



EUROPÄISCHE AKADEMIE

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

Direktor: Professor Dr. Dr. h. c. Carl Friedrich Gethmann

NEWSLETTER

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EDITORIAL

■ The staff of the Europäische Akademie regularly publish in the various organs of the academy, such as the book series (Springer Verlag) “Ethics of Science and Technology Assessment”, the journal “Poiesis & Praxis”, the Graue Reihe or in this Newsletter. They cover the natural and engineering sciences and the medical disciplines focussing on interdisciplinary approaches.

In 2008, so far two staff members published the results of the work of their project groups in the book series: Ruth Klüser (“Die Regulierung elektrischer Netze. Offene Fragen und Lösungsansätze”, vol. 32) and Georg Kamp (“Nachhaltigkeit und Gerechtigkeit. Grundlagen und schulpraktische Konsequenzen”, vol. 33).

Several Focus articles were published recently in the Newsletter by academy staff; furthermore, in “Poiesis & Praxis”, co-authors Thomas Engel and Ulrike Henckel published an article on “Human beings, technology and the idea of man” (issue September 2008).

Members of academy staff also publish articles in external books and journals, e.g. Thorsten Galert in “Theology meets Biology. Anthropological Perspectives on Animals and Human Beings” (2008) with an article on “What it means to ascribe pain to animals” and Felix Thiele “Ökonomie und Medizinethik” (editor together with Annemarie Gethmann-Siefert).

The Newsletter regularly informs about the publications of staff members.

KM/FW

Further information: www.ea-aw.de

FOCUS

Circumspective Planning and Sustainability

Georg Kamp

Since the “Rio-Conference” in 1992 and, increasingly, in the last years, when the topic of climate change attracted public interest and became part of the political agenda, more and more, ‘sustainability’ and ‘sustainable development’ became ubiquitous concepts. And the lament that it is anything but clear what exactly is meant by these concepts is ubiquitous, too, at least among the scientists dealing with these topics. But in spite of all their conceptual vagueness they are paradigm examples of what meta-ethicists called a pro-word: Whatever ‘sustainability’ refers to, it is something that everybody agrees to and that everybody prefers to its opposite (e.g. unsustainable non-development). This focus outlines a strategy to define ‘sustainability’ by action-theoretical means and analyses its relation to the concept of intergenerational justice.

■ As less as every home equals each other only because everybody wants his own home to be comfortable, as less it is to be presupposed that everybody would approve the same measures and actions, just because everybody approves the general aim of sustainability. And as well as a couple moving together can (and often better should) discuss on what their home should look like without looking for a consensus on what is to be called comfortable, as well it can be discussed on what the proper reaction to recognized challenges as that of global warming, the reduction of biodiversity or resource shortages should be, without sharing a common concept of sustainability. Actually, in the discourses devoted on these topics this concept may completely drop out of consideration. And yet, it becomes more and more of interest to have a well-defined concept of sustainability at disposal: Just because of its vagueness and abstractness the term was endorsed as a compromise formula in national and international agreements as some kind of a “regulative idea” that one could agree to follow without committing too much in detail. Subsequently, the con-

cept became a term in national and international law. But without a definition that is not only widely accepted but operable in its criteria it lacks of any subsumptive power. Yet, since any solution to the problems that gave reason to the debates presupposes that many people act in an appropriate and, in particular, in a well-coordinated manner, it is necessary to share a common understanding of what the regulative idea actually regulates. Thus, it is necessary to have at least some criteria that allow to differentiate between sustainable and non-sustainable measures, or – what would be more helpful – between more and less sustainable ones.

Of course, there have been efforts to define and to operationalise it (cynics say, rather too much than too little), and most of them try to explicate the core idea of the definition that was given with the Brundtland Report “Our Common Future” in 1987. It was the definition in this document and, even more so its affirmation in the declaration of the UNCED-Conference in Rio de Janeiro 1992 that brought the sustainability-concept to its present popularity. It picks up the initially silvicultural principle

of sustainable yield and connects it with the concept of development as it was central in the politics of development aid since the middle of the 1950s. In its mostly cited formula it amalgamates both with each other and shapes it to a principle of both synchronic and diachronic distributive justice: A sustainable development is defined as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

