



# 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 Europäische Akademie GmbH is a scientific institution involved in the research of subjects which, due to their content matter, are closely linked with politics. The academy's most important findings are memoranda which develop scientifically justifiable recommendations based on a scientific description of the current stage of the proceedings on a given topic. It is by means of these recommendations that the academy's work is referred to the political praxis. However, the academy neither tries to reverse political decisions taken by representative institutions through immediate political implementation, nor to replace or simulate the free shaping process of social opinion by fundamentally democratic proceedings. No matter the case, science would attempt to take the position of legitimate policy-makers. "Scientific political consulting" is science and not politics. A far-reaching consequence of this is that, while science can inform politicians of the scientific view on any given subject, it cannot expect scientific information to be regarded as the only basis for political decision-making. Nevertheless, science can expect political policy-makers to keep themselves informed about current developments within the world of science. This expectation also creates an obligation on the part of the scientific community to create channels of information, such as this Newsletter, which are meant to distribute current information concerning the process of knowledge development and its results.

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### FOCUS

#### The quest for a concept: is animal welfare science growing up?

Kristin Hagen

Over the past fifty years, the welfare of animals has attracted a considerable amount of attention in the public and academia alike: animal protection legislation has been revised, and scientific evidence regarding animal welfare is sought to inform animal ethics and animal protection legislation, as well as food labelling. Animal welfare science has become an increasingly comprehensive field with the inclusion of animals' subjective experiences into the concept – and the corresponding widening of methodological approaches. The use of the concept of animal welfare varies though, and in some cases it has become so broad that it incorporates notions of naturalness, dignity and integrity. There are two problems: the theories lag behind, and the relation of animal welfare science with animal ethics and policy is ambivalent. What if contradictory conclusions result from stressing different aspects of animal welfare? More theoretical work is required to meet the current conceptual challenges and to give animal welfare science continued scientific standing.

#### The need for a science of animal welfare

Is your cat well? How do you know? Do you care whether your cat is well? You may notice changes in its behaviour when it falls ill – although it is possible that its disease remains subclinical for a long time while it seems perfectly normal and happy. Later, when it is known to be ill, could it feel well nevertheless – maybe the painkillers work well? What do you think is important for it, or to it? Health, freedom from pain, freedom to perform certain behaviours? What do you owe to it? People who own animals often feel empathetic with them and care about them. Humans generally have inclinations to empathise with animals, but also to exploit them. The topic is currently controversial in the public as well as academia, with strong opinions ranging from "animal liberation" to the defence of the instrumentalisation and exploitation of animals. Industrialisation of farming has led to distance as well as sentimentality. But in any case, the

side-effects of industrialisation have been recognised, and there is currently a certain majority agreement – reflected in legislation – that we owe some sort of moral consideration to animals and should ensure that their welfare is not below some minimum standard.

The topics of animal welfare science are how the welfare of animals can be characterised and measured, what causes better or worse welfare, and how improvements can be made. Historically, animal welfare science developed in response to societal concerns about how animals were kept and used by humans. The anti-vivisection movements in the first half of the 20<sup>th</sup> century prompted an academic response that set out to reform (laboratory) animals' conditions without working for the abolition of animal experimentation. Ethical discussion in the early 1960s about animals' conditions in intensive farming (prominent in Ruth Harrison's 1964 book "Animal Machines") led to societal mandates for a science

of food animal welfare, most importantly by the UK Government's Brambell Committee which became famous for advocating "five freedoms" of movement for farm animals. Subsequently, this notion was expanded to incorporate freedom from thirst, hunger and malnutrition, from discomfort, from pain, injury and disease, from fear and distress – and freedom to express normal behaviour (John Webster). The ethical motivation for animal welfare science has led to a focus on species believed to be sentient, and on animals kept by humans – e.g. pets and farm and laboratory animals.

