



Europäische Akademie

zur Erforschung von Folgen wissenschaftlich-technischer Entwicklungen
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Direktor:
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Newsletter

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Editorial

Since 1996 the Europäische Akademie has been publishing the paperback book series "Graue Reihe" (grey series). Here the results of pre-studies and meetings held by the working groups as well as current discussions, material from other scientists etc. are documented. As an immediate medium the Graue Reihe includes material and documentation on current topics in the fields of Technology Assessment and Ethics of Science. Recently the 27th volume on "Klimaschutz in den Niederlanden" was published. With this series the Europäische Akademie tries to fulfill the task to make available the current discussions in various scientific fields before publishing the final report at the end of the group's work in the series „Wissenschaftsethik und Technikfolgenbeurteilung“ (published by the Springer-Verlag). The texts of the Graue Reihe are constantly surveyed and analyzed by scientists at the Europäische Akademie. So far aspects of the consequences of scientific and technological advance, environmental standards, global change, genetics, biodiversity, robotics, and climate change have been the major topics of the series. At the moment an edition on "Nachhaltige Entwicklung und Innovation" is in print; this volume documents the results achieved at the group's kick-off meeting. The volumes may be ordered from the Europäische Akademie in writing, by fax or e-mail. A list of the hitherto-published volumes is on page 3f.

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Focus

Bio-Policy and the Place of Institutionalized Ethics in Political Decision Making

Felix Thiele

Questions concerning moral problems caused by the life-sciences and concerning the adequate methods and instruments to solve these are timely and urgent; especially in the face of intense debates on the acceptability of research on human embryonic stem cells and preimplantation diagnostics, to name only two applications developed from research in the life sciences. Unfortunately, the constant and accusing demand that life-scientists must behave morally nor does it give a clue on how ethics may help in establishing guidelines for moral behaviour. In this heated situation the foundation of ethics-committees seems to be the motto of the day. But instead of functioning as necessary and fruitful scientific advisory boards these committees run the risk of being misused as a fashionable (and soon forgotten) weapon in the battle for political opinion-leadership. In the following the view is defended that ethics is a scientific enterprise and has an important role to play in political decision making on life-sciences issues.

The german version of this article is available at www.europaeische-akademie-aw.de/ Die deutsche Fassung dieses Texts kann auf der Homepage der Europäischen Akademie abgerufen werden unter: www.europaeische-akademie-aw.de.

I. Bio-Ethics and Bio-Policy

The task of professionalised ethics is not to be seen in gaining insights from some special source of knowledge – insights that would entitle the ethicist to demand a certain course of action or insist on certain conduct being prohibited and thereby excluding politicians and other mortals from moral decision making. Rather the proper task of ethics is the critical assessment of existing moral convictions and norm-systems made up from them. This assessment should be done by using a method that is in principle accessible to everyone. Moral convictions are subject to such an assessment when they generate conflicts – e.g. when they are incompatible with other moral convictions. In the case of moral conflicts there is a need for an

ethical criterion, that allows us to establish, which conviction should be followed. An example for such a criterion is the 'Golden Rule': „We should do unto others as we would wish them to do unto us“. This rule does not provide us with a material action-guide, but provides a formal criterion that any action guide has to fulfil in order to be morally acceptable.

Traditionally it has been the domain of philosophical ethics to design strategies for the solution of moral conflicts. In this sense *bio*-ethics is only a new area, because the conflicts to be solved were unknown until progress in medical technology and societal changes directed public attention to the ethical problems of the life-sciences.

It should be the role of a philosopher, wishing to contribute to the solution of bioethical issues, to provide a clarification of the moral concepts involved and to reconstruct the arguments used in the discussion. On this basis he can develop *strategies of moral reasoning* that

help determine which moral convictions one ought to accept. It should be made clear, however, that these strategies are developed on the basis of an underlying *ethical theory* and that a variety of different ethical theories has been developed during the history of ethics. Such theories often share certain presuppositions (e.g. the demand for 'universalisability' and 'consistency'), but differ in others, so that – depending on the theory applied – different strategies of moral reasoning can be developed in the discussion of a certain moral problem at issue.