The principle of sustainable yield, a commonplace in modern forestry since its first formulation in the early 18th century, restricts the amount of biomass that may be extracted from an eco system to its regenerative capacities. In fact, however, it was a principle of resource management for any time and anywhere where only the availability of a resource is recognized as limited, and where someone is not only interested in satisfying his needs now and immediately but also in being able to satisfy them in the time to come, too. What was new in the 17th and 18th centuries and what made it a topic of silvicultural economics was the need to regulate the usage of a regrowing resource that obviously ran short and was nevertheless used intensively, because the users were trapped in a social dilemma (which is a variant of the famous prisoner’s dilemma): Wood was needed by everyone and for a wide-ranging variety of ends, such as fuel and building material by a growing population and as construction material in mining, in smelting works, in salt works, in the dockyard, by the cartwright and as packaging material for transportable goods of any kind. And therefore, an intensive clear felling let the hills outside the walls visibly become bleaker and bleaker. But, as long as the forest is a public good, why should anybody reduce his own (private or commercial) use of wood, when the others do not? If A will not use a certain contingent for his immediate purposes, B will use it for his purpose. And, if not: The quantum A could spare by reducing his consumption by using wood more efficiently or using other resources will hardly be of relevance in contrast to the whole amount the community consumes. And, the other way round, the quantum he alone does *not* spare will hardly be of relevance either.

While the individual has effectual incentives to plan his actual and future contingencies of consumption circumspectively and will therefore behave sustainably in the mentioned silvicultural sense, this is often not the case in collectives competing for scarce resources. And that gave reason to reflect on the standards of circumspective planning of how to maintain and consume a resource everyone is dependent of and on how these standards could be asserted in a complex, dilemma-susceptible society. As we learned from the early classics of modern

political philosophy and economics, e.g. Th. Hobbes, D. Hume and S. Smith, normative institutions like the morals, the state, property rights and the market are important instruments to cope with these dilemmas. While the means of assertion, though, will be quite different in absolutistic and in democratic states, on mercantilistic and on liberalised markets, the standard keeps invariant, since it is a practical necessity of any long-term planning. If we now have preferences on how we want to live and what we want to do tomorrow (now-for-then-preferences, as R. M. Hare illustratively called them) and if we want to make them compatible to our preferences as much as possible on what we want to do now (now-for-now-preferences), then we must choose options that at least do not hinder the future availability of resources inevitably or irreplaceably for our future acting. Being irreplaceable hereby includes, that they could not be substituted without colliding with others of our plans, e.g. due to necessary investments that require resources needed for other actual or future actions. In slightly other but shorter words: If an individual or a group makes plans for its future and if he wants to make its short-term and its long-term planning consistent, then he needs to identify the required resources for now and for then and ration them, keeping their (maybe existing, maybe developable) intersubstitutability and regenerative capacities in view.

This – one might say: trivial – standard of circumspective planning is the generalised principle behind the more specific silvicultural principle and may be called the general principle of sustainability, applicable not only to a certain class of resources but to resources tout court, be it a fuel, the money to buy it, the time and physical power to earn the money, the ingenuity to find other means to get the car driven or to use the fuel more efficiently. As long as an individual (or, *mutatis mutandis*, a group) is capable at all to come to appropriate trade-offs between his colliding now-for-now and now-for-then-preferences, as long as he has all the information he needs and is capable of handling them, as long as it is capable of deciding even when information is incomplete, he will find it in its own interest to follow this principle and to use resources sustainable in this sense. He will accomplish it better or worse, awkwardly or routinely, depending on its talents, training and time. Maybe he is “shortsighted” and does not see in its younger years – as others may see as concerned observers – what he will need later in life. But by analytical reasons there is no lack of motivation: The preferences that are at stake in any case, are the preferences, the individual has itself, and only those he has “now” in the moment of decision (now-for-now or now-for-then).

And as sustainability is always relative to these preferences there is no need to advise it that it better applied the principle of sustainability. Nevertheless, however, it remains a complex task to reflect on realistic long-term plans to assess what will be needed to carry them out and to balance them appropriately with the short-term plans, especially because it is contra-productive to work on realistic long-term plans, while the temporal resources for realising the now-for-now-preferences evaporate.

