

chapter 5

Ethical Considerations

“It is time to start acknowledging that people’s body parts are their personal property. ”

—Lori B. Andrews
Hastings Center Report 16:5, 1986

“We may be more than mere protoplasm, but we’re nothing without our bodies (at least in this world). Putting a price on the priceless, even a high price, actually cheapens it. So we don’t approve of selling our body parts; and the body isn’t quite property. ”

—Thomas H. Murray
Discover, March, 1986

CONTENTS

	<i>Page</i>
Introduction	129
Hypothetical Case Study	129
List of Ethical Questions	130
The Ethics of Buying and Selling Bodies and Their Parts	130
The Principle of Respect for Persons	130
The Principle of Beneficence	134
Principles of Justice	135
The Moral Status of Bodies and Their Parts	137
Philosophical Perspectives	137
Selected Religious Perspectives	138
Summary and Conclusions	143
Chapter preferences.	144

Figures

<i>Figure No.</i>	<i>Page</i>
15. The Human Skeleton v. the Human Person	137
16. Dissection of the Human Corpse	140

Ethical Considerations

INTRODUCTION

The use of human tissues and cells in biological research raises important ethical issues about how these materials are obtained, transformed, and possibly commercialized. **Although these issues are new, there are significant moral and ethical traditions from which to develop guide lines about the ways in which human biological materials ought to be developed or exchanged.** The absence of established customs or patterns for the development and exchange of these materials is due, at least in part, to the relatively new potential for profits to be derived from the development of human cells and tissue into cell lines or gene probes. This potential creates novel questions about the best courses of action that should be taken by physicians, patients, and others concerning the transfer of human biological materials. The following hypothetical case study indicates some of the ways in which new questions about the proper transfer and use of human tissues and cells can affect the relationship between doctor and patient.

Hypothetical Case Study

Ms. Doe is a 42-year-old female who visits her gynecologist once a year for a routine pelvic exam, Pap smear, and mammography. In recent years, her physician's premiums for malpractice insurance have soared. Ms. Doe suspects that this is one of the reasons why she must now sign a sheaf of consent forms and waivers concerning the possible hazards of exposure to radiation, the possible use of her tissues and cells, and so on. She has come to regard the relationship between doctor and patient as one in which she is asked to be both vulnerable and unprotected. She waives her right to every sort of recourse save one prior to her visit with the doctor. She is determined not to be completely outsmarted and has purposely not waived her rights to any commercial

interests that may result from the use of her cells or developed cell lines.

Dr. Ray is a 50-year-old obstetrician/gynecologist beset with the problems and conflicts associated with conducting what had once been a satisfying practice in the modern technological world. She has been sued three times in the course of her 25 years of practice and in each case the charges have been dropped. Nonetheless, these experiences have caused her considerable stress and some humiliation in her relationships with her colleagues. She no longer derives the satisfaction that she once did in her relationships with patients because she can no longer practice in a trusting fashion. When she first began her practice, she believed that her obligations were to be of benefit to patients and, above all, to do no harm. In recent years, she has had to change her approach from telling her patients what she thinks they need to know to providing them with an abundance of information in order to allow for their autonomous choices as recipients of health care.

Advances in biotechnology offer both Ms. Doe and Dr. Ray some potential recompense for what they both view as modern encroachments on what had heretofore been a relatively unencumbered and trusting relationship. Both have heard that it is possible and occasionally profitable to patent cell products developed from unique cervical cells and wonder if the yearly routine Pap smear could be an opportunity for financial gain.

It is not farfetched to consider the ways in which modern developments in biotechnology might transform the relationship between doctor and patient. It is now possible to obtain something of value in any medical procedure that involves collecting a patient's tissues or cells. This possibility seems to entail new obligations regarding informed consent. The nature of these obligations, however, is a subject of some debate.

List of Ethical Questions

This chapter addresses the following questions:

- Is it ethical for human tissues and cells to be developed into commercial products?
- If it is ethical for human tissues and cells to be developed into commercial products, what are the necessary ethical conditions for such transactions?
- What is the relationship between the identity of a person and his tissues and cells?
- Are there any limits or restrictions on the use of human tissues and cells?
- Does an individual retain rights or interests in his tissues and cells after they are cast off as waste, surgically extracted, or otherwise relinquished?

The underlying question is whether or not the buying and selling of undeveloped human cells or developed cell lines and gene probes could result in substantial benefits or harms for individual human beings. It may be that anxieties about

whether it is ethical for bodily materials to be bought and sold or about how justice should be preserved in the distribution of profits are largely an American phenomenon. In Japan, for example, a loan shark gives his clients the “opportunity” to repay him in kidneys. In the Philippines, prisoners attempt to obtain earlier paroles by “donating” kidneys. In Bombay, India, a mother sold her kidney for \$7,000 to buy a dowry for her daughters, a clock, a TV set, and a swivel fan (22).

In this country, the combination of for-profit and nonprofit markets encompasses the sometimes competing values of private enterprise and public good (see ch. 7). If private enterprise and the public good were always synonymous, then the question of whether it is proper or fair for researchers to profit from human biological materials would not arise. This chapter discusses not only whether any harms might result if human tissues and cells are bought and sold, but also how profits that accrue from any commercialization might be fairly or justly distributed.

THE ETHICS OF BUYING AND SELLING BODIES AND THEIR PARTS

Are human biological materials objects for commerce, things that may properly be bought and sold? There are three broad ethical grounds for objecting to or supporting commercial activities in human biological materials. These parallel, but only roughly, the generally accepted ethical principles of **respect for persons**, **beneficence**, and **justice**.

First is respect for persons: the idea that trade in human materials ought to be limited to the extent that the body is part of the basic dignity of human beings. If the body is indivisible from that which makes up personhood, the same respect is due the body that is due persons. Conversely, if the body is considered incidental to the essence of moral personhood, trade in the body is not protected by the ethical principle of respect for persons.

The second moral principle is beneficence. Would commercialization of human materials (perhaps of specific kinds) be more beneficial than

a ban on such commercialization? Proposals for markets in human tissues, for example, could be justified on the grounds that they would lead to a preponderance of good results over bad. On the other hand, objections to the same markets could likewise be couched in consequentialist (outcome-oriented), beneficence-based terms.

The third principle is justice. A societal commitment to fairness and equality maybe relevant to determining the moral acceptability of commerce in human body parts. It maybe that much of the public repugnance to a market in human tissues stems from a sense that the limit on permissible inequalities would be breached by such a market.

The Principle of Respect for Persons

The principle of respect for persons can be illustrated by the work of four moral theorists: two have theological roots, two have secular back-

grounds. In addition, two emphasize the moral importance of the body, and two view human biology as incidental to the moral nature of human beings. The theologians are Paul Ramsey and Joseph Fletcher; the philosophers are Leon Kass and H. Tristram Engelhardt, Jr.

