Book Reviews

A Medicolegal Study

The Human Body and the Law. A Medico-Legal Study. DAVID W. MEYERS. Aldine, Chicago, 1970. xii, 204 pp. $7.95.

After World War II, the stark revelation of the Nazi atrocities systematically committed by a supposedly advanced Western nation in the name of racial purity, political catharsis, and scientific progress led to a series of international legal codes designed to protect human life and dignity against such assaults by governments. In Europe there was a revitalization of natural law philosophy as the legal positivism of the immediate past proved barren in the fight against concerted national policies of human extermination.

Now, some 25 years later, there are further challenges to humanity in the name of racial purity, sexual freedom, scientific progress, and something vaguely called the "quality of life." Legal principles and legal rules in nearly all Western nations are in a state of great and perplexing flux in the face of changing social and religious beliefs and practices. In this very fine monograph, David Meyers presents a scholarly review of the current law in the United States and Britain, with brief comments on the law in other parts of the world, concerning sterilization and castration, transsexualism, medical experimentation on humans, human organ transplantation, and euthanasia. He blends in discussion of the medical and the religious aspects of these subjects in a clear and quite unbiased manner.

Meyers refers to his book as a medicolegal study. It is certainly that, since each of the subjects he examines involves medical-surgical intervention, with the possible exception in some situations of euthanasia. The greatest contribution he makes, however, is in the comparative legal analysis he offers concerning these subjects. It may surprise scientists and physicians who are accustomed to research and communication across national lines to find that legal scholarship is much more provincial. American courts, and British courts as well, rarely cite foreign statutes or cases, particularly if they are not in the common-law tradition and are in languages other than English. This is true also of our legal periodical and textbook literature. Meyers's book is the only text published in English in the past generation that gathers together so much comparative legal material on these vastly important subjects. A century and more ago, legal medicine texts in the United States and in the English colonies were commonly international in flavor and content. That tradition is largely lost, particularly on the legal side. It can be hoped that Meyers's book will set a new trend in the 1970's in the medicolegal field.

The subject that receives the most extensive attention in the book is sterilization and castration. It is also one of the richest in comparative legal analysis. The author calls attention to the eugenic sterilization laws in 26 states, in 23 of which sterilization is compulsory for certain classes of the mentally ill, the mentally retarded, and criminal offenders. There is no compulsory or voluntary sterilization law in Great Britain, France, or Italy. Denmark authorizes compulsory castration of psychotics and sexual offenders but apparently does not practice it; a small number of "voluntary" castrations of sexual offenders are performed at the famous Herstedvester in Copenhagen each year. Germany had compulsory sterilization laws during the Nazi period, but these were abolished by the Allies in 1946 and have not been enacted again. There is no doubt that these laws were used by the Nazis as a part of their genocide program. How ironic it is that the Americans who helped to abolish them did not work to abolish similar laws in our American states. Meyers in his conclusion of these chapters argues strongly against compulsory sterilization laws of all kinds. More power to him.

The chapters on transsexualism and human experimentation are not as satisfying to the reader, particularly the nonlawyer, because of the more nebulous character of the subjects and the consequently subtler treatment by the author. The few cases and fewer statutes on these subjects anywhere in the world are well discussed, however.

The last two subjects, organ transplantation and euthanasia, offer much meatier legal fare for the author's comparative analytical style. The legal aspects of organ transplantation are already involved in international affairs because of the exchange of organs across national borders. There are actually two discussions of death in the book. One occurs in connection with organ transplantation, where the definition of death, particularly brain death, is examined. The other concerns euthanasia per se. There is an ominous overlap, as some authorities and commentators have argued that when the "quality of life" is below a certain point a person should be allowed to end his life and no medical intervention should take place to prolong it. Meyers reviews the law, or lack of it, in a number of countries on euthanasia. The discussion is fascinating, the conclusion reassuring: no nation currently allows euthanasia, either voluntary or invoked by a third party. The author seems to agree with this result in the law, though his conclusions are rather guarded. He ends this chapter with the observation that "we must trust to the professional ethics and humanitarian motives of our physicians to guide them in choosing how far and what nature of treatment shall be pursued in the particular circumstances of a given case."

On the whole, this is a unique and most worthwhile contribution to medicolegal literature of the Western world in the 1970's.

WILLIAM J. CURRAN
Harvard Medical School and
Harvard School of Public Health,
Boston, Massachusetts

Behavior Patterns

Ethology. The Biology of Behavior. IRENÄUS EIBL-EIBESFELDT. Translated from the German by Erich Klinghammer. Holt, Rinehart and Winston, New York, 1970. xiv, 530 pp. + plates. $12.95.

The work of German ethologists has been so overshadowed by the writings of Lorenz himself that the opportunity to read a full exposition of the views of a leading member of his school is most welcome. Unhappily, although the book has a number of attractive

features to which I will return, its most obvious feature is the retention of a variety of Lorenzian theoretical concepts which most students of behavior no longer find useful. A careful reading of this, the most recent defense of these concepts and approaches, has left me convinced that their use in a major new textbook is very unfortunate.

