

THE MORALITY OF VIVISECTION

Perhaps the reader has seen a picture of a surgeon clothed in the customary laboratory apparel, attentively trying the edge of a knife on his sensitive thumb, while his victim, a poor little dog trembling with a half certain apprehension, pathetically looks up from the operating table at this merciless master. The one is a vivisectionist; the other his innocent victim. Placards of such scenes are posted by those who oppose vivisection of animals. The covers of their publications display them to attract interest in this little friend of man, to gain sympathy and secure support to their cause. On the other side how different is the picture when painted by another hand! It is that of a modern experimental laboratory: the animal under the influence of an anesthetic, absolutely without consciousness of feeling, lies motionless before the student of science who, actuated by the highest motives of his profession, the alleviation of human suffering, proceeds to open the body of our dumb friend that he may study the operation of the living organism in its healthy and diseased states. This picture is designed by the scientist to arouse your approval and support of his methods of experimentation, required, he will tell you, to better safeguard and preserve human life.

Each year sees a fresh endeavor in several state legislatures, as well as in Congress, to have bills passed either for the complete suppression of vivisection, or for its restriction. Bills introduced last fall in Colorado and California called forth considerable discussion in those states, and some attention throughout the nation. The question is then one of general interest to the American public, a vast number of whom may be called upon sooner or later to exercise their suffrage in the matter. In Colorado the bill read: "An act to prohibit injurious, dangerous or painful experimental operations or administrations upon human beings or dumb animals except to relieve or cure them; making exceptions of persons consenting to such experiments." This proposed prohibition extended to operations with or without anesthetics, and therefore made even painless experimentation unlawful. Furthermore, the law if enforced would completely abolish any form of vaccination, since it forbade the use of animals in the production of the necessary cultures. The California

bill was to repeal a present law existing in that State which permits properly conducted scientific experimentations or investigations performed under authority of the faculty of the regularly incorporated medical college or university of the State. (vide *Colorado Medical Journal*, 1922).

If vivisection is, as some suppose, the wanton destruction of life merely to satisfy a morbid curiosity it deserves to be effectively stamped out; but if, as others claim, its object is something higher and a real benefit to humanity, then the question evidently takes on a different aspect. But no normal person, vivisectionist or antivivisectionist, delights in causing death to any animal. So opposite is the feeling that it is repugnant to many to put to death so much as a chicken that it might grace the Sunday dinner table. Yet they will dine on the bird, or upon the meat of other animals which have suffered death at the hands of man, without a disagreeable thought or emotion, and not question the propriety of so acting; for they realize that these animals have been given by the Creator to man for his use, and that consequently man exercises legitimate dominion over all subordinate creatures. "Thou hast subjected all things under his feet, all sheep and oxen; moreover, also the beasts of the fields, the birds of the air, and the fishes of the sea that pass through the paths of the sea." (Ps. viii, 8-9). Since man has the right to use certain animals for food, others to carry himself and his goods, or to furnish his recreation, it is equally lawful for him to use an animal for his material welfare, health or safety even when it entails the infliction of injury, pain or death.

The very order we see in nature emphasizes the subordination of animals to men. For the more imperfect are for the use of the perfect; plants use the earth for their nutriment, animals use the plants, and men use both plants and animals. (St. Thomas, *Summa Theol.*, 1a, q. 96, art. 1). This is a truth so obvious that it is difficult to understand the method of reasoning which would make it wrongful to kill animals for food. Yet such extreme opinions have been expressed in antivivisection literature. We have bodies that will not be fed upon ideas. There's much sound sense in Hamlet when he says: "A man may fish with the worm that hath eat of a king, and eat of the fish that hath fed of that worm." (Hamlet iv, 3). Does our idealist shudder?

But it is evident that man, as master of subordinate creatures, has a moral responsibility concerning the exercise of this do-

minion. This rational exercise of dominion in the use of creatures is not to be confounded with abuse. For example, no one can rightly defend the act of applying heat to a living dog's body solely from a morbid desire of witnessing the suffering it will cause the animal. This is clearly an abuse. Yet this same act, performed by a medical student, for the purpose of observing its effect upon the blood pressure may change the moral nature of the act, for the student's purpose is not primarily to inflict pain, but to secure knowledge for the advancement of science and the benefit of mankind. Just because abuses exist here and there some people take the occasion to decry the use. Such extremists ignore the ancient principle, "*abusus non tollit usum*"; that a thing is sometimes abused is no reason for giving up its legitimate use.

The fact that experimenters have not always properly exercised their right over animals has furnished much material for opponents of vivisection. Their great plea is for the protection of dumb animals. Many sensitive and sympathetic persons shudder at what they term the cruelty inflicted upon animals in the laboratory. But if in some instances an animal feels pain in the course of an experiment is this the result of cruelty on the part of the operator? Is the dentist who pulls your tooth cruel because he thereby causes you to suffer pain? Cruelty is a disposition to inflict suffering and pain; in other words it is an attitude of mind. Hence the vivisectionist who inflicts pain whilst seeking some physiological law is not cruel, for it is not his intention to inflict pain, but to find some natural law for the benefit of humanity, if not for the animal itself.

