more catalogues than it was considered possible to list). Entries in the main section of the book are organized by manufacturer's name. In some but not all cases dates of foundation or incorporation and known addresses are provided, as well as bibliographical details of literature produced. A subsidiary listing of the libraries and collections consulted gives the names of manufacturers whose publications are represented there. Makers' names derived from the trade literature itself have been supplemented by the consultation of one city directory (Albany, New York) and the work of two British authors whose sources were principally instruments themselves (Raymond Russell and Elisabeth Bennion).

In their short introduction, the authors touch on a host of subjects—the effect of advertising on practice, the role of technicians and many more—for which trade literature forms a rich resource. Those wishing to make use of this resource now have, in this book, a useful, if partial, introductory guide.

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J. B. LYONS, Thrust syphilis down to hell and other rejoyceana: studies in the border-lands of literature and medicine, Dun Laoghaire, The Glendale Press, 1988, 8vo, pp. 294, illus., [no price stated].

This collection of fourteen essays, many of them reprinted, is devoted largely to James Joyce and his world. The author, a consultant neurologist practising in Dublin, subtitled his volume Studies in the border-lands of literature and medicine and describes his approach as "a logical extension of my clinical work". Not surprisingly, therefore, his concerns throughout are more medical than literary, and the most substantial piece, 'Portrait of a patient', consists of a detailed account of Joyce's various disorders—ocular, gastro-intestinal, alcoholic, and venereal. Four essays have to do with whether neurosyphilis can be diagnosed in Joyce himself, in one of his friends, and in one of his characters. Others deal with Joyce's doctor, diseases depicted fictionally in Dubliners, and the role of anatomy and of doctors in Ulysses. Several of the 54 illustrations are of hospitals and physicians, and there is even a reproduction of the temperature chart of one of W. B. Yeats's illnesses.

What do all these clinical facts and speculations tell us about Joyce the literary artist, the most dazzling wordsmith in twentieth-century English literature? Sadly, almost nothing. Dr Lyons had added little more than a few footnotes to Richard Ellman's magisterial biography. His interest in morbid pathology, furthermore, appears to exclude the intriguing questions concerning Joyce's psychopathology that were raised by Carl Jung when Joyce asked why his schizophrenic daughter's verbal games were not like his own: "You are both going to the bottom of the river", said Jung, "but she is falling and you are diving". Dr Lyons prefers to stay on very dry land.

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EVERETT MENDELSON and HELGA NOWOTNY (editors), Nineteen eighty-four: science between Utopia and dystopia, Sociology of the Sciences Yearbook, vol. 8, Dordrecht, Boston, and Lancaster, D. Reidel, 1984, 8vo, pp. xv, 303, £29.25, $46.00.

This collection of thirteen essays examines the historical and sociological relationships between science, Utopia and dystopia. Case studies explore the meanings of Utopia in nineteenth-century German socialism (Kurt Bayertz); early twentieth-century German eugenics (Peter Weingart); late twentieth-century pluralist democracies (Yaron Ezrahi); Alexander Bogdanov's novel Red star, about a socialist Martian society (Loren Graham); and Charlotte Perkins Gilman's tale of Herland, a feminist Utopia organized around the single goal of the preservation and growth of children (Evelyn Fox Keller). Herbert Breger discusses sixteenth-
and seventeenth-century Utopian views of *Elias artista*. Finally, Christine Woesler de Panafieu outlines the Utopian aims behind eighteenth-century automata.

J. C. Davis points out that, historically, there has always been a tension between science and Utopia: as long as science retained its capacity for altering the conditions of life, it posed a threat to Utopian society, and as members of a perfect society, Utopians had to restrain science’s innovative capacity, or risk it undermining their own world. In contrast, James Fleck’s case study of recent work in artificial intelligence and robotics suggests that Utopia and science are what he terms “complementary modalities of the same process”: Utopian ideas can legitimize and inspire scientific development, while science, on the other hand, constantly provides new results which help re-shape Utopian ideas. Helga Nowotny suggests that the tension between science and Utopia might be resolved by the quickening pace at which science-based social transformations now take place, that Utopian options are made available as never before by the huge range of choices thrown up by rapid scientific development. Both Fleck and Nowotny, like Aant Elzinga and Andrew Jamison, seek the roots of Utopian flights of imagination in the social practice of science; Ingo Grabner and Wolfgang Reiter point to the development of a new form of Utopian writing in the twentieth century—science fiction—and to the simultaneous growth in the numbers of scientists as authors of Utopian forecastings.

Michael Winter suggests that three conditions led to negative views of Utopia, all of them connected with the historical development of science around the end of the eighteenth century and beginning of the nineteenth. The first was the instrumentalization of rationality, and its separation from morality. The second was the temporalization of knowledge, the concept that a development could aim not towards perfection, but towards something negative. The third was science’s emancipation of Utopia from nature. Graham notes the dystopian elements implicit in *Red star*. Although Bogdanov wrote his novel to encourage the Russian proletariat, after the unsuccessful 1905 revolution, within the socialist Martian ("Red Star") society there were failures which neither science nor socialism could solve. Ezrahin notes the contemporary ambivalence towards science and its Utopias. He suggests that the spectacular advance of science and technology towards the end of the twentieth century co-exists with widespread distrust of the comprehensive solutions to problems at the macro-social level. The book concludes with Auden’s poem ‘Vespers’, a dialogue between arcadian and Utopian viewpoints.

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