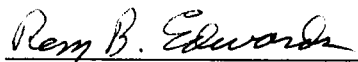


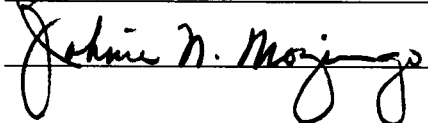
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I am submitting herewith a dissertation written by Michael J. Booker entitled "Justice and the Macroallocation of Human Donor Organs." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Philosophy.

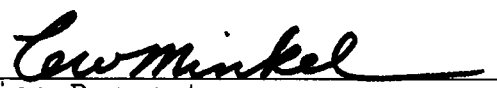

Glenn C. Graber, Major Professor

We have read this dissertation
and recommend its acceptance:





Accepted for the Council:


Vice Provost
and Dean of the Graduate School

JUSTICE AND THE MACROALLOCATION
OF HUMAN DONOR ORGANS

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Michael J. Booker
August 1990

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ABSTRACT

This dissertation seeks to deal with an unusual problem in the allocation of scarce resources which has arisen in recent years in medical care. Despite astonishing advances in the area of organ transplantation, we continue to face a shortage of usable human organs. Given this shortage, we must deal with the problem of justly distributing available organs.

In order to deal with this problem, the history of the distribution of human body parts is examined with particular attention to the allocation of human blood. The distributional policies advocated by the United Network for Organ Sharing are explained in order to show how whole cadaver organs are currently being allocated.

Consideration is also given to the theoretical issues associated with distributive justice. Eight possible systems of just allocation of health care are considered, and a theory of modified altruistic reciprocity is finally advocated. In allocating human donor organs by means of altruistic reciprocity, only those who are willing to be organ donors would be considered to be entitled to receive organ transplants.

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I. INTRODUCTION

In 1979 an anti-parasitic agent was discovered to have the ability to suppress the immune system's response to alien proteins. This property made the drug a poor anti-parasitic agent, but an ideal immunosuppressant. This new immunosuppressant, combined with advances in surgical technique and organ storage, has meant a new era in modern medicine. Since Cyclosporin A became generally available to medical professionals in 1984, we have seen more organ transplants than in the entire period preceding its availability.

Consider the following: In 1983, 172 heart transplants were performed, with 40 people on waiting lists at the end of the year (Friedrich 1984, p. 70). In 1987, only four years later, 1512 hearts were transplanted in the U.S., with 500 people awaiting transplants (Clark 1988, p. 63). One might notice that the number of transplants has gone up 780%, but the growth of the waiting list was even more spectacular at 1150%. The growth in kidney transplants was not nearly as spectacular (6116 with 7,000 waiting in 1983 vs. 8967 with 13,000 waiting in 1987), but the rate of growth was almost identical for liver transplants (163 with 175 waiting in 1983 vs. 1182 with 500 waiting in 1987).

While one-year survival rates have improved during recent years, the most radical revolution has been one of attitude. In the span of a few years we have almost forgotten that organ transplants were once considered to be a measure of last resort. While not yet commonplace, organ transplants, particularly of the heart and kidney, are commonly accepted medical procedures. The generalized shortage of suitable donor organs is one of the few limits on the phenomenal growth of this group of procedures.

We find here another example of how medical progress has given us a priceless gift, but not one without cost. A heart transplant costs over \$100,000, the efforts of a highly skilled surgeon and other specially trained medical professionals, the use of hospital resources, and a healthy human heart. It is this last resource with which this dissertation will be concerned. It will receive special consideration because it is an item quite unlike money or skilled human labor or other, more mundane, physical resources. Most organs available for transplantation come from the bodies of people who have met tragic and unexpected deaths. Only days or hours earlier, they were integral parts of one human being; now they are being considered for use in extending the life span of another.

In order to benefit from these recent advances in medical care, we must come to grips with the many difficulties which they generate. If we ignore the ethical

consequences of new technologies and fail to concern ourselves with their just utilization, we stand the very real risk of worsening the human condition rather than bettering it.

My objective here is to consider the problem of justice and the distribution of organs for transplantation. Many areas of concern will emerge in this study as I attempt to show what a just distributional system would be. As will be shown, the question of who deserves what is a difficult one in general, and becomes even more complicated in the allocation of medical resources. In Chapter II, I will consider the general problem of distributive justice, and in Chapter III the problem of health-care distribution will be discussed.

The decision to deal specifically with the distribution of donor organs reflects an assumption that the normal criteria for the allocation of resources may not apply to the allocation of human organs. In Chapter IV I will show why the human body cannot be understood simply as a useful resource; why it must be treated as an extension of an autonomous agent instead of merely as property.

In order to shed light on the question of the allocation of human donor organs, in Chapter V I will analyze the ways in which human blood and blood products have been treated in the past. The history of transfusion technology is considerably older than that of

transplantation technology, and though there are many obvious differences between the two, the parallels may prove enlightening.¹ This is not to assert that we can assume our past treatment of human blood to be an ethically correct model for the treatment of human donor organs, but rather to say that issues which have already been considered in dealing with blood and blood products may confront us in the near future as organ transplants become increasingly common.

In Chapter VI the reality of organ transplantation and its value will be explored. I will show the drastic recent rise in organ transplants and the benefits which have accrued from them. In Chapter VII I will explain the results of Public Law 98-507 in 1984, a law designed "[t]o provide for the establishment of the Task Force on Organ Transplantation and the Organ Procurement and Transplantation Network, to authorize financial assistance for organ procurement organizations, and for other purposes." This act led to the empowerment of the United Network for Organ Sharing (UNOS) to set the standards for organ allocation in this country. The content of UNOS's distributional policies will be examined in depth.

Having laid this factual and conceptual groundwork, I will suggest that a system of just distribution of human

1. This approach was suggested by G.E.W. Wolstenholme in Ethics in Medical Progress (Wolstenholme 1966).

donor organs can be founded on an understanding of justice as altruistic reciprocity. By uniting the question of who shall receive organs with the question of who is willing to donate organs, I will tie together the common concerns of a community which desires to benefit from important advancements in medical care. The desire for justice is not simply a concern that the world be made into a nicer place; it is an attempt to see to it that, insofar as possible, people receive what they deserve. This means that we must find terms in which it is meaningful to speak of a person being due the organs of a person who has recently died.

II. DISTRIBUTIVE JUSTICE

A) INTRODUCTION

The expression "distributive justice" refers to a justified distribution of benefits and burdens in a society. (Beauchamp and Childress 1983, p. 184)

The scope of our concept [of justice] will include the distribution of goods and evils generally... (Rescher 1966, p. 6)

...[T]he essence of justice is respect for the justified claims of others. (Bodenheimer 1967, p. 8)

Questions of distributive justice arise when competing claims to something exceed the supply available. (Edwards and Graber 1988, p. 699)

The problem of justice is one of the oldest in philosophy. The question of the just life is at the heart of Plato's Republic (331a), and disputes about who should be said to be deserving of what have become classic in the literature of philosophy. By justice I understand here the area of human concern which W.D. Ross identified in The Right and the Good (Ross 1930, p. 21). Ross held that among our basic ethical duties is the prima facie duty to see to it that each person receives what he or she deserves. This duty is one which may well come into conflict with other moral duties, and it must be weighed against other duties in those cases. I do not intend to debate here competing claims about the concept of justice, such as Nietzsche's assertion that justice is a word which the weak use in an attempt to extract resources from the

strong, or Rawls' claim that justice overarches and overrides other ethical concerns (Rawls 1971, p. 396).¹ My task here is to investigate the problem of desert, that is, the question of who deserves what.

The problem of justice has been dealt with in many ways by many authors. Aristotle defined the realm of concern of justice as being "complete virtue in relation to our neighbor" (Nicomachean Ethics 1129b).² Similarly, Sidgwick observed that "the term 'justice' denotes a quality which it is ultimately desirable to realize in the conduct and social relations of men..." (Sidgwick 1922, p. 264). Justice is, first of all, a social moral concern. A single survivor on a desert island need not concern himself or herself with the dictates of justice, but, given two persons, there is room for that area of ethics known as justice.

Returning to the question of desert, we may note that the ancients offered numerous candidates for the source of

1. Nietzsche's claim assumes what it attempts to deny, that is, that there is a legitimate basis for the concept of desert. Implicit is the assertion that the strong truly from them (Nietzsche 1924, vol. 6, p. 342). In the case of Rawls, what I am objecting to here is the assumption that we may never deny people what they are justly entitled to. I am allowing, at least hypothetically, that other goods may supersede the good of justice.

2. The word which Aristotle uses for justice, dikaiosyne, has a broader meaning than that which we normally associate with justice, but that linguistic difference does not bear on the point at hand.

Returning to the question of desert, we may note that the ancients offered numerous candidates for the source of a desert-claim (a claim that one is justly entitled to some thing). Plato cited the poet Simonides who said that justice is "to give what is owed" (The Republic 332a). Plato himself came to the conclusion that "the having and the doing of what is one's own would be admitted to be justice" (The Republic, 433c) The just man does his job and, literally, minds his own business. What he is entitled to is commensurate to his performance of his duties, though in Plato's ideal state even the most productive citizens would not enjoy great prosperity.

Aristotle's just man observed two kinds of justice. One justice, the universal, was due all men regardless of individual merit. Particular justice, on the other hand, consisted of giving to each man as his merits dictated. Universal justice was likened by Aristotle to "the lawful," though he made it clear that his reference was not to the formal laws of any given state, but to transcendent moral law. He linked particular justice to the concept of fairness. For example, it is not fair to give a military decoration to a soldier who was timid in the face of the enemy, whereas it is fair to give an award to a man who fought boldly against superior forces. As a matter of universal justice, however, one would be unjust in stealing from the timid man simply because of his moral inferiority

(Nicomachean Ethics, Book V). What Aristotle meant by the word translated as "justice" is thus broader than the sense intended here, though it may serve as a useful basis for more exacting analysis.

The question of just distribution must be distinguished conceptually from the ethics of beneficence, which I will refer to as charity. While a person may need charity (by virtue of hunger, thirst, illness, or some other problem), a person cannot be said to deserve charity. Charity is a good done to another person to which that person does not have any specific claim. While we may (as per Ross) have a prima facie duty to be beneficent, any specific instance of charity is a matter of choice, even if a generalized duty to be beneficent is not. If one can be said to have a duty to improve one's society, one may fulfill this duty by service in the Red Cross or in Habitat for Humanity. Neither organization, though, has any specific claim on the individual even if this duty of charity is freely acknowledged. The distinction between justice and charity will become important later in this chapter.

B) DIVISIONS OF JUSTICE

1) Distributive, Retributive and Contributive Justice

There are many distinctions which we may make in attempting to understand justice. The first, and one

already implied, is the distinction between distributive and retributive justice, a distinction made of the particular justices in Aristotle. If justice consists of "getting one's due," then this may be taken in positive and negative ways. As a negative concept, retributive or punitive justice deals with the distribution of (artificial) punishments in a society. Theories of retributive justice are commonly merit-based, which is to say that they consider individual acts which make an individual worthy of punishment. Though this may seem obvious, it is not the only way in which punishments might be allocated. One might, for example, allow for a person to be punished for defects of character (even if the person has not acted on that character defect), or for the betterment of society (at the expense of individual suffering). It might also be maintained that artificial punishments ought never be employed, in other words, that there can never be a reasonable case of punitive action.

While retributive justice deals with a deliberate division of evils, distributive justice deals with the deliberate division of goods. The concept of a "good" in this sense is very broad, and might include things such as food, automobiles, fame, fine clothing, respect, meaningful labor, and special living quarters. John Rawls holds that there are "social primary goods" which include "rights and liberties, powers and opportunities, income and wealth"

(Rawls 1971, p. 62). These are called social primary goods because they can be awarded or allotted by the society. There are also those good things which are not subject to human division, such as love, artistic excellence, and, to a degree, health, and so this concept does not include every possible desirable thing. It might be equated with the broad selection of goods and services that economists deal with, though there are some intangibles (such as fame) which can be allocated, but which are not normally available as commodities.

Between the deliberate division of goods and the deliberate division of evils we find an area which we may call the deliberate division of burdens. An eight-hour work day is not precisely a punishment, nor is it precisely a benefit (though there are circumstances where either might seem to be the case). Labor, in the broad sense, is necessary for the production of many goods and for the existence of all services. The just division of labor is normally subsumed under the general problem of distributive justice. However, some theories of justice speak at length concerning the just division of goods without any regard for their production. This is more than an oversight; it is a critical deficiency in a theory of distributive justice. While the production of goods and services may not be a problem in immediate decisions (such as the allocation of parachutes in a plummeting plane), larger

theories must take into consideration the value of production which gives rise to the value of consumption.

This study will focus on the problem of distributive justice, though concern for punitive issues may arise from time to time, and concerns for contributive justice (the distribution of social burdens) will certainly be significant.

2) Procedural and End-State Justice

Another division of justice theories is the distinction between procedural and end-state accounts of justice. Is justice embodied in just transactions and interactions, no matter what their result? Or are there certain results which we should expect of justice, at the expense of procedural concerns? Consider the criminal justice system in this country. We may well protest when a "clearly guilty" party escapes punishment due to a "legal technicality." Is justice done in such a case? We might observe that a model of procedural justice is being achieved in such cases. In a procedural sense, it is unjust if a suspect is not read his or her "Miranda" rights, and a conviction based on that unjust arrest is consequently unjust. Justice here consists of the proper adherence to a number of rules and principles. If a person is found guilty of a crime according to those rules and principles, then that person is justly entitled to whatever

punishment the society has determined to be appropriate.

In contrast to procedural justice, one might advocate a justice which is concerned with a certain fixed result or set of results. This would be called end-state or patterned justice. A patterned standard of criminal justice might be "punish the guilty and protect the innocent." If punishment of the guilty requires random searches, confessions gained by means of torture, or imprisonment without bail or parole, these acts would not, as such, be unjust (so long as the innocent do not suffer as a result). The distinction between patterned and procedural justice is just as valuable in discussions of distributive justice. One might claim, for example, that people should benefit in proportion to their labor. If that were true, then farmers who work hard but who lose their crops to drought or to locusts do not receive what they deserve. This patterned justice can be contrasted with a procedural understanding in which people would be entitled to whatever their efforts actually produced. No injustice would follow from a swarm of locusts stealing a crop, though a human who ran off with a portion of the harvest would be acting unjustly. Ethical intuitions vary widely on this point, as do justice theories.

3) Microallocation and Macroallocation

Another division of justice theories exists between

problems of macroallocation and microallocation. This distinction is one which is mostly encountered in discussions of distributive, rather than retributive, justice. Macroallocation is allocation on the large scale, usually on the level of a whole society; microallocation is allocation of resources on the small-scale. In microallocation, the actual resources and actual agents are usually known. On the level of macroallocation, general policies deal with hypothetical individuals and large resource bases.

Macroallocation may prevent the need for many difficult microallocation decisions. Macroallocation can prevent some problems by seeing to efficient distribution of available resources, and prevent others by allowing for adequate production of resources. It can prevent other problems by establishing norms for the distribution of resources. As there are many private understandings of what we are entitled to, there can be many conflicting demands on finite resources. Just macroallocation can achieve a common consensus of what we are and are not entitled to. Finally, just macroallocation should, it is hoped, anticipate the injustices and pressures which give rise to the need for microallocation decisions.

Just policies might, in an ideal world, end the need for microallocation decisions, but such is not the world that we live in. Policies can only anticipate the familiar

and the probable. Unexpected developments, both in needs and in resources, can upset the most finely-tuned allocation of resources. Therefore microallocation decisions will continue to be important even if macroallocation problems are resolved.

4) Rights, Duties, and Just Orders

A different sort of question about justice is this: Where is the proper locus of justice? This question may be approached in three ways. First, justice may be taken to be a problem of the just person, that is, a problem for the distributor. One might also focus on the end of the recipient. A third alternative would be to look at the problem holistically and socially, that is, as a problem for a whole society. The difference between these perspectives has subtle implications for a philosophy of justice.

If one takes the first approach, and takes justice to be an issue for the individual actor, then justice tends to become a matter of virtue. Justice would be a value to be cultivated in the moral person, and a search for one's duties towards others. Presumably, as long as all parties act justly, then justice has been done.

A weakness in this approach may be that a focus on the provider can mean that individuals do not receive what they deserve.

Suppose Ian spends all day cooking an elaborate dish for his supper. If Judy then comes along and demands that the food be served to her, we would not much be inclined to grant her wish. She has no serious claim of justice on the basis of which to expect to be given the meal, not because she has no claim of justice at all, but rather because Ian's ownership of the food (a right which stems from his labor in creating it) decisively outweighs Judy's claim. (Edwards and Graber 1988, p. 699)

In order to focus on individual desert, one can discuss justice in the language of rights. A right in this case is a justified entitlement to some thing. Instead of talking about giving, one talks about getting.

Still another approach is from the perspective of the whole society. On this level, justice is a virtue of societies rather than of individuals. A just society, as should be expected, is one which sees to it that people receive what they deserve. An individual's task in a just society is to adhere to the society's rules for acquisition and distribution. In an unjust society, justice can only be accomplished through social reform.

These levels may overlap in many ways, but one would do well to consider the relationship between rights and duties. Do rights entail duties, and do duties entail rights? A conventional answer to this question is that there are two sorts of duties, strong and weak. A strong duty is one which entails a right, while a weak duty entails no rights. A strong duty would be one like the one produced by a promise. When I make a promise to help a

friend with his car, I become duty-bound to the person to whom the promise was made to fulfill the terms of the promise. At the same time, that person to whom the promise was made acquires a specific right to the fulfillment of the terms of the promise. Other duties might be weak, in which case they would not grant any specific rights to specific individuals, such as duty to benefit future generations if one has no offspring.

5) Earned and Unearned Claims, and the Formal Principle of Justice

Finally, it should be added that there is a principle which is commonly felt to underlie the many theories of justice. The Formal Principle of Justice (Beauchamp and Bowie 1988, p. 43) asserts that we should treat like as like and unlike as unlike (or equal as equal and unequal as unequal). This proposition may not seem to be controversial, but its exact implications most certainly are. How can we determine what qualities are morally significant between individuals? We might note, for example, that a person is male, high-school educated, Presbyterian, Caucasian, a Scorpio, a carpenter, hard-working, a Republican, 5' 11" tall, married, of average intelligence, brown-haired, and a Freemason. Are any of these factors important when we are attempting to determine what he deserves? Strictly speaking, a person who is 5'11"

is not the same as a person who is 5'7" (even more strictly, no two people are exactly equal in all ways). Does this sort of difference have any moral weight?

As various models of justice are presented it is important to consider what attributes are considered to be morally significant. Some theories ignore all differences among individuals, while others consider only those attributes which the individual is believed to have some sort of control over; still other theories suggest that even innate or inborn qualities have moral importance.

Concerns over differences in individuals leads to a general distinction suggested by Nicholas Rescher. Justice theories may be divided into two groups, these being, to use Biblical terminology, those which are "respecters of persons" and those which are "no respecters of persons." In more conventional language, there are those ethical theories which consider individual merit to be of importance as well as those which consider individual merit to be an inappropriate basis for distinctions between individuals. Rescher identifies these as "earned claims," as opposed to "unearned claims" (Rescher 1966, p. 65).

Those theories which advocate unearned claims usually hold that need is a critical consideration in the problem of just distribution. Need might be taken, in a backwards way, to be a sort of merit, but this is an extreme use of the term which is not warranted. The concept of need is a

complex one and will be explored in the next chapter, which deals with the specific question of the allocation of health care resources.

C) THEORIES OF JUSTICE

With the preceding factors in mind, eight theories of justice will be considered. Some represent major schools of ethical thought, while others presented are feasible though not widely or well advocated. In examining these theories of justice, one should consider critically where they overlap and where they touch on similar truths. Certainly one cannot assume that the truth of justice lies in the limited area of common agreement among these theories, but one can see how various thinkers have attempted to clarify their intuitions about the nature of justice and the principles which they have derived from these central understandings.

