



Europäische Akademie

zur Erforschung von Folgen wissenschaftlich-technischer Entwicklungen
Bad Neuenahr-Ahrweiler GmbH

Direktor:
Professor Dr. Carl Friedrich Gethmann

Newsletter

Akademie-Brief ▪ No. 40 (July 2003)

Editorial

Since the beginning of the year 2000 the Europäische Akademie has added a further tool for improving the implementation of the European perspective into its work by offering a Research Fellowship Programme. The fellowship programme allows qualified foreign scholars to carry out research projects in a variety of scientific fields relating to the work of the academy. Research fellowships for a stay between 3 and 6 months are offered on competitive basis to Europe-based scholars.

Themes that have been explored by guest-scholars as part of the fellowship programme include: "Philosophical analysis of arguments justifying legal regulations in the area of medicine and biotechnology", "propositional logic", "suicide and altruism", "the rationality of Homo Economicus", "Societal decision making and genetics" and "Eugenic abortion and moral uncertainty".

Applications may be submitted at any time. Letters of application should include evidence of academic research and publications (PhD level) and a short exposé of the intended project and its relation to the work of the Europäische Akademie. The academy supports East-West academic ties and therefore particularly welcomes applications from East European scholars.

The Newsletter reports regularly about the research fellows.

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Focus

Financial Incentives for Organ Donors?

Friedrich Breyer

Presently 13,000 Germans are waiting for an organ transplant, of whom more than 750 die each year. This situation was not alleviated by the Transplantation Law of 1997. No doubt: Human organs are scarce commodities, and human suffering could be greatly reduced if society found ways to increase their supply. In this paper we discuss options for giving incentives to promote the donation of organs without impinging upon the freedom of choice of the potential donors. The first option is the so-called solidarity model which is based on the idea of voluntary and mutual support, the second one the opening of a market in which living donors can offer their kidney for a financial reward.

1. The Scarcity of Human Organs in Germany

Since 1967, when Christian Barnard performed the first heart transplantation in Cape Town, transplantation medicine has evolved into a well established branch of surgery with high case volume and long average patient survival times. In Germany alone, more than 3,800 transplantations of solid organs were performed in 2000, of which kidneys had a share of almost 60 per cent (see Table 1).

On the other hand, the demand for human organs measured by the number of new entries in the waiting lists exceeds the supply by up to 67 per cent, depending on the individual type of organ. Over time this excess demand has led to long waiting lists, in particular for those

organs whose failure does not lead to immediate death of the patient, mainly kidneys. While the supply of kidneys and thus the rate of transplants was virtually stable at about 2000 a year, the waiting list has steadily increased to about 14,000 so that even if no new cases of renal failure occurred – a totally unrealistic assumption –, it would now take seven years to eliminate the waiting list at the present rate of supply. It is also apparent from empirical observations that the Transplantation Act of 1997 has failed to bring about a reversal of the trend towards increasing scarcity.

Moreover, the inadequacy of organ supply in Germany would have even more severe consequences, if there were no net imports of organs from other member

	Kidney	Liver	Heart	Lung	Pancreas
Number of transplantations	2.219	780	418	158	244
New applications	2.706	1.056	627	264	279
Number on waiting list	9.510	600	381	270	153
Number of deaths on waiting list	355	155	142	86	24

Table 1: Statistics on Organ Transplantation in Germany (2000)

Source: Deutsche Stiftung Organtransplantation (2000), various tables.

states of the Eurotransplant network which comprises the Benelux countries, Austria, Slovenia and Germany. Some of the member states, notably Belgium and Austria have different legal regulations on organ procurement which lead to a considerably higher supply of organs per capita.

The scarcity of human organs has a number of very undesirable consequences which make it a burning problem:

1. Each year, a large number of patients on the waiting list die because no suitable organ became available. In 2000 this number was at least 750.
2. Patients with end-stage renal failure, who are treated by dialysis experience a much lower quality of life than patients with a donor kidney.
3. Renal dialysis is the more expensive treatment, as compared to transplantation. According to a calculation made by the "Deutsche Stiftung Organtransplantation" (German Foundation for Organ Transplantation) dialysis entails an average annual costs of 40,000 Euro, while a transplantation costs about 45,000 Euro and the follow-up treatment 10,000 Euro per year. If the average organ survival time is estimated (conservatively) at 10 years, the savings per kidney transplant amounts to (400.000 - 145.000 =) 255.000 Euro per case. Therefore, even the health insurance companies should have a strong interest in raising the supply of donor kidneys.

