

THE DEVELOPING FIELD OF HUMAN ORGAN TRANSPLANTATION

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Should circumstances at the time of my death make desirable and practical the transplanting and preserving of any parts or tissue of my body to assist with the life and health of other human beings my physician is authorized to arrange this, subject, if time permits, to the approval of the Medical College whose needs he shall, in any event, keep actively in mind.

These words, and words of similar import, mark the advent of a new era in human organ transplantation. By a legally proper indication of consent, nearly every person of legal age may today direct that upon his death his body, or parts thereof, be used for the preservation of human life and furtherance of medical science. To the extent that such a directive creates a right or interest in the donor's body, this development represents a departure from the age-old common law, for there it was axiomatic that *no one* had property rights in a dead body.¹ In fact, for many years no one particularly was concerned with such rights, aside from the often troubling problem of where and how the cadaver was to be disposed of.² Insofar as actual, practical usage was involved a human cadaver was regarded as having no real value at all, except for a reasonable supply for medical school purposes. The last few years have brought a sudden change in this concept as modern medicine has made the human cadaver often the single most precious commodity in the world to the individual who must have a portion of that body to live—a portion the former occupant quite obviously needs no longer.

Dr. Christian Barnard's dramatic heart transplantation on December 3, 1967 brought home the lesson of organ value most clearly, even though the lesson had been in the incubation process for some time prior to the Barnard operation. Corneas had been transplanted into living eyes in the 1940 era, skin transplantation between relatives had been performed since that time and, more recently, kidneys joined the list of transplantable organs.³ Because there is no

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1 22 AM. JUR. 2d *Dead Bodies* § 4 (1965); Annot., 83 A.L.R.2d 956 (1962).

2 *Herzl Congregation v. Robinson*, 142 Wash. 469, 253 P. 654 (1927).

3 See generally, Sanders and Dukeminier, *Medical Advance and Legal Lag: Hemodialysis and Kidney Transplantation*, 15 U.C.L.A. L. REV. 357 (1968).

reason to expect that the demand for organs will do anything but increase, the medical field is now faced with the problem of maintaining the supply.

Along with a substantial number of other states the State of Washington recently revised its legislation on the question of organ removal and donation to conform to the "Uniform Anatomical Gift Act," a model law designed to make organ donation and removal a fairly simple legal process.⁴ The problem is that even this advancement may place legal obstacles in the way of providing life to a dying patient.

The Act permits an individual of legal age—at least eighteen years old—to dispose of parts of his body, or all of his body, for scientific or medical purposes. This may be done by will or by some other form of properly witnessed document, including a card which can be carried on the person.⁵ The Act also specifies certain other persons who may, on behalf of another, consent to a gift of the latter's organs for medical purposes.⁶

What the Act does not do is to insure a maximum supply of organs with a minimum of legal interference.⁷ This is no doubt due, in part, to philosophical concepts which have grown out of the historical development of the law of cadavers. Thus, a step-back in history will serve best to highlight the problems encountered in the interplay between death—both physical and spiritual—and organ transplantation.

HISTORICAL BACKGROUND

The problem of organ transplantation is rooted in early nineteenth century England. Medical schools had turned to human cadavers in education, but the students generally had to help provide their own research materials.⁸ Because there were no satisfactory formal means for obtaining cadavers, grave robbing became a thriving trade, as the "sack-em-up" men strove to meet demand.⁹ The

⁴ Ch. 80, [1969] Wash. Sess. Laws. The model Uniform Anatomical Gift Act, approved by the American Bar Association on Aug. 7, 1968, was the result of the efforts of a committee established by the National Conference of Commissioners on Uniform State Laws. Early in 1969 it was reported that seventeen states had passed statutes based upon the Uniform Act. *TIME*, April 25, 1969, at 61.

⁵ Ch. 80, § 5, [1969] Wash. Sess. Laws 141-42.

⁶ *Id.* § 3.

⁷ See Sanders and Dukeminier, *supra* note 3, at 412; see also Dukeminier and Sanders, *Organ Transplantation: A Proposal for Routine Salvaging of Cadaver Organs*, 279 N. ENG. J. MED. 413 (1968).

⁸ J. BALL, *THE SACK-EM-UP MEN* 70 (1928).

⁹ *Id.*

dearly-departed often wound up on a dissection table, their resurrection coming significantly sooner than they might have anticipated. On one reported occasion a person accidentally buried prematurely gave his rescuers a surprise by coming to life on the dissection table.¹⁰ Certainly it was not a particularly wholesome way to obtain cadavers, but being the only practical way, the practice flourished.

Things came to a climax when two Englishmen who had found that although grave robbing was a lucrative profession, it also had its unpleasant moments, sought to bypass the middleman—the undertaker—and obtain bodies directly from their unwilling owners. The attendant publicity surrounding their eventual apprehension and trial aroused the English citizenry to demand action. Parliament appointed Henry Warburton to chair a special committee to inquire into the study of anatomy generally, and Warburton eventually succeeded in obtaining the passage of an anatomy law which bore his name—The Warburton Act.¹¹ That Act became the basic approach for legislation throughout the Commonwealth and in the United States as well.¹² Unfortunately, it was principally concerned with regulating the supply and usage of bodies for dissection purposes, which is quite a different thing from the supply and usage of organs for transplantation operations.¹³

The Warburton Act was necessitated by grave robbing. Grave robbing was, in turn, traceable directly to the public feelings which had made a normal method of obtaining cadavers for research purposes impossible. In this particular area the common law has its roots in man's earliest history.

