself and they spent a few days there before returning to Liverpool. He also tried to arrange for one of his daughters to meet him in Cyprus in 1913.

Ross seems to have taken his position as eldest seriously and did his best to forward the careers of his brothers. In 1918 he was endeavouring to obtain a position with the Education Department of the War Office for his brother, General Charles Ross. He also supported his two youngest brothers in their medical careers. Hugh Campbell Ross worked briefly at the Royal Southern Hospital in Liverpool with his brother after he had been relieved of his post with the Egyptian Medical Service. Ross enlisted the help of Ramsay MacDonald who tried to have the dismissal raised in Parliament but the efforts to have him reinstated failed. H C Ross contributed a chapter to Ross's 'Prevention of Malaria' (Ross 1910) and also worked on cancer cells. Ross again came to his rescue when his work was adversely criticized (Ross 1912). H C Ross became Director of the John Howard McFadden Foundation at the Lister Institute and died of fever on board ship off Ceylon in December 1926. Ross tried to find out what had happened to him but there is no satisfactory answer to his inquiries in the Archives. Edward Halford Ross, the youngest brother, also worked in Liverpool, but as a hygienist at the Liverpool School of Tropical Medicine. This temporary post was obtained for him by Ross's efforts.

There are records of tickets for lectures at the Royal Institution being supplied to Marion Thomas, Ross's eldest sister; she also came to the opening of the Ross Institute in July 1926 as did another sister, Isabel, his brother, Charles and his wife, and his son-in-law, James Blumer. Ross paid their bills at the Hotel Belgravia.

He appears to have enjoyed the company of children, which is perhaps an unexpected characteristic for an intolerant man. He was not too busy to supply crests from his letter headings to Marjorie Hope, daughter of Professor J W W Hope of Liverpool. He brought a tortoise back from Cyprus for the children of W Carnegie Brown, which they called 'Sir Ronald' after him. There are also letters from Jean Cowan, daughter of the MP, Sir Henry Cowan, who wrote to him describing a fall from her toboggan and thanking him for lending

her his sleeping bag. Violet Simpson, daughter of Sir William Simpson, was another correspondent. He sent her a Valentine, books and chocolates. He also sent books to the children of Professor George Nuttall when they had measles in 1906.

Other letters in the Archives show that he was a man to whom others turned for help. The wife of his friend, C J Joly, the Royal Astronomer of Ireland, who died from typhoid in 1906, wrote asking him to go through her husband's papers to see if there was anything ready for publication. She was left with three small daughters in what appears to have been an uncertain financial situation and Ross gave practical advice. Mrs Carnegie Brown, who was widowed in 1913, also asked for help in sorting out her husband's papers and wrote to thank Ross and Lady Ross for their assistance.

Ross spared no effort in supporting those whom he thought wronged. He mentions in his 'Memoirs' (Ross 1923*a*) the injustice that he felt was done to W M W Haffkine, who was eventually reinstated by the Indian Government after his dismissal, but he was not successful in 1913 in the affair of Richard P Cowl who was dismissed from Bristol University. Cowl's friends alleged that he had been wrongly dismissed and Ross tried to organize a committee, consisting mainly of Members of Parliament headed by Christopher Addison, the MP for Hoxton, to call for an investigation into the administration of Bristol University. Addison raised some support from Sir William Howell Davies, the MP for South Bristol, but both Sir William and Addison withdrew when Maurice Gersthwohl, a supporter of Cowl, disclosed this to the press. Addison also complained that Gersthwohl had misinformed him and parliamentary and press support for Cowl collapsed. Ross eventually advised him to forget the whole affair and make a new start.

Ross also tried to start a campaign in support of Alfred Grünbaum, who was at one time on the staff of the Liverpool School of Tropical Medicine and subsequently became Professor of Pathology at Leeds University. It was claimed that Grünbaum discovered the Widel reaction to typhoid before Widel but had failed to publish the fact. Ross wrote a letter to the *Lancet* in his support in February 1902 (Ross 1902).