It must be emphasised that a cost reduction can be expected only for kidney transplants while with all other organs the benefit consists exclusively in the additional life years of the organ recipients.

2. Legal Regulations on Organ Procurement

As indicated above, the supply of organs depends mainly on the legal regulations on organ procurement, where the following three types are the most common:

- a) *Opting-In Solution*: A procurement of organs is allowed only if the deceased has given his written assent.
- b) *Qualified Opting-In Solution*: A procurement of organs is allowed if either the deceased has given his written assent or – if no written statement is available – if the legally closest relative agrees. The relative ought to obey the presumptive will of the donor.
- c) *Opting-Out Solution*: A procurement of organs is not allowed if the deceased has explicitly refused a donation.

The German Transplantation Act of 1997 (§§ 3, 4) contains rule b), while rule c) governs in Belgium and Austria. It is easy

to see that the rules are described in an increasing order of organ supply and in a decreasing order of respect of property rights of a person over his body beyond death. In fact, the organ supply in Belgium and Austria (about 25 per million population per year) is about twice as high as in Germany or the Netherlands (12 per million per year).

3. Reasons for the Organ Scarcity and Attempts to Solve It

According to opinion polls, 70 per cent of all Germans are in principle willing to donate their organs upon death. However, this figure is in stark contrast to the number of those actually holding a donor card. In the year 2000, only 4 per cent of all transplantations performed in Germany could be based on the written consent of the donor and in 9 per cent of all cases, there was an oral consent as witnessed by the donor's relatives. In all other cases, relatives had to make the decision on the basis of the presumptive wish of the donor (81 per cent) or their own value judgement (6 per cent).

The numbers show a blatant discrepancy between i) the general, but non-binding assent to organ donation, and ii) the failure to give this lip service any meaning through taking the appropriate action. The reasons for this contradiction and for the failure of the official transplantation policy to raise organ supply should be carefully analysed. As a first guess, the share of 70 per cent of general assent is probably an overestimate of the "true" willingness to donate because – in particular in oral interviews – there is presumably a large incentive for the respondent to place himself in a favorable light by giving the "right" answers.

The higher organ supply in countries with more liberal procurement laws shows that part of the difference is probably due to inertia which leads many people to "choose" the default option of no donor card. On the other hand, even people who have actively deliberated on the donation of organs may have two separate kinds of objections against it:

1. Some are afraid that in a critical situation they might be given up prematurely since physicians might view them not only as patients but also as a potential organ bank. This objection is supported by the denial of the brain death criterion in small parts of the medical community.
2. Others are afraid that between brain death and the decision to explant one or several organs, their body will be held alive artificially and thus they are denied a death in dignity.

Health policy makers in Germany try hard to dispel these fears. Besides that, they

attempt to increase the organ supply by using nothing but moral suasion. Moreover, in their PR campaigns they never fail to emphasize the altruistic character of organ donation. In the leaflet "Wie ein zweites Leben" (Like a Second Life), the Bundeszentrale für gesundheitliche Aufklärung characterises posthumous organ donation with the words: "The willingness to donate organs must not depend upon economic considerations. It shall be based upon a voluntary humanitarian decision. For this reason, costs of the donor's burial are not reimbursed." Similarly for live donation of kidneys: "Thus it is ensured that the donation is exclusively an act of compassion and caring".

The quotations above make it clear that health officials expect a greater "active" willingness to donate but are not prepared to consider whether the willingness to donate could be promoted through a "give and take" procedure. Such an approach could seem quite natural given that ex ante, i.e. before the veil of ignorance on whose organs will fail and who will be killed in an accident is lifted, everybody is in the same situation: everyone would like to get an organ in the first case. Thus the situation is similar to that of a group of persons each of whom is subject to a similar but uncorrelated risk, and the natural solution is the promise of mutual assistance through an insurance contract.

4. Incentive Mechanisms for Promoting Organ Donations

In the relevant literature, several mechanisms for promoting the donation of human organs have been proposed of which the three most important will be described below.