When these individuals have addressed commercialization, it usually has been in the context of organs for transplantation. Each, however, has important views about the body and its relationship to moral personhood that illuminate the ethical debate about the use of human tissues and cells in biotechnology (14).

Paul Ramsey

Paul Ramsey, a Christian theologian, argues that man is a “sacredness” in his bodily life. For Ramsey, respect for the human body as an inseparable part of the person is an important moral duty grounded in the respect due to all persons created by God (18). Ramsey has reservations about the morality of organ donations by living donors. He requires that due weight be given to the physical harm done to the donor since the only human life we know to respect, protect, and serve in medical care is physical life. In particular, giving an organ is an act of charity and never an obligation.

Ramsey has equally deep qualms about policies that would remove organs from the newly dead without the consent of the donor while living and the family upon death. Even with consent, he cautions that human beings should not begin to think of their bodies as a group of parts to be given, taken away, or, worst of all, sold. Ramsey believes that **human beings exist in their bodies and that respect for the body is indivisible from respect for the person.** Ramsey has a basic concern about humankind’s tendency to regard the body as an instrument or as incidental to the moral person. He states:

There are many refined and subtle ways by which men [and women] may be encouraged or allowed to treat themselves as parts only, or collections of parts, in the service of medical progress or societal value to come. In terms of our vision of man and his relation to community, there may be little to choose between the blood and soil,

organic view of the Nazis and the technological, “(spare parts)” mechanistic analogies of the present day (18).

Ramsey criticizes those Protestant and Catholic theologians who, he believes, give too little emphasis to the fact of human embodiment. They contribute, he says, to the technological view of human bodily existence. Their writings simply affirm the dualism of person and body that influences contemporary views.

In addition, Ramsey is opposed to commercialization of the human body, or at least of its vital organs. His principle reason stems from his view of the body’s irrevocable connection to the person; he sees the body as a sacredness in the biological order. This requires that it be treated with respect. This view also makes the commercialization of the body morally repugnant.

Ramsey incorporates into his ethics the notion of a “quasi-property right”—the right of kin to control the disposition of the body for burial in Anglo-American common law. (See ch. 5 for a discussion of legal aspects of this right.) He argues that this right is “quasi” in that possession for commercial purposes is still denied to any claimant (the man himself or his kin). It is a sort of “property” in that possession for a certain human and familial purpose is legally protected. This purpose is the positive human value and interest at stake—a protection of the poor or the upwardly mobile from commercial exploitation even with the consent of the person whose body it is, or was. Ramsey states that there is no opposition too strong against the potential abuses of a market in human flesh.

Ramsey is so committed to the idea of sacredness and bodily integrity that he offers, only half-facetiously, the proposal that organs donated by living donors be regarded as merely on loan, to be returned to the giver when the recipient dies. Ramsey makes this proposal to emphasize the importance of bodily integrity and the wrong done when integrity is violated—even for such a great good as preserving the life of another. For him, no great preponderance of good could justify harming a live donor against his charitable will. His discussion of living organ donors asks: Does the body belong to the person? His answer: Yes.

For living or cadaver donors, may parts of the body be sold? His answer: No (14).

Joseph Fletcher

In contrast to Paul Ramsey's view of the ethical centrality of the human body, theologian Joseph Fletcher gives biology some emphasis, but does not assign much, if any, moral significance to it. To Fletcher, **the body appears to be merely a necessary condition for the pursuit of the truly important things about being human. Its significance is only instrumental, not essential.**

A recurrent theme in Fletcher's work is a preference for human control over natural processes, for design and choice over chance, for reason over those things indifferent to reason. Fletcher asserts that being truly human involves knowing one's circumstances (e.g., one's physical nature) and controlling circumstances toward rationally chosen ends (5).

Fletcher's equation of artifice and control with moral stature suggests that he advocates the least natural course as the most morally elevated one, that the artificiality of certain means of conception make them, for that reason, preferable to natural means. He states:

To be a person, to have moral being, is to have the capacity for intelligent causal action. It means to be free of physiology! It is precisely persons—and not souls or bodies or glands or human biology—that count with God and come first in ethics (5).

The relative unimportance of the body to moral personhood is reinforced in Fletcher's seminal article about "indicators of personhood" (7). He names 15 positive and 5 negative criteria. Fourteen of the fifteen positive criteria are descriptions of various capacities—e.g., self-awareness, curiosity, concern for others. Only one directly addresses the body—a functioning neocortex. It is clear that this physiological requirement is important only because the neocortex is the physiological substratum—the enabling condition—of the other 14 criteria.

Of the five negative criteria—those things that he asserts are not central to moral personhood—three may be taken to pertain to the human body:

persons are not non- or anti-artificial; they are not essentially sexual; and they are not essentially parental (7). In Fletcher's view, it is reasonable and possible to be thoroughly human and favor technology, to have the human species survive without sexuality, and to be fully personal without reproducing.

Fletcher's desire to move the body outside of the moral compass is even more accentuated in subsequent writings reflecting further on indicators for humanhood. He says that neocortical function is the key to humanness, the essential trait necessary to all other traits (7).

Given Fletcher's views about the moral insignificance of the body and his celebration of control and artifice, it is unlikely he would object to the commercialization of the body or its parts based on respect for persons. He might have other objections, but they would have to be on quite different grounds. His view of the body and its relation to the moral person could not support any strong objection to using it for commercial gain.

Leon Kass

Leon Kass, a physician and philosopher, objects to those whom he calls corporealists, that is, those for whom there is nothing but the body. He also objects to theorists of personhood, consciousness, and autonomy who treat the essential human being as pure will and reason, as if bodily life counted for nothing (10). Kass states that the former confines man too much to mindless nature; the latter treats man in isolation, even from his own nature (10).

In his book, *Toward a More Natural Science*, Kass develops a philosophy of medicine and medical ethics based on what he believes are insights that come from a right understanding of the body. It is completely secular, and in that respect it is distinct from both Ramsey and Fletcher. But in its rejection of a mind/body dualism and its embrace of a concept of the body that stresses its dignity, Kass has much in common with Ramsey and little with Fletcher. He finds part of his inspiration in the way physicians regard the body:

Doctors respect the integrity of the body not only because and if the patient wants or allows them to. They respect and minister to bodily wholeness because they recognize, at least tacitly, what a wonderful and awe-inspiring—not to say sacred—thing the healthy living human body is (lo).

