



# Europäische Akademie

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

Direktor:  
Professor Dr. Carl Friedrich Gethmann

## Newsletter

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### Editorial

*The third research report of the Europäische Akademie which refers to the period 2001/2002 will soon be distributed. The report refers to the first period after the five-year founding phase of the Europäische Akademie which was completed by an evaluation. As since then little has changed with regard to the structure of the research activities, the form and compilation of the report has fundamentally remained the same. The projects which have already been described in earlier research reports are summarised in the appendix in order to permit a further overall view of the activities of the Europäische Akademie. For the same reason the prospective section of the report is also brought up to date with regard to the planning. It concerns the projects of the fourth generation which are planned to be realised between 2003 and 2005.*

*Now that the projects of the third generation have been concluded or have reached the final phase, the chosen method concept of interdisciplinary research can be deemed successful and, after 9 projects have been completed, the instrument of interdisciplinary project groups can be said to have proved itself. In the meantime the Europäische Akademie has successfully managed to recruit a considerable amount of external contributions (external contributions in the year 2002 ca. 20%) to its subject fields and working structures.*

*The report may be obtained free of charge from the Europäische Akademie.*

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### Focus

#### Preimplantation Genetic Diagnostics, the Press and other Hazards

*Felix Thiele*

The debate on Preimplantation Genetic Diagnostics (PGD) is currently led with astonishing harshness by some newspapers. Unfortunately, it appears that in the case of PGD the reporting on scientific information enriched with personal commentaries facilitating the forming of public opinion is more and more replaced by outright campaigning that neglects the expert debate on PGD. In this article it is argued that it would be a considerable misunderstanding to mix up 'having a moral concern' and 'giving a moral argument'. This misunderstanding may well undermine the very project of moral argumentation – mastering moral conflicts that is. In addition to this comments on the current press coverage on PGD, the basic moral arguments pro and contra PGD are briefly discussed.

The row on Preimplantation Genetic Diagnostics (PGD) has now lasted for some years without any sensible sign of agreement or even rapprochement of the opposing parties. Bioethicists have contributed their lot to this debate – mainly on the issue of the moral status of the embryo or the embryonic cell respectively that is consumed in the process of PGD. Looking at recent press coverage of PGD in the run-up to an opinion published by the German National Ethics Committee it seems that the "public" or – to be more precise – some prominent journalists have not profited very much from the rich and easily accessible expert-debate.

In this situation the question arises as to what an ethicist can contribute more than to repeat the well-known arguments and to give an overview for those that are new to the debate. An answer may be drawn from a reflection on the aim bioethics is pursuing: bioethics is aiming at mastering, in an argumentative manner, moral conflicts caused by developments in the lifesciences.

It is a misunderstanding that bioethics primarily aims at proposing irrefutable and substantial moral arguments – e.g. on the moral status of an embryo. Developing and defending moral arguments is an integral part of the method of bioethics, but in many situations moral argumentation does not end in consensus concerning the "right" moral arguments. If setting up irrefutable arguments were indeed the main aim of bioethics, this enterprise would fail most of the time. Therefore more important than suggesting substantial moral arguments is to show how moral discourses can help to master moral conflicts.

This sheds some light on what goes seriously wrong in some of the already mentioned press coverage on PGD. A first interesting and practically relevant question is whether the involved journalists are merely good-hearted persons that try to prevent what they think to be "evil" or whether some of them actively engage in campaigning in the bad sense of the word, i.e. pursuing

their political goals by denouncing those that are not in line with them. Both patterns of behaviour can be found and should be treated with deep respect and leniency or in all due strictness respectively. However, since this article is not a survival guide for scientists that were dare-devilish enough to start a career in the field of embryo research or reproductive medicine, but an essay on the bioethical problems of PGD, drawing psychographs of journalists is left to professionals better trained for this job. Instead, a philosophical triviality will be briefly repeated: the difference between morals and ethics.

