

Letter from . . . Chicago

The hamsters say no

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To a civilisation dedicated to the pursuit of happiness and justice, news of improving social conditions in worlds other than our own should prove most gratifying. Thus we learn that on the *Planet of the Apes*, among the gorillas who inherited the earth after the final nuclear holocaust, the incidence of cases of overt discrimination has decreased sharply. The civil rights of minorities are being respected, and even the opprobrious quota system for admission of chimpanzees to medical school has been abolished. Only the abject human beings—those dumb, naked primitive creatures that once inexplicably ruled the earth but now roam in herds outside centres of civilisation—continue to be ruthlessly hunted down and ignominiously used for scientific experiments.

In our own pre-simian civilisation, by contrast, it is the apes and the other beasts, some 20 million a year, that are being used for experiments. Yet since time immemorial there have been people who would rather not eat animals or wear their skins, and more recently they have also objected to their use for the testing of drugs or the elucidation of more basic scientific questions. Though by no means a new movement, anti-vivisectionism has recently undergone a revival that has sent ripples of concern into the scientific community.

In several instances animal activists have resorted to the courts, such as when they tried to prevent a surgical supplies firm from testing a new stapling gun on animals. They have also worked on the politicians, quite successfully it seems, in that Congress last year was on the point of diverting almost one half of all funds earmarked for scientific research into developing alternatives to animal experimentation. Another bill was proposed this year, which would have changed the mechanisms for inspecting animal facilities, giving rise to fears that some of these inspections would be carried out by opponents of animals research.

Animal activists are also believed to have been behind the recent episode in which inspectors seized several monkeys that had undergone sectioning of peripheral afferent nerve fibres to simulate conditions produced by strokes. It was claimed in court that the animals had been kept under grossly neglectful and insanitary conditions, their wounds gaping and grossly infected from biting and chewing their sensation-deprived limbs. In the ensuing proceedings the chief investigator was found guilty in court and fined \$3000 as well as later losing his grant. Many people, however, thought that the whole thing was a "set-up" by an animal activist, who had infiltrated the laboratory in the guise of a research assistant.¹ Amid fears that animal research will soon become impossible, an appeal was filed, and several research groups set up a defence fund. Animal welfare groups, meanwhile, have extended their activity to the farms, trying to improve the short life of animals bred in confined spaces under factory-like conditions, emphasising that animals

should have the right to be free from suffering and exploitation as well as having "the ability to get up, lie down, groom normally, turn about, and stretch their limbs without difficulty." And in Chicago the animal lobby prevailed on a mayor in need of votes for the forthcoming elections to forbid the use for research of stray dogs and cats from city pounds, a reasonable political approach, there being no substantial pro-experimentation lobby.

Little Rock, 1981

A less favourable result, in this 100th year after the birth of Charles Darwin, crowned the efforts the fundamentalist and creationist groups to have the "science" of creationism taught in the schools. Their troubles, based on a perceived continuing decline in moral standards, date back to 1831, when Darwin set out to sea in HMS *Beagle* to visit Tierra del Fuego, the South Sea Islands, and the Indian archipelago. Not particularly impressed by the "miserable" Falkland Islands, "an undulating land, with desolate and wretched aspect, everywhere covered by peaty soil and wiry grass, of one monotonous brown colour," he sailed on to greener lands to study their plants and birds and turtles. On returning home he wrote a famous book that few have read, many have quoted, and everybody knows to prove that man is descended from the apes. The triumphant gorillas of the postnuclear society may have seen nothing offensive in this formulation. But Darwin has ever since been a painful thorn in the side of the fundamentalists, who abhor the simian connection; believe that the earth was created suddenly, from nothing, about 5000 years ago; and favour the view that catastrophism, referring to Noah's flood rather than to a nuclear holocaust, accounts for most of the peculiarities of the earth's geology.

In Arkansas, as early as 1929, the opponents of the theory of evolution had attempted to have Darwin legislated out of the classroom, so that nobody dared mention his name until the days of sputnik and the conquest of space. More recently the textbooks had become somewhat more explicit, to the dismay of the fundamentalists, leading eventually to a counter-reformation. Several organisations were formed in the mid-1960s to promote the literal interpretation of the Bible and of the book of Genesis, and thus the "science" of creationism came into being, supported by persuasive monographs such as "Evolution—The Fossils Say No!"²

But whatever the fossils may have to say on this subject, the First Amendment of the United States Constitution clearly mandates the separation of church and State, prohibits any entanglement between the two, and specifically forbids the government to set up a church or aid one religion to the exclusion of other beliefs. A religious crusade then had to be masked under the guise of science, and from the writings of the creationist experts arose an innocuous "model law," deemed inoffensive enough to avoid any semblance to religiosity and of contravening the First Amendment. Drafted by a certain Paul Elwanger, a respiratory therapist trained neither in law nor science,² this law was skilfully manoeuvred through the

Arkansas legislature in the last days of its 1981 session and signed into law by the governor.³ It was promptly appealed by the American Civil Liberties Union and other organisations on the grounds that it contravened the long-established separation of church and State.

The trial began in Little Rock, Arkansas, late in 1981. Several creationist experts testified in favour of the Act, but their credentials were promptly demolished and their evidence was thoroughly discredited.⁴ On 5 January 1982 Judge Overton entered an injunction permanently prohibiting the enforcement of the Act. His opinion, published in its entirety in *Science*,⁵ clearly explains what creationism is all about, how it represents a religious crusade under the guise of science, how "there is no way teachers can teach the Genesis account of creation in a secular way," and how the so-called balanced treatment would require "public schools to elect to forgo significant portions of subjects such as biology, world history, geology, zoology, botany, psychology, anthropology, sociology, philosophy, physics, and chemistry." Another version of the model legislation, quite "clean from a constitutional point of view" and also mandating the balanced treatment of creation science and evolution science, had meanwhile been signed into law by the governor of Louisiana.⁶ It was also appealed, dismissed by a Federal judge in June, and may mark the end of further legislative moves by the creationists.

