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LEGAL PROBLEMS IN ORGAN TRANSPLANTS

*Jerome F. Leavell**

INTRODUCTION

We can either preserve the ancient laws that guarantee the inviolability of the dead and the present rights of the next of kin, or we can rewrite those laws in favor of the living. Neither course is politically easy; but we have no third choice. If we want to preserve our present law, we must also accept poor but costly substitutes for natural spare parts. Many may feel that this comes within a hairsbreadth of saying that the rights of the dead take precedence over the rights of the living; they may feel that such an argument is already as outmoded as the arguments of the early anti-anatomists. If enough people come to feel this way, the laws will be changed.¹

The foregoing comment was made only months prior to the introduction of the Uniform Anatomical Gifts Act by the National Conference of Commissioners on Uniform State Laws² during August, 1968.³ The Uniform Act was drafted by Professor E. Blythe Stason of Michigan Law School, and further developed during 3 years of study. With the endorsement of both the American Bar Association⁴ and the American Medical Association, it has now been adopted by all but three states, as well as the District of Columbia.⁵

Although Mississippi has not adopted the Uniform Act, its statute, enacted in 1970,⁶ is quite similar to the Uniform Act, and will therefore be applicable to the following discussion.

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¹LONGMORE, SPARE-PART SURGERY 179 (1968).

²The National Conference of Commissioners on Uniform State Laws is composed of three lawyers or judges from each state, chosen by their Governor for 3-year terms. Their function is to make state laws more uniform and relevant. At their annual meeting they review proposed drafts of model or uniform acts prepared by their subcommittees. The subcommittee which developed the U.A.G.A. [also cited as the Uniform Act] was composed of E. Blythe Stason (Michigan); David R. Bishop (Michigan); Hugh N. Clayton (Mississippi); Douglas Keedie (Arizona), and Richard Rabbit (Missouri).

³Arkansas Democrat, Jan. 1, 1969, at 3A.

⁴The U.A.G.A. was endorsed by the American Bar Association on August 7, 1968.

⁵Council of State Governments, BOOK OF THE STATES 1970-71 (1970).

⁶MISS. CODE ANN. §§ 278.3-01 to -09 (Supp. 1970).

This article primarily concerns the problems of "consent" and "liability" in relation to the Uniform Act and the similar Mississippi statute. Hopefully it will provide insight into a virtually unknown, but increasingly important, area.

The fundamental principle permeating the Uniform Act is that a person should be able to control the disposition of his own body, or any part of it, upon death, without geographical limitation. Furthermore, the Uniform Act is the first attempt to standardize criteria relative to this problem and to protect doctors who wish to procure and use human tissues.

Section 2 of the Uniform Act allows persons who are 18 years of age or older and of sound mind to execute an anatomical gift. The age limitation reflects a growing tendency to place adult responsibility at a younger age and considerably enlarges the potential number of primary donors. Additionally, under section 2, the survivors may make the gift immediately before death or thereafter. These survivors are classed in a hierarchy which provides levels of donative authority. The specific hierarchy of survivors authorized to make the gift, when those of a previous class are unobtainable, will materially reduce the loss of critical time. The physician will thus be reassured that the person making the post-mortem gift has been authorized to do so. The rights of the donee are made supreme to all others except for the state's right of autopsy. This supremacy provision reasonably insures the physician donee that the gift cannot be countermanded by the survivors of the donor.⁷ Mississippi's donative authority is found in section 278.3-01 of the Mississippi Code and its provisions are similar to the Uniform Act, except that the donative age is 21 years. In addition, the Mississippi statute does not insure that survivors cannot revoke the gift, although it does stipulate that the survivors cannot make a donation in violation of the decedent's instructions or known wishes to the contrary.

Section 7 of the Uniform Act clearly outlines the privileges and obligations of all parties upon the death of the donor. The donee may reject or accept the gift, and provisions are made to include the interests of the survivors in providing the body for memorial services, where not precluded by the terms of the gift. When only a part is donated, the donee is obligated to remove it without unnecessary mutilation and give

⁷As a practical matter however, a survivor might still defeat an organ gift by advising the transplant physician that the authorization has been revoked by the donor in a then unavailable document or by an unrecorded statement. See Randall & Randall, *The Developing Field of Human Organ Transplantation*, 5 GONZAGA L. REV. 20 (1969).

custody of the remains to next of kin for burial. Also under section 7, several other important rights are delineated, especially in the area of the physician's liability. The donee acquires absolute ownership of the body or part specified in the gift, and is free from legal liability unless he acts without good faith, mutilates the body, or exceeds the terms of the gift.

Another important provision, which is provided in section 4, is that the physician in attendance at death who certifies the death may not participate in removal or transplantation. An obvious conflict of interest would result otherwise.⁸ Additionally, the determination of death is left to medical authorities. Artificial legal standards cannot easily be applied to a problem about which there is significant medical difference of opinion. The physician will doubtlessly judge death by the equipment and current standards at his command, without concerning himself with whether he is satisfying a static statutory definition. One who acts in good faith, pursuant to the terms of the Uniform Act, is relieved of liability, either civil or criminal, for such acts.

The Mississippi statute⁹ contains similar provisions, and, in addition, relieves the liability of those who act in "good faith" and without "notice of revocation." Furthermore, a person who "unknowingly fails to carry out the wishes of the donor" is protected.¹⁰ The Mississippi statute provides protection only in civil cases, however; it does not mention criminal actions. Mississippi has further settled certain conflicts of law problems by recognizing gifts executed in other jurisdictions.¹¹

⁸See Couch, Curran, & Moore, *The Use of Cadaver Tissues in Transplantation*, 271 NEW ENGLAND J. MED. 681 (1964).

⁹Section 278.3-06 of the Mississippi Code provides:

(a) The donee may accept or reject the gift. When the gift is only part of the body, promptly following removal of the part named, custody of the remaining parts of the body shall be transferred to the next of kin or other person or agency authorized or under obligation to dispose of the body. The time of death shall be determined by the physician in attendance upon the donor's terminal illness or certifying his death, and said physician shall not be a member of the team of physicians which transplants the part to another individual.

(b) A person who, in good faith and acting in reliance upon and authorization made under provisions of this act and without notice of revocation thereof, takes possession of, performs surgical operations upon, or removes tissue, substances or parts from the human body; or refuses such a gift; or any person who knowingly fails to carry out the wishes of the donor according to the provisions of this act, shall not be liable for damages in a civil action brought against him for such act.

MISS. CODE ANN. § 278.3-06 (a) & (b) (Supp. 1970).

¹⁰MISS. CODE ANN. § 278.3-06 (b) (Supp. 1970).

¹¹MISS. CODE ANN. § 278.3-04 (e) (Supp. 1972).

Although there are other provisions in both the Uniform Act and the Mississippi statute, they are not pertinent to the remaining discussion.

THE PROBLEM OF CONSENT

A. Consent of the Donor

As the skills of transplant teams increase and the rejection problem is gradually eliminated, more organs should become available for transplantation. The early transplants of vital organs were usually paired kidneys from living donors. Kidneys were transplanted because the living donor had two kidneys, but could function satisfactorily with one. Since the rejection factors were high, donors were generally limited to members of the family, where tissues were more easily and productively matched. Because these negative factors are now being reduced, more organs are naturally coming from cadaver donors, with, of course, the additional ethical advantage of their having no need of these replacement parts. Consequently, the problems peculiar to living donors are also becoming proportionately less significant. Nevertheless, since it is in keeping with traditional societal and legal concepts of the sacredness of the individual, and since the Uniform Act and the other gift statutes do not deal with living donors, the issue of adequacy of consent must continue to occupy a position of priority until the problem has been completely resolved by medical progress.

The physician must obtain consent from both the donor and the recipient for such surgical procedures.¹² The physician's concern is whether the consent is of sufficient validity to protect him from civil and criminal liability. As a starting premise it seems to be accepted that if the procedure consented to has a recognized and accepted "therapeutic" purpose, no liability per se should attach to the physician's invasion of the patient's person in an attempt to achieve that end. Since organ transplants are now usually within this definition, ordinarily the medical per-

¹²A suggestion on donor forms is provided by Wasmuth & Stewart, *Medical and Legal Aspects of Human Organ Transplantation*, 14 CLEV.—MAR. L. REV. 442 (1965). Consent evidently makes lawful all minor therapeutic procedures of a cosmetic nature, such as removal of skin blemishes, teeth straightening, tattooing, and perforation of ear lobes. Myers, *Aspects of Private and Public Law Regarding the Human Body from the Medico-Legal Standpoint* 242, 1968 (unpublished dissertation in University of Edinburgh Library), citing Strauss, *Bodily Injury and the Defense of Consent*, 81 S.A.L.J. 344 (1964). The removal of naturally replaceable or repairable tissues, such as blood transfusions and skin grafts, also does not create any particular problem where consent is obtained. *Id.* at 242, citing Forbes, *Legal Aspects of Blood Transfusion and of Therapy in General*, 4 MED. SCI. L. 26 (1964).

sonnel performing the operation will be protected, provided the consent obtained is "informed" and "voluntary" and the consenting party is legally competent.¹³

In discussing the aspects of informed consent, the California Court of Appeals in *Salgo v. Leland Stanford, Jr.*,¹⁴ declared:

A physician violates his duty to his patient and subjects himself to liability if he withholds any facts which are necessary to form the basis of an intelligent consent by the patient to the proposed treatment. Likewise, the physician may not minimize the known dangers of a procedure or operation in order to induce his patient's consent. At the same time, the physician must place the welfare of his patient above all else and this very fact places him in a position in which he sometimes must choose between two alternative courses of action. One is to explain to the patient every risk attendant upon any surgical procedure or operation, no matter how remote; this may well result in alarming a patient who is already unduly apprehensive and who as a result refuses to undertake surgery in which there is in fact a minimal risk; it may also result in actually increasing the risks by reason of the physiological results of the apprehension itself. The other is to recognize that each patient presents a separate problem, that the patient's mental and emotional condition is important and in certain cases may be crucial, and that in discussing the element of risk a certain amount of discretion must be employed consistent with the full disclosure of facts necessary to informed consent.

When the recipient of a vital organ transplant is to receive a functioning organ, he will surely die after his own diseased organ is removed, unless, as in the case of a kidney, he can be sustained by a machine until another donor can be found. The preparations for such risk-ridden procedures are thus made in an artificial environment charged with emotion and tension.¹⁵ Therefore, the recipient's (or his proxy's) consent requires an even greater degree of understanding to be intelligently given. This is a matter of subjectivity and perforce must vary somewhat with the facts and circumstances of each case. While the statement that informed consent is a prerequisite to such a radical surgical procedure does not admit

¹³"There is some question, however, whether the donor is acting free of coercive forces. The donor is subjected to extreme psychological and emotional pressure; inherent in his opportunity to save the life of a friend or relative, but despite the existence of such moral pressures practice has established the fact that fully informed adults are sufficiently free of coercion to give valid consent." Beecher, *Some Fallacies and Errors in the Application of the Principle of Consent in Human Experimentation*, 3 CLIN. PHAR. & THER. 141 (1962).