When is a sheep in distress? Do laying hens need to dust-bathe? Can fish feel pain? Is it natural behaviour for a domestic sow to build a nest for her offspring? Do laboratory cats experience less fear if provided with hiding boxes? Animal welfare questions warrant reliable and valid data generated by sound theories and empirical research. In order to reliably inform moral judgement and to advise on changes in legislation and industry, knowledge of the biological and psychological characteristics of the different animals is needed to balance anthropomorphism (our inclination to attribute human characteristics to animals in analogy) and prejudice. For example, it has sometimes been argued that piglets do not need anaesthesia during castration, nor analgesia afterwards (because they do allegedly not feel it anyway), but science has proved this position wrong. And it was not commonly thought that domestic sows had retained their nest-building inclination before this was shown experimentally. However, despite the importance of scientific method, practical knowledge should inspire the research and be used as a critical test to its results, because people who own animals or handle them a lot, e.g. personnel on farms and in laboratories and zoos, not only commonly care about them; they can also have good knowledge regarding their welfare.

### Concepts of animal welfare

Within animal welfare science, the role of practical knowledge has been partly reflected in the "five freedoms". However, the standing of "scientific facts" in industry, policy and legislation, for example in the European Food Safety Authority, has encouraged an emphasis on scientific character and objectivity. In the beginning, animal welfare was more or less equated with health, but biological perspectives were soon added to the veterinary. According to one influential biological theory of welfare, the welfare of an individual is "its state as regards its attempts to cope with its environment" (Donald Broom). This theory has been used to point out that the welfare of an individual animal can vary from very good to very poor and that it

can be characterised scientifically with physiological and behavioural measures related to the animal's coping methods. More recently, a concept of animal welfare based on allostasis has been suggested – the current core model of physiological regulation which means that stability in the relationship between an organism and its environment is achieved through constant change (S. Mechiel Korte).

Feelings are included – but not central – in these biological approaches to animal welfare. Feelings have been excluded in other biological approaches because their investigation has been judged as unscientific (Jane Hurst). In contrast, some authors (Marian Dawkins, Ian Duncan) have emphasised the psychological aspects of welfare, particularly an animal's subjective well-being. After all, the starting point of animal welfare science is that an animal perspective is taken, in the sense that we wish to know what matters *to the animals*, assuming that there *are* things that can matter to animals. Over the past couple of decades the investigation of animals' mental states and processes and the presupposition of sentience and consciousness have become increasingly accepted. Assessing feelings sets interesting methodological and philosophical tasks.

The "feelings approach" to animal welfare implies that *only* an animal's subjective experience counts as valuable for it. Should we really restrict the concept of welfare to aspects that we think influence how the animals experience their own lives? What about the human reconstruction of what might be a good life for animals? Integrative views on the animal welfare concept aim to reflect common moral concerns and include dimensions of health and biological functioning as well as feelings and also naturalness (David Fraser). Ideas of naturalness (and also integrity, dignity, and inherent worth) have entered animal ethics and gain new relevance with, for example, biotechnological development.

### Problems in the current situation

But does everything that is morally relevant in our relation with animals need to be part of the definition of animal welfare? If we include ideas of naturalness and dignity, without assuming that the animals actually conceptualise such ideas, then why do we not include the idea of death which many people see as highly morally relevant? Death is typically seen as relevant from a welfare point of view only to the extent that a given animal can conceptualise it (or the dead animal's companions, for example an offspring, can miss it). To include avoidance of premature death into the welfare concept would draw animal welfare science *ad absurdum*, because it works within indus-

tries that are based on the premature death of animals to a large extent. It is even possible within animal welfare science to argue for euthanasia of animals; for instance in promoting "humane endpoints" for disease-model laboratory animals, i.e. to make their earlier euthanasia possible rather than let them suffer the last stages of disease.

Integrative theories of welfare also lead to difficulties when conclusions from a focus on, say, "naturalness" versus "feelings" differ. When it comes to measuring, describing, and quantifying animal welfare, the different dimensions often lead to different conclusions. For example, group housing may be preferred by a social species and allow for more natural behaviour, but it may at the same time increase the risk of infections. If preferences, natural behaviour and freedom from disease all count in an evaluation, the conclusion becomes a matter of weighing and judgement – but which are the criteria for this evaluation, what is the basis for value judgements when the animal welfare science input is contradictory? Practical knowledge may play an important role here because sometimes it is suited better than reductionist approaches to catch the many facets of welfare on the level of the whole animal. Recently developed biological methods for coping with complexity will probably play an important role in animal welfare science in the future.