A 'moral' is a grown agglomerate of moral convictions and norms that is subject to multiple changes depending on the cultural and historical context in which it is developing. And indeed there is not just one 'moral' in the world, but many 'morals' – religious, private, professional, etc. 'Ethics' on the other hand is that method that is concerned with the critical examination of those 'morals'. Neither is there – probably to the horror of fundamentalists of all sorts – a single, true moral, nor is there a fixed method of ethics. Ethics is a constantly developing method of practical argumentation – in respect of developing further in the light of criticism very similar to what one calls a scientific method. In everyday life, morals are usually a reliable basis for questions on what to do and not to do. There are, however, numerous cases where morals do not deliver satisfying 'recommendations to act' – the case of PGD is one example.

The lesson to be learned from this is so simple that it likely needs the privilege to publish on the frontpage of an influential newspaper to forget it: individual or collective moral beliefs and norms are not suitable to resolve moral conflicts that arise only because the allegedly "right" moral is just not accepted by all persons concerned. Repeating wellknown substantial arguments ever again will not do to master moral conflicts caused by developments in the life sciences. What is needed instead is a rational – in the sense of well-founded and understandable for all conflict-partners – method of mastering moral conflicts.

On the background of what has been said so far, it may be interesting to outline roughly what such an argument concerning PGD may look like. The two major arguments to be dealt with are i) the moral status of the embryonic cell consumed in PGD, and ii) the likely societal consequences of performing PGD as a clinical routine.

i) A first problem to be solved is: what properties must an entity have in order

to be acknowledged as moral subject endowed with certain rights as e.g. the right to life. In the beginning of this article it has been argued that bioethics aims at developing strategies for mastering moral conflicts – strategies that help the actors involved in settling their matters. Therefore it appears convincing to acknowledge those entities that are authors of their own actions – actions that may cause conflicts – as moral subjects, since this concept fits well into the picture of ethics as tool for mastering conflicts. According to this "pragmacentric" position (Gethmann) there are good reasons to doubt that embryos let alone embryonic cells used in PGD are eligible as moral subjects. Adopting this position makes a long story short in that, concerning PGD, there are no rights of a moral subject infringed, so that PGD is not morally reprehensible with respect to the consumption of embryonic cells.

This argument is not accepted by many; still holding on to it would mean to make exactly that mistake that was indicated earlier, i.e. valuing substantial arguments higher than recommending strategies for mastering moral conflicts. For this reason it will be assumed in the following that embryos and embryonic cells used in PGD have some rights.

The second problem then is what rights moral subjects do have and to what extent these rights are due to them. In the debate on the moral status of embryos and embryonic cells it is often neglected that the acknowledgement of an entity as a moral subject is not sufficient for establishing what rights this moral subject is entitled to. It is true (though not trivial) that every moral subject has a right to life, but the decisive question concerning PGD is not whether moral subjects have such a right, but whether this right is in force unrestrictedly. The assumption of an unrestricted right to life of embryos is implausible: If adults do not have an unrestricted right to life in case of self-defence or (just) war, and if, in accordance with effective abortion law, fetuses do not have an unrestricted right to life, for what reasons should an unrestricted right to life for embryos and embryonic cells be justified? It seems obvious that the right to life of moral subjects is frequently weighed – even if some authors and institutions stubbornly refuse to take notice. This is not the place to elaborate the criteria for weighing the rights of embryos and the obligation to protect them drawn from these rights. But if one weighs the rights and needs for protection, then it is convincing that an embryo, screened e.g. for the risk of a minor handicap, needs more protection than an embryo where there is a risk of a lethal disease

that would kill the embryo turned newborn anyway.

ii) Another problem frequently discussed is the likely societal consequences of PGD. Some authors agree that PGD may be morally acceptable in some cases, they fear, however, that some of the unavoidable consequences are morally not acceptable, so that the whole technique should be banned in the first place. Arguments of this type are usually named slippery-slope arguments and are very popular in the press and elsewhere. An argument that is produced in favour of a ban against PGD is the following: "The application of PGD will lead in a morally reprehensible manner to eugenic consequences. Therefore, PGD should be banned." or stronger: "The application of PGD will lead in a morally reprehensible manner to a disregard of the rights of the living handicapped. Therefore, PGD should be banned." The proponents of such arguments suppose that an initial, morally acceptable action – e.g. ruling out a severe disease – will inevitably be followed by morally reprehensible consequences – i.e. eugenics or even the exclusion of the handicapped in our society. Slippery-slope arguments consist of two parts, a prognostic and a moral claim on the correctness of which the validity of the combined argument depends: To be convincing as a prognosis, it must be shown that the application of PGD indeed would have the predicted consequences with a demonstrable probability. In addition, it would have to be argued that these consequences are of a morally reprehensible type and therefore must be forbidden.