One of primitive man's fundamental beliefs concerning death was that of "animism," a belief that humans had souls or spirits distinct and separate from the body. Death was not considered an insuperable barrier to the ultimate reunion of body and soul.¹⁴ The relationship was viewed in several ways. Some thought the soul hovered over the body, watching it decompose. Others believed in a vengeful spirit who would smite the living if the body was not properly buried.¹⁵ Mutilation was considered by some as a process that could mean irreparable damage to the soul or the relationship of

¹⁰ BAILEY, *THE DIARY OF A RESURRECTIONIST* 65-68 (1896).

¹¹ Anatomy Act, 3 & 4 Geo. 4, c. 75 (1832).

¹² See 2 SYDNEY L. REV. 109 (1956).

¹³ See Comment, *The Law of Dead Bodies: Impeding Medical Progress*, 19 OHIO ST. L.J. 455 (1958).

¹⁴ 2 A. BENN, *THE HISTORY OF ENGLISH RATIONALISM IN THE NINETEENTH CENTURY* 461 (1906).

¹⁵ LASSEK, *HUMAN DISSECTION, ITS DRAMA AND STRUGGLE* 12, 13 (1958). A historical note on this subject also appears in JACKSON, *THE LAW OF CADAVERS* 4-6 (1st ed. 1936).

body and soul.¹⁶ As a consequence, early man was understandably reluctant to perform any act on the body which might anger the spirit or hinder its possible resurrection.

Evidently, Egyptian thought carried over the "animism" concept in the practice of mummification. Although the Egyptians opened the body to preserve it, they apparently had no interest in anatomy as such. The practice of mummification was performed with fear, an unfortunate wretch generally having been hired to make the initial cut in the corpse. Thereafter he was well-advised to hurriedly depart to avoid the stones that would be thrown at him by the undertakers, signifying their disapproval.¹⁷

In ancient Greece dissection was also looked down upon, due to a Grecian belief in the soul's ultimate reunion with the body. The Greeks believed that many gods tried to save a mortal but that if this failed, he would be sent to Hades where admittance was predicated upon presentation of a properly buried body which could be reunited with the individual's soul.¹⁸ The Romans followed this belief and had great respect for the dead human body, although they seemingly had little respect for human life.¹⁹

Even though the Greeks disliked dissection in general, the science was practiced in several of their private schools. In the Alexandrian school from about 350 B.C. to the first century A.D. some dissection was carried on. It has been suggested that this resulted from the Gnostic philosophy which considered the human body as a prison for the soul.²⁰ With the advent of Christianity the idea arose that there was something sacrilegious about dissection, and the practice was not followed officially for almost a thousand years thereafter.²¹

Although the Roman Catholic Church has been blamed for the prohibition of dissection, the blame is probably not wholly justified. The old belief in spirits and demons had flourished for some time prior to Christianity, and doubtless had its effect on scientific work after Christianity became wide-spread.

The concept that the Church officially opposed dissection of human bodies is traceable to the Papal Bull of 1300 which was interpreted to mean that the practice was directly forbidden. The Bull was actually directed to a practice growing out of the Crusades

¹⁶ LASSEK, *supra* note 15, at 18.

¹⁷ *Id.* at 39.

¹⁸ *Id.* at 35.

¹⁹ *Id.* at 50.

²⁰ *Id.* at 44.

²¹ *Id.* at 58.

whereby Crusaders boiled the bodies of their fallen comrades in order to remove the flesh and permit easy transportation of the bones from the Holy Land to the Continent for burial. The Bull itself read:

Persons cutting up the bodies of the dead, barbariously cooking them in order that the bones being separated from the flesh may be carried for burial into their own countries, are by the very fact excommunicated.²²

Except for the Papal Bull above quoted there is no evidence the Church otherwise forbade dissection. One author states that the contrary can be assumed because dissection did not appear in the *Handbook of Penance*, as he feels it would have had it been forbidden.²³

Two subsequent Papal decrees, however, did have a very real bearing upon dissection. One, by Pope Sixtus IV, and another by Pope Clement VII, specifically authorized the dissection of criminals.²⁴ The practice was adopted as a form of punishment in other countries and ultimately led to a public notion of dissection as a form of punishment.²⁵

COMMON LAW DEVELOPMENT

The first reference in English history to legislation providing bodies for dissection was the enactment of a charter for the United Company of Barbers and Surgeons in London during the reign of Henry VIII in 1540. The company was given the bodies of four criminals yearly for public dissection.²⁶ Having received the grant, the Barbers and Surgeons monopolized anatomy in England, and attempted to control it by legislation forbidding private dissections. The result was that students had no way to obtain cadavers other than through illegal means and the practice of grave robbing began.²⁷ By 1752 the practice of dissecting criminals became mandatory in England when murder was involved. Dissection was to be done in a public place and penalties were provided for attempts to interfere. The College of Surgeons was directed not only to dissect the criminal, but to provide the place to perform the operation:

²² De Sepulturis, Bonifacis VIII, noted in Walsh, *The Popes and the History of Anatomy*, 2 MED. LIBRARY & HISTORICAL J. 10-28 (1904).

²³ Alston, *Attitude of the Church Toward Dissection Before 1500*, 16 BULL. OF HISTORY OF MED. 221-38 (1944). The Edict of Tours (A.D. 1163) has been interpreted quite to the contrary however. See also FLETCHER, *MORALS AND MEDICINE* 22 (1960).

