some powerful output. What was most appealing about using the book as an upskilling resource, however, was its open-endedness. The capacity to expand on any of the procedures outlined in the book is extensive, and the authors provide a foundation sufficient to induct the novice, yet detailed enough to facilitate further exploration.

So, have I made 'the switch'? Not just yet – at least not completely, although my GIS needs are now adequately met by R thanks to this book. However, while statistical modelling forms a substantial part of my work, I simply have not spent enough consecutive blocs of time at the computer to internalise a complex language. Which is perhaps why I found Stata so appealing: for someone who works principally with the linear model (and some dynamic panel and cluster work); I can count on the help libraries to drop me back in after a period of absence, and the base commands are relatively simple. However the open-source nature of R means that developments in 'fundamental' statistics quickly find their way to the programme – this is the future of statistics and for geocomputation, it now seems the best way to keep pace with the field. The investment is substantial. I am not a programmer and my knowledge of statistics – although sound for my profession – is rudimentary compared to that of a working statistician, and, of course, time is often short. Taking stock of all this, it is remarkable that Brunsdon and Comber have produced something which speaks to these difficulties; the steep interface learning curve, and level of statistical detail. With the exception perhaps of Andy Field's iteration of *Discovering Statistics for R*, few have managed to provide so thorough yet accessible an introduction.

Review: William Mitchell, *Eurozone Dystopia: Groupthink and Denial on a Grand Scale*, 2015 (Edward Elgar).

Larry Brownstein

Bill Mitchell is one of the world's foremost macroeconomists and one of the original developers of the macroeconomic paradigm, Modern Monetary Theory. MMT is the foremost alternative to the neoclassical economic paradigm, the mainstream theory used by governments around the world. MMT is considered by its founders to be concerned only with accurate descriptions and explanations of real world economic activity, and is fundamentally evidence-based. Mitchell's analyses of the problems exhibited by the Eurozone are analyzed from this perspective. While many proponents of MMT associate themselves with the political left, the theory itself is viewed by its founders, one of them being Mitchell himself, as politically neutral.

Mitchell's analysis of the beginnings of the European single currency is one of the most detailed historical analyses yet, relying on both secondary and primary source material along with a wealth of data. The book is divided into three parts: I, The Early Years, II, The Path to Crisis, and III, The Options for Europe. I will concentrate on Parts II and III.

It must be noted that on the way to the creation of the European single currency, the world went from a fixed-rate currency exchange system based on the US dollar and its support of gold, under the auspices of the Bretton Woods agreement reached in 1944, to a fiat currency system with flexible exchange rates when Richard Nixon, almost overnight in 1971, took the US, and thus the rest of the world, off the Bretton Woods system. It was after this that the world economies gradually became dominated by what was first known as monetarism and then as neoclassical economics. It was during the 1970s and afterward when the neoclassical economic paradigm was asserting its dominance over the field of economics that the European Exchange Rate Mechanism and the single currency system were born. It was not an easy birth.

In Mitchell's view, it is the reliance on the neoclassical paradigm as the principal basis for economic policies that is one of the reasons the Eurozone is experiencing the problems it is at the present time. It is not the only reason, however. Another reason the Eurozone is in trouble is due to its design. The designers of the single currency seemed to believe that, from a single currency, a political union would emerge. As we know, this did not happen.

Taking the Eurozone design issue first, he sees the Eurozone as consisting of an incompletely constructed federation of individual nation states which have given up their own currencies and adopted a single currency, the Euro, but failing to come together under a single Treasury and real central European bank. The ECB has to be seen as a German creation and controlled by Germany, rather than by Brussels, where the European parliament is. There is no overarching European Treasury.

The Eurozone does not have an integrated federal system and, because it has no federally based Treasury and central bank, the Brussels parliament cannot do what the US government can. It cannot come to the rescue of its member states in an effective manner. As Mitchell shows, an incomplete federal system plus an adherence to neoclassical economic principles have rendered the Eurozone members incapable of rescuing its member states when in financial difficulty.

Why do all the Euro member states appear to think in the same way about the GFC (General Financial Crisis) afflicting its members? Mitchell contends this is due to members of the Euro elite all thinking along the same lines in a kind of groupthink, a term coined by William Whyte in 1952. In Mitchell's view, this drive for a rationalized kind of conformity leads to irrational and dysfunctional group decision-making, which is what Mitchell finds in decisions made by the Eurogroup. It should be noted that the Eurogroup, the central decision-making body for the Eurozone, is an unelected body, has secret meetings with no explicit agendas, is politically unaccountable, and has, as members, representatives of organizations that have no

real connection to the Eurozone, like a representative from the IMF. This is not a recipe for rational, eufunctional decision-making.

The irrationality of groupthink can best be seen in decisions concerning economic policies that contradict economic reality. This is most obviously the case with Greece. But it arises generally in a resistance to fiscal stimuli by central governments, which would result in deficit spending. A resistance to deficit spending in a deflationary scenario leads to a situation where austerity reigns. Groupthink reinforces the irrationality of decisions that underwrite austerity, making them seem ‘normal’ and reasonable.

Mitchell sets out the conflict between the mainstream, neoclassical, case and MMT and the relevance this has to the problems besetting the Eurozone. The conflict between the two approaches is set out in nine propositions, which, according to the precepts of MMT, are false for a macroeconomy, the economy of a nation state or national government (pp. 315-329). Mitchell sets out the implications of each proposition and argues why it does not apply to national governments and an entity like the Eurozone. 1) Government faces the same constraints as a household. 2) Fiscal deficits are bad and fiscal surpluses are good. 3) Fiscal surpluses contribute to national savings. 4) Fiscal outcome should be balanced over the economic cycle. 5) Fiscal deficits drive up interest rates and crowd out private investment. 6) Fiscal deficits mean higher taxes in the future. 7) Government will run out of fiscal space (money). 8) Government spending is inflationary. 9) Government spending will lead to big government.

Not only are these propositions incorporated into economic policies within the Eurozone, they are also deployed in the UK under the current government. And while some of them may apply to individual countries within the Eurozone, they do not apply to the Eurozone as a whole. Indeed, were the Eurozone constructed along truly federal lines (as outlined above), many of the economic problems facing individual countries could be overcome.

However, because Mitchell sees it as unlikely that the Eurozone will move to a closer political union, which is what would be required for it to solve its current economic difficulties, he advocates that countries like Greece ought to leave the Eurozone and go back to using their national currencies. It is only then that they will regain sufficient control over their own economies and, thus, be able to adequately deal with their economic problems.