warfare: an array of scientific rationalities, techniques, frameworks of interpretation and intellectual dispositions that have characterised approaches to the application of socially organised violence in the modern era. Antoine Bousquet delves into four distinct regimes of the scientific way of warfare, each of which is characterised by a specific theoretical and methodological assemblage: mechanistic, thermodynamic, cybernetic and chaoplexic warfare. Tracing the history of technology he argues that at the core of every scientific regime we find an associated paradigmatic technology, namely: the clock, the engine, the computer and the network.

Comprising seven chapters, the book analyses each scientific regime by charting its emergence and drawing out its fundamental principles and assumptions, and then investigates its impact on military organisation and war. It foregrounds the relationship between ideas of order and chaos with the theories and practice of warfare and science. The notions of discursive formations and abstract mechanisms of operation are called upon to provide a combined treatment of both the material and ideational dimensions of socio-cultural change.

Beginning his historical study, Bousquet first examines mechanistic warfare. The invention and dissemination of the clock and clockwork mechanism are related to the first major scientific body of ideas constituted by the principles of mechanism and Newtonian physics. The novelty of this argument lies in the subsequent discussion of Frederick the Great’s Prussian army as the epitome of mechanistic warfare, in which soldiers are heavily drilled and disciplined to execute preordained manoeuvres on the battlefield. Bousquet then discusses thermodynamic warfare and the appearance of the engine – first driven by steam and later by internal combustion and electricity – placed within the context of the industrialisation and modernisation of Western societies.

Next the analysis focuses on the genesis of the computer and electromagnetic communication technologies, alongside their applications in the military context. The author charts the ascendancy, dominance and subsequent failure of cybernetic warfare in Cold War America and the concomitant development of the informational paradigm. Chaos theory and complexity science are presented here, with particular attention to the manner in which they have grown out of cybernetic ideas yet have also forged a new body of ideas with a wide-ranging effect on both the natural and social sciences.

The analysis concludes by considering the implication of these new scientific ideas for military theories and practice and postulates the emergence of the latest regime of the scientific way of warfare: chaoplexic warfare.

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In 1959 the British physicist and novelist C. P. Snow observed not merely a growing rift between ‘the two cultures’ of the humanities and science, but even a breakdown of communication across disciplinary boundaries, which he considered to be fatal for the solution of global problems. To a certain extent, Richard Bronk’s book The Romantic Economist: Imagination in Economics can be read as a tentative solution to the conflict outlined by Snow: Bronk draws lessons from Romanticism which could be the basis for an economic approach to human behaviour that is intelligible to scholars beyond the cultural rift in academia. The bridging element between social science and the humanities, so to speak, is the individual’s imagination, a faculty necessary to both the Romantic artist and economic actors. This fact is entrenched in the history of economic thought, which Bronk believes to adhere nowadays to a mechanical view of human action.

The first part of the book delineates how, in light of the development of the ideas attributed to it, Romanticism could not easily be labelled as anti-rationalist. Bronk shows how John Stuart Mill tried to find a way to unite rationalism and the ideals of Romanticism, and how in the evolution of political economy various streams of thought existed that opposed a solely rationalistic approach. This journey through the history of ideas closes with a summary of Romanticism’s four lessons for economics. These include: (a) ‘the importance of organic rather than mechanical metaphors’; (b) value pluralism and incommensurability; (c) the importance of imagination and sentiments as well as reason; and (d) ‘the key roles played by language, perspective, metaphor and imaginative intuition in mediating our
perception and understanding of the world we live in’ (p. 87). While the book’s second part identifies various innovations in economic theory that already consider the lessons of Romanticism, Bronk has further alterations to suggest, some of which are controversial, such as the idea of forgoing any attempts at forecasting future developments. What would also have been interesting, however, is to know how Bronk views more recent theoretical approaches such as behavioural economics.

With a touch of self-mockery, Bronk describes his undertaking as ‘intellectual schizophrenia’ at the outset (p. 1), but he disproves any such allegation in the course of his challenging treatise. The book is one of the rare samples of a truly interdisciplinary inquiry which will appeal both to social scientists and to scholars of the humanities.

Claudia Franziska Brühwiler
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There has been a run of accessible and lengthy studies of the history of communism published over the last few years, no doubt because of the twentieth anniversary years of 1989 and 1991. Archie Brown’s book divides the topic into five sections: the early history (Marx and Engels, the Russian revolution and Stalinism, the nature of the communist system); the period of ‘communism ascendant’ (the Second World War and the spread of revolution to China and Eastern Europe); the post-Stalin reforms (including the spread of communism to Africa, other parts of Asia, and Cuba); ‘pluralizing pressures’ (dissent in Eastern Europe, Chinese reform post-Mao and the pressure to reform created by competition from the West); and the collapse of communism (Gorbachev’s reforms, 1989 and all that, and a postscript on whether communism still exists).

The ground covered is much the same as that in the other recent books on the subject. All these studies of communism have been weighted towards the USSR, China and Eastern Europe than some of the others. There is some logic to this, of course. The decline of communist power in Eastern Europe in the late 1970s and early 1980s had greater impact on Soviet decisions to reform, and hence on the collapse of communism, than the tragedy of Pol Pot’s genocidal brand of ultra-leftist nationalist Maoism. But occasionally the balance of the book leaves the impression of some things unsaid. In particular, what explains the differences between communist regimes is not as fully explored as it might be – despite Brown writing directly about what constitutes a communist regime – because some cases are passed over quite quickly. The upside to this, however, is that there is a lot of erudite detail about the day-to-day experience of Soviet and East European communism and, as one might expect from the premier chronicler of Gorbachev’s rule, there is a great deal of material on the collapse of the USSR and Gorbachev’s personal role in starting and shaping the Soviet reform process. Moreover, the book is well written with flashes of mordant humour and sufficient records of personal foibles and institutional stupidity to keep the reader going through some dreadful moments of recent human history.

Neil Robinson
(University of Limerick)


This monograph is part of Routledge’s ‘Global Institutions’ series and represents one of the very few studies of the ‘Olympic system’, and it therefore fills a void in the literature on the governance of sport. This is a fascinating topic, and certainly one that merits the attention of scholars working in the field of politics. On this occasion, however, the authors have delivered an overwhelmingly descriptive account which offers little in the way of critical analysis of the ‘Olympic Movement’s’ governance system. It seems that this may not have been the authors’ intention, as they only seek to analyse ‘how the system functions … and whether it will survive in the 21st century’ (p. 2). Consequently, after the statement of an objective that is too limited in its scope, the book details this system by providing an abundance of facts to...
Since economies are dynamic processes driven by creativity, social norms, and emotions as well as rational calculation, why do economists largely study them using static equilibrium models and narrow rationalistic assumptions? Economic activity is as much a function of imagination and social sentiments as of the rational optimisation of given preferences and goods. Richard Bronk argues that economists can best model and explain these creative and social aspects of markets by using new structuring assumptions and metaphors derived from the poetry and philosophy of the Romantics.