BOOK REVIEW

The Virtues of Openness: Education, Science, and Scholarship in the Digital Age, by Michael A. Peters & Peter Roberts, Paradigm Publishers, Boulder, 2012, 171 pages, ISBN-10: 1594516855

Reviewed by Dr Robert Shaw, The Open Polytechnic of New Zealand

Peters and Roberts identify the intellectual origins of ideas that drive our practices of science and education. As they say: '*The Virtues of Openness* investigates the social processes and policies that foster openness as an overriding educational and scientific value, evidenced in the growth of open source, open access, open education, and their convergences that characterize global knowledge communities' (p. 4). The book is primarily about modern science and education, and it relates digital initiatives in these domains to social and economic developments. The authors argue for a concept of openness that has the potential to consolidate and federate our thinking about modernity.

Peter Roberts is a professor at The University of Canterbury. Michael Peters is at The University of Waikato, although many know him because of his professorial appointments at the University of Glasgow and the University of Illinois Champaign Urbana. Some of the best examples in the book are drawn from New Zealand practices.

At last we have is a credible attempt to conceptualize the forces that disrupt our professional work and alter our environment. Diverse concepts of openness – open access, open education, open source, open journals – are apparent everywhere we turn – including monotonously, in the outpourings of marketing and promotional agents, yet their relatedness, relevance and integration have not been significant topics of erudite enquiry. The authors of this book set us on a path to rectify this deficiency in scholarship.

This book has eight short chapters. The first, 'Open scientific communication' examines the history of scientific communication and technologies dubbed 'open'. The chapter locates 'open science' as an aspect of an emergent global 'science system'. A profound chapter of the book is Chapter 2, 'The philosophy of open science', for it is here that the Peters–Roberts concept of openness shows itself in an historical context and through concrete examples. The philosophical idea of openness (in the language of continental philosophy, the individual human being stands open to experience, criticism and interpretation) confronts the 'digitization and logic of open systems' (p. 31). This confrontation alters science, politics and the economy – in short, it alters our culture. The essence (if we dare use that word) of openness is *freedom*. New dimensions of freedom, or expanded and enhanced old dimensions, become available to the individual through diverse digitization procedures. The ability of individuals to create, access, modify, publish and distribute intellectual products alters the foundational disciplines of modernity, particularly science and education. What is more, the genie is out of the bottle, there is no going back to an earlier age. When people experience freedom the demand for freedom grows. The critical disciplines are science and education, at least according to Peters and Roberts, but learning in those domains is heuristic and thus proliferates.

This line of thought – about openness and science – has historical antecedents and it is not possible to do justice to them in a review; however, some examples will indicate the flavour. After the authors genuflect to Popper and recognize the centrality of openness in his work (primarily the openness of the individual participant in science and politics), they boldly declare their allegiance: 'The classic work that philosophically develops openness as a central idea is the *Philosophical Investigations* by

Ludwig Wittgenstein (1953)' (p. 37). Wittgenstein, they say, does more than most to underscore that there is no set of hard-wired rules foundational to our language or our way (form) of life. There is no closed system that binds human beings to a way of functioning. Kant and Heidegger held reservations about such a view, but primarily those reservations were in relation to fundamental ontology.

The third chapter, 'Openness as an educational virtue' begins with an elaboration of the traditional notion of virtue, which the authors support. All the usual players contribute, from Aristotle to Lao Tzu. The uninspiring conclusion is that openness includes, but is not limited to, open-mindedness (p. 45). The importance of this chapter is that it shows us where to look if we want to think seriously about critical topics. Where in Popper, MacIntyre or Rorty should we look first if we wish to read what is relevant to our own situation? Students will find the guidance helpful. As you might expect from Peter Roberts, an acknowledged authority on Paulo Freire, the discussion of Freire is more extensive. Chapter 3 concludes with a brief statement on limits and possibilities – it suggests, but does not specifically raise, many academic concerns. These include, for example, the notion of openness and limits in discussions by Kant (particularly in relation to the human limits of modern science), Husserl (work on how we establish boundaries) and Heidegger (with his celebrated analogy of a light shaft in a pine forest).

Chapter 4, 'Open education and open knowledge production' brings to us a perspective on the relationship between publishing, knowledge, education and ultimately our own engagement in institutions. Chapter 5 continues the same subject under the heading 'Scholarly publishing and the politics of openness'. The challenge of digitization and openness could hardly be more profound. It is a challenge to our industrial, resource-driven, economic way of life. Neo-liberal economics is perhaps the most well-known theoretical expression of Western industrial metaphysics that has a hold on us all. Irrespective of the theory, citizens in the West are in the grip of near universal practice, which is being seriously frayed at the edges by the practices of openness. Knowledge cultures have political and economic dimensions, which we can sense in our everyday lives. Peters and Roberts set out the conflicts that become apparent when open practices confront economic traditions that are often enshrined in law and that may appeal to commonplace concepts of justice and fairplay. Some of these are well known, such as the confrontation between file sharing practices and the traditional concept of ownership as applied to authored works and software. Peters and Roberts work their way through a dazzling list of similar situations, particularly in relation to science (e.g. the ability of a researcher to disseminate raw data or to self-publish 'preliminary' findings) and education (the dissemination of course materials and podcasts from major universities). The conflict between performativity in higher education, as expressed through credentialing systems (sometimes erroneously called universities), and the human desire to genuinely understand phenomena, gains attention (pp. 78–86, develop concrete examples). Such practices fray the edges of capitalism and may well inaugurate a post-industrial era. We would be foolish to ignore the examples the book cites, each of which cries out for further elucidation and some 'tracking'.

Chapter 6, 'The open book and the future of reading' provides a useful summary of the challenges to print and reading that confront us all. Those who teach on the internet are likely to have strong views about this chapter. Many of its stories, such as those that relate to the political economy of reading, are unfolding before us in our daily news. The book concludes with heavily referenced chapters on 'Open cultures and open learning systems', and a final chapter (Chapter 8) that develops ideas about Wikipedia with the help of an analysis of Herman Hesse's famous book *The Glass Bead Game*.

There are three reasons why university teachers of business and management should read this book. First, it provides a bridge between the technical world that engulfs us all, modernity and ethics. Second, it refreshingly contrasts with many other books about the internet and management. Third, it is an important resource for senior students who want to write about current developments but find it hard to relate them to intellectual traditions.