He campaigned successfully against Sir David Bruce's compulsory retirement in 1911. Ross wrote to Sir Thomas Barlow, who was then President of the Royal College of Physicians, saying that it was ridiculous that someone of Sir David's abilities should be retired. Sir Thomas applied to Lord Haldane of Cloan and Sir David was promoted which made his retirement unnecessary. Sir David Bruce and Ross corresponded intermittently for a considerable length of time. Sir David wrote from Uganda describing his work and including messages for Charles Ross, Sir Ronald's younger son, suggesting a method of killing a lion which poked its head in the door of his tent by hanging a light on the end of the gun barrel to blind it and then shooting it, and describing how his African assistants had their canoe overturned by a hippopotamus in Lake Victoria. Sir David also asked Ross on several occasions to obtain a Nobel prize for him. Ross's response is not included in the Archives but it would appear that he was not encouraging and by 1912 Sir David said that he had abandoned all hope of it.

The Archives also contain an account of the research into kala azar. Ross had done some work on this before he left India and came to the conclusion that it was a form of malaria in which a degree of immunity had developed in the patient (Ross 1899). Charles Donovan wrote to Ross from Madras describing parasites, which he had found in patients with enlarged spleens. He illustrated his letters with water colour sketches (Figure 2) which he asked Ross if he could identify. He had the advantage over Sir William Leishman as he was able to do splenic punctures. Sir William had to obtain his specimens post mortem.

Professor George H F Nuttall was another friend. Their correspondence was spasmodic as at times Nuttall objected to the intemperate attitude taken up by Ross over Italian scientists. He himself could also be intemperate as he warned Ross about Robert Koch who, he alleged, was trying to claim the credit for the mosquito malaria relationship. Nuttall was instrumental in obtaining the post of external examiner for Ross for the Diploma in Tropical Medicine at Cambridge in 1904, but Ross only kept it for two years as he discovered that the fee, which he had understood to be fixed, was dependent on fees paid by students taking the diploma.

Alfred Fröhlich, the Viennese physiologist, was a friend and correspondent of Ross's from 1901, when he and his wife met Ross in Liverpool while on a visit to C S Sherrington, until about 1911. They returned to England in 1904 and spent a holiday with the Ross family in Wales. Fröhlich clearly thought Ross's preoccupation with fishing most extraordinary and highly amusing (Figure 3). Ross and his wife visited the Fröhlichs in Vienna on their way to Greece in 1906 and a full programme was arranged for their visit which included a dinner party with Julius Mannberg, but not his wife, as Ross had suggested, because 'alas! the poor chap hasn't got a "Frau" nor ever has had so we can't ask her'.

