In these scholarly essays Greenwood includes humorous anecdotes and an occasional dig at the establishment. John Freind, a physician of the early eighteenth century, achieved fame by spending a few months in the Tower of London because he opposed the Hanoverian accession. He was beloved by his colleagues, and on his release Mead gave a dinner party after which he handed Freind 5000 guineas—fees recovered from his patients during the imprisonment. This figure (Greenwood records) was later emended to 500 since it seemed improbable that anyone could have carried home 5000 gold coins after enjoying an eighteenth century dinner. Freind's support for the status quo made him popular with the college physicians. He took a leading role in maintaining restriction of the fellowship of the college to Oxford and Cambridge graduates.

It is not only the vivid accounts of these men that make for compelling reading. They are written in a style that invites rereading in order to enjoy the felicitous use of the English language. Bradford Hill, whose own scientific papers are models of clarity and economy in the use of words, writes in the introduction: "Much as Greenwood taught me, he could not transfer to me his powers of the pen in drawing fascinating pictures of men—famous or not famous—long dead, possibly forgotten."

The Medical Dictator and Other Biographical Studies. M Greenwood. (Pp xvii+137; £40 including postage.) Limited edition of 300 copies. The Keynes Press. London: British Medical Association, 1986. ISBN 0-7279-0162-1.

## "Youth's a stuff will not endure"

## A W BADENOCH

Serge Voronoff, a Russian Jew, was born in 1866, the son of a vodka manufacturer. He moved to Paris at the age of 18, where he studied medicine. Appointed assistant to a Parisian surgeon, he became a French citizen in 1895; he then moved to Cairo, where he was a successful physician, surgeon, and gynaecologist. He wrote several standard medical works, founded a nurses' training school, and married the daughter of Ferdinand de Lesseps. In 1910 he returned to Paris, where he became a fashionable medical figure. At about this time his interest in gland transplantation began. He communicated with Alexis Carrel, a disgruntled French surgeon who had emigrated to Chicago, and achieved such great fame in animal transplants that he was awarded the Nobel prize in 1912. In 1914 both Voronoff and Carrel joined the French army and did some work together.

In 1917 Voronoff left the army and was appointed director adjoint of a biological laboratory, where he began his work on testicular transplantation. This was at first on old rams and castrated lambs. During the early 1920s rejuvenation from grafted glands was widely discussed, especially in Austria, France, Germany, and Italy, as the first world war had obliterated a large number of young men from the "élite class." In America some surgeons and scientifically trained workers were interested, but in Britain only a few centres showed any interest.

In 1920 Voronoff married the daughter of a deceased oil millionaire. She had had a scientific training, spoke English, and was fabulously wealthy. The following year, at the age of 53, he began using monkey glands on humans. In 1922 he issued a statement in the *New York Times* to the effect that he was performing numerous monkey transplants and could retard aging by some 20-30 years. He paid most of the cost of this himself, including US \$500 per monkey.

In October 1922 he was due to give a paper at the annual meeting of the Congrès Français de Chirurgie. The day before the meeting a small announcement appeared in the Chicago Tribune stating that Voronoff would make an important statement at the congrès. When the congrès duly opened at the Sorbonne the chairman announced that Voronoff's paper had been withdrawn by the organisers because, against their rules, it had been published in the press on the day before. Voronoff gave his side of the story to curious newspaper reporters, claiming that there was a vendetta against him. On the following day Paris newspapers came out solidly on his side. He also received support from several reputable surgeons and pathologists in France and abroad, and from many patients, who, as the author suggests, may have been influenced by their considerable financial outlay and loth to admit that the treatment had done them no good.

The French authorities would not allow him to breed monkeys in France so he bought the huge Villa Grimaldi in Italy, just across the border from Mentone, and at the height of his fame 50 monkeys

were kept in the grounds. In the mid 'twenties, however, Voronoff's interest again turned to gland transplants in sheep. He claimed that they would increase the size of the animal and the quantity and quality of its wool. His methods were taken up in Algeria, where 3000 animals were treated with, it was claimed, satisfactory results.



In November 1927 a delegation visited Algeria by invitation. It included four French, two Spanish, one Argentinian, one Czechoslovakian, and four British members, all of whom expressed satisfaction except the British. Professor Crew, the director of animal breeding and research at Edinburgh, reported for the British delegation without enthusiasm, stating that the findings could not

be accepted without much further proof. Henri Velu, a talented French veterinary surgeon, repeated the experiments in 1928 in Morocco and found no evidence that they worked, stating that any tissue remaining at the site of the graft was scar or inflammatory cells. Two other major studies on livestock grafting confirmed Henri Velu's work, the first in South Africa in 1930 and the second in Australia in 1931.