I have chosen to focus here on the problem of distributive (and, where appropriate, contributive) justice, and to give little consideration to the difficulties inherent in the problem of punitive justice.

1) Justice as Liberty

When one considers distributive justice, one might quickly assume that justice involves an intervention into society to assure just allocation of resources. Contrary

to this assumption, Robert Nozick in Anarchy, State and Utopia deals predominantly with the justification of the use of force as the central concern for a theory of justice (Nozick 1974, p. 149). Rather than ask how the society or state should distribute resources so that justice will prevail, Nozick asks for justification of any external forceful redistribution of properties in a society.

Nozick begins with individuals in a Lockean "state of nature" (Nozick 1974, p. 10). Each individual is a free agent, holding as his or hers by right, autonomy of action. In order that freedom of action may prevail within an area, individuals may freely choose to form a "mutual protection association" which serves to maintain a monopoly on the use of force. This is to the benefit of those who support the mutual protective association because it protects them from the use of force to curtail their liberties. As an institution, this becomes a minimalist state, the only kind of state which Nozick finds to be ethically justifiable.

In the setting of the minimalist state, economic transactions are wholly and totally free. I may freely give away all that I own; I may exchange my goods; I may remain economically isolated; I may combine behaviors to suit my desires. Since each individual is entirely free, he or she need never provide goods to others unless that is what he or she freely chooses to do. Freedom determines when a person is entitled to something.

Nozick sidesteps the question of how we may originally be said to come to own things. "We shall refer to the complicated truth about [how unheld things may be come to be held], which we shall not formulate here, as the principle of justice in acquisition" (Nozick 1974, p. 150). Presumably, what Nozick has in mind with this "justice in acquisition" is some set of principles similar to John Locke's. Locke derives his understanding of just ownership from an axiomatic principle of self-ownership. "...[Y]et every man has a property in his own person; this nobody has any right to but himself. The labor of his body and the work of his hands are his" (Locke 1937, p. 19). Since a person has a foundational right to his or her productive labor, the infusion of this labor into some unowned thing gives a person a property right to it. One can point to a parcel of land and claim a right to it by virtue of having surveyed it, cleared it, built a house on it, and tilled it. Yet Locke never explains how much labor must be infused into some thing in order to lay claim to it. Does planting a flag on an island, for example, constitute an adequate infusion of labor?

However this problem is to be resolved, Nozick moves on to show how distributive justice may be simply codified.

If the world were wholly just, the following inductive definition would exhaustively cover the subject of justice in holdings.

1. A person who acquires a holding in accordance with the principle of justice in

acquisition is entitled to that holding.

2. A person who acquires a holding in accordance with the principle of justice in transfer, from someone else entitled to the holding, is entitled to that holding.

3. No one is entitled to any holding except by (repeated) applications of 1 and 2.

.....

Whatever arises from a just situation by just steps is itself just. (Nozick 1974, p. 151)

Nozick provides us with a clear example of procedural, as opposed to end-state, model of justice. Some might misunderstand Nozick's reference to "a just situation" in the previous quote. It might be suggested that gross disparities in wealth, or extremes of poverty, indicate obvious instances of unjust situations. Yet according to Nozick, we can assume no such thing. Nozick's question would be, "Who has violated the principles of justice in acquisition and transfer?" If it could be shown that theft or fraud has taken place, then Nozick would agree that injustice has occurred. However, if disparities of wealth exist because some persons have been less productive than others, then Nozick would not be convinced that injustice has taken place.

2) Justice as Natural Return

An interesting but little-explored variation on Libertarian theory is one which I will call the theory of natural return. When we ask the question, "who deserves what?" we may note that certain behaviors produce certain

common results. Industry produces, in most cases, wealth, while sloth (even more reliably) produces poverty.

Exercise produces fitness, but those who sit around all day can expect a low level of physical fitness. The student who reads her textbook carefully each day can expect better grades than a student who does not open the book until the night before the test.

These observations about probable outcomes may be taken to have important implications for a theory of justice. A hard-working person doesn't simply stand a good chance of success; he or she deserves success. Rescher call this the Canon of Effort.

This canon holds that justice consists in the treatment of people according to their efforts and sacrifices on their own behalves, or perhaps on behalf of their group (family, society, fellowmen). Here we have puritanical principle espoused by theorists of a "Puritan ethic," who hold that God helps (and men should help) those who help themselves. Burke lauded the "natural society" in which "it is an invariable law that a man's acquisitions are in proportion to his labors." (Rescher 1966, p. 77)

The "Canon of Effort" does not exactly match what is meant here by natural return, in that natural return is a broader description of justice. In this view, people who engage in risky behavior deserve the ills which befall them as a result of their chosen behaviors. A cigarette smoker who acquires lung cancer, a skier who breaks his leg, and a gambler who loses her money each receives what he or she deserves.

How is this understanding of justice to influence our behavior? One might interpret this theory to support a strict laissez faire in human interactions, that is, that we should never act to counteract whatever naturally takes place in the world. We are to accept whatever in fact befalls a person as that person's just desert. But the world may, paradoxically, refuse to reward people in accordance with their merits or punish them in accord with their wrongful behaviors. A farmer may work diligently to prepare the land, enrich the soil, plant the crop and cultivate it through the growing season, only to have it destroyed by locusts. Is this justice? A man may drink heavily and drive while under the influence of alcohol, yet never suffer personal injury or vehicular damage. Is this fair? It may well be that our response to this failure of the natural order would be to artificially compensate for these outcomes. Thus we would try to see to it that those who "do their best" receive according to their effort, and use artificial punishments to give people "what they deserve" when they engage in risky or self-destructive behaviors.

In either case, it is not to be ignored that some risk-taking behaviors are not intentional, and others are not freely chosen. Not everyone who lives on a fault line, near water, near a volcano, or in a tornado lane has the choice to live in a less dangerous locale. Farmers in many

third-world countries must spread dangerous pesticides by hand. Are they to be rewarded for their industry or penalized for the health risks that they take? Coal miners must likewise take considerable risks to their personal well-being in order to do their day's work. Again, are we who use coal (or coal-powered electricity) in a position to tell the coal miner that black lung disease is something which he or she merits by virtue of his or her occupation?

One might wonder why justice and injustice would be evaluated in this manner. Hopefully we are doing more than adding insult to injury, or praise to obvious success. Presumably there is a desire to reward good intentions -- intentions to do what it takes to do well in the world, at the expense of short-term personal gain -- and to punish bad intentions -- intentions to take chances for the sake of short-term pleasure, or to take unnecessary risks which might just as easily be evaded.

3) Justice as Utility

The creed which accepts as the foundation of morals, Utility, or the Greatest Happiness Principle, holds that actions are right in proportion as they tend to produce happiness, wrong as they tend to produce the reverse of happiness. By happiness is intended pleasure, the absence of pain; by unhappiness, pain, and the privation of pleasure. (Mill 1987, p. 278)

Under John Stuart Mill's Utilitarian theory of ethics, who receives happiness is neutral, so that, all other things being equal, the happiness of three people is

superior to the same level of happiness in two. The ethical utilitarian must respect this valuation even if it means that he or she would personally miss out on potential benefit; if act A means that the actor would benefit, and act B means that another person would receive greater benefit, then the utilitarian would desire that the latter act take place.

Utilitarians claim that our judgements about morality ultimately do, or should, come from our awareness of the happiness produced, or of the unhappiness which is eased or avoided. When we judge an act as morally wrong, we are claiming that it produces unnecessary unhappiness or that it fails to produce possible happiness. What is meant by happiness and unhappiness? Some utilitarians are classed as hedonists, meaning that they equate happiness with pleasures and unhappiness with pains. Other utilitarians are pluralists, which means that in addition to concern about pleasures and pains, they hold that some other things are intrinsically valuable (such as knowledge, beauty, or courage) which need not be justified in terms of the pleasures and pains that they produce.

Utilitarians are also divided in how to best realize these goals. Act utilitarians treat each particular moral decision individually and as a fresh opportunity to relieve unhappiness and to produce happiness. However, given the difficulty of attempting to understand the consequences of

of one's actions (which can echo far into the future) and of weighing the many options which one has in a given set of circumstances, some utilitarians prefer to choose specific rules for behavior which, as rules, will produce the maximum good for the maximum number. Even if one knows that the rules will sometimes produce more pains than pleasures, overall they can still be followed because overall they will produce more pleasure than pain; this position is called rule utilitarianism.

However understood, this interpretation of the heart of morality has important implications for justice. Mill tells us that our common understanding of justice comes from a feeling that certain actions ought to be punished, either because they hurt us or because we sympathize with the pain that they cause others. Mill lists five categories for the sorts of wrongs that are considered to be unjust: deprivation of liberty, the deprivation of a moral right, the deprivation of that which is deserved (good for good, evil for evil), a breach of faith, or partiality (Mill 1987, pp. 316-318). Further:

[...T]he idea of justice supposes two things; a rule of conduct, and a sentiment which sanctions the rule. The first must be supposed common to all mankind, and intended for their good. The other (the sentiment) is a desire that punishment may be suffered by those who infringe the rule. There is involved, in addition, the conception of some definite person who suffers by the infringement; whose rights (to use the expression appropriated to the case) are violated by it. (Mill 1987, p. 326)

Why would a good utilitarian allow for such punishments to take place? Only on the basis of general utility. These artificial punishments are justified in terms of security, which "no human being can possibly do without" (Mill 1987, p. 327). Security is of such monumental importance that Mill accounts "the justice which is grounded on utility to be the chief part, and incomparably the most sacred and binding part, of all morality" (Mill 1987, pp. 332-333).

Thus far, the term "justice" applies well to what has previously been termed punitive justice but has little relevance to the issues surrounding distributive justice. How does Mill treat the problem of the distribution of goods in a society? While other theories of distributive justice rest on relative desert, utility recognizes only absolute desert (Mill 1987, p. 335). Every person has an equal claim to the basic goods of the society and an equal claim to happiness unless it is socially expedient to limit these rights (Mill 1987, p. 337). This type of qualification on individual rights is the source of many objections to a utilitarian understanding of justice.

Rawls characterizes one type of utilitarian theory as advocating the production of the maximum average utility (Rawls 1971, p. 162). Given this "average principle," under certain social conditions one could, at least theoretically, justify a practice such as slavery on the

grounds that it produces the greatest possible happiness (Rawls 1971, p. 167). While most people would not complain about one person being asked to give up some small pleasure so that a great deal of happiness could come to many others, we might object to one person being cruelly used by the society on the grounds that the overall happiness thus produced (for whatever reasons) was greater than the harm inflicted on the individual.

This objection is standard to utilitarian ethics, and is normally countered by the utilitarian by the claim that the reason why we oppose the abuse of a person or of a group of persons is because we realize that the long-term social cost would not justify the act of cruelty. The exploitation of the few would cause fear, sympathetic suffering, and a generalized degradation of people within the society. Because of all of these types of unhappiness, the pains produced by the subjugation of the individual would be greater than the pleasures which that subjugation might have produced.

A second type of utilitarian theory which Rawls identifies would be one which maximizes the total goodness in a society; this he calls "classical utilitarianism" (Rawls 1971, p. 184). This differs from the previous interpretation of Utilitarianism in that it seeks to expand the population of individuals so long as people are generally happy about being alive. As Sidgwick noted:

But a further question arises when we consider that we can to some extent influence the number of future human (or sentient) beings. We have to ask how, on Utilitarian principles, this influence is to be exercised. Here I shall assume that, for human beings generally, life on the average yields a positive balance of pleasure over pain. (Sidgwick 1922, p. 414)

In an age whose sensibilities have been so strongly influenced by Malthus, this idea seems less than reasonable. The aim of producing the maximum balance of happiness for the maximum number of people would seem to be best achieved by limiting population pressure, rather than by promoting it.

4) Justice as Social Utility

Under Nozick's schema, a desert-claim is equated with a property claim, and the individual is the source of all rights. Under the theory now being considered, the state (or society) is taken to be the ultimate source of all rights. Such a view has not been strongly advocated in this country in this century, given the essentially individualistic strain of American thought. The view is, however, readily found in earlier Anglo-American writings on the subject of justice. Hobbes' Leviathan (Hobbes 1962) presents a particularly well-known exposition on this concept of justice (if we consider his Commonwealth to be the same as a society). According to Thomas Hobbes, life in a state of nature (where true individualism reigns) is cruel and unpleasant. Only when power rests in the hands

of a sovereign can life be rich and meaningful, therefore we owe the kind of life that we have to the order of the Commonwealth. My concern here is not with Hobbes per se, but instead with the proposition that individual rights and liberties must be made subordinate to the well-being of the greater social order.

Rescher describes the "Canon of Social Utility" as follows:

This canon holds that justice consists in the treatment of people according to the best prospects for advancing the common good, or the public interest, or the welfare of mankind, or the greater good of the greater number. (Rescher 1966, pp. 79-80)

Distributive justice, when guided by the dictates of social utility, rewards with distributional favor those who make the greatest contributions to the well-being of society. Further, this distribution is weighted to benefit those who will provide for the future benefit of society, as opposed to those who have served well in the past. The operative question here is, "How can we distribute resources so as to best serve the society as a whole?"

To illustrate this distributional scheme, let us consider two members of the society. Bob, though he isn't very smart, is a hard worker and contributes to the best of his ability to his family and neighborhood. Carl, his neighbor, is quite bright and well-educated, but sits around the house all day watching the soaps and eating bon-

bons. The state looks at these two men and determines just distribution of the society's goods for each of them. The state judges that Carl, though having the potential to contribute to the society's good, has chosen not to. The state chooses to give him just enough food to keep him alive, hoping that he will feel encouraged to be more productive, and considers giving him nothing at all in the future if his social worth does not increase. It is quite another story with Bob. The society wishes both to thank and encourage his kind of behavior. His living quarters and diet are upgraded, and he might be given Carl's television so that he can relax when he gets home at night.

As a pragmatic system, this distributional order is doubtless effective. Incentives to productivity are clear and reliable. But how does "if a man will not work, he shall not eat" (2 Thessalonians 3:10) serve as a principle of justice? Unlike libertarianism, a person's distributional rights come from productive value rather than from market forces. In a free market a person can make his or her fortune from amusing but non-productive endeavors such as sports and entertainment, and "sleeves down" jobs such as supervision tend to pay better than "sleeves up" work like construction and manufacturing. Market forces might not have the intelligence necessary to properly reward the day-to-day toil that keeps a society operational.

Unfortunately, people do not have full control over their societal worth. A gifted dancer might have the misfortune of living in a society with no use for a ballet company. A person might have the desire to work but be unable to do so for reasons beyond his or her control such as physical disability or mental limitations. Further, a soldier might be honored during wartime but be regarded as a social burden during times of peace. Thus distribution by social utility does not actually reward moral excellence (the will to be useful) but only the actual performance of useful labor.

The advocate of this system may protest, as with the utilitarian in section 4, that objections to this order are based on an incomplete understanding of this system. On the simplest level, we can see how an active worker would receive preferential treatment over a retired worker. Yet a retired person may be given perfectly decent treatment from the society because it is known that workers will be motivated to increased diligence if they know that they will not be forgotten in their declining years. Likewise, it is wrong to assume that people with limited native abilities, such as those with Down's Syndrome, will be forgotten by the society. After all, the society includes these people, and the well-being of the society is in part a reflection of the well-being of its citizens.

5) Justice as Fairness

There have been shown to be any number of reasons why distributive justice might not be based on a person's needs alone. Under libertarianism, a need must be accompanied by either payment or charity; if you can't afford it, you don't get it. If distribution by natural return is correct, then you are entitled to the conditions that you have created for yourself. Under utilitarianism, your need must outrank other possible sources of happiness in the world. Finally, if one adheres to distribution by societal need, the society must have some benefit in seeing to your needs. We will now consider possible claims that need alone be a determining factor in the distribution of the important goods in a society.

Certainly the most respected name in contemporary Anglo-American justice theory is that of John Rawls, whose book A Theory of Justice (Rawls 1971) is considered by many to be the most important work on the subject in this century. Rawls offers both a methodology for properly discerning the dictates of justice and a series of conclusions which he feels result from that methodology. Rawls teaches us that we can only appreciate justice from the "original position."

This original position is not, of course, thought of as an actual historical state of affairs, much less as a primitive condition of culture. It is understood as a purely hypothetical situation characterized so as to

lead to a certain conception of justice. Among the essential features of this situation is that no one knows his place in society, his class position or social status, nor does anyone know his fortune in the distribution of natural assets and abilities, his intelligence, strength or the like. I shall even assume that parties do not know their conceptions of the good or their special psychological propensities. The principles of justice are chosen behind a veil of ignorance. (Rawls 1971, p. 12)

Rawls believes that if we take part in this mental exercise, we can separate ourselves of our basic prejudices and come to understand what true fairness would be in a society. Given such a "veil of ignorance," we would be wisest to order a society as if our "place in society is decided by a malevolent opponent" (Rawls 1971, p. 153) Given such a state, self-interest would have us establish three rules which would ensure that fairness would prevail. The two of these are interesting but unspectacular; the third has far-reaching consequences for justice as Rawls understands it.

First Principle

Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.

Second Principle

Social and economic inequalities are to be arranged so that they are both:

- (a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and
- (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

.....

General Conception

All the social primary goods--liberty and opportunity, income and wealth, and the bases of

self-respect--are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favored. (Rawls 1971, pp. 302-303)

This brief passage merits careful examination. First of all, Rawls' commitment to equal liberty and equal opportunity do not differ greatly from libertarian justice (though equality of opportunity might be an infringement on freedom of hiring). Rawls' most spectacular innovation in justice is to establish a policy wherein the lot of the worst-off individual would be as favorable as possible, which he calls the difference principle (Rawls 1971, p. 76). Rawls derives this policy from an attitude which anticipates the worst that can happen is any given set of circumstances, labeled by Rawls the maximin principle, which is short for the Latin, maximum minorum (Rawls 1971, p. 154). This policy is chosen by those who are behind the veil of ignorance because they cannot be sure that they will not be born into the least fortunate lives. Rather than choose a sharply skewed social order and hope to be one of the few lucky ones, the rational individual would choose to avoid the risk of an extremely wretched state.

Rawls has an interesting view of ethical or moral value which differs from the assumptions that I made at the beginning of this chapter. Instead of approaching justice as a concern within ethics (the moral value of giving people what they deserve), Rawls considers justice to be prior to ethics. This means that a just society can be

created which will allow for people to have the liberty to promote whatever sorts of values, moral and other, that they wish. Regardless of one's particular life-goals, we can all agree that there are certain conditions which are necessary for the realization of those goals. These conditions Rawls calls social primary goods. Rawls is convinced that his principles are such that any rational individuals who give them fair and unbiased consideration will see their justice.

A Theory of Justice has attracted a great deal of critical interest, and some of the criticisms raised against his theory of justice will be explained in order to shed light on his theory. It may first of all be noted that Rawls, when considering the original position, has a very controversial understanding of risk-taking behavior. He assumes that the only reasonable approach to risk is to be, as one critic has described it, "conservative and fearful" (Kaplan 1976, p. 125). Clearly not everyone lives their life so as to minimize the possibility of dire outcomes. Lottery tickets are often purchased by people at the lowest social strata, who spend their grocery money in order to gain a tiny chance of immense wealth. If one is adverse to gambling, then a more noble example might be used. If a young person were to enter college knowing full well that the investment of money (either his own or his parents') and time were not certain to result in a desired

degree (and perhaps not even likely, given current graduation rates), would we rule the young person irrational for choosing this over the relative safety of fast food work? Rawls would evidently think so.