There is no plan without there being a preference for a certain status the planner wants to be realised. That does not include, though, that plans are only made for statuses the planner in a certain understanding “profits” from (strictly speaking: the reason why a planner plans, is his preference for a future state in the moment of his planning, not the future status itself). There is for instance nothing unusual in preferences one has for statuses that lie far outside one’s lifespan, be it for the well-being of relatives, for an enterprise to prosper forth or just “that the world goes on”. Especially where there are plans that involve the cooperation with others they often would not work if they were limited in time: As R. Axelrod showed in his game-theoretical analysis of so-called “iterated games”, under certain, but not unusual conditions, cooperation would cease in the last game, when what made the cooperation attractive was future cooperation benefits. But since there is no incentive for cooperation in the second last game, the gamers would not cooperate in that either, and so forth up to the very first game. Hence, to ensure a reliable cooperation to satisfy now-for-now-preferences is, often dependent from making plans that are not limited in time. Insofar, sustainability is connected to the preferences someone has, but principally open in its temporal extension.

Now is the relation of this concept of sustainability and the request for transgenerational justice it is often connected with? As the preferences of a single person will be incompatible unless the person makes them compatible by weighing one against the other, the preferences of different persons could be incompatible with each other. This is the case if the satisfaction of the one would lead to consequences that would exclude the satisfaction of the other. It is now in a logical sense just the same, whether two colliding preferences belong to one and the same individual or to two different individuals. And the same are the means to cope with the collisions: at least one plan to satisfy a preference is to be changed or abandoned. However, it is quite a different thing to legitimate that A should abandon the (full) satisfaction of a preference because there is another preference of his own that he ranks higher, and that A should abandon the (full)

satisfaction of a preference, since B has incompatible preferences. While A's coping with the collision between two of his preferences is a question of mere prudentiality, the solving of the conflict between A and B is a question of justice, as it has been discussed in philosophical ethics from its very beginning. Due to their very different origin, the general principle of sustainability and the principle of justice are independent from each other. Thus, a sustainable circumspective planning can sometimes be a means to realise intergenerational justice, but since the contents of the now-for-then-preferences that require circumspective planning are not specified, sometimes a (therefore not less sustainable) planning is done to obtain injustice statuses (as, for example, will be the business-plans of the owner of a slave farm). Therefore, we should predominantly be interested in transgenerational justice and then prove whether sustainability is a means to it. And even if 'justice' is foremost a pro-word that in spite of 2,500 years of philosophical reflection has no clearcut definite meaning, whereas 'sustainability' can be well defined by action-theoretical means, the debates on how to cope with the tasks at stake could fruitfully be tied to this tradition.

Dr. phil. Georg Kamp, M.A., is member of the scientific staff at the Europäische Akademie and was the coordinator of the project "Responsibility for Future Generations. Implementation of Sustainability in Schooling". The final report "Nachhaltigkeit und Gerechtigkeit. Grundlagen und schulpraktische Konsequenzen" by G. Müller-Christ, G. Kamp, A. Lerch, L. Martignon and H. G. Nutzinger (Berlin 2008) will be published as Volume 33 of the Europäische Akademie's book series "Ethics of Science and Technology Assessment". The presentation of the book will take place on 25th September at the Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, Bonn.

WORKING GROUPS

Final storage of nuclear wastes

■ The Europäische Akademie has launched a new project on finding rules for final storage of nuclear wastes. The fact that presently robust and ethically sound criteria for acceptable handling of nuclear wastes are still lacking gives reason for this activity. The problem is evident since the hazardous wastes from past processes are overdue to secure storage, irrespective of future scenarios opting in or out nuclear energy. Recommendations for or against conceivable options will have to respect chances and risks for the public and persons concerned as well as for future generations.

The interdisciplinary project will begin on 1st October 2008. It is supported by VGB Powertech e.V. (Essen) which, amongst others, serves as research centre for the national energy providers. The nucleus of the project group is built up by Professor Dr. phil. Dr. phil. h.c. Carl Friedrich Gethmann (Bad Neuenahr-Ahrweiler), Professor Dr. rer. nat. Dr. med. h.c. Christian Streffer and Dr. phil. Georg Kamp. The project group will be coordinated by the latter and in due course more experts will be invited to take part.