The author's position is perhaps clearest in the treatment of the old controversy over the distinction between learned and innate behavior, here zestfully reopened for an audience most of whom have sinned by ceasing to be interested rather than by failing to understand. Lorenz's new thesis is that innate or instinctive behavior patterns (the two terms are apparently more or less synonymous) are ones whose form is determined by "phylogenetically acquired information" stored in the genome. Learning may be involved in their development, so "innate" does not mean unlearned. The main objection to such a usage is that even Eibl-Eibesfeldt is unable to maintain it consistently against old habits. It soon becomes apparent that truly innate behavior is not "substantially modified through learning" and that it is "preprogrammed" in the central nervous system. In fact, although the extreme environmentalist position of Kuo deserves the attack it receives, an effect on behavior which is determined by the constraints that anatomy puts on learning (for example the learning of eye-paw coordination in the kitten) is clearly innate in the Lorenzian sense. Most workers have already solved this problem by abandoning the terms "innate" and "instinctive." Behavior, like any other phenotypical feature of an organism, is subject to genetic effects, but only differences in behavior due to such effects, not behavior patterns themselves, can be properly said to be under genetic control. It would be a loss if the term "fixed action pattern" (FAP) (here held to be an innate coordination) also became unusable, since there is a real need for a generic term describing the relatively stereotyped patterns in the behavioral repertoire of an individual that makes no reference to degree of genetic control of the patterns. Species-specific and individual-specific FAP's (such as bar pressing in a Skinner-box rat) might profitably be distinguished.

The retention of the Lorenzian model of motivation is a far more serious matter. It is once again proposed that many, and perhaps most, FAP's accumulate "central nervous excitatory potential" in the absence of performance and discharge it when performed. Apologists have argued in the past that such a model has the virtue that it is clearly independent of physiological reality. This position has apparently changed: it is, for example, suggested that discharge of excitatory potential is dependent on the exhaustion of catecholamines in an appropriate neural mechanism. Admittedly, both rises and falls in threshold, associated with performance of a response, have long interested ethologists and psychologists alike. However, a variety of mechanisms, many exclusively perceptual, are known to be involved: Hinde's work on owl mobbing in passerines and that of Beach, Larsson, and others on rat copulation are classical examples, neither of which is discussed here. Not only does the discharge model obscure all such complexities, but it fails to distinguish among three quite separate effects, namely the recovery from performance (or, more properly, performance and exposure to the eliciting stimulus), progressive changes caused directly by the lack of performance, and appetitive behavior directed toward the opportunity for performance. The second type of effect has been clearly established only for behavior like feeding or drinking, where there is an obvious physiological explanation. It has been assumed in cases like aggressive behavior only because of the false analogy made possible by the discharge model. The two experiments on cichlid fish cited here, which are intended to justify claims of the discharge of aggression, are quite irrelevant to this type of effect. The first one merely shows that, in a species where breeding males viciously attack both males and females kept with them, attacks are more likely to be made against a male, if the choice is given (the female thus being spared). In a second species brief fights are followed by a period when fights are less likely. There is, admittedly, some confusion among the critics of Lorenz as to which claim they are disputing. The evidence is good that a stimulus competent to evoke attack or prey catching can produce a period in which stimuli evoking (or associated with) these patterns are sought. However, there is no sound evidence that the longer a higher vertebrate goes without meeting an appropriate object to attack the more likely it is spontaneously to begin to search one out.

Other classical formulations are treated with similar reverence. Imprinting is still a form of learning clearly different from association learning, irreversible and promoted by pain and privacy; only a specific sensitivity to meprobamate is omitted. Reviews by Bateson and Sluckin are mentioned, but their contents and arguments are completely ignored. On the other hand, many areas of more recent ethological interest receive only passing mention. Displacement activities, for example, rate only three pages, their possible causation by overflow of energy is discussed with approval, and the most important recent advance, namely McFarland's work on their relation to attention shift, is not mentioned.

It will by now be abundantly clear that I feel that the theoretical content of the book under review is quite unsatisfactory. There would, at the very least, be general agreement that it represents the views of a small minority of ethologists. However, it is fair to add that a theoretical exposition was only one of the aims of the author. He also provides a summary of a great deal of observational work, which is particularly useful in the case of the marine fish on which he himself has worked extensively. Finally, the section on human ethology stands out as of quite different importance from the rest. It is the first real attempt to apply ethological techniques to the behavior of normal adult human beings, and is based largely on the author's own work. This is not to say that no forced comparisons are drawn between human and animal behavior. One, in which the erect penis shown on a variety of protective amulets and images is equated with a range of heterogeneous primate displays, on evidence from codpieces, penis sheaths, and exhibitionism, is worthy of *The Naked Ape*. Nevertheless, it is to be hoped that psychologists and anthropologists alike will take to heart the clear demonstration that, despite repeated assertions to the contrary, a great many complicated behavior patterns are common to all men everywhere.

R. J. ANDREW
School of Biological Sciences,
University of Sussex,
Falmer, Brighton, Sussex, England