A second criticism of Rawls' work is that he is strongly deterministic with regards to human attributes. In particular, he states that strength and intelligence are simply a part of the "natural lottery" (Rawls 1971, p. 12). It is held that "no one deserves his place in the distribution of natural assets..." (Rawls 1971, p. 311). While there is certainly truth to the fact that we come into the world with differing abilities, what we do with our abilities is vitally important to their value. "Many intelligent people do not use their intelligence and it is not clear that intelligence and strength have much worth in the absence of use..." (Kaplan 1976, p. 127). Rawls implies that people are as they are due to circumstances beyond their control. Even the supposed contributions of "what we do with ourselves" are the product of external forces.

It seems to be one of the fixed points of our considered judgements that no one deserves his place in the distribution of native endowments, any more than one deserves one's initial starting place in society. The assertion that a man deserves the superior character that enables him to make the efforts to cultivate his abilities is equally problematic; for his character depends in large part upon fortunate family and social circumstances for which he can claim no credit. (Rawls 1971, p. 104)

If Rawls were to allow that people have some control over themselves, his arguments against merit-based justice would be far weaker than he holds it to be, and hence the egalitarian strain in his work would be less convincing. There are certainly many times when a person with "everything going for him" in terms of upbringing and natural ability does not become successful, and there are just as clearly cases when people from the lowest tiers of society become productive and prosperous. A determinist like Rawls can be expected not to be persuaded that such cases are counterexamples to his position. Rawls can maintain that there are simply elements in the lives of these unusual people that explain why they differ from their peers and from our normal expectations. Rather than attempt to delve into the literature about free will and determinism, it might be more productive to grant Rawls his point. Assuming that we do not deserve our initial position or our endowments, how can we be said to deserve anything? If we cannot deserve anything, then how is it possible to treat people unjustly? At worst, we are giving people more than they deserve, since they are, as such, not entitled to anything. Further, in a strictly deterministic picture of the world, my act of depriving others of their possessions must be causally determined, and hence I am not blameworthy for theft or fraud or for the destruction of the Amazon rainforest. There may be practical reasons for

punishing me for certain acts, but the choice by a person or society to impose punishment on me would seem to be, likewise, a simple result of their heredity and environment.

A third and more complex criticism of Rawls has to do with the value that he attaches to liberty. Liberty is both vitally important in Rawls and methodically subverted by Rawls. Rawls holds that liberty is to be desired by all persons as a means to the goods that they wish to attain, so that he can require a society which supposedly does not wish to impose any particular values on individuals to center its institutions around this value (Rawls 1971, p. 250). Liberty, though prized to this extent, falls by the wayside when Rawls introduces the maximin or difference principle. Since Rawls contends that natural inequalities between persons are unmerited, society must do what it can to elevate the status of the least advantaged, even when the cost to others is extreme (Rawls 1971, p. 536). This denial of individual liberty for the purpose of bettering others leads to a condition that David Schaefer calls the "morality of the last man," taking his expression from Nietzsche's Thus Spoke Zarathustra (Schaefer 1979, p. 64). This morality of the last man, rather than supporting freedom, diminishes its meaning.

The tyrannical tendency implicit in the remarks just quoted [A Theory of Justice, pp.261 and 515] compels us to question the depth of Rawls's professed commitment to liberty. Rawls

claims, as we have seen, that his first principle of justice gives liberty a priority over all other goods. Yet if justice is said to dictate that the fundamental structure of society be constituted without reference to the wishes of its present members, and to require that everyone's nature be remolded so as to lead to the acceptance of the two principles of justice, the actual scope of liberty appears to be severely circumscribed. (Schaefer 1979, p. 71)

The ideal Rawlsian state seems to be committed to the ultimate victory of the lowest common denominator. "The underlying intention of Rawls's account of justice--which he seems unable to acknowledge to himself, any more than admit it to his readers--is to enslave men of superior talent and industry to the service of the least advantaged..." (Schaefer 1979, p. 76). As extreme as this criticism sounds, it seems thoroughly consistent with the Rawlsian principles of justice cited above.

6) Justice as Needs-Fulfillment

The peculiar title of this section is intended as an appeal to Marxist distribution theory. From the French Socialists of the last century came a description of ideal justice which was later adopted by Karl Marx, "[f]rom each according to his ability, to each according to his needs!" (Feuer 1959, p. 119). This terse description of distributive justice includes, as previous formulations have not, some mention of the justice of production as well as the justice of distribution. It is important to note that, for Marx, the production of goods and services was a

more critical concern than their distribution.

What we understand by the economic relations, which we regard as the determining basis of the history of society, in the manner and method by which men in a given society produce the means of subsistence and exchange their products among themselves...this technique also determines the manner and method of exchange and, further, of the distribution of products... (Feuer 1959, p. 410)

The manner of production of goods and services was held to be causally connected with the manner of their distribution.

Though its phraseology is appealing, this Marxist definition of distributional justice is lacking in clarity. It is also not an exhaustive description of distributive justice, as a bit of reflection will reveal. The first half of the statement, to give or produce according to one's ability, gives no guidance as to which of a person's abilities ought to be employed. It is presumably the case that each person has some activity to which he or she is best suited, and that the society would make use of a division of labor rather than have each person be a generalist. But the distribution of natural talents rarely, if ever, exactly matches the needs of a society (we can only sustain so many artists, priests, actors and philosophers), and so some people would either be serving in non-productive roles, or more likely, working with one of their lesser talents. This system would, of course, run contrary to our fondness for free choice in career options,

but in reality it takes a substantial aptitude in a skill to obtain employment, even in a "free" society.

How much work is to be expected of people, once their place in social order has been determined? It is possible to put in twelve or more hours of work per day, albeit with considerable lessening of individual well-being over the long run. Marx, I am sure, intended for the second half of the formulation to modify the first; work must be done until needs are met, and after that point the society has no more claim on the worker's productive capability. As Thomas More observed in the Utopia, when people work diligently and aren't trying to amass wealth, or having to line another's coffers, it doesn't take long to produce what is needed.

The problem of need returns to us in the second half of this definition. The question of "need" is extremely problematic on the level of the whole society. Need must always be understood in terms of implicit or explicit ends. What ends might exist within a person? Certainly a goal of life would be commonly accepted, and this end can be met by such things as air, water, calories, protein, shelter, clothing and safety. However, beyond the desire to preserve one's life, it is not clear what goals (and hence needs) might be classed as justified. There are possible goals with regard to self-image, education, physical prowess, religious fulfillment, and artistic self-

expression. Which, if any of these, must be taken into consideration by the just Marxist?

There is a further question that many authors feel compelled to ask about Marxist distributive justice. What is to be done about those who do not give according to their ability, either by doing nothing or by doing less than they can? Do they still receive according to their needs, or only in proportion to the effort that they have contributed? Marx, amazingly enough, never dealt with this possibility. How is it that this problem could be ignored?

Both [Marx and Engels] believed that in the communist order of the future selfishness, indifference, and sloth would disappear from the social scene. Men would become so thoroughly socialized that their cooperativeness and eagerness to produce would become a matter of firmly entrenched habit. Social consciousness and responsibility would have won the day, and no man would therefore do less than place his talents and abilities fully in the service of the community. (Bodenheimer 1967, p. 156)

This statement may be the most absurd claim in all of Marx's writings, but in its defense, Marx did realize that human nature would not change overnight. First, Marx felt that much of the sloth that takes place in capitalistic societies is a reasonable response to the inherently exploitive nature of the capitalist-proletariat relationship. Workers realize that the fruits of their labor go to the few who are rich, and they therefore are reluctant to work to the best of their ability. Second, Marx believed that people truly desire to work, so long as

work is meaningful. Given a choice between inactivity and meaningful labor, human beings will opt for meaningful activity. Finally, Marx knew that education would be required to change peoples' attitudes towards labor. The myths of capitalism would have to be forcefully countered by proper indoctrination into the communist ideal.

The core of the attractiveness of the Marxist definition of justice is the dual proposition that those who can be productive are, and that regardless of means or resources, no one should go without the essentials of human existence. Marxist justice theory has had the most profound impact on the actual configuration of the world in this century, and despite the recent changes in Eastern Europe and elsewhere in the world, Marxist justice theory is not to be casually discarded.

7) Justice as Equality

There are several synonyms for justice, and one encountered often in the literature of justice is equality. Equal distribution of goods is considered, at least in passing, by virtually every thinker who struggles with distributive justice. "The solution that comes most readily to mind [in the allocation of a single apple between two people] is to divide it evenly between them" (Edwards and Graber 1988, p. 701). One possible foundation for the idea that goods should be distributed evenly is

found in utilitarian thought, which holds that morality consists of the production of the maximum good for the maximum number. It might be argued that, insofar as we count all people equally, the goal of the maximum good would be best effected by an egalitarian distribution of goods.

What is meant by egalitarianism is usually something other than pure or ideal egalitarianism. Imagine pure egalitarianism as follows: Each month a truck arrives at your front door with a bale of hay, a bag of flour, several pounds of pig iron, a vial of sulfuric acid, a jar with an assortment of pills, a spool of wire--in short, an even portion of all of the goods that the society produces. The absurdity of this sort of distribution should be obvious at first glance. You wouldn't need all of those things, and exchanging what you didn't need for what you did need would be a full-time job.

Egalitarian distribution normally takes into consideration whether or not a person needs the items at hand. Snow shoes don't go to the tropics, and water skis aren't allocated in the desert. The problem of need, as has already been considered, is a formidable issue. Need always occurs within a given context, that is to say, need must be understood with regards to a particular end. Egalitarian distribution may be legitimate within certain contexts (such as with essential commodities), and

illegitimate with regard to other situations. What standard may be used to determine when egalitarianism is just?

Utility is a principle which says that a given act is just when it produces the maximum good for the maximum number. Rule utilitarianism is a modification of utilitarian thought which states that any rule, law or maxim should be followed so long as it serves the rule of utility. The rule may produce instances which are less than optimal, but because faithful adherence to that rule will serve the greater good, we are morally obligated (again, by appeal to the principle of utility) in following that rule. If equality is productive of the maximum good for the maximum number, then it may be adopted as a rule of just distribution by a rule utilitarian.

According to John Hospers, "if [Jeremy Bentham and John Stuart Mill] had to choose between a society in which good was equally distributed and one in which there were glaring inequalities, they would choose the first" (Hospers 1961, p. 426). The importance of egalitarianism was recognized by several utilitarian authors. John Stuart Mill offered that "equality...often enters as a component part both into the conception of justice and into the practice of it, and, in the eyes of many persons, constitutes its essence" (Mill 1987, p. 318). According to Sidgwick, "the essence of Justice or Equity (in so far as

it is clear and certain), is that different individuals are not to be treated differently except on grounds of universal application..." (Sidgwick 1922, p. 496). In the next chapter it will be shown how utilitarian egalitarianism may serve as a rule for the just distribution of health care.

8) Justice as Reciprocity

Reciprocity is one of the oldest principles in ethics. Pure reciprocity implies a relationship of quid pro quo between actors -- what one person does, the other repeats. Consider the ancient principle of punitive justice: "life for life, eye for eye, tooth for tooth, hand for hand, foot for foot, burn for burn, wound for wound, bruise for bruise" (Exodus 21:23-25). It can be contrasted with anticipatory reciprocity, wherein one tries to act as one would have others act. One attempts to anticipate the desires of others based on one's own desires. Formally and informally, these are rules which underlie some of the most familiar standards of distributive and retributive justice. Confucius (551-479 B.C.) is usually credited as the first to specifically recognize the primal morality of reciprocity. His formulation is sometimes called the "silver rule."

Tzu-kung said, "What I do not want others to do to me, I do not want to do to them." Confucius said, "Ah Tzu! That is beyond you." (Analects)

5:11)

Confucius said, "When going abroad [...d]o not do to others what you do not want them to do to you." (Analects 12:2)

Confucius' formula in these passages is called the "silver rule" because of its negative character. It explains that negative actions may be judged to be negative if we find them personally offensive or undesirable. It makes no positive claims on moral behavior. In another passage, however, Confucius implies a positive variation on this theme.

Confucius said, "[...]A man of humanity, wishing to establish his own character, also establishes the character of others, and wishing to be prominent himself, also helps others to be prominent. To be able to judge others by what is near to ourselves may be called the method of realizing humanity." (Analects 6:28)

This positive message does not have the general application of Confucius' silver rule, yet it suggests the universalization of one's desires to others. Confucius had a further remark about the value of reciprocity which is of interest when compared with later thinkers.

Someone said, "What do you think of repaying hatred with virtue?" Confucius said, "In that case what are you going to repay virtue with? Rather, repay hatred with uprightness and repay virtue with virtue." (Analects 14:36)

This remark does not reflect a pure, but rather a slightly modified appeal to reciprocity. As will be shown, pure reciprocity is not without its limits as a moral principle, and Confucius here indicated that it would not be proper to simply reflect the wickedness of those around

us.

In the history of Western thought, Isocrates (436-534 B.C.) is held to have first pointed out the value of reciprocity, interestingly enough, quite similarly to Confucius' formulation. Like Confucius, Isocrates (a contemporary of Plato and a student of Socrates) used negative language to explain the essence of morality.

Do not do to others that which angers you when they do it to you. (Nicocles 61)

Also like Confucius, Isocrates suggested positive formulations of the rule of reciprocity.

Conduct yourself toward your parents as you would have your children conduct themselves towards you. (To Demonicus 14)

Deal with weaker states as you would expect stronger states to deal with you. (To Nicocles 25)

Whatever advice you give to your children, consent to follow it yourself. (To Nicocles 38)

Anticipatory reciprocity teaches us that we should not expect others to live by rules which we would not consent to ourselves. Further, it insists that we put ourselves in the place of those around us, understanding the desires of weaker states, our children and our parents. It is not through philosophers, but through religious traditions, that the importance of anticipatory reciprocity has come down to us. In Tobit (one of the books of the Apocrypha, written in roughly 150 B.C.) we find the admonition, "And what you hate, do not do to any one" (Tobit 4:15). Hillel the Elder (circa 60 B.C.-A.D. 10) set forth a similar bit

of moral wisdom. "What is hateful to you, do not do to your neighbor: that is the whole Torah; the rest is commentary; go, study" (Glatzer 1956, p. 74).

Our most familiar version of anticipatory reciprocity is the Golden Rule. It is important to remember that Jesus of Nazareth never classified himself as a moral revolutionary (Matthew 5:17-20). Yet his reformulation of the moral law which he inherited from Moses is considerably more demanding and inclusive than traditional Jewish morality. The Golden Rule insists, "[s]o in everything, do to others what you would have them do to you, for this sums up the Law and Prophets" (Matthew 7:12). Jesus was not only advising, as thinkers before him, that we should avoid acting in ways that we do not want others to act, but that our moral duty is to actively do what we wish others to do to and for us.

In another passage, Jesus advocates what we might take (if we wish to be kind) to be a step beyond the ethics of anticipatory reciprocity or (if we wish to be less than kind) to be a violation of the morality of reciprocity.

You have heard it said, "Eye for eye, and tooth for tooth." But I tell you, Do not resist the evil person. If someone strikes you on the cheek, turn to him the other also.

.....

You have heard that it was said, "Love your neighbor and hate your enemy." But I tell you: Love your enemies and pray for those who persecute you... (Matthew 5:38-39, 43-44)

Reciprocity would have us return blow for blow. The return of blow for blow is not a matter of vengeance, but a morally justified act. Anticipatory reciprocity informs us that we should not initiate strikes against others, as we would not wish to be thus struck. Yet it must be added that the expectations which Jesus has here go beyond either of these claims and in fact deny the rectitude of returning blow for blow. Confucius' attitude on this point seems far more palatable as well as more consistent.

Given the weight which reciprocity has had with early thinkers, does it have any instructive value for current problems in applied justice theory? Even in its noblest formulations, how can this principle serve as any more than a necessary condition for a theory of justice? On one level, it is unspectacular to suggest that a principle be universalizable; a principle must apply, at least in some aspect, in a general way. If we treat others as we ourselves wish to be treated, we may fall into two traps. The first is a tendency to undue subjectivity, and the second is a preferentialism which would render this principle impossible to universalize. Undue subjectivity would occur because people who are well-equipped to deal with the world are likely to expect less help and cooperation from others than those who have fewer natural abilities. There is also a danger of what might be called preferentialism, which would involve the faulty

generalization of personal tastes. As a trivial example, one person may prize foot massages more than the rest of the population, and think that proper reciprocity would consist of people routinely exchanging foot massages.

Reciprocity in its crudest form consists in the simple repetition of past behaviors. I harm those who have harmed me in the past, and treat those who have previously been kind to me with kindness. People deserve either my kindness or wrath based upon their past performance. This repetition of past behaviors, however, ensures that the world will be no better in the future than it has been in the past. We can bring to mind cases of wars that have lasted for many generations because each side failed to forgive the wrongs of the past. In theory, there is presumably one party who instigated the conflict, and the war should have ended when the parties wronged took their revenge. However, as a practical matter, the origins of such extended disputes are not easily identified. Both sides consider themselves to be the wronged parties, and thus the conflict is never resolved peacefully.

Anticipatory reciprocity improves on this by preventing the introduction of undesirable elements into the social milieu. Yet there are questions which this does not answer. If we are to treat others as we wish ourselves to be treated, how are we to approach problems of punitive justice? It is hard to honestly offer what we

would feel to be proper punishments for us in given circumstances. What should happen to me if I commit murder? As much as I might favor extremes of punishment, it taxes my credibility to claim that I would calmly accept my "just desert." I might quite honestly want others to be long-suffering with my shortcomings, and then decide that my moral duty, as per the Golden Rule, is to cultivate long-suffering to the misdeeds of others.

These forms of reciprocity are then inadequate guides for behavior and for justice. A refinement on the principle of reciprocity is a principle which has been dubbed reciprocal altruism. This principle involves an initial assumption of cooperation followed by strict quid pro quo based on the cooperation or defection of other group members. Robert Axelrod has suggested that altruistic reciprocity is our best guide for social life (Axelrod 1984, p. 136). Reciprocal altruism is a tool which can result in an improved world rather than one which simply maintains its present level of goodness because it introduces a supposition of kindness. This assumption is a force which can keep morality from being enslaved to the past. Reciprocal altruism is self-defending and yet forgiving. It is also punitive of wrong behaviors, giving those who act wrongly an incentive to seek out more cooperative behaviors. If undesirable behaviors are tolerated as readily as good behaviors, as Confucius

suggests, good behaviors remain under-rewarded.

It is interesting to note that recent computer simulations have shown the value (both for individuals and for their societies) of altruistic reciprocity (Rabow 1988, p. 57 and Cowley 1989, p. 44). Reciprocal altruism is a strategy which has proven successful in iterated (repeated) prisoner's dilemmas. A prisoner's dilemma is a standard problem in ethical literature which has many variations. One would be as follows: Two men are arrested for robbery, and each is taken aside by the police and offered a chance to implicate the other. If a prisoner cooperates, he will get off without punishment, though his accomplice will receive a stiff penalty. If both remain silent, they will each receive mild punishment for lesser charges. However, if both implicate each other, then they will both receive strict punishment. The ideal situation for each person would be for him to be "nasty" while his partner is "nice." In an iterated prisoner's dilemma, this decision is repeated by the same two agents over and over again (Rabow 1988, p. 57). Reciprocal altruism involves an initial assumption of cooperation, followed by strict quid pro quo. If all agents follow this procedure, then they will be consistently cooperative with each other. If one agent attempts to exploit the other, this exploitative behavior will prove to be counterproductive since it will be repeated against him. A return to cooperation would be

rewarded by future cooperation.

Altruistic reciprocity has the important feature of reconciling the disparate problems of distributive, retributive and contributive justice. Yet as worthwhile as reciprocal altruism may be, it fails to answer three important questions. First, it does not explain what sorts of behaviors are to be offered initially, or to whom these behaviors are to be offered. Second, it does not differentiate between voluntary and involuntary defection. Third, it does not allow for beneficence, or altruism proper. As for this first concern, we may note at this stage that the problems of undue subjectivity and preferentialism have not been solved. They are further complicated by the added element of altruism. If we are to assume something which has been called "cooperation," what are we aiming for? It is easy to see how our altruistic duties to others could easily exceed our personal resources. The question here is one of scope. If the scope of our altruistic obligations is too large, we can reject it on the basis of sheer impracticability. We might also object that our altruistic duties, even if within our means, would mean being deprived of things to which we are entitled. Reciprocity presumes the autonomy of the individual and the basic right of an individual over certain person resources--I can't be expected or required to do what I don't have the resources to do (the principle

that "ought" implies "can").