On secular rather than theological grounds, Kass stands with Ramsey in tying human embodiment to human moral worthiness. He states that human dignity rests on acknowledging the necessity of human embodiment. What is the relationship of the human being to his body: that of the owner to property? He does not explicitly answer this question but he makes clear his skepticism about treating the body as commercial property. Discussing reproductive technologies in general and surrogate motherhood for pay specifically, Kass states that the buying and selling of human flesh and the dehumanized uses of the human body ought not to be encouraged (10). This position is tied to his general repugnance at the notion of owning living nature *per se*. He doubts the wisdom of permitting the patenting of life and worries about individuals owning entire living kinds, e.g., micro-organisms. He sees no natural stopping place between bacterium and homo sapiens, once the ownership of living nature is permitted. He asks:

If a genetically engineered organism may be owned *because* it was genetically engineered, what would we conclude about a genetically altered or engineered human being? (10).

Kass refuses to separate the body out from what gives human beings their dignity and offers the premise that one can learn a great deal about human dignity and moral conduct from looking carefully at what the body means. He is reluctant to permit commercialization of the body or to treat living nature in general as something that should be reduced to mere property. Taken together, **these views create an argument that links the body to human dignity so strongly as to raise doubts about the moral acceptability of commercializing the human body.**

H. Tristram Engelhardt, Jr.

H. Tristram Engelhardt, Jr., a physician and philosopher, holds a secular view of the body that

has much more in common with the theologian, Fletcher, than with the philosopher, Kass. Human beings have no interest, he says, in preserving mere biological life as an end in itself. In contrast to the brain, and particularly the neocortex, the body is a complex, integrated mechanism that sustains the life of the brain, which serves as a basis for the life of a person (4). But all of the body's parts, aside from the higher parts of the brain, can be replaced. The particular features of the body are in this sense more incidental than essential. Engelhardt has no difficulty counting the computer HAL in the movie 2001 as a person. His views on personhood and brain transplants are consistent with this (i.e., personhood goes with consciousness, with the brain and not the body) as well as his view on the proper definition of death. He agrees with Fletcher that in humans the person does not survive the destruction of the neocortex. From all of this, it is clear that for Engelhardt the body is morally important only insofar as it embodies the life of the person. Engelhardt stresses that it is in and through our bodies that we are in the world, have our relations with others, and realize our concrete purposes in life (3). Still, persons can objectify their bodies, measure them according to personal goals, replace them, and even sell them.

Because persons are at the core of morality and because persons are in the world through their bodies and have their bodies as their cardinal possessions, individuals cannot do whatever they please to the bodies of others.

Engelhardt states that one cannot respect other moral agents, while being willing to destroy their embodiment or their unique place in the world (4). Respect for persons, then, provides a minimal protection against unwanted physical violence to the bodies of human beings.

Engelhardt's arguments regarding the limits of State authority lead to his explicit views on the commercialization of the body. In contrast to thinkers like Ramsey and Kass for whom the special dignity of the body places it outside the realm of those things that may be bought and sold, Engelhardt cites the philosophers Hegel and Locke to develop his claim that the human body is the quintessential example of property. He then argues that we have a right to trade our bodies com-

mercially. In fact, he argues that, if anything, our right to trade other material objects is inferior to and less clear than our right to trade our bodies. He also would permit indentured servitude, as it exists, for example, when **one** receives support for education in exchange for a commitment to military service.

For Engelhardt, these rights are based on consent. He states that persons own themselves and own other persons insofar as they have agreed to be owned (4). He explicitly denies the authority of governments to forbid commercial trade in bodies and their parts. He states that the authority of governments is suspect, insofar **as they** “(r)estric the choice of free individuals without their consent” (e.g., attempts to forbid the sale of human organs) (4). Should the State try to prevent such transactions, he defends a fundamental moral right to participate in the black market (4). According to Engelhardt, individuals own their bodies and may commercialize them as they wish. There is no State authority for interfering in that commercialization, and there is a moral right, all else being equal, to defy any such efforts at State control. Engelhardt contends that it cannot be presumed that individuals have consented to such governmental control of their bodies by virtue of their participation in the State.

Although religious views may be thought to be the key dividing line between those who consider the body an essential and irremovable part of personhood and those who give it much **less** moral weight, this brief analysis of the views of four theorists shows that this is not the case. Rather, **it appears that the idea that the brain and the neocortex are the morally important stuff of personhood is held by those who do not oppose commercialization of the body.**

The Principle of Beneficence

The relevance of the principle of beneficence to the debate can be understood by considering this fundamental question: **would commercialization of human materials be more beneficial than a ban on such commercialization?** Even allowing for imperfections, one could argue that a market in human tissues and cells would be the most efficient system of determining production and allocation. A market would permit the quan-

tity produced to match the quantity demanded at an equilibrium price that reflects the value of the material to sellers and buyers. However, it is important to consider whether there are any beneficence-based reasons to object to a market in human tissues and cells (14).

Beneficence-Based Objections to Commercialization

There are two general types of objections to commercialization based on the principle of beneficence. The first focuses on basic assumptions about the importance of freedom and rationality; the second grants these assumptions, but argues that wider, indirect effects are preponderantly negative (14).

Arguments of the first type **deny** that individuals maximize their own well-being through market transactions. There are four objections of this type:

1. Critics of commercialization argue that the assumption that people are rational consumers is dubious. There is ample evidence of irrational human behavior in markets and elsewhere. While this may not seem important when the commodity being traded is a videocassette recorder or cake mix, irrational trade in human tissues, cells, and cell products is a more serious matter.
2. While the assumption that people are free and rational might be reasonable for most adults, there will be large classes of people, including children, the mentally ill, and the mentally disabled, for whom this assumption is clearly unjustified. These people might participate in either production or allocation markets. Given their inability to consent to the use of their body, including invasive procedures necessary to obtain commercially valuable materials, their participation as sellers seems particularly morally questionable. Decisions would need to be made about whether to ban such people as suppliers, make provisions for their limited participation, or endure the spectacle of unlimited use of such non-consenting suppliers.
3. In every human interaction, including all market interactions, there is the possibility of

abuse--fraud, misrepresentation, coercion, and the like. This is not peculiar to markets in human materials, but it may be that abuse in this realm is more morally repugnant than it would be with other goods,

4. There may be a discrepancy between what people desire and what they need; that is, between what even fully rational and free consumers might pursue in a market, and what those individuals need to promote their genuine well-being. Therefore, it is possible that a market might be consistent with human desires but inconsistent with the human good.