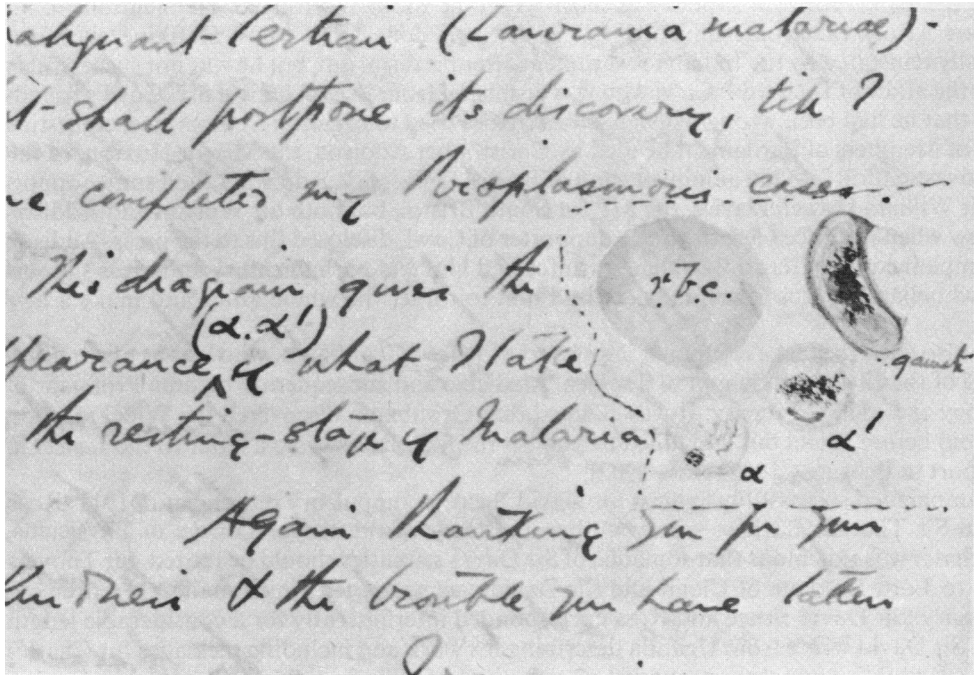


Figure 2. Sketch by C Donovan of *Leishmania donovani*, 1903. (Courtesy, Library, London School of Hygiene and Tropical Medicine)

Ross also had friends in Paris, the most notable of whom was Alphonse Laveran. Ross's letters to Laveran from India were full of enthusiasm, Laveran's were shorter and more formal. Ross's assessment of Laveran is found in the obituaries of the Fellows of the Royal Society (Ross 1923b).

Ross's dislike of the Italian scientists is well known but there are exceptions. One of these was Aldo Castellani, who turned to Ross for advice when his work on trypanosomiasis was under attack from Sir Ray Lankester. Ross dissuaded him from resigning his post in Ceylon and returning to London to defend himself. Later he gave Castellani a post at the Ross Institute and he recorded that it was Castellani who first suggested the idea of a Ross Institute to him in 1917 (Figure 4).

A man of Italian origin whom Ross heartily disliked was Louis Sambon. The trouble seems to have started with a dispute with the London School of Tropical Medicine over priority in discovering the trypanosome in human beings. There were some intemperate letters in the *British Medical Journal* and Ross noted on his cutting of a letter by Sambon to the editor: 'This was by the egregious Sambon who made all the mischief'. Later Sambon gave Ross added cause for annoyance. Having agreed to write a chapter on malaria in Italy for 'Prevention of

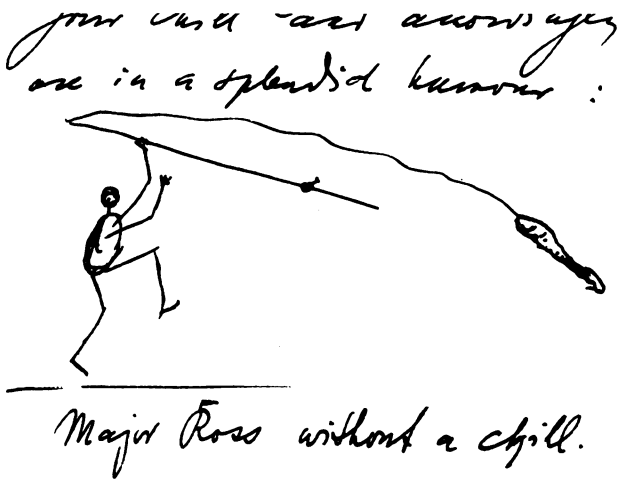


Figure 3. Sketch by A Fröhlich of Professor R Ross fishing, 1904. (Courtesy, Library, London School of Hygiene and Tropical Medicine)

Malaria' (Ross 1910) and assuring Ross that it was almost ready, Sambon departed for Italy leaving his wife to return some books that Ross had lent him and explain that the chapter was in fact unwritten. Ross had to ask Angelo Celli, with whom he had refused to share a platform at the St Louis World Fair in 1904, to rework an article which had already been published in the *Journal of Tropical Medicine* (Celli 1908) in order to fill the gap.

There was a further dispute when Sir Patrick Manson died. Ross objected to some of the obituaries including those in the *Lancet* (1922) and the *British Medical Journal* (1922) which he felt were incorrect in apportioning the credit for malaria research. Sambon wrote a letter to *Nature* (Sambon 1922) to which Ross replied in such terms that Sir Richard Gregory, the editor, refused to print his letter unless it were modified. Ross withdrew it and wrote another (Ross 1922).

