PUBLIC AFFAIRS QUARTERLY Volume 21, Number 1, January 2007

# SELF-OWNERSHIP AND TRANSPLANTABLE HUMAN ORGANS

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or nearly two decades, philosophers have given sustained attention to the Controversial possibility of (legal) markets in transplantable human organs. Most of this discussion has focused on whether such markets would enhance or diminish autonomy, in either the personal sense (e.g., Taylor 2002, Zutlevics 2001, Boddington 1998, Tadd 1991) or the Kantian moral sense (e.g., Merle 2000, Gerrand 1999, Morelli 1999, Munzer 1994, Chadwick 1989). What this discussion has lacked is any consideration of the relationship between self-ownership and the use of markets or other institutions for allocating organs. This absence is not entirely surprising: whenever self-ownership is brought up in this context, it is usually assumed that it unambiguously implies free markets in body parts (e.g., Block 2003, pp. 61, 71–72, 75). Like autonomy, however, self-ownership is a concept with many different associated conceptions, and its implications for institutions that distribute organs may be more complex than is usually assumed. This paper will concentrate on the most prominent and defensible of these conceptions—control self-ownership—and examine its implications for both market and nonmarket organ allocation mechanisms.

Like all varieties of ownership, *self*-ownership consists of a bundle of rights and liberties, powers and immunities, etc. The relatively narrow conception of ownership known as "control self-ownership" (hereafter CSO) in the literature is composed of the rights of use and exclusion, the power of transfer, and an immunity from expropriation (Christman 1991; Christman 1994, p. 160). These four incidents of self-ownership pertain to one's body and labor power, and they are exercised by self-owners *in rem* (i.e., against the world) as opposed to *in personam* (i.e., against particular people). CSO is a compact conception of self-ownership, as its incidents all focus on managerial control over the object in question (viz., the self) and therefore circle about the right of exclusion; it excludes the right to income, which is usually included in the broader, libertarian conceptions of self-ownership. Various moral defenses of CSO have been offered, including ones based upon personal autonomy (e.g., Christman 1991) and Kantian moral autonomy (e.g., Taylor 2004). One thing that these defenses have in common

is a failure to support the more extensive conception of self-ownership proffered by libertarians, who endorse an absolute right to labor income and thus condemn any form of redistributive labor taxation (e.g., Nozick 1974, pp. 169, 172). Libertarians try to link the control rights constituting CSO, which protect individual sovereignty and are strongly supported by our moral intuitions, with an untrammeled right to income, but their efforts to do so have been sharply and effectively criticized (e.g., Christman 1994, Taylor 2005).

With this rough definition of CSO in hand, the essay will proceed as follows. First, it will provide an overview of the laws and institutions governing organ allocation in the United States (with a little discussion of European systems) and an economic analysis of the causes of the shortage in transplantable human organs. Next, it will examine the implications of CSO for nonmarket organ allocation mechanisms. Finally, it will show that CSO, if accompanied by an economistic concern for human welfare (i.e., one involving an ordinal, interpersonally noncomparable conception of utility), can offer limited support to markets in human organs, ranging from mutual-insurance pools to full-fledged *inter vivos* (i.e., live donor) organ sales.

## I. THE SHORTAGE OF TRANSPLANTABLE HUMAN ORGANS: LAWS, INSTITUTIONS, AND ECONOMICS

Thanks to major advances in transplantation technology over the previous quarter-century (e.g., the development in the early 1980s of the powerful antirejection drug cyclosporin), a wide array of human organs can now be fruitfully transplanted (Finkel 2001). Such organs are usually from cadaveric sources, but *inter vivos* (i.e., live donor) transplants are also possible for certain organs, including kidneys, lungs, and livers (only lobes are removed in the latter two cases—see Grady 2001).<sup>2</sup> Unfortunately, the demand for transplantable organs far outstrips the available supply, and the shortage is rapidly worsening. The number of patients on the UNOS (United Network for Organ Sharing) waiting list for all categories of transplants skyrocketed from around 25,000 in 1991 to nearly 92,000 in 2006, but cadaveric organ donations increased very little. As a result, the number of patients on the waiting list who die waiting for an organ has increased from about 2000 per year in 1991 to over 6000 per year in 2005 (AP 2001; Graham 1999, UNOS 2006). These figures probably understate the mortality and morbidity costs of the shortage, though: the mortality figures do not include those who may have benefited from an organ but were not on the waiting list, and the time spent waiting for a transplant often involves enormous suffering, especially for those patients who have experienced renal failure and are undergoing dialysis as a result (Crespi 1994, p. 9).3

In understanding the causes of the shortage—legal, institutional, and economic—two pieces of legislation are especially important: the Uniform Anatomical

Gift Act (UAGA) of 1968 and the National Organ Transplant Act (NOTA) of 1984. The UAGA, which was adopted in all states by 1973, gives individuals the right to become cadaveric organ donors; if they do not make their wishes known, their next of kin may exercise this right (Crespi 1994, p. 13).<sup>4</sup> NOTA, which was the first major piece of federal legislation affecting organ transplantation, established a national Organ Procurement and Transplantation Network (operated by UNOS since 1986) and prohibited organ sales (Crespi 1994, pp. 14–15; Spurr 1993, p. 192).<sup>5</sup> These two pieces of legislation have jointly created the current U.S. organ-transplant institutions: individuals (or their next of kin) make decisions to become cadaveric organ donors on an unpaid, voluntary basis; after death, their organs are "harvested" and allotted by regional Organ Procurement Organizations (OPOs); this allocation of transplantable organs operates with the assistance of, and according to triage rules promulgated by, UNOS (Graham 1999).

