

Commentary on Boyer and Petersen

Folk-economic beliefs as ‘evidential fiction’: Using narratives to debunk conceptual fallacies and ‘fake news’ and put the economic public discourse back on track

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Abstract

Folk-economic beliefs may be regarded as ‘evidential fictions’ exploiting the natural tendency of human cognition to organize itself in narrative form. Narrative counter-arguments are likely more effective than logical debunking. The challenge: conveying sound economic reasoning in narratively conspicuous forms: an opportunity for economics to rethink its role and agency in public discourse, in the spirit of its old classics.

In their target article, Boyer and Petersen offer a compelling explanation of the success and endurance of folk-economic beliefs, based on the influence of evolved, panhuman, cognitive modules. Folk-economic beliefs fit with our intuitions and expectations, and thus they have a cultural advantage with respect to other beliefs, independently of whether they are true or not. A question that emerges from the article is whether and how we can change these beliefs, given their intuitiveness.

Different approaches to cultural evolution (see Acerbi and Mesoudi, 2015) propose that various factors can have a role in the cultural diffusion of beliefs. An important distinction in cultural evolution is made between content- and context-based biases. Content-based biases refer to intrinsic features of the cultural traits at stake, which is what Boyer and Petersen focus on. Context-based biases refer instead to contextual factors, independent of the content of the cultural traits, such as popularity (the majority of other individuals believe X) or prestige (experts, or famous individuals, believe X). It is an open question how content- and context-based factors interact in different domains, and whether context-based biases can overcome the intuitiveness of folk-economic beliefs.

Another framework, epistemic vigilance (Sperber et al., 2010), proposes that, under certain conditions, trust and argumentation can enable the spread of counter-intuitive beliefs against the intuitive ones – in this case, folk-economic beliefs. However, argumentation works better in long, face-to-face, interactions, and its strength is inversely proportional to the complexity of the topic. Since trust in economic experts (Bookstaber, 2017) and politicians (Tormey, 2015) is at historical lows, this may be a prohibitive task. The situation presents some analogies with counteracting anti-vaccinations beliefs (Miton and Mericer, 2015).

To understand the success of folk-economic beliefs, we can also characterise them as instances of the ‘evidential fictions’ studied in the cognitive science of narratives (Oatley, 2016). The importance of narratives for the social dimension of economic interactions has recently been acknowledged by economists (Shiller, 2017). However, economists have so far largely ignored these issues and their implications for cultural transmission – and this is all the more surprising in view of the role of beliefs and expectation formation processes (Shiller, 2015) and self-fulfilling prophecies (Farmer, 1999) in the assessment of the allocative efficiency of markets and of the effectiveness of economic policy.

Not incidentally, Adam Smith's famous 'invisible hand argument', which is a cornerstone of modern economics, is essentially a powerful narrative rather than a rigorous theorem, and significantly draws upon a complex cultural and even theological tradition (Harrison, 2011).

The characterisation of folk-economic beliefs in terms of narratives also suggests possible ways in which they can be counterbalanced. Humans tend to organise their mental models of social situations and contexts in narrative form, and this cognitive strategy need not be regarded as a form of bounded rationality or a source of bias (Mar and Oatley, 2008). It has been suggested that engagement in fiction has substantial developmental implications for empathy and theory-of-mind (Oatley, 2016), and increases the likelihood to engage in prosocial behaviour (Johnson, 2012). Narratives can prompt individual changes through involvement in the story, including emotional participation and identification with characters, and through the content of the story, by simulating events and situations that are unlikely to be experienced in real life. Narratives, moreover, enable individuals to perform complex social computations that they would be unable to carry out in non-narrative form (Boyd, 2009). Therefore, contents that are presented in narrative form elicit judgmental self-confidence in individuals, are felt as less threatening than technical ones, and elicit (possibly biased) non-reflective decision making (Winterbottom et al., 2008). Highly technical content that is not cast into narrative form calls on the contrary for an act of trust in the epistemic authority of the proponent – e.g., the economic expert (Trinkaas Zagzebski, 2012). If such authority is challenged by the very narrative that supports folk-economic beliefs, its credibility is fundamentally disqualified and it becomes hard to counteract this in non-narrative terms (Smith, 2017).