Another subtle but important point must be considered: what happens if the risk of infections is increased in group housing only for certain breeds developed for very high productivity, or at certain group sizes, with lack of space, in dependence of the kind of food offered, etc.? The recommendation with regard to group housing or not will then also be dependent on, for example, whether or not lower productivity is considered an option, i.e. the degree of reformist versus abolitionist argument in the underlying ethical position. When directly responding to industry concerns, animal welfare science is vulnerable to the omission of such perspectives, it can be biased in the sense that only some aspects were measured and reported on, while others were not.

Furthermore, the methods for the investigation of subjective states have been focussed too narrowly on correlated physiological processes, and on preference tests. More emphasis should be on the development of further approaches that take a subject's intentional behaviour and its ability to interact with humans into consideration.

### Conclusion

Defensiveness about being a proper science has hindered the development of animal welfare science. As animals' subjective experiences are

recognised as an important dimension of animal welfare, more methods are needed for their investigation. At the same time, not only subjective experiences may be thought to be of value to the animals and integrative concepts of animal welfare have therefore become popular. In many cases, this means that contradictory results can be obtained (and too easily manipulated) within the same concept – and how shall these results then inform moral judgement and legislation?

Furthermore, the concept is becoming too broad to be operational when all moral concerns are incorporated. Therefore, we need a clear distinction between what is of value for the animals being studied versus what users owe their animals – we may well owe them considerably more than “just” good welfare. We may thus have obligations beyond animal welfare to promote animal integrity or naturalness – but that does not mean that integrity or naturalness have to be included in a concept of animal welfare.

Animal welfare science seems to be in a blind alley, with its concept overarching and fragmented, and the ethical and scientific questions entangled. Philosophers have called for moral assumptions to be made more explicit in animal welfare research, but this does not seem to solve the problem. There is a need for more theory development and clearer delineation of the concept of animal welfare, offering continued tasks for collaboration between animal scientists, ethicists, and philosophers of science.

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**Kristin Hagen** did her Ph.D. at the *Animal Welfare and Human-Animal Interactions Group, University of Cambridge*, with the thesis “*The expression of emotions and learning in cattle*”. She conducted further research on the welfare of cattle before joining the *Europäische Akademie GmbH*. She was responsible for the *animal welfare perspective on transgenic animals* in the “*Pharming*” project of the academy and is currently organising the autumn conference “*Concepts of animal welfare – interdisciplinary perspectives*” (SETA-Hotel Bad Neuenahr, 8–9 October 2009, see also “*Conferences*”, p. 4).  
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## WORKING GROUPS

### Ethical Evaluation – SKRIBT

■ The study group prepared its first evaluation report on early results of the joint research project “Protection of crucial bridges and tunnels of road traffic (SKRIBT)”. The report evaluated both the analyses of emerging threats from natural and human-induced impacts on crucial infrastructures and related hazard scenarios as well as the analysis of a list of potential measures for a better protection of

endangered bridges and tunnels on technological, operational and organisational levels.

The evaluation of the provisional results will enable the partners to formulate sound and acceptable provisions in favour of crucial infrastructures and their users. The report was submitted to the customer (BAST – Bundesamt für Straßenwesen/Federal Highway Research Institute) on 12 June 2009.

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## NEWS

### Day for organ donation

■ On the occasion of the German “Tag der Organspende” (day for organ donation, 6 June), Dr. Margret Engelhard, scientific staff member of the Europäische Akademie GmbH, gave a talk at the meeting of the Lions-Club Bad Neuenahr-Ahrweiler on 8 June. The topic was the scarcity of donated organs in transplantation medicine. Engelhard discussed diverse causes of the scarcity of organs and explored ways to alleviate this problem; in this connection she referred to the academy’s publication “Organmangel. Ist der Tod auf der Warteliste unvermeidbar?” (Springer-Verlag, 2006) which is the result of the work of an interdisciplinary research project.