²⁴ C. SINGER, *HISTORY OF ANATOMY FROM THE GREEKS TO HARVY* 70-76 (1957).

²⁵ LASSEK, *supra* note 15, at 6.

²⁶ BALL, *supra* note 8, at 59.

²⁷ See Comment, *supra* note 13.

A Proper room, house, or building with suitable Conveniences, within four hundred yards, at the furtherest, from the usual Place of Execution . . . for the purpose of more conveniently Dissecting and Anatomizing the Bodies of such Murderers as shall at any time hereafter be delivered. . . ."²⁸

Between grave robbing and playing the part of assistant executioner, the anatomist did not enjoy a high status in early England. The grave robber himself did very well in a business sense, however, and convictions are reported to have been quite rare.²⁹

First there was the difficulty of getting someone to identify the body. Secondly, the owners of burial grounds were reluctant to admit that a body could be removed from their premises.³⁰ Finally, and most importantly, there was a very real question whether stealing a cadaver was a crime of any consequence at all, due to an interpretation of the law that a dead body had no property value so that the unauthorized possession of one was at most a misdemeanor.³¹

The theory that a body had no property value can be traced back to 650 A.D. when, due to the existing fear of the dead, care and disposal of all bodies came within the authority of the Church. Curthbert, Archbishop of Canterbury, introduced the practice of graveyard inhumation and during the reign of King Stephen clerical control of cadavers actually became exclusive so that secular authorities had no control over the dead.³² This led to the attitude of the Tudor and Stuart courts that they had no concern with cadavers and, accordingly, they limited their activities to protecting grave sites and monuments. Lord Coke wrote his dictum that the body was "but a lump of earth" and was no concern of the common law courts, which in turn led to the eventual interpretation that there could be no property rights in a body.³³

The first recorded conviction of a resurrectionist (grave robber) occurs in *Rex v. Lynn*³⁴ where, in 1788, the indictment charged the defendant with entering a burial ground and exhuming a body for dissection purposes. The defense urged that because there were no property rights in a cadaver no crime could have been committed. The court found that the only legislation remotely in point was a

²⁸ Dobson, *Anatomizing of Criminals*, 9 ANNALS OF ROYAL COLLEGE OF SURGEONS 112 (1951).

²⁹ BAILEY, *supra* note 10, at 92.

³⁰ JACKSON, *THE LAW OF CADAVERS* 126, 127 (2d ed. 1952).

³¹ Hayne's Case, 77 Eng. Rep. 1389 (1613).

³² See 30 TEMP. L.Q. 40 (1956).

³³ 4 BLACKSTONE, *Commentaries* 236.

³⁴ 100 Eng. Rep. 394 (1788).

law making it a felony to steal bodies for witchcraft. As the offense did not fit within the statute, the court finally held that taking a body from a burial ground was a common law offense, but that no punishment had been prescribed for the offense. A small fine of five marks was levied.

In 1728 one John Davies was tried on charges of possessing a body not his own for purposes of dissection. The conviction of Davies, who was a medical student, helped serve notice to the profession that teachers and students were liable for punishment if caught with an unauthorized body.³⁵ The conviction of the two grave robbers-turned-murderers followed, and the Warburton Act finally established that grave robbing was a serious offense.³⁶

ANATOMY LAWS IN THE UNITED STATES

The State of Massachusetts actually preceded England insofar as a body-supply statute was concerned. That state, in 1784, adopted a provision which provided that persons killed in a duel could be buried in one of two ways; namely, in public with a stake driven through the body, or dissected.³⁷ The statute did not, however, raise the status of anatomists in Massachusetts.

New York followed Massachusetts in providing for the orderly supply of cadavers after a series of riots in the city of New York which followed grave robbing incidents.³⁸ The principal riot occurred when a medical student waved off a crowd of children with the arm of a cadaver. The children informed their elders who marched on the school, and the riot followed.³⁹ Shortly thereafter the state legislature passed a bill which made available for dissection murderers, arsonists, and burglars.⁴⁰ Until the Civil War that legislation constituted the sole legislation continuously in force, although several states had adopted anatomical supply statutes which were later repealed.⁴¹

The Civil War gave impetus to legislation for dissection materials, however, and by 1909 thirty-nine states had some form of statute providing for anatomical supply, largely based upon the

³⁵ BAILEY, *supra* note 10, at 95, 98.

³⁶ Anatomy Act, 3 & 4 Geo. 4, c. 75 (1832). It is to be noted that this Act also provided legal methods for obtaining bodies for dissection.

³⁷ BALL, *supra* note 8 at 203-04.

³⁸ Waite, *Development of Anatomic Laws in States of New England*, 233 N. ENG. J. MED. 716 (1945).

³⁹ *Id.*

⁴⁰ *Id.* at 719.

⁴¹ Blake, *Development of American Anatomy Acts*, 30 J. OF MED. ED. 431-39 (1955).

