

EUROPÄISCHE AKADEMIE

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

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

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FOCUS

Ways of Man-Making

Why we need a medical anthropology

Felix Thiele

Contemporary philosophy of medicine has a strong focus on moral problems caused by research and application. In these debates, however, there is a partial lack of awareness for anthropological presuppositions woven into the argumentation. The debate on what the aims of medicine should be, for example, and whether modern medicine adequately realizes these aims, has an anthropological aspect. Also, the neuro-ethical debate on the concept of moral responsibility in view of causally determined brain processes points towards the anthropological question on the biological and/or moral nature of humans.

The claim that anthropological assumptions are part of moral argumentations will be less contested than the question what consequences this may have for applied ethics. This article will discuss three problems that will help to understand whether and how philosophical anthropology can enrich medical ethics. There is a rich debate on this issue covering a spectrum from substantial anthropological propositions and whole theories over anthropological methods up to the denotation for a certain philosophical research area in the first half of the 19th century. Moreover, there exist anthropologies in other scientific disciplines, such as biology and ethnology, as well. In the following, I will discuss i) the relation of anthropology and ethics, ii) the relation of anthropology and natural sciences, and iii) the relation of anthropology and medicine.

The relation of anthropology and ethics

Some ethicists, especially those that can be assigned – broadly speaking – to the Anglo-American school of analytical philosophy, think anthropology as something better to be kept away from ethics. The well-known battle cry “ethics without metaphysics” might also go “ethics without anthropology”. From this perspective anthropology is not much more than a nuisance lingering around in the hallway of ethics where it is arrested for good reasons.

But what are the reasons for the exclusion? Most plausible is the suspicion that the reference to human nature as being specific for anthropology cannot establish a firm basis ethics can draw universally valid statements from. The reason for that can be seen either

in the assumption that nature in general, and therefore human nature, too, is irrelevant for moral considerations. Or it is assumed that statements on human nature can be integrated in moral arguments but that the individual tokens of human nature are way to diverse to serve as a basis for ethics.

What can be said against this? Just think of an ethics that aims at the moral evaluation of actions. For this task it is indispensable to characterize the author of actions. Only if we have a clear idea of how the originators of actions are structured, i.e. what capacities and limitations they have to move in the world and to change it, only then meaningful statements about the moral responsibility of these actors are possible. An ethics merely confined to the

formal characterization of the capacity to act may suit an ethics for spiritual beings but not for us. If one accepts this argumentation, it seems plausible that ethics needs some input from anthropology, while it is not yet clear how this input should be developed.

The relation of anthropology and the natural sciences

I do not want to subscribe to the thesis that anthropology must draw on the natural sciences for characterizing human nature. This would, for example, have the strange consequence that Pico della Mirandola's "On the dignity of man" could not count as a piece of work in anthropology. However, for the purpose of scrutinizing the benefit of an anthropological foundation of medical ethics, the relation of anthropology and the natural sciences is more promising than that of anthropology and ancient philosophy of nature as in Pico's writings.

One of the most interesting contemporary attempts to explicate human nature by referring to biology has been proposed by Martha Nussbaum. Her 'capabilities approach' aims at drawing on human nature for identifying certain basic goods that are constitutive for a good human life. In this, she is following Aristotle but stands in opposition to other authors who refrain from drawing on human nature. Authors like Kant and Rawls claim that the biological nature is stable but a-moral, so that it is impossible to tie moral arguments to it. Or, quoting Habermas' critique of anthropology: An anthropology referring to the biological functionality of humans is "indifferent opposite barbarism and humanitarianism". Nussbaum, on the contrary, thinks this to be the only possible way. On her path she draws extensive lists of basic goods from human nature such as rationality, sociality, and bodily needs, and claims that the protection of these goods is morally obligatory.