The second type of beneficence-based objections go on to ask about the wider effects of commercialization, particularly of the human body:

1. Commercialization of the body will lead to disrespect and devaluation of the human body in general. This argument will not be especially persuasive to those who believe that the biological body does not deserve such respect in the first place (e.g., Fletcher) or who argue that such regulations fall outside of the moral authority of the State (e.g., Engelhardt).
2. Commercialization will somehow threaten important ideals of equality, not through any explicit declaration in favor of inequality, but because in a society where wealth is unequally distributed, the costs of production and benefits of allocation are likely to be unequally distributed as well. Whether such inequities come to be seen as morally unacceptable will depend on a number of complex factors having to do with the prevailing ideals of the culture, the history of related decisions, and the nature of the good being allocated. When the poor, for example, are the suppliers of human biological materials and the wealthy are the beneficiaries (e.g., if production and allocation of transplantable kidneys were accomplished through markets), the resulting correlation between risks and poverty, benefits and wealth, would challenge a very important conception of equality in this country.
3. Moving from the concept of gift to a market in human tissues and cells carries with it such important losses to the common good that

they will, on the whole, outweigh the immediate benefits (12)18).

4. In the specific case of human biological materials donated for research to nonprofit institutions (e.g., university-based biomedical research), the shift from a gift to a market basis could have damaging consequences in the cost and availability of such materials, public perception of and generosity toward biomedical researchers, and increased suspicion of health providers.

Principles of Justice

Distinct questions of justice as fair and equal treatment arise when considering the acquisition, development, and allocation of human tissues and cells. To complicate matters further, there are several ideals or theories of justice, each of which commands a certain amount of respect and adherents. **Since our society appears to subscribe to several, sometimes incompatible ideals of justice, there will be no easy way to list the ethical implications of commercializing human biological from a “correct” theory of justice.** It is possible, however, to contrast two important, opposed views: the libertarian view and the egalitarian view (14).

The Libertarian View

Libertarian theorists emphasize the processes of exchange as based on free consent, they minimize the importance of whatever distribution results from a series of fair exchanges, and they hold that the State does not have the authority to interfere in most market transactions (4,15). On the other hand, more egalitarian theorists believe that there are constraints on permissible exchanges, and they also believe that there may be specific limitations on the institutions a just society may have (19) or on the distribution of at least some goods—especially those goods necessary to the fulfillment of basic human needs (2,24).

The libertarian view of justice and the commercialization of the body is intimately tied to the importance of the concepts of respect for **persons** and private property. This view places a fundamental emphasis on autonomy, understood as

the free choice of rational persons based on rights to privacy and noninterference by the government where parties involved freely consent. The idea of property has as its paradigm case one's ownership of one's own body (4). Given these premises, interfering with commercial trade in one's own biological materials would be perhaps the clearest and gravest affront to justice imaginable.

Given the libertarian view, selling oneself freely to another does not involve a violation of the principle of autonomy, so such transactions should fall within the protected privacy of free individuals. In addition, if one sells oneself at the right price and under the proper circumstances, one would expect to maximize the balance of benefits over harms. However, the point in principle is that free individuals should be able to dispose of themselves freely (4).

According to this view, if this results in the poor selling and the rich buying, so be it; interfering with the free choices of individuals is a violation of justice. The pattern of distribution is not relevant to justice; indeed, the very notion of "distributive" justice, of unjust patterns of distribution obtained from exchanges not in themselves unjust, seems incoherent in this theory.

The libertarian view of justice follows directly from the concept of the person as individual, autonomous, and free, and from the notion that respecting persons means most of all not interfering in whatever transactions to which rational individuals agree. **The libertarian theory of justice says in effect that commercial trade in body parts is the essence of justice, and that those who would interfere with it have an exceedingly heavy burden of proof on their shoulders. The more traditional maxims of distributive justice—to each according to need, worth, merit, or work—are replaced by "to each according to the agreements he has freely made" (4).**

The Egalitarian View

The egalitarian theory of justice contrasts with the libertarian view. Egalitarian theory is based on a powerful and clear view of respect for persons. This theory emphasizes concepts of natural or human rights. These human rights are prima

facie claims, to be respected even though not explicitly invoked.

These human rights are based on a concept of individual moral worth as inalienable and as absolute. According to this view, all humans are of equal and immeasurable moral worth. Egalitarians argue for the proposition that one person's well-being is as valuable as any other's and one person's freedom is as valuable as any other's. From this follows the claim of the prima facie equality of a person's right to well-being and freedom (24).

One egalitarian offers this definition of justice: "An action is just if, and only if, it is prescribed exclusively with regard to the rights of all whom it affects" (24). Egalitarians argue that some inequalities can be justified precisely on the grounds of justice; that is, that the very reasons for saying that human beings have equal moral worth and equal rights to well-being and freedom can also, under certain empirical circumstances, justify limited forms of inequality.

By showing that certain inequalities maybe justified within an egalitarian theory of justice, it is possible to identify and condemn unjustified inequalities. This is accomplished by examining practices to see if they deny or diminish the equal moral worth of individuals or groups of persons, or if they otherwise enhance or impede satisfying the demands of justice.

To the extent that commercial trade in human tissues and cells makes people feel that they are inferior to others, this practice would be unjust. Pricing the body and its parts, which would probably lead to the poor selling more than the rich, could also have this effect.

The arguments come full circle. **If one believes that the body is merely incidental to what is morally significant about persons—their rationality, capacity to choose, and freedom—then those aspects of commercialization likely to lead to differential participation in the body-market will not seem offensive, precisely because the body is not particularly connected to a person's moral worth. If, on the other hand, one believes that respect for persons includes respect for the human body, then those empirical properties of the market do pose a threat to justice (14).**

THE MORAL STATUS OF BODIES AND THEIR PARTS

Philosophical and religious traditions offer a number of alternatives for thinking about the body and its parts in relationship to the human person. These traditions provide a basis on which to gather insights about the uses and transfer of human tissues and cells.

Philosophical Perspectives

The nature of the relationship between human identity, personhood, and the mind to the body is a problem that has classical roots in Western philosophy. Although the early Greek Atomists held that the human mind was made of actual material, the idea that the mind is nonspatial has dominated philosophical thinking since the time of Plato. The view that the human mind and body exist as a duality was developed in some detail by Rene Descartes in the 17th century. Cartesian dualism holds that the essence of a person is an immaterial, nonspatial substance or mind that can, in theory, exist apart from the body. During the lifetime of an individual, mind and body are one but this is incidental and not necessary to the existence of mind.

From a Cartesian point of view, human tissues and cells are valuable only to the extent that they provide a temporary substrate or basis for the existence of the human person. The relationship between the human person and a particular tissue or cell is not essential, particularly if these materials are replenishable. This is not to say that Cartesian would be reluctant to attach a monetary value to such materials. In fact, they may be quite inclined to make tissues and cells the object of commerce because there is no great significance attached to such materials in terms of the human mind, personality, or identity.