First empirical data suggest that PGD is unlikely to change the numbers of and more importantly the reasons for abortions dramatically when compared to the already practiced in vitro fertilisation (IVF). On top of that, it seems that the rights of the handicapped have been continuously strengthened over the past decades, even though the diagnostic capacities in prenatal medicine have improved substantially. In conclusion, the prognostic part of the given slippery-slope argument against PGD does not seem to be very convincing – though it is not the task of a bioethicist, but of empirically working social scientists to establish the quality of such data. From the perspective of the philosopher there is, however, another remarkable aspect of slippery-slope arguments – namely that these arguments presuppose that certain consequences of human action occur in a, as it were, law-like manner. Oddly enough, however, what is reflected on is not natural processes that may be explained by laws of nature, but by human action of

which we are fond of talking (as a rule) as free, i.e. explicitly not explainable by laws of nature. Therefore the discussed slippery-slope arguments against PGD suffers not only from the (current) lack of convincing data, but also from a systematic weakness of the underlying view on human behaviour as ruled by laws. This is fatal, because it shows the low esteem of the possibility to specifically influence the consequences of human behaviour via norm-design.

It should not be necessary, after what has been said in the first part of this article, but to be on the safe side: the above argument does not claim to be the "true" or "only" or "objective" answer to the question whether PGD is morally reprehensible and should be prevented. The above argument is just an attempt to propose a strategy that may help to solve the conflict at issue and every part of it may be revised on the basis of good reasons for doing so. It should be remembered, however, that the criterion for being a good reason is not the circulation of a newspaper or the frequency with which the reason is repeated.

Dr. med. Felix Thiele, M.Sc., is Vice Director of the Europäische Akademie.

## Working groups

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

The working group held a review meeting in Ahrweiler from 5<sup>th</sup> to 6<sup>th</sup> October 2002 to discuss its provisional results with experts from outside the working group. Some comments were also given in written form. The external referees and commentators were Professor Dr. Armin Grunwald (Karlsruhe), Dr. Gerd Hanekamp (Ahrweiler), Professor Dr. Christoph Lumer (Firenze), Dr. Benito Müller (Oxford) and Dr. Sebastian Oberthür (Berlin). The inputs and recommendations are to be taken into consideration for the preparation of the final study report.

The internal part of the meeting focused on the preliminary evaluation of feedbacks from the questionnaires on Art. 2 UNFCCC which were distributed among attendees of the Delhi Conference of the Parties to the Framework Convention in October 2002.

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### **Miniaturisation and Properties of Materials**

The constitutional meeting of the project group took place in Bad Neuenahr-Ahrweiler from 7<sup>th</sup> to 8<sup>th</sup> November 2002. Project group members are Professor Dr. G. Schmid (Essen, chair),

Professor Dr. H. Ernst (Koblenz), Professor Dr. H. Fuchs (Münster), Professor Dr. H. Hofmann (Lausanne), Dr. W. Grünwald (Stuttgart), Professor Dr. A. Grunwald (Karlsruhe), Dr. M. Mayor (Karlsruhe), Professor Dr. U. Simon (Aachen). The group will be completed according to the work programme accepted by the Scientific Council of the Europäische Akademie.