An ongoing debate is the question how Nussbaum's thesis of the normative relevance of specific needs can be justified. Assigning normative relevance to the needs of humans nourishes the suspicion that Nussbaum adheres to a naturalistic concept of ethics. However, she explicitly rejects naturalistic ethics, if it, as she expresses it, refers to an "external" biology. Opposite to this, the biology in Aristotle's work (and in her own) would always be impregnated with moral considerations. The appeal of naturalistic approaches to ethics is that normative considerations are anchored in a largely persistent nature so that a fixed core of morality is established beyond historical and cultural variability. It is worth discussing whether Nussbaum's approach is not

loosing this appeal by reconstructing human nature by including normative considerations. Moreover, it is questionable whether the invested "biology" is sufficient to develop convincing and substantial normative theses. Of late, Nussbaum draws on the Rawlsian concept of "reflective equilibrium", so that her idea of human nature can hardly be understood anymore as something being rooted in biology. It should have become clear by now that referring to the biology of humans alone cannot deliver a satisfying foundation for ethics – not even for anthropology itself. A biological anthropology lacks the means for subtle description of the psychological, cultural, and historical particularities of human nature.

The relation of anthropology and medicine

Without doubt, during the last 150 years or so the success of medicine drawing on the natural sciences has been outstanding. However, it seems that in this process medicine frequently has lost the picture of the patient as a whole. Yet there has been a counter movement, most prominently the so-called Heidelberg school of anthropology with Viktor von Weizsäcker as one of its preeminent representatives. This movement is best understood as an insurgency against the sprawling biological view on humans. It is questionable, however, that the Heidelberg school and its heirs were successful in restoring a view on the whole human. The view of the physician Jores – already criticized by Karl Jaspers – is, for example, paradigmatic: He claimed a close relationship between disease and sin, thereby insinuating that the biological cause of an illness was itself only an indicator or a symptom of inadequate behavior. Or, referring to a contemporary writer: In a recent book Klaus Michael Meyer-Abich attempted to fathom the meaning of disease under the premise "that a disease shows, that one is not living anymore in the truth of life, i.e. being in a state of impurity with oneself". In these examples, the scientific explanations of disease and, based on that, therapeutic strategies using means, e.g. pharmaceutical compounds, developed on the basis of these explanations, seem to have no proper place. In view of the history of medicine over the last centuries, though, this seems rather odd.

Which medical anthropology for what?

In the view of grave problems of developing a philosophical anthropology the question still to be answered is: What would a medical anthropology be good for in our times? So far, I have argued that anthropological approaches interpreting human beings exclusively as either biological or spiritual be-

ings do not result in a satisfying concept of human nature. In contrast, I suggest to aim at an anthropology balancing different ways of explicating what it means to be human, thereby constructing a picture of human beings as a whole.

Odo Marquard argued that it is specific for anthropology to shift the focus away from describing humans through their cultural and historical condition and instead turning towards their nature. Contrary to that it seems that those authors advocating anthropology today do so because they oppose a view on humans that exclusively draws on the natural sciences. Against this background it seems plausible to describe the task of anthropology differently: Human nature should not be characterized by favouring a specific view about humanity, i.e. one should not ask whether the specifics of human beings are rooted either in their biology, or culture, or history. Instead, anthropology should aim at conciliating between the different approaches to human nature. In allusion to Nelson Goodman one might speak about 'ways of man-making' from which one has to choose for developing an integrated, comprehensive view of human nature.

Priv.-Doz. Dr. med. Felix Thiele, M.Sc., Deputy Director of the Europäische Akademie GmbH, organised this year's autumn conference on human nature and the life sciences (22 September, Bonn). For further information on literature please e-mail to felix.thiele@ea-aw.de.