Warburton Act.⁴² Many of the statutes were not changed until recently.⁴³

Civil actions by the survivors of dissected persons have become more and more common in the United States, following an interpretation by the courts that an action for mental anguish does exist where a cadaver has been cut into without authorization, based on the theory of a "quasi-property right" in the body.⁴⁴ In *Cremonese v. City of New York*,⁴⁵ for example, the New York Appellate court approved a reduced jury verdict to a surviving spouse where an autopsy had been performed without permission. Although the jury had awarded the plaintiff-spouse \$12,500 in damages, the appellate court reduced the verdict to \$3,500. Many cases of this nature have doubtless made an impression on the medical profession.⁴⁶

There also developed a body of thought in the United States which held that unauthorized dissection was a common law offense, whether or not grave robbing was involved.⁴⁷ In this connection a 1939 decision by the Supreme Judicial Court of Maine is of considerable interest. In *State v. Bradbury*⁴⁸ the defendant had disposed of his dead sister by burning her body in the house furnace. The resulting smoke and odor attracted considerable attention and polite inquiry was made as to the sister's whereabouts. In answer, the brother shoveled some ashes and bones out of the furnace at the feet of the questioner.⁴⁹ The court found that because the feelings and natural sentiments of the public were outraged, a common law offense had occurred.⁵⁰

More recently, in the 1967 case of *State v. Hartzler*⁵¹ the New Mexico Court of Appeals ruled that the common law misdemeanor of "indecent handling of a dead body" applied to the defendant as he had so treated the body of a dead woman as to "outrage the public sense of decency."

In Washington a specific statute provides that mutilation of human remains without authorization of law is a penitentiary offense.⁵² Although the section is probably intended to prevent grave

⁴² Jenkins, *The Legal Status of Dissecting*, 7 ANATOMICAL RECORD, 387-99 (1913).

⁴³ Comment, *supra* note 13.

⁴⁴ 22 AM. JUR. 2d *Dead Bodies* § 4 (1965).

⁴⁵ 215 N.E.2d 157, 259 N.Y.S.2d 235 (1965).

⁴⁶ Annot., 83 A.L.R.2d 956, 957, 964 (1962). An extreme case of mishandling of the organs of the dead is found in *Palenzke v. Bruning*, 98 Ill. App. 644 (1901).

⁴⁷ 22 AM. JUR. 2d, *supra* note 44 at 594.

⁴⁸ 9 A.2d 657 (Me. 1939).

⁴⁹ *Id.* at 657.

⁵⁰ *Id.* at 659.

⁵¹ 78 N.M. 514, 433 P.2d 231 (1967).

⁵² WASH. REV. CODE § 58.08.150 (1962).

robbing, it could be interpreted to apply to an unauthorized removal of organs.⁵³

THE UNIFORM ACT

Washington's version of the Uniform Anatomical Gift Act became effective on June 12, 1969 and is substantially the same as the proposed uniform model law.⁵⁴ Prior to the Act's adoption, Washington law did permit disposition of remains by a prospective donor or his survivors in a manner not too dissimilar from the Act itself.⁵⁵ Washington's sister state of Idaho, on the other hand, had no provisions at all for the disposition of human remains for transplantation or dissection purposes until that state's legislature adopted the Uniform Act at its last session.⁵⁶

In lieu of specific authorization by statute there is a very real question whether an individual has the right to dispose of his own body after death. The principal and most famous case on the subject is *Holland v. Metalious*,⁵⁷ where the authoress of *Peyton Place* had directed that her body was to be used by either the Dartmouth or Harvard medical school following her death. Both schools declined the body, reportedly after having been advised by her survivors that legal action would be brought if they accepted the "gift."⁵⁸ When her administrator, with the will annexed, sought to carry out her direction that no funeral be held for her, the survivors again objected, and funeral services were ultimately held.⁵⁹

The Uniform Act purportedly prevents a decedent's directions from being overturned by his survivors,⁶⁰ and should avoid the problem raised by objecting survivors. In this connection, it is interesting to note that the Pittsburgh University Health Law Center's "Hospital Law Manual" cautions against using organs from a body where there are objections, even though the decedent had authorized such use unless there is specific legislation permitting such use.⁶¹

⁵³ *Id.*

⁵⁴ Ch. 24, [1969] Wash. Sess. Laws 140. Compare Uniform Act appended in Sadler and Sadler, *Transplantation and the Law: The Need for Organized Sensitivity*, 57 GEO. L.J. 5 (1968).

⁵⁵ See WASH. REV. CODE § 68.08.260 (1962).

⁵⁶ Ch. 24, §§ 34, 39, [1969] Idaho Sess. Laws.

⁵⁷ 105 N.H. 290, 198 A.2d 654, 7 A.L.R.3d 742 (1964).

⁵⁸ Dukeminier and Sanders, *supra* note 7, at 414.

⁵⁹ *Holland v. Metalious*, 105 N.H. 290, 198 A.2d 654, 7 A.L.R.3d 742 (1964).

⁶⁰ Ch. 80, § 3, [1969] Wash. Sess. Laws 141.

⁶¹ 1 HOSPITAL LAW MANUAL § 3 at 13, (Pitt. Univ. Health Law Center).

Under the Uniform Act a prospective donor may execute an anatomical gift in three different ways:

- (1) By will;
- (2) By a document other than a will if executed and witnessed by two witnesses; and
- (3) By a properly executed card carried on the donor's person.⁶²

Even if the will is declared invalid for testamentary purposes the gift will be considered valid and effective if acted upon in good faith.⁶³ If a donee is designated who is not available, the attending physician may, in lieu of knowledge of a contrary desire by the donor, accept the gift as donee.⁶⁴ But the physician who becomes a donee under the Act's provisions cannot participate in removing or transplanting the organ.⁶⁵ Delivery of the document is not necessary to finalize the gift, but the original or an executed copy can be placed with a hospital, bank or storage facility or registry office to facilitate action after the donor's death.⁶⁶ Revocation may be by a signed statement to a specified donee where the donee has been delivered the original grant, or by an oral statement in the presence of two witnesses properly communicated to the donee. Revocation by a statement made to an attending physician during the terminal illness or injury (if communicated to the donee) will also serve.⁶⁷ Undelivered documents may obviously be cancelled by destruction or cancellation.⁶⁸

Where the decedent has not authorized removal of his organs, an enumerated class of survivors, in order of those having primary and secondary authority, is provided by the Act.⁶⁹ The person with first priority is the spouse of the decedent, followed in turn by his adult son or daughter, either parent, an adult brother or sister, a guardian having guardianship of the decedent at time of death, and finally "any other person authorized or under obligation to dispose of the body."⁷⁰

Removal of organs upon authority of any of the persons des-

⁶² Ch. 80, § 5, [1969] Wash. Sess. Laws.