Altruistic reciprocity reconciles the division between retributive and distributive justice. In this section I wish to reconcile the claims of the individual with the claims of the society. To do this I begin with the assumption that a person has a unique claim on his or her own person (which I will call self-ownership in Chapter IV) which entitles a person to his or her own labor, as well as to the proceeds of that labor. Yet we are for many reasons and in many ways bound to those around us, and these social bonds create a shared life for the members of a community.

My goal here is to show a plausible way that altruistic reciprocity can be understood and put into action. My tool for this task is a concept which I call the principle of the common lot. The common lot is a recognition of the social nature of man, and the historical fact that each of us has benefited from the contributions of many other persons. Man, as Aristotle observed, is a social animal; complete self-sufficiency is a characteristic of beasts or of gods, but not of men (Politics 1253a). Human children are wholly reliant on their parents, or on other caring humans, for survival. This is our first social relationship, yet one which is frequently overlooked by writers on the subject of distributive justice.¹ When it is approached, there are

two standard positions which are taken. The first is that a parent has no obligation to care for his or her offspring. Any care extended to the child is the equivalent of charity.

A second approach is to view a parent-child relationship as a kind of social contract. The relationship between a parent and a child is not one which is bound by an explicit contract. While marital partners may have their duties to each other enumerated in a set of marriage vows, no such agreement does or could exist for parents and children. The claim that there is a social contract between parents and children is little more than a useful analogy or a helpful fiction. A contract which has no terms, and to which one has not consciously agreed, is not a contract which is binding against one.

I would suggest that the reason why parents (usually) care for their children, and why children are considered to be especially entitled to that care, is because there is a relationship in the family which has little or nothing to do with formal declarations. In the traditional marriage vows, it is implied that the couple now joined together

1. John Rawls has little place in his ideal order for the family (Rawls 1971, p. 51), though this is understandable, given the focus of his work. Robert Nozick is more tolerant on this matter, holding that there should be no hindrance to the right to spend our resources on those whom we love (Nozick 1974, p. 167).

will share a common fate, or at least that neither will suffer or prosper in solitude. "[F]or better for worse, for richer for poorer, in sickness and in health," the couple is to share the same fate. In the same way, but to a lesser degree, children share their parents' fate. If the parents prosper, the children are to prosper as well. If the parents suffer, the children will frequently share that fate, either directly or indirectly.

The relationship of the common lot can extend to larger groups as well. Circles of friends, neighborhoods, and nations can be common lots. Clubs, sporting teams and fraternal orders may also impose special obligations of mutual assistance on their members. Common lots are not to be confused with contractual arrangements (which have been considered as a matter of justice on pp. 53-54) or practical motivations for helping those around us (which reflect enlightened self-interest rather than justice). Common lots may be entered into either voluntarily and consciously, or established nonvoluntarily by the particulars of one's history. In the case of one's relationship to one's country, we note that while immigrants must state a formal oath to become citizens, most people are citizens through birth. Even though we have not chosen the terms of our national social-political arrangement (none of us, for example, having signed the Constitution), and even though we may not have officially

sworn an oath of national loyalty, and even though most of us are not in a position to simply uproot ourselves and move to another country if this one does not suit us, we are still bound to our nation by a set of mutual demands and expectations.

There is some degree of choice in one's common lot commitments, though rarely absolute freedom. There are at times ways to "opt in" and "opt out" of social groups. Marriage, the adoption of a child, and oaths of citizenship are examples of opting in. Divorce and emigration are examples of opting out. There may also be instances of opting in and opting out which are not formally recognized. Becoming a hermit is an example of opting out which involves no ceremony or paperwork.

The extent of our obligations to the common lots to which we belong are determined by three things: the size of the common lot, the needs of the common lot, and the character of the common lot. First, all other things being equal, my obligations to a small group are greater than my obligations to a large group. This is the case because in a large group there is a larger pool of persons from which resources may be demanded, and because the person-to-person bond is, generally, weaker. My duty in a marriage is immensely greater than my duty to a fellow citizen in a country with a quarter-billion inhabitants. Second, all other things being equal, a weak need is less important and

has less force against me than a strong need. My duty in a life-and-death situation will be far greater than my duty to spare someone from their boredom. Third, different social groups have different characters. My best friend and I have a one-on-one relationship, but its character is weaker than the character of my relationship to my spouse. If I move to a new city, my best friend would not expect for me to bring him with me in the same way that my spouse would.

This third factor, the character of the relationship, is one which might easily become a source of contention. Am I implying that all marriages must have the same sort of significance, and that people who marry for "convenience" are somehow wrong? Not necessarily. If the partners share a common understanding of their relationship, and if they agree to that relationship on a relatively free basis, then the common lot has taken its own definition, something which is not in and of itself unjust. These conditions would not apply for a person who wanted to impose a weakened relationship on a less advantaged partner, such as if a parent of a child with Down's Syndrome wanted to be free of the normal claims to which a child is entitled.

The theory of the common lot has already taken into consideration the fact that it is not always possible to respond in kind to the kindness of others. The model which Axelrod uses makes no distinction between voluntary and

involuntary defection and would evidently treat both events equally. Inability to reciprocate may come from any number of reasons. A young child cannot properly take turns in all aspects of household maintenance (i.e., preparing meals, replacing fuses, purchasing groceries), and to expect an even exchange would be both unreasonable and futile, though symbolic chores (which are at first more educational than productive) have their place. The very old, the mentally handicapped, and the ill can also be restricted by limited natural abilities. Even those whose abilities are not in some way restricted may find that circumstances can hinder the performance of their reciprocal duties.

I will suggest here that altruistic reciprocity must be expanded in the direction of altruism. There is an assumption of cooperation in this theory of justice, one which can justify a presupposition in the favor of those unable to reciprocate the kindness of others. Our rule here might be, "when in doubt, assume that a person would reciprocate if he or she could." An extremely disabled person might require the help of others for years and never be in the position to be a caretaker of others.

We can count these persons as "cooperators" so long as their status is in doubt. However, when circumstances permit, they must be subject to the rules of reciprocity which bind other participants in the society. This

assumption of kindness is a presupposition, not a fiction. Given demonstrated failure to cooperate where the possibility of cooperation exists, one can no longer support the presupposition.

There is one final modification of Axelrod's distribution which will be entertained here. Axelrod allows in The Evolution of Cooperation (Axelrod 1984, p. 138) that a pure tit-for-tat strategy can allow feuds to continue indefinitely. This unending cycle is what Axelrod calls the echo effect, one which he suggests might be dampened by a lesser (9/10, say) return of evil for evil.

Axelrod makes a second suggestion here, which is that cooperation may evolve in a group by experimentation with cooperative behavior (Axelrod 1984, p. 79). Such experimentation is again a violation of the pure quid pro quo, but one which serves to promote overall cooperation.

These two allowances may be generalized into a principle of beneficence, which would be a rule which states, "altruistic reciprocity does not exclude the possibility of beneficence, that is, of kindness extended in excess of an individual's merit." This principle is not the same as the previous proposal (which dealt with involuntary defection) because it specifically acknowledges that the kindnesses done are not deserved. Their enactment demonstrates values other than that of justice; in morality we may properly, on occasion, give people more than they

deserve, so long as this does not deprive others of what they are justly entitled to.

III. THE JUST DISTRIBUTION OF MEDICAL CARE

In this chapter I will consider the ways in which the theories of justice explained in the previous chapter may be applied to the problem of the distribution of health care in a society. The focus here will be on the macroallocation of health care, which is to say, the general policies by which a society will determine who is entitled to health care. Health care is a general designation for a broad set of resources that have profound importance to the physical (and mental) well-being of the members of a society. Some resources will not be considered even though they are of extraordinary importance to one's health, such as nutrition, clean water, worker safety, and exercise. This restriction may not be entirely warranted, but occurs commonly in medical literature as if there were some clear line between a glass of Kool-Aid and an intravenous dextrose solution.

Health care may be classed in three ways. The first type of health care is preventative medicine. This is medical care that every person may make use of to preserve health, or to prevent illness. As medical care, this may be taken to include education provided by medical professionals, immunizations against disease, and public health measures. A second class of medicine is acute care

medicine. This is medicine which exists to help those who have some sort of malady, and may act to cure the illness or at least to make life more tolerable if the malady cannot be cured. Acute care medicine is what people normally have in mind when they envision health care. It is health care which requires submission to the alien realm of the medical professional rather than health care in which we can retain our autonomy. It has been asserted time and time again that monies spent in preventative medicine avert far greater expenses in acute care medicine. Yet acute care medicine receives greater attention because it is more dramatic, more interesting, and is attached to circumstances of greater urgency. A third class of medical care is the world of chronic care, which deals with the long-term maladies which cannot be cured but which require frequent medical intervention. Chronic care may be required for a host of maladies, including diseases such as hypertension, diabetes, and arthritis (President's Commission 1983, vol. 3, pp. 184-185).

A) JUSTICE AS LIBERTY

In libertarian distribution, individuals are free to do as they wish with their resources. Those who wish to go into business providing health care goods and services are free to do so, and those who desire such services may obtain them at mutually agreeable terms of exchange.

Nozick specifically disagrees with the claim that medical care should be exempted from the normal principles of just distribution (Nozick 1974, p. 234).

We may ask, What of those who need medical care (especially acute care) but have nothing (agreeable) to exchange for it? The libertarian answer is that they must go without care, unless someone freely chooses to take pity on their wretched state and give them medical care, or else goods to exchange for care. The core of justice, according to Nozick, is the preservation of liberty. The existence of the minimal state is just in that it serves to preserve individual freedoms. A program which would, by force of taxation, take goods from free individuals in order that the poor might receive health care would be a blatant violation of individual liberty, and hence, unjust.

Some have offered that libertarianism might justify a redistribution of wealth if we interpret freedom in a positive rather than in a negative way. Nozickian libertarianism is negative, which is to say, focuses on the absence of restrictions on the individual. A positive libertarianism would interpret the promotion of liberty in terms of enabling individuals. Using this line of reasoning, freedom would be promoted by a tax-driven health care system because illness limits the freedom of people, and this loss of freedom is more extreme than the minimal sacrifice of liberty which the taxation system would

create. This line of reasoning is not, however, the one to which Nozick subscribes.

Nozick does not have to deny that it is a tragic thing when a man dies for want of health care, just as he does not have to deny that it is tragic when a man starves to death or dies of exposure. However, according to Nozick, providing for these sorts of needs is a matter of charity, if one is so inclined. Failure to help others is not itself unjust. Nozick gives the following example:

A medical researcher who synthesizes a new substance that effectively treats a certain disease and refuses to sell except on his own terms does not worsen the situation of others by depriving them of whatever he has appropriated.
(Nozick 1974, p. 159)

Nozick's claim here is one which runs contrary to many common intuitions. A serious failing in Nozick's theory is that he accepts the Lockean "state of nature" as the basic moral state of the individual (effectively granting that each man is, morally, an island). Nozick recognizes that this is historically counterfactual (Nozick 1974, p. 77), but does not consider that to detract from this theory's essential truth. I disagree. The historical inaccuracy of the Lockean account is this: we, each and every one of us, enter the world in a state of utter dependence. Without the constant support of those around us during our first ten years or so, we could not survive. It is quite some time before the most resourceful of us could hope to be able to perform all of the tasks necessary for survival,

and then only with the cooperation of a relatively friendly environment. To finally emerge from the contributions of so many others and declare oneself to be utterly free is an affront to one's history. This is not to say that we have a debt to those who cared for us (a weak assertion, as we had no choice in the matter), but rather to show that our nature is social rather than individual.

Another weakness in Nozick's position is that he too narrowly defines the notion of force. Force, particularly in the economic sector, need not be confined to fists and bullets. The person who is the sole possible supplier of food to a starving man may exercise an incredible amount of force over him without laying a hand on him. To picture both men as free agents in that scenario is absurd. The starving man must engage in trade or die, while the merchant may sell or not sell at his leisure. This consideration is extremely relevant when considering the provision of health care. The health care professional has overwhelming leverage against a seriously sick person, and people will willingly reduce themselves to poverty if it can mean a restoration of health.

B) JUSTICE AS NATURAL RETURN

Justice as natural return claims that we are morally due the probable results of our actions. As a matter of health care, we might formulate a system of distribution

along the following lines: an undeserved illness merits an undeserved cure, but a deserved illness deserves no such cure. A few authors have mused, with varying degrees of conviction, that a national health care system (socialized medicine) ought to discriminate against people who engage in health-risking pastimes (Mappes and Zembaty 1981, p. 198). Smokers who acquire lung cancer, alcoholics who acquire cirrhosis of the liver, skate-boarders who break their wrists, and Type-A businessmen who develop stomach ulcers may be said to be accountable for their maladies. At the very least, we are likely to be less sympathetic to such a person's condition than to the illness of another person who "did nothing to bring it on himself." We might also take this to be a very just and natural distributional guide for the allocation of health care.

As a principle of distribution, justice as natural return would suggest free health care to those who have not brought their maladies on themselves, but care at a cost (if available at all) to those who have "merited" their conditions. People would receive health care in proportion to how hard they worked to avoid being sick.

A variation on this theme would be to tax unhealthy behaviors whenever possible and use the proceeds to support health care. This would work well with items like cigarettes, off-road vehicles, and alcohol, but not well with less consumer-oriented hazards like failure to

exercise or indulging in promiscuous sex.

A third alternative would be to require all people to support a general health care delivery system, with the lowest premiums going to "good" people who do not smoke, drink, engage in hazardous employment or pastimes. There might even be a discount for proof of proper diet and a regular fitness regimen. Perhaps a further discount would be available to people who restrict their sexual contacts (a chastity bonus). There might even be a cash bonus if persons with genetically inheritable diseases agree to be sterilized, thus eliminating another risk to the health of the society.

As the list grows, it becomes evident that there is not a direct relationship between risk-taking and actually deserving an illness. Remarks have been made to the effect that men who have hundreds of homosexual sexual partners "get what they deserve" when they acquire AIDS. Yet it boggles the imagination to propose that sexual promiscuity be made into a capital crime, and further that punishment be executed in the form of a slow, lingering death. Such a punishment would easily exceed the magnitude of whatever "crime" was being committed. It would also be grossly objectionable to casually break the wrist of a skateboarder just because he deserved to have his risky behavior punished.

As extreme as this distributional system may appear,

it is presently used, after a fashion, to formulate health insurance rates. Those in higher risk groups pay more for health insurance, in a sense paying for being in higher risk categories. Current insurance rates also consider factors over which individuals have no control. Insurance companies claim that they charge older persons more for health care as a matter of pure pragmatism, without considerations of justice. Yet if this is not justice, why do insurance companies insist on applying it? Pragmatism does not compel us to injustice.

C) JUSTICE AS UTILITY

Utilitarianism interprets justice as a tool for the production of the maximum happiness for the maximum number. Certainly medical care can be a critical tool for the production of this happiness, which is understood in hedonistic utilitarianism as the production of pleasure and the relief from pain. On the surface of it, this would imply that any medical malady, in that it causes some form of pain or disability, would warrant assistance. A far-reaching utilitarian would emphasize preventative medicine over acute care medicine because preventative medicine can avoid discomfort before it becomes necessary to relieve it.

When, if ever, might a utilitarian withhold health care from those in need of it? If there are unlimited medical resources, or at least resources adequate to meet

all present and likely needs, and if the provision of health care is not unduly reducing the ability of the society to meet other needs for happiness, then presumably health care would be generally available. Yet given scarce resources, utilitarianism gives guidance as to how resources should be distributed. Health care should be administered so that pains are minimized in the population. Some whose conditions are not seriously hindering to their overall happiness will have to do without care in order to provide care to those with more serious conditions. A utilitarian society would not operate like ours, where millions of dollars go to plastic surgical techniques like face-lifts and tummy tucks while a large percentage of the population does without basic medical care.

D) JUSTICE AS SOCIAL UTILITY

In 1961, when Swedish Hospital in Seattle had to allocate scarce time on hemodialysis machines, a group of citizens --a lawyer, a minister, a banker, a housewife, a politician, a labor leader and a surgeon -- were assembled to form the Life or Death Committee (Alexander 1962, p. 106). This committee looked over the facts about the lives of the people who needed this life-saving therapy in order to determine, to put it bluntly, who would live and who would die. One of the questions that the committee asked was who would be of the greatest social worth. Whose life

would the society miss more than another life?

During the Second World War, limited supplies of antibiotics were given to soldiers with venereal diseases instead of to soldiers who had sustained battle injuries. While the moral merit of the latter group was certainly greater than that of the former group, the decision was made to use a limited resource on soldiers who could be returned to the combat lines. The rationale for this was simple; there was a war going on, and resources had to be allocated to win that war.

In less critical times, justice as social utility may seem to be too harsh. Nonetheless, limited resources are a constant, and a society which distributes health care may be entitled to the promotion of its own ends as a society. First rate health care may be reserved for the people who do the most for the society, rather than be given indiscriminately to all in need.

E) JUSTICE AS FAIRNESS

Rawls does not consider health, and therefore medical care, to be an automatic good. There are some basic elements which Rawls classes as social primary goods. These are things that everyone would desire as essential to any kind of good life, and include rights and liberties, opportunities and powers, income and wealth, and a sense of self-worth. Health is classed differently, as a natural

primary good (Rawls 1971, p. 62). Natural primary goods (which also include vigor, intelligence, and imagination) are not for the society to administer to its citizens. Social primary goods are to be distributed so as to produce the maximum good for the least advantaged, but natural primary goods cannot be distributed in that manner. Health care is then a good to be distributed through conventional societal distributional methods.

It might be argued that Rawlsian methodology can, with a few modifications, be used to support a general right to health care. Margaret Lovell suggests this right in her dissertation:

What is demanded in a just society is that there be an acceptable and realistic minimum available to the least advantaged members of society. If health is the social primary good, then a just minimum of health-care services can be achieved through the derived right of health care in the same Rawlsian methodological way that if wealth is the social primary good, a just minimum of wealth can be derived through the appropriate application of Rawls' methodology. I would suggest, then, that health is the social primary good, and that health care is the subject of a derived right all members of society have in attaining that good. (Lovell 1985, p. 147)

Given Lovell's modification, Rawlsian contractarian theory can be seen to remedy the natural inequities which come from ill health through the tools of a society which is concerned with making life as good as possible for the least well off.

F) JUSTICE AS NEEDS-FULFILLMENT

Societies which profess to be of a Marxist orientation have generally made the provision of health care an item of high priority (though there are not at present any truly Communist governments in the world, as such a government would be an oxymoron). Socialist governments which look to Marx's works for inspiration have held health care to be a critical duty for the state. Despite the fact that the average Soviet polyclinic is underequipped and its staff undertrained, some level of health care is available to all Soviet citizens.

In the People's Republic of China, the Communist government took power over a land with 450,000,000 people and only 20,000 "real" (Western-trained) doctors plus hundreds of thousands of traditional healers with no fixed training or ability. The country had epidemic levels of syphilis, opium addiction, and schistosomiasis (a lethal disease spread from infected human waste by snails). Rather than attempt to create a huge medical structure, the Communist party set about training over a million "barefoot doctors," rural health care providers, with urban counterparts known as "worker doctors." These people were trained in a combination of Western and traditional Chinese medicine and instructed in basic medical care, midwifery, and public health. Though poorly trained (compared with full-fledged MD's), they were able to care for 90% of the

ailments of the common people. Through mobilization of the population, venereal diseases, opium addiction, malaria and schistosomiasis were brought under control (Livingston and Lowinger 1983, Chapter 2).

