Local Anesthetics for Draize Test

C.A. Hoheisel, D.K. Lowther and R.L. Harris of the Consumer Product Safety Commission’s Division of Health Sciences Laboratory (Washington, DC) have reported that certain local anesthetics are effective in eliminating pain associated with the instillation of irritants into the eyes of live rabbits. These are proparacaine HCl (0.5% w/v solution) and butacaine sulfate (2%). The other two, tetracaine HCl and lidocaine, were unsatisfactory in that anesthetics was delayed and animals still “exhibited responses indicating pain” when the irritant was instilled into the eye.

Proparacaine did increase the irritancy scores of some of the test chemicals and lengthened the recovery times. For example, nine out of twelve control animals dosed with 5% acetic acid were healed by the fourteenth day after dosing, while only two of the twelve experimental animals (pretreated with proparacaine) were healed. Butacaine, which is no longer used in humans because of excessive irritation and allergic response, appeared to affect irritancy scores less markedly than proparacaine. However, the butacaine studies were conducted several years ago, and the CPSC report notes that the use of the anesthetic for regulatory purposes would require further investigation.

The Limits of Legislation in Achieving Social Change

Theodore S. Meth

This paper is about law, not laboratory animals or philosophical ethics. It proceeds from the premise that law is an appropriate, perhaps inevitable, instrument for dealing with ethical issues related to the use of research animals.

The Characteristics of Law

Law has three principle characteristics: it defines, it manages and it reflects social norms. Anglo-American law in the eighteenth century was largely concerned with defining relationships, especially those involving the use of property. Thus animals came to be regarded as just another form of property. The nineteenth century saw the codification of this process and the beginnings of the managerial, or public law, approach which has been completed in this century. I believe that the twenty-first century will see great development in the reduction of social norms to formal law, especially those concerning personal freedom and economic equality. This process has commenced already in the area of civil liberties.

Most laymen are at 1929 in this historical continuum. If they learn about an apparently cruel and pointless use of animals in an experimental laboratory, they tend to respond by demanding prohibitory legislation, enforced through criminal penalties. This is the syndrome which produced Prohibition. Such an abuse of law rarely involves any evaluation of the costs or available techniques for enforcement. It thrives on the dramatic satisfaction of outraged feelings. Such legislation is the preferred methodology of all absolutists, and therefore of the antivivisectionists.

In the intervening fifty years, legal thinking has evolved far beyond prohibitory legislation as the means of choice for dealing with social change. Especially important in this evolution has been the device of the administrative agency, armed with rule-making, investigative and prosecuting functions.

You may translate this into “bureaucracy,” but bureaucracy is a function of social complexity and population scale. In the absence of radical decentralization of a modern society, the growth of agencies of government is obligatory — and not entirely undesirable. Public administration can be flexible and dynamic in its implementation of the broad declarations of purpose and scope in an enabling legislation. As it moves through the process of receiving and balancing the conflicting inputs of affected factions within the society, it can develop rules which do work and which can be perfected through experience and group criticism. It is a device better suited to a pluralistic society than one-law-one problem legislation.

The Limitations of Law

Administrative solutions are, however, often unsatisfactory to absolutists who have little respect for the pragmatic balancing of interests. They are also susceptible to...
theoreticians of the law who decry the glacial lack of imagination of most bureaus and departments. Out of this discontent has come disrespect for the law, an anomic bordering on anarchy and, among professionals, a profound concern for what has been called legal "pollution," that is, the proliferation of laws and consequent incursions into other processes of society.

One interesting result of these concerns has been the concept of "sunset" laws by which any specific law and its government machinery automatically terminate at the end of a set period of years unless the law maintains sufficient political support for reenactment. Another result has been a novel shift away from our historic reliance on the courts as the premier instrument for managing the resolution of conflicts. New instruments have been established which divert certain problems, such as consumer product complaints, to private agencies; or which move some classes of disputes into mediation and away from litigation, as in the case of divorce.

It is in this historical context that arguments are raised about the limits of legislation as the way to achieve social change in regard to the protection of research animals. If there are those who see these arguments as lending comfort to others who regard animals as neutral tools, devoid of any ethical coefficient, then this is regrettable, but the truth must be told. We have run out of patience and funds for endless management of our activities by government. Proposition 13 is evidence of society's impatience, even if it is not a particularly helpful guide for the future.

The Direction of Law

The legal framework needs to and will move toward other mechanisms of control, such as planning, goal-setting, discretionary funding, catalyzing the private sector and general standard-setting. As this happens, the legal structure will move away from the direct operational management of society's affairs. Indirect law techniques need not be less efficient than straight-line administration. As we all know, the direction of our lives is intimately affected by the direction of the flow of tax revenues, and so it should be. Also, where law mandates fact-finding and dissemination, at least where the effort is not directed to some trivial end, the impact on the formation of public values and the actions of society is very direct. Already the National Institutes of Health is effective in setting standards for the use of experimental animals in projects made possible by its funding.

Law should move in this direction whether our society becomes more socialist or more oligarchical-capitalist. However, the humane movement must realize that its main concern is just one of a host of other single issues, such as tobacco, and cybernetics in all its dimensions. A proper understanding of the place of ethical concerns about the use of animals in biomedical programs will lead to greater humility and better access to the legal system.

