



Integration of social science into research is crucial

Social scientists must be allowed a full, collaborative role if researchers are to understand and engage with issues that concern the public, says Ana Viseu.

Funders and institutions increasingly prioritize research that addresses the challenges and opportunities of an inherently interdisciplinary world. Policymakers and influential voices in science — including *Nature* — have also warned of a worrying disconnect between research and the needs and concerns of the public. One proposed solution is the integration of social scientists such as myself into publicly funded research initiatives. This is expected to contribute to the production of ‘better’ science.

Not in my experience. I spent three years as an in-house social scientist at the Cornell NanoScale Science and Technology Facility in Ithaca, New York, and the US National Nanotechnology Infrastructure Network, and it was a futile and frustrating time. I left a decade ago, but friends and colleagues who have since worked on similar projects tell me that the problem is widespread and that little has changed. Too many in the physical and life sciences dismiss social sciences as having a ‘service’ role, being allowed to observe what they do but not disturb it.

In its current model, integration is fuelled by the assumption that projects bring in the social sciences to carve a place for ‘society.’ This is expected to maximize the benefits of research while reducing negative impacts and public controversy. In other words, rather than being scientists in our own right, we are brought along as silent partners whose job it is to care for science. Rather than blurring boundaries and labour divisions, integration works to reify them. Thus, the questions that social scientists ask and the expertise we can contribute are muted or made invisible because we remain outside ‘proper’ science.

Integration is also deeply asymmetrical. The social sciences (often a single social scientist) are typically brought in after the project has taken shape. This asymmetry is present in every aspect of integration — from power to personnel numbers, funding, knowledge production and, ultimately, independence — but remains hidden in mundane interactions that dictate what counts as a valid social-science activity and who gets to define it.

This is not genuine integration. It pays lip service to the idea and is a waste of everyone’s time and the public money that supports it.

When I began my work alongside the nanotechnology scientists, I naively expected that my expertise as an ethnographer would be useful. I was prepared to study the culture of a laboratory and to probe its interaction with wider society. I thought that this would be helpful, given the frequent statements made by nanotechnology experts about how they wanted to engage and talk about the risks and benefits of their work.

Instead, the other scientists seemed to view my role as one of managing a narrow list of possible

risks and consequences, so that if a researcher followed my instructions and ticked boxes, then I would bless them as ‘social and ethical’ and they would be free to do their work with no concerns. I was routinely (wrongly) introduced as an ethicist and was expected to find minimal, non-disruptive ways of dealing with social and ethical issues. This was not a job that I could do nor wanted to do. Worse, my attempts to build bridges with my technical colleagues, for example by donning a cleanroom suit and learning how to use some of the equipment, were classified in lab annual reports as ‘outreach’. My perceived contribution was not one of expertise, but rather of a willingness to be educated in the proper way of thinking about nanotechnology.

Although my experience has left me sceptical of integration, I am not ready to dismiss the idea of fruitful collaboration between the natural and social sciences. Some fixes could be easily implemented: initiatives aiming for integration should have teams of social scientists, instead of one or two individuals, and these teams should be given the financial and operational autonomy to define and implement their activities.

When integration is planned, there should be a reassessment of what social scientists call the ‘positionality’ of the projects, which determines who pays for the research and thus who has the power to decide what is done, how it is done and what can be said about it.

For the social sciences to make meaningful contributions, funding structures must also be rethought. Ideally, we would see increases in stand-alone funding for social-science strands without requirements for integration or subordination to a topic. But this seems unlikely. There-

fore, we must push for project funding structures that — from the start — allocate and ring-fence money for the social-science component.

But this is not enough. For ‘integration’ to be productive, we must change its very meaning, from one of service to collaboration between equals. Doing so involves changes to scientific education and practice as well as continued reframing of our definitions of success. We must insist on the value of complexity, so that divergent thinking is not eclipsed in the effort to speak with one voice. We must make room for the disputes that are at the centre of knowledge production.

This is all the more important because, in a world of decreased funding for social sciences and humanities, speaking out of tune is both difficult and crucial. So we must begin to think of new means of partnership that will benefit us all. ■

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