

Knowledge élites and class war

Would life be better if we left the difficult decisions to experts alone?

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For centuries, the gulf between the haves and the have-nots has been defined in material terms. The rich have more possessions, greater mobility, better nutrition and longer lives than the poor. While such disparities still separate rich nations from poor ones, within today's affluent societies class lines are a lot less easy to draw. Even average citizens have the means to own computers, fly in aeroplanes, eat food grown in far corners of the Earth and enjoy the miracles of modern medicine. At the same time, wealth seems insufficient to shield the rich from many risks of contemporary life, such as terrorism, environmental cancer and aeroplane accidents.

Knowledge, not money, has emerged as the most important instrument of social separation in technologically advanced societies. Those who possess scientific and technical expertise are spearheading the new industrial revolution in biotechnology and computers. Those who do not seem increasingly to be relegated to the status of passive consumers, their preferences shaped by the entrepreneurs of television and the Internet.

The redrawing of class lines through science and technology carries not only economic but also political consequences. Just as property ownership was once a condition for voting, so today there is a growing sentiment among the knowledge élite that public decision-making should be left to the experts who control specialized information. Gone is the idealistic, if sentimental, egalitarianism of the 1960s. From US calls for 'sound science' as the basis for regulating genetically modified foods to the explosion of expert advisory bodies worldwide, the knowledge meritocracy is everywhere asserting power.

One platform for the new class struggle between experts and non-experts is the US legal process. The recent vogue for letting judges screen expert testimony, and even appoint their own experts, bespeaks a growing impatience among professional élites with lay juries. This loss of confidence in the public's capacity to make sense of complex disputes bodes ill for the future of democracy. It also misreads the evidence about what the public knows and understands.

Are the public in developed countries hopelessly illiterate about science and technology, and should they therefore be kept at arm's length from the conduct of law and policy? Some would argue so. When a US jury acquitted O. J. Simpson of murder in October 1995, following the century's most widely



Trusting the experts: public acceptance of DNA tests has altered dramatically over a short period.

watched criminal trial, there was much hand-wringing in scientific circles about lay misunderstanding of scientific evidence. If the jury had only grasped the biological foundations of DNA fingerprinting, critics argued, it would not so cavalierly have acquitted Simpson. An educated appreciation of the technique's precision would have overwhelmed any residual doubts about police probity.

Ironically, just three years later, the US public unquestioningly accepted DNA evidence about the amorous proclivities of two of the nation's presidents. Historians had speculated for years that Thomas Jefferson, the revered third president of the United States, had fathered illegitimate children by his slave, Sally Hemings. Yet it was not until November 1998, when *Nature* published DNA test results from the Jefferson family and Hemings' descendants, that mainstream historians, journalists and the public accepted the conjecture as true.

Similarly, many who believed President William Jefferson Clinton's professions of sexual innocence in the early months of 1998 changed their minds on hearing about the DNA tests on Monica Lewinsky's famously unlauded blue dress. On this occasion, the US public seemed perfectly ready to accept the experts' assertion that it was not spinach dip that had caused the tell-tale stains. Despite the political character of independent counsel Kenneth Starr's investigation, a public wise to presidential weakness failed to express the kind of doubt that undermined the DNA evidence in the equally charged Simpson case.

Examples such as these should caution us against simplistic generalizations about how

the public regards scientific facts and claims, let alone against legal and administrative reforms that widen the gap between experts and non-experts. If the technological disasters of the late twentieth century — Bhopal, Chernobyl, the Challenger, environmental degradation — tell any coherent story, it is that expert assessments need to be tempered by broader visions. The risks of modernity are compounded by compartmentalizing technical knowledge and practical experience, separating lay from expert judgement, and mistaking the incomplete models of the technically literate for the sum total of reality. Would the Challenger have been launched, one wonders, if the engineers' doubts had been exposed to public scrutiny? And might the Green Revolution's environmental impacts have been lessened if farmers had played a more active role in designing the technology?

The strength of the common-law system historically has been to promote the integration of expert knowledge with lay perceptions of facts and values. This model of decision-making should be especially prized at a time when our sciences have made us sharply aware of the interconnectedness of things. As in current US debates about law reform, it may be tempting, in the short run, for knowledge élites to shake their heads over public ignorance and to avoid lay involvement in decisions affecting science and technology. But in the long run our hope lies in enhancing, not curtailing, the opportunities for conversation between science and society. ■
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