 Contact:

Dr. phil. Georg Kamp, M.A.
 +49 (0) 2641 973-308
 georg.kamp(at)ea-au.de

NEWS

Managing Committee/Partners' Assembly

■ The 23rd meeting of the Managing Committee and the Partners' Assembly of the Europäische Akademie took place in Bad Neuenahr-Ahrweiler on 25th July 2008. During this meeting the accountant's report as well as the report on the situation in 2007 were stated and the managing director was given release for the financial year 2007. The accountant's report was accepted by the auditors firm without any restrictions.

Book Presentation: Study on Pharming

■ On 30th October 2008 the academy's project group "Pharming. Genetically Modified Plants and Animals as Future Production Site of Pharmaceuticals?" will present its study "Pharming. Promises and risks of biopharmaceuticals derived from genetically modified plants and animals" at the Berlin-Brandenburgische Akademie der Wissenschaften in Berlin. The book addresses a large range of questions associated with pharming: An analysis of the state-of-the-art of plant and animal pharming technologies is followed by an assessment of environmental risks and welfare risks for pharming animals. Public views and attitudes to pharming are investigated on the basis of a comprehensive survey in 15 countries. Ethical and legal questions, posed by present and foreseeable future practices of pharming, are analysed. The concluding chapter presents the main findings and recommendations.

At the same time, the book "Genetic Engineering in Livestock. New Applications and Interdisciplinary Perspectives" will also be presented. The Europäische Akademie and the Berlin-Brandenburgische Akademie der Wissenschaften addressed the topic of transgenic farm animals in an interdisciplinary symposi-

um in 2007. In these proceedings the following topics are covered: an analysis of the state of the art of the technology and its applications, an introduction to zoopharming (including its historical industrial development and the market for biopharmaceuticals), an assessment of ethical aspects, and considerations regarding the investigation of animal welfare implications of livestock biotechnology. The proceedings address science, industry, politics and the general public interested in the chances and risks of this upcoming field of biotechnology.

Publications: E. Rehbinder, M. Engelhard, K. Hagen, R. B. Jørgensen, R. Pardo-Avellaneda, A. Schnieke, E. Thiele: "Pharming. Promises and risks of biopharmaceuticals derived from genetically modified plants and animals" / M. Engelhard, K. Hagen, M. Boysen (eds): "Genetic Engineering in Livestock. New Applications and Interdisciplinary Perspectives". Vols. 35 and 34 of the series "Ethics of Science and Technology Assessment", Springer 2008.

Further information on these topics will be found in the Focus article of the upcoming Newsletter No 84.

 Contact:

Dr. phil. Margret Engelhard, Dipl.-Biol.
 +49 (0) 2641 973-305
 margret.engelhard(at)ea-au.de

Ethical and Philosophical Relevance of Neuroscience

■ On 4th October 2008 an international meeting "On the Ethical and Philosophical Relevance of Neuroscience" is planned to take place at the Universitätsclub Bonn. As evidenced by several completed and ongoing research projects of the Europäische Akademie, neuroscience with its powerful ways of monitoring and modulating activities of the human mind has become an established object of ethical reasoning. In recent years, neuroscience is also taking an interest in ethics or, more precisely, in moral phenomena. Several studies investigated moral decision making with neuroscientific imaging techniques. The ethics of neuroscience and the neuroscience of ethics will be addressed in this meeting. The invited speakers are Jorge Moll, Ph.D., M.D. (Rio de Janeiro), Guy Kahane, Ph.D. (University of Oxford), Neil Levy, Ph.D., Ph.D. (University of Melbourne), and Elisabeth Hildt, Ph.D. (Universität Tübingen). The meeting is the second of three workshops organized by the interdisciplinary research group "Neuroscience in Context: Critical Perspectives, Neuroethics, and Anthropology". This research group is funded by the Volkswagen Foundation as part of its "European Platform for Life Sciences, Mind Sciences, and the Humanities." For registration to the meeting in Bonn contact Dr. phil. Thorsten Galert who is

a member of the “Neuroscience in Context” group (www.nic-online.eu) and project coordinator at the Europäische Akademie.

Contact:

Dr. phil. Thorsten Galert, M.A.

