

New Technology, Same Culture

A Review of Cultural Evolution in the Digital Age by Alberto Acerbi (Oxford University Press, 2019)

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The digital revolution has transformed human life. More than half of the world's population uses the internet and owns a smartphone (Clement 2020; Poushter 2016), and the total number of websites currently stands at nearly 2 billion—more than a quarter of the world's population (Internet live stats 2020). The average American spends more time online every day than they spend eating, reading, and doing anything outdoors *combined* (Clement 2020). When I reflect on my own life, most activities that I consider fundamental to my work (e.g., writing on my laptop, retrieving articles from Google Scholar, analyzing data in R) and leisure (e.g., watching films, speaking with family members on Facebook, scrolling through Twitter) rely on digital activity, and would not have been possible 20 years ago.

Given the influence of digital media, studying cultural evolution in the digital age is an important venture, and Alberto Acerbi's book does the topic justice. Near the beginning of *Cultural Evolution in the Digital Age*, Acerbi demonstrates the impact of digital life by showing how the simple process of writing a sentence has been transformed. Whereas sentences used to be written linearly—with one word coming after another—most of us write completely differently now, jumping back and forth as we go and using spellchecks and thesauruses to add flair and precision. Later in the book, Acerbi points out how lost one of our early ancestors would be if they were transported to the present day. These examples help underscore how quickly our world is changing, and how we need social science to make sense of this change.

Yet with change comes stability. This is perhaps the main message of Acerbi's book, and he argues at length that the digital age is characterized by the same principles of cultural evolution that characterized the Bronze Age, the Iron Age, and every other age of human history. "Prestigious" people still have more influence than non-prestigious people. Common beliefs are still more persuasive than rare beliefs. There is still a limit to our social connections. We still interact mostly with others who are similar to us. And we still love to consume and share gossip.

Acerbi uses this message to cleave through many familiar myths about digital media. Examining claims that we live in a post-truth society, he argues that humans

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have always been seduced by attractive misinformation if the packaging was glossy enough. Confronting fears about online echo chambers, he points out that humans have always been homophilous, and if anything, the internet has exposed us to a greater diversity of opinions. Responding to the view that the internet is the great equalizer, he shows how 99% of YouTube videos will only receive a handful of views, whereas celebrity accounts will accumulate millions. Acerbi is strongest when he is busting these myths and providing vivid examples to make his case.

Challenging sensational claims is important. However, some sensational claims about the digital age are actually true, and one downside to writing a book dedicated to applying past theories to digital life is that it risks neglecting some of the novel aspects of digital culture. For example, content on the internet really is growing exponentially, as is the pace of technological innovation (Denning and Lewis 2016). What are the implications of this exponential growth for machine learning and artificial intelligence? It is also true that people write differently in print and online (Gee and Hayes 2011). How might this influence the future of human language? The digital age will likely also have unprecedented effects on group size (Dunbar 2016), social and episodic memory (Sparrow et al. 2011), and mental health (Kross et al. 2013). Acerbi touches on some of these factors, but it would have been nice to see an acknowledgment that we will probably need new models of cultural evolution to develop our understanding of how the digital revolution is changing human culture.

But this is only a minor drawback, and Acerbi's book is otherwise well researched and expansive. Real-life events are woven seamlessly into precise and efficient summaries of research programs. The book does expect a level of academic knowledge from the reader. Statistical terms such as moderation and mediation are discussed offhand without definition, and some chapters (e.g. "Wary Learners") involve detailed technical summaries of psychological and cultural theories. These early chapters provide some foundation for the book's later points, but they don't have the zing of later chapters about memes, echo chambers, and a backyard shed that became London's top-ranked restaurant according to Trip-Advisor. On the whole, though, the book is well worth including in an undergraduate or graduate social science curriculum.

One benefit of the book's subject matter is that it contains insights for readers both inside and outside academia. A non-academic reader will learn more about why memes spread, how fake news catches on, and why so many characters die in children's films. Students and researchers will learn more about the bedrock of cultural evolutionary theory and the cognitive biases that guide cultural change. Whereas most books on cultural evolution tend towards the esoteric—focusing on the fine details of topics such as religion, language, and architecture—Acerbi ap-

plies cultural evolution to topics that might come up at family dinners and in dorm rooms.

Cultural evolution has had a strange history. Evolutionary theories of human behavior are more than a century old, but they have long been shunned in the social sciences, and the term “cultural evolution” has been popularized only recently. As a result, popular press coverage about cultural evolution is still sparse, and mostly geared to an academic audience. With *Cultural Evolution in the Digital Age*, Acerbi joins the likes of Peter Turchin, David Sloan Wilson, and Joseph Henrich in offering an engaging and accessible application of cultural evolutionary models, which will almost certainly attract new scholars to the field. Never did I expect to read about Grumpy Cat and the social brain hypothesis in the same book, but the result was genuinely satisfying.

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