1) *The Reciprocity Model*: According to this model which is advocated in Germany by the philosopher Hartmut Kliemt from the Universität Duisburg-Essen and by the economist Beat Blankart of Humboldt Universität Berlin, persons who themselves possess a donor card (or at least had one when they were healthy) should receive priority in the allocation of scarce organs. An easy way to legalise this model would be to allow organ donors to restrict the scope of potential recipients of their organs. If enough organ donors can be convinced of the advantages of this model in raising the supply of organs, they will confine the scope of their consent in the described way.

2) *Payments for Donor Card Possessors*: Instead of a higher priority in the allocation of organs, people with donor cards could be rewarded financially. One way would be a monthly reward, e.g. through a reduction in health insurance contribu-

tions, another way a life insurance payment to the heirs in the possible event of death and explantation of an organ.

3) *The Purchase of Kidneys from Living Donors*: Whereas today live donation of a kidney is only allowed within the family and without financial reward, this restriction could be lifted. E.g. sickness funds could be entitled to purchase kidneys from healthy individuals in order to overcome the specific scarcity of this type of organ.

Interestingly, health policy officials as well as medical organisations agree on an outright condemnation of a "trade in human organs". However, they rarely give a justification for this opinion. Therefore, it seems to be a valuable task to analyse the ethical reasons for and against lifting the prevailing ban on financial rewards for organ donations.

Professor Dr. Friedrich Breyer has a Chair in Public Economics at the Universität Konstanz and is Research Professor at the Deutsches Institut für Wirtschaftsforschung, DIW (German Institute for Economic Research) Berlin. He is member of the Europäische Akademie's currently installed project group "Organ Trade" and he was member of the former project group "Ethical Questions and Societal Consequences of Human Genetics". Hence Professor Breyer is member of the Council of the Europäische Akademie.

Working groups

Fachgespräch: Effizienzdenken und moralische Verpflichtung im Gesundheitswesen

In Zusammenarbeit mit dem Medizinisch Philosophischen Arbeitskreis des Allgemeinen Krankenhauses Hagen GmbH und dem forum philosophicum an der Fern-Universität Hagen veranstaltete die Europäische Akademie vom 12–13 Juni ein Fachgespräch zum Thema „Effizienzdenken und moralische Verpflichtung im Gesundheitswesen“. Im Rahmen des Treffens wurde versucht, die antagonistische Frontstellung zu überwinden, indem die begrenzte Berechtigung und Komplementarität ökonomischer und ethischer Kategorien aus ökonomischer, juristischer, medizinischer und ethischer Sicht aufgewiesen wurden.

Die kontroversen Diskussionen um die Reform des Gesundheitswesens in Deutschland sind durch einen grundsätzlichen Antagonismus zwischen ökonomischem Effizienzdenken und moralischen Ansprüchen, die aus den normativen Implikationen des Arzt-Patient-Verhältnisses abgeleitet werden, geprägt. Diese Diskussionslage verlangt nach einer gründlicheren Reflexion des Verhältnisses von ökonomischen und ethischen Kategorien. Grundsätzlich besteht hier näm-

lich kein zwingender Gegensatz. So kann durchaus in bestimmten Kontexten von einer moralischen Verpflichtung zu effizientem Handeln gesprochen werden, während andererseits effiziente Handlungsstrategien durch eine „kluge“ Rücksichtnahme auf moralische Normen ausgezeichnet sein können. Dies verdeutlichte beispielsweise Dr. Herberhold (Wetter), der das kostendeckendere Arbeiten der Krankenhäuser mittels DRG's (Disease Related Groups) als das sozial gebotene herausstellte.

Professor Raspe (Lübeck) wies die Evidenz-Basierte Medizin als eine wesentliche Chance für die Medizin als Wissenschaft auf, sich auf ihre Wissenschaftlichkeit zu besinnen und gleichzeitig überprüfte Therapien bereitzuhalten, und damit verbunden einen abgesteckten wirtschaftlichen Rahmen der Therapie vorausberechnen zu können. Aus juristischer Sicht (Dr. Freudenberg, Essen) wurde der Versuch gemacht aufgrund der Gesetzeslage, einen Anspruch auf eine medizinische Grundversorgung herauszuarbeiten.

