

RADICAL SCIENCE

If we look over the last decade or so, the proliferation of the 'sciences' of the social — law, social policy, criminology — is nothing if not impressive, a flow that is becoming a torrent as Foucault's influence spreads. Yet the Left has been somewhat more reluctant to tackle the 'hard' sciences. Foucault, of course, left that work to others.

A case in point is the July-August 1986 issue of *Monthly Review*, which promised to address itself to the "not-so-benign neglect" of science as a theoretical issue by the Left. What it delivered was something less, a surprisingly perfunctory collection of articles that barely scratched the surface of the issue.

Meanwhile it is difficult to ignore the centrality of scientific and technical rationale in the current restructuring of the late capitalist state as it tools up for the post-industrial age. In Thatcher's Britain, it is the aggressive adoption of 'technical innovation' strategies that are underwriting the restructuring of the British coal mining industry.

What is easier to see and more difficult to quantify is the growing seduction of Western culture by the products and processes of *technics*. Popular representations of science, especially the glossy 'technoporn' magazines like *Omni*, speak a simple language of awe and respect, a discourse laced with added reverence since the appearance of AIDS. Like all forms of hegemony, Progress has its dark side — the Challenger, Bhopal, acid rain — but the solution is always more efficient technology.

Popular representations of science foreclose on the possibility of

much serious debate over scientific issues; what is produced instead is a kind of uneasy fascination. High-tech solutions to all manner of social problems are touted as 'common sense,' erasing the role of science in power relations and leaving us with the image of the genius at the laboratory bench and the promise of Next Year's Model.

How can the Left oppose the restructuring of society by high technologies without resorting to Luddism? Are there politically progressive uses of technologies? What would a socialist science resemble?

One site at which Marxists have attempted to ask these questions and articulate a progressive critique of science and technology is the UK-based Radical Science Collective, publishers of the annual *Radical Science Journal* and a number of other collections under the aegis of Free Association Books. Their newest project, which supercedes the *Radical Science Journal* is a quarterly with the evocative title *Science as Culture*.

How successful have these attempts been? What I'd like to do here is to trace the topography of the arguments that have been played out in the pages of the *Radical Science Journal* and that promise to be aired in *Science as Culture* (since only the pilot issue is available at the time of this writing), and to locate both publications in the development of the radical science movement as a whole.

Scientists have always been concerned with the social consequences of their work, but the notion that science and social responsibility weren't synonymous first began to receive widespread public recognition as part of the fall-out from Hiroshima. Its aftermath saw physi-

cists organizing anti-nuclear campaigns; the *Bulletin of the Atomic Scientists*, with its famous Doomsday Clock, started publishing in the same period.

As the debate over the arms race heated up in the 1960s, scientists banded together in organizations like the Federation of American Scientists and lobbied against particular weapons. They also took an active part in the opposition against the Vietnam War through the campaign against the development of chemical and biological weapons.

These critiques of scientific practice by scientists were based on what has come to be known as the 'use/abuse' model, which draws a firm line between the legitimate (read: objective) practice of science, and its abuse at the hands of ideologues. 'Good' scientists voiced their opposition to 'bad' science by invoking a discourse of expert knowledge: the feasibility of certain weapons was the basis of much of their opposition.

The use/abuse model remains the foundation of arguments by mainstream scientists against developments like Star Wars. It was also the point of departure for the radical science movement. What pushed many people working in science beyond a use/abuse analysis was their growing politicization around the civil rights movement, the opposition to the Vietnam War and the events of May 1968. The radical science movement as we know it coalesced around the realization of the need to challenge not just particular weapons, but the role

that scientific and technological rationality itself played in maintaining the existing power relations in society.

What this meant, of course, was a decisive rejection of the epistemological privilege historically accorded to science — a privilege bolstered rather than denied by the use/abuse model. And not surprisingly, it split the scientific establishment between liberal institutions like the British Society for Social Responsibility in Science (BSSRS), and newer organizations like the Radical Science Collective, a group of scientists, teachers and activists who began publishing the *Radical Science Journal* in 1974.