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 Project of the Europäische Akademie on “Organ donation”:

- Incentives for Organ Donation (duration: 7/03–6/06), [www.ea-aw.de/en/project-groups](http://www.ea-aw.de/en/project-groups)

Publications of the Europäische Akademie on “Organ donation”:

- F. Breyer, W. van den Daele, M. Engelhard, G. Gubernatis, H. Kliemt, C. Kopetzki, H. J. Schlitt, J. Taupitz: *Organmangel. Ist der Tod auf der Warteliste unvermeidbar?* Springer-Verlag, Berlin 2006. ISBN 3-540-33054-2

- F. Breyer, M. Engelhard (eds): *Anreize zur Organspende*, Graue Reihe No 39, Europäische Akademie 2006, [www.ea-aw.de/en/publications/graue-reihe](http://www.ea-aw.de/en/publications/graue-reihe)

- F. Breyer, Focus “What to Do about the Organ Scarcity”, Newsletter 62/2006, [www.ea-aw.de/en/publications/newsletter](http://www.ea-aw.de/en/publications/newsletter)

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### Medical Ethics Working Group – lecture on “brain doping”

■ On 11 May 2009 the “Arbeitskreis Medizinethik” had its 28<sup>th</sup> meeting at the Europäische Akademie GmbH. Philosopher Dr.

Thorsten Galert, scientific staff member of the academy, gave a lecture on “Ethical Issues of Pharmaceutical Neuroenhancement”. Neuroenhancement, or “brain doping” in popular parlance, refers to the non-therapeutic improvement of cognitive capacities or emotional well-being. While there is little reliable evidence on the actual magnitude of this trend, it seems that more and more healthy people are willing to improve their minds by taking psychopharmaceutical drugs such as antidepressants (e.g. Prozac®) or psychostimulants (e.g. Ritalin®). Opponents of pharmaceutical neuroenhancement are raising a variety of concerns, some of which related to the impact of “smart pills” or “happy pills” on the individual consumer whereas others pertain to social consequences which may result from a widespread use of such drugs. According to Galert, these concerns hardly warrant a principled ethical rejection of pharmaceutical neuroenhancement. However, some critical arguments which fail to make a good case for a general prohibition may nevertheless convince many people that it is not in their best interest to seek mental enhancement by psychotropic drugs. Furthermore, there is reason to carefully monitor the future development so as to prevent possible undesirable social consequences. For instance, it would certainly be alarming if people felt a growing pressure to take pills in order to keep up academically and socially.

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### Inaugural lecture by Priv.-Doz. Dr. med.

#### Felix Thiele on clinical research on children

■ On 27 May 2009 Dr. Felix Thiele delivered his inaugural lecture as Privatdozent in the department of humanities at the Universität Duisburg-Essen on the topic “Clinical research on children. A critical view of medical-ethical and economical-ethical provisos”. Thiele dealt with suggestions of how to improve the therapeutic situation of minors.

The main emphasis was laid on the increasing shifting of clinical research projects into developing and newly industrialising countries, such as Eastern Europe or India. Many reports indicate that such research projects often do not meet the moral and legal requirements prevailing in Europe and the USA and, thus, have to be rejected. However, in principle, Thiele supported an internationalisation of research on minors. In this respect an international regulatory concept would be required to ensure that test persons take an adequate advantage of their participation in such research projects.

Felix Thiele studied medicine and philosophy

i.a. at the Universität Heidelberg and the London School of Economics. Since 1999 he has been deputy director at the Europäische Akademie GmbH, and at present he is member of the interdisciplinary project group “Clinical research in vulnerable populations”.

