every inch of policy. Instead, he appeals to the vision he has for Wikipedia and commends those individuals whose actions reinforce the values that underpin it.

Wikipedia's management has become increasingly bureaucratic as procedure within the community has been settled. Nonetheless, there is still a strong undercurrent that opposes unnecessary procedure. A high court of sorts has been created to arbitrate disputes among community members. Montesquieu would be disappointed, however, as the committee in question is also able to create policies.

Wales, who was once a futures trader, counts F.A. Hayek as a major influence on his vision for Wikipedia and its community. There are many aspects of Wikipedia that a Hayekian would appreciate: rule of law (of sorts); accountability (even Wales has found himself in trouble for not following his own principles and acting in the spirit of Wikipedia); and a competition for accuracy and information (a non-monetary market for knowledge). Nonetheless, it is the understanding of collective behaviour—the occurrence of spontaneous order—that was of most interest to Wales. Wikipedia, though messy and imperfect, is increasingly achieving this.

Good Faith Collaboration prompts consideration of a vast number of issues: running a business, teamwork, politics, legal theory, multiculturalism, and obviously, the scope for technology in society. Reagle's inclusion of Wikipedian laws, rules

and theorems is also a nice touch for non-Wikipedian readers to get a sense of the culture. Readers who fancy themselves technology gurus will also enjoy the detail included. The most interesting contribution of the book is that it is the operation of Hayekian organisation and structure and visionary leadership that allows the global community to flourish and make a contribution. For those who groan at the thought of Wikipedia's inaccuracies or partially complete articles, Wales and Reagle are clear: Wikipedia is a work in progress. To this end caveat emptor. Then again, perhaps it is one more reason to contribute to its pages.

Reviewed by Alice Bailey

The Warcraft Civilization: Social Science in a Virtual World
By William Sims Bainbridge
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Online communities are a growing use of the internet. Some of the most popular sites let internet users interact with others and build a distinctly personal space: MySpace, Facebook and YouTube—now household names—are examples.

Online gaming worlds are perhaps less known online communities, but many of these virtual worlds have millions of active users. A few examples include Everquest,

World of Warcraft, and Second Life. These worlds have a persistent online space in which people, through a virtual projection of themselves, can simultaneously interact with the environment or with other players. Participants identify with their virtual projection—their avatar—and develop it to their taste within the world's rules. In a sense, this virtual existence is analogous to our real life existence.

The fact that these worlds contain continually interacting human participants has encouraged academics to study them. In the field of medicine, virologists studied the spread of a highly contagious and fatal disease in a virtual world. What made that study compelling when compared to computer-based simulations was that it let researchers analyse the uncontrolled human behavioural response to the outbreak. This, obviously, has implications for drawing conclusions about real-world behaviour. Other contributions to the developing literature on virtual worlds have sought to shed light on the social, cultural and economic features of these worlds.

Warcraft Civilization by William Sims Bainbridge is one of these contributions. The book examines the society that has developed within the online gaming world Azeroth of the game World of Warcraft, which is developed and maintained by Blizzard Entertainment. It is wide-ranging and covers diverse

topics such as the religions in Azeroth, its economy, and the identities it develops.

Bainbridge is a participant in Azeroth, having spent more than 2,000 hours in the world. This puts him in a good position to analyse its features. Each chapter begins with a story set in Azeroth. These scenes set the tone for the chapter's topic and emphasise the connection that people develop with their Azerothian avatar. Some may find this style frustrating, particularly if they have not heard of World of Warcraft or the fantasy genre.

Bainbridge seems to be suggesting that virtual interaction by Azerothians is (at least) equivalent to interactions on Earth. He documents how many human traits and societal dynamics are evident in Azeroth. Bainbridge's discussion of Azeroth's economy is among his most interesting.

The purpose of an economy is to efficiently price and allocate scarce resources. A well-designed economy is crucial to fostering an enjoyable experience for participants in virtual communities. An important component of a well-designed virtual economy is a balanced degree of scarcity. Scarcity in goods, labour and time encourages trade, specialisation and cooperation.

Scarcity in goods and labour makes a world 'fun' to be in; at the very least, it motivates us to act. The designers of a virtual world can eliminate scarcity of products within the world; they could endow every participant with every conceivable object allowed within the world's rules. But a designer who did this would quickly discover his or her world will not attract inhabitants. In a world of everything, there would be no gains from investing labour in finding or producing something that others do not have. In other words, there would be no motivation to spend time in the world.

Bainbridge shows how the designers of Azeroth understand this. He has an in-depth discussion of the labour skills—or a specialisation—that Azerothians can commit to. These vary from cooking to mining and tailoring. I agree with Bainbridge that the different occupations are critical to the gameplay and reinforce what he calls the reciprocity role of the economy, encouraging cooperation and trade. Private markets within Azeroth, which are well-described in the book, complement the specialisations. Bainbridge documents how a successful virtual economy should be structured. The chosen structure seems capitalist; in a quote that Bainbridge attributes to Scott Rettburg, a virtual worlds academic, '[World of Warcraft] offers its players a capitalist fairytale in which anyone who works hard and strives enough can rise through society's ranks and acquire great wealth.'

Nonetheless, I found Bainbridge's discussion of the role of property within Azeroth to be wanting. A lesson from the real world is that a well-designed system of property rights encourages investment and capital accumulation. Only tidbits of information are gleaned throughout the book about the role of property and how it is protected from others *within* the world. I think property is fundamental to the success of Azeroth and deserved to be fleshed out further.

The book also lacks detail on how Azeroth's economy performs at the macro-level. In particular, how stable are aggregate prices; what is the relation between aggregate money supply and prices; how do banks operate in Azeroth; what is the degree of wealth inequality between members of the society; whether there are there organised private companies within Azeroth; and so on. Detailed examination of these would have given readers a more in-depth view of the economy and its comparisons to real life economies.

The topics for discussion about virtual world societies are as diverse as those for real life societies; only some of the issues, ideas and areas of study fleshed out by Bainbridge are outlined here. I recommend this book for readers who would like to get a feel for the interesting dynamics present in virtual worlds. It shows how many of the social, economic and cultural dynamics that we see every day in real life appear in virtual life.

Reviewed by Callum Jones