Class 32: Public Participation Handout

Reading:

- Langdon Winner, Testimony before congress, April 9, 2003
- Nature editorial on public involvement in scientific funding

Snippets for discussion:

Often the promoters try a clever ploy, announcing that the changes on the horizon are "inevitable," beyond anyone's power to guide or significantly alter. In advertisements, World's Fairs exhibitions, and public relations campaigns, proclamations of inevitability have long been standard themes.

Rachel Carson's modest report in The Silent Spring about the environmental destruction caused by the use of chemical pesticides brought heated denials from the chemical industry and attacks on Ms. Carson's scientific credentials (even though she was a noted scientist) and flagrant efforts to destroy her reputation.

In fact, technological change is never foreordained, the future never foreclosed. Real choices need to be identified, studied, and acted upon despite recurring efforts to say, "Sorry, you're too late. Your participation won't be needed, thanks."

The acceptance of any technology requires the building of a broad social coalition that agrees to support its introduction and use.

the social coalition of support, neglected or even scorned as biotech development moved ahead, has now evaporated in key areas of application. For reasons they find entirely sensible, nations in the European Union now refuse to buy genetically modified foods from the U.S.

This was certainly the case in the development of nuclear power in the United States.

failure to provide open, thorough and honest attention to the broader social, political and cultural contexts that influence the acceptance or rejection of emerging technologies can lead to disaster.

(1) Should we continue long-standing efforts to conquer and dominate nature rather than seek harmony with natural structures and processes?
(2) Should we actively promote a path development in which technical means become the driving force that shapes social ends?
(3) Is it wise to experiment with technological applications likely to produce irreversible effects?

As one reads reports coming from scientists and policy makers interested in nanotechnology and converging technologies in several areas of scientific and technological development, one does not see the common sense ends/means thinking at work. In writings on nanotechnology, there seems little willingness to ask: What are society's basic needs at present? What basic goals define our sense of well-being going forward?

What we find instead is a kind of opportunistic means-to-ends logic. Researchers and institutions interested in doing molecular and atomic scale engineering scan the horizon to see what opportunities might be identified as justifications for public funding and private investment.

I would not advise you to pass a Nanoethicist Full Employment Act, sponsoring the creation of a new profession. Although the new academic research in this area would be of some value, there is also a tendency for those who conduct research about the ethical dimensions of emerging technology to gravitate toward the more comfortable, even trivial questions involved, avoiding issues that might become a focus of conflict. The professional field of bioethics, for example, (which might become, alas, a model for nanoethics) has a great deal to say about many fascinating things, but people in this profession rarely say "no."

Indeed, there is a tendency for career-conscious social scientists and humanists to become a little too cozy with researchers in science and engineering, telling them exactly what they want to hear (or what scholars think the scientists want to hear).

I believe Congress should seek to create ways in which small panels of ordinary, disinterested citizens, selected in much the way that we now choose juries in cases of law, be assembled to examine important societal issues about nanotechnology. The panels would study relevant documents, hear expert testimony from those doing the research, listen to arguments about technical applications and consequences presented by various sides, deliberate on their findings, and write reports offering policy advice.

Is Winner misguided in his assessment of the ultimate motivations of scientists?

Is governmental funding for nanotechnology and society really an elaborate propaganda campaign to mold public perceptions of a new and powerful technology and avoid what happened in biotech?

Should government in list citizens directly in its determination of where research funding should be placed? List pros and cons.

PROS

CONS