The failure of this system to eliminate or even alleviate the organ shortage has prompted the adoption of several minor reforms, none of which have significantly reduced the size of the shortage. The first of these reforms, called "required request," was first proposed by Arthur Caplan in 1984 and has since been adopted (with varying degrees of stringency) by dozens of states and the federal government, which in 1987 began requiring the reform of hospitals that participated in the Medicare and Medicaid programs (Cohen 1989, p. 21; Crespi 1994, pp. 15–16). As the name suggests, this reform mandates that doctors ask the next of kin if they wish to donate the organs of the deceased. Physicians are understandably reluctant to press this issue at such a traumatic time, especially in the absence of any additional incentives, and the results have been consequently disappointing (Hansmann 1989, p. 61; Spurr 1993, p. 193). Noncompliance by doctors and other participants in the organ procurement process presents a major obstacle to efforts to reduce organ shortages within the existing institutional framework.

The second of these reforms, called "mandated choice," would require all individuals over a certain age to choose whether or not they want to be cadaveric organ donors (Hansmann 1989, p. 61). Colorado adopted such a program in 1981: in order to obtain a driver's license there, you must state a preference regarding the disposition of your organs after death; sixty percent of applicants agree to be donors (Cohen 1989, pp. 7, 9; MacDonald 1997, p. 183; Colorado Revised Statutes §§ 12-34-105 and 42-2-107). Given these results, "mandated choice" looks like a promising reform, especially if *national* versions were adopted (e.g., linking choice to federal income-tax returns). Unfortunately, it has not been tested on a large enough scale to measure its effectiveness, nor is it clear that it would ultimately lead to a higher rate of organ *harvesting*, given the continuing problem of physician noncompliance. Advocates of such an approach have suggested a variety of ways to increase the reform's effectiveness (e.g., by arguing that all public education accompanying the reform advocate donation [Chouhan and Draper 2003]) but have not addressed the noncompliance issue.

The third and final reform, called "presumed consent" or "escheatage," gives the state the right to harvest an individual's organs upon death unless that individual has explicitly "opted out" of the system; moreover, the exercise of this right does not require the consent of the next of kin. This reform has been adopted in at least fourteen continental European countries, which now authorize procurement without consent (Crespi 1994, p. 53). Perhaps surprisingly, given the radical nature of this reform, the results have been disappointing: none of these countries has a significantly higher organ donation rate than the United States, and a study of the French experience with escheatage found that organ supplies failed to increase substantially after the reform (Hansmann 1989, p. 61; Gerson 1987, pp. 1024–1025). The source of escheatage's failure appears once again to be physician noncompliance: doctors fail to take the initiative in harvesting organs and continue to feel a moral obligation to seek the consent of surviving family members (Cohen 1989, pp. 19–20).

As we have seen, physician and OPO noncompliance is the proximate cause of the failure of these reform efforts and of the continuing shortage in transplantable human organs, and public campaigns to encourage organ donation will have only a limited effect unless this problem can be overcome (e.g., by stiffening legal penalties on doctors and OPOs for failing to follow donor wishes). Many scholars (most notably economists) have argued, however, that the *root* cause of the problem is the absence of alienable property rights in transplantable human organs: because cadaveric organs have no residual claimant, no one (least of all the physician) has a sufficient incentive to harvest them. Moreover, NOTA's prohibition of commerce in such organs prevents OPOs from offering financial incentives to potential donors. An effective price cap of zero exists on human organs, and the resulting shortage should be of little surprise to anyone familiar with the basic principles of economics. Consider Figure 1, where the vertical axis measures the price of a human organ of a certain quality (say, a healthy kidney) and the horizontal axis measures the quantity of this organ supplied or demanded. The supply of this organ is depicted by the supply curve S, which intersects the horizontal axis at A > 0 to indicate that even at a price of zero some people will be cadaveric or inter vivos organ donors. The demand for this organ is represented by the demand curves D, which have been drawn with steep slopes to show that demand is price inelastic: with their lives and health at stake, consumers will presumably not be very responsive to price changes. Given a price cap of zero, as mandated by NOTA, a shortage of transplantable organs will exist that will increase from AB to AC as demand rises from  $D_1$  to  $D_2$  (as it has done in the past decade). Were alienable property rights in human organs established, there would be no shortage: prices would equilibrate quantity supplied and quantity demanded, and increases in demand would simply lead to price increases (from  $P_1$  to  $P_2$  in Figure 1, assuming competitive pricing). On this reading, the shortage in transplantable human organs is not an accident of nature but rather the result of a deliberate policy choice—namely, NOTA's prohibition of markets in human organs.

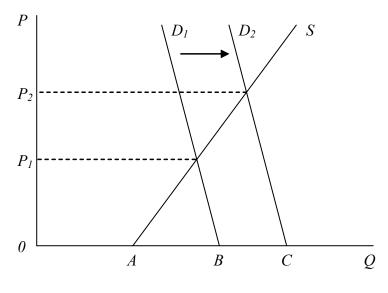


Figure 1

Such economic analyses lead to a predictable set of policy prescriptions for reforming the existing organ-donation institutions. First, on the supply side, financial incentives must be given to either the donors themselves or their next of kin to encourage organ donation. Such incentives might take any number of forms, including but not limited to a small cash payment or donation to charity for those who sign donor cards, a promise to the donor to make a large payment to the donor's estate if cadaveric organ harvesting occurs, or a large payment or donation to charity for those families who agree to the harvesting of their deceased relative's organs.7 Second, on the demand side, additional incentives must be provided to OPOs and their employees to persuade them to harvest more transplantable human organs. In order not to create dangerous conflicts of interest, salable property rights in these organs could be vested in third parties (such as insurance or organ-procurement corporations, who would contract with potential donors), who would then have a legal cause of action against the employees of OPOs who renege on their duty to preserve transplantable organs after "bright line" events (e.g., brain death) due to family objections. Legal liability for physicians might promote good stewardship of transplantable organs in those cases where altruism and admonition have failed.

The preceding recommendations assume, however, that the overriding policy objective is the elimination of the shortage. The creation of an organ market may have *moral* costs associated with it that outweigh any benefits of reducing or eliminating the shortage. The commodification of organs, for example, may diminish respect for human life and coarsen the culture of societies that allow it (Radin 1987, 1996). Moreover, establishing such a market may be inconsistent

with a Kantian regard for human dignity. (See Munzer 1994 for a carefully qualified argument to this effect.) These important objections to organ markets should be kept in mind as the remainder of the paper goes on to argue that CSO can be used to criticize existing and proposed nonmarket organ-transplant institutions and (in conjunction with other principles) to defend organ markets; these objections will be revisited in the conclusion of the paper.

