

Blackett: Physics, War and Politics in the Twentieth Century By Mary Jo Nye
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This is the text of a book review which was commissioned by the IET but did not appear in print. Perhaps they had been expecting something anodyne and found this was too hard-hitting,

Every book has a purpose and an audience - or at least it should have. In the case of Ms Nye's book on Blackett, neither of these are quite clear, which is perhaps why this reviewer has found it so difficult to arrive at an unequivocal view. It was fortunate that it contained much reference to "Patrick Blackett: Sailor, Scientist, Socialist" edited by Peter Hore and herein was found an alleviation from these difficulties. Tam Dalyell in his Foreword to that book opens with a statement:

"Patrick Maynard Stuart Blackett was, quite simply, the most personally formidable man for whom I have ever worked - or, indeed, whom I ever met, at close quarters."

He was indeed a giant of a man whose claim to fame could have made on the basis of any one of his many achievements: a Nobel prize for work on nuclear physics, the father of Operational Research, a pioneer in paleomagnetism and a major contributor to development of science in India. He was also the conscience of world science, not afraid to be unpopular when developments in the nuclear arms race were at odds with his Fabian socialist principles.

Hore's book is a collection of essays, mostly written by people who knew Blackett. It is of particular interest in that it covers his time in the Navy, his contributions during two world wars as well as his scientific work. Blackett the socialist, at odds with western governments for fuelling an arms race which countenanced total annihilation is largely addressed in chapter 14, a contribution written by Ms Nye. Even here we get some indication of the difficulties that are encountered in the book which is the subject of this review. She gives an impression of an outsider looking in, looking at an Establishment figure in an environment that she does not appear to fully comprehend. She also writes in isolation from the rest of the book, summarising much of what has been said elsewhere. However, once into the core of her thesis, she is illuminating, even if this reviewer found himself at odds with her choice of chapter title. It could be argued that "A Physicist in the Corridors of Power" is precisely what Blackett was not when he was Blackett the socialist opposing the nuclear arms race.

Having made a valuable contribution to Hore's book one wonders why Ms Nye thought it necessary to revisit her subject, albeit on a larger canvas? A clear statement at the outset could have helped. Did she perhaps feel that there were issues that had not been fully clarified? There is indeed much work to be done on Blackett, but this reviewer believes that there is also a need for time to pass, so that the bigger picture can be assessed with the benefit of 20-20 hindsight. Her book represents a step in this direction. It comprises a set of essays which are more evaluative than the various chapters in Hore, where many of the authors could be deemed to have been 'too close' to be impartial. However, in choosing to be thematic rather than chronological, there is a problem which few authors (except perhaps Cornelius Ryan in "The Longest Day") overcome. Parallel histories require repetition of detail or worse, the use of tedious cross-referencing. Ms Nye has chosen the former option, but a more subtle use of reminders might have reduced an occasional sense of irritation.

In addition to statement of purpose, an indication of intended audience would have helped. One can't help feeling that she never gets inside the socio-temporal aspects of Blackett, but maybe this is no bad thing. In attempting to teach the history of science/technology to undergraduates this reviewer has been faced with the difficulty of communicating into a knowledge vacuum, a complete ignorance on

the part of UK students that there ever was a British Empire and that it had a global impact on developments in science and technology. For those who remember Empire and its scientific achievements, the almost biblical listing of eminent scientists, and politicians on the edges of science is uplifting. Nevertheless, there will come a time when anyone assessing Blackett will be an outsider, so that this book is probably for them.

There are many curiosities. The introduction "A life in Controversy" and the conclusion "Style and Character in a Scientific Life" have been held outside the six enumerated chapters. Nevertheless, in substance, they are chapters in their own right. As stated in the case of her contribution to Hore's book, this reviewer found himself at odds with choice of titles throughout the book. Maybe if it had been "Physics, War and Politics in the Twentieth Century, the case of Patrick Blackett" then the pervading sense might have been different. The second last chapter is a case in point, because initially this reviewer was lulled into thinking in miniature. A title "Scientific Leadership" conjures up ideas about how to run a research group, a university department etc. However, it soon becomes clear that the author is considering a world leader in science. Interesting though they are, lengthy digressions into topics such as the process of nomination for a Nobel Prize hide the main thread, but other topics such as the divergence of opinions between Blackett and Salem are fascinating. Blackett the international scientific advisor "advocated as immediate priorities the purchase of First World technologies by Third World countries and the organisation in underdeveloped countries of science education and research centres closely linked to technological development rather than to fundamental research." On the other hand "Salem argued that fundamental basic research must be supported in underdeveloped countries both to prevent the brain-drain of which he was an example and to ensure that technologies are not simply purchased by their buyers as black boxes that are not understood by their users." The arguments still rage, but current developments in India and China give some indication as to who might have been right.

The Conclusion is absolutely fascinating in so far as it goes, but questions are raised which are left unresolved. The author sets out to consider what makes a great leader in science and presents many facets in her discussions. However, what is particularly curious is that Blackett does not appear to fit into the mould. Does he perhaps redefine the mould? Maybe a consideration of this could have turned the chapter into an entire book.

In summary, this book is a 'must', but it really requires ancillary (background) reading. There is no doubt that author is at her best when writing in miniature. In the closing lines of her contribution in Hore's book she states:

"This identity probably helps explain the personal confidence (some said 'arrogance') and the sense of duty that led Blackett to take the unusual course among scientists of opposing his country's atomic weapons policy immediately after the Second world War. Blackett's status as an officer, a gentleman and a scientist in a small elite of Englishmen, who were well known to each other, ensured a hearing in the corridors of power, however controversial his views on war and politics."

What a perfect description of the man and his time!