¹⁴154 Cal. App. 2d 560, 317 P.2d 170, 181 (1957).

¹⁵*Medical Experiment Insurance*, 70 COLUM. L. REV. 965, 977 (1970).

of argument, it is difficult, if not impossible, to define the limits of the information required for such consents. It is clearly necessary to admit the limitations of the mechanism of informed consent,¹⁶ but it is equally unavailing and counter-productive to attempt to go beyond it for a preferable, workable alternative. Conceding this, the best test for validity of consent appears to be the customary and flexible "reasonable man" standard. Was the patient (or his proxy) informed of all of the material facts that a "reasonable man" would have wanted to know before making an intelligent choice? Was the individual given full opportunity to exercise his own independent judgment as to whether or not to participate?¹⁷ If so, then no liability should ensue with respect to the organ recipient.

With respect to the donor, the considerations, while analogous in part, are somewhat different because of the inducement factors. The consent does not involve the same factors as would a normal "self-therapeutic" operative procedure. Most importantly, it may be difficult to show that the operation provides any benefit to the donor.¹⁸ The high probability of satisfactory existence with one kidney presumably explains why legal liability has not been imposed for such organ removals.¹⁹ The typical response, especially in the case of the "family" donor, is that the risk to him is relatively slight compared to the certain death and loss of a loved one; therefore, the obvious consideration and benefit to the donor is years of love and affection from the recipient if the operation is successful.

¹⁶Myers, *supra* note 12, at 345.

¹⁷"Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient's consent commits an assault, for which he is liable in damages." *Schloendorff v. Society of N.Y. Hosp.*, 221 N.Y. 125, 105 N.E. 92, 93 (1919).

¹⁸One major difficulty should be considered. In the human body there are two kidneys. If one is injured the second carries on the entire metabolite function of both kidneys with no resultant harm to the individual. However, if a donor, who is left with only one kidney, subsequently suffers damage to his remaining kidney, he is in the same position as the recipient of his kidney and is a candidate for transplant himself. Thus, there is a definite danger in giving a kidney and the donor must be so advised.

Woodside, *Organ Transplantation: The Doctor's Dilemma and the Lawyer's Responsibility*, 31 OHIO ST. L.J. 66, 73 (1970).

¹⁹Nevertheless, it is a substantial sacrifice, particularly for patients donating a kidney to one of many children. A mother has obligations not only to the child with renal failure, but to her other healthy children. Although one kidney will sustain life normally and indefinitely, there is the risk that disease or injury will affect the remaining organ. The ethical questions involved in asking a minor to give a kidney to a brother or cousin have become so complex that it is no longer practiced in most centers.

Dunphy, *The Story of Organ Transplantation*, 21 HAST. L.J. 67, 71 (1969).

Though these paired organ removals cannot be performed without some risk,²⁰ at least to the extent the donor is subjected to the rigors of a severe surgical trauma and elimination of his reserve,²¹ few legal disputes have actually arisen regarding liability to the donor. Some illumination was provided in this area not long ago in three landmark Massachusetts Declaratory Judgment actions—(1) *Masden v. Harrison*,²² (2) *Husky v. Harrison*,²³ and (3) *Foster v. Harrison*.²⁴ All three cases concerned the consent of a minor to donate a kidney for his identical twin who suffered from fatal renal disease. In each case a hospital sought the court declarations prior to proceeding with kidney substitution. The three cases involved donations where consent was given by both the children (teenage youths of ages 19, 14, and 14) and their parents (or guardians). The issue was the competence or capacity of the consenting parties.²⁵ Were these consents of such legal efficacy as to protect the hospital and surgeons from liability for civil and criminal assault and battery?

The court declared that the hospital would incur no liability if the operation was required to save the sick twin and if the healthy twin (donor) knew all of the consequences before consenting. Based on the testimony of a psychiatrist that if the sick twin should die the resulting emotional disturbance ("grave emotional impact") could affect the health and well-being of the donor twin for life, the court concluded that the operation was for the benefit, if only psychological, of the

²⁰A most important aspect of the use of a living donor is the risk to such donor upon the removal of one of his two normal kidneys. The risk can be described in two components: one, the immediate risk of operation; and two, the long-range risk of living with one healthy kidney rather than with two. Both of these risks are small and hard to assess precisely; however, the following statements can be made. To date, over 650 such operations have been performed with no known fatalities or permanent disabilities. The immediate risk of such ill effects therefore is low, but it is doubtful that the figure will remain at zero forever. Stickel, *Organ Transplantation in Medical and Legal Perspectives*, MEDICAL PROGRESS AND THE LAW 40 (1970).

²¹Woodside, *supra* note 18, at 74.

²²No. 68651 (Mass. Sup. Jud. Ct., June 12, 1957).

²³No. 68666 (Mass. Sup. Jud. Ct., Sept. 14, 1957).

²⁴No. 68674 (Mass. Sup. Jud. Ct., Nov. 20, 1957).

²⁵The problem becomes more complex when one deals with donations of a kidney from a minor since the minor, of course, is incapable of consent. The parent can consent to the operation on a minor, even though it would certainly not be for the benefit of the donor child; but because of the potential liability involved in such an operation, most surgeons refuse to take an organ from a minor without a court order.

donor.²⁶ Thus, the operation was for the continued good health and well-being of the healthy twin.²⁷ Apparently, the only other American case in point is *Bonner v. Moran*.²⁸ There the physician removed some skin for a graft from a boy, aged 15, for the benefit of a badly burned cousin. The donor was taken to the physician by an aunt and there gave his consent. His mother was never told of the operation. Later the boy became ill and suffered a permanent scar. The federal appeals court found that a surgical operation was a technical battery, and as such was excusable only by the consent of the parents. In such a situation a doctor is justified in operating on a minor, with only the minor's consent when he is near maturity. Moreover, since this operation was not for the donor's benefit it was necessary to have his parent's consent. The court stated that this was "a case of a surgical operation not for the benefit of the person operated on but for another, and also so involved in its technique as to require a mature mind to understand precisely what the donor was offering to give. . . ." ²⁹ That the donor had acted idealistically in the hope of helping his ailing cousin was evidently regarded by the court as irrelevant. This case might also be taken as a precedent for the proposition that competent consent may be given for removal of tissue, even if the operation is not for the donor's direct physical benefit. Albeit, the limits to this "intangible" benefit remain undetermined and doubtful. For instance, would the consent of a friend of the recipient, rather than a twin, who volunteers his kidney, be valid against a post-operative repudiation on the basis of the "benefit" principle? This question of what constitutes benefit to a donor stands in need of considerable clarity.

The question of capacity of children, *qua* children, to consent to transplantation is a controversial one.³⁰ For example, Professor Paul A. Freund of Harvard thinks that a child is ordinarily legally incapable of

²⁶This reasoning has not escaped criticism. For example: "Yet the whole opinion of the Court is based on this one opinion which leaves the door open for almost all donors to donate since any child of normal intelligence would suffer grave and emotional impact if his mother, father, brother, or sister died and a donation of one his organs would have saved this relative's life. And since a child would generally be a good donor for such a relative (because of the genetic similarity) there would seem to be no limitation upon this doctrine." Woodside, *supra* note 18, at 78.

²⁷This reasoning is difficult to reconcile with the decision in *Strunk v. Strunk*, 445 S.W.2d 145 (Ky. 1969), an often criticized case where the donor twin was retarded.

²⁸126 F.2d 121 (D.C. Cir. 1941).

²⁹*Id.* at 123.

³⁰See Curran, *A Problem of Consent: Kidney Transplantation in Minors*, 34 N.Y.U.L. REV. 891 (1959); *Experimentation on Human Beings*, 20 STAN. L. REV. 99, 107 (1967).

consenting to tissue removal, when the removal is of no direct benefit to him,³¹ but is against an absolute disqualification which would eliminate much useful investigation.³² Oxford University's Professor Daube takes an even more stringent view, contending that children should never be transplant donors.³³ This view is in keeping with the traditional English attitude toward hazardous experiments involving children, which are not directly beneficial to such children. According to the English view it is impermissible to conduct such procedures even with parental consent.³⁴ English courts do not regard a child of less than 12 years of age as being capable to consent to any medical procedure which may do him harm. In Scotland it is age 14, and in America evidently 18 is the minimum age for a person to be capable of giving valid consent.³⁵ According to one source it is the practice of American doctors to refuse to perform any operation on children under age 10, even for their direct benefit, without parental consent. While it is the apparent consensus that any person who is age 18 or older possesses the full capacity for requisite consent in any recognized operation,³⁶ in America persons under age 21 are not usually considered as kidney donors because the validity of their consent in this context is subject to question, except in identical twin cases.³⁷ Other groups placed in "special consent" categories, because of their extraordinary vulnerability to undue influence, are: the feeble-minded, the insane, soldiers, wards, medical students, and prisoners.³⁸ Of course, there is the even deeper problem of the uncomprehending or illusory consent. Suffice it to say that the ethical and legal issues which underlie the question of consent in such cases are of considerable complexity.

Thus, the legal effect of consent by a living donor to removal of tissues, which are not necessarily replaceable by his own body, still remains relatively uncertain. Moreover, the whole question of the "extent" of consent—what one willing individual can donate to another for purposes of health or medicinal improvement—remains doubtful and in need of full consideration by the courts. The uncertainty is further com-

³¹Freund, *Ethical Problems in Human Experimentation*, 227 NEW ENG. J. MED. 687, 691 (1965).

³²Freund, *Introduction*, DAEDALUS xii (Spring, 1969).

³³Myers, *supra* note 12, at 247.

³⁴*Id.*

³⁵Beecher, *Scarce Resources and Medical Advancement*, 98 DAEDALUS 275 (1969).

³⁶Myers, *supra* note 12, at 249.

³⁷Stickel, *supra* note 20, at 44.

³⁸For a comprehensive discussion of the subject of prisoners as donors and the problem of consent, see Woodside, *supra* note 18, at 80-87; Stickel, *supra* note 20, at 33-34.

plicated by the traditional social-legal attitude of hostility toward surgery not carried out for the physical benefit of the patient, consent notwithstanding.

B. Consent of the Recipient

With respect to consent by the recipient, the considerations are somewhat different. In Anglo-American law there is a premise that "each man is considered to be master of his own body."³⁹ Consequently, any physical invasion must rest on a free and informed consent. Such consent protects the physician from a claim of assault and battery.⁴⁰ By the same token, an affirmative misrepresentation by the physician as to the nature of the operation or a failure to disclose the probable consequences of the operation expose him to a charge of unauthorized treatment. The physician, however, has no obligation to describe in detail all of the possible consequences of treatment, if the patient should have known of the danger by the nature of the operation. The absence of informed consent subjects the physician to a claim of assault and battery, to medical malpractice for lack of conformity to medical standards,⁴¹ or sometimes even to a claim for wrongful death.