### II. CSO AND NONMARKET ORGAN-TRANSPLANT INSTITUTIONS

Control self-ownership, despite its relatively narrow policy purview, rules out at least three nonmarket organ-transplant institutions: escheatage, compensated takings of organs, and restricted gifting. Escheatage or "presumed consent," which was discussed in the last section, is in effect the collectivization of cadaveric organs with an opt-out provision. The inconsistency of this policy with CSO is easy to see: whereas CSO assumes that its component incidents (rights of use and exclusion, power of transfer, and immunity from expropriation with respect to both body and labor) originally inhere in the person and can only be ceded with his or her explicit consent, escheatage assumes that a subset of these incidents—viz., rights, powers, etc., over transplantable cadaveric organs—originally inheres in the state but can be reassigned to citizens at their request. This may seem like a distinction without a difference—how hard is it to put in a request?—but it is in fact a large one. The incidents of CSO, which are vital to the protection of self-sovereignty, can never be viewed even in part as gifts of the state; they are prepolitical rights that act as prior constraints on state behavior. States that arrogate any of these rights to themselves, even for the strongest of reasons (such as ameliorating organ shortages), fail to respect persons. 8 Thus, when individuals die without indicating whether they wish to be organ donors, their next of kin should decide for the simple reason that close relatives are presumably in a better position than the state to know or at least guess the deceased's preferences. As we have seen, this appears to be the way escheatage systems work in practice, at least in Europe (Gerson 1987).

Crespi has called escheatage "a governmental taking of property without compensation" (Crespi 1994, p. 54), which raises an interesting question: would governmental takings of human organs be acceptable if compensation *were* paid? To see that this question is hardly an idle one, consider the following discussion by Susan Rose-Ackerman about the possibility of monopoly power in the market for transplantable human organs and tissues:

The monopoly power issue arises most clearly in the provision of human tissue. . . . Thus, if tissue typing shows that your kidney is the best one to transplant into your cousin, a bilateral monopoly situation is created, and if sales are permitted, you might hold out for a large payment in return for saving your cousin's life. Similarly, some types of rare antibodies are only available from a few people and are extremely valuable in the production of certain drugs. In such contexts, an entirely

unregulated market could have undesirable distributive consequences if people exercise their monopoly over scarce bodily tissues and antibodies at the expense of the sick. Prohibiting sales is not, however, the only response to the problem. One could instead imitate the policy followed in more conventional cases of monopoly power by permitting sales but regulating prices so that they reflect marginal costs and risks borne by the donor. (Rose-Ackerman 1987, p. 949)

Such price regulation would certainly be allowed under CSO: as we have seen, CSO does not include a right to income, so the regulation and taxation of wages is consistent with it.

The state has a much richer array of responses to monopoly power than Rose-Ackerman suggests, however. Consider the following two additional possibilities:

- Eminent domain: In situations of bilateral monopoly (e.g., a "holdout" problem where a landowner refuses to sell property along the route of a proposed highway), the state will sometimes respond by exercising its power of eminent domain, i.e., by seizing the property in question and compensating the owner at fair market value.
- Common-carrier restrictions: In the transportation industry, state-imposed "common-carrier" restrictions prevent firms with substantial market power from discriminating among customers, e.g., refusing to provide service to some customers.

These two types of state intervention might be used in Rose-Ackerman's kidney and antibody examples, respectively. If the person with the uniquely valuable kidney holds out (whether for spite or in expectation of a higher price), thereby placing his cousin at risk of premature death, the state could simply seize the kidney against his will and order the cousin to pay fair market value as compensation. Similarly, the state could mandate that *if* persons with rare antibodies decide to offer them for sale, *then* they must offer them to all comers; compensation of a sort would be paid in the form of the revenue received from previously excluded customers. Neither of these policy interventions would be consistent with CSO, however, because they both violate its constituent incidents: the former involves a blatant violation of the right of exclusion, while the latter severely restricts the power of transfer by specifying that transfers must be made either to all paying customers or to none. In these cases and many others, CSO functions as a binding constraint on the state's pursuit of equity.

The third nonmarket organ-transplant institution that CSO rules out is restricted gifting. A particularly extreme example of restricted gifting can be found in Richard Titmuss's seminal book *The Gift Relationship*, which focuses on blood donation:

In a positive sense, we believe that policy and processes should enable men to be free to choose to give to unnamed strangers. . . . In the interests of the freedom of all men they should not, however, be free to sell their blood or decide on the specific

destination of the gift. The choice between these claims—between these different kinds of freedom—has to be a social policy decision; in other words, it is a moral and political decision for society as a whole. (Titmuss 1997, p. 310)

Titmuss believes that if individuals are allowed to target their gifts of blood, a more generalized form of altruism will be made impossible: individuals wanting to make an open donation, seeing that others are targeting their gifts of blood towards friends or relatives, will feel like chumps and begin to target their own gifts; so in order to "enable men to be free to choose to give to unnamed strangers," the freedom to give to named friends and relatives must be eliminated. Regardless of how compelling one finds this argument, restricted gifting is inconsistent with CSO because it involves a limitation on the power of transfer similar in kind to the common-carrier restrictions just discussed. Contra Titmuss, CSO requires that decisions about the destination of donated organs and tissues be made by the donors themselves, not by "society as a whole."

CSO may have implications for many other organ-transplant institutions or practices. For example, it was mentioned earlier (note 4) that OPOs and their employees generally refuse to harvest the organs of willing donors if their family members object. This practice is in violation not only of the UAGA but also of CSO, which morally underwrites the institution of cadaveric organ donation. Carrying out the reasonable requests of those who have recently died is one of the most profound ways to show respect for them and their autonomy, especially where these requests concern the disposition of their own bodies. The unwillingness of doctors to harvest organs is understandable in these circumstances, but respect for the person requires that third parties be empowered to apply legal pressure to OPOs as well as their employees in order to guarantee that the express wishes of the deceased are followed in such cases.

