Responsive Science

What is Responsive Science: Sam's perspective

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We have spent millennia exploring different forms of governing our societies, but we have spent only about a century trying to explicitly govern science. For virtually all of that century, the premise for governing science has been an assumption that the process of science works best when it is independent of the rest of society. But we can see the cracks in this assumption at every turn these days. Pressures to publish, to patent, to build on the work of predecessors, and to craft research projects in terms that funders want to see are only a sampling of the ways science is intimately connected to the wider society. By stating that the power and value of science lies in its independence and objectivity, we are at the same time saying that science must be its own governor.

Those of us working on the concept of 'responsive science' think differently, though we are still in the early stages of working out what that means. I propose one basic assumption is that the methods we use to generate knowledge about the world should be subject to oversight and change by society as a whole, not just the scientific community. This assumption puts in place not an idea of autonomy, but of scientific democracy.

Of the forms of political governance civilization has explored, democracy has shown remarkable resilience and a continual drive to open up decision making to scrutiny and change. What would it mean to govern science according to democratic principles? This is the primary question I am interesting in exploring through the concept of Responsive Science.

This question is not new; answers have been put forward for several decades. For example, non-scientists could govern science, but only if they knew as much about the science as the scientists themselves. Another example is to conduct citizen juries and focus groups to learn what topics publics would like addressed through science, or which areas of research should be avoided.

The difference with Responsive Science, I argue, is that it is a method of generating answers to the question of how to govern democratically, rather than the answers themselves. It is a process, not an outcome. The two approaches to engaging oversight mentioned above, in contrast, are often presented as one-off events that provide political approval. Each of these methods has serious flaws in the ways it constructs science, publics, and democracy.

I am assuming here that we do not know the 'right' way to govern, so we need to build in an ability to continually renew how we govern as we gain new knowledge and change the political, social, natural, and technical environments. Just as there is a process for changing political constitutions and the ways we implement political democracy, there should be routinized ways that we change the ways we produce knowledge about the world and build tools to reconfigure that world.

This website is a space where we, meaning you and everyone else, can work through what the concept of responsive science means by acting it out and reflecting on the results. Vital to this process is to have

different ideas on what should count as 'responsive', 'science', and what topics and methods are best to address. As such, this though piece on the concept of responsive science is only one that is launching this site. I encourage you to read [Kevin's](#) and [Jeantine's](#) as well.