slacker, tendencies are also sometimes evident. It's a shame that West and Whaples did not put up a little editorial resistance to them.

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Carl Hampus Lyttkens, *Economic Analysis of Institutional Change in Ancient Greece: Politics, Taxation and Rational Behavior* (London and New York: Routledge, 2013), pp. xiii, 188, $140. ISBN 978-0-415-63016-0.

Carl Lyttkens's book was written, he tells the reader, with the two-fold goal to persuade his fellow economists that the ancient Greek world is an under-explored realm for economic analysis and to persuade his fellow students of Greek antiquity that modern economic analysis can be fruitfully employed in their analyses. To make his case, Lyttkens opens with a claim guaranteed to create awe and wonder. It needs to be quoted:

> In 487/6 BC the Athenians decided that the archon—the most important state official in Athens—was going to be appointed by drawing lots among the candidates. This was an extraordinary idea: think about running France, the United States or Iran by drawing lot among the candidates from president. In Athens, this innovative method of appointment was later extended to many other posts. (p. 1)

Space and my competence being scarce, I'll focus on this aspect of the argument—the "extraordinary" idea of election by lot as a topic to intrigue modern economists, and then touch on Lyttkens's concerns with economic rationality.

Lyttkens avows his methodological presuppositions in a most transparent manner. He writes in the context of "New Institutionalist Economics" set forth by Douglas North in association with many able and energetic fellow economists. The tool set includes an appreciation of the principle of unintended consequences, the use of

satisficing instead of maximizing, and a willingness to suppose agents are myopic, risk-averse, and ignorant of probabilistic competence. What presumably keeps the resulting model from becoming a "just so" story is an anchor in the real, observable beliefs of people being studied. So stipulated. Lyttkens takes pains to inform the reader that in the ancient Greek world, the identification of democracy and random representation was unquestioned. He explains election by lot as an attempt to reduce the nasty consequences of intra-elite competition, an institutional reform that in some deep sense failed as it reduced the attractiveness of political office to competent people (pp. 93–95).

Where my problem with the argument begins is Lyttkens's inference from our puzzlement to their puzzlement. Again, I quote: "Using a lottery system to select those given the authority to govern the state is a very strange idea to the modern mind…. I believe that appointment by lottery must originally have seemed like a strange notion to the Athenians as well" (p. 90).

This seems a very odd claim. Greek religion tells us of a moment at which the high gods divided the world by lot, a fact that justifies a denial of hierarchy (*Iliad,* Book 15: 185–193). If random allocation is good enough for the gods who live forever, why isn't it good enough for us? Lyttkens makes the common assertion (p. 19) that ordinary people don't do very well when it comes to dealing with probability distributions. Perhaps, but before there were regression models there were proverbs; those may have much the same properties. What they require is the belief that while your experience may differ from mine, they are both true (Levy and Peart 2004).

Lyttkens runs into perhaps deeper trouble when he allows the history of scholarship to constrain his reading. I say this because the only Aristotelian texts he reports are those that pass the modern judgment of scholars. Random representation is not a problem for which I would accept such a constraint. We need to recognize how hard a problem this is. Blaise Pascal started probability theory by reflecting upon dice games. Here, there are so few possible outcomes that everyone can be checked. In the modern era, computer-implemented Monte Carlo methods came into being when Stan Ulam and John von Neumann discussed how to compute the probability of winning a hand of Solitare. There are only fifty-two cards in a deck. There were how many citizens of Athens?

There is, in one of the stigmatized texts in the traditional Aristotelian corpus, a claim from the ancient world that speaks to the issue. One ought, we are told, to vote for important offices, draw lots for the minor ones, and use the lot as a remedy for factional violence. Taking this as a theorem of ordinary understanding, can we find the proof? I think we can (Levy 1989; Martin 2013). The only step that is complicated requires us to realize that majority rule shares properties with the sample median—something proved only in 1907 by Francis Galton (Levy and Peart 2002)—and that we think about factions as forming bimodal distributions. The non-robustness of democratic politics follows immediately. Americans looked into that abyss in the Florida count in the days after the contest between Bush and Gore.

To present economic analysis as something serviceable for classicists, Lyttkens makes the case that we know all about gifts to friends and family (pp. 7–8). A famous context for this concern comes because Moses Findley (Findley 1977) pointed to the role of circulating gifts in the ancient economy. How does "rational" agency deal with

those who give things away? Perhaps a good answer was provided by Adam Smith some time ago when he asked the related question: why do we trade and not simply share? His answer is that in a society with some considerable number of people, we don't have time to be friends with more than a few. The deep appeal to a finite life—all humans are mortal—ought to resonate with students of Greek classics (Levy and Peart 2013).

In conclusion, I need to make clear that this is, in my way of thinking, an admirable project. Economists can learn things by studying the ancient world. To continue the example discussed above, random representation in the ancient world means that problems of democratic stability, such as those Kenneth Arrow considered, would be completely obvious to the Athenian critics of democracy. Lyttkens rightly emphasizes how ostracism forms an important part of Athenian democracy. There is a research problem here, since this form of democracy will not share properties with the sample median (Levy 1989), but what the actual estimate of location is that reflects that democratic constitution is, as far as I know, unknown.

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Roger Frantz and Robert Leeson, eds., *Hayek and Behavioral Economics* (New York: Palgrave Macmillan, 2013) pp. xvii, 349, $115. ISBN 978-0-230-30116-0.

The appearance of a new collection of original essays considering the relevance of the writings of F. A. Hayek to behavioral economics can be greeted only with some degree of both anticipation and trepidation. If Hayek's groundbreaking work in diverse fields is handled with analytical sophistication, any application to or examination from the perspective of behavioral economics is likely to be insightful. But, if one fails to comprehend the subtleties of Hayek's often difficult ideas, a treatment of the latter through the lens of behavioral economics is likely to exacerbate misunderstanding. Luckily for Roger