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VIEWPOINT

Science and Activism

Benjamin Franta

Does campaigning for social change have a place in the scientific identity?

ast September, I was one of 400,000 participants in the People's Climate March in New York City. It was the largest march I had ever attended, though it wasn't my first foray into activism. For more than two years I'd been working with students, university faculty and others to build the fossil fuel divestment campaign at Harvard University.

Being a scientist and an activist is often seen as an unusual combination—many scientists see a conflict between the two identities. Some colleagues have told me that they will not engage in activism because they believe it will undermine their objectivity. Others have cautioned me to distance myself from activism when acting as a scientist and vice versa.

Of course, other scientist-activists exist; an entire section of the People's Climate March was reserved for scientists, and the activists now pushing for fossil fuel divestment at the Massachusetts Institute of Technology (MIT) are mostly scientists. One of those scientistactivists, Ph.D. student Joel Jean, expressed in *The Climate Selfie Project* the progression to activism that many scientists are now experiencing (see facing page).

Just as telling as the motivation to become an activist is the acknowledgement that, for many scientists, activism must be defended from negative connotations. Why is this?

Possible roadblocks

There are at least three factors that contribute to scientists' natural disassociation with activism:

Education.

Though many people are aware of the fruits of historical activism in the United States—including rights for workers, women's rights and rights for nonwhites—not as many are familiar with the methods through which they were cultivated, including mass organization, social and political disruption, and violent as well as nonviolent confrontation, all over periods of time spanning generations. Activism in the second half of the 20th century contributed to environmental protection and possibly to the avoidance of nuclear war. Despite the central role activism has played in the social and political history of the United States, knowledge of historical activism is today an academic specialty to which scientists are rarely exposed through formal education.

Firsthand experience.

Based on what I've seen, those with firsthand activism experience are much more likely to view it as a legitimate and potentially useful mode of engagement, even across various issues. People who have not witnessed activism in action tend to view it with suspicion, and many young adults today, including scientists, have no experience with activism. However, there are signs that activism among young adults is growing, especially around issues **66** I've never been called an activist.

"I'm a scientist. An engineer. A grad student. But an activist? Definitely not.

"I work on solar cells, and for a long time I thought that was enough. I thought that technology was the answer to everything, that if we could just make better solar cells, taller wind turbines and cheaper electrons, we could stop climate change. If only.

"I know now that technology is not enough. The bottleneck today isn't electrons; it's elections. It's politicians doing politics. It's Congress refusing to talk about climate change. It's our elected officials making noises about solving problems while discounting the future of the world beyond the next election. I still work on the technology. but I no longer count on it. The problem before was that I wasn't scared enough. I didn't know enough to be scared. Now I know. And now I'm terrified....

"So for today, for tomorrow for however long it takes to solve the climate crisis—go ahead: call me an activist. I won't mind.

> —Joel Jean, Ph.D. student The Climate Selfie Project

http://climateselfieproject.org/gallery

of climate change and socioeconomic inequality.

Identity.

The third factor, and probably the most important factor for scientists, is identity—that is, how scientists are defined and depicted by themselves, by other scientists, by institutions and by society. Such identities define for the scientist what is proper behavior and what is not.

Resolving the scientist identity

Two of the most dominant identities in science, especially in elite institutions. are the scientist-as-child and the scientist-as-professional. The scientist-as-child is usually depicted endearingly as motivated by personal curiosity rather than by wider social considerations. Institutions cultivate this identity when they describe laboratories as "playgrounds" with "toys" for exploring new ideas while glossing over or ignoring how the scientist's work may impact society. The scientist-as-professional—a highly skilled worker or expert-for-hire—is characterized by their potential economic value through specialized skills or knowledge offered to a client, whether the client is a university, a research lab, an investment bank or a consulting firm.

These two identities do not naturally lend themselves to activism. The scientist-as-child does not typically focus on social impact, and the scientist-as-professional discourages action that does not increase potential value for prospective clients. But they are not the only identities that can exist for

scientists. The scientist-as-publicintellectual is more likely to engage in action on social challenges; and the scientist-as-public-servant is motivated by public welfare—like the International Physicians for the Prevention of Nuclear War, who were active in the latter part of the Cold War.

The scientist-as-socialcrusader, an identity that seems to be increasing in popularity, is motivated less by the scientific process and more by the potential for science to address social problems. I have noticed this identity in scientists who have experienced poverty and inequality firsthand and want to address injustices that affect their friends and families, as well as in scientists who are focused on social-structural problems like climate change and, more broadly, global economic sustainability.

Scientists who subscribe to different identities can view each other with suspicion and even resentment. Some amount of this is to be expected, as the range of scientist identities represents what is essentially a debate about what the role of science in society should be. Perhaps our zeal for our own scientific identity, though, will be tempered if we recognize that our differences are in large part the result of personal experience, historical trends and changing social conditions that present new types of problems.

For some, the scientist identity conflicts with the activist identity, but this conflict is not a fundamental contradiction. Rather, it's the result of today's educational models, scientists' experience in the context of history, and the dominant identities of scientists today. As social conditions change, and as some problems become increasingly urgent, it could pay to rethink what it means to be a scientist—and what it means to be an activist. **OPN**

Benjamin Franta (bafranta@fas. harvard.edu) is a Ph.D. candidate at the Harvard School of Engineering and Applied Sciences, USA, and a research fellow at the Belfer Center for Science and International Affairs at Harvard University's John F. Kennedy School of Government, USA.

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