

On the Wilderness ALLEA Must Help to Cultivate¹

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Introduction

In Amsterdam, Frits van Oostrom opened the Conference on 19 May 2005 by optimistically stressing that striving after universal values and a respective ethics of science was the privileged topic and obligation of scientific² academies – in contrast to the universities who were mainly driven by self-interest. Thus academies – and all the more ALLEA, their European federation – were assigned the moral duty to assure that science, scholarship, and technology contribute to a better world. But *ultra posse nemo obligatur*: What about the academies' capacity to meet such an obligation?

In a slightly earlier lecture given to the Academy of Athens, Pieter J. D. Drenth had pondered over the interaction between science and ethical norms (Drenth, 2004). Not only did he show "that there are more kinds of knowing than cognition" (p.175), but he also reminded his audience that all science seen as a complex undertaking depended on extra-scientific presuppositions, value related and normative ones; moreover that scientific efforts were 'pegged down by social, political and legal restrictions' based again on 'ethical and moral values' which are, at least partly, 'culture-specific'. Disagreement between countries on the acceptability of objectives, methods, and guiding conceptions cannot be dissolved by "only scientific arguments and rational risk analysis" (p.178). We will not discuss the open and tricky significance of the term 'rational' but content ourselves with noting that according to Drenth there are probably but a few ethical constraints "so fundamental that they could have ... a universally imperative character" and serve as

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¹ To Albert Schweitzer, ethics is not a well ordered French park, but wilderness in which we have to find, in an ever renewed effort, our path (Günzler, 1996, 22) following the promptings of our conscience while being aware that a safe conscience is the devil's invention (Schweitzer, 1974, vol 2., 388).

² In this text, the term 'scientific' is used in a broad sense, including natural and social scientists, medical scientists, engineers and scholars (*i. e.* the community of the humanities).

unquestionable limits to the research business. He mentions unacceptable damage (including as objects nature and culture), "conflict with basic human values" (first human dignity, then autonomy, with other values and principles that are well known in the discussion about research on human beings following), finally the principles of solidarity and equality, extending them from actual mankind to posteriority "embodying the broader responsibility for the sustainable development of the planet that was to be left for future generations"³ (p.179 f).

Drenth's observations show that the obligation Frits van Oostrom alluded to is far from evident. Yet there exist even less confident positions and statements, underpinned by historical, systematic and empirically supported arguments. Such is the case *e.g.* with J.-P. Connerade maintaining that there are not any prefixed common moral bases in Europe, and that it is from shared worries only that common values may emerge (cf. Connerade, above)⁴; or with H. T. Engelhardt's study on *Bioethics and Secular Humanism* (1991) on which we shall have a quick look. My intention, however, is to take up some less tackled issues which in making use of civic ethics⁵ might be easier to treat without being less important for morally and ethically acceptable behaviour in the science business.

Living in a world of 'moral strangers'

Over and over again, we are told and agree that, although there is no serious lack of moral conviction and orientation in our cultural communities, we are confronted with a plethora of competing moral positions and ethical endeavours. While in urgent need of commonly mastering vital problems in various fields of shared interest, we seem to be living together as 'moral strangers'⁶ with no chance of constructing a sufficiently detailed value system and ensuing normative rules, which would offer us a path to tackle those problems with the hope of lasting success.

³ Obviously, P. J. D. Drenth's position is not simply anthropocentric, but open to the idea of inherent worth in nature.

⁴ There are more pessimists among our authors, cf. *e. g.* H. Galjaard or O. Susa, above.

⁵ Cf. J. Mittelstrass and Ayse Erzan, above.

⁶ Engelhardt, 1991, XI, XIV. Cf. the whole Introduction for a quick and comprehensive orientation.

The complaint about the absence – at least an overscarcity - of mutually affirmed and binding moral and legal rules⁷ has been officialised: The Council of Europe has been heading for a minimal set of common values and obligations in pressing problem areas such as biomedical research and practice.⁸ While experiencing limited success, the Council had to pay the price of remaining rather general and evading queries where consensus could not be reached. - The European Union issued directives, *e.g.* on patenting living substances⁹, which remained contested, lead one of its member states to launch a law suit (eventually lost in court), and are not yet generally transposed into national legislation.¹⁰

⁷ For a telling, though biased example see George Weigel's critique of secular Europe renouncing the very heart of its cultural tradition supporting human dignity, human rights, the spiritual humanism, and democracy: the Judeo-Christian heritage (2005).