PROJECT GROUPS

Fourth meeting of the EU-project "NanoDiaRA" on nanotechnology in medicine

■ From 5 to 7 October the fourth NanoDiaRA scientific meeting took place at the Paracelsus Medizinische Universität in Salzburg. Over 40 principal investigators, trainees and collaborators from the 15 different partner institutions shared their research progress since the start of the project 18 months ago and discussed future steps. At the meeting the NanoDiaRA team also welcomed their project officer Dr. Maj-Inger Nilsson from the European Commission and in a guest lecture Professor Kenneth Dawson (Trinity College, Dublin) presented nanoparticle interfaces as the key to understanding interactions with living organisms.

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Advance publication of a study on balancing renewable electricity

■ A significant problem of integrating renewable energies into the electricity system is the temporally fluctuating supply by wind and solar power plants. Thus, in order to meet the ambitious long-term targets on CO₂-emission reduction, long-term viable low-carbon options for balancing electricity will be needed. The current study of the Europäische Akademie "Balancing Renewable Electricity. Energy Storage, Demand Side Management and Network Extension from an Interdisciplinary Perspective" is concerned with the interdisciplinary discussion of these options and will be presented at the Berlin-Brandenburgische Akademie der Wissenschaften on 2 February 2012 (registration: info@ea-aw.de). Now already a summarising advance publication is available on the academy's website (www.ea-aw.org). The study analyses published future energy scenarios in order to get an impression of the required balancing capacities and shows which framework conditions should be modified to support their realisation. The authors combine their perspectives from energy engineering, technology assessment, political science, economical science and jurisprudence and address science, politics, actors in the energy sector and the interested public.

Public podium discussion on clinical research in vulnerable populations

■ On 25 October a public podium discussion on clinical research in vulnerable populations took place at the Berlin-Brandenburgische Akademie der Wissenschaften (BBAW) in Berlin. The event was jointly organized by the Europäische Akademie and the BBAW who also collaborate in a project group on this topic. Professor Stock, President of the BBAW, discussed current problems and possible solutions with Professor Hanfried Helmchen (Freie Universität Berlin), Heike von Lützu-Hohlbein (Deutsche Alzheimer Gesellschaft e.V.) and Dr. Laila Narouz-Ott (Bayer HealthCare) and the audience. Many individuals from vulnerable populations such as children, mentally ill, or critically ill patients, cannot give consent to clinical research or can do so only to a limited degree. In the past, difficulties in achieving informed consent in vulnerable populations and the high level of protection required for them often resulted in disproportionately less clinical research for vulnerable populations than for the majority of patients with non-limited capacity to consent. A solution could be achieved by increasing the number of vulnerable populations in research projects by a careful and responsible evolution of existing frameworks in order to let them benefit from medical progress more than has been the case so far.

NEWS

Studiengruppe „Praktische Philosophie“

■ Seit 2000 trifft sich in lockerer Folge die Studiengruppe „Praktische Philosophie“, in der sich die wissenschaftlichen Mitarbeiter der Europäischen Akademie mit Fragen auseinandersetzen, die für ihre Arbeit in den Projekten von grundlegender und methodischer Bedeutung sind. Für die nächsten Sitzungen sind folgende Themen vorgesehen:

- Aus Prinzip: Polluter Pays!

Moralisch und juristisch ist das Verursacherprinzip fest in der Urteilspraxis verankert. In der ethischen Analyse ist jedoch im Einzelfall zu prüfen, ob das Prinzip – und wenn ja: in welcher Deutung – Anwendung finden soll.

- Folgen und andere Gründe

Die Aufgabe der Ethik wird oft in der Begründung spezifischer ethischer Restriktionen der Handlungswahl gesehen. Analog zur Frage nach den technischen Restriktionen – „Was ist möglich, was nicht?“ – wird die Frage gestellt „Was ist zulässig, was nicht?“. Anders als bei den technischen Restriktionen kann es aber für den Einzelnen durchaus vorteilhaft sein, wenn er die vermeintlichen ethischen Restriktionen ignoriert. Was ändert sich, wenn die Ethik solche Anreize berücksichtigt und ihre kognitiven Bemühungen auf praktische Handlungswirksamkeit ausrichtet?