Professor Kolmar (Göttingen) stellte verschiedene Modelle der Ökonomik zur Finanzierung des Gesundheitswesens vor, deren normativen Bezug er betonte. Sowohl in der Ökonomie bzw. in der Ökonomie als auch in der Medizin sah er eine normative Grundstruktur, die beide verbindet. Hieran schloss Professor Gethmann (Bad Neuenahr-Ahrweiler/Essen) an, indem er den präskriptiven Charakter der Krankheit als Kontingenzerfahrung hervorhob, der die Grundlage für ein Ethos des Heilens bildet, aber auch die Grundlage einer gerechten Verteilung begrenzter Ressourcen sein muss.

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Environmental Standards. Low Dose Effect Relations and their Risk Evaluation

The project group held its final meeting in Oslo on 10 June 2003. The session was hosted by the Norwegian Academy of Science and Humanities. At this meeting the texts were finalised and recommendations in the different areas of standard setting have been intensively elaborated. Besides pure scientific recommendations most attention has been put on suggestions for regulators. The memorandum will be submitted to the Scientific Council for its next autumn session. The final publication is expected for the first half of next year.

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TAMI Technology Assessment in Europe; between Method and Impact

The TAMI working meeting was hosted by viWTA (Flemish Institute for Science and Technology Assessment) and took place in the Flemish Parliament on 11 June 2003.

The plenary focused mainly on dissemination issues, such as the organisation and structure of the dissemination conference which will take place in the Flemish Parliament in Brussels from 27–28 November 2003. The two-day conference will be titled "Improving the role of TA in policy-making – Results of the TAMI project". Three key-speakers have been invited to report on following topics:

- Improving national innovation strategies
- Improving the interaction between science and society
- Improving science policy

The second conference day will be split into three workshops – each moderated by a TAMI member – and open/deepen the discussion on the three key-topics of the first conference day. An official announcement and further information about the dissemination conference will be published in the next Newsletter.

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Reasoning Goals of Climate Protection. Specification of art. 2 UNFCCC

The preliminary results of this study have been already utilised by its customer, the Federal Environmental Agency of Germany (UBA), on the occasion of the 18th Session of the Subsidiary Bodies (SB 18) to the UN Framework Convention on Climate Change in Bonn from 4–13 June 2003. In order to specify the relevant reasonable measures, the UBA was especially concerned on possible solutions to the problem to prioritise or discriminate certain optional pathways to the future and related legitimacies.

Meanwhile, the customer of the study evaluated the final draft of the working group. The recommendations of the UBA will be considered for preparation and editing of the final report and its translation into German language. The study report will be available soon after its final adoption and release for publication probably in the second half of this year.

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News

Am 24. April besuchte der Wissenschaftsdezernent der Stadt Bonn – Herr Dr. Krapf – die Europäische Akademie zu einem gegenseitigen Informationsaustausch. Hauptthema war die Einbindung der Europäischen Akademie in die Wissenschaftsregion Bonn. Im Rahmen dieser Erörterungen stellten die Projektleiter Dr. Stephan Lingner und Minou Bernadette Friele, M.A. die Akademievorhaben "Klimavorhersage und Klimavorsorge" und "Embryo Experimentation in Pluralistic Europe" vor.

Kreissparkassen-Vortrag

Im Rahmen der Kreissparkassen-Vorträge, die die Europäische Akademie in Zusammenarbeit mit der Kreissparkasse Ahrweiler veranstaltet, hielt Professor Julian Nida-Rümelin am 5. Juni im SETA Hotel Bad Neuenahr einen Vortrag zum Thema „Das Ethos der Wahrhaftigkeit – im Alltagsleben und in der Politik“. Der Referent ist Professor für Philosophie an der Universität Göttingen und war bis Oktober 2002 Kulturstaatsminister in der Bundesregierung.

Research Fellowship Programme

The Europäische Akademie has awarded two fellowships this summer. Professor Erzebet Rozsa, Chair in History of Philosophy at the University of Debrecen, Hungary, has been awarded a six months fellowship to work on Practical Philosophy of Hegel and Applied Philosophy.