Several other characters are referred to and described in this book—usually quacks like Steinach, Neihans, and especially the American, Brinkley, who had no proper medical qualifications but became a millionaire by transplanting goats' testicles into men.

The main story, however, is a very good biography of Serge

Voronoff, whom the author—a well qualified transplant surgeon—presents as an enigmatic character who was 53 years old when he started dabbling in transplantation. He was then at the height of a successful conventional medical career and immensely rich. He rightly ponders on why Voronoff continued to work as he did. (He did not die until 1951 aged 85.)

This is a fascinating story and I congratulate the author not only for a careful review of transplantation in the 1920s and 1930s but also for his reasonable attitude to Voronoff.

The Monkey Gland Affair. D Hamilton. (Pp 166; £10.95.) London: Chatto and Windus, 1986. ISBN 0-7011-3021-0.

## An unequal partnership

## TONY SMITH

In the spring of 1915 Juliette Baillot, an unsophisticated Swiss girl of 19, came to England to find work as a governess. She went to an agency and was given the names of three prospective employers. The third of these, Lady Ottoline Morrell, interviewed her in the first class waiting room at Oxford Station and offered her the job. Juliette, overwhelmed by the physical and mental impact of Lady Ottoline, accepted.

Within a few months she had met most of the regular visitors to Garsington Manor, including Bertrand Russell, Lytton Strachey, Carrington, Mark Gertler, Virginia Woolf and Vanessa Bell, Katharine Mansfield, and Aldous and later his brother Julian Huxley. She sat at dinner with intellectual conversation crackling around her—and by her own account "never said a word." She was, however, strikingly beautiful, and Julian Huxley fell in love with her. He began writing to her and met her for lunch whenever theywere both in London; and shortly after the end of the war they agreed to marry.

The Leaves of the Tulip Tree is an account of that marriage, and is an honest, appealing description of a relationship that was in many ways similar to others of the Bloomsbury group—but which managed to survive until Julian Huxley's death in 1975.

Within a few months of the marriage, in Julian's first term at Oxford as a university teacher, he had an attack of depression—an illness that returned intermittently throughout his life. On this first occasion he was treated by psychotherapy; in a later attack he responded well to electroconvulsive therapy (recommended forcefully by the impressive pairing of Russell Brain and Lord Horder). Clearly Juliette provided important support on these occasions—though early in the first attack she became guilt ridden by the conviction that Julian's depression was due to their marriage (something he never suggested).

Julian Huxley was amazingly intelligent, and knew it; but like many very clever people he found it difficult to believe that he could be wrong. One of his convictions was that marriage should be open and that both partners should be free to have affairs. In 1930 Julian went on a working trip to east Africa and on the boat met and fell in love with a young American girl. He wrote to Juliette asserting his right to have an affair with the girl and made no secret of their contacts, which continued intermittently for several years. Juliette describes her misery vividly: she lost the ability to sleep and "went for long dreary walks at night, trying to kill the maggots in my brain." Friends rallied round and sent her for a prolonged visit to Baghdad. A few months later Julian decided to end his affair and the two began the process of repairing what was left of their marriage. They agreed, sadly, that they had lost its romantic core and that in the future that aspect of their relationship would have to be filled from outside. Both took lovers from that time on.

If all that sounds rather bleak it would be to give a false impression of the book and of the Huxleys' life together. Apart from the depression their first 10 years were exciting and happy—with magical interludes such as a winter in the Alps in 1927-8 with Aldous and his wife and son (and governess) and with D H Lawrence and Frieda. That winter saw Aldous Huxley completing



Juliette and Julian Huxley on safari in Uganda (1960).

Point Counter Point and Lawrence finishing Lady Chatterley's Lover and the whole group arguing and discussing every possible topic (except science, which led to Lawrence becoming enraged). Juliette travelled widely with her husband and was deeply moved by her experiences in Africa, "that mesmerising land." Clearly, too, she gained enormously from a close relationship with Aldous Huxley and from the happiness and successes of her children. Nevertheless, the final impression must be that when the heart was knocked out of her marriage life was never the same again for Juliette Huxley.

Leaves of the Tulip Tree. J Huxley. (Pp 256; figs; £12.95.) London: Murray, 1986. ISBN 0-7195-4288-X.