- Verhaltensmodelle in der Normsetzungsfolgenabschätzung

Sollen gesetzgeberische Normsetzungsbemühungen zweckangemessen sein und die gewünschten Wirkungen hervorbringen, dann ist das faktische Entscheidungsverhalten der Normadressaten in Rechnung zu stellen. Welche Verhaltensmodelle sind entsprechend für die Normsetzungsfolgenabschätzung (und entsprechend für die wissenschaftliche Politikberatung) zugrunde zu legen?

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CONFERENCES

Does size matter? International Summer School on ethical, societal, legal and biological aspects of large animals as biomedical models

■ From 10 to 14 October the Europäische Akademie Bad Neuenahr-Ahrweiler GmbH and the Technische Universität München conducted an international Summer School with junior researchers who met in Freising and Munich to discuss large animals as biomedical models.

The possibility to develop transgenic mice generated a lot of new research possibilities in biomedicine in the 1980s. Species that were interesting for research into human biomedicine – but that could not yet straightforwardly be genetically altered at the time – included primates, dogs, cats, pigs, sheep, goats and cattle. In animal biotechnology, it has become common to refer to these as "large animals" in contrast with the small laboratory rodents, and large animals used in biomedical experiments are often referred to as "large animal models". Nowadays, technologies for genetic modification have been extended to many species, including large animals, and, hence, there is currently a dramatic increase in the possibilities for biomedical research with large animal models.

The scientific question behind a research project determines the relevant biological characteristics that guide evaluation of which species is best suited as model organism for the particular research project and choice of species may also depend on economic, practical, legal and ethical considerations. Animal protection law requires research with sentient animals to undergo ethical evaluation and balancing of potential goods with potential harms. There is often more moral concern – in the public and also in ethical committees – with regard to the experimental use of species with which we have closer bonds, or to which we ascribe more ability to suffer or higher cognitive abilities.

The different factors that may guide species choice in animal research were explored in the contributions by the Summer School's junior

CURRENT PROJECTS OF THE EUROPÄISCHE AKADEMIE

- **Synthetic Biology** (duration 1/11–6/13)
- **Long-term planning. The relevance of social and cognitive resources for sustainable economic activities** (duration 9/10–2/13)
- **Nanoparticles for medical purposes. Technical, medical, and ethical aspects** (duration 5/10–9/12)
- **Development of novel nanotechnology based diagnostic systems for Rheumatoid Arthritis and Osteoarthritis (NanoDiaRA)** (duration 2/10–1/14)
- **Energy storages and virtual power plants for the integration of renewable energies into the power supply. Potentials, innovation barriers and implementation strategies** (duration 1/09–12/11)
- **Clinical research on vulnerable populations** (duration 12/08–12/11)
- **Deep brain stimulation in psychiatry. Guidance for responsible research and application** (duration 10/08–12/11)

researchers and additionally invited experts. The group covered the fields of veterinary medicine, animal biotechnology, animal welfare science, philosophy of science, law and ethics. The last session of the Summer School was open to the public and organised in cooperation with the Carl von Linde-Akademie (Technische Universität München). The Summer School's junior participants presented a summary of the week's work and discussed animal research ethics with professors in the field and members of the public. The Summer School was jointly organised by the Europäische Akademie GmbH and the Chair of Livestock Biotechnology (Technische Universität München) and funded by the German Federal Ministry of Education and Research (BMBF). Proceedings are in preparation.

LECTURES

Bert Droste-Franke

19/10/2011

■ "Energy Storage, Demand Side Management and Network Extension from an Interdisciplinary Perspective"

IEA Annex 26 "Electric Energy Storage – Future Energy Storage Demand", INES (Institut National de L'Énergie Solaire), Le Bourget-du-Lac Cedex, 19–20/10/2011

17/11/2011

■ "Energiespeicher: Achillesferse des Energiewandels?"