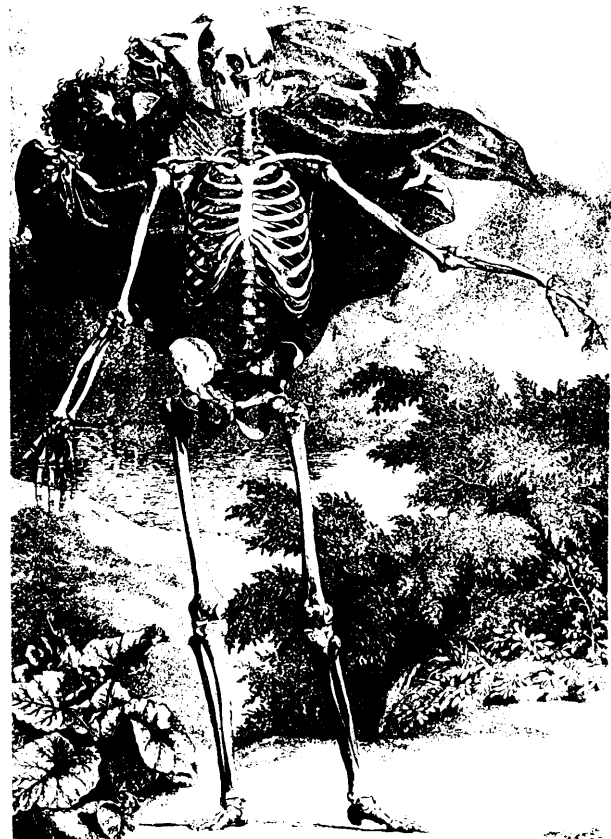
There are at least two primary alternatives to Cartesian dualism. One alternative view is that the human mind and some specific biological material (e.g., the human brain) are intimately connected so that it is impossible for the mind to exist apart from the presence of brain tissues and cells such as neurons. In this case, one might value certain kinds of human tissues and cells above

others. The donation of brain tissue might be viewed as more central to the essence of a person than the donation of skin tissue.

A second alternative to Cartesian dualism is that mind or the essence of the human person is intimately connected to all of the biological material that comprises the human body. In this case, the essence of the person or identity is tied up in each and every cell and tissue, so no one type of human tissue would be considered more valuable than any other. In fact, the genetic identity of an individual person can be discerned from any one somatic cell.

It is not clear that either of these alternatives to Cartesian dualism necessarily precludes the use

Figure 15.—The Human Skeleton v. the Human Person



SOURCE: *Albinus on Anatomy*, by Beverly Hale and Terence Coyle

of human tissues and cells in commerce. The materialist may in one case attach a higher price to certain kinds of cells or he might hold that each and every tissue is so valuable that all human biological material should be expensive. In addition, **whether one is a Cartesian or not, it may be possible to object to the buying and selling of human tissues and cells based on social justice or other considerations that are separate from the question of how the essence of a human person is related to the body.**

Selected Religious Perspectives

There are three reasons to examine religious perspectives when developing public policies in a pluralistic society. One reason is historical: many existing laws regarding bodies and their parts have been influenced by religious sources. To understand these laws, it is important to identify the beliefs and values that support them. Second, religious traditions shape the ethical values of many people. These traditions influence whether some uses of bodily parts or materials are viewed as ethically acceptable or unacceptable. A third, closely related reason is that religion and religious organizations are an important facet of our society and they have to be considered when policy-makers try to determine which policies are politically feasible. Extreme opposition from religious organizations sometimes may render a policy infeasible from a political standpoint (1).

Because of variations among and within Judaism, Catholicism, and Protestantism, it is difficult to speak of a "Judeo-Christian tradition" unless that is taken to mean a common source (the Hebrew Bible/Old Testament) and some common, though very general, themes (1). These themes are based on the relationship between God and human beings.

The Old Testament states that God created the world, including human beings, as good. Human beings themselves were created "in the image of God" (Genesis 1:26f; cf. 5:1 and 9:6). This is the basis of the theological doctrine of "imago dei" or the image of God. Although imago dei has been variously interpreted as reason, free will, or spiritual capacities, some theologians have objected to the concentration on intellectual and spiritual aspects

of humanity to the neglect of the external body. Some have even argued that the image of God is the body, while others have argued that it is a combination of the spiritual and the physical in a psychophysical unity. Jewish and Christian thought and practice as a whole views the person as an animated body. At times, however, Judaism and Christianity have also appropriated Hellenistic convictions about the separation of soul and body; sometimes their beliefs and practices represent a combination of themes (25).

Among the numerous ethical implications of different interpretations of the image of God, some are especially important for this study. The Genesis passage connects creation in the image of God with God's authorization of human "dominion" over the rest of creation. Humans are in, but are distinguished from, the rest of nature. If, as in the royal ideology of the ancient Near East, humans are God's representatives in parts of his kingdom, their rule should be like God's and should never be exploitative. Their dominion is not to be viewed as domination but as stewardship or trusteeship. **As stewards and trustees, human beings do not have unlimited power. God has set limits on what human beings may do with and to their own bodies and those of others (1).** Genesis 9:6, for example, connects the prohibition of taking human life with creation in God's image.

Arguments against suicide in Judaism and Christianity often draw on analogies between relationships between God and human life, on the one hand, and ordinary relationships, on the other. Many of these analogies involve property relationships (e.g., life is a gift or loan from God) or personal or role relationships (e.g., human beings are God's children, servants, or sentinels). While Jewish and Christian traditions rule out suicide and some uses of the body such as prostitution, they do not clearly prohibit slavery, even though its convictions, particularly about the creation of all human beings in God's image, could be invoked in opposition to slavery (1).

Finally, respect for the cadaver is significantly connected to the human beings' creation in God's image: Jews and Christians respect the body of the dead as symbolic of the human person and

his dignity (8). This respect recognizes and supports (within limits) the aversion to tampering with the body, whether living or dead.

The language of the image of God has often focused on what is distinctive about human beings, particularly their use of reason, exercise of will, and making decisions. Respect for persons is one way to state the implications of the theological doctrine of the *imago dei*, but it entails respect for embodied human beings, not simply their wills, and it is not unlimited self-determination or autonomy because it is severely limited by God's creation and will. In practice, it is often very difficult to determine what actions are required by the principle of respect for persons, as an expression of the *imago dei* (1). This point is evident in the following analysis of specific Jewish, Catholic, and Protestant beliefs and practices regarding the body, its parts, and materials.