It is often used as an argument against the use of moral reasoning for practical questions, that there are *no indisputable arguments for moral norms achievable on a rationally understandable basis*. Though true, this should lead to modesty not resignation concerning the power of moral argumentation, since we should not demand in the field of ethics what is not to be had in other areas too: For example, in applying the laws a judge is always left with a degree of discretion within which he has to carefully examine the special circumstances of the case at issue.

The ability to analyse the moral concepts involved and to apply one or the other ethical theory to bioethical problems will help the physician, policy maker or whoever else is confronted with these questions to think about them in an explicit way and to develop moral convictions acceptable to all parties concerned.

The methodology supplied by philosophical ethics is only one – albeit essential – component in the attempt to solve bioethical problems. The philosopher is trained in examining the arguments proposed, whether they are valid relative to some standards of rationality or whether they fall back upon metaphysical or emotion-based beliefs. Substantial arguments about bioethical problems should be based, however, on knowledge from those sciences in whose domain those problems originated. A discussion of the ethical problems of, for example, research on human embryos without the participation of physicians, jurists and others would be futile and very likely would not lead to acceptable recommendations for societal regulations.

Bioethics is, therefore, an auxiliary discipline supporting the discussions of other disciplines, but a discipline that is capable of proposing scientific statements – statements that are correct or incorrect relative to certain standards in much the same way as statements of other scientific disciplines.

Those who first introduced the term *bio-policy* into the (German) debate used it in a depreciative manner. Bio-policy, so it was suggested, is done by those that are not willing to accept the existing consensus on the principles that should guide moral decision making. (Talking about the 'bio-industrial complex' in analogy to the military-industrial complex made jointly responsible for World War I, is just one example of this offensive style.) But referring to an alleged material value-consensus (be it European, religious etc.) is wrong for at least two reasons: first, such a consensus does not exist – except in the mind of fundamentalists. This can easily be seen by looking at the different – actually partly contradictory – national regulations on euthanasia and embryo experimentation. Second, merely claiming that one is in the possession of a correct moral is far from arguing for it by using the available method for critically assessing morals – philosophical ethics that is.

In another reading bio-policy simply designates that part of policy-making that is concerned with questions arising from the life-sciences. In this way bio-policy does not differ in any interesting way from monetary or social policy.

In the case of political decisions that are complex and need careful consideration of the pros and cons, politicians usually seek (and find) the advice of relevant experts: tax reform the plans no less than climate policies are based at least partially on scientific expertise. For sure, policy decisions are rarely based on scientific information alone. This does not, however, show that scientific policy advising is futile, quite to the contrary, it indicates an organisational deficit, insofar as it is demanded that policy making is rational relative to some standards. The idea of supporting policy making by scientific advisory committees has a very long tradition, and was never seriously questioned. *Insofar as ethics is a science, there is, therefore, a point to make in favour of supporting bio-policy making by ethics committees*. That this insight is so intensely disputed, depends on some serious misunderstandings (and sometimes willful abuse) of institutionalised ethics in policy making.

II. The Place of Ethics Commissions in bioethical Decision-Making

As has already been said, scientific advisory committees – whether assigned to government bodies or other (professional) organisations – have a long standing tradition. It seems unnecessary to argue in favour of scientific advi-

sory committees as such – as becomes perfectly clear, when one rhetorically asks, whether it would be prudent, if parliament would revise safety standards laid down in building regulations without the consultation of architects and stress analysts. The reason for institutionalising scientific advice is mainly pragmatic: on the basis of rules of procedure such committees can produce transparent, long-term reliable advice.

In the last few decades bio-ethics committees have become an abundant phenomenon at large research institutes and clinics, but also as committees assigned to government bodies. It was proposed above that the task of ethics is to make distinguishable by way of reconstruction those moral norms that are universalizable, i.e. are valid for everybody and this is basically also the task of institutionalised ethics, ethics committees that is. It should be noted, however, that there is – at least in Germany – a large number of ethics committees without participating ethicists: though strictly speaking a misnomer, such committees are relatively unproblematic, as long as those committees are intended to watch over the observance of an already existing moral. But with the progressive development of the life-sciences those committees are more and more approached in cases where the traditional morals generates conflicts and needs critical evaluation. In these cases ethics committees without ethicists miss their vocation.