Whatever complaints one may have about the failings of Communist governments around the world, most have done much to make a basic level of medical care available to their entire populations. The Marxist maxim of, "from each according to his ability, to each according to his need" indicates that needs for health care would be met by the Marxist community.

G) JUSTICE AS EQUALITY

The utilitarian rationale for the equitable distribution of health care is commonly cited or assumed by reformers in the American health care scene. "The special nature of health care helps to explain why it ought to be accessible, in a fair fashion to all" (President's Commission 1983, vol. 1, p. 18). The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research advised that we provide an "adequate" or "decent" level of health care (President's Commission 1983, vol. 1, p. 20). The justifications for this proclamation were twofold. First, there is a practical value to good public health (justice as social utility). Second, there is a moral claim that

the society has an obligation to provide this decent minimum of health care. The basis for this assertion is hard to follow, in good measure because the members of the President's Commission were unable to agree on a theoretical basis for this federal duty.

Rather than attempt to adjudicate among competing theories of rights [which would support a claim of a right to health care], the Commission has chosen to concentrate on what it believes to be the more important part of the question: what is the nature of the societal obligation, which exists whether or not people can claim a corresponding right to health care, and how should this societal obligation be fulfilled? (President's Commission 1983, vol. 1, p. 35)

A variety of ethical theories are cited within the three volumes of the President's Commission's report on Securing Access to Health Care, but the overall tone of the ethical reasoning seems to be best summed up by a utilitarian defense offered by Allan Gibbard.

The medical care that has promise of immensely contributing to intrinsic reward in life is care that is reasonably likely to make a difference between a long life well worth living, and early death or a life ill worth living. In a reasonably prosperous society, a utilitarian decent minimum will include such care, even if the cost is high. (President's Commission 1983, vol. 2, p. 174)

In order to produce the maximum good for the maximum number, an equal availability of some level of health care might be conducive to that end. A provision of all possible health care that people might desire would likely require too great an expenditure of resources and take away

from the other possible sources of happiness.

Egalitarianism cannot mean that everyone is extremely well-off, unless the resource base is improbably large.

Egalitarianism, even in health care, means that every person must accept limitations on consumption so that everyone can be as well off as possible.

H) JUSTICE AS RECIPROCITY

Last year, the United States Senate passed legislation which was designed to protect the elderly from the economic ruin which comes from expensive health care. The Catastrophic Care Bill was repealed a year after its passage, by an overwhelming majority, when the same people who had demanded its passage refused to bear its cost. Our enlightened, semi-socialistic state has produced a population who expect everything from their government but who have no desire to "pay the piper" when the time comes. Though there have been movements in this country since the 1930's to provide socialized medicine, the potential beneficiaries have considered the cost of health care to be someone else's problem. This type of thinking has been disastrous for the country and shows no sign of diminishing. Justice as reciprocity offers a simple antidote to this unhealthy picture of social justice.

Altruistic reciprocity demands that an initial assumption of cooperation be followed by a strict quid pro

quo. But is this reasonable when applied to health care? If health care is offered to those in need, reciprocity may be hard to establish. The ill person may require repeated instances of care before the possibility of reciprocity exists. Axelrod's model of reciprocity assumes that actors are autonomous and have the option of returning the acts of cooperation which are proffered. In order to apply altruistic reciprocity to the real world, if it is to be of any value, provision must be made for the fact that the will to reciprocate is not always accompanied by the ability to reciprocate.

It is interesting to note that so many writers on the subject of medical justice, with so much talk about indigent care, fail to notice the most common instances of indigent care in our society. Children are, individually and as a group, unable to care for themselves, unable to offer payment for care, and unable to contract for deferred payment. They simply have needs which must be met if they are to survive and flourish. Obviously at least some of the children find adults to care for them. I have tried to show how the common lot, a group which sees its collective well-being as important as individual well-being, can be a mechanism for understanding this common phenomenon. The assumption made is that the members of the common lot would reciprocate if they were able, which may have a number of applications. If my spouse becomes ill, I do not care for

her on a pure "IOU" basis, but on the most general assumption that she would care for me if circumstances were reversed. In the case of children, my assumption would be, not that they would care for me in my old age, but that the quality of care that I give to them would be shown to their children when that time, if it ever arises, should come about.

Altruistic reciprocity in health care would mean that we would begin by extending health care to those in need, with the assumption that that care would be reciprocated by them if and when that need should arise. But to whom should we offer care? Given the theory of the common lot, it might be assumed that a system of socialized medicine or national health insurance would logically follow. This is not necessarily the case. As has been noted, the strength of the common lot decreases as the size of the lot increases. Consider health care as ultimately coming down to a matter of tending to someone sick in bed with the flu. To how many people would we offer this service? To our immediate family, quite likely, and to close friends, perhaps, but to complete strangers? Even if it were likely that complete strangers would return the favor, there are so many people who might make demands on our time, and our relation to a fellow countryman in a country with a quarter-billion citizens is so weak, that my obligation to a given person is infinitesimal, barring unusual

circumstances.

In the past, health care was the province of the community, something given by family members and presided over by the local priest or shaman or matriarch. It is interesting to note that some early health insurance groups took the form of fraternal orders; they were not the purely economic creatures which we are more familiar with (Starr 1982, pp. 206-209). In the past century the character of health care provision has changed drastically, and the level of education required to be a competent health care health care provider has grown sharply. A registered nurse today must know more than a medical doctor of only a generation past, and most medical doctors must focus on only a tiny area of medicine in order to keep up with the explosion of knowledge and technique. Therefore it is not surprising that we must go to strangers when we are ill, and not necessarily a bad thing. Since we go to strangers for the specific need of medical care, we form one-dimensional relationships rather than relationships which cut broadly across our lives. This causes an alienation between the care-giver and the care-recipient, an alienation which has made compensation for services more of an issue than in the past. Further, new healing technologies require capital expenditures unthinkable in earlier periods.

Because of the changes in the nature of health care,

the common lot must be expanded into a large enough group to admit trained personnel and adequate resources. There are also some functions which must fall under the auspices of the largest possible social mechanism because they cannot be effectively managed at the local level. The control of infectious diseases, for example, works best when it is administered at a national or international level. A local effort might control the spread of disease, while an international campaign might effectively eradicate it. The principle of mutual cooperation at the lowest possible level may at times be impractical, and at such times should defer to larger-scale entities. In other cases, though, it should be closely followed.

A just health care system is one which its members are willing to support, that is to say, one which its members are willing to provide to its other members if circumstances would allow them to be health care providers rather than health care consumers. Naturally there are some people who know well that they are going to be net consumers of health care, and who might support a more extensive system of health care than they personally, were things different, would be willing to support. By the same token, those with good health might be less interested in health care than they would be in the abstract. Despite individual perspectives, the principle of altruistic reciprocity can be appreciated by individuals in differing

circumstances. It is no small task to formulate the particulars of such a system, but the tools for its determination are now at hand.

IV. THE STATUS OF THE HUMAN BODY

As has already been indicated, it would be quite wrong to begin with the assumption that a donated organ may be treated in any manner which might be perfectly appropriate for any other medical resource. This may not necessarily be a case of cultural taboo or sentimental squeamishness. Many of our notions of personal identity reside in the specific body which is seen as being the person. In a sense, my body is what I am rather than something that I own. In other ways, the body is "merely" the ultimate and most personal possession to which I have a claim. These two streams of thought intertwine in the popular mind, and ought not be ignored when considering the proper and just distribution of donor organs.

Anglo-American law has traditionally had difficulty in assigning a legal status to human bodies. In the case of the body of a living person, an act committed against the body is taken to be a wrong against the person. One stabs me when one stabs my arm. However, a dead person is not a person at all, certainly not in the sense of being a legal entity. Reluctant to claim that it would be possible to own a corpse, British law in the Eighteenth Century held that it was (technically) impossible to steal a human body. A corpse-robber might be convicted of stealing a coffin or

a burial shroud, but not of stealing a dead body (Scott 1981, p. 6). This peculiar bit of legal history says much about the uncertain status of the human body and its parts.

It may be profitable, then, to consider what sort of sense may be made of an assertion of a property-claim on a human corpse or, more importantly for our purposes here, on an organ. It is not being suggested that such a view is entirely satisfactory or accurate, only that there are times when such a position might be useful. Further, whatever deficiencies might be found in such a view may lead us towards a more acceptable alternative.

Let us begin with the thesis that all property rights are based upon one's claim of ownership on one's person, or in more practical terms, on the claim that one has on one's own body. All other things being equal, no person may use my body unless I permit it, and to do so would be a wrong against me. The labor that I perform is then automatically mine as are acts which have their origin in me. The fruits of my labor are mine as an extension of this principle -- I "put myself into" the things that I make. Other earned desert-claims become extensions of my ownership of that which I produce.

As Smith explained in The Wealth of Nations, "[l]abor was the first price, the original purchase-money that was paid for all things. It was not by gold or silver, but by labour, that all the wealth of the world was originally

purchased..." (Smith 1947, p. 26). Adam Smith was apparently convinced that John Locke's conceptualization of ownership was quite sound.

#27. Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this nobody has any right to but himself. The labor of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labor with, and joined to it something that is his own, and thereby makes it his property. (Locke 1937, p. 19)

Setting aside the difficulties of Locke's latter claim (which cannot, at any rate, be understood without an analysis of Locke's religious convictions), let us focus on the plausibility of the assertion that we are inherently in possession of our bodies and of our labor, and that our property-claims are extensions of the claim of self-ownership. Historically, at least, we may find examples which run contrary to this Lockean claim. One such counterexample might be seen in the institution of slavery. A slave, by social definition, is a person who does not have a basic claim on his or her own person. Slaves may be bought and sold like property, and ordered to work or die at the request of their owners. Yet we find in some societies (Frost 1980, p. 85) that a slave could own property and even be able to purchase other slaves. What sort of sense can we make of this? Without debating the morality of slavery, we seem to have a case where property rights were not contingent upon the ownership of one's own

person. Such historical examples are problematic, but perhaps more for their society than for us. Surely the property-claim of one slave on another is merely a privilege extended by the first slave's master, and if the master wished to take away the slave's slave, no court in the land would side with the first slave.

There are other, and more compelling, reasons why one might not wish to accept a basic principle of self-ownership. Instead of proposing that we have prima facie claims to our own persons, that claim might be replaced with an assertion that, since we are so strongly reliant on some other person (or persons, or Being) for our existence, it follows that that other person (or persons or Being) has the primary claim on our person. This argument may take a number of forms:

- "Your mother and I brought you into this world, clothed you, fed you, and cared for you when you were sick. Since you would not even be alive if not for our efforts, your primary duty and loyalty is to us."

- "The Motherland has taken care of you from the very day of your birth. We have seen to it that all of your basic needs were met, educated you, and given you a safe place to live. Were it not for the care and guidance of the Motherland, you would not enjoy the wonderful life that you have today. Your service to the Motherland is only just and fitting" (see Plato's discussion of this point in

the Crito 50A-52B).

- "The very breath in your lungs is a gift from the Almighty. The food you eat and the sun in the sky are special provisions from a God who loves you. In gratitude for the gift of life, you should serve the Lord your God with your whole being."

While we may be grateful for the contributions of which others have made to our lives, our gratitude will probably not compel us to see ourselves as the property of others. If we assume that we are basically our own masters, then these claims sound like peculiar contractual obligations, obligations to which we have never agreed, and about which we were never given a choice. How can our parents, or the country, or God, claim that we are indebted to them for gifts and services for which we never asked? Yet that assumption must be lifted if we are to avoid making the error of begging the question.

Our reliance on others is a matter of historic fact, but what of it? It is important to realize that none of us is self-creating. Our existence is and has been contingent upon the contributions of others. Yet if another makes a claim of ownership on my person, I may well ask the question, "If you own me, then who owns you?" If my parents claim to own me, then presumably their parents had an equally strong claim on them, and so forth back through time. If my society claims to own me, then its claim is

likewise transferred back through time to those societies which have come before it.

Perhaps it might be suggested that my claim on my own person does not fall into my hands until the demise of all of my ancestors, at which time I would come to inherit it. Ironically, the situation thus described treats self-ownership as something that can be owned (and traded and inherited), and a person could not take ownership of his or her self if he or she lacked the fundamental basis of all forms of ownership. Perhaps a god might have a unique sort of property-claim on his or her creation, but the status of this divine contribution to our existence is far less demonstrable than the contributions of our fellow human beings.

Self-ownership is therefore a very different sort of thing than what we might normally understand by property rights or claims of ownership. It means that we have the right to freely use our own bodies (within the basic limits of social propriety and within the limits of the physical rights of others), and that it is wrong for others to use or abuse our bodies without our consent. Our consent is limited by the fact that self-ownership is non-transferable; we can never truly choose to do "anything" that another person might wish, nor can we sell ourselves into slavery. Our claim to other things is an extension of this right by virtue of our effort and involvement. We

cannot, however, assert ownership of other individuals.

If the human body and its parts may be considered to be a sort of property, it might be suggested that non-essential parts of the body may be sold for profit just as any other kind of property. Yet such suggestions have attracted a great deal of hostility from different quarters. All other things being equal, why has this been the case? Some of the following considerations might be cited:

-Selling a kidney is improper since you have not worked to make your own kidney, and no amount of labor could produce such an organ.

-You would feel like a fool if your remaining kidney developed functional problems. Had you freely given your kidney to someone who needed it, you would have the consolation of the good you had done, and the hope of another altruistic person doing the same for you in your time of need. A kidney-seller would have neither consolation, only the hope that a kidney would be available--at a price--when one is needed.

-Selling organs treats the sacred human body as a mere economic resource. It demeans not only the seller, but others in the society as well, because it encourages an attitude of exploitation (Dowie 1988, p. 232).

-If we permit the selling of organs, we will discourage people from altruistic donations. They will

think that the need for their organs will be met by paid donors.

-Selling organs will have violent and undesirable economic consequences. People will try to get loans using their organs as collateral, people with no desire to sell their organs will be forced to treat their body parts as economic assets, and the cost of transplants will rise as more and more middlepersons become involved in the organ trade.

-If organ selling were permitted, we know realistically that only the very poor and economically disadvantaged will become organ donors. In yet another way, the rich will exploit the poor, and the downtrodden will lose another scrap of human dignity. Further, international trade in organs will reinforce the subordinate relationship which the less-developed countries have to the developed (Schneider and Flaherty, pp. 12-23)

-The sort of people who would sell their organs are the least desirable elements of society, and hence have organs of poor quality and pose a greater risk of having diseases which might be transmitted through organ transplantation. Since diagnostic tests for hepatitis, HIV and similar diseases are not totally reliable, we are better off encouraging voluntary donations from less needy donors.

-The overall social cost of selling organs to make up

the shortfall of available donor organs is greater than the good that would arise from such a practice. Relatively few people will die from want of organs, but the whole of society would be affected by the practice under consideration.

Given these objections, one might wonder why any serious consideration should be given to the possibility of paid organ donations. Certainly there is not a massive public outcry for such a system. The predominant public opinion is that it is wrong to sell one's organs, usually for one or more of the reasons just cited.

Nonetheless, the burden of proof is on those who would forbid this practice. Prima facie, one ought not forbid a private transaction without due cause. If two consenting adults wish to enter into a contract involving the sale of an organ, we may only interfere with that contract if there is a considerable wrong or wrongs to be avoided. We frequently trade in goods which cannot be replaced. Every time we engage in the sale of some item, we risk the possibility of regretting that sale at some later time. We also realize that even in a supposedly free market, there are those who are relatively strong and those who are relatively weak, and that exchanges are therefore sometimes unduly advantageous to one or to the other of the participants. It is also the case that trade-for-profit and non-profit transactions of the same sort of items can

occur within the same society (a supermarket may be across the street from a volunteer pantry, and a clothing store may be next to a center which distributes free clothing).

What is really taking place when people object to the sale of organs? We might consider that underlying legislation banning prostitution is a social concept of the nature of human sexuality. Legislators might talk about the drug traffic and the spread of disease and organized crime, but frequently these are only superficial objections, merely more demonstrable ills of a practice seen as innately wrong. It is the understanding of sexuality which not only says that, "I will have sex only with an adult [of the opposite sex] whom I truly love [and to whom I am married] and who loves me, and will only engage in that activity in an appropriately caring and loving manner," but which also asserts that it is wrong for anyone to participate in a sexuality which does not conform to those characteristics, and wrong to a degree similar to the desecration of a religious observation.

The attitude of the sanctity of the human body is not to be taken lightly, but the moral philosopher might be at a loss at how to deal with it. On one hand, it cannot be automatically assumed that common assumptions of the general population are ethically correct. On the other, it must be realized that moral philosophy is not a discipline which exists in some ethereal realm apart from humanity.

Within this tension we observe that no society is indifferent to corpses. Even the supposedly atheistic and materialistic Soviets stand in long lines to gaze upon the remains of Lenin. Funeral customs differ from place to place, but the operative question is not whether to respect the corpse of one who is deceased, but how. One might suppose that cannibals are wholly indifferent to the special status of human bodies, but instead, most cannibals eat human bodies for ceremonial and magical purposes. Eating a dead human is normally a very different thing from eating a dead animal. It is only occasionally that military and medical professionals learn to treat bodies as mere objects, and even then their attitudes are not to be considered the social norm, but rather necessary doses of distancing necessary for their professional activities.

Likewise, treating bodies as commodities (as when Napoleon's bodily parts were auctioned off) is an aberration from standard thinking about our bodies. When I claim that I own my body, I am normally resisting another's claim on my person, and not defending the right to sell bits of myself. I am asserting my autonomy and right to self-mastery against some threat against them. It may be better to drop the metaphor of self-ownership in favor of a basic understanding of autonomy and privacy. The language of property is the language of the legal system, a language of confrontation. Rather than be fought over, the human

body should simply be respected for what it is--the integral domain of a human agent.

V. THE HISTORY OF THE DISTRIBUTION OF BLOOD AND BLOOD PRODUCTS

The possibility of blood transfusions was opened up in 1628 when William Harvey traced the route of the human circulatory system. In 1665, Christopher Wren and Richard Lower attached the vein of one dog to the artery of another with a hollow quill. But while the possibility of giving one person the blood of another has existed for 350 years, it was not until recent history that physicians have had any understanding of the role which blood plays in the body's functioning. Between 1665 and 1875, it is estimated that 476 blood transfusions were attempted on human beings, 347 using human blood, and 129 using animal blood (typically sheep's blood). As one might well assume, the results from these transfusions were quite poor. Because of their poor results, blood transfusions were made illegal in England, France and Italy until this century. Some physicians speculated that receiving the blood of another person or animal would be accompanied by a spiritual transfusion as well (a belief supported indirectly by a passage in Deuteronomy, and a belief still held by Jehovah's Witnesses). It was quite fashionable for physicians to bleed sick patients until this century, a practice which could have been therapeutic only in rare cases, and which had its roots in the antiquated notion of

imbalances of bodily humors.

Gradual understanding of the blood's functioning increased during the Nineteenth Century. In 1901, Karl Landsteiner noticed that some people's red blood cells clumped together with other red blood cells. He ascertained that there were two sorts of surface substances, "A" and "B," which were present or absent on a person's blood cells. After ABO typing, Rh (for rhesus factor) typing was discovered in 1939 and 1940 by Levine, Stetson, and Landsteiner. With these factors understood, safe transfusions could be performed for the majority of individuals (though some require more extensive antibody testing). The storage of whole blood required the development of anticoagulant solutions which could be safely transfused along with whole blood. Sodium citrate was used as early as 1914 and is still used today. Other mixtures, such as acid citrate and heparin, were developed during the Second World War. Refrigeration and freezing techniques were also improved so as to maximize the preservation of blood and blood products. (Historical information taken from Hagen 1982, pp. 11-13; Hough 1978, pp. 10-11; and Titmuss 1971, pp. 17-19).