Judaism

In Judaism, as well as in Catholicism and Protestantism, there is little, if any, direct discussion of the issues arising from the modern use of human tissues and cells. Hence it is necessary to ferret out concepts and principles in the myriad rules that Jewish tradition has developed regarding the living human body and the cadaver. Several relevant concepts and principles can be discerned in the laws of burial. Also relevant is the interpretation of the rules of the "halakah" (the body of Jewish law supplementing Scripture) through analogical arguments about cases.

According to Jewish law, there are three major prohibitions regarding the cadaver: it is impermissible to mutilate the cadaver (and thus, according to many, to cremate it), to use or derive any benefit from the cadaver, and to delay the interment of the cadaver or any of its parts (17,20). These prohibitions against desecration derive from God's creation of human beings in his own image (21). How are these prohibitions interpreted and applied? In particular, are they absolute? Any prohibition in Jewish law, except for murder, sexual immorality, and idolatry, may be overridden in order to save human life. Saving human life is a paramount imperative—"Thou shalt not stand

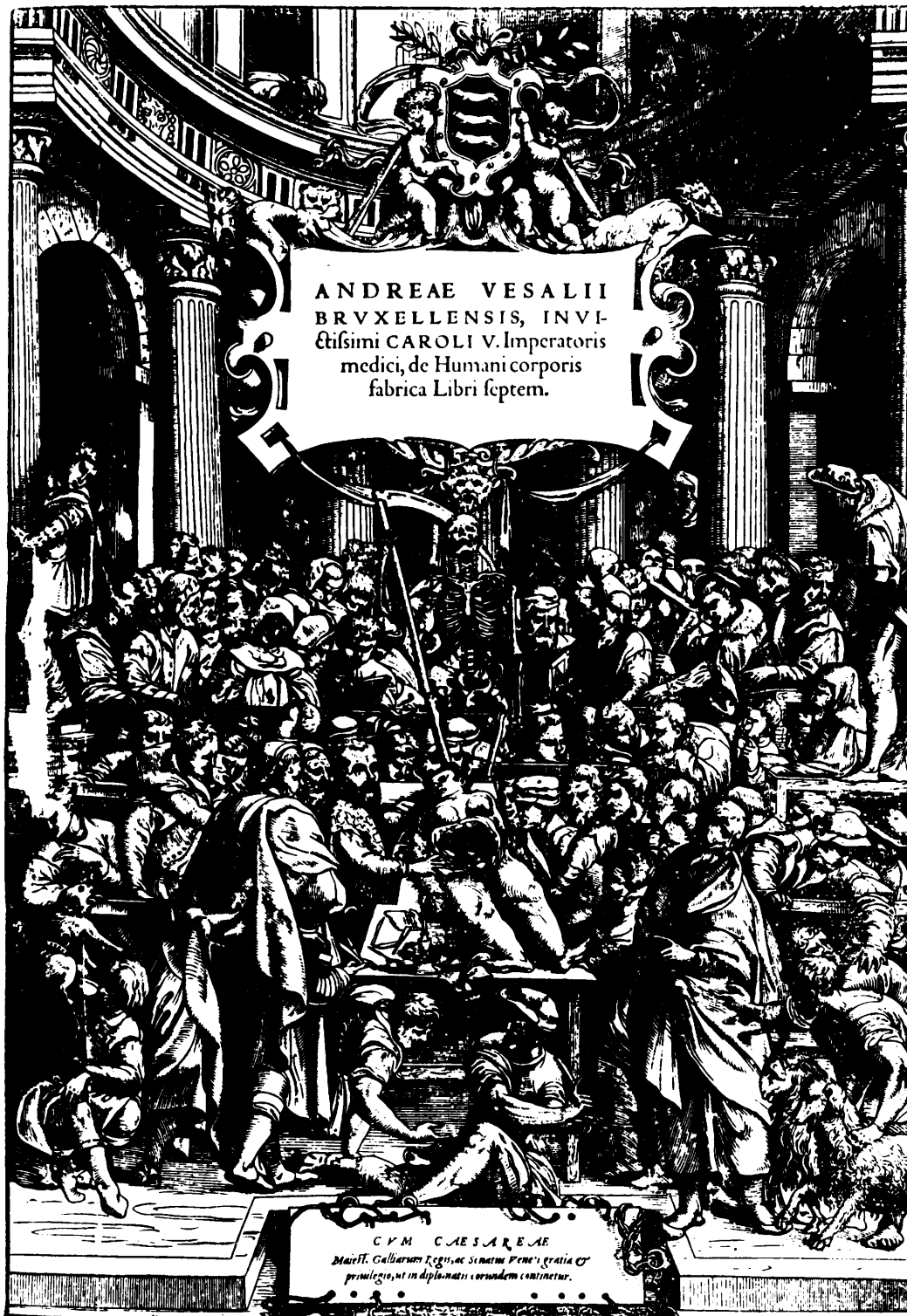
idly by the blood of thy neighbor" (Leviticus 19:16)—and it justifies some actions that would appear to be prohibited regarding the cadaver.

Under Jewish law, autopsies are generally opposed even when performed to establish the cause of death or to increase medical knowledge in general. An autopsy is permitted, however, to answer a specific question that would contribute to the immediate improved care of patients (21). When a patient dies, for example, while suffering from cancer and receiving an experimental treatment, it may be important to determine whether the drug was in part responsible for the death. The emphasis falls on the immediacy of the benefit to be gained. Within the Jewish tradition, the cadaver merits the same dignity, respect, and consideration that would be accorded a living patient undergoing an operation (21). Organs should not be removed from the body, except where absolutely necessary for the information sought, and any removed organs must be returned to the body for burial except for small sections necessary for pathology examinations. Any part of a dead body must be buried because any person who comes into contact with it is ritually defiled.

The priority of saving human life allows for considerable flexibility in the application of Jewish law to technological developments such as organ transplantation. The tradition emphasizes that the source of the organs must be dead according to criteria of absence of respiration and absence of cardiovascular pulsation—obviously these criteria pose problems for organ transplantation—and it stresses the decedent's act of donation (though familial donations are not precluded). Some commentators view the prohibitions against the use of a dead body as not applying to a removed organ which "lives" again when it is successfully transplanted into a recipient (20).

Within the Jewish tradition there would appear to be opposition to tissue banks on the grounds that a recipient is not immediately available, but cornea banks have been viewed as acceptable on the grounds that it is highly probable that the cornea will be used immediately because so many potential recipients are at hand. It would not be easy, however, to extend this argument to cover research on human tissues, cells, and developed

Figure 16.—Dissection of the Human Corpse



SOURCE: *De Humani Corporis Fabrica*, 1555.

cell lines and gene probes because it is difficult to predict benefits, which, in any event, would only accrue to patients in the future.