What should be the ingredients of informed consent in heart transplants? As pointed out in the excellent and thorough analysis of this problem by Jeffrey C. Baker in *Liability and the Heart Transplant*,⁴² if the doctor portrays the transplant as a means of probable recovery, the consent is unlikely to be construed as an informed one. Although some hope for prolongation of life is offered by the survival of several transplant patients, the radical nature of this extreme operation requires that the patient fully comprehend that his life will be endangered by the transplant, and that even if he survives, his life span will probably be limited. Few patients, if any, however, would refuse the possibility of a prolonged life. In other words, it is a matter of semantics and verbal emphasis. This is where a very subtle element enters the picture and where the greatest danger lies in this doctor-patient relationship. If consent is couched in such terms by the doctor as to make it appear to be a choice of "treatment" or "no treatment," it is actually no consent at all,

³⁹Natanson v. Kline, 186 Kan. 393, 350 P.2d 1093 (1960); Schloendorff v. Society of N.Y. Hosp. 211 N.Y. 125, 105 N.E. 92 (1914). See also Annot., 99 A.L.R.2d 599 (1965).

⁴⁰Schloendorff v. Society of N.Y. Hosp., 211 N.Y. 125, 105 N.E. 92 (1914); Baker, *Liability and the Heart Transplant*, 6 Hous. L. REV. 85 (1968).

⁴¹Baker, *supra* note 40, at 105.

⁴²Baker, *supra* note 40, at 106.

but a mere affirmation of the doctor's decision.⁴³ Moreover, if put in terms of "death or life," it is not a valid consent, since this is a misrepresentation of the true situation. The decision is not one of "death or life," but of "probable death or probable limited prolongation of life." It is also extremely important in this respect that the standards of such consent be even more scrupulously enforced now that transplants of vital organs have been apparently removed officially from the category of experimentation by the Uniform Act; thus, possibly encouraging less skillful physicians to attempt the operation. The courts should be absolutely certain that proper criteria are established for informing the patient of the medical expectations and conceivably dire consequences of his decision, and that unscrupulous medical practitioners are held accountable for failure to conform thereto.⁴⁴

LIABILITY OF TRANSPLANT PHYSICIANS

The field of heart transplantation is so new that the medical community, *inter alia*, is somewhat unsure of what constitutes acceptable

⁴³In attaching significance to the principle of personal autonomy the author is cognizant of the degree to which the power of decision of the very ill person in an experimental setting is greatly diminished. An investigator cannot create a strong ego for a patient or subject, but there are leads he can follow to stimulate what he does find in the person. A sensitive investigator can enhance the consent situation for the normal subject or patient by assisting him to perceive what it is that he does have control over; that is, his consent. Some physicians when interviewed revealed confusion about the content of patients' consent. Some indicated that they thought informed consent meant that the patient is expected to agree intelligently to the design of the experiment or to the details of a new therapy, and thus they could easily despair of ever attaining consent or be wary of seeming to relinquish professional medical judgment. The expectation of informed consent has never been that the patient be a judge of the medical procedure in the consent situation. What is hoped for is the most self-possessed decision to give consent, to say "yes" or "no" to participation. The roots of the word consent (*con-sentio*) point not only to mutual understanding between the parties but to an answer which proceeds from within the person, involving feeling and perception. The most serious moral question which can be addressed to those who participate in the consent situation is this: How can the subject be helped to employ what power of decision he does possess? Can the interaction be turned to the mutuality of the persons involved so that fears of manipulation and deception can transmute into meaningful cooperation between equals in the research procedure? Such prominent questions are derived from the principle of persons-in-mutuality, so integrally related in its development to the personalizing meaning of agape, the central focus on Christian ethics. The two values which could come into conflict in the consent situation, the general welfare and the welfare of the individual, must be balanced and harmonized in the consent situation itself. It is not by accident that nonscientists have become concerned and involved in the debate about consent. Stickel, *supra* note 20, at 87.

⁴⁴*Id.* See also *Salgo v. Leland Stanford Jr. Univ. Bd. of Trust.*, 154 Cal. App. 2d 560, 317 P.2d 170 (1957).

procedures, techniques, and limitations.⁴⁵ We have seen that the Mississippi statute⁴⁶ and the Uniform Act, which authorize organ and tissue gifts after death, limit the liability of persons acting under the authority of a written instrument of gift.⁴⁷ But what of the physician who lacks or exceeds such authorization? While the Uniform Act does not define the donee's liability for failure to act in "good faith," it would seem that he would be accountable in damages for accepting a gift with knowledge of its revocation; for knowingly exceeding the terms of the donation; or in a single-organ situation, for failure to return the body to the survivors in a condition suitable for burial.⁴⁸ Living donors, such as donors of paired organs (kidney), however, are not subject to the Uniform Act, and the law concerning them is extremely limited. There are no reported appellate cases on unauthorized organ removal from a living donor for transplant purposes, or exceeding the authority when consent for such a gift was actually made.⁴⁹ Most problems in this area revolve around the question of consent. For example in *Bonner v. Moran*,⁵⁰ a physician was held liable in trespass for a skin graft taken from a 15-year-old boy, despite the donor's consent.

Doubtless, a physician who removes an organ (such as a kidney) from a living donor without proper authorization or requisite care and skill would be liable in tort for damages as in the case of any unauthorized (assault and battery) or negligently performed (malpractice) operation.⁵¹

As a convenient vehicle to explore possible civil liability of the transplant physician in cases of post-mortem organ donation, Jeffrey Baker has suggested the following hypothetical:

⁴⁵Since the conventional definition of death has been the only legally recognized definition to date, the legality of unconventional determinations of death, so-called because based on an unconventional definition of death, and also of transplant surgery dependent on these determinations, is uncertain. Luyties, *Suggested Revisions to Clarify Section 7 of the U.A.G.A. on Determinations of Death*, 11 ARIZ. L. REV. 749 (1969).

⁴⁶MISS. CODE ANN. § 278.3-06 (b) (Supp. 1972).

⁴⁷U.A.G.A. § 7.

⁴⁸U.A.G.A. § 7 (a).

⁴⁹Luyties, *supra* note 45, at 749.

⁵⁰126 F.2d 121 (D.C. Cir. 1941).

⁵¹For an exculpatory statute which pre-existed the U.A.G.A., see TEX. REV. CIV. STAT. art. 4590-1 (1960), repealed by Act of May 29, 1969, Tex. Laws ch. 375, § 9: "the hospital or physician shall not be civilly or criminally liable for removing said organs or any part thereof from the body, providing the donor has, prior to death, executed a valid written agreement as provided herein." See also *Wall v. Brim*, 138 F.2d (5th Cir. 1943) (an operation performed without patient's consent is a technical battery).

D is injured in an automobile collision and is brought unconscious to a modern hospital. A surgeon, S, examines D and concludes that he has suffered a fractured skull, and that his brain is hemorrhaging badly. S determines that there is no hope of saving D's life and later death is pronounced. Since D's internal organs are still intact, S immediately connects him to an artificial respirator to keep his tissues viable. Recipient, R, has been bedridden in the hospital for some time with a deteriorating heart condition. After some tests, S decides that D is a suitable donor and obtains R's consent to perform the transplant. D's wife consents and the transplant is performed. Artificial equipment is removed from D's body and R is returned to the recovery room.⁵²

This hypothetical raises several possible legal issues: (1) When is D legally dead so that S can remove his organs without incurring malpractice liability for causing that death?⁵³ (2) In what area may S encounter malpractice to R, the recipient? (3) Are heart transplants malpractice per se on the ground that they are experimental and violative of public policy?⁵⁴

⁵²Baker, *supra* note 40, at 107.

⁵³This question is often a subject of much "semantical variation," which further complicates the basic issue. Examples: (1) "Doctors are faced with a dilemma as to should a person be kept *alive* artificially or allowed to *die* naturally." (2) "The religious and moral question involved is whether or not a doctor should *speed up* a donor's death when death is imminent. . . ." Opposing this point of view, Rabbi Emanuel Jakobovits, Chief Rabbi of the British Commonwealth states: "Even a fraction of life is precious. Therefore no one must hasten the death of a donor." (3) "At a recent scientific meeting in London, Professor Michael Woodruff who performed Britain's first kidney transplant operation, stated that 'doctors must remove organs from a donor before he dies if transplant operations are to succeed.'" (Note that all of these statements turn on the definition of the term "death.") Such definitional variation is enough to give a philologist a verbal nightmare. Greenstone, *Legal Aspects of Organ Transplants*, 92 N.J.L.J. 449, 454 (1969).

While the electroencephalograph might well be used in all cases in order to determine cerebral death, it is of particular interest to those patients who have had catastrophic neurologic difficulty and who require, in order to preserve life, ventilation by mechanical means. To continue life in such patients condemned to eternal state of coma is merely a triumph of protoplasmic resuscitation. It is doubtful whether there is any benefit to the patient, and certainly there is a financial drain on the family.

Wasmuth, *Organ Transplantation*, LEGAL MEDICINE NEWS (1969). See Fletcher, *The Patient's Right to Die*, 221 Harpers, OCT., 1960, at 139; Stevens, *What is Death*, 94 READERS DIGEST 225 (May, 1969); 205 J.A.M.A. 29 (1968); Collins, *Limits of Responsibility in Prolonging Life*, 206 J.A.M.A. 391 (1968).

⁵⁴See E. DAVIES, TRANSPLANT—THERAPY OR EXPERIMENT. "There should be legislation to make it clear that a transplant operation would not per se give rise to civil or criminal liability. The surgeon would then have some protection but would still be under a duty of care not to endanger the donor's health," (or the recipient's).

As to the first question, the responsibility of interpreting the physiological conditions constituting death are left, under the Uniform Act, to the discretion and judgment of the attending physician (section 7 (b)),⁵⁵ who, by section 7 (c),⁵⁶ is apparently absolved from responsibility when acting in good faith. Section 278.3-06 of the Mississippi statute has similar provisions. Nevertheless, it is conceivable that a court might interpret these exculpatory provisions narrowly,⁵⁷ in which event the physician's determination of death might be circumscribed by various possibilities of civil and criminal liability.⁵⁸

One authority, in concluding that Section 7 of the Uniform Act does not necessarily afford protection to the physician, stated: "The first step in deciding whether such a physician is somehow protected by the U.A.G.A.'s disclaimer is to determine whether he acts 'in accord with' section 7 (b) (directing that 'the time of death shall be determined by a physician who tends the donor. . .'), when he makes a determination of death. The second step is to determine whether a negligent act can be committed in good faith."⁵⁹ If both questions can be answered affirmatively, the determiner of death should be immune from liability, provided, of course, that the determination is alleged to be only negligent—not intentionally wrongful.

⁵⁵U.A.G.A. § 7 (b): "The time of death shall be determined by a physician who tends the donor at his death, or, if none, the physician who certifies the death. The physician shall not participate in the procedures for removing or transplanting a part."