Dr Garrath Williams, Lecturer in Philosophy at the Institute for Environment, Philosophy & Public Policy (I.E.P.P.P.), Lancaster University, has been awarded a three months fellowship in the area of "responsibility, institutional regulation and accountability"; his work relates to the emerging EU agencies that deal with scientific and technological developments, and the general issue of how regulation and accountability can operate in ways that support and complement individual responsibility.

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Lectures

Carl Friedrich Gethmann

16.6.03 „Ethos des Heilens vs. Effizienz des Gesundheitssystems“: Fachgespräch „Effizienzdenken und moralische Verpflichtung im Gesundheitswesen“ der FernUniversität Hagen und der Europäischen Akademie (Bad Neuenahr-Ahrweiler)

27.6.03 „Freiheit des Willens oder Handlungsurheberschaft?": Sitzung der Biologisch-Medizinischen Klasse der Berlin-Brandenburgischen Akademie der Wissenschaften (Berlin)

4.7.03 „Kann das Ganze Thema der Forschung sein?": Symposium „Vom Wissen zum Handeln? Die Forschung zum Globalen Wandel und ihre Umsetzung“, Institut für Technikfolgenabschätzung und Systemanalyse im Forschungszentrum Karlsruhe (Berlin)

18.7.03 „Akzeptanz und Akzeptabilität. Ethische Fragen in der Biotechnologie“: 4. Sitzung der Projektgruppe „Biotechnologie“ des Technologiebeirates beim Ministerium für Wirtschaft, Verkehr, Landwirtschaft und Weinbau Rheinland-Pfalz (Mainz)

Jorge Guerra González

10.6.03 „Xenotransplantation: Umgang des spanischen Rechtssystems mit dem Xenozoonosenrisiko.“ Interdisziplinäres Zentrum Medizin-Ethik-Recht an der Martin-Luther-Universität Halle-Wittenberg (Roßbach bei Naumburg)

Erzebet Rozsa

6.5.03 „Kontinuität oder Diskontinuität? Die Lage der Philosophie in Ungarn“, Collegium Europäum Jenensi (Jena)

7.5.03 „Versöhnung in Hegels Kunstphilosophie“, Friedrich-Schiller-Universität, Institut für Philosophie (Jena)

14.5.03 „Versöhnung in Hegels Kunstphilosophie – im Kontext seiner praktischen Philosophie“, FernUniversität Hagen, Institut für Philosophie

2.7.03 „Europäische Identität – nationale Identität im Blick auf Ungarn“, Institut für Philosophie, Heinrich-Heine Universität, (Düsseldorf)

Personalities



Peter Marburger studied law from 1959 to 1963 in Marburg and Cologne. Having successfully passed the two Law Examinations (1964, 1968), he completed his doctorate in Cologne in 1969. Subsequently, he was engaged as a Judge at Cologne Landgericht before qualifying as a university professor in Göttingen in 1978. Since the winter semester of 1978/79 he has held a full professorship in civil law, commercial and economic law as well as civil proceedings law in the law department of the Universität Trier. Professor Marburger is Director of the Institute for Environment and Technology Law at Universität Trier. From 1986 to 1998 he was a member of the board of "Deutscher Juristentag". His main fields of research are: civil law, private environment law, technology law. Publications, among others: Die Regeln der Technik im Recht (1979); Atomrechtliche Schadensvorsorge (2nd edition 1985); Wissenschaftlich-technischer Sachverstand und richterliche Entscheidung im Zivilprozess (1986); Ausbau des Individualschutzes gegen Umweltbelastungen als Aufgabe des bürgerlichen und des öffentlichen Rechts, Report C to the 56th German Jurists' Congress (Deutscher Juristentag) (1986); Massenstromwerte und Anlagenbegriff der TA Luft (1993); Umweltschutz durch gesellschaftliche Selbststeuerung (1993, with A. Endres); Commentary on §§ 779-811, in: Staudinger, BGB (Civil Code), 2002.

Since 1996 Professor Marburger is member of the Scientific Advisory Board of the Europäische Akademie which he is chairing since May 2003.

Publisher:

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Print:

Warlich Druck Ahrweiler GmbH, Bad Neuenahr-Ahrweiler
ISSN 1432-0150, frequency of publication: 6 – 8 times per year, 2.700 copies, reproduction is permitted with reference to the source, please send two voucher copies.