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### **Embryo Experimentation in Europe**

At the end of September 2002 the group completed the second phase of the project by preparing a provisional final report that was sent to various experts of the relevant scientific areas for their review and comment. Professor Dr. Anne McLaren, Cambridge University, Professor Dr. Sheila McLean, University of Glasgow, Dr. Bernhard Böhm, Bundesministerium der Justiz, Baroness Mary Warnock, House of Lords, Professor Dr. Dieter Birnbacher, Universität Düsseldorf and Professor Dr. Julian Savulescu, Oxford University acted as reviewers of the provisional final report. Their comments were discussed with the group in a so-called Mid-term Meeting, which took place at the Novartis Foundation, London from 8<sup>th</sup> to 9<sup>th</sup> December 2002.

Amongst others the ongoing debate of the special moral status of the human embryo and its influence on the various political stances and regulations in European countries was discussed. Furthermore, the participants of the meeting discussed the possibilities and the possible necessity of a harmonisation of embryo research related regulations within the European Union and beyond. In this context the particular problems resulting from different legislative requirements in different European countries were emphasised, and it was suggested to establish adequate European institutions for licensing and controlling research proposals in the mentioned area. Of course, such a suggestion is based on the assumption that research is not banned in total but that comparing and balancing of risks and chances are desired in general.

Following the Mid-term Meeting the members of the project group revised the chapters again with respect to the previous discussions. These changes were discussed in a further meeting which took place at the BBVA Foundation in Madrid from 14<sup>th</sup> to 15<sup>th</sup> December 2002.

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### **Environmental standards. Low dose effect relations and their risk evaluation**

The project group held a meeting in Bad Neuenahr-Ahrweiler from 9<sup>th</sup> to 10<sup>th</sup> January 2003. Further drafts had been discussed. Subjects were amongst others radiobiological considerations, epidemiology, risk evaluation and communication. In toxicology the problem of topi-somerase II poisons contained in food was been discussed amongst other subjects. From a theoretical consideration this poison should show a linear non threshold dose-effect relationship. It had been shown to be carcinogenic in animal experiments and is suspected to play an important role in childhood leukaemia even at low doses. Philosophy of science had examined the problem of hypothesis testing. Different standards of proof were found in the different disciplines concerned. Experimental and hypothesis building approaches are different in different experiments aimed at finding dose response relationships and thresholds.

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## News

Professor Dr. Carl Friedrich Gethmann was elected by the 'Deutsche Akademie der Naturforscher Leopoldina' (Halle) as one of their members (section: Philosophy of Science).

## Conferences

### **Spring Conference 2003 Bioethics in a Small World**

The annual spring conference of the Europäische Akademie will be focused on bioethical problems connected with the globalisation process and will include following sessions and speakers:

1. Bioethics. A science and its application in politics: Udo Schüklenk, Edgar Morscher
2. Culture-dependent ethics?: Godfrey Tangwa, Oswald Schwemmer
3. Access to essential drugs: Carmel Shalev, Georg Marckmann
4. Reserach ethics/research on orphan drugs: Nathan Ford, N. N.
5. Patents on biomaterials. A new colonialism?: Bronwyn Parry, Joseph Strauss
6. GMO's and the world nutrition problem: Abdallah Daar, Michiel Korthals

This conference will bring together scientists from the fields of medicine, law, and philosophy. The group will be relatively small to facilitate open discussions of foundational and applied prob-



lems of bioethics from an interdisciplinary and international perspective. The conference will take place at the SETA Hotel in Bad Neuenahr, Germany, from 10th to 12th April 2003.

The conference programme and the registration form is available on <http://www.europaeische-akademie-aw.de>.

For further information please contact the scientific organisers:

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## Graue Reihe

The Graue Reihe is a current documentation of material being worked on in the different project groups of the Europäische Akademie. The series is published by the Europäische Akademie. This edition of the Newsletter contains the recent publications of the series and thus offers the opportunity to order – with the enclosed order form – any issue from the Academy free of charge. Please send orders via e-mail to [Europaeische.Akademie@DLR.de](mailto:Europaeische.Akademie@DLR.de) or via fax to +49 (0) 2641 – 973 320.