⁵⁶*Id.* § 7 (c): "A person who acts in good faith in accord with the terms of this Act or with the anatomical gift laws of another state (or a foreign country) is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act."

⁵⁷"Not all courts can necessarily be expected to conclude that doctors are authorized to make unconventional determinations of death in conjunction with U.A.G.A.—authorized body gifts even if confronted with the intention of the drafters to negate the older, anachronistic definitions of death and to leave the definition of death to the medical profession." Luyties, *supra* note 45, at 761.

⁵⁸There is an apparent disagreement concerning the U.A.G.A.'s "exculpatory clause." Some authors contend that the clause is far more extensive than it appears. They opine that:

The possible criminal or civil responsibility of the physician who makes the determination to discontinue medical treatment in maintaining circulation is apparently governed by the Anatomical Act. A person acting in good faith in accordance with the terms of the Act is not liable in damages or criminal prosecution. Moreover, a respected legal scholar (Fletcher) has suggested that the discontinuation of treatment is an omission, rather than an affirmative act, which places the question in the context of what 'doctors customarily do.'

Randall & Randall, *supra* note 7, at 37.

⁵⁹Luyties, *supra* note 45, at 749.

To the extent that the attending physician determines death for the purpose of designating when organ removal from a corpse can commence, the physician is acting in accord with the Uniform Act. Consequently, assuming good faith compliance with the terms of the anatomical gift, the doctor should be protected from any claims of mental distress caused by the mishandling of the dead body. However, the doctor in the transplant setting not only determines death of a donor *qua* corpse; he also determines the death *qua* patient. Thus, if a question arises as to time of death, the fact that an attending doctor made the determination that death had occurred before organ removal or withdrawal of supportive therapy would not necessarily justify application of the disclaimer to immunize the doctor from liability for a negligent determination made when the donor was still alive.⁶⁰ The disclaimer applies only to the acts of the attending doctor in his relationship to the donor *qua* corpse so that a malpractice claim based on the use of improper criteria to determine death or misapplication of proper criteria may still be heard.⁶¹ Indeed, the disclaimer probably does not apply to the acts of the attending doctor with regard to the donor *qua* patient, but the meaning of the disclaimer is difficult to extract from the terms of the Uniform Act. From the discussions of the Uniform Act in the Committee of the Whole of the National Conference of Commissioners on Uniform State Laws in August, 1967, and July, 1968, where the disclaimer was analyzed the following conclusions (as to the intended meaning of the disclaimer) can be drawn. First, good faith was intended to protect

⁶⁰See generally Corday, *The Patient's Rights Always Come First*, PROCEEDINGS OF THE NATIONAL MEDICOLEGAL SYMPOSIUM (1969); Halley & Harvey, *Definitions of Death*, 69 J. KAN. MED. SOC'Y 280 (1968); Hamlin, *Life and Death by EEG*, J.A.M.A. 112 (1964); Sadler, *Transplantation—A Case for Consent*, 280 NEW ENG. J. MED. 862 (1969); Wecht & Aranson, *Medical-Legal Ramifications of Human Tissue Transplantation*, 18 DEPAUL L.J. 588 (1969); Williams, *Transplantations—Other Tissues and Organs*, 65 NURSING TIMES 818 (1969); Williams, *Transplantation Problems*, 65 NURSING TIMES 849 (1969). See also *Hearings on S.B. 2999 Before the Senate Committee on the District of Columbia*, 91st Congress, 2d Sess. 1730 (1970).

⁶¹This is the crux of the problem:

On the other hand, courts which have paid lip service in the past to the idea that the time of death is a question of medical judgment have apparently meant only that the time at which all vital functions ceased (the traditional legal definition) was a question of fact. That is, the question of the existence of death was resolved within the context of traditional legal criteria. . . . Therefore, in a pre-U.A.G.A. claim arising out of a doctor's withdrawal of supportive therapy or a surgeon's removal of an organ before conventional death, a court could have instructed a jury to determine, in terms of the existing definition of death, whether the signs which were observed by the doctor constituted conventional death. The question is then the import of the first sentence of section 7 (b).

Luyties, *supra* note 45, at 755. In other words, does this give the determining physician the freedom to use any *criteria* that the medical profession will accept?

the donee or any doctor who accepted and used an anatomical gift, ostensibly made in accord with the Uniform Act without actual notice of a latent procedural defect in the gift document. Second, protection is also afforded to the donee who accepts an anatomical gift from a survivor of the decedent without knowledge that the survivor knows of the objections to the gift by other survivors or by the decedent. Third, if the gift is accepted after it has been revoked but before actual notice of the revocation is received, the recipient and others acting on the gift are immune from liability.

Another factor which militates against construing the disclaimer to immunize negligent determination of death from liability is that it would probably be held unconstitutional. Since many states have constitutional provisions which prohibit the abrogation or limitation of actions for damages, an interpretation of the Uniform Act's disclaimer which would limit the common law right to sue for injuries caused by malpractice would be presumptively unconstitutional.⁶²

Since the Uniform Act might be construed to mean that doctors are authorized, if acting in "good faith," to extract organs from bodies without fear of liability and are also authorized to use their own judgment in determining the point at which transplantation can be commenced without judicial "second-guessing," there arises the obvious danger that the disclaimer (section 7 (c)), might be interpreted to immunize all death determiners from liability so long as they acted in "good faith," rather than only those who acted non-negligently.⁶³

A person who acts in good faith in accord with the terms of this Act or with the anatomical gift laws of another state or a foreign country is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act; *provided that nothing contained in this or any other clause of this Act shall be construed to exculpate the negligence of any physician, surgeon, or other medical attendant in rendering or discontinuing medical treatment to a patient.*⁶⁴

⁶²See 2 LOUISELL & WILLIAMS, MEDICAL MALPRACTICE § 21.36 at 594.27-29 (1969). See also *Moseley v. Lily Ice Cream Co.*, 38 Ariz. 417, 420, 300 P. 958, 959 (1931).

⁶³"Good faith is 'without culpable negligence,' or a wilful disregard for the rights of others." *Whitney v. Huntington*, 37 Minn. 197, 201, 33 N.W. 561, 563 (1897). "Bad faith is stronger than the idea of negligence." *Warfield Natural Gas v. Allen*, 248 Ky. 646, 655, 59 S.W.2d 534, 538 (1933).

⁶⁴Luyties, *supra* note 45, at 768 (emphasis in original). Physicians in some states, such as Arkansas, have anticipated this problem and have initiated legislation to insulate them, to some extent, from malpractice liability in such cases. See, e.g., ARK. STAT. ANN. §§ 82-410.1 *et seq.* (1960). Other states have taken the opposite position and have modified the disclaimer provision of the model U.A.G.A. See, e.g., MO. ANN.

If the surgeon employed the traditional criteria of heartbeat and respiration, in our hypothetical, D would presumably be regarded as legally dead⁶⁵ prior to the organ transfer, thus obviating any difficulty.⁶⁶ If, however, the determining physicians used the cerebral-death test for the moment of death, there would be room for conflicting expert testimony,⁶⁷ especially in view of the almost universal acceptance of the heart-lung basis for death.⁶⁸ In this situation it might be possible to prove to a jury that under the circumstances of the case the certifying physician acted improperly. Furthermore, because of the absence of standardization in the time period for recording the "flat EEG" before such a determination, there is a possibility of a conflict even among the physicians present at the scene. The jury, and later an appellate court, therefore might find, on the basis of the testimony of experts and eye-witnesses,

STAT. § 194-270 (3) (Supp. 1970) (added "without negligence," "to good faith."); MONT. REV. CODES ANN. § 69-2321 (1969) (eliminated "disclaimer"); N.C. GEN. STAT. § 90-220.7 (c) (1965) (replaced provision with "due care"); ORE. REV. STAT. § 97.290 (3) (1969) (replaced "good faith" with "probable cause").

⁶⁵Simultaneous death disputes are the closest to a legal determination of the exact moment of death that the courts have decided. However, while adopting the conventional heart-lung criteria most do nothing but rule that one decedent predeceased another. See, e.g., *Smith v. Smith*, 229 Ark. 579, 317 S.W.2d 275 (1958); *Schmitt v. Pierce*, 344 S.W.2d 120 (Mo. 1961), *motion for rehearing denied*, 379 S.W.2d 548 (Mo. 1964). In the *Smith* case, the Arkansas Supreme Court held the deaths were not simultaneous, since "Mrs. Smith was [not] dead, scientifically or otherwise, unless the conditions set out in the definition existed." 317 S.W.2d at 279.

⁶⁶*Cf.* *Thomas v. Anderson*, 56 Cal. App. 2d 371, 215 P.2d 478 (1950) ("[d]eath is not a continuing event and is an event that takes place at a precise time," i.e., when the "heart stops and respiration ends.") *Id.* at 482. "Actually, the use of the conventional criteria affords the unscrupulous an opportunity to manipulate the determination of the time of death for inheritance purposes. If the decision is influenced by the wishes of certain relatives hoping to inherit, he may, by unrealistically prolonging resuscitative measures determine the disposition of the decedent's property." M. HOUTS, DEATH § 1.02 (3) (1967).

⁶⁷An example of such conflict is found in Peart, Letter to the Editor, *The Times* (London), June 3, 1969, at 9, col. 2: "Criteria of death in . . . patients are almost impossible to lay down but the doctor determines this once he turns off the respirator."

⁶⁸In the past, courts have held consistently that any evidence indicating continuance of the vital functions in one person beyond the time when there ceased to be any indication of vital functions in another to be sufficient to establish survivorship. See *Smith v. Smith*, 229 Ark. 579, 317 S.W.2d 275 (1958); *Thomas v. Anderson*, 96 Cal. App. 2d 371, 215 P.2d 478 (1950). See also *Sauers v. Staltz*, 121 Colo. 456, 218 P.2d 741 (1950); *Gray v. Sawyer*, 247 S.W.2d 496 (Ky. 1952); *Vaegemast v. Hess*, 203 Minn. 207, 280 N.W. 641 (1938); *Schmitt v. Pierce*, 344 S.W.2d 120 (Mo. 1961); *Finch v. Edwards*, 239 Mo. App. 788, 198 S.W.2d 665 (1947); *Sauger v. Butler*, 45 Tex. App. 527, 101 S.W. 459 (1907).

that the doctors involved were guilty of a tort (wrongful death) for having removed a vital organ from a living person.⁶⁹

The requirements of the Uniform Act (section 7 (b) and the Mississippi statute [section 278.3-06 (a)] should, of course, go far toward eliminating the recipient surgeon's liability in this respect.⁷⁰ Nevertheless, the transplant surgeon seems to be in the center of all of these controversies, and "whether his involvement in all of the facets of the transplant procedure is real or imagined, he is nonetheless pictured in the minds of the public (and thus a jury), as being in control of every detail."⁷¹

Irrespectively, there may still be conceivable grounds for malpractice if, after the decedent's condition is pronounced hopeless, substantial supportive therapy is not employed. It has therefore been suggested by some commentators that transplant physicians face potential liability for failure to continue extraordinary efforts to prolong the life of the patient (e.g., stopping cardiac resuscitation, turning off the respirator, removing the needle in intravenous therapy). It has also been suggested that a physician who withdraws such life-supportive measures or who removes a critical organ before conventional death is reached is committing an act of homicide.⁷² Since malpractice doctrines require the doctor to provide a level of care not substantially less than that generally available,⁷³ the withholding of such treatment may be difficult to justify, especially in a sophisticated clinical environment. Thus, if the defendant physician cannot show that there was "legal" death before all hope was pronounced lost, he must show that all hope was lost because of the extent of the injuries. Of course the injuries might be so extensive as to

⁶⁹Luyties, *supra* note 45, at 760.