It is permissible for living persons to donate a kidney to save someone's life or to donate blood to a blood bank. Even though there are prohibitions against intentionally wounding oneself or forfeiting one's life to save another, most interpretations of Jewish law hold that one is allowed or even obligated to place oneself into a possibly dangerous situation to save his fellow man from certain death (21). This is a risk-benefit analysis, in which the probability of saving the recipient life is substantially greater than the risk to the donor's life or health. Blood donation is viewed similarly, even though the donor may have no specific recipient in mind and the blood maybe stored for a time. Here again the needs of potential recipients are so great that there is a reasonable certainty that the blood will be used to save life, while the risks to the donor are minimal.

In general, the requirements for exemption from the prohibitions regarding the cadaver or the living person focus on the probability of immediate rescue of human life. Both the prohibitions and the exceptions are based on the dignity of human beings as created in the image of God. Extensions of the exceptions to banking corneas or blood suggest that some indirect and delayed possibilities may be available. However, as indicated in the preceding discussion, it would be difficult—though not impossible—to extend them so far as to include research and commercialization on human tissues *and cells or cell* lines and gene probes. Such an extension would depend on the probability of significantly benefiting human beings through research.

Roman Catholicism

In general, the Catholic Church holds that notable or major excised parts of the body should be buried. Transplantation of organs and tissues from cadavers generally has been accepted. Donation of organs and tissues has been viewed as praiseworthy, though not obligatory, and the benefit of donation need not be as direct or as immediate as Jewish law suggests.

From a Catholic perspective, since human beings are merely the administrators of their lives, bodily members, and functions, their power to dispose of these things is limited (11). In this context, the principle of totality limits what people may do to their bodies and parts. The principle of totality indicates that a diseased part of the body can be removed for the benefit of the totality or whole body (13). This doctrine was subsequently applied to the amputation of a healthy human limb. A modern formulation of this doctrine appears in Pope Pius XI's *Casti Connubii* (1930):

Furthermore, Christian doctrine establishes, and the light of human reason makes it most clear, that private individuals have no other power over the members of their bodies than that which pertains to their natural ends; and they are not free to destroy or mutilate their members, or in any other way render themselves unfit for their natural functions, except when no other provision can be made for the good of the whole body.

Because this formulation of the principle of totality appears to warrant mutilation only for the physical benefit of the person's body as a whole, it also appears to rule out removal of an organ to benefit another person. However, many theologians have come to believe that mutilation is ethically appropriate when it is for the good of the whole person, not simply of the body.

Some critics contend that appeals to psychological or spiritual benefits to the donor to justify organ donation undermines the appropriate moral-religious constraints on the human use of bodies and their parts (18). One Jesuit moral theologian rejects both of these charges: Richard McCormick contends, first, that a donor's benefit (psychological or spiritual wholeness) is not necessarily identical with the donor's motivation (charity), and second, that these psychological and spiritual attributes of the donor only establish the moral context of organ donation, not the justifiability of particular transplants. The justifiability of particular transplants depends on the proportionality of benefits and burdens to the recipient and to the donor (13).

In a statement that invoked an analogy with the sale of blood, Pope Pius XII refused to rule out all compensation for organs and tissues:

Moreover, must one, as is often done, refuse on principle all compensation? This question remains unanswered. It cannot be doubted that grave abuses could occur if payment is demanded. But it would be going too far to declare immoral every acceptance or every demand of payment. The case is similar to blood transfusions. It is commendable for the donor to refuse recompense: it is not necessarily a fault to accept it (16).

Catholicism, like Judaism and Protestantism, emphasizes the dignity that belongs to human beings and to their physical remains after death. This dignity is derived from their creation in the image of God. Representing the image of God, human beings are stewards or administrators of their lives but their actions are limited by God's law. Some of these limits have been expanded in recent years in response to technological developments. In general, charitable acts of donation are praised, whether they are directed toward specific individuals or tissue banks (e.g., a blood bank), but they are subject to evaluation from the standpoint of proportional or relative good (e.g., kidney donation).

Protestantism

Although there are variations within both Judaism and Roman Catholicism, they are not as extensive as in Protestantism, which encompasses so many different religious groups. After examining some Jewish, Catholic, and Protestant positions in the late 1960s, Joseph Fletcher lamented, "as we often find in these matters of specific or concrete moral questions, there is no Protestant discussion on surgery, autopsy, and other mutilative procedures—not even on the ethics of transplant donation (6)." Modern Protestants tend to emphasize the principle of respect for persons even more than Catholicism, with its emphasis on the ends of nature, and Judaism, with its strong emphasis on the tradition of interpretation of the law. However, Protestants generally have recognized limits to what people may do to their bodies even when they have disagreed about what those limits are. The philosopher Immanuel Kant offered one extreme formulation:

It is a form of partial self-murder to deprive oneself of an integral part, for example, to give away or sell a tooth to be transplanted into another per-

son's mouth or to be castrated in order to make a more comfortable living as a singer and so forth. But to have a dead or diseased organ amputated when it endangers one's life or to have something cut off which is a part, but not an organ, of the body (e.g., one's hair) cannot be considered a wrong against one's own person—although a woman who cuts her hair in order to sell it is not altogether free from guilt (9).

Protestants generally do not believe that there are any special limits on what may be done to cadavers. Protestants, like Jews and Catholics, recognize limits expressed in the language of respect and dignity. One Protestant commentator argues that rituals are needed even after a cadaver's organs have been donated as "(a testimony to the privileged place of the body in acts of love (12).)" For the most part, Protestants tend to conceive most of the major ethical problems in this area in relation to consent, which they see as a requirement of the principle of respect for persons.

In the treatment of living persons, Protestants tend to emphasize the virtues of love or charitable consent. Many theologians would grant greater latitude to competent people making decisions about their own organs to benefit others than to surrogate decisionmakers donating organs (e.g., kidneys) from persons such as children or institutionalized, mentally retarded, or insane people. However, several Protestants have argued that charitable consent still allows too much latitude in permissible donations. At least one Protestant theologian appeals to a strand of Biblical tradition, also strongly affirmed by Judaism, that emphasizes the integrity of the flesh and opposes Cartesian mentalism and dualism, which he fears could lead, for example, to donation of a heart by a living person (18). Although the independent value of bodily integrity clearly rules out a heart donation from a living person, its other limits are not very clear. As in Judaism and Catholicism, one of the main requirements for organ donation would be proportionality as expressed in a risk-benefit analysis.

In sketching out the implications of these traditions, it is important to recall the distinction between ethically acceptable and ethically preferable policies and practices. For example, some modes of transfer and some uses of human

biological materials may be viewed as ethically preferable to others without those others being viewed as ethically unacceptable—for example, these traditions put a high premium on explicit gifts and donations without necessarily excluding tacit gifts, sales, abandonment, and appropriation in all cases (1).