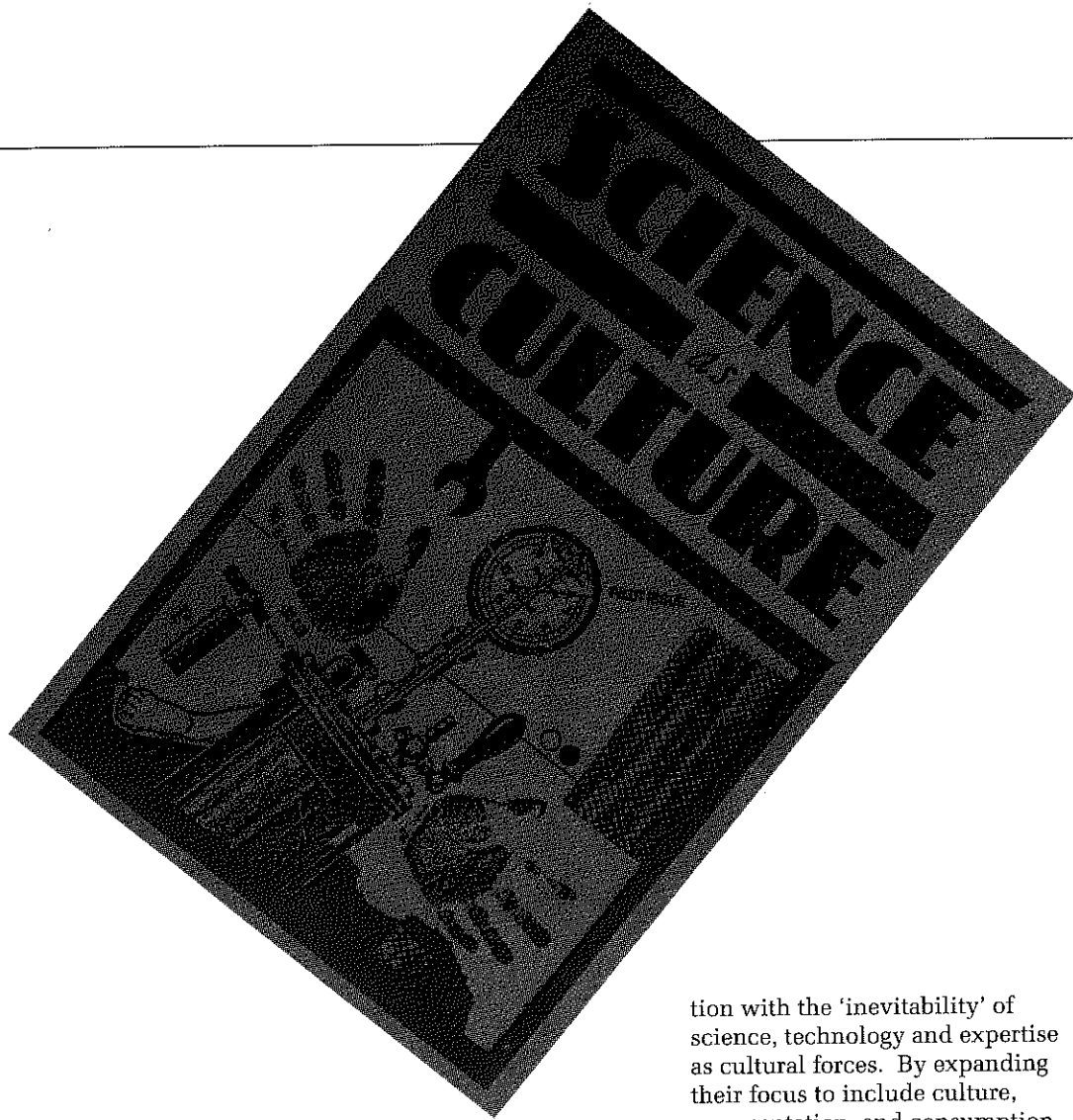
Looking back over 13 years of the *Radical Science Journal*, it is possible to see three strands of thinking emerge on science and technological progress.

