

To build bridges, or to burn them

Environmentalists who have grown impatient with science and technology need not be dismissed as beyond the reach of reason.

Not everyone's opinion is equally valuable. If this statement startles, then that is testament to a culture in which everyone's say-so is deemed to be of value, whether it emerges in the classroom, on talk radio, in a blog or in political activism. It would be a stretch to allege that this culture created the small group of environmental activists whose tactics include the arson of scientific laboratories. But a case can certainly be made that the two are connected.

In this issue, *Nature* tells the story of a radical environmental movement in the northwestern United States that allegedly mounted physical attacks on the laboratories of scientists whose investigations they deemed undesirable (see page 498). The numbers of those actually involved in the attacks was rather low, but their base of support is considerably larger.

Environmentalist scientists should maintain a dialogue with this larger group. But this will be no easy task: signs of paternalism or scepticism about emotional arguments will quickly alienate a section of public opinion whose views, although logically fuzzy, are very firmly held.

The perpetrators of the attacks in question identified themselves as members of the Earth Liberation Front (ELF). They set fires at labs that they believed to be engaged in the genetic engineering of trees, for example, or in the culling of wildlife. Their motivation was doubtless provided by a conviction that their own judgement about the morality of the science in question trumped everyone else's — supplemented, perhaps, by the thrill of the criminal action itself.

Emotional response

ELF communiqués and writings, as well as interviews with supporters of these crimes, show clearly that many such activists have moved in circles in which intuition, emotional response and individualism are pre-eminent values. Such activists can be seen as an American species of Romantic — except rather than merely contemplating the sublime, they feel inclined to mount attacks in its defence.

It is all too easy to imagine how this outlook could come into conflict with the scientific method, which rejects emotion in favour of objective measurement and rationality, and which moves forward by subjecting itself to critical inquiry.

But this inherent conflict is greatly inflamed and inflated by the view that many members of the activist communities in question take of scientists: as an oppressive hierarchy of élites making pronouncements dressed up as facts. Many of them feel that these pronouncements are readily corruptible by the interests of the rich and powerful. Some feel that what were touted as scientific solutions to society's problems — such as DDT, thalidomide and nuclear power — turned out not to deliver what they promised. So many of this new generation of environmental activists hold science and technology in deep mistrust.

The small minority of that generation who are responsible for physical attacks on laboratories and other targets possess youth, passion and uncheckable self-assurance. They are angry, idealistic, and have a sense of place and a sense of urgency. They see themselves as fighting for a just cause, and in its pursuit they don't need science any more than do the creationists, with whom they have little else in common. Their hearts tell them the truth. And, in an individualistic, relativistic culture, they see their opinions as just as valid as anyone else's. They don't approve of some lines of inquiry, especially anything to do with genetic engineering or testing on animals. And so: boom.

Several supporters of these drastic actions say that they have nothing but disdain for long, patient field studies, computer models or the careful exploration of data. They say that the environment is in crisis, and that the time for action is now. Some of them think that science itself is not worth keeping — it is a facet, they consider, of a civilization rotten to the core.

Mutual affirmation

Why should scientists bother to reach out to those whose community norms, reinforced by years of enthusiastic, mutual affirmation, run so directly counter to the scientific method? They should do so because this group carries influence within a larger environmental movement that, in turn, constitutes a powerful and potentially constructive element in today's political landscape.

The scientific community's best hope for retaining influence over such difficult territory rests in presenting itself diligently and relentlessly — in schools, in universities, on television and on the Internet — as what it is. That is, not as a set of rules laid down from above by an élite, but as a set of methods for the investigation of the plethora of difficult or near-intractable problems confronting humanity.

The community and its supporters should stress how science can, for example, help us to learn how a natural habitat works, so that its essential elements can be carefully nurtured. Science can also sometimes, if presented with enough aplomb and footnotes, impress policy-makers. And some technology need not consume valuable resources: much of it will save them instead.

The radical radicals, the adherents of the Earth and Animal Liberation Fronts, will never be convinced. But there is also a much larger group of less intense sympathizers who feel strongly about the environment, attend a march here and there, and share the same views on science. They might be more likely to change their minds about science if its practitioners would desist from sneering at emotional argument and demonstrate that science is a window through which we can see our world more clearly. ■

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