PAUL ERICKSON, JUDY L. KLEIN, LORRAINE DASTON, REBECCA LEMOV, THOMAS STURM and MICHAEL D. GORDIN, **How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality**. Chicago and London: The University of Chicago Press, 2013. Pp. viii + 259. ISBN 978-0-226-04663-1. £24.50 (hardback).
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How Reason Almost Lost Its Mind is a collaborative effort of six authors, with its origins in a workshop held at the Max Planck Institute for the History of Science in Berlin in 2010. The book is dedicated to tracing Cold War rationality as a specific intellectual formation in a distinct historical context represented by specific actors. The volume sets out to understand the Cold War as a distinct period in the history of science, specifically 'a chapter in the long history of reason' that was characterized by the prevalence of a distinct form of rationality (p. 7).

How Reason Almost Lost Its Mind is a jointly authored book comprising consecutively numbered chapters rather than being presented as a collection of individual contributions. As the volume's main aims are to write the biography of Cold War rationality and to show how this specific style of thinking became persuasive and pervasive in a wide range of scientific disciplines, the chapters mainly focus on situating individual scientists, their ideas and their concepts in their historical context. In doing so it focuses on American scientists exemplarily, laying open the conscious decision to largely exclude the Soviet side. The volume convincingly argues that Soviet Cold War science was missing the characteristic degree of institutional concentration of forces that can be observed within the American context and gave Cold War rationality its shape.

In order to situate Cold War rationality in the wider context of the history of reason the first chapter engages in definitional work and uncovers the roots of this specific style of thinking. It mainly traces these roots to the nineteenth century, especially the shaping of algorithms as tools of automated rationality. The chapter argues that Cold War rationalists seem to have perceived themselves as standing in the tradition of the Enlightenment. The main difference, however, and this argument is essential to the volume as a whole, lies in the relation between reason and rationality. While thinkers of the Enlightenment and beyond thought of reason as a corrective for rationality, the scientists of the Cold War seem to have reversed this relation by considering rationality the guiding principle for reason. Algorithms, with their capacity to produce rationality seemingly untarnished by human errors, were considered ideal tools for this approach. This reversal, the volume argues, is one of the main characteristics of the period in question and hence of the intellectual formation of Cold War rationality.

Chapters 2 to 6 focus on case studies of Cold War rationality in action. The authors mainly use a combination of biographical information on individual scientists and explanation and interpretation of key theoretical concepts. Each chapter aims to show how Cold War rationality took hold in a specific context. The examples range from operations research during the Second World War and the Berlin airlift (Chapter 2) to the search for 'the situation', a prototypical experimental design in the context of behavioural sciences to analyse social behaviour (Chapter 4), and finally the fragmentation of Cold War rationality during the 1980s in the face of the introduction of irrationality into its concepts (Chapter 6). Cold War rationality serves as a unifying theme for the narrative which highlights the emergence and demise – the 'career' – of this style of thinking. The chapters offer new perspectives on already well-known examples, such as the persuasiveness of the prisoner's-dilemma matrix (Chapter 5), but also focus on lesser-known cases and protagonists. Through the course of the book a way of thinking specific to the Cold War takes shape. An equally important result is that the scientists of the Cold War era could be, at once, the main exponents and the sharpest sceptics of Cold War rationality. This circumstance becomes especially poignant in the examples of Irving Janis and Charles Osgood (Chapter 3). Both pointed at the factor of irrational behaviour in human decision-making, thus providing a counterpart to rationality, which in turn contributed to moulding and stabilizing Cold War rationality as a concept.

With examples like this the volume neatly demonstrates the persuasiveness of Cold War rationality and never falls into the trap of idealizing or demonizing single actors.

Overall, *How Reason Almost Lost Its Mind* succeeds in carving out the specific place of Cold War rationality within the history of science. It gives a convincing display of its roots, idiosyncrasies and 'strange career'. The focus on individual scientists, however, could at times have been broadened a little to make an even stronger case for the persuasiveness of Cold War rationality. Furthermore, glimpses at popular culture are made throughout the book but remain just those. The consideration of phenomena outside the immediate scientific realm – a chapter on representations of science in fiction springs to mind – could have further enriched an already highly fascinating and very well-executed volume.

All in all, with its far-reaching implications, *How Reason Almost Lost Its Mind* can be considered essential reading for those interested in not only the history of science during the Cold War but also the intellectual and cultural history of the second half of the twentieth century in general.

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Harry Collins, **Are We All Scientific Experts Now?** Cambridge: Polity Press, 2014. Pp. vi + 144. ISBN 978-0-7456-8204-4. £9.99 (paperback).
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Harry Collins is an expert on the topic of expertise, a subject about which he has been writing for more than thirty years. His latest book offers an up-to-date taxonomy of the word 'expertise' as he answers the question posed by his book's title: *Are We All Scientific Experts Now?*. What readers might find surprising is the context in which he answers the question – partly autobiographical and partly a historical view of the field of science studies.

The book begins in 1951 with eight-year-old Harry standing underneath the Skylon at the Festival of Britain. It 'was a thrill for a kid to stand directly underneath, thinking that if scientists and engineers were not so clever the massive object would spear down through the top of my head' (p. 1). But things went wrong, recollects Collins, with scientific and technological failures – 'in food science, veterinary science, medicine, economics and weather forecasting' (p. 9) – visible to everyone. If science and technology are so fallible, does that lead to the conclusion that everyone can be a scientific expert? Maybe ordinary citizens really can make scientific and technological decisions as good as or better than those of scientists and technologists – *default expertise*.

By the early 1970s, Collins writes, what he calls 'Wave 2' of science studies had begun. The starting point was Thomas Kuhn's *Structure of Scientific Revolutions* (1962). According to Collins's interpretation, the point that emerges from Kuhn is that since the world changes according to how scientists think about it, the world no longer can be viewed as a fixed point. Wave 1 of science studies took experimental and observational data as unproblematic. Wave 2 argues that we no longer can be sure from experiment and observation what is true and what is false. Scientific knowledge suddenly becomes more like religion and art. A new field called sociology of scientific knowledge (SSK) began to grow. The kid disillusioned about science rightfully claimed a place as one of the founders of the field disillusioned about science.

Decades later, Wave 2 of science studies has recognized the need to 'treat science as special without telling fairy stories about it' (p. 81), which becomes the project of Wave 3, with its focus on the skills, experience and expertise of the practitioners. The spirit of science may be divine but not the scientists. Interestingly, Collins mentions that Kuhn was anticipated by Ludwik Fleck's book *Genesis and Development of a Scientific Fact* (published in German in 1935), at the time relatively unknown. (Fleck's book probably would have remained unknown without Kuhn arranging its translation into English.) Kuhn's idea of scientific revolutions was absent from Fleck's work. Had Fleck been appreciated before Kuhn, then the proper focus for