The Impacts of These Religious Traditions

At least two major variables present in these religious traditions may affect the use of human biological materials: the **type or kind of materials** and the **mode of transfer**. The significance of different modes of transfer (or acquisition, if viewed from the standpoint of the user) and different materials will hinge on various moral principles, such as:

- respect for persons;
- beneficence, or benefiting others; and
- justice, or treating others fairly and distributing benefits and burdens equitable.

In addition, several other moral considerations, such as fidelity to promises and contracts, truth-

fulness, privacy, and confidentiality, might be derived from these general principles. From these principles and others, it is possible to indicate some judgments about the ethical acceptability and preferability of various policies.

According to the religious traditions analyzed, any of the following modes of transfer of human biological materials—gift (explicit or presumed), sale, abandonment, or appropriation—is ethically acceptable under some circumstances, but priority is given to explicit gifts In any event, the first three modes of transfer all depend on voluntary, knowledgeable consent in significant, but different, ways. Thus, they all recognize some kind of property right by the original possessor of the biological materials. A recent prediction for future legislation is not surprising:

Legislation in the future seems likely to follow an uneven course in which systems of voluntary consent will be diluted with mixtures of controlled commerce, contracting out, and limited compulsory acquisition (23).

SUMMARY AND CONCLUSIONS

Ethical choices about how to handle the transfers of human tissues and cells from patients and research subjects to physicians and researchers are important decisions in two respects. First, these choices will reflect the way in which the human body is regarded. If certain human parts are sacred or dignified, then social traditions suggest that they may be given, but not sold, and ownership of them is only of a special, limited kind.

Second, like the choice of how to obtain blood for transfusions, the system that is chosen for obtaining human tissues and cells will characterize relationships among the individuals of our society. These relationships are mediated through the profit and nonprofit institutions that connect human beings in their mutual quest to relieve suffering and to pursue the common good separately and together.

The dispute between those who believe that commercialization of the human body is justi-

fied and those who think it is not seems mostly to be an argument between those who accept a dualistic view of the separation between body (material, physiological being) and mind (immaterial, rational being), and those who do not. The former group includes theological and secular ethicists such as Joseph Fletcher. The latter include such theologians and secular philosophers as Paul Ramsey and Leon Kass. Others, such as H. Tristram Engelhardt, Jr., argue that commercialization must be tolerated as part of recognizing the limits of governmental authority to interfere in private choices, even on behalf of important goals or special beliefs certain groups may have about the sacred character of body parts that individuals may freely wish to sell.

Religious traditions offer insights about the value and significance of the human body. According to selected religious traditions, the human body is created in the image of God and therefore there

are limits on what human beings can do with their own bodies and those of others. Although several methods of transferring human tissues and

cells are acceptable within the Jewish, Catholic, and Protestant traditions, priority is given to explicit gifts.

CHAPTER 8 REFERENCES

1. Childress, J. F., "The Implications of Major Western Religious Traditions for Policies Regarding Human Biological Materials," contract paper prepared for the Office of Technology Assessment, U.S. Congress, May 1986.
2. Daniels, N., *Just Health Care* (New York: Cambridge University Press, 1985).
3. Engelhardt, H. T., *Mind-Body: A Categorical Relation* (Hague: Martinus Nijhoff, 1973).
4. Engelhardt, H. T., *The Foundations of Bioethics* (New York: Oxford University Press, 1986).
5. Fletcher, J., *Morals and Medicine* (Boston: Beacon Press, 1960).
6. Fletcher, J., "Our Shameful Waste of Human Tissue: An Ethical Problem for the Living and the Dead," *Updating Life and Death: Essays in Ethics and Medicine*, D.R. Cutler (cd) (Boston: Beacon Press, 1969).
7. Fletcher, J., "Four Indicators of Humanhood—The Enquiry Matures," *Hastings Center Report* 14(6):4-7, December 1974.
8. Hovde, C. A., "Cadavers: General Ethical Concerns" *Encyclopedia of Bioethics*, W.T. Reich (cd.) (New York: Macmillan/Free Press, 1978).
9. Kant, I., *The Doctrine of Virtue, Part II of the Metaphysics of Morals*, trans. M.J. Gregor (Philadelphia: University of Pennsylvania Press, 1971).
10. Kass, L. R., *Toward a More Natural Science* (New York: Free Press, 1985).
11. Kelly, G., *Medico-Moral Problems* (St. Louis, MO: The Catholic Hospital Association, 1958).
12. May, W. F., "Religious Justifications for Donating Body Parts," *Hastings Center Report* 15:38-42, February 1985.
13. McCormick, R. A., "Organ Transplantation: Ethical Principles," *Encyclopedia of Bioethics*, W.T. Reich (cd.) (New York: Macmillan/Free Press, 1978).
14. Murray, T. H., "On the Ethics of Commercializing the Human Body," contract paper prepared for the Office of Technology Assessment, U.S. Congress, Washington, DC, April 1986.
15. Nozick, R., *Anarchy, State, and Utopia* (New York: Basic Books, 1974).
16. *Papal Teachings: The Human Body* (Boston: St. Paul Editions, 1960)
17. Rabinovitch, N. L., "What Is the Halakah for Organ Transplants?" *Jewish Bioethics*, F. Rosner and J.D. Bleich (eds.) (New York: Sanhedrin Press, 1979).
18. Ramsey, P., *The Patient as Person* (New Haven, CT: Yale University Press, 1970).
19. Rawls, J., *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971).
20. Rosner, F., "Organ Transplantation in Jewish Law," *Jewish Bioethics*, F. Rosner and J. D. Bleich (eds.) (New York: Sanhedrin press, 1979).
21. Rosner, F., and Tendler, Rabbi, M.D., *Practical Medical Halacha*, 2d ed. (Jerusalem/New York: Feldheim Publishers, 1980).
22. Schneider, A., and Flaherty, M. P., *The Challenge of a Miracle: Selling the Gift* (Pittsburgh, PA: Pittsburgh Press, Nov. 3-10, 1985).
23. Scott, R., *The Body as Property* (New York: The Viking Press, 1981).
24. Vlastos, G., "Justice and Equality," *Social Justice*, Richard B. Brandt (cd.) (Englewood Cliffs, NJ: Prentice-Hall, 1962).
25. Wartofsky, M. W., "On Doing It For Money," *Biomedical Ethics*, T. Mappes and J. Zembaty (eds.) (New York: McGraw-Hill, 1981).
26. Zaner, R., "Embodiment," *Encyclopedia of Bioethics*, W.T. Reich (cd.) (New York: Macmillan/Free Press, 1978).