### III. CSO AND MARKET ORGAN-TRANSPLANT INSTITUTIONS

Although control self-ownership can be used to rule out a large set of nonmarket organ-transplant institutions, it cannot underwrite organ markets on its own. The CSO incidents of use, exclusion, transfer, and nonexpropriation are necessary but *not* sufficient conditions to establish any kind of organ market: CSO does not include the right to income and consequently would not be violated were the state to hamstring organ markets with large taxes or fines. As noted above (note 9), CSO mandates the *decriminalization* of organ markets, not their *legalization*. In order to make the case for legalization and a policy of modest taxation and regulation, we will have to use CSO in conjunction with other political principles.

In the introduction it was noted that CSO could be defended on grounds of personal and moral autonomy, but it can also be defended on the grounds of *welfare*. The argument proceeds as follows. If we equate welfare with the satisfaction of revealed preferences, then any voluntary (i.e., noncoerced and nonfraudulent)

trade is welfare-enhancing: the fact that two parties engage in such trade implies that it is mutually beneficial; otherwise, they would have refused to trade. In order for trade to take place, however, resources must be alienable, and CSO guarantees the alienability of a key set of resources—namely, the human body and its labor. Therefore, a concern for welfare so understood should lead one to endorse CSO.<sup>12</sup>

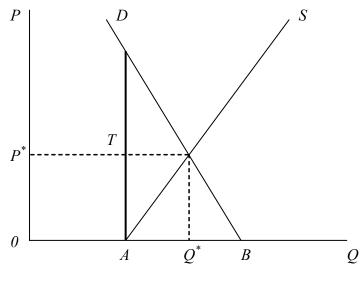


Figure 2

This argument, however, clearly has much broader implications. It suggests not only the value of CSO but also the damage of state policies, such as heavy taxation or fines, that hinder voluntary exchange. Consider Figure 2 (a variant of Figure 1), which represents a model organ market. An untaxed and competitive market in transplantable human organs—made possible in part by the protection of CSO rights—will generate equilibrium price  $P^*$  and quantity  $Q^*$ . At this price, all mutually advantageous trades will be carried out. A unit tax of size T (represented here by the dark line) would effectively shut down the organ market, though, leaving no suppliers but volunteers. The welfare loss generated by this tax, known as its "deadweight loss," is depicted here by the triangle with T as its base; it is equal in size to the welfare gains that would result were the organs indexed A through  $Q^*$  actually traded. Smaller taxes would generate smaller supply distortions and welfare losses, of course.

The upshot of this economic analysis is that a concern for welfare militates in favor not only of CSO (which can be defended on autonomy grounds as well) but also of a legal, regulated market in human organs, with its tax rate set at a modest but efficient level.<sup>13</sup> Optimal regulation of such a market would concern itself with preserving competitive conditions (on both the supply and demand

sides), disseminating information, and guaranteeing quality.<sup>14</sup> Thus, although CSO cannot underwrite organ markets on its own, it can do so in combination with an economistic conception of welfare. We will provisionally adopt such a conception for the remainder of this section and consider its implications for the structure of organ markets.

Such organ markets could take any number of forms. They could be limited to cadaveric organs, or they might include *inter vivos* (e.g., live donor) organs as well. Markets for cadaveric organs could be operated with incentives ranging from cash and insurance-premium reductions to charitable contributions and preferential access to the organ pool. Governments, insurance companies, or specialized private organ-procurement firms could organize these markets. The use of economic incentives might be allowed only on the supply side, with the allocation of organs carried out according to triage rules rather than ability to pay—a system that would obviously require substantial public subsidies.

On efficiency grounds, the best system would probably be private, inclusive (allowing both cadaveric and *inter vivos* organs to be traded), and mainly cash-based. Such a system would maximize flexibility, encourage competition, and extend the market to include as many traders and kinds of trade as possible. The poor could be empowered to purchase organs through either government-subsidized health insurance (the most likely route) or vouchers.

Opposition by citizens and medical professionals to organ markets is quite strong, though opinion in the transplant community is apparently shifting in favor of such markets (Caplan and Coelho 1998, pp. 193–195). Consequently, implementation of a full-fledged market system, such as the one just mentioned, will be out of the question for the foreseeable future. Any efforts to alleviate the shortage in transplantable human organs through a market will therefore have to proceed in a piecemeal fashion and in a way that is sensitive to the concerns and fears of its opponents. Apart from one experiment currently underway in Pennsylvania (which defrays some funeral expenses for families willing to donate the organs of their deceased relatives—see note 7), the use of economic incentives to encourage organ donation has never been tried. In reviewing proposed institutional forms for an organ market, we will therefore start with the least controversial reform (mutual-insurance pools) and end with the most controversial (*inter vivos* trade). Policy reform in this area, if it occurs at all, will most likely follow a similar path of least political resistance.

## A. Mutual-Insurance Pools: Schwindt and Vining

One source of opposition to organ markets may be the use of money as an incentive for donation. Schwindt and Vining (1998) propose an alternative to the current system that uses a nonmonetary incentive to encourage cadaveric-organ donation. They would establish a mutual-insurance pool for transplant organs, so that individuals who agreed to give up their organs after death would receive

preferential access to organs while they are alive. This "organ club" idea works on an easily understood principle of reciprocity: only those who are willing to give up their organs for others should expect access to organs that others give up. The payment-in-kind offered by this system might encourage additional donations and help alleviate the shortage in transplantable organs, though the size of the effect could only be determined by experiment.

