surprisingly, this high-resolution history, which focuses more often than not on the practice of science rather than on science as a system of thought, has produced several new explanatory models: science was practised to legitimate a rising social class of marginal men; it functioned as a shibboleth of radical politics; it was used by the ruling élite to preserve its hegemony; it provided a channel for upward social mobility; etc.

To be sure, economic utility had a formative influence on scientific activity too, as Paul Weindling argues in his study of the short-lived British Mineralogicial Society. But Jack Morell shows how even in such an avowedly utilitarian set-up as that of the Geological and Polytechnic Society of the West Riding of Yorkshire the ornamental function of geological knowledge came to dominate its economic interest. Local conflicts, as distinct from national divides, were also a moulding condition. Steven Shapin stresses the peculiar position of Edinburgh as a "provincial metropolis" where the Combeites formed an alliance with the lesser bourgeoisie which nurtured local cultural ambitions. And Derek Orange examines the significance of the personality of William Turner and his Calvinist dissenting convictions for the Newcastle Literary and Philosphical Society.

In their emphasis on science as a cultural activity, many historians tend to ignore "great scientists" and "great universities" in favour of marginal men, dissenters, radicals, phrenologists, minor naturalists, the lesser institutions and societies, and the outright "failures". The further a case study can be found away from any establishmentarian apex, the more earnestly its explanatory value for the development of science will be argued. As an antidote to the earlier "great men" tradition, this is wholly good, but the new orthodoxy should not become an equal extreme of the opposite.

Fortunately, there is balance in this volume. Michael Neve's essay on scientific Bristol (1820–60) makes it clear that in the West Country science was not the property of marginal men, but the achievement of the well-established, predominantly Anglican bourgeoisie acting in alliance with the Oxbridge élite and with a metropolitan conservative culture *à la* Peel.

Two contributions in this collection are of particular interest to the historian of medicine. Both use the notion that scientific expertise functioned to consolidate or increase the social prestige of the medical profession. Roy MacLeod concludes from a study of the reform movement in the Royal Society (1830–48) that the scientific and medical establishments recognized the importance of "philosophical" excellence as a means to justify their social status. And M. Durey shows that during the cholera epidemic of 1831–32, individual practitioners came through the crisis with enhanced prestige, but that the profession as a whole failed to do so. Also of medical interest is J. N. Hays's valuable account of the London "lecturing empire" (1800–50); London scientific life was dominated by the lecture, and much of the freelance lecturing was aimed at the medical students; as medical education became more formalized, so the scientific lecturing became more institutionalized.

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TREVOR I. WILLIAMS, *Howard Florey. Penicillin and after,* Oxford University Press, 1984, 8vo, pp. xvi, 404, illus., £17.50.

It was difficult to imagine that anybody could write a comparable sequel to Gwyn Macfarlane's enthralling *Howard Florey: the making of a great scientist,* but Dr Trevor Williams has done so. Macfarlane left us at 1942, the year when penicillin became a public success, covering Florey's remaining twenty-six years in a short epilogue. Williams's *Howard Florey: penicillin and after* is its mirror image, brief on the earlier part of the career, full on the latter—when the complex mixture of the brash and the sensitive, restless and naîve, impetuous and unsure became ultimately the public smiling man, a Nobel prizewinner much sought after as a committee figure, a respected head of an Oxford college, an innovative President of the Royal Society, and a powerful formative influence on the Australian National University.

Nevertheless, Williams is right to remind us first of the transformation that Florey brought

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about to Oxford pathology when he arrived in 1935, developing a whole new programme of teaching and research and continuing it long after the penicillin story was all over bar the squabbles about priorities. Florey's characteristics, of objective honesty, research flair, and prodigious industry and technical skill, were partly innate and partly developed in earlier posts, including those at London, Cambridge, and Sheffield. Never were these more needed than in the early work on penicillin, initially only 2–3 per cent pure. And once the potential of penicillin had been recognized from the pilot trials, then much persuasion was needed to establish large-scale production and use—something that could be done only by the man at the top. Florey did this consummately well, travelling widely, to the USA, to the battlefields in North Africa, and to the USSR; it was something he always enjoyed and he was to continue with often gruelling schedules until the end of his life.

Ultimately, however, the popularity of a scientific biography does not wholly rest on its subject's achievements—men (such as Lord Adrian) with comparable merits instantly spring to mind who have not been commemorated in this way. Like the Bloomsbury movement in literature or the struggle for priority in establishing the genetic code, part of the attraction of a book about Florey must be the personalities concerned. What emerges from Dr Williams's beautifully written and scholarly book, and Macfarlane's recent sequel on Alexander Fleming, is that the Nobel committee got things right by splitting the award among the three principals. We now need a biography of Ernst Chain to complete this eternal triangle.

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PIERO CAMPORESI, *La carne impassibile,* Milan, Il Saggiatore, 1983, 8vo, pp. 300, L.25.000 (paperback).

We lack integrated historical accounts of attitudes towards the body—popular, medical, ecclesiastical, aesthetic, and so forth—in the development of Christendom and then in post-Christian culture. In 300 pages, Camporesi cannot be expected to have written the definitive, fine-textured account of this vast and intriguing theme, but he has produced a work, novel, exciting, provoking, which raises all the key questions and provides some suggestive hypotheses. Camporesi's point of entry is to probe some of the fundamental paradoxes within Christian theology and culture. On the one hand, distrust of the flesh. On the other, the doctrine of Christ incarnate. Put together, they lead to an uneasy conjoining of attitudes in which (with one breath) the distrust for the distastefulness of the flesh is continually emphasized—man riddled with worms—leading to orgies of mortification; while (with the next breath) Christianity also felt obliged to glory in incarnation, in the flesh, not least as an anti-Manichean ploy. Hence a whole range of popular and ecclesiastical miracles actually centred on the *wonders* of the flesh (corpses that wept, bled, moved, that never decayed, despite the decay of all flesh). Hence Christianity, in some of its popular medieval phases, became (Camporesi argues) a religion approximating to flesh-worship, with its endless preoccupations with the bones of the saints, with burial procedures, with opening coffins, and the like.

So central to Camporesi's book is a fundamental ambivalence in Latin Christendom: a distrust of the flesh that engenders a fascination for the flesh, amounting at times to obsession, fully as morbid and Romantic as those sentimental and erotic modes of infatuation with death which we associate (via the work of Praz and Ariès) with "the Romantic agony" of the early nineteenth century. This provides the jumping-off point for a whole range of fascinating, labyrinthine investigations into subsequent practices concerning, and doctrines regulating, the flesh. The account is broadly chronological. Camporesi casts his net extremely wide; he takes in dimensions of the history of saints and martyrs, fads in food, not least the semeiology of meat and vegetables, bodily eroticism, embalming practices, the hagiography of convulsionaries and similar ecstatic religious movements (he asks whether trances were induced by food cults, and comes up with no clear answer)—and much more besides.

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