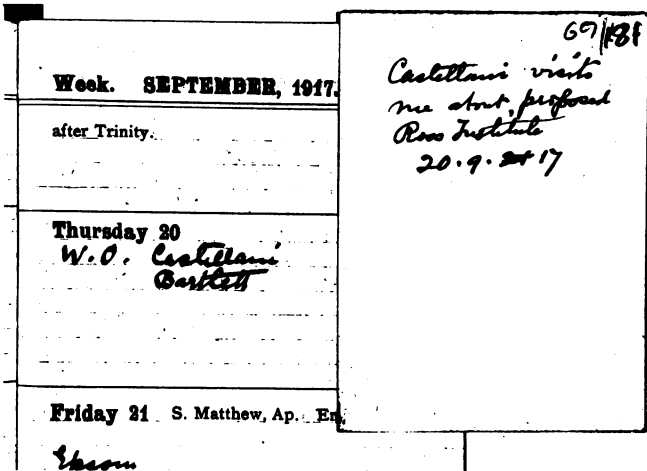


Figure 4. Note by Sir Ronald Ross with his diary entry for 20 September 1917. (Courtesy, Library, London School of Hygiene and Tropical Medicine)

Despite his volatile temper and his long memory for grudges Ross appears to have been an approachable person who was ready to help the careers of younger men. David and John Gordon Thomson were his assistants at Liverpool. David Thomson held the post of Clinical Pathological Assistant and worked with Ross on methods of calculating the number of parasites in a patient (Ross & Thomson 1910). During the First World War he went with Ross to Alexandria to work on dysentery (Figure 5). Ross tried to have him attached to his Malaria Research Unit at the 4th London General Hospital at Denmark Hill when David Thomson was working on venereal disease at Rochester Row Hospital. He was unsuccessful in this so Thomson suggested that some malaria cases be moved to Rochester Row for him to work on in his spare time, but whether the authorities agreed to this is unrecorded.

John Gordon Thomson was a research assistant in Ross's cryotherapy work. This ended when Ross moved to London, although a refrigerated room was considered for inclusion in the new King's College Hospital being built at Denmark Hill where Ross held a consultant post. John Gordon Thomson also worked with Ross during the war at his Malaria Research Unit. In December 1918 Ross said that it would be a great pity if Thomson were lost to the army, but he subsequently tried to help when Thomson's demobilization was delayed because no one could be found to take his place. J G Thomson's return was wanted by the London School of Tropical Medicine and when he still was not demobilized in March 1919 he offered to come to Denmark Hill daily to do the routine work if he could be released immediately, as he was needed at the London School of Tropical Medicine and was losing financially through staying in the army. This presumably took place as there is no further correspondence relating to the matter.

Ross's relations with his colleagues at Liverpool were not always as harmonious as those with the Thomson brothers. Sir Alfred Jones appeared to think that he owned Ross. He was embarrassed when Ross refused to go to New Orleans with Rubert Boyce to assist in the yellow