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.* § 6.

⁶⁷ *Id.* § 7

⁶⁸ *Id.*

⁶⁹ *Id.* § 3

⁷⁰ *Id.*

ignated is permitted if parties of a prior class are not available at the time of death, provided that there is neither actual knowledge of the objections of the decedent nor of persons of a superior class or of the same class as the consenting party.⁷¹ The Act specifically exempts from criminal or civil liability any person acting in good faith in accordance with the terms of the Washington Act or a similar act of another state or foreign country.⁷²

Although the Washington legislation did not include a proposed form for organ-donation purposes, Senate Bill 1053, which became Idaho's version of the Uniform Anatomical Gift Act during the last session of the Idaho legislature, does include a proposed form which should be equally valid in Washington. A copy of that form is set forth in the Appendix.

The Uniform Anatomical Gift Act is certainly a major achievement when viewed in light of the prior treatment accorded human cadavers and human organ transplantation. It has allowed those states adopting the Act to discard old common law principles and subsequent inadequate legislation. Unnecessary and cumbersome formalities have been eliminated, and only those safeguards required to protect the various interests of the donor, his relatives and physicians, and the general public are left. The Act has, however, left certain questions unresolved,⁷³ and it is by no means the complete answer to the problems involved in organ transplantation.

It is difficult to rationalize the morality of permitting one person to die for lack of an organ which is in fact, available, but legally unavailable for want of proper authorization. It is fair to assume that the most sought after organs will be those of relatively young persons whose body functions are the most adaptable to transplantation. Young persons are not likely to execute the needed forms authorizing removal of their organs, secure in their belief that life has a long road for them. A premature end to that life through an accident leaves the attending physician with salvageable organs, but no authorization unless the next-of-kin, should they be located in time, consent. The somewhat grisly scene of advising a survivor that there is no hope for a loved one, and in the same breath ask-

⁷¹ *Id.*

⁷² *Id.* § 8

⁷³ In a paper entitled "The Legal Aspects of Transplantation," presented by Joseph P. Roth to the American College of Cardiology in Chicago on Dec. 10, 1968, the author observed that the Uniform Act failed to mention or deal with payments for gifts, the selection of recipients, and the recipient's role in the transplantation process. The author did note, however, that such omissions were most likely intentional, for the "draftsmen undoubtedly felt that the Uniform Act was not a proper vehicle to deal with these areas."

ing for permission to remove the organs of that person, should be avoidable.

There is also the problem of persons who have no readily ascertainable next-of-kin. A 1956 opinion of the Washington State Attorney General's office stated that it would be improper for a physician to remove the eyes of a deceased welfare recipient who died without survivors, in order to transplant the corneas from such eyes.⁷⁴ It is interesting to note that the body of a decedent to be buried at public expense, if the decedent had not requested to be buried or if his body is not claimed for burial, may be claimed for dissection by physicians or medical schools.⁷⁵

It has been suggested that even with statutory authorization permitting a person to give his organs for transplantation purposes, a survivor could thwart the wishes of a deceased donor by advising the attending physician that the authorization had been revoked by the donor in a just-then unavailable document or by an unrecorded statement.⁷⁶ Under Washington's Uniform Anatomical Gift Act, this would be possible.⁷⁷ Whether it would in fact occur is quite another question, although *Holland v. Metalious* suggests that it is not impossible.⁷⁸

Jesse Dukeminier, Jr., and David Sanders, who have co-authored two articles dealing with organ transplantation⁷⁹ offer a most reasonable solution to the problem. In essence, they suggest legislation which would recognize four basic principles:

(1) Removal of useful cadaver organs is routine practice; leaving them to putrefy is unusual.

(2) Removal of organs is performed under conditions that do not burden the bereaved persons with the problem.

(3) The donor may object during life to removal of his organs after death, which objection is controlling. If, however, the donor expressly agrees to the use of his organs after death, his next-of-kin has no power to veto.

(4) If the donor neither objects nor expressly assents, his

⁷⁴ 1955-1957 WASH. OP. ATT'Y GEN. 269 (1956).

⁷⁵ WASH. REV. CODE § 68.08.070 (1959).

⁷⁶ See Dukeminier and Sanders, *supra* note 7.

⁷⁷ Ch. 80, § 7, [1969] Wash. Sess. Laws 142. Although the section provides that a document of revocation must be *delivered* to the donee to be effective, the practical result of an assertion that such a document existed would certainly preclude most physicians from proceeding. See Dukeminier and Sanders, *supra* note 7.

⁷⁸ See Dukeminier and Sanders, *supra* note 7.

