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## Notes on the Science in Society Relationship: The Case for Greater Public Involvement

Why move beyond the "deficit model" and one-way communication? What is the rationale for not just communicating research results to the general public and seeking to improve its understanding of the value and benefits of science, but also involving the public in science policy making and even in the research process itself? Many scientists are averse to the idea of engaging the public in the research process, as it appears to threaten the autonomy of science.

There are two main reasons for advocating greater public involvement (apart from the obvious fact that enhancing public participation is often the most efficient means for achieving the goal of traditional one-way communication, i.e. creating awareness of science and its potential benefits to society):

- 1) Responsiveness: Two-way communication and public engagement can help researchers identify the real societal challenges and devising efficient means for their solution. The public can function as a powerful research instrument, a sensible seismograph capable of providing valuable feedback to the research process. This is analogous to the idea of user-driven innovation and design in business contexts.
- 2) Democratic legitimacy: The autonomy of science is unassailable when it comes to the individual research process, i.e. the choice and use of scientific methods, criteria for validity and scientific excellence etc. It is, however, debatable whether scientists should also be the sole authority when it comes to choice of topic or research area, or other strategic decisions. Kitcher (2001) argues convincingly that prioritizing scientific resources and setting the goals for the overall research processes is a genuinely public concern and thus a political issue, which, in otherwise democratic societies, ought to be under democratic control.

Scientists are no doubt superior when it comes to judging the scientific importance of a particular issue or result, especially within their own particular field. But they not are equally superior when it comes to estimating its importance to society, or its importance relative to issues in other fields or branches of science.

There is a legitimate worry that it will hamper scientific creativity if scientists are not allowed to pursue their own projects, but have to do research on demand. Clearly there should be room for curiosity-driven and blue-skies research, and for pursuing questions not imposed from the outside, but which have arisen within research itself and which laypeople may not be able to understand or perceive as significant. But already a large amount of public funded research is strategic or agenda-driven. Even curiosity-driven research is often indirectly guided or constrained by external factors, like the allocation of funding or the strong motivating influence of political agendas or public debates. Though traditional academic or 'Mode 1' research still coexists with the more agenda-driven 'Mode 2' activities, and retains its importance, it has not been left unaffected by the general changes in society, science policy and the role and forms of knowledge production (Ziman 2007).

Moreover, some of the well-documented current mistrust of science probably stems from a widespread perception that science no longer lives up to its traditional Mertonian ideals; that it has become too strongly influenced by particular commercial, economic or political interests and thus tends to be biased. Rather than trying to free science from such external influences, which is hardly realistic and probably not even really desirable, this unpopular tendency could instead be counterbalanced by adding alternative channels of influence, representing the concerns of ordinary citizens.

It can be argued that especially in a knowledge society, where knowledge is, allegedly, the main productive factor, and where the welfare of individuals and groups depends crucially on the availability of, and access to, the right sort of knowledge, citizens can rightly insist on having a say on how knowledge is produced and to whom it gets distributed (Ziman 2007, 294).

The case for enhanced engagement and participation thus appears strong. And it should be emphasized that it does not rest on controversial assumptions about the nature of science, as it is perfectly compatible with an orthodox view of science which takes it to be a reliable means for producing objective knowledge. Not the scientific results per se, but only their wider significance and the question of the prioritization and direction of scientific efforts, are seen as interest-dependent and thus a matter for political and democratic concern. There is, however, also reason for caution. The optimal balance between democratic and meritocratic institutions, communication channels and decision procedures within generally democratic and open societies remains a matter of dispute (see Goldman 1999 for arguments in favor of gatekeeping and selection procedures based on scientific expertise; Arneson 1993 for an argument that non-democratic

procedures and institutions has a legitimate role in democratic societies). Last but not least, it remains an open question to what extent and under what form the public should be involved.

## **References**:

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