It is true that a century ago in Europe, especially in France, many horrible abuses existed in the dissection of living animals. The anatomical theatre was often the scene of public demonstrations, whose chief purpose seemed to be the display of dexterity and wanton cruelty on the part of the vivisector. Three or four instances of this inhuman practise are frequently cited against the use of vivisection. We read of a splendid greyhound, that had been a lady's companion, tied to the dissecting board, and before a large assembly put through the slow torture of having its flesh laid bare, nerves exposed and manipulated, and otherwise cut to pieces until death brings its agony to a close. Or again, the story is told of the Frenchman who

made a sore upon a dog's back and for days kept it irritated, then one by one destroyed the senses, that of sight by gouging out the eyes, that of hearing by breaking the inner ears, whilst keeping the animal under close observation merely to study its powers of apprehension when deprived of certain senses, and its manifestations of hate and fear under these cruel circumstances. Such revolting experiments were conducted by men of the type of the French Magendie, Brachet, Bérnard, and the Italian Mantegazza, who are held up as examples of the terrible abuses to which unrestricted vivisection will lead. Yet these men were exceptions; a few ignorant godless men of the eighteenth century who left nothing of lasting good to science. Chloroform and ether being unknown at that early day the poor animals were sensible to all their sufferings.

Today the story is very different. Animals are dissected only after being rendered insensible by some form of anesthetic. Aside from the humane aspect, utility demands the use of anesthesia, for upon this largely depends the success of the operation. The methods of producing this unconsciousness and their effectiveness have given rise to much discussion. Those who hold the position that vivisection is justifiable only when there is a certainty that not the least pain is felt by the animal, argue that such absolute certitude cannot be had. A small amount of pain certainly is justifiable when the ultimate purpose of the experiment is the good of mankind, for whose legitimate use the animal has been created by God. And it logically follows that the amount of pain inflicted unavoidably is proportioned by the importance of the purpose.

Here for example is a method sometimes employed in laboratories. An Indian arrow poison, known in medical circles as curare, is applied to cause the paralysis of the motor nerves to such an extent that the subject cannot so much as quiver an eye lid, yet at the same time its sense of feeling is in no wise dulled. However, the feeling is overcome by the simultaneous use of an anesthetic. But the use of curare and anesthetics do not satisfy the antivivisectionist, because, they maintain, while complete paralysis of the nervous system prevents the animal from manifesting its sense of pain, it cannot be determined when sufficient anesthesia is used. Moreover, a rise in blood pressure is often shown, which is asserted to be a sign of consciousness of

pain. Dr. Lethingwell in his book, "An Ethical Problem," devotes much space to this discussion. He calls attention to the fact that since a dog cannot live under a sufficient amount of chloroform to insure complete insensibility for the length of time required in many operations, only a sufficient quantity is administered to keep the animal quiet. This point is often insisted upon in antivivisection literature in which anesthesia is called the curse rather than the blessing of animals. Here, however, it is well to observe that in such cases when the first sign of returning consciousness is manifest in the reflex of the cornea of the eye more anesthetic is applied. Furthermore, if the state of insensibility is sufficient to keep the animal quiet it seems to be pretty good evidence that if any pain is felt it is very slight.

The present question is, however, not concerned with the certainty that all pain is eliminated, but with the sufficient reasons for the experiments. It is evident from the above that experimenters are seeking to avoid the infliction of pain in the dissection of living animals. What reasons, then, justify such operations? The answer to this question determines the morality of the process. A concrete example will perhaps illustrate this very well. At Edgewood Arsenal, Md., the Chemical Warfare Service is engaged in experimental work which involves the use of living animals. The case was recently given publicity by opponents of vivisection as an abuse not to be condoned. (Vide *Mercy and Truth*, Sept. '22, Feb. '23). The Service was accused of exploiting dogs in determining the frightful effects of new poison gases. Brig. General Amos A. Fries, the officer in charge, answered this charge (*ibid.* Feb. '23). He states that the experimentation is not only for the purpose of determining the effects of gas but also of finding methods of treatment of men gassed. "The object," he says, "is to save the lives of men in a future war and the necessary data cannot in general be obtained from such tests as can now be made upon man. Animals are, therefore, used. Dogs are used only where mice, rats, rabbits or guinea pigs cannot be used. Before a dog is used in any painful experiment he is rendered insensible to pain by a general anaesthetic. When the experiment is complete, the dog is killed. All dogs are killed by injecting a saturated solution of magnesium sulphate which produces death in twenty to forty seconds." Considering the object of this work,

and in view of the terrible suffering endured by our soldiers during the world war from the effects of poison gases, no reasonable man will say that the government is not perfectly justified in conducting these experiments to discover methods of treatment. Then should another war call upon the service of Americans we will not be without means of protecting or treating burns from such gases. We are assured by the authorities that this work is carried on in the most human manner possible. That is all that is necessary in this case, the reasons for the form of experimentation being most certainly sufficient.

