

Letter to the Editor Regarding Chemical White Paper Special Issue

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In a recent speech at their annual science festival, the President of the British Association for the Advancement of Science referred no less than 16 times to how things appear, or how they are perceived.⁽¹⁾ His argument was that these public perceptions need to be incorporated into the risk management process for society to restore its trust in the scientific decision-making process.

In a similar vein, Michael Rogers in his article points to the “*perceived need for a new regulatory framework for chemicals*,” referring us to the European Commission’s review that indicated “*widespread public concern about the effects of chemicals on human health and the environment*.” Similarly, Inger Schörling suggests that for various diseases “*a link to chemical exposure seems likely*,” and Ragnar Löfstedt alludes to “*the image of a ‘non-toxic society’*.”

I was brought up to think that it was the role of science and the responsibility of scientists to expose the real relations behind the appearance of things. If the world were as it seems there would be no need for science, while public policy based upon appearance is little more than bigotry. In the long run this can have quite devastating consequences.

Unfortunately, those in our society charged with pointing to the hidden depths behind the surface of things seem increasingly unwilling to challenge people’s prejudices. Among these I would include politicians, regulators, and businesses who in some shape or form have come to rely on a popular mandate, rather than a principled position, for their own survival.

Sadly, some scientists also have all too readily absorbed the modern dictate for “inclusivity” and

“dialogue” in the vain hope of somehow re-legitimizing their activities. In fact, whether the public is truly concerned about many of these issues, as the Cambridge philosopher Onora O’Neill pointed out in her recent Reith Lecture series, actually remains to be determined.⁽²⁾ Their behavior suggests otherwise.

The media have in their turn made much of these deliberations and confusions, although I would hardly blame them for this in the absence of informed scientific debate. After all, it should be part of the remit of any scientist to ruthlessly analyze and criticize the work of others in his or her field. For if we cannot trust the experts to do this we invariably fall back upon all manner of self-appointed journalists, ethicists, risk communicators, and, tragically in some instances, the relatives of victims, whose expertise in such matters is necessarily vague.

I find it quite striking that none of the other articles in this issue seek to situate this drive to pander to an assumed public mood within its historical context. Things were not ever thus, and it is the nervousness and defensiveness of the elites in the face of their own evidence and electorates that should be the true cause for concern among committed rationalists and democrats. Jean-Philippe Montfort’s article is a case in point, suggesting as it does that the Commission’s proposals are “*not properly balanced*” rather than fundamentally flawed.

Forget chemicals, why not call for all food substances to be tested, both alone and in combination with one another? After all, many of these display far greater activity as carcinogens and endocrine disruptors. Of course, the reason we should not is that food, along with many of the chemicals under scrutiny, has literally billions of hours of exposure data available through our everyday use and consumption.

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Fetishising natural products over manufactured ones is hardly an excuse, ignoring as it does the extent to which food is essentially manufactured nowadays anyway. But also, such an outlook seems blind to the fact that nature itself remains by far one of the greatest risks we face on a daily basis and that our creations, on the whole, have reduced these risks for us. Ragnar Löfstedt seems to overlook this fact when pointing to the “*unique side effects*” (all negative in his telling here) of industrialization.

No doubt, industry will point to numerous problems of definition in these articles. Who is to decide what is meant by “*clean*,” “*sustainable*,” “*flourishing*,” “*balanced*,” “*varied*,” “*magnificent*,” and “*safe*”? And how will they decide? There is enough material here to keep an army of lawyers, bureaucrats, and consultants busy for a long time. Further, if industry is to provide the evidence in order to reduce the regulatory burden, then the fact that it is not trusted merely stores up problems further afield.

But I want to come back to the main point of my own essay, which is that it is the hidden costs of these developments, in terms of framing social responses to exploration and experimentation, that may prove to be the greatest. Most of the authors refer to the growth of allergies over the recent period without stopping to question why this may be so. In fact there is plenty of evidence to suggest that the definition of what counts as an allergy has been significantly expanded to include what in the past would have been considered to be a mild intolerance.

Further, there is much work from the field of psychosomatic medicine to suggest that social signals as

to potential problems associated with chemicals lead to the development of real symptoms. A case, as I have suggested, of society literally worrying itself sick. I refer the reader to a recent paper published by a team at the University of Leuven in Belgium in this regards.⁽³⁾

Inger Schörling in particular seems keen to emphasize the “*complexities*,” “*uncertainties*,” and “*indeterminacies*” within science that lead, she suggests, to proof being “*virtually unobtainable*.” This profligate terminological obfuscation does not seem to hold her back from her own convictions though, as with these “*unobtainable*” proofs she nevertheless concludes that “*exposure to chemicals undoubtedly contributes*” to the diseases to which she refers.

It seems somewhat churlish, but nevertheless necessary, to remind her that in science, as in all things, we can proceed to understanding what we do not know only from the basis of what we do know. *What is?* is a more fundamental question than *What if?* Otherwise, we base our actions to what we don't know as if we did know and thereby open the door to real risk and reaction.

REFERENCES

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