The technology for blood transfusion was well available during the Great Depression; however, it was not used as a common medical practice until the Second World War (largely because Rh typing was not discovered until

1939). Though direct transfusions between soldiers were used during the Franco-German War, and indirect transfusions (where the blood had been stored for several hours before use) were performed during the First World War, it was during the Second World War that the civilian population was strongly encouraged to donate blood. As a part of the war effort, human blood was airlifted to field hospitals. Civilian involvement with the blood supply made the general public aware of the potential good to be derived from blood transfusions and established a popular esteem for the practice of donating blood.

While the military had experience in gathering and storing blood, the civilian sector had no large organizations established for that purpose. Hospitals, for-profit blood centers, the American Red Cross and non-profit blood centers rose to develop a pluralistic system of blood distribution.

Today, blood transfusions are considered to be routine medical procedures. More importantly, medical professionals consider them to be a therapy, rather than an experimental or desperate measure. One can say today that a patient needs blood, rather than to say that a blood transfusion might do some good. The Red Cross has often been cited as a model for non-profit blood distribution, and one must certainly not underestimate the contribution which it has made to the availability of human blood, but

for-profit blood centers are quite sensitive about the role which the American Red Cross has played in the gathering and distribution of blood and blood products (Rock 1986). While the Red Cross is technically an independent non-profit relief agency with international status, it is in many ways an organization which is under the wing of the government in general, and the military in particular. As early as 1929, the Red Cross considered involvement in the business of human blood (Eckert and Wallace 1985, p. 37). During the Second World War, the Red Cross became a primary supplier of blood and blood products (particularly blood plasma) for the military. After the war, the Red Cross carefully considered, and finally chose to, expand its role as a blood supplier. The Red Cross does not compensate its blood donors, but does charge hospitals for the processing of its blood and blood products. It also receives a profit for its troubles (8.8% according to Rock 1986, p. 158). The resentment which for-profit centers hold for the Red Cross has three points. First, the Red Cross makes a very real profit from its work, though it is incorporated as a non-profit organization. Second, the Red Cross competes directly in markets such as the plasma market against for-profit organizations, with the advantage of not having to pay taxes or its donors. Third, the Red Cross does not use its profit for purely charitable functions, but rather uses a large percentage of its profits for investments.

During the early part of this century most blood was handled by local hospitals. Each hospital had its own policies for recruiting donors, testing blood, and paying or otherwise compensating donors. After the Second World War, many hospitals preferred to allow the Red Cross to serve as their chief blood supplier, while other hospitals were no longer able to attract enough blood donors because of competition with the Red Cross and for-profit blood collection centers. The American Medical Association was consulted before the Red Cross expanded into a national civilian blood collection service, but many individual physicians were still opposed to competition with hospitals.

In this area (Knoxville and East Tennessee), the non-profit Medic organization claims to be the sole whole-blood supplier for the 25 area hospitals that it serves. However, the University of Tennessee hospital continues to receive and process a small number of whole blood units which are not for self-transfusion (3% of its total blood usage, as of December, 1987). Most other hospitals explain that they have left the area of blood collection (even for replacement of units used at their facilities) because of the quality of service from the non-profit collection center and because the present difficulty in testing whole blood units for syphilis, hepatitis-B, liver enzyme factors which are indicative of non-A, non-B hepatitis (recently

isolated and identified as hepatitis-C), and HIV. The hospitals also discovered that having their own collection facilities generated a competition between hospitals for a limited number of blood donors, a competition which did not serve the hospitals' images well.

The Red Cross is not the only non-profit blood collection agency in the country. As has been indicated, the East Tennessee area is served by the Medic organization, which was conceived as a "blood insurance" agency in 1958 by area physicians. Like most non-profit blood banks, it belongs to a national non-profit organization, the American Association of Blood Banks. The AABB opposes the practice of paying blood donors in cash for their donations, but it does allow for "insurance" programs, whereby blood donors are allowed to receive blood without cost if they need it within a year after their last donation (coverage may be extended to immediate family members, and in certain cases to fellow employees at a given workplace). It also allows for non-monetary awards being given to blood donors.

The most controversial form of blood collection and banking is found among the for-profit blood banks and plasmapheresis centers. These too have a voluntary national umbrella organization, the American Blood Resources Association (ABRA). For-profit blood and plasma centers usually offer cash payments for donations, varying

from \$10-\$25 for basic donations to over \$100 to secure units of particularly rare blood (not simply rare by virtue of blood type, but rare by virtue of unusual antibody types). In Knoxville, there exists one of the largest (perhaps the largest -- accurate numbers not being available to the public) plasmapheresis centers in the country, Plasma Alliance, operated by Armour Pharmaceutical. There is also a smaller Plasma Center, licensed to Alpha Therapeutic Corporation. Plasma Alliance processes roughly 9,000 units of plasma per month (Hagen 1982, p. 124) while the Plasma Center probably handles less than 1,000 over the same period. A unit of plasma varies in content by the weight of the donor and the extraction process used, from 550-820 grams per donation. In other parts of the country, for-profit centers also account for a large percentage of the whole blood drawn. In Houston, Texas, for example, paid donors provide the bulk of whole-blood donations, while in the East Tennessee area, no units of whole blood for transfusion are drawn from paid donors, and such units only arrive in the area during periods of regional blood shortage. While the Federal government has discouraged the use of for-pay whole blood since 1978 with the enactment of the National Blood Policy, there is actually little governmental restriction on the use of for-pay whole blood for transfusion. In most areas, an informal understanding between blood banks determines how

much of the local supply comes from paid donors and how much comes from volunteer donors.

The distinction between "paid" and "volunteer" donors is not necessarily as clear as it seems at first, and a great deal of literature has grown out of the work done by Richard M. Titmuss on this distinction. Titmuss's book The Gift Relationship (Titmuss 1971) had nothing less than revolutionary impact on the blood industry in the United States. A British sociologist, Titmuss was extremely critical of the state of blood banking in the United States. Despite the fact that the book was considered by many economists to be neither well researched nor well argued (Eckert and Wallace 1985, p. 7), it had a tremendous popular reception, and was followed by a series of newspaper and magazine articles which claimed to show how the nation's health was being compromised by the reliance on "cash" or "for-pay" blood. The message which most people received from Titmuss' book was that paid donors were the lowest and least desirable class of people, those most likely to carry dangerous diseases such as hepatitis. Drug abusers and alcoholics were considered to be particularly likely to sell their blood for money. On the other hand, volunteer donors could be shown to be "better people," namely those whose lifestyles would make them better sources of safe blood and blood products. The most desirable blood donors were held to be those donors who

would not require the incentive of a few dollars to give their blood. The popular press supported Titmuss' appeal for an all-volunteer donor system. While hepatitis-B is not the threat today that it was when Titmuss wrote his book because of the present testing for that disease, we have only recently isolated hepatitis-C (which was previously known as non-A, non-B hepatitis) and developed a test for it, and there is the far more dire threat of the transmission of the AIDS virus, HIV. (Hepatitis-A is not transmissible through blood transfusions.) While there are two tests for HIV antibodies, neither is considered to be certain to catch all contaminated units of blood because several months may elapse between infection with HIV and the production of the antibodies that these tests look for. Therefore the issue of the quality of the donor population remains extremely important.

There is little evidence that one might offer to oppose Titmuss' general claim about the quality of paid donors. The Merck Manual advises: "Paid donation is discouraged because of abuses inherent in the 'skid row' blood banks in big cities, because blood from such banks has 5 to 10 times the usual rate of hepatitis infectivity, and because of a desire to encourage voluntary donors and thus broaden the donor base" (Berkow 1982, p. 1093). Though some sources indicate that the risks associated with paid versus voluntary blood donations have been

exaggerated, generalizations of this sort seem generally sound. If one is selective with one's data, one can find cities such as Houston faring better than cities such as Denver insofar as hepatitis transmission is concerned, even though Houston's blood supply is virtually all for-pay and Denver's supply is almost entirely voluntary (Drake, Finkelstein and Sapolsky 1982, pp. 32-36). Selective cases such as these, however, have little importance when one is considering general health care delivery policy.

As Titmuss himself realized and noted, it is not enough merely to distinguish paid from unpaid donations. There are many "shades of grey" between the donor who receives a check for his or her blood donation and the donor who receives no more than a kind word for the unit given. It is common for non-profit blood centers to offer blood insurance programs for those who donate regularly. In some cities, sports and theater tickets, discount certificates, and small trinkets are given to donors. In some countries special medical care is given to blood donors. In some environments, such as prisons and in the military, special treatment of considerable consequence is shown to blood donors (Titmuss 1971, pp. 75-89). Titmuss' concern, though, was not simply with providing the safest possible blood supply. He had a deeper point which has often eluded those who read his book.

Titmuss claimed that allowing blood to be bought and

sold like any other commodity was a degradation of the very human act of blood donation.

From our study of the private market in blood in the United States we have concluded that the commercialization of blood and donor relationships represses the expression of altruism, erodes the sense of community, lowers scientific standards, limits both personal and professional freedoms, sanctions the making of profits in hospitals and clinical laboratories, legalizes hostility between doctor and patient, subjects critical areas of medicine to the laws of the marketplace, places immense social costs on those least able to bear them -- the poor, the sick and the inept -- increases the danger of unethical behavior in various sectors of medical science and practice, and results in situations in which proportionately more and more blood is supplied by the poor, the unskilled, the unemployed, Negroes and other low income groups and categories of human populations of high blood yielders. (Titmuss 1971, pp. 245-246).

The attitude is well characterized by the following statement by Andrea Rock: "Hospital administrators have always regarded blood as a commodity they must stock along with supplies such as floor wax" (Rock 1986, p. 160).

Making blood a market commodity not merely put the blood supply at the mercy of the workings of the free market, but resulted ultimately in a degradation of both the donor and the blood recipient. Further, it discouraged altruism. Titmuss considered this to be an important consideration, as the title of his book suggested. A person who truly freely donates his or her blood is giving an almost perfectly free gift, that is a gift without expectation or even possibility of repayment (Titmuss 1971,

pp. 88-89). If a person donates blood without the incentive of even a blood insurance program, the gift becomes immensely valuable. A pure gift is an act which builds up the community, whereas economic transactions set up adversarial relationships between people (we treat each other as tools for our own personal gain). The following list is offered by Titmuss to show how free blood donation is a purely altruistic act:

1. The gift of blood takes place in an impersonal relationship, sometimes with physically hurtful consequences to the donor.
2. The recipient is in almost all cases not personally known to the donor; there can, therefore, be no personal expressions of gratitude or of other sentiments.
3. Only certain groups in the population are allowed to give; the selection of those who can is determined on rational and not cultural rules by external arbiters.
4. There are no personal, predictable penalties for not giving; no socially enforced sanctions of remorse, shame or guilt.
5. For the giver there is no certainty of a corresponding gift in return, present or future.
6. No givers require or wish for corresponding gifts in return. They do not expect and would not wish to have a blood transfusion.
7. In most systems, there is no obligation imposed on the recipient himself to make a corresponding gift in return.
8. Whether the gift itself is beneficial or harmful to an unknown recipient will depend to some extent on the truthfulness and honesty of the giver (information by the donor about himself which is deliberately withheld or misrepresented may be lethal to a stranger). Moreover, the intermediaries -- those who collect and process the gift -- may determine in certain systems whether it is potentially beneficial or harmful.
9. Both givers and recipients might, if they

- were known to each other, refuse to participate in the process on religious, ethnic, political or other grounds.
10. Blood as a gift is highly perishable (its value rapidly diminishes) but neither the giver nor the recipient wields any power in determining whether it is used or wasted.
 11. To the giver, the gift is quickly replaced by the body. There is no permanent loss. To the receiver, the gift may be everything: life itself. (Titmuss 1971, p. 78)

We might readily acknowledge the moral value of a gift of this sort, and accept without debate that it should be permitted in our society. But Timuss made a stronger claim than this. The blood distribution system must not only tolerate this kind of gift-giving; it must disallow all other possible systems. Titmuss' argument for this rather drastic claim lay first in his general low regard for the quality of for-pay blood. He considered such blood to be exploitative and medically dangerous. Titmuss also held that a pluralistic blood system that allows for-pay blood inherently limits the freedom of people to give freely. His proof for this claim is not expressed well in The Gift Relationship, but his basic stance is that a pluralistic system cheapens the value of a blood donation. In a country where a person can receive \$15 for a blood donation, a blood donation takes on a value of \$15. A blood donation however, as Titmuss noted in point #11 of his observations about blood donations, can mean far more

than that small amount to its recipient. The life-and-death gift becomes just a small charitable donation.

Titmuss has noted for us an important hidden cost in the pluralistic system of blood acquisition and allocation in our country, but he failed to explain the costs of the system which he advocated. It is not at all certain that a purely voluntary system of the kind which Titmuss desired would produce enough blood to meet the medical needs of its population. Some countries, such as France and England, do not permit paid donations within their borders, but to meet their needs must acquire blood from other countries where the practice is permitted. Should paid donations be banned world-wide, we might realistically expect persistent shortages of blood and blood products. Titmuss might be willing to pay such a cost in order to promote the sense of community and unity within a society, but it is not at all clear that others would be willing to support this good at such a high cost.

It might be suggested that an all-volunteer system need not produce shortages of the types previously described. Education and public awareness might be used to prevent this sort of mishap, but to use the word "education" in this way implies information provided with sufficient manipulation to achieve the goal at hand. This might include stressing the value of blood transfusion, emotional appeals to the suffering of those in need of

human blood, and the creation of feelings of obligation to be a blood donor and guilt if one is not one. These manipulative efforts degrade the pure altruism which Titmuss wishes to encourage (see point 4 on the previous list). If we wish to remain true to Titmuss' program, we must either choose pure altruism with an unstable blood supply or an impure altruism with a more stable supply.

It is interesting that most forms of charity occur side-by-side with for-profit enterprises. Food, clothing, and shelter are commonly donated to those in need; each may also be obtained for a price. Medical care may be given freely or contributed as a charitable work. Religious enlightenment is free in many contexts, but paid for in others (such as in the case of formal seminary training). Counseling can be obtained without cost from skilled counselors, and is also sold at \$100 an hour. Does the existence of for-profit enterprises somehow demean the value of acts of charity or make them any less altruistic? Titmuss implies this to be the case. Titmuss desires to cultivate altruism in the population, but what does this mean? Does it mean to give people the opportunity to be altruistic, to teach them of the potential for altruism, or to encourage them to be altruistic? The first two are certainly admirable and necessary. The third, however, is self-defeating. If I expect others to be altruistic, and use whatever pressures I have at my disposal to push them

in that direction, then the acts which result are not necessarily going to be as fully altruistic as they would be otherwise.

There is certainly the need for free and voluntary blood donation, moreover, voluntary blood donation produces many benefits beyond the simple contribution to health care. The benefits from an all-volunteer system are not, however, great enough in this case to warrant the drastic changes which Titmuss has suggested.

VI. THE TECHNOLOGY OF TRANSPLANTATION

The first human whole organ transplant took place on June 17, 1950, and was performed in Mary Hospital in Chicago, Illinois. A woman with a diseased kidney was given another person's kidney, and was able to use it for six months before it failed. Despite the fact that an account of the surgery was published in the Journal of the American Medical Association, its importance was not appreciated at the time (Miller 1971, p. 4). Tissue transplantation had taken place earlier than that date, including bone, skin, and corneal transplants, and blood transfusion. In order to improve our appreciation for the value of human body parts in the reality of medical practice, this section will briefly sketch the history and use of organ and tissue transplants. The list which follows is only partial, as there is a great deal of experimentation into new types of organ transplants.

A) Blood

By far the most common body part used in medical therapy is the transfusion of human blood. The first human transfusion took place in 1818 by Dr. James Blundell at St. Thomas's and Guy's Hospitals in London. Since blood grouping and typing was not known until this century, early

experiments had generally less than favorable outcomes. Today, over a million units of blood and plasma are collected each year in this country. Units of blood and plasma are usually broken down into numerous biological components and administered as needed. The most common uses for human blood products are as follows:

1) Whole Blood -- Fresh human blood which has been tested for infectious diseases and refrigerated until needed (up to about three weeks). It is used to replace blood components and blood volume when severe bleeding, either internal or external, occurs. Whole blood is not used as frequently now as in previous years, because most patients do not need all of the blood's components. Anticoagulants (such as citrate phosphate dextrose solution) must be added to all whole blood units in order to prevent clotting.

2) Red Blood Cells -- RBCs can be separated from whole blood with a centrifuge and are used to treat anemia and to increase the blood's oxygen-carrying capacity.

3) White Blood Cells -- WBCs can also be removed from whole blood with a centrifuge. They have little use in medical therapy, but have value in medical research. WBCs are critical in the body's ability to fight off illness.

4) Plasma -- Blood plasma can be donated by plasmapheresis up to twice a week (under FDA guidelines) or can be removed from whole blood. Plasma is used as a blood

expander and as a source of other blood factors (through fractionation). It can be frozen or dehydrated to increase storage life.

5) Platelet Concentrates -- Platelets can be derived from whole blood or from blood plasma, and are used in concentrated form to control bleeding.

6) Factor VIII -- Normally derived from blood plasma, this blood factor is given to hemophiliacs to compensate for their poor clotting ability.

7) Serum Albumin -- Also normally derived from blood plasma, serum albumin is used in the treatment of shock victims.

8) Immune Globulins -- Various human immune factors can serve as diagnostic tools, in the treatment of ongoing diseases, and to produce immune sensitization. In some instances they may be used to prevent active immunization by supplying a passive (and therefore temporary) immunity, such as when Anti-D Immunoglobulin or Rhogam is given to an Rh negative mother after delivery of an Rh positive child, which prevents the woman's body from becoming sensitized to the Rh antigen.

B) Bone

Transplantation of bone tissue (bone grafting) is useful in reconstructive surgery and in repairing spinal deformations due to calcium deficiencies. Living bone

tissue will not survive in a new host but can act as a template for the body's own bone cells to cling to and eventually replace. Human cartilage has similar uses.

C) Bone Marrow

Bone marrow transplantation represents an entirely different class of therapy. Bone marrow can help to replace the immune system of a person suffering from aplastic anemia or acute leukemia. The technology of this technique is still immature, and the recipient of bone marrow is at risk of developing graft versus host disease. When that condition occurs, the transplanted immune system attacks the body of the marrow recipient, frequently killing him or her. Still, bone marrow transplants may be the only hope for patients with total immune system failure.

Bone marrow donations have been brought to the public's attention in recent months because bone marrow suitable for transplantation can be taken from a living donor. The publicity about bone marrow donation unfortunately seems to be downplaying the pain involved for the donor (who must have a quart of marrow drawn from his or her hips) and the reality of graft versus host disease. This downplaying may be a strategy to attract more donors, but ultimately there will be those who learn, after they have psychologically committed themselves to donate their

marrow, the extent of the pain involved and the possibility that their tissues will mean the death of the person that they are trying to help.

D) Skin

Skin transplants have been attempted since the turn of the century. They are of immense value to burn victims, since donated skin can protect the body from infection and slow dehydration, which can be a fatal pair of complications for burn patients. If the damaged area is small, autografts are usually used (skin taken from another part of the person's own body). For more extensive burns, cadaver skin (allografting) is used, though such grafts must be combined with a regimen of immunosuppressants and eventually be replaced by autografts.

E) Cornea

There is a long history of successful corneal transplants, dating back to 1905. Unlike many other sorts of transplants, corneal transplants do not require tissue or blood typing. As a protective covering for the eye's lens, the cornea can become damaged in any number of ways, thus impairing a person's vision. In 1988, 36,000 corneas were transplanted in the United States (according to Suzanne Beach at the Knoxville Eye Bank).

F) Kidneys

Kidney failure can result in a person dying from his or her body's own wastes. Since kidneys are found in pairs and are relatively easy to remove, kidney transplants were among the first attempted for whole organs. Reliable success was first obtained with identical twin donors, and then with closely related donors. Since the introduction of modern immunosuppressant drugs, only a blood-type match is necessary for a good chance of a successful transplant. Kidney transplants for the past decade, as recorded by the United Network for Organ Sharing, are shown in Table 1.