The Law in Relation to Animals

This is not the place to criticize the logic of those who speak about "animal rights" or "animal liberation." Seen as political metaphors — which is what every ideology comes down to — they are harmless figures of speech. Seen as true statements about the law, they are absurd and dangerous. Dangerous because they subvert the dialectical process of social analysis and commitment and mask the subtle relationship between the problem of ethics in regard to animals and the whole constellation of other concerns which are at stake for the scientific community.

Indeed, I am concerned lest law and legislation come to be the vehicles for anti-science and wonder if hostility to science, perhaps because science has at times raised unreasonable expectations in the minds of the average citizen, is not the fuel driving much of the antivivisectionist movement. Of course, this is not necessarily the driving force for other animal welfare groups. I cannot conceive of any fundamental antagonism between law and science in regard to the developing law regarding research animals.

The Analogy of Environmental Law

We have much to learn from the ecological movement and the development of environmental law. Analytically both ecology and the humane movement have their roots in religious impulses which are decent and creative, but which, in certain mindless forms have lent themselves to anti-intellectual attitudes which have also been anti-human. Thus the joke that some people love dogs and trees, and hate men and women.

Environmental law has developed a number of techniques specially suited for promoting accountability for and protection of research animals. The impact statement requires, as a condition precedent to a given regulated activity such as roadbuilding, a clear delineation of what may fairly be projected as the consequences of the activity. That is hardly antiscientific! Another approach is to place public funds in trust, so that, for example, a fair portion of a grant must be used in learning how to avoid disrupting the wilderness, even while the greater portion is being used in ways which do have impact on the wilderness.

These are rational devices, readily administered and equitably responsive to societal need, moral concern and economic limitation. Again environmental law, we have learned to issue "licenses to pollute." Through taxation and other devices we increase the economic cost of incursions on nature. We wish to modulate and eventually eliminate those incursions, but we want to avoid the precipitous approach which might be calamitous for individual enterprises and society alike.

You can readily see the appropriateness of these techniques to the progressive regulation of the use of laboratory animals. Hopefully we will have learned from some of the more bizarre and wasteful applications of these techniques in the environmental field. Perhaps the National Institutes of Health would move toward mandating research into complementary and alternative laboratory methods to animal experimentation and testing in medical and pharmacological research. One thinks of the LD 50 toxicity test as a suitable place to begin. Likewise, direct grants for the development of alternatives and toward the establishment of international research clearinghouses are being suggested.

The Stance of Science Toward Law

Those who are primarily concerned about animal protection, in the course of generating public support for the sort of positive and proportionate law-making that we have been discussing, will often indulge in some excess invective against the scientific community. This occurred during the picketing of the American Museum of Natural History, where scientists failed to respond to charges of cruelty and were ultimately equated with Frankenstein's. This case, in fact, illustrates more than a failure of the Museum in public relations or blind scientific arrogance; it
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Law should move in this direction whether our society becomes more socialist or more oligarchical-capitalist. However, the humane movement must realize that its main concern is just one of a host of other single issues, such as abortion, public health, genetic research, regulation of dangerous substances including alcohol and tobacco, and cybernetics in all its dimensions. A proper understanding of the place of ethical concerns about the use of animals in biomedical programs will lead to greater humility and better access to the legal system.

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demonstrates the scientific community's failure to understand how great an involvement the general public has in scientific research. However, there is bound to be some exaggeration of the extent to which some uses of animals, as in undergraduate psychology courses, is least defensible. Also, the aggressive factionalism which has been endemic in the humane movement will tend to encourage groups competing for public attention and dollars to stray into lurid prose and unrepresentative photographs. These distortions of the goals and practices of medical and biological science are simply prices we pay for freedom in a democratic society. We pay them gladly, if also regretfully. Science, like law, has not always done a good job of public relations.

But science should not fight fire with fire. If we accept the thesis that highly restrictive legislation is socially undesirable, then the scientific community should be in the forefront of the effort to protect research animals, ameliorate their lot and strive toward eliminating their use. Look at the analogy to environmentalism: If the automotive, petrochemical and mining industries, and agribusiness, had taken a leadership position in efforts to protect nature, the costly, often ineffective, and highly uncoordinated layers of legal enactments which at times come near to paralyzing business today would probably not have been created. Regulation is obverse of irresponsibility.

As always, de Tocqueville understood Americans.

"If you do not succeed in connecting the notion of right with that of personal interest, which is the only immutable point in the human heart, what means will you have of governing the world except by fear?"

Those who are concerned with protecting the freedom of science must demonstrate leadership and take prompt action in regard to research animals, or else the absolutists will. Law making by prohibition is not dead, even though it is not always done a good job of public relations.

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The law is constitutionally adverse to ideological absolutism, but it will succeed unless knowledgeable, continuous and forceful leadership comes out of the scientific community. Law and lawyers ultimately do what they are told and can all too readily revert to the old ways of prohibition, bureaucratic proliferation and their attendant wastefulness and confusion. Picture the pile of forms to be filled out if rat-catching of higher mammals, including laboratory animals, were legally mandated. If that happens, you will only have yourselves to blame.

The Politics of Animal Rights: Making the Human Connection

Jim Mason

Animal Rights is in the air, so much so that the term borders on becoming a buzzword and the cause itself the latest form of radical chic. Although Lewis Gompertz, Henry S. Salt and others put forth radically different views on attitudes and

Mr. Mason is a founding member of Animal Rights Network, Inc., Box 5234, Westport, CT 06881, and an editor of Agenda, a journal of animal liberation.