⁷⁰See MODEL PENAL CODE § 3.02 (1962), Comment (Tent. Draft No. 8, 1968).

⁷¹Baker, *supra* note 40, at 112. Luyties notes that:

The effectiveness of this provision will depend on interpretation of the term "participate" in relation to the terms "removing" and "transplantation." "Participate" could encompass everything from physically removing an organ, to performing an autopsy to determine acceptability of the desired organs for transplantation, to transporting a body to a transplant center, to testing the donor for tissue compatibility, to preserving the body's metabolic functions to maintain oxygenation of the organs, to being merely a nonparticipating member of a transplant team. Of these different possible things only the last one seems certain to fall outside the scope of participation.

Luyties, *supra* 45, at 756 n.21.

⁷²LOUISELL, TRANSPLANTATION: EXISTING LEGAL CONSTRAINT, C.J.B.A. FOUNDATION SYMPOSIUM, ETHICS IN MEDICAL PROGRESS WITH SPECIAL REFERENCE TO TRANSPLANTATION 7898 (Wolstenholm & O'Connor eds. 1966).

⁷³See McCoid, *The Care Required of Medical Practitioners*, 12 VAND. L. REV. 549 (1959); Sherman, *The Standard of Care in Malpractice Cases*, 4 OSGOODE HALL L.J. 222 (1966).

establish that common medical practice would consider the decedent's condition absolutely hopeless. Thus, the more extensive the injuries, the more difficult it would become to prove that the physician was guilty of any omission.⁷⁴ Nevertheless, with the usual injuries of a fractured skull and some brain damage, medical testimony may be in conflict as to the extent and duration of treatment that should be attempted.⁷⁵

Moreover, public opinion is not favorable to physicians when they are defendants in transplant-malpractice actions. The transplant surgeon is prepared to resort to drastic and extreme measures to save one man's life, yet he or his representatives might do comparatively little to restore the donor.⁷⁶ The defense of the physician's judgment in such a situation (provided the "good faith" disclaimer does not exculpate the negligent death determiner) weakens further in light of some rather remarkable recent reports of recoveries where otherwise certain death might be the normal prognosis.⁷⁷

⁷⁴The court in *Evans v. People*, 49 N.Y. 86 (1872), states that "[d]eath is the opposite of life, and death cannot be caused where there is no life." *Id.* at 90. See Sommer, *Additional Thoughts on the Legal Problems of Heart Transplants*, 41 N.Y. St. Bar. J. 196 (1969).

⁷⁵"A report of the Royal Academy of Medicine in London revealed that among a group of 102 head injury victims who were still unconscious more than one month after their injury, 63 survived and 48 of them returned to their old jobs or less demanding but still productive work." Sommer, *supra* note 74, at 198. Henry K. Beecher ". . . testified at the New York State Commission on Transplant of Vital Organs that in tests on 1665 patients at Massachusetts General Hospital who satisfied the Committee's Definition of brain death, 1662 that fell into that category did not recover. The three others were victims of barbituate poisoning and never had been considered as donor candidates." *Id.* at 198 n.8. Baker has stated that, "[t]hus difficulty of refutation may not prevent the law from finding that the withholding of all therapy from a potential donor in clinical circumstances is malpractice, no matter how careful 'S' [see hypothetical *supra* at 877] was in his actual pronouncement of death. The question of the extent of the efforts that should be required to save the donor remains." Baker, *supra* note 40, at 97.

⁷⁶"[S]ubstantial measures should be taken to save the donor—measures that are consistent as possible with those that would be made to save him if he were not a donor." Baker, *supra* note 40, at 100. This may perhaps be the greatest source of potential litigation until the public and the courts accept the concept of irreversible coma as the standard criterion for death. *Id.* "They owe a high duty to their potential donor—the duty to save his life if possible. They at the same time owe that duty to the possible recipient. Add the fact that the closer to the moment of death of the donor that his heart is removed, the greater the probability of success of the transplant, and the extreme difficulty of the decision is manifest. The rapid decline of life signs in the recipient could affect the decision that all hope is lost for the donor." *Id.* at 97.

⁷⁷See Baker, *supra* note 40, at 96.

A theory supporting liability of the donor's physician has been suggested by Professor Luis Kutner.⁷⁸ The physician, he says, may be subjected to a "contractual liability," on the rationale that he owes a duty to his patient to make a proper determination as to when to terminate the relationship.⁷⁹ A breach of this duty arises when the doctor discharges the patient prematurely or discontinues treatment without giving him an opportunity to obtain other care. Even if the doctor does not formally remove himself from the case, an abandonment may still occur. The decision of the doctor to disconnect the supporting mechanism could be considered such an abandonment.⁸⁰ The court, however, could imply such a duty to continue "extraordinary treatment" only when the patient or his relatives employed the doctor in reliance upon such treatment being provided.⁸¹ If the doctor acts to make the patient's heart available for transplantation, a breach of fiduciary duty may arise since the doctor's primary duty is to protect and treat the patient.

Hospitals may also be held liable under a theory of deprivation of civil rights.⁸² With respect to hospitals administered by governments, and with the ever-increasing government involvement in private hospital operations,⁸³ the estate of the patient may claim denial of civil rights in deprivation of the right to life as a result of the denial of supporting machinery and excision of the organ.⁸⁴ A denial of equal protection might also be claimed on the ground that the patient was not accorded the same care provided others similarly situated. Moreover, if the hospital

⁷⁸Kutner, *Due Process of Human Transplants: A Proposal*, 24 U. MIAMI L. REV. 782, 798 (1970).

⁷⁹*Id.*

⁸⁰See M. HOUTS, DEATH § 1.05 (1967).

⁸¹One commentator has recommended that a legal decision be "forced" in these continued resuscitation cases by institution of an action by the next of kin for an injunction for or against the termination of therapy. He suggests, however, that a court is not equipped to make such a medical judgment necessitated by day-to-day changes in the patient's condition. Wasmuth, *The Concepts of Death*, 30 OHIO ST. L.J. 32, 51 (1969). See also M. HOUTS, DEATH § 1.06 (1967).

⁸²In November, 1971, a two million dollar damage suit was filed under the Federal Civil Rights Act against the Medical College of Virginia, charging the hospital with allowing a black laborer to die so that his heart could be used in a transplant operation. It was contended that Bruce O. Tucker, the black laborer, was not granted the same privilege and immunities afforded a white person. William Tucker, the donor's brother, had previously filed a one million dollar suit, which is still pending, against the hospital for removing the heart without the consent of relatives. Also named as defendants were the state medical examiner and 11 college physicians. Arkansas Gazette, Nov. 5, 1971.

⁸³See *Simkins v. Moses H. Cone Memorial Hosp.*, 323 F.2d 959 (4th Cir. 1963), cert. denied, 376 U.S. 938 (1964).

⁸⁴See Kutner, *supra* note 78, at 798.

lacks procedural safeguards for making such determinations this might also be treated as a denial of civil rights.

In Sweden, the question of the doctor's obligation to continue supportive therapy arose in 1965.⁸⁵ When an elderly patient had a cerebral hemorrhage, to spare her further agony, the doctor discontinued intravenous nourishment, which resulted in death 7 days later. At a disciplinary hearing before the Royal Medical Board, the council (two doctors, two lawyers, and a member of Parliament) was unable to decide whether the doctor had committed a crime or an act of professional neglect. The case was referred to the local prosecutor, who, after consulting the attorney general, accused the doctor of professional neglect: (1) in having shortened the woman's life by the discontinuance of therapy, and (2) in having asked permission of the patient's relatives to do so. Regarding the first charge, the court found no guilt, holding that the continuation of therapy "would not have fulfilled a medical or human purpose." As to the second charge, the court likewise thought there was no intent to share the responsibility for the decision with the relatives.⁸⁶ This case is arguably a precedent for the proposition that such futile, meaningless therapy is equally unnecessary in transplant cases.

It would seem appropriate to mention some of the observations relevant to this matter contained in a very well-considered analysis by Professor George Fletcher.⁸⁷ Fletcher begins with a familiar hypothetical involving a comatose patient with a flat electroencephalogram. According to the physician's best judgment the patient has only an infinitesimal chance of recovery; nevertheless, he possibly can be sustained (as a "vegetable") by intravenous therapy. Professor Fletcher then poses the dilemmatic question: From a legal standpoint, what should the physician do? It would be a mistake, he says, to think that legal tradition contains a clear answer. As a first step toward the solution, he points to the legal significance between acts and omissions in this context. A doctor may be civilly and criminally liable either for intentionally taking life, or for omitting to act,⁸⁸ and thus permitting death to occur naturally. If the question involves an act, the relationship between the doctor and patient is irrelevant. If it is an omission, however, that relationship is control-

⁸⁵See *Doctor Cleared in Euthanasia Case*, MEDICAL WORLD NEWS 49 (Apr. 2, 1965).

⁸⁶*Id.*

⁸⁷203 J.A.M.A. 65, 68 (1968). See also Fletcher, *Prolonging Life*, 42 WASH. L. REV. 999 (1967).

⁸⁸Doctors generally explain their freedom from culpability on the ground that the termination of treatment is always an omission. A simpler principle would be that a homicide resulting from the termination is justified whenever the withholding of treatment would have been justified. Kutner, *supra* note 78, at 796.

ling. Applying this distinction, if the ceasing of the activity to artificially prolong life is an "act," the law unequivocally forbids it. If it is an omission, the analysis is more flexible. Whether it is forbidden as an omission would depend on the demands imposed by the relationship between doctor and patient. The doctor's duty to prolong life, Fletcher states, is a function of his relationship with his patient; and, in the typical case, that relationship devolves into the patient's expectations of the treatment he will receive. These expectations are, in turn, a function of the practices prevailing in the community at the time. The practices in the use of the respirator are what doctors actually do in a particular time and place. Thus, it is the customary medical standards which determine the expectations of patients and regulate the relationship, and ultimately, the law. In regulating this relationship, physicians control the extent of their own legal obligations. This conclusion generally appears to be the same as that tacitly adopted by the authors of the Uniform Act, where the determination of death is left to the sound judgment and discretion of the attending physician,⁸⁹ who will inferentially be responsible for a justification of his decision under standards fashioned and followed by his peers.

