## nature *neuroscience*

## Legal challenges to animal experimentation

On 13 April this year, the German Parliament narrowly rejected a constitutional amendment that would have recognized the rights of animals. The proposed change involved only a few words, but by giving animal rights the same level of constitutional support as already exists for freedom of scientific research, the amendment would have provided opponents of animal experimentation with a strong legal weapon, with major repercussions for biomedical research in Germany. This episode is perhaps the most significant example to date of an emerging trend in both Europe and the US, where anarchic protests are being superceded by powerful political and legal challenges to the use of animals in research.

The German vote was alarmingly close; supporters of the amendment were in the majority, although they fell short of the two-thirds required to alter the constitution. Something similar occurred in Switzerland two years ago, where a proposal to ban all transgenic animal work would almost certainly have been passed by referendum but for a last-minute public relations campaign by a small group of prominent scientists, supported by the pharmaceutical industry. Worryingly, the German biomedical community, in contrast, appears to have done little to defend itself in the battle for public opinion.

Researchers elsewhere would do well to pay attention to these events. The German amendment may yet be adopted (if its sponsors can muster support for a second vote), and if this happens, the implications of the revised constitution will have to be worked out in that country's courts. In other countries such as the US, the animal rights movement has adopted a more 'bottom-up' approach, but the long-term strategy is the same everywhere: legal campaigns are emerging as the animal rights movement's best hope for advancing its political agenda.

What exactly are the implications of 'rights' for animals, as opposed to the protection they receive under existing anti-cruelty laws? An admirably clear exposition can be found in a recent book entitled *Rattling the Cage*, by Steven Wise, a Boston-based attorney who specializes in animal rights law. His book, which includes a preface from Jane Goodall, bills itself as "the animals' Magna Carta", and it seems likely to become an important document for the animal rights movement. It deserves careful attention from biomedical researchers, because they will need to refute its arguments if they are to withstand the legal challenges that appear to be on the horizon.

Wise's thesis is that whereas animals are now treated as 'things' in the eyes of the law, some of them, notably great apes, ought to be considered as 'persons'. Whether or not one accepts, as Wise does, that some apes can learn sign language, it is clear that their cognitive capacities exceed those of many humans (the very young, the severely retarded). Therefore, the argument goes, they ought to enjoy similar protection, including the right not to be kidnapped, sold, imprisoned or vivisected. The traditional view is that there is an absolute distinction between humans and all other animals, but Wise argues that modern biology has made this obsolete, and that there is no reason why it should remain embodied in law. Rights under the law, he says, stem not from belonging to a particular biological species, but from having a certain type of mind, and any definition of mind that encompasses all humans would also include chimpanzees, bonobos and perhaps other species.

This is a radical proposition, but Wise makes a detailed legal argument that the law can and should evolve to accomodate it. He draws parallels with the abolition of slavery, first in England and later in the US, and although he does not seek to equate caged animals with human slaves, his point is that freeing slaves and giving them constitutional rights required a similarly fundamental change in society, in which the courts played a decisive role.

Wise rejects the utilitarian view that animal experiments are justified if the human benefits outweigh the cost to animals. Civilized countries do not allow involuntary experimentation on human subjects, because 'personhood' implies absolute rights that override any benefits to society. Great apes, in his view, should have the same protection. But this leads to the major weakness in Wise's argument: boundaries must be drawn somewhere. It would seem absurd to make no distinctions between species, but if it is wrong to discriminate between humans and chimpanzees, then what about macaques, cats or mice? Any sensible solution would seem to require criteria for evaluating different animals' mental capacities and for weighing them against the benefits of experimentation, but Wise offers little guidance on how this might be achieved.

These difficult questions will not be resolved at one stroke; instead, they are likely to be fought over, step by step, through various national legal systems. Indeed, the opening salvoes are already being fired in the US courts. In one recent decision, hailed as a victory by the animal rights movement, the court ruled that a private individual was entitled to sue the government under the Animal Welfare Act, for failing to prevent a Long Island zoo from housing primates in social isolation. Another ongoing dispute in Los Angeles concerns a pet chimpanzee that (who?) was confiscated from its (his?) owners after biting a passer-by: at issue is whether the animal's interests—as opposed to those of its owners—should be protected by legal guardianship. Meanwhile, animal rights advocates are working to build not only case law but also legal scholarship in their field: courses in animal law are now being offered at several prominent law schools, including Harvard, where Wise is a visiting lecturer.

It is, of course, appropriate that deep controversies such as these should be decided by constitutional means. But this will also require scientists to engage their critics more effectively than they have done in the past. Neuroscientists in particular are likely to find themselves on the front lines at some point, given that the animals of greatest interest as models for the human brain are, by definition, the ones for which the case for protection is strongest. It would be unproductive to deny that the arguments raised in Wise's book have some force. Instead, the research community will need to confront them headon, and to be prepared with good counterarguments.