*Project of the Europäische Akademie on “Pharmaceuticals”:*

- Clinical Research in Vulnerable Populations (duration: 12/08–6/11), [www.ea-aw.de/en/project-groups](http://www.ea-aw.de/en/project-groups)
- Publications of the Europäische Akademie on “Pharmaceuticals”:*
- F. Thiele, J. M. Fegert, G. Stock (eds): Clinical research in minors and the mentally ill, Graue Reihe No 46, Europäische Akademie 2008, [www.ea-aw.de/en/publications/graue-reihe](http://www.ea-aw.de/en/publications/graue-reihe)
- F. Thiele, Focus “Research on Minors”, Newsletter 79/2008, [www.ea-aw.de/en/publications/newsletter](http://www.ea-aw.de/en/publications/newsletter)

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## LECTURES

### Thorsten Galert

3/6/2009

■ “Ethische Probleme des pharmazeutischen Neuroenhancements”

Scientific Colloquium of the “Klinik und Hochschulambulanz für Psychiatrie und Psychotherapie”, Charité – Campus Benjamin Franklin, Universitätsmedizin Berlin

### Carl Friedrich Gethmann

18/6/2009

■ “Freiheit oder Handlungsurheberschaft. Überlegungen zu einer Problemsubstitution”  
Conference “Freiheit und Bildung. Schellings Freiheitsschrift 1809–2009”, Pädagogische Hochschule Weingarten

4/7/2009

■ “Wissenschaftliche Gesellschaftsberatung, interdisziplinäre Forschung und die Rolle der Philosophie”

Symposium “Philosophie und politisches Handeln”, Universität Bamberg

### Katja Stoppenbrink

8/6/2009

■ “Wann Ethik? Überlegungen zu Zeitpunkt und Möglichkeit ethischer Reflexion im Zeitalter antizipatorischer TA”

9<sup>th</sup> Austrian TA-Conference “TA ’09 – Wann TA? Technikfolgenabschätzung im Zeitalter der Technowissenschaften”, Vienna

## CONFERENCES

### Autumn Conference on animal welfare

■ Animal welfare is a topic that plays an increasingly important role in public perceptions, politics, and science. The autumn conference 2009 brings together scientists representing animal welfare science, animal ethics, law, and philosophy of science, in order to discuss how philosophical analysis and explication of the scientific terminology, concepts and theory may support the further development of animal welfare research in light of the animal welfare concept’s broad use in animal ethics, society and legislation.

There will be three different sessions followed by a panel discussion at the end of the conference: “A broad perspective on animal welfare”, “Animal welfare and normativity” and “Methodological foundations for animal welfare science”.

*Date: 8–9 October, 2009*

*Venue: SETA-Hotel, Bad Neuenahr-Ahrweiler*

*Deadline for registration: 28 September 2009*

*Further information: [www.ea-aw.de/en/events](http://www.ea-aw.de/en/events)*

## PERSONALITIES



■ Dr. phil. Georg Kamp, M.A., is member of scientific staff at the Europäische Akademie GmbH.

After commercial training and work as a retail manager he studied philosophy and German language and literature at the universities of Essen, Duisburg and Bochum (M.A. in Duisburg in 1993). Thereafter he worked as a research assistant at the Institute of Philosophy at the Universität Essen until 1999 and successfully completed his philosophical dissertation project in which he worked on the pragmatic foundations of argumentations in regulative contexts (published as “Logik und Deontik. Über die sprachlichen Instrumente praktischer Vernunft” in 2001).

From 1999 to 2002 he was member of scientific staff of the Europäische Akademie – there he was head of the study group “Practical Philosophy” and managing editor of the journal “Poiesis & Praxis”. During a parental leave he worked as freelance consultant, docent and editor and completed further education as mediator at the FernUniversität Hagen. After having managed a project on discontinuity in working-biographies at the Hochschule Niederrhein for one year, he returned to the Europäische Akademie as co-ordinator of the project group “Responsibility for Future Generations. Implementing Sustainability in Schooling” (completed in 2008) and head of the study group “Practical Philosophy” (current). He is now co-ordinator of the project group “Radioactive Waste. Technical and Normative Aspects of its Disposal” and working on his habilitation (“Normative Instrumentalism. A Language Philosophical Critique of Practical Reasoning”).

*Dr. phil. Georg Kamp, M.A., is scientific staff member at the Europäische Akademie GmbH and co-ordinating the project group “Radioactive Waste. Technical and Normative Aspects of its Disposal” (duration 10/08–10/10).*

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