Finding Professor Fletcher's reasoning persuasive, I would think it highly desirable, if not essential, for a single standard of death to be adopted.⁹⁰ The most desirable is brain death manifested by "irreversible coma." This suggestion, of course, is not meant to advocate that the decision be made in every case on the basis of absence of central nervous system function⁹¹ alone. It is simply the recognition of brain function as

⁸⁹Sommer, *supra* note 74, at 201. See also N.Y. Times, Dec. 5, 1968, at 34, col. 2, where, in discussing a resolution passed by the American Medical Association's House of Delegates at its 22nd Clinical Convention in 1968, it is stated: "the cause of death . . . must be evident and of an irreversible type. The fact of death must be demonstrated by adequate consent and acceptable scientific evidence in the operation of the physicians making the determination."

⁹⁰Whether there should be a statutory definition of death which would eliminate confusion between the legal and medical definitions, is currently being considered by the New York State Temporary Commission on Transplant of Vital Organs. This nine-man commission is under the chairmanship of Justice Erwin Shapiro of the New York Supreme Court. . . . Dr. Adrian Kantrowitz, the doctor of surgery at Maimonides Medical Center in Brooklyn, testified before the New York Commission that he was against any attempt to statutorily define death. He said that he hoped lawyers would not become too deeply involved in the issues because they are liable to "mess things up."

Sommer, *supra* note 74, at 200-01. One state, Kansas, has adopted a statutory definition of death. See J. Leavell, A Treatise on the Law and Ethics of Transplants 251, n. 833, 1972 (unpublished dissertation in Yale Law School Library).

⁹¹Some thoughtful criticism which gives pause for reflection:

This new definition of heart donor eligibility that substitutes "irreversible brain damage" for "total death" raises more questions than it answers. Does acceptance of this concept mean that it is no longer necessary to treat, for

the crucial factor in such determinations and "that any pronouncement of death is a statement of the impossibility of continued brain function with return of consciousness and interaction of the patient with his environment irrespective of whether the determination is based on the clinical observations of cessation of heartbeat and respiration, or on facts obtained by more modern and sophisticated methods such as the EEG."⁹²

When physicians employ the heart-lung standard and its concomitant of insisting that physicians continue to support circulation and respiration as long as possible, irrespective of any hope of brain function restoration, we might perforce prevent the utilization of medically indispensable resource material to patients with good chances of survival. However, to insist on such a standard means, we either close our eyes to what doctors in fact do at the present time, or require that physicians apply the practices of a generation ago rather than keep up with advancements that have been made.⁹³

Marshall Houts has developed a standard for testing the physician's determination of death, as well as providing guidelines which recognize that a physician has a professional responsibility to his patient "which he can fulfill only by an exercise of conscientious and enlightened medical judgment, and that this judgment may vary as the circumstances under which it is exercised vary." Hout's definition of death is:

example, the senile patient who would meet such criteria? How do eligible donors differ in principle from totally feeble-minded individuals? What are the implications for the inheritance of property if the heart of an intestate donor is kept beating with a pacemaker while the search for a recipient goes on and the donor's wife dies during the interval? Does this new definition of death for the heart donor open up new channels of criminal activity that will lead to the burking of patients to increase the supply of eligible donors? Let us examine the nature of this revolutionary change in our ethics and pursue its implications to their logical conclusion. Substituting irreversible brain damage for complete absence of any living manifestations in any organ as essential in the diagnosis of death forces us to examine the meaning of the phrase "irreversible brain damage." The presently recommended definition of irreversible brain damage demands a complete absence of any manifestations of brain function, all the way from the higher levels of cortical activity down through the centers governing the emotions, sensations, automatic functions, and muscular control and including the spinal reflexes, with, however, two special exceptions — the centers controlling respiration and circulation. These centers are excluded for practical and not for ethical reasons. In severely ill patients, the function of these centers can be taken over by machines that may be stopped until the diagnosis of death is made on other counts. Moreover, for successful heart transplantation, the heart must be alive if it is to benefit the recipient.

Rutstein, *The Ethical Design of Human Experiments*, DAEDALUS 536 (Spring, 1969).

⁹²M. HOUTS & J. HUNT, 1 DEATH § 1.03, at 1-25 (1970).

⁹³*Id.* § 1.02 (3), at 1-23. See also Sommer *supra* note 74, at 196; Wheeler, *Anatomical Gifts in Illinois*, 18 DE PAUL L. REV. 471 (1969); Comment, *Medico-Legal Problems With the Question of Death*, 45 CHI.-KENT L. REV. 202 (1968-69).

Death of a human being is that point in time at which there has occurred an irreversible cessation of such of the vital functions as renders impossible a return of even a minimal degree of consciousness and interaction between the individual and his environment.⁹⁴

He offers the following tests for determining the point of death:

- (1) An isoelectric encephalographic tracing.
- (2) Cessation of respiration if not supported by artificial means.
- (3) Cessation of circulation if not supported by artificial means.
- (4) Bilateral mydriasis (dilatation) and fixation of pupils; no reaction to light.
- (5) Failure to respond to even the most painful stimuli.
- (6) Absence of all voluntary movement, and of spontaneous spasms or muscle movements.
- (7) Absence of reflexes.
- (8) Ophthalmoscopic evidence of cessation of circulation.
- (9) Angiographic evidence of cessation of cerebral circulation.
- (10) Falling blood pressure when vasopressor drugs and artificial support are withdrawn.
- (11) Failure to react to atropine.
- (12) Continuation of observed criteria for such period of time as will permit formulation of an opinion, with reasonable medical certainty, that cerebral function has ceased irreversibly and that return of even minimal consciousness and interaction with the environment cannot be expected.⁹⁵

Among the advantages of this joint-definition test are that it separates the definition of death from the statement of the criteria by which the fact and time of death may be determined, thus preventing any of these criteria from hardening into immutable principles of law⁹⁶ either as absolute indications that death has occurred or as essentials to such a determination. It recognizes that brain function is the crucial factor in the determination of life and death, and that any pronouncement of death is a statement of the impossibility of return of brain function. This is true whether based on the classical clinical

⁹⁴M. HOUTS & J. HUNT, 1 DEATH § 1.03 (1970).

⁹⁵*Id.*

⁹⁶"If science could provide some clear, unequivocal facts about death then perhaps the law could change its mind. Such facts can be established, however, only on the basis of a comparison definition of life. It is merely survival. And as more is learned about such things as the role of DNA will we discover a need to discriminate between different kinds of human life?" 1971 BRITANNICA YEARBOOK OF SCIENCE AND THE FUTURE 83; see Biorck, *When is Death*, 1968 WIS. L. REV. 484; Corday, *Life-Death in Human Transplantation*, 55 A.B.A.J. 629 (1969).

observation of heartbeat, respiration, reflexes, and response to stimuli, or upon facts determined by more modern and sophisticated methods such as electroencephalography and electrocardiography. In this respect it acknowledges that deaths may have occurred even though heartbeat and respiration may continue with the aid of artificial support,⁹⁷ and conversely, that although spontaneous respiration and heartbeat have ceased, life may still be present. It places primary responsibility for the decision upon the physician rather than surrounding him with rigid criteria which he must apply in every case. This joint-definition test avoids a dual standard by which a person may be considered dead for one purpose but alive for another. Also, it recognizes that death may occur under circumstances which, from the standpoint of evidence available for its medical determination or proof in litigation, are less ideal, and would permit a determination on the evidence available without necessity for carving out exceptions from a more rigidly formulated definition and criteria. Another advantage is that it would permit, without reformulation of concepts, the recognition by the courts of advances in science and technology and their consequent changes in medical thought and practice.⁹⁸

It is of course conceivable that the surgeon could be held accountable in damages for making the decision to perform the transplant on a particular recipient because of lack of acceptable standards as to when a transplant is really necessary. This would be the case if the plaintiff could establish that the physician did not use proper judgment in his decision and that the transplant may have shortened the recipient's life (even if he survived for a period of time).⁹⁹ Prior to the operation the physician must first decide whether or not the transplant, a severely drastic and novel surgical procedure, is the patient's only hope for prolongation of life or for a preferred period of improved life. The physician's judgment may well be the decisive factor in the decision. The burden of proving that the recipient would have lived longer without the operation would be perhaps insurmountable, especially without supportive testimony from other physicians associated with the recipient. The physician's judgment, made in the light of his medical knowledge and training, is unique among cases because of varying

⁹⁷"The French, by providing a legal definition of death, have put the protection and the prestige of the law behind transplant surgeons removing organs while artificial maintenance continues the respiration and circulation of the donor." Myers, *supra* note 12, at 255.

⁹⁸M. Houts & J. HUNT, *supra* note 92, § 1.05 at 1-4, Robertson & Jacob, *The Significance and Future of Organ Banking*, 74 CASE & COM., 21 (1969).

⁹⁹Baker, *supra* note 40, at 103.

degrees of disease and different characteristics of patients. Thus, his judgment may be virtually impossible to refute. Presumably, there would be present a progressive deterioration in the patient's blood pressure and respiration, and an overall decline in the heart's ability to sustain life.¹⁰⁰ Also, the following factors would likely be considered significant: (1) A patient in a condition that warrants a transplant may have difficulty surviving the operation. (2) The transplantation is not a permanently corrective treatment at the present time. Thus, if the recipient had shown any signs of improvement from the time he was designated a potential recipient until the actual transplant, this could be a significant factor in the malpractice claim, and could be established by competent evidence.

For these reasons it would appear advisable that the transplant surgeon lessen the chances for liability by referring this "necessity decision" to an independent committee.¹⁰¹ This would also have the desirable social utility of insuring adequate supervision and responsibility for all such operations. Moreover, and equally as important, legally valid efforts to prolong and add quality to life would be relieved of the retarding effects such litigation might create. The Uniform Act will probably be construed as giving the legal imprimatur to transplant operations, thus, removing all such procedures, including cardiac, from the anathematized category of "purely experimental," and thus possibly subjecting physicians to "strict liability" for performing operations which are ultra-hazardous in nature.¹⁰² Therefore, the operations would

¹⁰⁰*Id.*

¹⁰¹Compare "The Committee of National Health and Medical Research Council of Australia drew up an elaborate proposal for the conduct of organ transplant operations. One interesting feature of the proposal was the requirement that two medical teams be involved — one for deciding when further medical treatment of the donor has become useless, and a second for carrying out the operation." 1970 ENCYCLOPEDIA BRITANNICA YEARBOOK 461 (1970). Interesting, Dr. Denton Cooley has declared that if legal problems continue to grow involving transplants the resultant pressure may force surgeons to entirely abandon this procedure. MED. WORLD NEWS, Aug. 9, 1968, at 22.

