*Quantifying Counterfactual Military History.* Brennen Fagan, Ian Horwood, Niall MacKay, Christopher Price, A. Jamie Wood. ASA-CRC Series on Statistical Reasoning in Science and Society. Abingdon, Oxon: CRC Press, 2024. ISBN 978-1-1385-9238-4. Illustrations. Appendix. Bibliography. Index. Pp. x, 238. £47.19 (hardback).

While interesting, worth a read, and commendable for its brevity and for the clarity with which methodology and statistics are introduced, this book is somewhat of a disappointment. This is a reflection not on its discussion of modern statistical techniques, but rather as a result of its limited and somewhat simplistic account of counterfactualism, and, indeed, military history. As I tried to show in *Other Pasts, Different Presents, Alternative Futures* (Indiana University Press, 2015), a work the authors have neglected to consider, counterfactualism (like indeed war, strategy, geopolitics) is culturally varied in that the understanding, historiography and practice of the concept varies greatly by culture, country, time and specialization. This is an inconvenient situation for those who seek to apply scientific and mathematical approaches and methods based on the idea of the world as an isotropic surface. Ironically, of course, the latter is not only the antithesis of counterfactualism but also of the role of human variables. These are not only the case in the conduct of war and strategy, and also in the conceptualisation and understanding of both. However, the book under review has space for photos, for example of Westmoreland, the *Barham* and SS4 ballistic missiles, but not for example of Chinese and Indian understanding, modern or past, of counterfactualism.

So this book is seriously limited as a discussion of counterfactualism. What of the case-studies? The four are of considerable interest, and each is well-worth reading: Could the Germans have won Jutland? and the Battle of Britain? and the Americans have prevailed in Vietnam? The last, 'The Road to Able Archer' Counterfactual Reasoning and the Dangerous History of Nuclear Deterrence 1945-1983,' is differently ambitious and sees an application of asymmetric dilemmas as part of a sophisticated handling of game theories. The authors argue that there is a danger of using models because they are available rather than because they are right or enable a better decision to be made. For Jutland, there are a host of variables, including whether, had *Seydlitz* not suffered its explosion at Dogger Bank, German battle cruisers might have had sufficiently greater flash risk to cause probable losses at Jutland. The detailed counterfactuals employed with considerable success and drawing on good knowledge of the battle lead to the conclusion that the pursuit of 'alternate Jutland's will never result in any meaningful historical insight. Much weight is placed on the size of the British fleet, a situation derived from pre-war policies.

For the Battle of Britain, a lack of strategic insight on the part of Hitler is seen:

"... in the case of both Hitler and Goering, what began as a restrained counterfactual was pulled by the data towards something stronger, amounting to a single person acting and deciding differently in ways which, while perfectly feasible, would have been out on a limb of the tree of possibilities' (92).

Yet, the emphasis on what is termed 'crunching the numbers in battles of attrition' (93) has many problems. There is the need to focus on fighting methods, the difference between offence and defence, and other issues to which the authors, while aware, arguably devote insufficient attention. For Vietnam, it is claimed that American decision-making 'became a prisoner of it's a *priori* assumptions' (139) which seriously underplays the range of relevant factors at both strategic and operational levels. A very interesting volume indeed and one that reveals the serious problem with data analysis and the 'danger of hubris' (188). The conclusion focuses on the extent to which, despite their intentions, personalities matter.

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