John Hinckley Jr

The lawsuits on creationism, despite their fundamental importance, attracted relatively little publicity. The trial of John Hinckley Jr, the man whose attempt on the President's life was witnessed by millions on television, became the concern of every American. The issue narrowed down to whether Hinckley was sane at the time he fired the gun, and the verdict, given by the jury after listening to contradictory evidence for eight weeks and deliberating for four days, provoked a national outrage.

Comments ranged from "a travesty of justice" and "shocking" to "fundamentally wrong." The legal profession came in for much criticism, especially when it was found that the lawyers had plea bargained earlier on for sane but guilty on a less serious charge verdict. Although a Federal judge later committed Hinckley indefinitely to a mental hospital on the basis of a further psychiatric examination, it was pointed out that he might have been released in a less notorious case, and that anyway he can petition under the law for his release every six months. Some people thought that the judicial system needed a purgative, being intellectually corrupted, and that the law was the villain and needed changing. Others blamed the psychiatrists and wanted to analyse them to determine if they were sane at the time they were testifying. One newspaper thought that much harm was done to the public's perception of justice, and that anyone listening to the gibberish of the psychiatrists might be forgiven for concluding that the system itself was crazy. Somebody else suggested that anyone wanting to kill a famous man to impress a young actress was clearly mad, but that the judge should determine how much time he should spend in a mental hospital and how much in jail. There was also a prevailing mood that psychiatry and the law made an unsatisfactory marriage, and that societies could not be run on hospital or psychological models, where the concept of illness or of deep-seated uncontrollable behaviour patterns supplanted that of personal responsibility.

Even President Reagan, after an appropriately dignified silence, suggested that it was hard enough to prove that one's own friends were sane, and that the onus of proving sanity should not rest with the prosecution. Several of the jurors also declared that the verdict was wrong, and two thought that Hinckley was guilty but admitted that they had given into fatigue and peer pressure. A condemned killer was quoted as saying that Hinckley should have been electrocuted and that "the plea is a bunch of bull." Others shared his views, especially at a time when the insane are being released in droves from State

mental institutions because the local authorities are running out of money, and because of the difficulty of confining people when it is almost impossible to prove that a person constitutes an immediate danger to himself or others.

It was pointed out, on the other hand, that the debate about insanity and legal responsibility was hundreds of years old, and that in the United States the insanity plea is rarely successful. Moreover, people declared to be insane often ended up spending more time in confinement than those put in jail; and in the States that have adopted the "guilty but insane" plea most people are sent directly to jail without ever receiving treatment for their illness. Despite the public's outrage there were also voices for moderation, suggesting that how a society treats its mentally ill is a measure of its civilisation, what separates man from beast. "You would not want to hang a madman," said a kindly old lady; many psychiatrists also spoke out against scrapping the insanity plea, though suggesting that it might need to be modified; and there were warnings against abandoning in the heat of emotion the concept that the mentally ill are not responsible for their actions. But the consensus was that one cannot let dangerous people walk out on the street and that there was a need for better ways of dealing with the mentally ill who commit violent acts. Already several congressmen have submitted a proposal to eliminate the massive amount of conflicting psychiatric evidence from these confusing and expensive insanity trials, and to limit the insanity plea to instances where a person was so deranged that he did not know that he was attacking a man—but might have thought he was shooting a tree—or slicing a melon rather than cutting a throat.

On a larger scale, the debate about the insanity plea illustrates once again the ever-present difficulty of striking the right balance between what is permissible and what needs to be regulated or restricted in a free society. This dilemma was also recently brought to the fore when the Supreme Court addressed itself to the "serious national problem" of child pornography by allowing local authorities to ban the production and distribution of material even if it is not considered to be legally obscene. The ruling, which primarily concerns photographic material and the live performance or reproduction of sexual conduct, was hailed as a desirable move. Yet once again it was pointed out that there is a thin line between desirable regulation and repressive censorship—a problem that will continue to exercise the best judicial minds of the country for years to come.

References

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- ² Anonymous. Creationism in schools: the decision in McLean versus the Arkansas Board of Education. *Science* 1982;215:934-43.
- ³ Lewin R. A tale with many connections. *Science* 1982;215:484-7.
- ⁴ Lewin R. Where is the science in creation science. *Science* 1982;215:142-4.
- ⁵ Broad WJ. Louisiana puts God into biology lesson. *Science* 1981;213:628-9.

Is a 30-year history of multiple sclerosis in a father a contraindication to pertussis vaccination in his child?

No. There is no evidence at all that a history of multiple sclerosis in a parent increases the risk of pertussis vaccination in the child. The recommendations issued in 1977 by the Joint Committee on Vaccination and Immunisation were a source of confusion about this type of family history. The revised recommendations issued by the Joint Committee in 1981,¹ however, make it clear that when considering the child's family history it is only *idiopathic epilepsy in a parent or sibling* that needs considering, and that even this should not be regarded as an absolute contraindication.—M A P S DOWNHAM, consultant paediatrician, Newcastle upon Tyne.

¹ Department of Health and Social Security. *Contra-indications to vaccination against whooping cough*. London: HMSO, 1981. (DHSS circular CMO(81)9/CNO(81)13.)