A mutual-insurance pool of this kind could be organized in different ways. Schwindt and Vining suggest that it be run as a government monopsony and that members of the pool be given preferential access to *all* cadaveric organs, not just those donated by pool members (Schwindt and Vining 1998, pp. 728, 730). Neither of these are essential features of the institution, however, and the former has been sharply criticized in a different context by Hansmann (1989, p. 63). <sup>16</sup>

### B. Futures Markets: Schwindt and Vining, Hansmann, and Cohen

Another institutional possibility, more controversial than the last, is a futures market in cadaveric organs. In return for some form of compensation, individuals would agree to give up their organs upon death to some kind of procurement institution. The nature of the compensation and the character of the procurement institution vary from proposal to proposal. Schwindt and Vining (1986) would make the federal government the sole purchaser of organs; compensation would be in cash, with the amount varying according to individual characteristics (e.g., health and age); and individuals would be unable to withdraw from the program once they had enrolled. Hansmann (1989) would make private insurance companies competitive purchasers of organs; compensation would be in the form of reduced premia; and individuals would be able to make participation decisions on an annual basis. Cohen (1989) would make private companies the competitive purchasers of organs, and compensation would be in the form of a death benefit to heirs (though he leaves the door open for cash payments).<sup>17</sup>

All of these markets would be carefully regulated. Hansmann and Cohen, for example, allow that prices offered for organs might be set administratively (e.g., by price floors). All of these authors are also quite hostile to *inter vivos* organ trades. This hostility is sometimes the result of principled moral opposition, but more often it results from political considerations: opposition to *inter vivos* organ trades is likely to be much stronger than opposition to futures markets. Cohen suggests prices that might be paid for various organs (Cohen 1989, pp. 35–36), but these numbers are purely speculative. As a result, it is difficult to know how strong an incentive potential sellers would have. Given that the value of an option to harvest organs at death is equal to the expected price of those organs at time of death, discounted for expected time to death and for the expected probability of a successful harvest of usable organs, the compensation to sellers might be low. (Incidentally, one can see why Hansmann makes insurance firms the purchasers: they employ experts in actuarial science who are uniquely situated to calculate such option values.)<sup>18</sup>

C. Live-Donor Organ Sales:

The International Forum for Transplant Ethics (IFTE)

As noted at the beginning of the paper, *inter vivos* (i.e., live donor) transplants are possible for a number of organs, including kidneys, lungs, and livers. Although transplanting lobes from lungs and livers can be relatively risky and painful for the donor, kidney donation is guite safe: Finkel (2001) reports that "of the halfdozen studies performed on [kidney] donors, including a twenty-year follow-up, none have revealed any increased mortality. Health-insurance companies do not raise their rates for kidney donors." Because kidney transplants are safe for donors and highly beneficial for recipients (in terms of their survival rates, quality of life, and avoidance of dialysis costs), calls for live-donor kidney sales are becoming more frequent as the shortage of transplantable kidneys grows worse. A major breakthrough in the debate occurred in 1998, when a group of surgeons, lawyers, and medical ethicists in the transplant community, all members of the International Forum for Transplant Ethics (IFTE), published an editorial in the medical journal The Lancet calling for live-donor kidney sales (Radcliffe-Richards et al. 1998). Many of the authors of this piece, including Harvard professor and transplant surgeon Nicholas Tilney, had previously opposed such sales (Caplan and Coelho 1998, p. 195).

Available data suggest that the welfare gains from such sales would be significant. On a cost basis alone, the savings would be big: dialysis costs about \$40,000 per year, while kidneys (which usually last about twenty years if they are from live donors) cost anywhere from \$800 to \$10,000 in the black markets of such countries as India, Iraq, and Turkey (Gottlieb 2000, Finkel 2001). Horror stories abound, of course, of botched operations and the cruel exploitation of both donors and recipients in black markets (see Finkel 2001), but these are a predictable consequence of the market's illegality. In a legal, regulated market for kidneys, the state (or states, if global trade were allowed) could enforce contracts, deter medical malpractice, and provide information about risks to both buyers and sellers (Hippen 2005).

The prospect of an international market in kidneys and other organs is certainly not an inspiring one, and many commentators are understandably hostile towards it. <sup>19</sup> If futures markets in cadaveric organs were so successful as to eliminate the shortage, then proposals for live-donor markets might be gratefully shelved. Failing this possibility, however, an economistic concern for welfare militates in favor of experimenting with such markets for the simple reason that (for kidneys at least) the gains to recipients are so large and the costs to donors are so small. Given that the risks to donors are of the same order of magnitude as the risks they would incur by entering certain occupations, arguments against such markets on grounds of economic exploitation seem weak, at least on the utilitarian grounds assumed in this section.

#### IV. CONCLUSION

This paper began by examining existing nonmarket organ-transplant institutions in the U.S. and (to a lesser extent) Europe and by providing an economic analysis of the causes of the current organ shortage, which suggests that it is the result of an absence of markets. It went on to consider the implications of a narrow conception of self-ownership—CSO—for nonmarket and market institutions for organ allocation. It found that CSO rules out a large set of nonmarket institutions, including escheatage, compensated takings of organs, and restricted gifting. It also discovered that CSO, *if* supplemented by an economistic concern for welfare, could underwrite markets in human organs of varying types, ranging from mutual-insurance pools to *inter vivos* (i.e., live donor) organ sales.

Certain Kantian and anticommodificationist concerns regarding organ markets were bracketed at the end of Section I, but we should return to them briefly here. There are numerous features of the proposed markets—especially *inter vivos* ones—that are morally troubling, not the least of which is their tendency to degrade persons and their bodies, to objectify and commodify what should be "raised above all price" (Kant 1996, p. 84). Consider the following example, in which this tendency is manifest: CSO clearly grounds the rights to commit suicide and have one's organs disposed of as one wishes and—if supplemented by an economistic concern for welfare—to have them sold in legal markets, with proceeds going to heirs, charity, etc. The prospect of organ markets filled with the vital organs (e.g., hearts, lungs) of suicide victims and the likelihood that the existence of such markets would *encourage* suicides at the margin (as suicidal people contemplated the benefit to heirs and charities of their decision) are deeply disturbing. Is there any way we can respond to our strong Kantian and anticommodificationist intuitions against such markets?