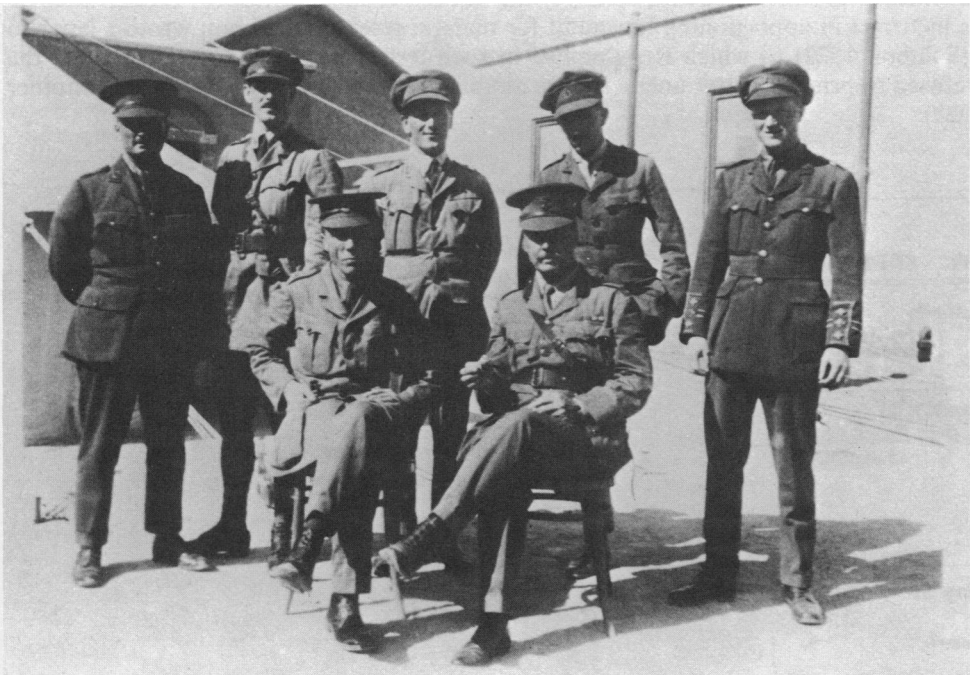


Figure 5. Photograph of Sir Ronald Ross (front right), D Thomson (second left back) and J G Thomson (third left back) taken at Alexandria, 1915. (Courtesy, Library, London School of Hygiene and Tropical Medicine)

fever epidemic and there was a further dispute over Sir Alfred's trying to obtain a post at the Liverpool School of Tropical Medicine and the Royal Southern Hospital for W T Prout. Prout had been Medical Officer of Health of Freetown, Sierra Leone, and Ross said that he had done his best to hamper his work on mosquito control there and was not suitably qualified to work at the Royal Southern Hospital. He was given an honorary post at the Liverpool School of Tropical Medicine.

Ross's final brush with Sir Alfred Jones took place in 1909 when he asked Ross to visit a Belgian notable, Baron Dhanis, in Brussels, as it was thought that the Baron might have kala azar. Sir Alfred said that he would pay Ross's fee and expenses and was most annoyed to be taken at his word. He said that Ross should charge a reduced fee while Ross maintained that the fee he charged, which was £59. 9s. 7d. including expenses, was a quarter of the normal one and the very least that he could consider. Sir Alfred reluctantly paid, saying that he did not like Ross's letters: 'They display no consideration whatever for the circumstances'.

After his return from India Ross's relationship with Sir Patrick Manson cooled. There was a disagreement between the London and Liverpool Schools over priority in discovering the human trypanosome. Ross also felt that Sir Patrick used his connection with the Colonial Office to obtain preferential treatment for the London School of Tropical Medicine. In 1912 Ross alleged that Sir Patrick libelled him in a reference for W T Prout who was applying for Ross's post. The reference inferred that if Prout were given the post the teaching at Liverpool would be greatly improved. The staff at the Liverpool School supported Ross's complaints and after fifteen months of solicitors' letters Sir Patrick apologized and paid Ross's legal costs.

There were further difficulties over the Ross-Manson correspondence. Ross maintained that he and Sir Patrick had agreed to return each others letters, although there is nothing in the Archives to indicate that Sir Patrick ever made any such agreement. Ross had possession of Sir Patrick's letters to himself and about half of his to Sir Patrick when Sir Patrick died in 1922. He discovered that his missing letters had been given to the London School of Tropical Medicine and tried to persuade the School Council to give them to him. This they refused to do, although copies were made for him, and the correspondence was not finally brought together until the Ross Institute was incorporated in the School in 1934.

Ross's friends were not limited to his scientific colleagues. He described his views in a letter to the editor of the *New Statesman* as 'sometimes ultra-radical and sometimes ultra-Tory'. It would appear that he voted Liberal as he lent his car to the successful Liberal candidate for one of the Liverpool constituencies, John Bernard Seely, during the first election of 1910, but his political friends and acquaintances covered the spectrum. Ramsay MacDonald called for action on improved sanitation in the colonies with information supplied by Ross. Ross was also acquainted with Austen Chamberlain, although Chamberlain gave him no support when he presented his petition for a grant to Parliament in 1913 and, as Chancellor of the Exchequer, Chamberlain turned it down when it was presented a second time in 1920.

