

## Why speak?

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Emma L. Johnston

### Abstract

In an information free-for-all why should scientists bother to add their voice? In this commentary piece I argue there is an increasingly important role for scientists amongst the growing ranks of public intellectuals and the many who style themselves as such. First, we must become the sifters and sorters. We need to be willing to use our research and analytical skills to identify what is valuable amongst all the noise, and, if necessary, to volubly reject what is not. And, second, we need to create and defend the space everyone needs for deep thought and consideration. We need to influence ongoing debates by seeking to push them towards evidence-based arguments and areas of scientific consensus. To sift out the deliberately distracting stories and to counter fake news.

### Keywords

Public perception of science and technology; Science and media; Science and policy-making

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There is such constant clamour, such varied and voluminous avalanches of information available anywhere, anytime, that I can scarcely hear myself think. I have largely turned off the radio and the television and I now select my deeper readings by choosing from the steady stream of tweeted headlines.

Amongst such a howling hubbub why should I bother to add one more voice? Why speak? What makes me vie for a slice of the digital messaging? What makes me think that I can manage to cut through all the meaningless white noise and, indeed, that I have something valuable to say?

I speak because I believe there is an increasingly important role for scientists amongst the growing ranks of public intellectuals and the many who style themselves as such. Instant, digital global communication has collapsed the filters — the editors, publishers and media producers — who had, until the internet gave us all our personal soap box, sorted the authoritative, insightful, knowledgeable and entertaining out from the rest. The public domain was previously a pre-vetted space — albeit often controlled by commercial interests. Today, anyone can speak, write, tweet and post and we are, arguably, all the richer for it — just as long as we can sift the wheat from the chaff — and we can recognize the commercial and political influences.

For scientists, this information-saturated era demands, in my opinion, a more public role. Why? First, because we've plenty of important things to say. Second, because despite the apparent cacophony, we have a dwindling supply of authoritative voices in the current mix. The profound disruption to the business models of traditional media organisations and publishing means we have far fewer professional journalists, analysts and writers to rely on to make well informed, reasoned sense of world. Professional journalists have principles to guide their practice. They have pride in their independence. In the US, the ranks of professional journalists employed in the nation's newsrooms have almost halved since 1990<sup>1</sup> and in Australia successive rounds of redundancies have cut reporting and commentary positions to the bone. Meantime, we've got an oversupply of unsubstantiated opinions, and prejudices, seeking to pass themselves off as the truth.

Scientists can, and should, help fill that void. As a starting point, we can make a valuable contribution by translating complex concepts to help make sense of all those views and news. But, analysis and commentary is not, of course, the exclusive domain of scientists. From the earliest philosophers, our lives have been enhanced by astute thinkers who have helped us make sense of the world, regardless of whether or not they are researchers or knowledge creators themselves.

But, what scientists *do* have that is particular to our profession is training in the methods that enable us to rigorously interrogate and verify, or otherwise, the torrents of facts and opinions that rush into the digital public domain every day, hour and minute. We are trained to be critical thinkers and skeptical observers.

We need to be willing to use our training in the public sphere.

What might it mean to cast ourselves as public intellectuals in the current environment? I think this is a dual role. First, we must become the sifters and sorters. We need to be willing to use our research and analytical skills to identify what is valuable amongst all the noise, and, if necessary, to volubly reject what is not. And, second, we need to create and defend the space everyone needs for deep thought and consideration. We need to be able to stand back to reflect, synthesize and to juxtapose. We need to influence ongoing debates by seeking to push them towards rational and the evidence-based arguments and towards points of scientific consensus. To sift out the deliberately distracting stories and to counter fake news.

In an information free-for-all, that's much harder than it might sound. There is considerable confusion in the public domain over who to trust and there's no shortage these days of bloggers, shock jocks, tweeters (and some self-serving politicians and public figures) peddling anti-intellectualism. These active and enthusiastic proponents of brand 'populism' are more than willing to attack and undermine evidence-based arguments that stand in their way for their own ideological and/or profit-making purposes.

So, part of the job of any aspiring public intellectual today is to resist the white-anting, the gas-lighting, even the direct attacks on person and property. We have been here before — during dark ages, dictatorships, wars and famine. What

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<sup>1</sup><http://www.niemanlab.org/2015/07/newsonomics-the-halving-of-americas-daily-newsrooms/>.

has taken us by surprise, however, is the increasingly anti-intellectual arguments of successful populist politicians in wealthy, educated democracies.

As trite as it sounds, maybe we need to work on our own branding. Can we counter fake news by promoting science, and scientists, as the ambassadors of brand 'knowledge' and brand 'truth'. Science is a means to investigate and test the world — it aims to create increasingly reliable understandings of the natural world — and increasingly the human/social/psychological world. Our processes and our practices have been painstakingly designed to ensure rigor and to minimize the influences of corruption, deceit or external influences. We are not motivated by personal profit, but by the close interrogation of the world around to constantly improve our understanding, and edge closer to the truth. As such, I think we have the responsibility to create and present inspiring ideas and visions for society and the future.

As public intellectuals, our qualifications as scientists could, and should, be shorthand for reliability and credibility. We are already seeing this happen in a modest way. Articles from *The Conversation* website, written entirely by academics, are increasingly being republished in mainstream media publications as their own capacity to create original content dwindles. And, we could, and should, be using our academic endorsements to amplify evidence-based stories and positions in public debate.

This may seem like a leap of imagination. Many of us are more comfortable with that conventional stereotype of the scientist in a white coat in the lab, peering through a microscope at the minutiae of life on earth. In fact, most of us were explicitly taught to create knowledge — but not use it — or decide it's value. Isn't science an apolitical pursuit, something that stands outside the contest of opinions? Few of us would expect, or want, or even feel legitimate about having a role on the (crowded) public stage.

But, other professions don't seem to have the same qualms about wading into to murky waters when it is important to do so. They don't separate themselves as clearly from society as scientists seem to want to do.

This reticence means we need to encourage more scientists to speak in the public realm and support and train them to do so.

I myself am not a science communicator in the professional sense. But I do communicate science, at least I try. I present science on television, I give many public talks, I write about science in public formats and I advocate for scientists.

I'm sure I would be much better at all of this if I had some training. Training in how to create a compelling story, in the art of engaging, in the science of leaving a lasting impression and changing minds. Instead I have had to learn from constant communication, trial and error and by reaching out to multiple audiences. And as a scientist this doesn't sit comfortably with me. I want to interrogate and measure my effectiveness as a public intellectual. I want to know, based on the best available evidence, if I am making a difference, or merely adding to the noise.

Communication, however, isn't my field of expertise. I need to know more. Possibly the single most effective thing that universities and other research organisations could do, then — as professional communication jobs are cut across Australia and the globe — is to train more of us scientists to pick up the baton of public intellectualism. The world is changing and we need as many science voices out there in the hullabaloo as possible.

### Author

Emma L. Johnston is Pro Vice-Chancellor Research at UNSW Sydney and a Professor of Marine Ecology and Ecotoxicology. She advises industry and government on environmental science and is President-Elect of Science and Technology Australia (STA). E-mail: [e.johnston@unsw.edu.au](mailto:e.johnston@unsw.edu.au).

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