As noted in the introduction, one can offer a Kantian defense of CSO (Taylor 2004), but as we have seen the question remains whether a *legalization* of organ markets is consistent with a Kantian respect for the person. As both Stephen Munzer (1994) and Nicole Gerrand (1999) have observed, however, Kant's worries regarding body-part sales were expressed in his *Tugendlehre* (Doctrine of Virtue) and were focused not on state legislation but on living ethically (Kant 1996, p. 547). Consequently, there is nothing in Kant's *political* philosophy that would obviously rule out organ markets, even if they are questionable on Kantian *ethical* grounds. Given the focus of this paper on justifying particular reforms in organ-allocation institutions rather than specific ethical practices by individuals, these concerns (important though they are) can reasonably be set aside.

Anticommodificationists' concerns, however, cannot be dismissed so easily, as they are specifically addressed to political and institutional matters (e.g., Radin 1987, 1996). To a great extent, their concerns overlap with Kantian ones, as they worry that expanding markets lead to pervasive objectification and instrumentalism and therefore cheapen human life and coarsen our culture. If markets *do* in fact

lead to such "conceptual commodification," then their expansion is indeed a cause for concern, perhaps even political concern, but the empirical claim is difficult to evaluate (Radin 1996, pp. 104–106, 118). Even if we assume its truth, however, hostility to markets on these grounds is itself expansionist, tending to condemn activity (e.g., assembly-line production) that most would find unobjectionable (Radin 1996, pp. 73, 106; cf. Tadd 1991). Still, these concerns are serious ones, and arguments for organ markets (or markets more generally) are often blind to such threats to human dignity. Whether these objections should be allowed to override the strong welfarist considerations that favor the legalization of organ markets is another matter entirely.

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#### NOTES

I wish to thank Chris Kutz, Eric Schickler, Shannon Stimson, Sam Wheeler, and an anonymous referee for *PAQ* for their helpful comments and suggestions.

- 1. A partial exception to this claim is Cherry (2005). Although Cherry never uses the term "self-ownership" and does not speak to the vast literature on this topic, he does briefly address some of the potential incidents of self-ownership (e.g., the power of transfer) as well as survey three possible defenses of more or less extensive ownership schemes over the body (pp. 28–36). What Cherry does not do is (1) specify a *particular* conception of self-ownership and then (2) *directly* apply it to the subject of organ-transplant institutions—which is what this paper will endeavor to do.
- 2. Kidneys can be obtained from both live donors and cadavers, but the quality of the organs from these two sources is quite different: median survival length is eleven years for a cadaveric kidney but over twenty years for a live-donor one (Finkel 2001).
- 3. "Dialysis is a tricky thing, rough on the body—it keeps you alive while gradually killing you. It is not uncommon for a person to lose 15 pounds during a single three-hour dialysis session" (Finkel 2001).
- 4. The UAGA gives priority to the wishes of the deceased rather than to the desires of their next of kin, but this rule is usually not followed in practice, resulting in lower levels of organ procurement:

A government survey of the nation's 61 OPOs found wide variations in how they decide whether to remove organs from the dead for transplant. Just 29 of the groups have an official policy on whether to follow the wishes of the deceased or of family members. If a person had indicated in a living will or on a donor card that he wanted to be a donor but his survivors opposed it, only seven groups—12 percent—said they would probably remove the organs. Fifty-two of the groups surveyed—85 percent—said they rarely have documentation of the deceased's wishes. And when they do, 51 of them—84 percent—said families do not always go along with the deceased's wishes. (AP 2001; emphasis added)

- 5. NOTA makes it a federal crime "for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce." The punishment for violation is a fine of up to \$50,000 and/or up to five years in prison (Crespi 1994, p. 15).
- 6. As Crespi notes, the most transplantable bodily organs come from individuals who have been "victim[s] of a sudden death caused by traumatic brain injury or cerebral hemorrhage," especially if they are young and healthy (Crespi 1994, pp. 5–6). Such deaths are particularly wrenching for family members, and therefore create a perverse situation for doctors: the more suitable the organs are for transplant, the more likely it is doctors will shirk their "required request" responsibilities to procure organs for patients on the UNOS waiting list—who are, unlike the grieving family members, usually nameless and faceless abstractions.
- 7. The first experiment along these lines is currently being conducted in Pennsylvania:

State health officials say that by early next year [2000], they will begin offering a stipend of about \$300 to help families of organ donors cover their funeral expenses; the stipend, authorized by a 1994 law, will not be paid directly to relatives, but rather to funeral homes under a pilot project that will be monitored for three years by a panel of medical ethicists to see if it increases organ donations.... The Federal Government says that the payments may violate NOTA, which classifies human organs as national resources and prohibits their sale. (Stolberg 1999)

8. For a review of objections to escheatage systems, see Cohen (1989, pp. 15–21) and Crespi (1994, pp. 53-54). Note that for this nonmarket organ-allocation mechanism, as for the other two reviewed in this section, social-contract defenses might exist. That is, following John Rawls, individuals might hypothetically consent to certain limitations on CSO incidents in a suitably defined original position. Such defenses would need to overcome at least two obstacles. First, given that principles chosen in the original position are quite general and abstract, it is unclear whether the proposed "tailoring" of basic liberties can be done without opening up the possibility of other, more objectionable limitations when principles are actually applied via the four-stage sequence (Rawls 1999, pp. 171–176). For example, whereas a draft or nonconsensual autopsy seems relatively unproblematic, as the tradeoffs contemplated are between basic liberties alone (specifically, managerial rights over oneself versus physical integrity, which is threatened by enemy attack or by possible "foul play" that autopsies are designed to detect), escheatage seems more problematic, as the tradeoff contemplated is now between managerial rights over oneself and welfare concerns over artificially generated organ shortages—a variety of tradeoff that, if allowed in principle, could open the door to much more worrisome tradeoffs (e.g., depriving the sighted of their eyes for the welfare of the blind—see Nozick 1974, p. 206). Second, the nonmarket mechanisms considered here (especially the compensated taking of organs and tissues from the living) might, even if chosen in the original position, create severe "strains of commitment" for real-world citizens: psychological barriers likely exist to this sort of taking and would lead to perceptions of illegitimacy at best and active resistance at worst (Rawls 1999, pp. 153-154). The possibility of successful social-contract defenses cannot be ruled out, however, as these two obstacles might be overcome; it will simply be assumed for the rest of the paper that they cannot be, without further argument.

