

The epiknowledge of socially responsible innovation

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Comment on: **SM Flipse et al** (February 2014)

In their discussion of socially responsible innovation (SRI) and its links to industrial R&D and academic applied research, Flipse *et al* [1] acknowledge that the nature and purpose of academic and industrial research have changed “to demonstrate social or environmental responsibility to contribute to a more positive corporate image.” We wish the authors had focused more on that last word, “image,” for it is an admission of the theatrical play being acted out in today’s academic and industrial research to conceal the true nature of SRI. Any ensuing discussion about establishing mutual understanding and common language between the social and the natural sciences to “efficiently work together” misses the heart of the issue: how political forces change the nature and purpose of research, and how it similarly changes the role of social scientists and humanists.

SRI is now considered an indispensable factor for socially robust R&D. Ideally, it is performed upstream or midstream in the early stages of research rather than as an afterthought, so that attendant findings can be usefully integrated. The ostensible benefits of SRI, as articulated by its proponents and the public and private funding agencies that subscribe to it, include “a collective learning exercise” for natural and social scientists; prosperity through socially acceptable technology; robust linkages between innovation and customers; and more “efficient,” targeted and user-cognizant science and technology.

Invoking the metaphor of DNA, Flipse *et al* [1] describe the coming together of

social and technical knowledge, of natural scientists collaborating with social scientists and humanists in the pursuit of SRI. We think that this is too simplistic. SRI is more complex than two cultures sharing “different, yet complementary information.” As a concept and practice, it goes beyond the two-dimensional view of natural sciences on one strand and social sciences and humanities on the other. It includes a latent third dimension: the political forces that influence the structure of knowledge-based innovations.

Politics are prevalent both in the endorsement of SRI by governments and funding agencies and in the self-interests of innovation “narrators,” [2] such as bioethicists, social scientists and humanists, as they come into closer contact with natural scientists and associated novel funding streams for career advancement. Such unchecked politics can dictate and delimit the legitimate bounds of social science and humanities practice and expertise and blunt their critical and analytical role.

Politics permeates for instance the current situation in Canada, where the government has transformed the nearly 100-year-old classically fundamental research-oriented National Research Council into a one-stop “concierge-service” that caters to commercially applicable science (<http://www.nytimes.com/2014/02/17/world/americas/dispute-over-the-future-of-basic-research-in-canada.html>). Similarly, the European Union and other governments have endorsed SRI-like approaches that in our view remain *asymmetrical*—as though science must invariably proceed and social scientists and humanists must serve merely as confined “science enablers.” It does not help that the limited tenure track positions now available

to social scientists and humanists leave them without much other options than playing the SRI-framed science enabler role and succumbing to the flow of research cash available for SRI.

Without recognizing the political dimension, a two-dimensional collaborative system will serve little good for science and society. Collaborative spaces where natural and social scientists work together do not exist in a vacuum. We propose that a more robust and transparent SRI should shine the spotlight on hidden political components for *all* constituents of the knowledge ecosystem.

To import the missing third dimension into SRI, we advocate for involving political science to examine not only natural scientists’ practices in the course of innovations but also the practices of social scientists and humanists. Absent a crucial discourse on the politics of social science and humanities, we risk both natural and social scientists succumbing to epistemic blind spots, epistemic imperialism, or deliberate or unconscious drives for personal power and attendant professional imperialism [3]. Flipse *et al* invoke the DNA metaphor to describe collaborative spaces in achieving SRI. We think a more apt metaphor to illustrate knowledge co-production systems is the epigenome, which regulates gene expression; in SRI, we should look for an “epi” approach to knowledge where we consider and examine not only the natural scientist but also the social scientists, humanists, regulators, and public and private funders, for they too play a role in contributing “to a more positive corporate image.”

Flipse *et al* are right that “collaborative spaces” are vitally important to achieve SRI, but an *a priori*, unreflexive approach by

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social scientists to make “better science and technology” will not contribute to knowledge production. After all, the drive for “better science and technology” (read: efficiency) concerns those players who have an inherent stake in crafting a “more positive corporate image.” We thus cannot help but wonder: does this drive for keeping up appearances of *socially* responsible innovation really concern society?

Conflict of interest

The authors declare that they have no conflict of interest.

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