

# Information Wars: How Should the Moral Statistician Respond?

ICS Discussion @ JSM 2017

Statistics is a weapon of choice in the Information Wars. The 21<sup>st</sup> century technological advances of the internet, big data, and similar disruptive technologies have resulted in *Information Wars* - the efforts of ideologically opposed groups to gain the ascendancy of their viewpoint through the control of information to their target audiences. Some examples of the use of statistics in the information wars include: (1) the erroneous statistical consensus that led to the Brexit and Trump election upsets; (2) Facebook and Google experiments which have proven they can effect what people learn, how they learn it, and whether to vote; (3) over-use of standardized testing for students and value-added models for teachers; (4) personalized online predatory advertising and price optimization; and (5) conventional manipulation of statistics in the fake news debate. In this discussion, we will consider the appropriate response of a moral statistician. In particular, we will focus on identifying problems and solutions we can implement in our professional context. As a Christian group, we will explicitly include the Bible, and a Christian worldview in our discussion, although we will endeavor to frame the final responses in ethical terms that can be agreed upon by the broader statistical community. In this way, we may benefit the community as a whole. Our discussion will also include what we can do as individuals, as well as an outreach group within the ASA.

Three references that provide background for our discussion are:

1. Davies, John; 1/19/17; How Statistics Lost Their Power and Why We Should Fear What Comes Next; The Guardian; [www.theguardian.com/politics/2017/jan/19/crisis-of-statistics-big-data-democracy](http://www.theguardian.com/politics/2017/jan/19/crisis-of-statistics-big-data-democracy)
2. Useem, Jerry; May 2017; How Online Shopping Makes Suckers of us All; [www.theatlantic.com/magazine/archive/2017/05/how-online-shopping-makes-suckers-of-us-all/521448/](http://www.theatlantic.com/magazine/archive/2017/05/how-online-shopping-makes-suckers-of-us-all/521448/)
3. O'Neil, Cathy; 2016; Weapons of Math Destruction; <https://www.cardus.ca/comment/article/5087/the-devil-you-dont-know/>

## Questions

1. John Davies' thesis is, "The ability of statistics to accurately represent the world is declining. In its wake, a new age of big data controlled by private companies is taking over – and putting democracy in peril." In short, statistics is being employed as a weapon in the 'Information Wars', as described in the abstract. Discuss this concept. (E.g. Is it true? False? What distinctions should be made? Where is the trend going?)
2. What can we do personally, as individual Christians, to help reverse the course of this moral decay in our society and profession?
3. What can we do, as an outreach group of the ASA, to help reverse the course of this moral decay in our society and profession?

## **Summary of Discussion at JSM**

[We are still putting this together. Please check back in a week. Thank you!]