+49 (0) 2641 973-307

[thorsten.galert\(at\)ea-aw.de](mailto:thorsten.galert(at)ea-aw.de)

PUBLICATIONS

Thomas Engel/Ulrike Henckel

■ “Human beings, technology and the idea of man”, in: *Poiesis & Praxis* 5 (2008): 249–263

Carl Friedrich Gethmann

■ “Wer ist der Adressat der Langzeitverpflichtung?”, in: Carl Friedrich Gethmann, Jürgen Mittelstraß (Hgg.), *Langzeitverantwortung. Ethik – Technik – Ökologie*, Wissenschaftliche Buchgesellschaft, Darmstadt 2008, pp 10–22

■ “Klimaforschung und Klimapolitik. Über den verantwortlichen Umgang der Politik mit wissenschaftlichem Wissen”, in: Verband der Metall und Elektroindustrie Rheinland-Rhein Hessen e.V. (Hrsg.), *Vorträge anlässlich der Jahreshauptversammlung des Verbandes der Metall und Elektroindustrie Rheinland-Rhein Hessen e.V. am 6. Mai 2008 in Bad Neuenahr*, Koblenz 2008, pp 43–71

■ „Warum sollen wir überhaupt etwas und nicht vielmehr nichts? Zum Problem einer lebensweltlichen Fundierung von Normativität“, in: Peter Janich (Hrsg.), *Naturalismus und Menschenbild* (Deutsches Jahrbuch Philosophie, Band 1), Hamburg 2008, pp 138–156

Kristin Hagen

■ “Animal welfare aspects of gene technology in animal production”, in: Laura Boyle, Niamh O’Connell, Alison Hanlon (eds) *Applied Ethology – addressing future challenges*

in animal agriculture. Proceedings of the 42nd International Congress of the International Society for Applied Ethology, 2008, p 245

LECTURES

Thorsten Galert

2/9/2008

■ “Ethical Issues of Psychopharmaceutical Enhancement”

Educational Track *Society and Neuroscience: The Neuroethics Conundrum*, 21st European College of Neuropsychopharmacology Congress, 30 August–3 September, Barcelona, Spain

Carl Friedrich Gethmann

15/9/2008

■ “Philosophie zwischen Lebenswelt und Wissenschaft”

Testimonial lecture on the XXI. Deutscher Philosophie Kongress, Universität Duisburg-Essen, Campus Essen

Margret Engelhard

3/8/2008

■ “Pharming”

Projekt Zukunft/Tomorrow Today, Deutsche Welle-TV

Kristin Hagen

6/8/2008

■ “Animal welfare aspects of gene technology in animal production”

42nd International Congress of the International Society for Applied Ethology, Dublin

PERSONALITIES



■ Michael Ebling was born in Mainz in 1967. He studied law at the Johannes Gutenberg-Universität in Mainz where he passed his first and second state examination in law. After having served as policy principle consultant to Minister Professor Dr. E. Jürgen Zöllner, Ebling was appointed Deputy Mayor of the city of Mainz, for Social Affairs, Youth, Health and Living in 2002.

In 2006 he became State Secretary at the Ministerium für Bildung, Wissenschaft, Jugend und Kultur, Rheinland-Pfalz (Ministry of Education, Science, Youth and Culture of the Federal State of Rhineland-Palatinate).

Since 2007 Ebling is head of the managing committee of the Europäische Akademie Bad Neuenahr-Ahrweiler GmbH. Furthermore, he is also chairman of the commission “Quality Assurance at Universities” of the Kultusministerkonferenz (Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, KMK) and member of the Accreditation Council of the “Stiftung zur Akkreditierung von Studiengängen in Deutschland” (Foundation for the Accreditation of Study Programmes in Germany).

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 Bad Neuenahr-Ahrweiler GmbH, Wilhelmstraße 56, 53474 Bad Neuenahr-Ahrweiler, Germany

E-Mail & Internet:

europaeische.akademie@ea-aw.de • www.ea-aw.de

Director:

Professor Dr.phil. Dr.phil.h.c. Carl Friedrich Gethmann (Vi.S.d.P.)

Editing:

Katharina Mader, M.A., Phone +49 (0) 2641 973-313, Fax 973-320
katharina.mader@ea-aw.de

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Michael Ebling is head of the managing committee of the Europäische Akademie GmbH and State Secretary at the Ministry of Education, Science, Youth and Culture of the Federal State of Rhineland-Palatinate