- 32 Climate Prediction and Climate Precautions, Meinhard Schröder et al., 06/02
- 31 Humangenetik auf dem Weg in eine neue Eugenik von unten?; Bernhard Irrgang, 2/02
- 30 Societal Decision Making and the New Eugenics; Michael Selgelid, 4/02
- 29 Robotik. Perspektiven für menschliches Handeln in der zukünftigen Gesellschaft. Materialienband; T. Christaller, M. Decker (Hrsg.), 11/01
- 28 Nachhaltige Entwicklung und Innovation im Energiebereich; G. Hanekamp, U. Steger (Hrsg.); 7/01
- 27 Klimaschutz in den Niederlanden; C. W. Backes, 3/01
- 26 Technikphilosophie und Technikfolgenforschung in Russland; V. G. Gorokhov; 2/01
- 25 Tierschutz als Staatsziel? Naturwissenschaftliche, Rechtliche und Ethische Aspekte; F. Thiele (Hrsg.); 2/01

## New Publications

Carl Friedrich Gethmann  
C.F. Gethmann, S. Lingner (Hrsg.): *Integrative Modellierung zum Globalen Wandel*. Springer-Verlag, Berlin, 2002, ISBN 3-540-43253-1

(in cooperation with F. Thiele)

„Grundlagen der ethischen Beurteilung der Gentechnik“, in: D. Ganten / R. Ruckpaul (eds), *Ethische Probleme der Molekularen Medizin. Grundlagen und Anwendungen*, Heidelberg u.a. 2003, S. 711 – 734

Stephan Lingner

(in cooperation with M. Decker) „Normative Implikationen und intergenerationale Lernprozesse langfristigen Umwelthandelns“, in: Gotthard Stein (Hrsg.): *Umwelt und Technik im Gleichklang. Technikfolgenforschung und Systemanalyse in Deutschland*. Springer-Verlag Berlin Heidelberg New York, 2003. ISBN: 3-540-43872-6

## Lectures

Carl Friedrich Gethmann  
10.2.2003 „Über den Ursprung des Sollens“; Kulturwissenschaftliches Institut, Essen

Jorge Guerra Gonzalez  
11.12.2002 “Evaluation of *The Living* from the Philosophical, Juridical and Economical Perspective”. Meeting: The Challenge of “The Living”: How to Conciliate Science and Conscience, Law and Economy? PRÉSAJE (Paris)

Miltos Liakopoulos  
26 – 27.9.02 “Trust and functional foods; new products – old ways”, Expert meeting “The role of Trust and Responsibility in the AgroFood sector”, Centre for Bioethics and Health Law of Utrecht University (The Netherlands)

30.10 – 3.11.02 “Golden Rice and Learned Helplessness – Developing the Wrong Kind of Psychology” and “Functional Foods – Ethical Issues” (together with Dr. Doris Schroeder), 6th World Congress of Bioethics” (Brasilia)

## Personalities



Professor Willy Geysen graduated 1967 in Electrical Engineering (Master); 1970 he finished his Ph.D., both at the Katholieke Universiteit Leuven (K.U. Leuven). In 1980 he got his Master in Law (LLM) degree through the State Jury. 1969 – 1975 he was docent at the Engineering College in Hasselt and Associate Professor at the K.U. Leuven. 1975 – 2001 he was full Professor at the K.U. Leuven and chairman of the Power and Industrial Applications Division (Engineering Faculty).

In 1975 Professor Geysen founded a post graduate programme for the education of safety engineers at the K.U. Leuven. He chaired the programme until 1990. He specialized in accident investigation with a focus on fire and explosion investigation. He is still teaching Safety Law and still acting as a forensic expert in this field.

Since 1988 he is President of the Centre for Intellectual Property Rights of the K.U. Leuven. 1990 – 1995 he was spokesman, from 1995 – 2001 director of the Development Office and since 1995 senior advisor for external affairs of the Rector of the K.U. Leuven. Since 2001 he is professor emeritus.

Professor Geysen is a member of various organizations; for example member of the VDI (Verein Deutscher Ingenieure) and VDE (Verband der Elektrotechnik, Elektronik und Informationstechnik, Germany), of the Scientific Board of the National Institute for Criminology and Criminalistics and of the Editorial Board of ‘Poiesis & Praxis’.

Furthermore Professor Willy Geysen is a member of the Scientific Board of the Europäische Akademie.

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