Ross knew Beatrice Webb, contributing an article to an early issue of the *New Statesman* (Ross 1914), and he wrote several general articles for the *Nation*, including one which would appear somewhat surprising. During the Derby of 1913 the suffragette, Emily Dickinson, ran in front of the horses and was killed. This incident caused considerable adverse publicity as she had brought down the favourite, but in October 1913 Ross was writing that the case against women's suffrage as put by Sir Almroth Wright was not based on scientific fact (Ross 1913) as women were not mentally inferior to men and physical inferiority did not incapacitate them from voting. It was perhaps his acquaintance with such women as Madelaine Brodrick, wife of a Secretary of State for India, and Mrs Alec Tweedie, a writer and explorer, who tried to cajol Ross into visiting Woodhall Spa to rid it of mosquitoes, that gave him these opinions.

A lady, with whom Ross's acquaintance was unfortunately cut short by her death in 1900, was Mary Kingsley. Miss Kingsley's four letters to Ross are short, but just before she left for her final journey to South Africa she sent him a bottle of water, which was collected from Lake Bosumtwi by an acquaintance of hers, for analysis, as local tradition said that it caused disease. It can only be a cause for regret that the indefatigable Miss Kingsley did not live longer to

supply Ross with specimens, information and more entertaining letters than those business-like ones in the Archives.

Ross's attempts in the field of literature are well known, if rarely read, but they brought him several literary friends and acquaintances. Letters from Rudyard Kipling are included in the Archives, although they are not concerned with literary matters. Ross was a sociable man and something of a gourmet and in 1909 he tried to arrange an annual dinner for British Nobel prize winners for which Rudyard Kipling expressed enthusiasm. It is interesting that Kipling wanted a bachelor dinner with no guests, but finally said that he could not help in the organization and was not eager to travel up to London in December. Perhaps the possessive hand of Mrs Kipling can be discerned in those various statements.

Sir Arthur Conan Doyle was a friend rather than an acquaintance. He and Ross met at the house of the MP, Henry Cowan, and had medicine as well as literature in common. Sir Arthur was interested in spiritualism and in 1919 tried to persuade Ross to undertake 'psychic research'. Ross refused, saying that he had no time, and later made his views on ghosts and psychic phenomena very clear in a book review (Ross 1919) and a letter (Ross 1920) in *Science Progress*.

Sir Rider Haggard was another literary friend, and expressed his wholehearted admiration for 'Memoirs'. There was also John Masefield who was on holiday with Ross in Wales when Ross's knighthood was announced. In 1921 Ross was invited by Masefield to lecture to the Oxford branch of the English Association on Science and Poetry. Ross accepted, on condition that Masefield could guarantee that the audience would not throw eggs at him. Masefield assured him that eggs were too expensive to waste.

This paper only gives a very cursory glance at a small number of Ross's friends and acquaintances but emphasis has been laid on those who are briefly mentioned in his autobiography or not discussed at all. It can be said that a man reveals himself in his personal letters to and from both friends and enemies. Perhaps a closer acquaintance with some of the correspondence and papers which comprise the Ross Archives gives a clearer and more favourable picture of Sir Ronald Ross although it does not hide his feet of clay.

References

- British Medical Journal* (1922) i, 623–626
 Celli A (1908) *Journal of Tropical Medicine and Hygiene* 11, 101–108
Lancet (1922) i, 767–769
 Mégroz R L (1931) Ronald Ross: Discoverer and Creator. Allen & Unwin, London
 Ross R (1899) Report on the Nature of Kala Azar. Office of the Superintendent of Government Printing, Calcutta
 Ross R (1902) *Lancet* i, 332–333
 Ross R (1910) Prevention of Malaria. John Murray, London
 Ross R (1912) *Nature* 90, 102
 Ross R (1913) *Nation* 14, 93–94
 Ross R (1914) *New Statesman* 2, 778–780
 Ross R (1919) *Science Progress* 14, 331–335
 Ross R (1920) *Science Progress* 14, 440–444
 Ross R (1922) *Nature* 110, 38
 Ross R (1923a) Memoirs. John Murray, London
 Ross R (1923b) *Proceedings of the Royal Society B* 94, xlix–liii
 Ross R & Thomson D (1910) *Proceedings of the Royal Society B* 82, 411–415
 Sambon L W (1922) *Nature* 109, 681–682

Ross Archives: References to the unpublished material in the Ross Archives have not been included through lack of space. A catalogue to them is available in the Library of the London School of Hygiene and Tropical Medicine.