The Mathematical Gazette, March 2017

Jane Austen, game theorist (updated edition) by Michael Suk-Young Chwe, pp 296, £15.95 (paper), ISBN: 978-0-691-16244-7, Princeton University Press (2014).

Nearly a century ago, Emile Borel and John von Neumann started game theory as a serious mathematical discipline. Already a century before that, Jane Austen pioneered the study of strategic thinking in her novels. That is the message—and successful marketing ploy, with a wonderful cartoon on the book cover—of this scholarly book by Michael Chwe, a social scientist at the University of California at Los Angeles.

In Jane Austen's world, people have to navigate rigid social structures, with marriage as the most important decision in a woman's life. Jane Austen's characters, in particular the women, learn and know how to think strategically. This means to understand that other people have different preferences, to anticipate their behaviour, and to act accordingly.

Not understanding other people's preferences is dubbed 'cluelessness' by Chwe. He elaborates on this both in Austen's novels and in the real world. An example is George W. Bush's 'strategic thought' as 'make up your mind and stick to it', which is the very opposite to the concept of 'strategy' in game theory, where you take other people's actions into account.

Mathematical notions, and formal models in economics, are easily misunderstood by laypeople, and even humanist scholars, who connote much more than a technical definition with terms such as 'utility', 'profit maximization', or 'strategic behaviour'. Like a mathematician, Chwe does attach precise meanings to his terms. 'Cluelessness' is one of them, and Chwe analyses its possible advantages, such as avoiding empathy with the victims of one's actions in war, or more neutrally as 'commitment power', a concept pioneered by Tom Schelling, an endorser of this book.

A very interesting insight is that people of lower social status need to think much more strategically than people of higher social status. Chwe amply illustrates this with folk tales, such as that of 'Flossie and the Fox' (which shows how much power is about perception), and the civil rights movement, before elaborating on it in Jane Austen's novels. For me, these wider considerations, beyond Jane Austen, enrich the book very much.

For those who do not know Austen's six novels, or only some of them, a long chapter summarises them in depth. In fact, the details of all the references to Austen give a plodding aspect to parts of the book, where I think less would have been more. In the afterword to the paperback edition, Chwe justifies the book's length so as to 'meet skepticism with evidence'. But the reader can skim parts of the book, and it is a sign of good organization that one can do this easily.

The book is not an introduction to game theory, which is restricted to a single chapter. Herbert Gintis, a game theorist, gives an excellent short review on amazon.com [www.amazon.com/review/R1B1GKTV9YS094] that emphasizes the 'dimensions of human behavior' revealed in Austin's novels by Chwe's book. I see this book as a stimulating research programme for the social scientist. Indeed, a wealth of human behaviour has to be studied much further if game theory is to become a realistic 'science of interaction'.

10.1017/mag.2017.38

BERNHARD VON STENGEL

Department of Mathematics, London School of Economics, Room COL 4.12, Houghton St, London WC2A 2AE

email: stengel@nash.lse.ac.uk