Since, properly understood, ethics committees are expert groups, they are frequently blamed for drafting recommendations without a wide enough consultation of the relevant stakeholders. Taking into account the respective opinions of the relevant stakeholders is an important step in the preparation of a moral recommendation. But, as said before, the task of ethics (and ethics committees) is the critical assessment of moral convictions by singling out those moral rules of action that are universalizable, i.e. are valid for everybody. This means, however, that the assessment and its results should be impersonal and independent of the personal and background of those actually performing the assessment. Therefore, ethics committees do not necessarily have to involve all stakeholders; even involving only a very few experts can lead to an ethically justified result. In addition, there is no need for the often demanded participation of social groups in ethics committees – be it unions, employer's associations, let alone religious groups.

If ethics is understood as a scientific profession practised by experts in the same way as the study of radiation effects is a profession practised by specially trained experts, the institutionalisation of bio-ethics in committees loses its alleged subversive touch. Ethics committees are a chance to improve science- and technology policy making by developing rational and reliable recommendations concerning the chances and risks of new developments in the life-sciences. In addition, the fear that ethics committees might take over political power seems to miss the point: An expert committee on, for example, radiation protection can assess whether exposure to a certain type and amount of radiation is acceptable relative to some safety standards; in addition, the committee itself can suggest safety standards, but it will not endow these standards with binding force – except in those cases where the legislator formally delegates some of its regulatory competencies to expert committees.

In this perspective the recent row on the foundation of the so called National Ethics Committee in Germany appears rather odd. If this committee is considered as a scientific advisory body to the Federal Government or the chancellor the appropriate complaint is not *that* it was established, but rather that this happened *so late*. Furthermore, the fear that this committee will take over legislative power from parliament, is lacking any legal substance; in addition, it is not without irony to expect that the current chancellor would deliberately create a powerful institution that cuts down his own scope of action.

But some warnings are in order: *The German National Ethics Committee* is, contrary to initial plans as it is said, interspersed with representatives from social groups – with the notable fact that the participating theologians are exclusively of Christian denomination; should this committee, nonetheless, be intended to function as a scientific advisory board, it will depend on the skill and prudence of its members to make clear, ideally by explicit rules of procedure, the scientific standards they pursue. That this can work has been demonstrated by National Ethics Committees in other countries have demonstrated. The most unfavourable, though not unlikely, outcome would be, that ethics is replaced by morals, and that intuitions rule.

Dr. Felix Thiele is vice-director of the Europäische Akademie. His special field of research is Bio- and Medical Ethics.

Working groups

Climate Prediction and Precautions

On 4th July the project group Climate Prediction and Precautions held its final regular meeting. Main topics were refinements of interdisciplinary efforts and the formulation of concluding statements from the study. Subsequently, a final report will be prepared for evaluation by the Scientific Advisory Board in autumn 2001.

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Functional Foods

The project group Functional Foods had its Kick-off meeting in Lancaster, UK, 6-7 July 2001. On this occasion, invited guest speaker gave their comments on the ideas so far and the proposed work plan of the project group. Of particular importance was the discussion over the centrepiece of the work plan structure which is based on the "ethical matrix" developed by Professor Ben Mepham of the University of Nottingham, UK. The invited speakers provided advice for the use of the matrix by the group as well as suggestions for further points to be taken into consideration by the group. The workshop ended in a lively discussion and the eventual consensual agreement on one of the most contentious issues in functional foods: their definition.

Members of the Functional Foods project group are:

Professor Ruth Chadwick, Lancaster, UK (Chair); Dr Spencer Henson, Reading, UK; Professor Bevan Moseley, Reading, UK; Professor Cees Midden, Eindhoven, The Netherlands; Professor Gerhard Rechkemmer, Karlsruhe, Germany (Vice-Chair); Dr. Jenya Vulfson, Norwich, UK; Professor Atte von Wright, Kuopio, Finland.