- 9. Notice that a whole range of CSO-consistent policy interventions remain, including the levying of fines to punish discriminatory behavior. A distinction must be made between the *decriminalization* and the *legalization* of behavior, as the former but not the latter allows fines and other civil penalties (e.g., public shaming, which is sometimes used to punish fathers in arrears for child support). CSO requires that a wide range of activities, including the holding out and discrimination described above, be decriminalized but not necessarily legalized: fines, shaming, and other civil penalties—unlike eminent domain and common-carrier restrictions—fail to violate the incidents of CSO, which do not include rights to income, public reputation, etc. Moreover, even if the practices *were* legalized, taxation and/or regulation of any earnings associated with them would be consistent with CSO, as noted above.
- 10. An anonymous reviewer reports that "some American OPOs have addressed the physician noncompliance issue, primarily by formally mandating procurement after donation even in the face of next-of-kin objection." The author has been unable to determine how widespread or effective these policy changes have been.
- 11. One example of an *unreasonable* demand: Jeremy Bentham's mummified body, per his request, still sits in a closet in the board room of University College, London—though his head, which evidently fell off some time ago, rests on a platter at his feet (Stromberg 1986, p. 59).
- 12. The "so understood" here indicates that only an ordinal, interpersonally non-comparable form of utility is being assumed. Stronger assumptions of cardinality and comparability might *threaten* CSO by condoning CSO-violating but welfare-improving forced transfers. Utilitarianism of a stricter variety would be a double-edged sword here.
- 13. An efficient system of commodity taxation (i.e., one that minimizes the size of overall deadweight losses, subject to the government's budget constraint) generally follows what is called the "inverse elasticity rule": *ceteris paribus*, the less price-elastic supply of, and demand for, a commodity are, the higher its tax rate should be. This rule makes intuitive sense: the less responsive suppliers and demanders are to changes in price, the less distorting a tax of any given size will be. Given that demanders and (possibly) suppliers of organs will not be particularly responsive to price changes, *relatively* high tax rates on organs might be justified on efficiency grounds.
- 14. Titmuss (1997), among others (e.g., Arrow 1972 and Stewart 1992), worries that a market in human organs and tissues (such as blood) might lead to lower quality levels than would exist in a purely voluntary system: unhealthy people (e.g., vagrants, drug addicts), who would not have donated in a voluntary system, may do so once money is offered. Although the risk of such adverse-selection problems should not be minimized, Rose-Ackerman points out that there are any number of ways to deal with this problem short of banning markets: for example, imposing legal liability for damages on sellers (Kessel 1974), labeling organs and tissues as "volunteer" or "paid" (already required by the FDA for blood [Scott 1981, pp. 194–195]), and better screening, including quality testing of organs and tissues and background checks on donors (Rose-Ackerman 1987, p. 946).
- 15. More precisely, it has not been *legally* tried. For an intriguing (and at times horrifying) look at the illegal market in kidneys—which is flourishing in such places as Israel and Turkey—see Finkel 2001.

- 16. As with any insurance scheme, adverse-selection problems are also of concern. Schwindt and Vining suggest that low-risk individuals could be given preferential access *within* the pool as a kind of premium reduction (1998, p. 730). Such discrimination among individuals with different risk levels would help alleviate the adverse-selection problem.
- 17. Crespi (1994) offers yet another proposal for a futures market, but it is almost indistinguishable from Cohen's.
- 18. In 1969, Mississippi gave its citizens the right to sell their organs to hospitals, which would harvest them at death; breach of contract required repayment of the option price (plus interest at 6 percent) to the hospital (Scott 1981, p. 190). This system was superceded by NOTA in 1984, which outlawed all organ markets. There is no evidence that the futures market Mississippi had in place during the 1969–1984 period was ever used.
- 19. See, for example, Scheper-Hughes (1998, 2000) and Cohen (1999)—though the former has some odd moments:

But the very idea of organ scarcity has to be questioned. It's an artificially created need, invented by transplant technicians and dangled before the eyes of an ever-expanding sick, ageing, and dying population. And it's a scarcity that can never under any circumstances be satisfied, for underlying the need is the quintessentially human denial and refusal of death. (Scheper-Hughes 1998)

#### REFERENCES

- Arrow, K. 1972. "Gifts and Exchanges." *Philosophy and Public Affairs*, vol. 1, no. 4, pp. 343–362.
- Associated Press (AP). 2001. "Dilemmas Cited in Removing Organs." *New York Times* (January 16).
- Block, W. 2003. "Toward a Libertarian Theory of Inalienability: A Critique of Rothbard, Barnett, Smith, Kinsella, Gordon, and Epstein." *Journal of Libertarian Studies*, vol. 17, no. 2, pp. 39–85.
- Boddington, P. 1998. "Organ Donation after Death—Should I Decide, or Should My Family?" *Journal of Applied Philosophy*, vol. 15, no. 1, p. 69–81.
- Caplan, A., and D. Coelho. 1998. *The Ethics of Organ Transplants: The Current Debate* (Amherst, N.Y.: Prometheus Books).
- Chadwick, R. 1989. "The Market for Bodily Parts: Kant and Duties to Oneself." *Journal of Applied Philosophy*, vol. 6, pp. 129–139.
- Cherry, Mark. 2005. *Kidney for Sale by Owner: Human Organs, Transplantation, and the Market* (Washington: Georgetown University Press).
- Chouhan, P., and H. Draper. 2003. "Modified Mandated Choice for Organ Procurement." *Journal of Medical Ethics*, vol. 29, pp. 157–162.
- Christman, John. 1991. "Self-Ownership, Equality, and the Structure of Property Rights." *Political Theory*, vol. 19, pp. 28–46.
- \_\_\_\_\_1994. *The Myth of Property: Toward an Egalitarian Theory of Owner-ship* (Oxford: Oxford University Press).