⁷⁹ Sanders and Dukeminier, *supra* note 3; Dukeminier and Sanders, *supra* note 7.

next-of-kin may object to removal any time before the organs are removed, which objection is controlling.⁸⁰

In connection with the fourth point the authors of the article stated they had reservations about permitting the next-of-kin any veto rights whatsoever, but had included such point to avoid constitutional problems dealing with freedom of religion.⁸¹

Although the Catholic Church permits organ removal and transplantation and commends donors⁸² there is a question of whether Orthodox Judaism approves of such a procedure.⁸³ If for no other reason, this would seem sufficient to require any legislation to recognize a right-of-veto in survivors when the donor has not previously authorized removal.

Two other authors, who are listed as playing a considerable part in the original drafting of the proposed Uniform Gift Act, suggest that the Sanders and Dukeminier approach would be improper.⁸⁴ In brief, they contend:

. . . The fact is that it would be more macabre and unacceptable to allow any surgeon to remove an organ or tissue upon death without having an obligation to give notice to anyone. It is difficult to imagine public acceptance of such a proposal.⁸⁵

Although it might well be difficult to obtain the initial legislation permitting such action, once the legislation was adopted and the practice actually begun (assuming no sensationalism on the part of the news media) it is difficult to imagine public *non-acceptance* where the end result is so clearly meritorious. This is not an abortion bill with its problems of ending life, but the very converse—a legislative proposal which would continue life in a number of cases where such life might otherwise terminate.

The European countries are evidently more concerned with the donor's wishes (or lack of objection) than is the Uniform Act's provisions. In Italy the deceased may make a binding consent to removal of his organs. In lieu of such consent, unless specified objection by the decedent had been made, and unless an objection by a relative or spouse is made affirmatively, removal of organs

⁸⁰ See Dukeminier and Sanders, *supra* note 7.

⁸¹ *Id.*

⁸² See Sanders and Dukeminier, *supra* note 3, at 404-07, for a general discussion of religious attitudes on this subject.

⁸³ *Id.*

⁸⁴ Sadler and Sadler, *supra* note 54.

⁸⁵ *Id.* at n.138.

is permitted.⁸⁶ The United Kingdom,⁸⁷ France,⁸⁸ Spain,⁸⁹ and Sweden⁹⁰ have adopted similar legislation. In Czechoslovakia, only the decedent is given the right to object to removal of his organs after death, by means of a written statement made during his lifetime which specifically objects to removal of his organs.⁹¹

One state, Mississippi, had a statute which permitted an individual to sell his body, the sale to take place upon his death.⁹² The sale was considered binding upon his survivors but the seller was given the right to revoke the sale by a written instrument and repayment of the amount he had received, plus six percent interest from the date of sale.⁹³ Although Dukeminier and Sanders recognize the possibility of selling one's body,⁹⁴ neither they nor the authors of this article believe such a practice to be wise. Whether such a sale is even legally binding without legislation specifically permitting it is doubtful.⁹⁵

In all respects, the Dukeminier and Sanders approach seems preferable to the Uniform Gift Act, whether the primary consideration is for increasing the supply of salvageable organs or for minimizing the grief of the survivors. It would be most unfortunate if the Uniform Act became the final word in organ transplantation legislation, as did the Warburton Act for dissection work.

DEATH

While the enactment of the Uniform Anatomical Gift Act offers a near-term solution to many of the problems involved in organ transplants, the problem of "death" remains in a state of flux. Specifically, the problem of defining death is replete with both technical and moral impediments. This problem is possibly most dramatically presented by the occasional automobile bumper sticker which reads: "Drive carefully, Dr. Barnard is watching." Although facetious

⁸⁶ Decree #300 of the President of the Republic of Italy of 20 January 1961, 13 World Health Organization, INTERNATIONAL DIGEST OF HEALTH LEGISLATION 305; Law 458 of 26 June 1967, 19 INTERNATIONAL DIGEST OF HEALTH LEGISLATION 389 (1968).

⁸⁷ 19 INTERNATIONAL DIGEST OF HEALTH LEGISLATION 163 (1963).

⁸⁸ *Id.* at 628.

⁸⁹ 3 INTERNATIONAL DIGEST OF HEALTH LEGISLATION 388 (1951-52).

⁹⁰ 4 INTERNATIONAL DIGEST OF HEALTH LEGISLATION 541 (1954).

⁹¹ 7 INTERNATIONAL DIGEST OF HEALTH LEGISLATION 374 (1956).

⁹² MISS. CODE ANN. ch. 480, § 1-3 (1966).

⁹³ *Id.*

⁹⁴ Sanders and Dukeminier, *supra* note 3; Dukeminier and Sanders, *supra* note 7.

⁹⁵ If a person has no property rights in his body sufficient to donate it after his death as previously set forth, he could hardly have the right to sell his body without specific enabling legislation.

on its face the admonition points to an increasingly complex question: What is death? Both the medical and legal journals are giving more and more attention to what used to be a simple problem.⁹⁶

There are only a few decisions which have hinted at what is fast becoming a central issue not only for organ transplantation, but for such areas as the criminal law, inheritance determination, and civil litigation. One of the few court decisions dealing with this problem considered the question of "brain death" (irreversible coma), now looked upon by a growing segment of the medical profession as the standard criteria for defining when a person is dead.⁹⁷

In *Smith v. Smith*,⁹⁸ the Arkansas Supreme Court summarily dismissed the contention that the deaths of two persons involved in an automobile accident were simultaneous since one of the victims had "survived" in a coma for seventeen days. The court rejected the argument that because the individual had failed to reawaken she had "lost the power to will" at the same time as her husband and, consequently, had died at the same instant. The court considered the legal definition of death to be that set forth in Black's Law Dictionary. An earlier California case had employed the same definition,⁹⁹ and more recently, it was readopted in another California decision.¹⁰⁰ According to that definition, death is:

