

## Media Scientists: Bad for Science

Adam Nieman on the Communication of Science by Scientists

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The ongoing debate about the role of science in society is degenerating and scientists themselves are largely to blame. A recent panel discussion in London served only to reinforce scientists' reputation for arrogance and inflexibility. As the media profile of science increases, a new cadre of media scientists is emerging who command huge advances and appearance fees. Convinced of their righteousness, they are less and less inclined to listen to the rest of us, instead bringing to the debate an agenda that is ever more narrow and inappropriate.

*Science: Dangerous Knowledge?* was the first in a series of talks organised by the Institute of Contemporary Arts and sponsored by Cap Gemini Life Science Group. The series aims to examine 'some of the most pressing issues of the day' including genetically modified food and 'lifestyle drugs' such as Prozac and Viagra. But the invited scientists failed to address these issues creatively or intelligently; their failure was a failure to listen to other voices.

Scientists like these claim that they - rather than philosophers, sociologists or historians - should have the last word on the philosophy, sociology or history of science. This is perhaps the inevitable result of cultural shifts. As the science publisher John Brockman argues, 'literature and philosophy have shifted into the background. It is scientists - not literary intellectuals - who have the most to say on the important questions facing mankind'. Alternative approaches are marginalised and even powerful voices from politics and industry find themselves forced to adopt the rules of engagement laid down by increasingly influential scientists.

The debates about science are policed rhetorically through 'winks and nudges' - rhetorical forms at which the biologist and prominent media-scientist Lewis Wolpert excels. His grotesquely exaggerated facial gestures provide a running commentary on the discussion. When somebody speaks about a subject he feels is irrelevant, he indicates this by sighing, holding his head in his hands and staring at the ceiling. If they address a subject in the 'wrong way', he smirks and whispers an irreverent comment to his neighbour before creasing up in barely suppressed mirth. His interventions are punctuated by loud tuts and when he has said his piece he indicates that this is all there is to be said on the matter by folding his arms and turning his face away with either a scowl or a satisfied grin.

At the ICA debate, Wolpert implored people who 'go on about social responsibility in science' to explain to him what they want scientists to do. A member of the audience did just that by asking scientists to emulate their colleagues who had, like nuclear physicist Joseph Rotblatt, endeavoured to prevent the misuse of the technologies they have inspired. Wolpert held his head in his hands and stared at the ceiling. This suggestion was clearly so wide of the media-science agenda that it did not warrant contemplation let alone a reply.

By contrast, the contributions of Susan Greenfield, director of the Royal Institution, were lucid and polite. But like Wolpert, she works to a fixed agenda and is dismissive of approaches or even language that does not conform to media-scientists' conceptions of science or society. She engineers the debate as surely as Wolpert but with less pomposity. Questions about the philosophy of science (for instance, the status of scientific 'facts' and 'method') were discussed with an impatient shortness as if to say 'this is all very simple'. As a neuropharmacologist with a long-standing research interest in the origin of consciousness, Susan Greenfield is by no means philosophically naive. I strongly suspect that she and, for instance, Lewis Wolpert hold very different positions on the questions being addressed, but

the media-science agenda has become so polarised that tensions and subtleties in scientists' own accounts become blurred.

The hero of the ICA event was sociologist of science Hilary Rose. She has been studying the role of science in society for many years and has the ability to make scientists sit up and listen. She achieves this not by competing for attention but by accommodating media-scientists' own agenda in her argument. A speaker from the floor who made a valuable point about genes being not simply a technical issue - they also play a potent role in society as metaphors for individual identity - was dismissed by Lewis Wolpert with the single word 'no' (followed by a self-satisfied grin and a nod to Susan Greenfield). But Rose was able to rephrase the point in such a way that it fitted into the constricted framework of the media-scientists, thus forcing them to address the issue raised.

For Lewis Wolpert, questions about the application of science are completely separate from questions about its funding or the conduct of scientists - science is a completely autonomous and independent entity. According to Wolpert, when scientists apply their work to, say, medicine they cease being scientists and should instead be thought of as technologists. Science, then, can never be socially irresponsible or problematic because as soon as it impinges on society it ceases to be science. This emphasis on the autonomy of science inevitably results in a tautological definition and makes it difficult to speak coherently of its benefits to society.

Asked how he could make such a firm distinction between pure and applied science, Wolpert replied, 'Money!' According to Wolpert, scientists don't have either money or power. Rose pointed out that most of the top molecular biologists in the US own substantial shares in bio-technology firms.

Journalist Brian Appleyard was even more direct. He simply recounted a conversation these scientists had had in the bar just before the debate in which they discussed 'six and seven figure deals' for their popular science books.

When media-scientists are invited to discuss policy issues in public, as at the ICA debate, they must understand that they meet the public as equals. If they resist efforts to broaden the debate and insist on their own terms of reference, they will eventually lose credibility. If this happens, the high media profile of scientists will have been a public relations disaster rather than a victory.