Conference "Energiespeicher 2011", Munich

28/11/2011

■ 1) "Interdisciplinary perspectives of storage technologies applied for balancing out supply and demand at a high penetration of renewable energy in the electricity system"

2) "Evaluating environment and resource aspects of energy storage technologies with respect to a long term viable usage"

IRES 6th International Renewable Energy Storage Conference and Exhibition, bcc Berlin Congress Center, 28–30/11/2011

Margret Engelhard

9/12/2011

■ "Möglichkeiten und Grenzen der synthetischen Biologie"

Conference "Das Rätsel des Lebens im Spiegel der Wissenschaften", Evangelische Akademie im Rheinland

Thorsten Galert

8/11, 15/11, 22/11, 30/11/2011

■ "Hirndoping – psychoaktive Arzneimittel. Fakten und ethische Orientierung"

Continuing education lecture series for the Landesapothekerkammer Rheinland-Pfalz in Ludwigshafen, Altenkirchen, Trier and Mainz

25/11/2011

■ "Neuroenhancement – Ethische Implikationen"

Conference of the German Association for Psychiatry and Psychotherapy 2011 (DGPPN-Kongress), Berlin

Carl Friedrich Gethmann

4/11/2011

■ "Die transzendente Phänomenologie und das Problem der Sonderstellung des Menschen in der Natur"

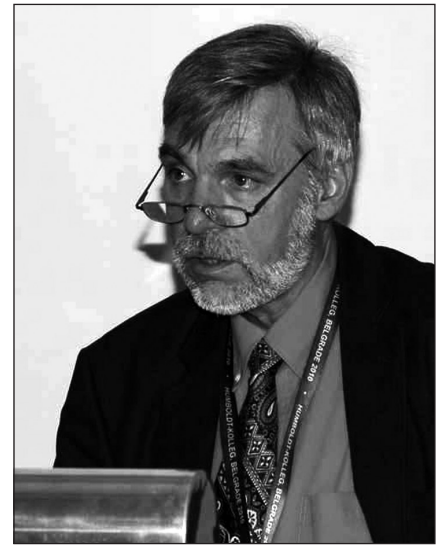
Husserl-Arbeitstage 2011, Universität zu Köln

5/11/2011

■ "Von der Endlichkeit der Mittel in der Medizin"

Conference of the German section of the International College of Surgeons, Hattingen/Bochum

PERSONALITIES



■ Martin Carrier is Professor of Philosophy and member of the Institute of Science and Technology Studies (IWT) at the University of Bielefeld. He studied physics, philosophy and education at the Westfälische Wilhelms-Universität Münster where he also gained his Ph.D. in philosophy in 1984. Carrier lectured philosophy at the University of Konstanz until 1989 and received his habilitation in philosophy in Konstanz in 1989 about the relation between theory and evidence in space-time theories. Being a Full Professor of Philosophy (Philosophy of Science) at the University of Heidelberg from 1994 to 1998, he has held the Chair of Philosophy in Bielefeld since 1998.

Carrier's main area of work is the Philosophy of Science; particularly he is interested in historical changes in science and scientific method, theory-ladenness and empirical testability, inter-theoretic relations and reductionism. Presently he also focuses on methodological issues of application-oriented research.

Carrier was part of the Governing Board of the Bielefeld Center for Interdisciplinary Research (ZiF) from 2002 to 2009 and is a member of the National Academy of Sciences Leopoldina, the Academy of Sciences, Humanities and Literature Mainz and the Academia Europaea. In 2008 he was awarded the Leibniz Prize of the German Research Foundation (DFG).

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Professor Dr. phil. Martin Carrier is Professor of Philosophy at the University of Bielefeld and member of the current study group "Interdisciplinary research and transdisciplinary claims of validity" at the Europäische Akademie GmbH (duration 3/10–9/12).
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