The cessation of life; the ceasing to exist; defined by physicians as a total stoppage of the circulation of the blood; and a cessation of the animal and vital functions consequent thereon, such as respiration, pulsation, etc.¹⁰¹

The definition does not include any reference to "brain death," a concept most recently considered by the Ad Hoc Committee of the American Electroencephalographic Society on EEG Criteria for Determination of Cerebral Death to be of primary importance.¹⁰²

If the Black's definition is to stand and to provide the criteria

⁹⁶ See, e.g., Corday, *Life-Death in Human Transplantation*, 55 A.B.A.J. 629 (1969); Wasmuth, *The Concept of Death*, 30 OHIO ST. L.J. 32 (1969); Comment, *Medico-Legal Problems With the Question of Death*, 5 CAL.-W. L. REV. 110 (1968); Hannah, *The Signs of Death: Historical Review*, 28 N.C. MED. J. 457 (1967); *When is a Patient Dead?*, 204 A.M.A.J. 1000 (1968).

⁹⁷ *A Definition of Irreversible Coma* (Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death), 205 A.M.A.J. 337 (1968). The Committee Report has been used increasingly as a basis for discussion in a variety of studies. See *infra* note 107, and Corday, *supra* note 96.

⁹⁸ 229 Ark. 579, 317 S.W.2d 275 (1958).

⁹⁹ *Thomas v. Anderson*, 96 Cal. App. 2d 371, 215 P.2d 478 (1950).

¹⁰⁰ *In re Schmidt's Estate*, 67 Cal. Rptr. 847 (1968).

¹⁰¹ BLACK'S LAW DICTIONARY 488 (4th ed. 1951).

¹⁰² Silverman, et al., *Cerebral Death and the Electroencephalogram*, 209 A.M.A.J. 1505 (1969).

for legal death it is submitted that the medical advances of the past few years will be significantly undermined. Using medical techniques available at present it is quite possible to maintain blood circulation for some time, long after the patient has suffered irreversible brain damage. As the need for transplantable organs grows, human vegetables which contain the gift of life for others will be maintained in a legally "alive," but medically "dead," existence while desperately ill patients lose whatever chance for true life they might have were such organs immediately available. This is particularly true where heart and liver transplantation is concerned. As Dr. Denton Cooley of St. Luke's Hospital in the Texas Medical Center in Houston stated:

The heart has always been a special organ. It has been considered the seat of the soul, the source of courage. But I look upon the heart only as a pump, a servant of the brain. Once the brain is gone, the heart becomes unemployed. Then we must find it other employment.¹⁰³

The Uniform Anatomical Gift Act adopted by the last session of the Washington legislature¹⁰⁴ contains the standard provision suggested by the original drafters of the Act, insofar as the question of time of death is concerned: "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."¹⁰⁵ If, then, the fact of death is to be left to a physician to determine, as has been suggested by a symposium relating to the overall problems of life and death,¹⁰⁶ the problem is greatly simplified. A person is dead when a physician says he is, and transplantation can begin immediately. The answer, however, is probably not that self-evident.

It is certainly not improbable that the question will be raised within the relatively near future. The University of Washington Medical Staff Administrative Committee has already established criteria to aid attending physicians in determining when to terminate efforts to maintain circulation and respiration, both to avoid undue emotional, monetary and manpower expense and effort on a hopeless patient, and to determine when a still-functioning organ may be removed from what is in essence a cadaver. The criteria are reasonably concise:

1. On the basis of evaluation of the literature available and

¹⁰³ LIFE, Aug. 2, 1968, at 34. To date Dr. Cooley has supervised more heart transplants, and has a higher proportion of survival success, than any other surgeon.

¹⁰⁴ Ch. 80, [1969] Wash. Sess. Laws 140.

¹⁰⁵ Ch. 80, § 8(2), [1969] Wash. Sess. Laws 143.

¹⁰⁶ Symposium, *The Medical, Moral, and Legal Implications of Recent Medical Advances*, 13 VILL. L. REV. 732 (1968).

some clinical experience, we recommend that, if the following criteria be met, the prognosis for survival is hopeless:

- a. A truly isoelectric EEG (Electroencephalogram).
- b. Exclusion of hypothermia (temperature below 90° F. or 32.2° C.) and/or significant blood levels of central nervous system depressants such as barbituates.
- c. Deep coma with apnea necessitating artificial respiration, areflexia, and complete lack of response to noxious stimuli.
- d. Persistence of these conditions (a,b,c) for at least 24 hours.¹⁰⁷

The Committee refused to accept a definition of death based upon clinical criteria alone (where an EEG is not used) or where the EEG is not isoelectric, and similarly refused, at present, to base a definition of death solely on purely EEG grounds. The latter possibility was seriously considered, however, and may very well eventually be accepted by the Committee as sufficient evidence of cerebral death in and of itself.¹⁰⁸

Employing the present criteria of the University Committee, there are some threshold problems which must be considered. Possibly the most consequential aspect of the proposed definition is suggested by a 1968 transplantation operation involving a Houston, Texas patient. In the Houston transplantation the heart of a beating victim was removed and placed in a critically ill patient. The county medical examiner raised the issue of whether the decedent had died due to the removal or because of the beating. The validity of the autopsy was also considered questionable by the examiner.¹⁰⁹

The probability of defense counsel raising the question of actual legal responsibility for a death when transplantation occurs is a very real one. A former King County deputy prosecuting attorney, now engaged in defense work in Seattle, expressed the thought that such a defense could be presented.¹¹⁰ A Los Angeles, California Deputy District Attorney had voiced the same concern over a year

¹⁰⁷ *Ad Hoc* Committee, University Hospital, University of Washington, *Some Criteria for the Definition of Irreversible Coma*, approved by the University Hospital Medical Staff Administrative Committee, June 13, 1969.