Table 1. Kidney Transplantation

YEAR	KIDNEYS TRANSPLANTED
1981	4,885
1982	5,358
1983	6,112
1984	6,968
1985	7,695
1986	8,975
1987	8,967
1988	9,123
1989	8,886

Because of the availability of dialysis machines, kidney transplants are no longer usually considered to be life-and-death procedures. However, kidney machines are considerably less efficient than organic kidneys and do not allow the patient to live a normal life. The one-year success rate for kidney transplants is now at 96% for

kidneys from living, related donors, and 91% for cadaveric kidneys. The national waiting list for kidneys, as of March 14, 1990, was 16,775. The cost for this procedure runs from \$25,000 to \$30,000.

G) Thymus

The thymus is needed for a healthy immune system. Because it serves to focus the immune response, a transplanted thymus may produce graft versus host disease, with catastrophic results. The first thymus transplant took place in 1957 at the University of Miami. Fetal thymus tissue (taken from stillborn or aborted fetuses) offers the best chances for this type of transplantation, as the fetal tissue is more likely to adapt to its new host.

H) Liver

Like the kidney, the liver extracts wastes and toxins from the blood. Unlike the kidneys, the liver has no "mate," and there is no mechanical substitute for the liver. The technical aspects of liver transplantation are formidable, the liver being even more difficult to remove and reattach than the heart. For this reason, it is the most expensive of common transplant procedures, costing \$135,000 to \$230,000. The first recorded liver transplant took place in 1963 at the University of Colorado Medical

Center in Denver, although the patient, a three-year-old boy, did not survive the operation. Since then, the success rate for that operation has been improved to about 65% (one-year patient survival). There are now 922 people waiting for liver transplants in this country, and roughly half of them will die before a suitable organ is available. The growth of liver transplants has been phenomenal in recent years, as demonstrated by the figures in Table 2 (again taken from UNOS records).

Table 2. Liver Transplantation

YEAR	LIVERS TRANSPLANTED
1981	26
1982	62
1983	164
1984	308
1985	602
1986	924
1987	1199
1988	1680
1989	2160

The latest development in liver transplantation has been the transplantation of livers from living donors. The left lobe of the liver may be excised from a healthy donor and given to a person needing it, usually a child needing a small organ. The liver is one of the very few organs that can regrow itself, and ideally the donor will suffer no permanent damage, while the recipient will have an organ which will grow in size to fulfill its needed role. Should

this procedure prove reliable, it will do a great deal to assist those in need of transplants.

I) Lung

Because of the circulatory interconnectedness of the heart and lungs, they are usually transplanted together. Immunologists have also found that lungs are extremely vulnerable to disease when kept outside the body. Lung transplantation alone, however, was performed before heart transplantation (1963 at the University of Mississippi Medical School). Eighty-nine lung-only transplants were performed in 1989, and 121 people are on waiting lists for lung transplants.

J) Spleen

The spleen stores blood and contribute to the body's immune system. In 1963 the first attempt at a spleen transplant was conducted at the University of Colorado Medical Center. There have been few spleen transplants since then because the body can survive the loss of the spleen, and there is little indication that the procedure will ever be common.

K) Pancreas

Three hundred and twenty-three people are currently awaiting pancreas transplants, but the number who could

benefit from them is up to eleven million. Diabetics, particularly insulin-dependent (Type I) diabetics suffer from the absence of a properly-functioning pancreas. At a current cost of \$30,00-\$40,000, the procedure, if it could produce a healthy pancreas within the host, would be a bargain. The earliest pancreas transplant (performed in 1966 at the University of Minneapolis Medical School) was the first of a long series of disappointing attempts to replace a defective pancreas. Current research is focusing on the transplantation of the islet cells in the pancreas. There is reason to believe that the use of fetal pancreatic tissues would be more effective than the transplantation of adult organs, but research into this area has been politically and legally problematic. UNOS statistics indicate an 85% survival rate for pancreatic transplants, but this is donor survival rather than graft survival, which I understand to be far lower. Most pancreas transplants in recent years have been performed in conjunction with kidney transplants. The number of pancreas transplants from 1982 to 1989 are shown in Table 3.

Table 3. Pancreas Transplantation

YEAR	PANCREATA TRANSPLANTED
1982	35
1983	61
1984	87
1985	130
1986	140
1987	142
1988	243
1989	412

L) Heart

The first heart transplant in Cape Town, South Africa, in 1967, was a major international media event. Dr. Christaan Barnard became a celebrity by breaking what had been more of a cultural taboo than a medical frontier. Heart disease is so common in our society as to need no elaboration, and the role of the heart in sustaining life is well known. Heart transplants have gone from being a violation of the natural order to now being valuable public relations tools for hospitals. The procedure has an 80% success rate, and 1,524 people are currently awaiting heart transplants. According to the GAO (Government Accounting Office) the cost of this operation is \$115,000. Table 4 shows the number of heart and heart-lung transplantation operations performed in the United States in this decade.

Table 4. Heart and Lung Transplantation

YEAR	HEARTS TRANSPLANTED	HEART/LUNGS TRANSPLANTED
1981	62	?
1982	103	?
1983	172	13
1984	346	22
1985	719	30
1986	1368	45
1987	1438	41
1988	1647	74
1989	1673	70

M) Reproductive Organs

Along with artificial insemination and oocyte donation, it is now possible to transplant testes and ovaries. The first ovarian transplant took place in 1972 in Argentina (although there are several contenders for this claim). The first testicular transplant was reported in Beirut in 1972 (Scott 1981, p. 222). The tabloid press has claimed that a complete set of ovaries, fallopian tubes, and uterus was transplanted to a man as a part of a sex-change operation in Sweden in 1987, but I have been unable to confirm this report.

While the technical aspects of these sorts of surgery are not as complicated as many other kinds of transplants, the social and ethical dimensions to the transplantation of reproductive organs should not be underestimated. The Council of Europe, in a 1975 model law, excluded the transplantation of reproductive tissues (Scott 1981, p. 74). A transplanted ovary or testicle will only generate

an egg or sperm with the genetic information of its donor. If the donor is an identical twin to the organ recipient, then that genetic information is identical with that which that person would have had. If, however, a cadaver testicle or ovary were to be used for the transplantation, the deceased would, in effect, be a parent after his or her death. Different individuals have different reactions to this possibility, reactions which must be respected even if not agreed with totally.

VII. UNOS

Why has the federal government become involved in the distribution of human donor organs? In large part, it was felt that donor organs were being distributed unjustly. Stories abounded that foreigners with large bundles of money could receive transplants at U.S. hospitals when local citizens could not. It was said that medical need was not nearly as important as having the right sort of connections when one was in need of an organ. Parents resorted to the media to try to find organs for their dying children, creating a sub-system which favored wealthy parents with attractive children.

October 19, 1984 saw the passage of Public Law 98-507, "An Act--To provide for the establishment of the Task force on Organ Transplantation Network, to authorize financial assistance for organ procurement, and for other purposes." The short title for this act is the "National Organ Transplant Act."

The act accomplished a number of things. It created a twenty-five member task force to investigate the current state of affairs with regard to organ transplantation and to report its findings back to Congress. Secondly, it established a network for providing financial assistance to non-profit organ procurement organizations. Third, it

created the Organ Procurement and Transplantation Network, a task which has since been contracted to the United Network for Organ Sharing (UNOS). Fourthly, it made illegal the sale of human organs such as "the human kidney, heart, lung, pancreas, bone marrow, cornea, eye bone and skin." However, payment could still be required for "reasonable payments associated with the removal, transportation, implantation, processing, preservation, quality control and storage of a human organ in connection with the donation of the organ." The National Organ Transplant Act also instructed the Secretary of Health and Human Services to hold a conference on the advisability of establishing a national registry of voluntary bone marrow donors.

It has been suggested that this Act was premature, given the fact that the technology of organ transplantation is still in its infancy. As Dr. Mitchell Goldman, a transplant surgeon at the University of Tennessee Medical Center at Knoxville, has informed me, the situation in the "old days" (before the National Organ Transplantation Act) was not as inhumane as the media has painted it. While the system was certainly informal, it was not necessarily capricious. As the numbers in the previous chapter show, there were relatively few transplants being performed before 1984, and these were being done by a handful of surgeons. They had contact with each other through regular

conferences and through voluntary organizations such as SEOPF (the South-Eastern Organ Procurement Foundation). In the "old days," it apparently was easier to obtain a donor organ than at present, due largely to the rarity of these operations. Research was easier in those days, because the transplant surgeons knew "who was doing what," and could channel available organs to doctors whose research was of interest.

The system which existed before 1984 was one where the transplant surgeon had almost complete control, and this in and of itself was enough to make some commentators suspicious of its overall justice. The public feared that the caprice of these medical prima donnas meant life or death for their patients. On the other hand, in a young science, still very much in experimental stages, only those actively involved could have a full appreciation of what was going on. The only people conceivably able to regulate what was happening were those who were presumably in need of regulation.

Whether the Act was based on sound needs or merely on perceived dangers, the task of taking on the duties as Organ Procurement and Transplantation Network went to the United Network for Organ Sharing. While this organization was initially conceived as a data base and cooperation facilitator, legislation was soon passed requiring hospitals wanting to do transplants either to join UNOS and

submit to its policies or to lose Medicare and Medicaid benefits. With an annual budget of \$5,878,000¹ UNOS now sets national policies for organ distribution.

How does UNOS allocate donor organs? First, it must be realized that UNOS exerts little control over organs which do not leave the hospital when they are harvested.² If the donor is living, the organ donated is certainly intended for a specific person, and never enters UNOS' supervision (except insofar as the program performing the operation must meet UNOS' specifications). Further, some programs simply prefer to use as many organs locally as possible. For example, Emory University Hospital in Atlanta harvested 36 kidneys between October and December of 1988. Of those, only two left the hospital; the remainder were used locally (according to SEOPF Quarterly Statistics). It is presumed that this policy sacrifices good antibody matches for the sake of a greater overall number of transplants. UNOS makes no attempt to judge such practices (with one exception--that of six antigen matched kidneys--which will be explained later). What it does do is to manage the national distribution of donor organs made available for transplantation.

1. According to data obtained from Russel Goding, Director of Finance at UNOS.

2. The term "harvest" is commonly used to describe organ recovery, though there are those who find the term objectionable (see Dowie 1988, pp. 23-24).

UNOS maintains a national waiting list for persons in search of organs (hearts, kidneys, livers, pancreata, heart/lung sets, and single lungs). These lists are divided by the organ needed, blood type, and age (children having their own waiting lists). Once an organ becomes available, the people on the list are given points based on a number of factors, the person with the most points being given first priority on the available organ.

A) KIDNEYS

The allocation system for cadaveric kidneys is as follows:

1) Time of Waiting

Up to ten points are awarded based on how long the person has been waiting for an organ. This is determined by the time that a request for a kidney was registered with the UNOS computer. If there are seventy people on a list, the seven who had waited the longest would each receive ten points, and so on. A very recent entry on the list would receive only one point.

2) Quality of Antigen Match

There is an area on our sixth chromosomes which is called the major histocompatibility complex. We know of four loci in this complex which have been labeled A, B, C,

and D. Each site governs a set of antigens. The reactions between these genetic sites and their antigens determines, to a large degree, whether or not a transplanted organ will be rejected. Identical twins always share their antigens, and family members tend to (based on the normal rules of genetic inheritance). When attempting to transplant an organ between an unrelated donor and recipient, these antigens are checked to estimate the compatibility between the organ and its new host. Different racial groups have typical distributions of these antigens, but it is quite possible for people of different races to have identical antigen matches. These matches are often identified as HLA (human leukocyte group A) matches.

Up to twelve points are given for antigen matching (A, B, and DR [D Related] antigens are checked) between donor and recipient. If the national waiting list locates a six-antigen match (each locus can be matched twice), that person must automatically receive the available kidney, even if that means that the organ must leave the center where it was harvested. As for one-to-five antigen matches, there is some, though not drastic, difference in the success of the transplant operation based on the quality of these matches. Research has shown that "...zero mismatches in A, B, DR, had the highest survival rates followed by mismatches in the A locus as well as in the B

locus. After that, additional incompatibilities in the DR, B and A loci had a relatively minimal effect on the one-year graft survival rates" (Terasaki 1986, p. 379).

3) Panel Reactive Antibody

On a purely local and regional level, up to ten points are assigned for the a patient's PRA rating. This is a number between 0 and 99 which reflects the likelihood of a positive reaction to a random donor. Patients who have been given many blood transfusion, past organ recipients, and women who have carried several children tend to have high PRA scores because they have been exposed to a wide variety of foreign cells. A patient which has antibodies to 80% of the population can only receive 20% of the available kidneys. As previously stated, on the national level this factor is not considered.

4) Medical Urgency

Up to ten points may be granted for the urgency of a patient's need for a kidney, but points are rarely allocated here, since dialysis is normally available.

5) Logistical Score

A maximum of six points can be given as follows:

<u>Distance from Center</u>	<u>Points</u>
0 - 50 miles	6
50 - 500 miles	5
500 - 1000 miles	4
1000 - 1500 miles	3
1500 - 2000 miles	2
2000 - 2500 miles	1
more than 2500 miles	0

Attempts are first made to place the organ locally, and then regionally (there are ten regions in this country, soon to be modified to eleven). If there is no national demand for that particular organ, then UNOS may place it internationally.

B) HEARTS AND HEART-LUNG COMBINATIONS

The allocation of hearts and heart-lung combinations is more complicated than that for kidneys, and will be reproduced verbatim from UNOS Policies:

3.7.3 Primary Allocation Criteria

3.7.3.1 Two urgency categories of waiting heart recipients are defined:

Status I -- Patients requiring cardiac and/or pulmonary assistance with one or more of the following devices in place:

- (i) Total Artificial Heart (TAH);
- (ii) Left and/or Right Ventricular Assist System (LVAS);
- (iii) Intra-aortic Balloon Pump;
- (iv) Ventilator.

OR Patients meeting BOTH of the following criteria:

- (i) The patient is in an Intensive Care Unit; and
- (ii) The patient REQUIRES inotropic agents to maintain adequate cardiac output.

Status II -- All other waiting patients who do not meet Status I criteria.

3.7.3.2 Time Waiting. The "time of waiting"

begins with the date and time the patient was activated on the UNOS computer.

3.7.3.3 Logistic Factors. The distance of the recipient hospital from the donor hospital will also be used to prioritize the recipient list for hearts, and heart-lung combinations which will not be used by the local OPO [Organ Procurement Organization]. Three zones will be defined by concentric circles of 500 and 1,000 mile radii with the donor hospital in the center. Zone A will extend to 500 miles, Zone B is defined between 500 and 1,000 miles, Zone C is beyond 1,000 miles.

3.7.3.4 Distribution. Status I hearts of all compatible blood groups. Status II hearts and heart-lung combinations, first ABO identical then ABO compatible, are allocated locally first, then in the following sequence with stratification within each group according to the time of waiting. If the heart is to be used for a heart transplant only, single or double lung allocation shall be made according to Policy 3.6, "Allocation of Extrarenal Organs Except Hearts." The allocation for hearts or heart-lung combinations shall be:

(i) First, local allocation: The choice will be made locally to utilize the organs for either a heart transplant only or for a combined heart and lung transplant. If the heart is to be used for a heart transplant only, the heart will be allocated first to local Status I patients according to length of time waiting; then to local Status II patients according to the length of time waiting. If the organs are to be used for a combined heart and lung transplant, they shall be allocated to waiting local heart-lung recipients according to length of time waiting. If the heart is not allocated locally, it will be allocated next to

(ii) Status I, heart only recipients in Zone A; then to

(iii) Combined heart and lung recipients in Zone A; then to

(iv) Status I, heart only recipients in Zone B; then to

(v) Combined heart and lung recipients in all distances outside Zone A; then to

(vi) Status II, heart only recipients in Zone A; then to

(vii) Status II, heart only recipients in

Zone B;
 (viii) Status I, heart only recipients in
Zone C; then to
 (ix) Status II, heart only recipients in Zone
C.
(UNOS Policies: Changes as of December 6, 1988,
pp. 10-11)

The list of factors considered here is fairly short, but the interplay between them is quite complex. Basically, end-stage patients have priority over less critical patients, local patients have priority over patients further away, and patients who have been waiting a long time have priority over those whose need is more recent.

C) EXTRARENAL ORGANS EXCEPT HEARTS

A point system is again used for all organs which are not kidneys or hearts. The system of allocation is very much like that for kidneys, except that urgency of need is more important and the standards for a good antibody match are left to the transplant surgeon and his or her team. As before, a preliminary division is drawn between patients who need different organs, who have different blood types, and between juvenile and adult patients.

For pancreata, the only factors considered are distance and time of waiting. Distance is considered first, with the time of waiting only used when distances are equal.

For other organs, the following points are allotted:

1) ABO Points

10 points are given to patients with identical matching blood types, and 5 points go to patients with compatible but not identical blood types (for example, an A+ recipient of an O+ liver).

2) Time Waiting

Again, up to ten points are awarded based on how long the patient has been waiting for a transplant as determined by the UNOS computer.

3) Degree of Medical Urgency

Up to twenty-four points are awarded for liver recipients based on degree of medical urgency.

<u>Points</u>	<u>Definition</u>
4	Working, In School, Growing Infant
8	Confined to Home, Self Care, Not Thriving but Stable (infant)
12	Home Requiring Professional Care, Losing Developmental Ground (infant)
16	Hospital Bound, Not in Intensive Care (ICU)
20	ICU Bound
24	In ICU, Unconscious, Ventilator

4) Logistic Factors

Points are assigned both for the distance from transplant center to donor, and from transplant center to recipient.

<u>Distance</u>	<u>Donor Points</u>	<u>Recipient Points</u>
0- 50 miles	12	6
50- 500 miles	10	5
500-1000 miles	8	4
1000-1500 miles	6	3
1500-2000 miles	4	2
2000-2500 miles	2	1
over 2500 miles	0	0

Looking at these three sets of distributional criteria, we can see fairly clear patterns of distribution. The three principles are a combination of normative and pragmatic concerns. The first principle is that an organ should go to the person who can best use it. A bad ABO or antibody match offers a lesser chance of a successful transplant than a close match, though current antirejection drug regimens have reduced the importance of this consideration. A transplant made when such a low-probability match exists would be more likely to waste the available organ. From the perspective of the patient, however, a poor possibility may be better than no possibility at all (as would be the case if organ availability were particularly low).

The second implicit principle is that a person who has the greatest need for an organ should receive it. We see this in criteria for time of waiting and medical urgency. This principle can come into conflict with the preceding principle when a patient's medical condition is grave, making the patient's need great, but likelihood of a successful transplant poor. UNOS's criteria attempt to

reconcile this conflict by making urgency more important than likelihood of success, at least in cases where the urgency is great enough to make waiting for a more compatible organ dangerous to the patient (we can be choosier with kidneys than with livers since kidney dialysis is available). UNOS considers time of waiting to be an important enough consideration to use it to break ties in allocation points. If two potential recipients receive identical scores (based on the factors listed in this chapter), the one whose name was entered on the UNOS computer first is to be given the needed organ.

The third principle is that organs should be allocated as close to the harvest site as possible. A hospital which recovers an organ usually has first choice as to its disposition, and if it chooses to make it available to other institutions, hospitals in the geographic region closest to the harvesting institution are given priority. This is a practical concern, given the brief storage life of human organs, and a normative one, supporting the value of community and of regionalism. It also encourages local initiative in procuring organs. When storage technology improves the survival time of donated organs, we will likely find less concern for this factor and more interest in obtaining the best biological match possible.