The first is expressed most succinctly in the title of Robert Young's essay "Science is Social Relations", which appeared in *RSJ* 5. Moving beyond debates around the distinction between science and ideology, some members of the Radical Science Collective sought very early on to explore the ways in which social relations are embodied in technologies and scientific practices. Les Levidow's article on scientificity in IQ testing ("IQ as Ideological Reality") in *RSJ* 6/7, for instance, was a strategic intervention at a time when a group of American researchers were attempting to screen newborn males for an extra chromosome that supposedly established a genetic basis for 'criminality'.

The second position has explored the possibilities for alternative uses of technology, and is most clearly displayed in *RSJ* 16, a large chunk of which was devoted to

discussions of alternative communications media. This position that on central dilemmas of science movement has been apparent. On the one hand, it seems to be a strong rejection of technologies that are alternative, oppositional, pirate radio (Richard Doolittle) and the revolutionary (DeeDee Halleck), and that seems to have come from Enzensberger. It is little less certain of the possibilities of technology. Athanasiou's account of the contradictions faced by those who tried to set up a bulletin board in Berkeley is the heart of alternative technology. It is one example.

The third position — a tendency — in the *Radical Science Journal* is a current of anti-technological sentiment that has roots in the American counterculture of the British Romanticism of the last century. What is up, as it seems to do, is that one hears more than one technological determinist.



discussions of alternativism in communications media. It is in this position that one of the central dilemmas of the radical science movement become apparent. On the one hand there seems to be a strong conviction that technologies can be put to alternative, oppositional use in pirate radio (Richard Barbrook) and the revolutionary use of video (DeeDee Halleck), an argument that seems to have drawn much from Enzensberger. Others are a little less certain of the liberatory possibilities of technologies. Tom Athanasiou's account of the contradictions faced by activists who tried to set up an electronic bulletin board in Berkeley, the heart of alternative America, is one example.

The third position — or rather, tendency — in the *Radical Science Journal* is a slight undercurrent of anti-technological sentiment that has roots both in the American counter-culture and the British Romantic movement of the last century. When this pops up, as it seems to do unbidden, one hears more than a whisper of technological determinism in

comments like, "We feel the thrust of this impetus in all aspects of our life: we have not asked for colour television or supersonic aircraft..." (*RSJ* 17)

If there is an impasse reached by the radical science movement in the positions that have been voiced to date, it is the inability to get beyond the stout declaration that 'science is not neutral,' while in the late 1980s the supposed neutrality of science and technology no longer seems an issue, at least in the arena of cultural politics. Instead, as *RSJ* contributor David Dickson put it, "the central message being preached by capitalism is that technology in general — and high technology in particular — is exciting and desirable."

The appearance of *Science as Culture* marks a strategic — and long overdue — attempt to deconstruct our uneasy fascina-

tion with the 'inevitability' of science, technology and expertise as cultural forces. By expanding their focus to include culture, representation, and consumption, the editors of *SaC* may justly be accused of jumping on the postmodern bandwagon. But *SaC* is also pitched at a more popular level than its predecessor, with a grittier, more readable, more irreverent feel: clearly an acknowledgement that the radical science movement has had little impact on the non-academic public.

The pilot issue is a mixed bag: pieces on Star Wars, community radio, sex selection, and a lengthy review of *Pandaemonium*,

Humphrey Jennings' epic study of the cultural ramifications of the Industrial Revolution. While it is far too early to tell whether *SaC*'s promise to "transcend the two cultures" will be borne out, its arrival is not a moment too late: in this tranced dancing, we need to know who we are dancing with, and why. *urnals* discussed:

Science as Culture
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