¹⁰²The leading cases supporting a physician's malpractice liability for injuries resulting from untried treatment (experimentation) are *Carpenter v. Blake*, 60 Barb. 488 (App. Div. 1871), *reversed on other grounds*, 50 N.Y. 696 (1872). In this case the defendant attempted treatment of a broken leg by placing the patient's injured limb in a "heavy steel thing that had teeth." The court declared that a patient comes to a doctor expecting his treatment to conform to established professional standards. Hence, the use of unconventional forms of treatment is at the practitioner's peril, absent an informed consent. See also *Graham v. Doctor Pratt Institute*, 163 Ill. App. 91 (1911); *Hailes v. Raines*, 162 Mo. App. 46, 141 S.W. 917 (1911); W. PROSSER, *THE LAW OF TORTS* 508 (3d ed. 1964).

be "inside the law," as it were.¹⁰³ The legality of the operation itself, involving any organ, appears to be no longer questionable in those jurisdictions which have adopted the Uniform Act. Any liability would be contingent on some factor other than the nature of the operation itself, such as failure to obtain a legally valid consent.¹⁰⁴ Patients are presumed to consent to their physician's use of ordinary and accepted techniques. If the physician wishes to use a technique or method other than that generally accepted as therapy, he has a duty to obtain the patient's consent thereto. Failure to do so or subsequent failure to observe a reasonable standard of care subjects him to liability.¹⁰⁵ In absence of negligent execution of the novel procedure, however, there is no recourse to a malpractice action when consent has been obtained.¹⁰⁶

It is well settled that a physician who acts negligently in treatment of a patient will subject himself to liability.¹⁰⁷ There is also the possibility of a malpractice action for failure to make a reasonably proper match between the donor organ and the recipient. For example, it would be obvious, even to a layman, that it would be indefensible to transplant a heart from an elderly person into an adolescent.¹⁰⁸ The same would appear true where there is unusual disparity in size between the two organs. The placing of a smaller organ in a larger cavity apparently diminishes the chance of success, since a smaller heart should not be able to circulate a system which previously required a much larger one. Dr. Denton Cooley evidently makes a practice of matching body weights to presumably match the work potential of both hearts.¹⁰⁹

¹⁰³See also Segal, *Medical Malpractice in an Organ Transplant Case*, 15 PRAC. LAW. 65-66 (1968), wherein it is said: "[i]t is not medically conceded that heart transplants have gone past the investigational stage of medical progress."

¹⁰⁴Whenever the proposed medical procedure, diagnostic test, or course of therapy constitutes a departure from what is considered merely routine procedure (e.g., taking patient's pulse, checking heartbeat, testing reflexes, etc.) and involves an added element of risk to the patient's welfare, the courts have imposed the requirement that the physician first obtain the patient's informed consent. Failure to do so will subject the physician to liability.

U.S. DEPT OF H.E.W., LEGAL ASPECTS OF PUBLIC HEALTH SERVICE MEDICINE 36 (1970).

¹⁰⁵See *Fortner v. Koch*, 272 Mich. 273, 261 N.W. 762 (1935); Comment, *Medical Experiments: Insurance*, 70 COLUM. L. REV. 965 (1970).

¹⁰⁶Baker, *supra* note 40, at 96.

¹⁰⁷"A physician is bound to bestow such reasonable ordinary care, skill and diligence as physicians and surgeons in good standing in the same neighborhood in the same general line of practice, ordinarily have and exercise in like cases." *Copeland v. Robertson*, 236 Miss. 95, 110, 112 So. 2d 236, 241 (1959); *Everad v. Hopkins*, 80 Eng. Rep. 1164 (K.B. 1650).

¹⁰⁸Baker, *supra* note 40, at 105.

¹⁰⁹Cooley, *Minutes of the Cape Town Meeting*, MED. WORLD NEWS, Aug. 9, 1968, at 22.

It is certainly arguable that a half-sized heart seems obviously insufficient and that the transplant means almost certain death for a patient who otherwise might have been supported by artificial means pending arrival of a more suitable donor.¹¹⁰ In time, after more research, the degree of similarity will evidently be established, providing a legal test setting the limits of permissible discrepancy as to the donor.

Undeniably neither the Uniform Act nor the Mississippi statute insulates a transplant surgeon from ordinary malpractice liability. Thus, if he "bungles the job" or fails to demonstrate requisite skill he will not be shielded by the Uniform Act.¹¹¹ The usual standard, of course, is whether in his performance he has possessed and exercised the degree of skill, knowledge, and care ordinarily possessed and exercised by members of the medical profession in the community. Since the transplant operation cannot, at this stage of development, be regarded as a "regular medical practice," how are the components of this standard of care (skill) applicable to transplant medical personnel to be ascertained? The following questions are pertinent to the formulation of such standards:¹¹² (1) Since malpractice doctrines require that the doctor provide a level of care not insubstantially less than that generally avail-

¹¹⁰Baker, *supra* note 40, at 105.

¹¹¹The following general conclusions were drawn by Attorney Melvin B. Bishop from a large number of malpractice cases:

(1) One licensed to practice medicine is presumed to possess that degree of skill and learning of the average member of his profession in the same locality. (2) Before a physician or surgeon can be held liable, he must have done something in the treatment of his patient which the recognized standard of good medical practice in the community forbids in such cases, or he must have neglected to do something which standard requires. (3) To sustain a verdict of malpractice, the standard of local practice must be shown by affirmative evidence. Unless there is evidence the jury may not speculate as to what required standard is, or whether he has departed from it. (4) Negligence is never presumed but must be affirmatively proved and no presumption arises from the mere fact that the treatment has been unsuccessful, failing to bring the best results, or that the patient has died. (5) Negligence by reason of departure from proper standards must be established by expert testimony, unless the negligence is so grossly apparent that a layman would have no difficulty in recognizing it. (6) The testimony of the physicians that they would have followed a different course of treatment is not sufficient to establish malpractice unless it also appears that the treatment deviated from one of the standard methods. . . .

Bishop, *Medical Malpractice*, 36 Miss. L.J. 287, 288 (1965). No system which embraces fundamental professional relationships eventually involving ethical risks of individuals can remove personal liability.

¹¹²"It is impossible to state in general terms what constitutes reasonable standards of medical care and practice . . . this question can be as complex as the question of what constitutes informed consent, and the answer to it varies with the individual circumstances of the case in which it arises." Dunphy, *The Story of Organ Transplantation*, 21 HAST. L.J. 67, 70 (1970); PFIZER LABORATORIES SPECTRUM 20 (1966).

able, does the standard practice in the particular locale of the suit, where possibly few, if any, similar operations have been performed, have to conform with the practice in the larger national community? (2) Should the standard be based on the transplantation of the same organ, or on transplantation generally? (3) What bearing will the accumulated experience of all of the transplant surgeons with a particular organ have on this formulation?¹¹³

The codes, rules, and standards recently established by the medical community itself will doubtlessly be considered. Because of the investigative aspects of transplantation the practice would be subject to these ethical guidelines. Although these rules are not law in the technical sense, they have some of the attributes of law,¹¹⁴ since they are generally acknowledged within the group as general norms and thus recognized by the courts as indicia of acceptable conduct.

In the absence of any illuminating decisions dealing specifically with transplantations it would appear that doctors engaged in such procedures would be subject to the existing body of malpractice law, as well as a potential conflict-of-interest problem.

CRIMINAL LAW AND TRANSPLANTS

When an organ donor's life is artificially sustained and a vital-organ transplant attempted, the legal rights of the donor are uncertain and the criminal liability of the physicians involved remains unclear. This uncertainty results from the disparity between the legal and medical definitions of death.

While heart removal in the days of the rack and screw was not regarded as a particularly efficient means of killing, being too "messy," it was nevertheless considered effective and receives more than passing mention in the literature of torture and inquisition (and even "religion," e.g., Aztecs).¹¹⁵ Of course, today's transplant physician is acting to cure and not to kill in replacing the diseased vital organ. Yet, in a time when the number of transplants are relatively few and the rate of

¹¹³PFIZER LABORATORIES SPECTRUM, *supra* note 112.

¹¹⁴*Id.*; Stickel, *supra* note 20, at 52. These codes and rules are: (1) The Nuremberg Articles (1946); (2) American Medical Association's Principles of Medical Ethics (1946); (3) National Institute of Health Guiding Principles in Medical Research Involving Humans (1953); (4) World Medical Association's Code of Ethics—Declaration of Helsinki (1964); (5) United States Public Health Service Policy and Procedure Order No. 129 (1966); (6) American Medical Association's House of Delegates, Ethical Guidelines for Clinical Investigation; and (7) American Medical Association's Heart Transplant Guidelines.

¹¹⁵See generally A. VERRILL, *THE INQUISITION* (1931).

success low, it can be argued that the transplant surgeon runs an appreciable risk of prosecution for criminal conduct. While the risks of civil liability have apparently been obviated to some extent by adoption of the Uniform Act, and by execution of release forms, the risks of criminal proceedings would still seem to be present, partly because of the vagueness of the term "good faith" in the Act.¹¹⁶

Generally, under the criminal law it is incumbent on a person to act only in limited circumstances, depending upon his relationship with another, being free to omit all but the most basic and ordinary acts expected. Thus, when a doctor fails to provide certain treatment, he has merely made a value judgment dictated by his training and experience. The *mens rea* (guilty intent) is lacking, which perhaps explains why there is no known case where a doctor has been successfully prosecuted for omitting treatment. Nevertheless, it is conceivable that a doctor might be found to have committed a crime in disconnecting a mechanical supportive device in order to facilitate a transplant. He might be found to have acted wilfully, knowing that the patient would "die" (using the conventional criteria). Of course, if he could establish that he did not alter the normal course of events by turning off the machine (i.e., the condition was irreversible and death was thus inexorable and imminent) the act might be found to have been justifiable. Thus, under these circumstances the withholding of treatment might be found legally permissible.

It is apparent that using the traditional definition of life, the surgeon who removes a beating heart for transplantation, upon a "premature" declaration of death, could be found to have committed a "technical murder."¹¹⁷ To a lesser degree, perhaps, the surgeon who cuts out the diseased heart of a recipient in such an operation might conceivably be charged with criminal culpability upon the recipient's death.¹¹⁸ Under ordinary conditions the excision of the "failing heart"

¹¹⁶U.A.G.A. § 8 (c), which states: "A person who acts in good faith in accord with the terms of this act on the anatomical gift laws of another state (or foreign country) is not liable for damages in any civil action or subject to prosecution in any criminal proceedings for his act."

¹¹⁷The opinion was proffered by D. Louisell that a physician who withdrew the mechanical supports or who removed a vital unpaired organ before conventional death was committing an act of homicide. It has also been suggested that a possible prosecution for murder under such circumstances might be justified because the three requirements for proving murder would be met: malice aforethought (or intent that death should result), an act that resulted in death, and a lack of justification or excuse. D. Louisell, *supra* note 72, at 78, 98. See Fletcher, *Prolonged Life*, 42 WASH. L. REV. 999, 1000, 1007 (1967); Taylor, *A Gift of Life*, 70 J. KAN. MED. SOC. 87 (1969).