VIII. IMPLICATIONS AND CONCLUSIONS

When one considers the specific problem of the distribution of human donor organs, it is not always clear how a specific theory of justice might be applied to it. There are complexities and nuances to the allocation of human body parts which are not discussed in most theoretical works on distributive justice. One might hazard to guess that a libertarian such as Nozick would allow organs to be exchanged under the normal rules for the exchange of commodities. A libertarian would probably not object to such things as paid donations of organs from living donors, or to people being given money or services in exchange to rights to their body parts after death. At any rate, entitlement to human body parts would come from economic transactions or as free gifts. So long as deception and coercion are avoided, the forces of the marketplace are given free reign.

A person who subscribed to the doctrine of natural return would insist on knowing why a person would be in need of a new organ. If a liver were lost to alcohol consumption, or a kidney to failure to control high blood pressure, the natural return theorist might not permit organ transplants to take place. On the other hand, if a pancreas transplant could remedy juvenile-onset diabetes,

social resources might be brought to bear to see to it that that need was met.

If one desired to produce the maximum good for the maximum number through the health care delivery system, then it would seem probable that a fairly liberal program of organ transplantation would be required. Since kidney machines produce a far less pleasurable life than transplanted kidneys, organs would be made available for that purpose so long as transplantation programs did not unduly limit other needed social programs. A utilitarian would probably remove useful organs from all deceased persons as a matter of course, as the benefit to be gained from their use in transplantation would be so much greater than the displeasure that some individuals would experience at not being able to choose intact burial.

Social utility would make its own determinations about organ availability. Human donor organs, like all important but scarce health care resources, would be allotted first of all to those most valuable to the society. Older citizens might not be considered for organ transplants if their productive years were past, although, as discussed in Chapter III, an "enlightened" state might use a universal health care system to foster loyalty to the society.

John Rawls' approach to organ transplantation is fairly predictable. If one were to ponder the matter from the perspective of maximin, one would envision oneself as a

person in need of a donated heart or liver, and advocate a system of universal organ donation. This would allow those is the neediest states to receive necessary health care. A Marxist state would doubtless take the same stance, given that adequate resources were available to perform the transplant operations and to provide post-transplantation care.

Justice as equality seeks to achieve the maximum good for the maximum number by offering evenhanded treatment to all persons in the society. This does not necessarily mean that everyone would have access to organ transplants. Given the cost of organ transplants (especially heart and liver), the society might categorically refuse to permit such procedures. One would have some consolation (albeit, very little) in the knowledge that no one in the society would be allowed these costly procedures.

I will now propose a system of just distribution of human donor organs, suggest policies for the implementation of that system, and respond to probable areas of criticism and ambiguity. The system which I will suggest should not only satisfy basic considerations of justice and fairness, but also solve most of the problems now faced due to donor organ shortages, while not excluding the actualization of other societal values.

Our original question was this: how may a person be said to be due a human donor organ, and how may these

organs be justly distributed in the society? In order to answer this question, I will apply the theory of altruistic reciprocity and the mechanism of the common lot which were explained in Chapters II and III.

Cadaver organ donation is, or at least should be, a decision made by the survivors of a deceased person based on their understanding of that person's wishes regarding the disposal of his or her remains. In some cases, there is a written document to record those wishes; in other cases the deceased made remarks to his or her family regarding organ donation, and in many cases the family must make assumptions based on their knowledge of that person. The issue is clouded, however, because the matter of organ donation and the disposal of the remains of a loved one can be extremely emotional, and a refusal to do more than is absolutely necessary at the time of death can be a means of coping with that loss.

It has been suggested (see Peters 1988 and Thomasma 1988) that it is not unreasonable to reverse our present assumptions about the wishes of the deceased. Currently, it normally takes a positive consent or evidence of intention of consent before an organ or set of organs can be removed for transplantation. This reflects our conventional thinking about informed consent, where any interventions on a person's body can only be made with the person's specific informed agreement to the procedure.

Reversed, our assumptions would allow us to remove a person's organs unless that person had specifically requested not to be an organ donor. This action would doubtless ease the present shortage of human donor organs but would not enhance distributive justice. This approach to organ removal could easily create distrust for the medical profession and make people feel exploited by the organ procurement system. Some people object to organ removal because they do not wish to be treated like a car in a junkyard or simply a "source for parts." It might be countered that people who feel this way would be free to sign organ non-donation cards, but that option would not be enough to dispel the general feelings of vulnerability and exploitation which would result.

It is also likely that this presumed consent law would not be uniformly or predictably applied. We know that it is possible for a wealthy, well-placed, or simply articulate family to have the death certificate of a person who has died of an "embarrassing" cause of death changed to reflect a less embarrassing terminal condition. Our national statistics about deaths from alcohol overdose and alcohol-induced liver failure are incorrectly low because families do not wish to have it known that a loved one died from what might be taken to be a moral weakness. We still are not certain about the toll which AIDS is taking on our population because AIDS patients may be officially listed

as dying from pneumonia (without indicating that it is one of the forms such as pneumocystis indicative of AIDS) or simply cardiac failure. Given that medical professionals are "cooperative" in this way with the families of the deceased, it is likely that many would honor an informal request not to violate the dead. Even if it were possible to thoroughly police all deaths in the country so as to prevent this, it would be virtually impossible to convince the population that such exceptions were not being made.

It might be argued that there can be a just system of distribution even if it is not understood or trusted by the public. This disregard for public perceptions is, however, an unhealthy and ultimately counterproductive attitude. Distrust of the organ procurement and allocation system has been the single strongest barrier to adequate donations in this country. Rumors that the families of the deceased must bear the cost of transplantation are not dispelled when publicly contradicted because the medical establishment is not trusted. Fears that potential organ donors are not given the best possible medical care and may be declared dead before their time discourage people from signing organ donor cards. Further, the belief that organs from black donors will go to white patients has meant that very few blacks donate their organs. If the human donor distribution system does not concern itself with its own perceived trustworthiness and attempts to use force of law

to coerce acceptance, the public will find a way to sabotage its goals.

There is also reason to believe that a rule of reverse consent is based on the assumption that refusal to donate is simply irrational, or at best a peculiar position which requires sincere conviction and some sort of religious justification. Most people do not know how bodies are embalmed, and have inaccurate ideas about their decomposition, either with or without embalming procedures. Belief that the body must be buried whole is normally based on a concern for bodily resurrection, and the belief that one's flesh and bones must be present in one place to receive resurrection. Given, however, the processes that take place in any body which has been in the ground for several decades, it is frequently accepted that a resurrected corpse must have miraculous restoration of the body if it is to be of any use. If divine power can restore a body which has lost its fluids and been reduced to dust by the years, it seems appropriate that it can replace organs which have been given to others. To say that a god could do one but not the other seems peculiar; to say that a god wouldn't restore the body of a person who has desired to share life with another in need challenges the moral discretion of that god. Still, I do not wish to assume that the desire to be buried whole is irrational, or to judge those who hold that position. What I wish to

achieve is a just distribution of donor organs.

Justice would connect the business of organ procurement with the matter of organ distribution. I propose the following: that access to organs for transplantation be linked to the willingness to be an organ donor. The right to receive a donated organ should be tied to the duty to donate organs. This is more than simply a crude quid pro quo. What we would be establishing here is a special common lot in which members of the common lot would be willing to forego being buried whole so that other members of the common lot might be able to receive needed organ transplants. A person in this group would be entitled to a transplantation when needed by virtue of a willingness to be a donor. As with many other aspects of altruistic reciprocity, those who are most likely to be givers are least likely to be receivers.

We have two questions here, one of justice, and one of incentive. As a matter of justice, altruistic reciprocity demands that those who wish to benefit from some form of cooperative behavior be willing, at least in the abstract, to cooperate at the other end. Statistics aside, I am as willing to give an organ as receive one, though I certainly would prefer to do neither. As a practical question, this requirement will give many people a better reason to donate than currently exists, namely, that they will not be allowed access to organs if they have not shown some

willingness to donate organs. As organ transplants become more and more common (as they likely will in the future, given the trends shown in Chapter VI), more and more people will be concerned with the question of transplantation. It has been suggested that this use of the quid pro quo is merely a coercive tool to increase the pool of potential organ donors. I am satisfied, as shown in Chapters II and III, that this is an adequate guide to justice, and one which would be just even if it did not increase availability of donor organs. It is hoped, however, that it would have a positive impact on the availability of organs while at the same time counteracting the injustice of individuals being reluctant to be organ donors but all too willing to receive organs when the need arises. In the second book of the Republic, Plato offers that justice should be both good in-and-of-itself as well as useful for the production of other goods (Republic 356D).

To date, there have been two cases where a person receiving a heart-lung combination transplant was able to donate their old heart to another patient. Consider how absurd it would be for a person in such a circumstance to say, "No, just throw that thing away. I don't believe in organ donation." Should such a request be made at some point in the future, it would very justly be ignored. It is wrong to consider organ donation to be an act of altruism to be engaged in at one's whimsy but to consider

organ transplantation to be an inalienable right.

There is obviously a plethora of difficulties which would be faced in attempting to employ this system of distribution. If it were put into effect suddenly and without concern for other social considerations, it would produce far more injustice than justice. This system is not meant to be a heavy-handed attempt to increase organ donation through use of fear and governmental force. It would have to be enacted gradually over a period of time so that attitudes could shift as the way that organs are distributed changes. I will attempt to answer a number of questions and objections which will be raised concerning this system.

A) Principles of Inclusion

There must be a way for people to opt into and opt out of the organ transplantation common lot. In its final form, there should be something of a local registry with a computer record of individual desires in this area. It has been suggested that medical insurance cards rather than drivers' licenses should be used to record a person's attitudes about organ donation, because in the event of a traffic accident the driver's license is kept by the police, and third-party payer cards are the first thing that emergency room workers look for on an injured person. In either case, it cannot be assumed that every member of

the population owns or carries an insurance card or a driver's license. A "hard copy" of intent concerning organ donation is certainly a good thing, and a simple written document would be useful for those who do not have ready access to telephones or other telecommunications systems. However, an electronic record has its own advantages, and could be used in conjunction with written statements of intention. This record would have the same status with respect to privacy as other medical records.

Once listed on a computer network, people would be free to change their status as they wish, though a time lag for processing changes of status may serve to limit the very human tendency for individuals to minimize their duties and maximize their own benefits from a system of resource allocation. Basic blood typing and genotyping (from blood samples) may make admission into the system more than a formality and assist in cataloging availability of donors. Yet this certainly involves more individual initiative than signing a donor card, something that many well-meaning individuals "haven't gotten around to." The question will still arise, and probably often, of how to count people who have not officially indicated their wishes. Colorado has attempted to require a "yes" or "no" to organ donation before anyone can receive a driver's license, but even that step only covers a portion of the population. Altruistic reciprocity, as modified in Chapter

II, gives us guidance in this matter. The first step in altruistic reciprocity is to assume cooperation, and then to match cooperation with cooperation, and defection with defection. Does this mean that a first organ transplant is to be awarded as a matter of course? Not exactly. It means that in a situation where cooperation or defection cannot be ascertained for certain, we may presuppose cooperation. This would apply if a child needed an organ, or if a transplant was required by an elderly or mentally ill adult who could not express his or her wishes. It also means that in an emergency (where there is not time to determine a person's attitudes and preferences), we may assume in the favor of the person in need. However, this assumption cannot be maintained in the face of "defective" behavior, that is, for persons who have forgone opportunities to indicate a willingness to be an organ donor. While this would mean little for most people, as most of us will never be in need of donated organs, it would be a factor in determining the allocation of human donor organs.

Thus far there has been only the most general limitation on receiving organs. Further work is required to show how organs will be allocated when there are not enough to go around (which is likely to happen even if 100% of the population is willing to donate organs, since many deaths occur in such a manner as to render organs

inappropriate for transplantation, and because of the compatibility which must exist between donor and recipient).

B) Rules for Allocation

Once the common lot of organ donors has been established, organs would be available to members of the common lot when needed. Reproductive organs would be excluded from the common lot unless specifically authorized by the deceased as those transplants are of a low order of need and have unusual ethical ramifications. Organs would be allocated first of all to common lot members, i.e., to those who had indicated a willingness to be organ donors.

When there are not enough organs to go around, there are three factors to be taken into consideration, factors which may conflict with each other. The first is the distance from donor to recipient; organs should be allocated as close to the region of their harvest as possible. The reasons for this position were considered on p. 138.

The second factor is one of need. In UNOS criteria this is determined by a category of medical urgency (which is not applied when kidneys are allocated) and by a listing of time of waiting. Neither of these considerations exactly weighs the question of need, but the problem of need is one which defies exacting quantification.

The final factor to be weighed is the question of the probability of success. This factor weighs specifically against the problem of need, as presumably a perfectly healthy person (one who wouldn't need an organ) would be the most hospitable environment for an organ. UNOS criteria consider blood typing, HLA grouping, and sometimes panel reactive antibodies. The data that I have seen indicates that the difference in long-term survival does not support some of the distributional patterns which UNOS advocates (such as the difference between 2 and 5 antigen matched kidneys, which can outweigh months of waiting).

The challenge here is to reconcile the potential of a patient's death from want of an organ with the potential for the waste of an organ (which, given to another person, might have spared that particular life). Reciprocity gives us only the guidance that we should seek out a resolution which we might find acceptable for ourselves, were we in need of an organ. When we consider the case of a person who has received an organ but biologically rejected it, we might be inclined either to give that person priority in receiving another organ, or no further organs at all, depending on whether we are envisioning ourselves as that person or as another potential organ recipient. I do not find my ethical intuitions especially clear on this point, and I suspect that others are likewise lacking an "obvious" solution. As I see it, either need or probability of

success can be given greater weight, so long as that weight is applied on a consistent basis. This could mean either that we give preference to those who are in the greatest need and then ask who the best histological match for the organ is, or that we seek out the best biological match for the organ and then determine who of those best suited to the organ is most in need of it.

C) Family Refusal

As it stands in this country, hospitals will not remove organs from the deceased without the consent of the deceased's family. Under the system that I am proposing, the next-of-kin would not be allowed to refuse organ donation (assuming that some record exists indicating a willingness to donate) unless it could be established to the satisfaction of the local organ removal coordinator that the deceased had decided to opt out of the common lot. This prevents a simple deception from reducing the pool of donated organs.

If the deceased is a minor, transplantation will be strongly encouraged but not required if the parents do not wish it. Children will always be allowed to receive organ transplants without their parents' donation status affecting their ability to receive organs. As far as their serving as donors goes, we should note that the organs of small children are extremely valuable for transplantation.

It would be appropriate as a matter of justice that, given the liberality being shown children, they should all be made to serve as organ donors in the event of their deaths. Yet for reasons other than reasons of justice we may choose to spare undue trauma to parents who have just lost their offspring, and therefore allow them to refuse the donation of their childrens' organs.

D) The Allocation of Blood

If a human organ common lot would give us justice in the distribution of donor organs, would not that system also work for the distribution of blood? It could allow blood and blood products to only go to blood donors or to those medically unable to donate or to minors too young to donate. As it stands, money may serve as a substitute for blood donation. In the East Tennessee area, the Medic system attempts to provide blood to everyone who needs it, at a cost if they are not "insured," or without cost to those who have donated within the past year. Medic personnel did not respond kindly to the suggestion that insured community members be given priority during blood shortages. They indicated that they would not wish to flatly refuse blood to people who simply choose not to be blood donors. One practical reason for this is that it is not desirable to force people to donate blood who do not wish to because many people are in high-risk groups (for

AIDS and hepatitis) and do not wish to admit that they are bad candidates for blood donation. It was explained that when people go to family members for blood (as many people are doing with the possibility of transfusion-induced AIDS) before planned surgery, they may place too much pressure on them and compel them to donate when they know that they might be doing more harm than good by donating. People find it difficult to accept the possibility that "good old Uncle Fred" might be an IV drug user or a homosexual, and Uncle Fred may choose to donate blood rather than have to explain why he should not. Given that the majority of the population will need blood or blood products at some time in their lives, one would not desire a blood center filled with the full cross-spectrum of society. How many IV drug users and homosexuals will trust the blood banks to keep their reasons for not donating confidential? Given the risks of blood-transmittable diseases like AIDS and hepatitis, one would not wish to unduly encourage blood donation by those who are in questionable risk groups.

Might not the same reasoning be used with regards to organ donation? Yes, but to a lesser extent for a number of reasons. First of all, the secrets of a dead person are less damaging than the secrets of the living. Also, a person's medical records may be available at the time of death. Finally, extreme medical conditions will likely have some role in a person's demise.

Another important difference between blood donation and organ donation is that an organ transplant after death involves no pain, no risk to one's health, and no infringement on one's time. Since blood transfusions are needed in greater numbers than organs, and since the donation process is more demanding, it is likely that qualified donors will not meet the community's needs without additional incentives. As many weaknesses as "paid blood" has, it is still preferable to no blood at all. If more people would donate freely, then there would be no need for paid donors. One might hope that once people understand the connection between organ donation and organ transplantation, they would appreciate that the relationship is the same as that between blood donation and blood transfusions, and respond appropriately.

E) Fetal Tissue

There is no area in a discussion of human organ donation as difficult as the area of fetal tissue transplantation. Fetal pancreata, brain tissues, and immune-type organs hold therapeutic promise that adult organs cannot match. However, the status of the unborn is a hotly contested issue in this society.

While there is no reason why fetal organs from miscarriages and spontaneous abortions could not be used just as organs from dead children may be used, the most

obvious source of fetal tissues is the product of the many elective abortions that take place in this country every year. Making the best of a bad situation is usually considered to be quite reasonable, but there are a considerable number of people who do not want to see any encouragement to the abortion industry, including the possible constructive use of terminated human fetuses. Until that social dispute is resolved (if indeed it ever is), caution would be best in approaching this area, and a cautious position would not be to use therapeutically aborted fetuses as a source of transplant tissues.

If tissues from miscarriages and spontaneous abortions are routinely used while tissues from induced abortions are disallowed, we do risk the same problem which is currently plaguing African elephants: any ivory taken illegally can be claimed to have been harvested legally. In that way, a legal avenue for a small quantity of a commodity can worsen problems with regulation of illegally-obtained goods.

F) Charitable Donations

Is any kindness to be extended to those who need organ transplants but who are not members of the common lot? Certainly such kindness is not to be systematically excluded. At present, there is a recommended 10% ceiling on the number of transplants that a transplant center may give to foreign patients. A fixed percentage is not a

reliable tool for justice, as the availability of organs may rise and fall from month to month. Individuals who are willing to donate organs should certainly receive priority in the allocation of organs, since they alone can be said to deserve available organs. Those who are not potential donors (such as non-resident aliens and local citizens who are not themselves willing to be organ donors) may receive available organs as a matter of charity. This may mean that the chances of receiving a healthy organ with a good antigen match are small, but the duty to charity does not override the moral obligation to do justice.

G) Designated Donations

A young boy in California had a premonition of his death, and stated that if he should die he wanted his organs to go to a girl who he knew that needed them. Shortly thereafter, he died quite suddenly, and his wish was honored. Is a designated donation just? There are those who would specify that their organs go to a member of their race, religion or profession. There are families who want to know who is receiving the organs of their loved ones, or who wish to decide who should receive those gifts.

Most transplant specialists are trying to keep the identities of the organ donor and recipient hidden from each other. In part, this practice is intended to limit the possibility of unfavorable contact between the parties,

and in part it is to encourage a spirit of social unity. Organ recipients have remarked that they feel much more interdependent with other people since their transplants, and the fact of their survival makes this feeling quite reasonable. Not honoring designated donations may discourage some donations, but it will foster a greater sense of social unity and, just as importantly, remove hints of favoritism from the organ distribution system. Everyone who belongs to the common lot must feel that it is likely that he or she will be able to receive an organ when needed. Without this faith in the system, the system cannot operate.

The clear implication [of our present situation]: Transplanting can survive only if it remains available to anyone who might, under different circumstances, donate an organ.

.....
By sharing organs and discovering ways to make them function in other peoples' bodies, we confirm our interdependence and expand our sense of community. (Dowie 1989, pp. 19-20)

This common lot, properly brought into being, will be an enriching and life-enhancing organism. We will be brought together in our needs and in what we have to give to each other.

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