Invited speakers were:

Dr Gerrit Koenen, Dutch Ministry of Health, Welfare and Sports, The Netherlands; Professor Ben Mepham, Nottingham University, UK; Dr Doris Schroeder, Lancaster University, UK; Dr Richard Shepherd, University of Surrey, UK; Professor Brian Wynne, Lancaster University, UK.

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News in Brief

Welcome

Since May Dr. Klaus-Peter Fiedler has been dealing with the project "Psychotropic Substances" at the Europäische Akademie. Its purpose is to clarify to what extent it is possible to misuse psychotropic substances in order to make somebody act in a predetermined way; it includes the fields of neurobiology, psychopharmacology, medical psychology, philosophy and law. Dr. Fiedler studied Biology, Chemistry and Physics at the Universität of Heidelberg, in 1986 he finished his doctorate in Biology at Mainz Universität. Jeantine Lunshof (Drs., NL) is the successor of Dr. Thomas Krause. As a philosopher and bioethicist she is involved in the Arbeitskreis Medizinethik at the Europäische Akademie. For her main task she is attached to the Berlin-Brandenburgische Akademie der Wissenschaften as a research assistant to the task force on Health Standards, chaired by Professor Dr. C. F. Gethmann.

Arno Schatz is the successor of Jürgen Tibes and is responsible for the IT-section at the Europäische Akademie. His fields of work are developing and performing concepts for data interchange training, installing service support for hard- and software as well as securing the stability of the networks and workstations.

Organs

Partners' Assembly and Managing Committee

On 25th July the 11th meeting of the Partners' Assembly and the Managing Committee of the Europäische Akademie took place. The partners approved the annual accounts and the general report. The management of the Europäische Akademie was instructed by the members of the Managing Committee to check the possibility to conduct further education at the academy. Because Mrs Ahnen has been appointed State Minister for Education, Women and Youth she has retired from the Managing Committee. Her successor is State Minister Roland Härtel.

Graue Reihe

The Graue Reihe is a current documentation of material being worked on in the different project groups as well as other material of the Europäische Akademie. The series is published by the

Europäische Akademie. This edition of the Newsletter contains a list of the previous editions of the entire series, and thus offers the opportunity to order any issue from the academy free of charge. Please send orders to the academy via e-mail to europaeische.akademie@dlr.de or via fax (026-41/973320).

Nr. 1 Carl Friedrich Gethmann, Armin Grunwald, Technikfolgenabschätzung: Konzeptionen im Überblick, 9/96, 2. Aufl. 7/98

Nr. 2 Carl Friedrich Gethmann, Umweltprobleme und globaler Wandel als Thema der Ethik in Deutschland, 9/96, 2. Aufl. 10/98

Nr. 3 Armin Grunwald, Sozialverträgliche Technikgestaltung: Kritik des deskriptivistischen Verständnisses, 10/96

Nr. 4 Technikfolgenbeurteilung der Erforschung und Entwicklung neuer Materialien. Perspektiven in der Verkehrstechnik. Endbericht zum Vorprojekt, Arbeitsgruppe Neue Materialien, 1/97

Nr. 5 Mathias Gutmann, Peter Janich, Zur Wissenschaftstheorie der Genetik. Materialien zum Genbegriff, 4/97

Nr. 6 Stephan Lingner, Carl Friedrich Gethmann, Klimavorhersage und -vorsorge, 7/97

Nr. 7 Jan P. Beckmann, Xenotransplantation. Ethische Fragen und Probleme, 7/97

Nr. 8 Michael Decker, Perspektiven der Robotik. Überlegungen zur Ersetzbarkeit des Menschen, 11/97

Nr. 9 Carl Friedrich Gethmann, Nikolaj Plotnikov, Philosophie in Rußland. Tendenzen und Perspektiven, 5/98

Nr. 10 Gerhard Banse (Hrsg.), Technikfolgenbeurteilung in Ländern Mittel- und Osteuropas, 6/98

Nr. 11 Mathias Gutmann, Wilhelm Barthlott (Hrsg.), Biodiversitätsforschung in Deutschland. Potentiale und Perspektiven, 11/98, 2. Aufl. 4/00