For these reasons, insisting on the falsification of folk-economic beliefs on the basis of factual evidence, or even stigmatising such beliefs for their foundation upon conceptual fallacies and 'fake news' might be a generally ineffective strategy, both from the point of view of Boyer and Petersen and ours. However, cognitive science of narratives and fiction and cultural evolution could suggest possible ways in which intuitive folk-economic beliefs could be addressed, by providing alternative narratives that cast highly technical processes and events in real and financial markets into an intelligible and meaningful form, while being at the same time suitably designed and tested to control for biases. The use of metaphorical arguments and rhetoric tropes is deeply ingrained into the economic discourse (McCloskey, 1998), and economics has an inescapable, although poorly acknowledged, narrative dimension (McCloskey, 1990). It is not just for self-irony that George Akerlof (1984) titles the collection of some of his major theory papers *An economic theorist's book of tales*: in the introduction, he explicitly equates the single economic idea presented in a theory paper with the powerful narrative proposition of a good short story. The issue posed by folk-economic beliefs may be a healthy challenge for economics to rethink its role and agency in the public discourse, looking back to the teachings of its own old classics. Is it possible to convey good economic reasoning through emotional involvement, identification with characters, simulations of events so to crowd out the deceiving simplicity and intuitiveness of folk-economic beliefs? This is, in our opinion, a promising avenue for future research, at the crossroads of economics, social psychology, cultural evolution, and the humanities.

References

- Acerbi A, Mesoudi A (2015) If we are all cultural Darwinians what's the fuss about? Clarifying recent disagreements in the field of cultural evolution. *Biology & Philosophy* 30, 481-503.
- Akerlof G (1984) *An economic theorist's book of tales*. Cambridge University Press, Cambridge.
- Bookstaber RM (2017) *The end of theory: Financial crises, the failure of economics, and the sweep of human interaction*. Princeton University Press, Princeton NJ.
- Boyd B (2009) *On the origin of stories. Evolution, cognition and fiction*. Belknap Press, Cambridge MA.

- Farmer R (1999) *The macroeconomics of self-fulfilling prophecies*, second edition. MIT Press, Cambridge MA.
- Harrison P (2011) Adam Smith and the history of the Invisible Hand. *Journal of the History of Ideas* 72, 29-49.
- Johnson, DR (2012). Transportation into a story increases empathy, prosocial behavior, and perceptual bias toward fearful expressions. *Personality and Individual Differences*, 52, 150-155.
- Mar R, Oatley K (2008) The function of fiction is the abstraction and simulation of social experience. *Perspectives on Psychological Science* 3, 173-192.
- McCloskey D (1990) *If you're so smart. The narrative of economics expertise*. University of Chicago Press, Chicago.
- McCloskey D (1998) *The rhetoric of economics*, second edition. University of Wisconsin Press, Madison WI.
- Miton H, Mercier H (2015) Cognitive obstacles to pro-vaccination beliefs. *Trends in Cognitive Sciences* 19, 633-636.
- Oatley K (1999), Why fiction may be twice as true as fact. *Review of General Psychology* 3, 101-117.
- Oatley K (2016) Fiction: Simulation of social worlds. *Trends in Cognitive Sciences* 20, 618-628.
- Shiller R (2015) *Irrational exuberance*. Revised and expanded third edition. Princeton University Press, Princeton NJ.
- Shiller R (2017) Narrative economics. *American Economic Review* 107, 967-1004.
- Smith N (2017) Economists lose credibility when they're too certain. *Bloomberg View*, December 21 <https://www.bloomberg.com/view/articles/2017-12-21/economists-lose-credibility-when-they-re-too-certain> (accessed January 9, 2018).
- Sperber D, Clément F, Heintz C, Mascaro O, Mercier H, Origgi G, Wilson D (2010). Epistemic vigilance. *Mind & Language* 2, 359-393
- Tormey S (2015) *The end of representative politics*. Polity Press, Malden MA.
- Trinka Zagzebski L (2012) *Epistemic authority. A theory of trust, authority, and autonomy in belief*. Oxford University Press, New York.
- Winterbottom A, Bekker HL, Conner M, Mooney A (2008) Does narrative information bias individuals' decision making? A systematic review. *Social Science and Medicine* 67, 2079-2088.