There are other classes of experimentation, however, that are open to question. Students of physiology are accustomed to make experiments to demonstrate facts that have been for a long time certain and accepted. Many of them are necessarily unskilled vivisectors and so may inflict unnecessary suffering. This practise has been objected to as altogether unneedful. Some form of restriction may seem advisable, as for instance, always having these experiments conducted under the immediate supervision of experienced operators. But if dissection for the demonstration of known facts be entirely forbidden to students, it is readily seen that this prohibition of the fundamentals will make progress impossible. Again, investigations of the phenomena of pain seem sometimes overdone. In such matters may be seen the feasibility of sane legislation for more humane restriction. It must be noted that reference is made to particular cases which must not be confused with the universal practise of vivisection.

Today considerable literature is broadcasted underrating the good effects of vivisection, and often openly denying that man has benefited any by the practise. In the face of the vast amount of undeniable evidence to the contrary it is difficult to understand how people can gratuitously deny the truth of this evidence. What stronger proof is needed of the practical good to humanity from vaccination than the government and municipal Board of Health statistics on the enormous decrease in mortality from several contagious diseases that are thereby prevented. The science of bacteriology is a fruit of the practise of vivisection. It gives man the means of preventing many dread scourges of the human race, such as yellow fever, smallpox, diphtheria and typhoid. It was by the use of animals that Pas-

teur discovered deadly germs, the causes of disease. By means of this great scientist's serum hydrophobia has been cured. Antitoxins and serums used for the protection of man require the use of animals for their production, yet attempts have been made in several states to pass antivivisection laws making such use an unlawful act.

It is a specious argument put forth by these extremists that the decrease in contagious diseases is due not to vaccination but to greater sanitation. Even granting for the sake of argument that vaccination has been ineffective, what lies back of modern sanitation? It is bacteriological experimentation. It is of interest to observe here that one horse furnishes enough antitoxins to save hundreds of human lives, and that same horse continues to live in greater comfort than many of his fellow creatures employed on farms or on our city streets. Aseptic surgery, safeguarding operations from infection, surgery of the brain, blood transfusion, skin grafting, bone growth, and digestion owe a great debt to vivisection. There is scarcely a department of therapeutics or surgery that has not made great advances as a result of this manner of experimentation.

Even the dumb animals themselves have profited much by the sacrifice of their fellow creatures in vivisection laboratories. Here are a few of the diseases affecting animals that are either prevented or cured as a result of such experimentation: the foot and mouth disease, lumpy jaw, rinderpest, Texas fever, sheep scab, splenic fever, glanders, swine fever, anthrax, chicken cholera, cattle tuberculosis, and the silk worm disease. It is quite evident, therefore, that no properly instructed farmer or ranchman will ever favor the abolition of a practice that has been of such great aid to himself in the preservation of his stock.

The foregoing paragraphs set down a few rational principles that must necessarily be applied in judging the morality of vivisection. Some abuses exist it is true. If it is found feasible to legislate certain regulations that will in any measure check these abuses, while at the same time the law does not interfere with proper exercise of experimentation there should be no objection to such sane legislation. The danger lies in the extreme measures that are advocated. It is obvious that the attempted legislation, in the two states mentioned at the beginning of this article, cannot be termed sound and reasonable. The English

law of 1871 which restricts vivisection to authorized persons and provides for the voluntary and gratuitous services of members of the medical profession to act as inspectors of laboratories seems to contain many good points for the prevention of abuses. (Vide Lethingwell, "An Ethical Problem"). Some such law might function in this country for the good of all concerned. Caution, however, must be exercised in this direction to safeguard the proper rights of science. No one will deny that as a whole the scientists engaged in this work are conscientious men, and their opinion as to what is necessary for progress in their salutary labor is to be preferred to that of laymen who are not in a position to know these things. Readers of papers "devoted to securing justice for animals" are often so fed up on the so-called "rights" of animals that they are forgetful of the true rights of men, and so swayed by passionate appeals to their sympathies for our dumb friends that they become unmindful of suffering humanity for whose sake vivisection is practised.

—*Bro. Joseph Regan, O. P.*

IN LABIIS TUIS

(To Brother John Phillips, O. P.)

Thanks be to God! I've known eternal Light,
Since first I ventured on life's treach'rous sea;
Thanks be to God! I've always had my sight,
Unblinded by the pomp of heraldry.

Thanks be to God! His faith has made me whole
With joyous youth and peace with waning years.
Thanks be to God! I've ever kept my soul
From worldly trammels and unholy fears.

Thanks be to God! I've felt the crushing cross
Pin me to earth with wounded soul and sad;
Thanks be to God! I've never known the loss
Of goods renounced or goods I might have had.

Thanks be to God! I see the setting sun;
I hear celestial choirs intone their praise;
Thanks be to God! my journey here is done,
May He preserve me still in His Own ways!

—*Bro. Hugh Hartnett, O. P.*