Nr. 12 Thorsten Galert, Biodiversität als Problem der Naturethik. Literaturreview und Bibliographie, 12/98

Nr. 13 Gerhard Banse, Christian J. Langenbach (Hrsg.), Geistiges Eigentum und Copyright im multimedialen Zeitalter. Positionen, Probleme, Perspektiven, 2/99

Nr. 14 Karl-Michael Nigge, Materials Science in Europe, 3/99

Nr. 15 Meinhard Schröder, Stephan Lingner (eds.), Modelling Climate Change and its Economic Consequences. A review, 6/99

Nr. 16 Michael Decker (Hrsg.), Robotik. Einführung in eine interdisziplinäre Diskussion, 9/99

Nr. 17 Otto Ulrich, „Protection Profile“ – Ein industriepolitischer Ansatz zur Förderung des „neuen Datenschutzes“, 11/99

Nr. 18 Ulrich Müller-Herold, Martin Scheringer, Zur Umweltgefährdungsbewertung von Schadstoffen und Schadstoffkombinationen durch Reichweiten- und Persistenzanalyse, 12/99

Nr. 19 Christian Streffer et al., Environmental Standards. Combined Exposures and their Effects on Human Beings and their Environment (Summary), 1/00

Nr. 20 Felix Thiele (Hrsg.), Genetische Diagnostik und Versicherungsschutz. Die Situation in Deutschland, 1/00, 2. Aufl. 2/01

Nr. 21 Michael Weingarten, Entwicklung und Innovation, 4/00

Nr. 22 Ramon Rosselló-Mora, Rudolf Amann, The Species Concepts in Prokaryotic Taxonomy, 8/00

Nr. 23 Stephan Lingner, Erik Borg, Präventiver Bodenschutz. Problemdimensionen und normative Grundlagen, 9/00

Nr. 24 Minou Bernadette Friele (Hrsg.), Embryo Experimentation in Europe, 2/01

Nr. 25 Felix Thiele (Hrsg.): Tierschutz als Staatsziel? Naturwissenschaftliche, rechtliche und ethische Aspekte; 2/01

Nr. 26 Vitaly G. Gorokhov: Technikphilosophie als und Technikfolgenforschung in Russland; 2/01

Nr. 27 Chris W. Backes: Klimaschutz in den Niederlanden; 3/01

These new editions of the "Graue Reihe" can be ordered free of charge at the Europäische Akademie. Further titles (No. 1-24) are also available – please contact the Europäische Akademie: europaeische.akademie@dlr.de

Personalities



Professor Dr.-Ing. Gerd Hirzinger received his Dipl.-Ing. degree and the doctor's degree from the Technical University of Munich, in 1969 and 1974 respectively. In 1969 he joined the German Aerospace Center (DLR) where he first worked on fast digital control systems. In 1976 he became head of the automation and robotics laboratory of DLR, where he and his co-workers soon received several awards for innovative technology transfer from robotics research to applications. In 1991 he received a joint professorship from the Technical University of Munich.

Since 1992 he has been the director of DLR's Institute of Robotics and Mechatronics. He has published around 200 papers on robotics, mainly on robot sensing, sensory feedback, mechatronics, man-machine interfaces, telerobotics and space robotics. He was the first person to send a robot into space (shuttle mission ROTEX in April 93) and also controlled it from earth. For many years he has been chairman of the German Council on Robot Control and a member of the Administrative Committee of the IEEE Society on Robotics and Automation.

He rejected several chairs offered to him by different European Universities and received a number of high national and international awards, e.g. in 1994 the Joseph-Engelberger-Award for achievements in robotic science and in 1995 the Leibniz-Award, the highest scientific award in Germany and the JARA (Japanese Robotics Association) Award. In 1996 he received the Karl-Heinz-Beckurts-Award, Germany's most important award for outstanding promotion of the partnership between science and industry, and in 1997 the IEEE-Fellowship-Award.

Professor Dr.-Ing. Gerd Hirzinger is a member of the project group "Robotics" of the Europäische Akademie.

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