¹¹⁸*When is a Transplant a Legal Murder*, THIS WEEK, Nov. 17, 1968, at 3.

would be tantamount to killing. Here, even under the most optimum clinical circumstances, the patient must be capable of retaining sufficient vitality to withstand the rigors and demands of the most draconian of operations. If either the graft or the patient's physical reserves fail he will surely die. Thus, in effect, the surgeon will have killed him by accelerating his demise, no matter how lofty the surgeon's motives in trying to prolong life or to make it more satisfying.¹¹⁹

The *Potter* case in England has been the subject of considerable scholarly dispute and discussion in medical and legal circles.¹²⁰ In that case, Potter, aged 32, had received severe head injuries (four skull fractures and extensive brain damage) in a public-house brawl on June 16, 1963, in Newcastle-upon-Tyne. Fourteen hours after being brought to the Newcastle General Hospital, he stopped breathing and was then attached to a respirator for a period of 24 hours, during which one of his kidneys was transplanted. The consent of his wife and the attending coroner were obtained before the removal. On June 17, when the respirator was turned off, there was no spontaneous heartbeat or respiration. An inquest was held at which a pathologist testified that death was due to the head injuries and that the extraction of the kidney had nothing to do with the death. Another physician testified that he thought that Potter died when he stopped breathing on June 16, "though from a legal point of view he might have died when circulation ceased and the heart stopped beating on the 17th." The coroner, who thought that the patient was alive when the kidney was removed, stated that his consent was based on the supposition that the organ would be removed after death. They did not feel, however, that the physician

¹¹⁹Acting to terminate life is first-degree murder. This is true regardless of the motives of the actor. At one time in the evolution of the Common Law of murder it might have made a difference whether a man was moved by emotions of spite or by emotions of mercy. One speaks of the element of emotions of spite or by emotions of "malice" in the Common Law definition of murder. But, surely a man does not kill maliciously if he kills in order to save another man from unbearable suffering. The concept of malice lost its force in the evolution of the Common Law. As early as the 16th and 17th Centuries it came to mean no more than the requirements that the killing be intentional. Since a man killing for each reason of mercy does kill intentionally, he also kills maliciously — at least according to the special dictionary of the law. Killing for reasons of mercy, like killing in order to rob one's victims, is murder. But one should recognize that here statements of the law are a statement of principle only. There is a gap between the law in theory and the law in practice. That the legal norm is severe and uncompromising does not mean that the people who administer the legal system are also severe and uncompromising. Prosecutors or grand juries may fail to indict someone who is clearly guilty of intentional euthanasia; judges and juries may acquit someone who is guilty on the facts (of technical homicide).

Apocrophal, TIME, Dec. 15, 1967, at 71. See also Robitscher, *Changing Concepts of Criminal Responsibility*, LEGAL MED. ANNUAL (1969).

1204 MED. SCI. L. 59 (1964).

had committed any offense. It was apparently determined that the death occurred on the 16th of June, though the conclusion was somewhat ambiguous. No action was taken against the physician and the assailant was convicted of manslaughter.¹²¹ The case once again emphasizes the difficult problems associated with the dual concepts of death.

According to an analysis of the *Potter* case by Professor D. W. Elliott, Solicitor of the Supreme Court and Dean of the Faculty of Law at University of Newcastle-upon-Tyne,¹²² if a jury had found death to have occurred on June 17, after the transplant, the consent of the wife would have been invalid, since the kidney removal was of no therapeutic value to Potter. Furthermore, since the patient died with the discontinuance of the supporting apparatus, the surgeon would be guilty of homicide, absent a recognition of euthanasia, as well as assault and battery. The difficulty turned on justifying the use of the mechanical life supporter after June 16, while contending that Potter died on the 16th. The problems in this case obviously arose from the disagreement, though tacit, as to the standard for determination of death. Evidently Professor Elliott was refusing to accept the cerebral-death (irreversible coma) concept.

A somewhat similar situation arose in Texas. There Dr. Joseph Jachimczyk, the Chief Medical Examiner of Harris County, was confronted with the problem of having to perform an autopsy on a homicide victim, who had been a heart donor. After the operation the coroner raised a question as to the establishment of the cause of death of the victim. He questioned whether the examiner could complete his report and testify in a competent manner at the accused-assailant's trial if injuries to the body without the heart were insufficient to account for death, and whether the assailant under such circumstances could be convicted.¹²³ With this type of legal contretemps in view, committees

¹²¹M. HOUTS & J. HUNT, *supra* note 92, § 1.06 at 1-59; Elkinton, *The Dying Patient, the Doctor, and the Law*, 13 VILL. L. REV. 740 (1968); Halley & Harvey, *Medical and Legal Definitions of Death*, 204 J.A.M.A. 423 (1968); Williams, *Renal Transplantation From Mortally Injured Man*, 2 LANCET 294 (1963); Baker, *supra* note 40, at 85; *Foreign Mail*, 185 J.A.M.A. 993 (1963); *Moment of Death*, 2 BRIT. MED. J. 394 (1963).

¹²²4 MED. SCI. L. 77 (1964).

¹²³The assailant was convicted of manslaughter. The decision possibly was based on the principle of causation expressed in Annot., 100 A.L.R.2d 769 (1965):

[W]ith respect to a mortal wound, that is, one which is necessarily fatal, the same rule applies regardless of the jurisdiction, and it is well established that the person who inflicted such an injury is criminally responsible for the death of the injured person even though it immediately resulted from medical or surgical treatment and regardless of whether such treatment was proper or negligent, on the ground that the original wrongful act was the proximate

composed of legislators and physicians in Texas recommended legislation to amend the rules of evidence in criminal trials to make inadmissible any evidence tending to show that the donor-victim's heart was still beating when he was pronounced dead and his heart removed.¹²⁴

Sweden's "Crafoord Case," which occurred in 1965 at the Karolinska Institute, has also been the subject of a great deal of discussion because it illustrates rather dramatically the "all hope is lost" approach to the transplant donor's death, which has been a disturbing factor to some moralists. In that case the donor, a woman of age 40, had suffered a cerebral hemorrhage and was comatose. After her condition was pronounced hopeless on the basis of a flat EEG (but before respiration had ceased), the transplant was performed with her husband's consent. She "died" in the respirator 2 days later following removal of her kidney. The case provoked such controversy that it was investigated by the disciplinary committee of the National Board of Health, the Attorney General, and the Stockholm prosecuting attorney, to determine if legal action was warranted. Professor Crafoord, chief of the Thoracic Clinic and a distinguished Swedish heart-lung surgeon, assumed responsibility and said that he and his staff had previously agreed that in a case where the chance of survival was, with 100 percent certainty, deemed hopeless, a kidney could be removed. The reason, of course, was that the chance of success of the transplant would be reduced if cessation of heartbeat and respiration had to be awaited. Final disposition of the case was apparently never reported, although the Royal Medical Board found that death occurred when heart activity stopped.¹²⁵ Thus, para-

cause of death, the subsequent treatment with its attendant risks being foreseeable and a consequence of the original wrongful act.

Id. at 774.

It has been suggested, with some plausibility, that should adherence to conventional criteria of death be required the longer artificial life maintenance is continued the more difficult it correspondingly becomes to establish causation. M. HOUTS & J. HUNT, *supra* note 92, § 1.02 (3) at 1-19. See also Baker, *supra* note 40, at 85; MED. TRIB., May 13, 1968; MED. WORLD NEWS, July 12, 1968, at 10; MED. WORLD NEWS, May 24, 1968, at 11; N.Y. Times, Aug. 5, 1968, at 1, col. 8; N.Y. Times, May 13, 1968, at 18, col. 3.

Donor May be Victim of Murder; Heart Transplant Called Off: Standard University Hospital said Wednesday that plans for a heart transplant operation were abruptly called off when it was learned that the proposed donor's death was under investigation as a possible murder . . . Authorities first believed he was under investigation as a possible murder . . . authorities first believed he was under investigation as self-inflicted gunshot wound in the head. But Butte County Sheriff's Capt. Richard Stanberg later advised Stanford authorities that . . . had been booked on suspicion of attempted murder.

Arkansas Gazette, Oct. 24, 1970, at 24A.

¹²⁴Baker, *supra* note 40, at 100.

¹²⁵See Wasmuth & Stewart, *supra* note 12, at 467, 494.

doxically, since the patient was alive her consent was necessary. In such cases, under Swedish law consent of next of kin is unrecognized.

Though it would seem, as a practical matter, that a district attorney is not likely to treat such activities as criminal, it must be conceded that the potential for such action nevertheless exists. This was clearly demonstrated in August, 1968, when two officials of Santa Clara, California, a coroner and a county executive, requested the district attorney to determine whether a criminal complaint could be issued against surgeon Norman Shumway, who had transplanted a heart into Leon Drake. The officials charged that an autopsy was required to determine the cause of death before any organs could be removed. The failure of the surgeon and the hospital to notify the coroner until 3 hours after the operation was one of their specific complaints.¹²⁶ Apparently, the district attorney decided not to present their grievance to the Grand Jury as nothing more was officially done about the matter. Irrespectively, the incident shows that a criminal proceeding is a latent possibility and could be converted into reality in the hands of a crusading or publicity-seeking official.¹²⁷ The outcome before a jury is, of course, highly problematical and largely dependent upon the direction of public opinion concerning such operations, which would presumably be an amalgam of press indoctrination and public response to the progress or failure in the future of these procedures.

CONCLUSION

Although the spectacular displays of the news media and the great public interest generated therefrom have given transplant operations an aura of a magical gift of life, they are in fact merely medical methods of the most sophisticated kind and by their very nature attended by the most awesome risks. Some of the major legal problems created by outdated laws, however, have fortunately, been removed by the almost unanimous adoption of the Uniform Anatomical Gift Act, hopefully leaving the transplant doctors to devote their best efforts to the perfection of a promising life preserving or prolonging technique. One of the major problems, that of uncertainty of legal liability with respect to donation of an organ at a critical period, has definitely been largely alleviated. While the great publicity accompanying transplants may encourage some surgical teams to undertake these operations when

¹²⁶Arkansas Gazette, Aug. 24, 1968, at 3A.

¹²⁷Sommer, *supra* note 74.

professionally unprepared, most are apparently highly skilled and acting with the noblest of intentions.

The eminent scholar and teacher, Wigmore, once reminded us that "reverence for the memory of those who have departed does not require us to abdicate the high duty of doing justice to the living."¹²⁸ It appears that by acceptance of the Uniform Anatomical Gift Act, though conceding some of its imperfections, we have indeed not abdicated that high duty to ourselves or to society.

¹²⁸J. WIGMORE, EVIDENCE § 2221, at 196 (McNaughton rev. ed. 1961) (3d ed. 1940).