¹⁰⁸ *Id.*

¹⁰⁹ Washington Post, May 8, 1968; see also 114 CONG. REC. S 6149 (daily ed. May 22, 1968).

¹¹⁰ Interview with H. John Aitkin, Attorney at Law in Seattle, Washington, Oct. 21, 1969.

earlier, and concluded that difficulty could be created by organ removal where the donor had died violently.¹¹¹

The long-standing rule where criminal responsibility and medical treatment are inter-related is set forth in a 1965 annotation of the American Law Reports:

. . . [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 cause of death, the subsequent treatment with its attendant risks being foreseeable and a consequence of the wrongful act.¹¹²

The question then resolves itself to this: Is it foreseeable that, in light of present medical treatment, the respirator on a cerebrally "dead" victim will be turned off? Unless we are to advance into a quagmire of legally-imposed reasoning it is hoped that the answer will be affirmative.

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 for damages or criminal prosecution.¹¹³ Moreover, a respected legal scholar 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."¹¹⁴ The position of the Catholic Church, as set forth in a statement of Pope Pius XII, seems to be in accord. It is not necessary to continue extraordinary medical effort to stave off the inevitable. Vegetative existence is not life in the spiritual sense.¹¹⁵

Because of the rapidly changing concepts of life and death in the medical sense, it seems premature in the judgment of the authors to urge a legislative definition of death. Today's definition might prove to be a hindrance to further advances of knowledge, much as the nineteenth century statutes aimed at providing cadavers for medical research are a hindrance to twentieth century transplantations. Then, too, there is always the possibility that political

¹¹¹ New York Times, May 8, 1968; see also 114 CONG. REC. S 5307 (daily ed. May 10, 1968).

¹¹² Annot., 100 A.L.R.2d 769, 774 (1965).

¹¹³ Ch. 80, § 8(3), [1969] Wash. Sess. Laws 143.

¹¹⁴ Fletcher, *Prolonging Life*, 42 WASH. LAW REV. 999 (1967).

¹¹⁵ Discorsi ai Medici 608-18 (Roma Orizzante Medico 1959).

motives might influence a legislature to enact more restrictive rather than less restrictive definitions of when a person is dead. Perhaps the most that can be hoped for at present is that the medical profession will be allowed to have a major voice in deciding what death now is. The final decision will have consequences too far reaching to permit the development of a definition based purely on legal determination.

CONCLUSION

With the Uniform Anatomical Gift Act now in effect, the courts may very well be faced with deciding the tacky problems of death and organ transplantation previously left to moralists. Further, public education concerning death and organ transplantation is lamentably confined to the spectacular, and it is to be expected that even sound and medically responsible decisions cannot be made without moral repercussions and public consternation. In balancing the necessities, however, recognition must be given to the right of life—a developing moral right to obtain vitally necessary organs from consenting donors whose moral consolation is “doing unto others as they would . . .” To hold otherwise, in the face of a medically sound, routine operation, would be to approve Lord Coke’s dictum concerning the human cadaver: “Flesh given to worms.”¹¹⁶ This need not be the case.

APPENDIX*

ANATOMICAL GIFT BY A LIVING DONOR

I am of sound mind and 18 years or more of age.

I hereby make this anatomical gift to take effect upon my death. The marks in the appropriate squares and words filled into the blanks below indicate my desires.

I give: ☐ my body; ☐ any needed organs or parts;
☐ the following organs or parts

To the following person (or institution):

☐ the physician in attendance at my death; ☐ the hospital in which I

¹¹⁶ COKE, THIRD INSTITUTE 203.

* This form was adopted by the State of Idaho for the purpose of providing a means of giving consent to organ donations.

die; ☐ the following named physician, hospital, storage bank or other medical institution _____

☐ the following individual for treatment _____

for the following purpose: ☐ any purpose authorized by law;
☐ transplantation; ☐ therapy; ☐ research; ☐ medical education.

Dated _____ City and State _____

Signed by the Donor in the presence of
the following who sign as witnesses:

Signature of Donor

Witness

Address of Donor

Witness

(2) A form substantially as follows is sufficient to comply with the provisions of this act for the making of an anatomical gift by next of kin or other authorized person:

ANATOMICAL GIFT BY NEXT OF KIN OR OTHER AUTHORIZED PERSON

I hereby make this anatomical gift of or from the body of _____ who died on _____ at the _____ in _____. The marks in the appropriate squares and the words filled into the blanks below indicate my relationship to the deceased and my desires respecting the gift.

I am the surviving: ☐ spouse; ☐ adult son or daughter; ☐ parent;
☐ adult brother or sister; ☐ guardian; ☐ _____, authorized to dispose of the body;

I give ☐ the body of the deceased; ☐ any needed organs or parts;
☐ the following organs or parts _____;

To the following person (or institution) _____ (insert the name of a physician, hospital, research or educational institution, storage bank or individual)

for the following purposes: ☐ any purpose authorized by law; ☐ transplantation; ☐ therapy; ☐ research; ☐ medical education.

Dated _____ City and State _____

Signature of Survivor

Address of Survivor