- Cohen, Lawrence. 1999. "Where It Hurts: Indian Material for an Ethics of Organ Transplantation." *Dædalus*, vol. 128, no. 4, pp. 135–165.
- Cohen, Lloyd. 1989. "Increasing the Supply of Transplant Organs: The Virtues of a Futures Market." *The George Washington Law Review*, vol. 58, no. 1, pp. 1–51.
- Crespi, G. 1994. "Overcoming the Legal Obstacles to the Creation of a Futures Market in Bodily Organs." *Ohio State Law Journal*, vol. 55, no. 1, pp. 1–77.
- Finkel, M. 2001. "This Little Kidney Went to Market." *New York Times Magazine* (May 27).
- Gerrand, N. 1999. "The Misuse of Kant in the Debate about a Market for Human Body Parts." *Journal of Applied Philosophy*, vol. 16, no. 1, pp. 59–67.
- Gerson, B. 1987. "Refining the Law of Organ Donation: Lessons from the French Law of Presumed Consent." *New York University Journal of International Law and Politics*, vol. 19, p. 1013.
- Gottlieb, B. 2000. "How Much Is that Kidney in the Window?" *New Republic* (May 22).
- Grady, D. 2001. "Taking Risks to Save a Friend, Healthy Give Up their Organs." *New York Times* (June 24).
- Graham, W. 1999. "Organ Transplantation in the United States. http://www.unos.org.
- Hansmann, H. 1989. "The Economics and Ethics of Markets for Human Organs." *Journal of Health Politics, Policy, and Law*, vol. 14, no. 1, pp. 57–85.
- Hippen, Benjamin. 2005. "In Defense of a Regulated Market in Kidneys from Living Vendors." *Journal of Medicine and Philosophy*, vol. 30, pp. 593–626.
- Kant, Immanuel. 1996. *Practical Philosophy*, trans. and ed. Mary Gregor (Cambridge: Cambridge University Press).
- Kessel, R. 1974. "Transfused Blood, Serum Hepatitis, and the Coase Theorem." *Journal of Law and Economics*, vol. 17, pp. 265–289.
- MacDonald, Andrew. 1997. "Organ Donation: The Time Has Come to Refocus the Ethical Spotlight." *Stanford Law and Policy Review*, vol. 8, p. 177.
- Merle, J. C. 2000. "A Kantian Argument for a Duty to Donate One's Organs: A Reply to Nicole Gerrand." *Journal of Applied Philosophy*, vol. 17, no. 1, pp. 93–101.
- Morelli, M. 1999. "Commerce in Organs: A Kantian Critique." *Journal of Social Philosophy*, vol. 30, no. 2, pp. 315–324.
- Munzer, S. 1994. "An Uneasy Case against Property Rights in Body Parts." *Social Philosophy and Policy*, vol. 11, no. 2, pp. 259–286.
- Nozick, Robert. 1974. Anarchy, State, and Utopia (New York: Basic Books).
- Radcliffe-Richards, J., A. S. Daar, R. D. Guttmann, R. Hoffenberg, I. Kennedy, M. Lock, R. A. Sells, and N. Tilney. 1998. "The Case for Allowing Kidney Sales." *The Lancet*, vol. 352, pp. 1950–1952.
- Radin, Margaret Jane. 1987. "Market-Inalienability." *Harvard Law Review*, vol. 100, p. 1849.

- \_\_\_\_\_1996. *Contested Commodities* (Cambridge, Mass.: Harvard University Press).
- Rawls, John. 1999. *A Theory of Justice* (rev. ed.) (Cambridge, Mass.: Harvard University Press).
- Rose-Ackerman, S. 1987. "Inalienability and the Theory of Property Rights." *Columbia Law Review*, vol. 85, pp. 931–969.
- Scheper-Hughes, N. 1998. "Organ Trade: The New Cannibalism." *The New Internationalist* (April), pp. 14–17.
- \_\_\_\_\_. 2000. "The Global Traffic in Organs." *Current Anthropology*, vol. 41, no. 2, pp. 191–224.
- Schwindt, R., and A. Vining. 1986. "Proposal for a Future Delivery Market for Transplant Organs." *Journal of Health Politics, Policy, and Law*, vol. 11, pp. 483–500.
- \_\_\_\_\_. 1998. "Proposal for a Mutual Insurance Pool for Transplant Organs." *Journal of Health Politics, Policy, and Law*, vol. 23, no. 5, pp. 725–741.
- Scott, R. 1981. The Body as Property (New York: Viking Press).
- Spurr, S. 1993. "The Proposed Market for Human Organs." *Journal of Health Politics, Policy, and Law*, vol. 18, no. 1, pp. 189–202.
- Stewart, H. 1992. "Rationality and the Market for Human Blood." *Journal of Economic Behavior and Organization*, vol. 19, pp. 125–143.
- Stolberg, S. 1999. "Pennsylvania Set to Break Taboo on Reward for Organ Donations." *New York Times* (May 6).
- Stromberg, R. 1986. *European Intellectual History Since 1789* (Englewood Cliffs, N.J.: Prentice Hall).
- Tadd, G. V. 1991. "The Market for Bodily Parts: A Response to Ruth Chadwick." *Journal of Applied Philosophy*, vol. 8, pp. 95–102.
- Taylor, J. C. 2002. "Autonomy, Constraining Options, and Organ Sales." *Journal of Applied Philosophy*, vol. 19, no. 3, pp. 273–285.
- Taylor, R. S. . 2004. "A Kantian Defense of Self-Ownership." *The Journal of Political Philosophy*, vol. 12, no. 1, pp. 65–78.
- \_\_\_\_\_\_. 2005. "Self-Ownership and the Limits of Libertarianism." *Social Theory and Practice*, vol. 31, no. 4, pp. 465–482.
- Titmuss, R. 1997. *The Gift Relationship: From Human Blood to Social Policy* (New York: New Press [original edition (1971) with new chapters]).
- UNOS. 2006. http://www.unos.org/.
- Zutlevics, T. L. 2001. "Markets and the Needy: Organ Sales or Aid?" *Journal of Applied Philosophy*, vol. 18, no. 3, pp. 297–302.