⁸ Council of Europe, 1997. The work of the Convention is work in progress. A recent achievement in this continuous effort is the Additional Protocol to the Convention of Human Rights and Medicine Concerning Biomedical Research, Strasbourg, 25.1.2005.

⁹ European Commission, 1998.

¹⁰ We must not, however, overlook the efforts the European Union has been making, particularly in the last few years, to establish generally recognized values and norms. Its most fundamental initiative is the adoption of the Charter of Fundamental Rights and its introduction into the draft European Constitution – even if this draft was finally rejected by two of the member states, and therefore is not valid today. Since more than twelve years, the European Group on Ethics in Science and New Technologies has been issuing *Opinions* to the European Commission, *e. g.* 2003. - In 2002, the Commission published a *Science and Society Action Plan* which also included a strong ethics component in putting responsible science at the heart of policy making. This plan became part of the 6th Framework Programme (FP6) of the EU project of creating a European Research Area. – Another notable document issued by the European Commission is the *European Charter for Researchers* with the *Code of Conduct for the Recruitment of Researchers* (2005). – Last but not least, special mention must be made of UNESCO's decade-long effort in dressing universally acceptable ethical agreements. I will content myself with mentioning but the latest relevant proclamation of the General Conference, the *Universal Declaration on Bioethics and Human Rights* (19 October 2005), for two reasons: firstly because the introduction provides a kind of a summary of the numerous documents stating values, ethical, and legal principles and norms formally accepted by the worldwide human community, and secondly because it testifies that community's will to reach such normative agreements and its capacity to do so. This is of high importance even though political and moral practice of state and private bodies, as well as individuals, remain far behind what has formally been agreed. The challenge and the chance of realization thus remain conceivable and the object of reasonable hope.

What has been experienced on the European level is but an echo of the everyday struggle for ethical and political understanding and cooperation in the particular European countries - *i. e.* nations and cultural areas featuring international as well as intranational differences which seem to make the mere quest for a European and universally shared moral and legal area an utopia. In any case, it has become doubtful whether the traditional democratic procedures still offer an effective path out of this awkward situation (Dahrendorf, 2002, p.101 f., 103 f.).

It is well known that many of the normative controversies characteristic of the present historical situation are due to scientific achievements and discoveries, and to technological advances. They have been changing what we consider reality, and traditional images of the world and the human being have been altered.¹¹ Out of the new forms of understanding ourselves and the world we live in, emerged unexpected possibilities, interests, and objectives of forging both. However, these interests and objectives are far from being unanimously welcomed. There exists an obvious clash between traditional and newly acquired conceptions and attitudes, to such an extent that peaceful co-existence within and between our societies has been put under heavy additional stress. Thus, looking for common ethical procedures, moral attitudes and standards has become a major concern of the socially, politically, culturally and, to some extent, also economically competent and responsible actors: institutions as well as individuals, amongst them the overarching organizations alluded to, *viz.* the European Community and the Council of Europe. Global bodies are engaged, too, in the first place the United Nations Organization with its precarious efforts of having the human rights respected all over the world.

The quest for ethical consensus and compromise

Science, technology, and scholarship with their personal and institutional actors are among the leading factors responsible for the 'post-modern predicament'; and since their performances and products are no longer *a priori* and generally saluted as a wish for progress, and a promise of general wealth and happiness (Ropohl, 1996, chapter 1),

¹¹ A prominent example has been provided by the efforts and the achievements of the neurosciences leading, amongst others, to the contention that human free will was but an illusion. Cf. Roth, 2001 and Singer, 2003, 24-34, particularly 32 f.

they are also among the first to be hit by the demand of engaging in the quest for existential meaning and moral orientation. Their representatives, in the first row their academies and professional associations, perceived and after some time accepted that demand turning it into one of their prominent responsibilities (this does not apply to ALLEA, for it spontaneously did so right from its beginning).

They have been realising their responsibility in various ways, particularly on two separate though indissolubly related tracks. The first consists in submitting scientific and scholarly practice to ethical critique and moral regulation¹²; the second in elaborating the specific responsibilities of those pertaining to the scientific and scholarly communities in looking for ethically acceptable ways of meeting the challenges of present day societies, of humanity at large.¹³ On both tracks, though in different ways, they have been striving after universal normative arrangements. - A third track they followed should not be overlooked, *i.e.* the direct political engagement when faced with stirring violation of the principle of human dignity, more precisely of human rights¹⁴, particularly the right to free scientific and scholarly activity and communication. Lately a fourth track has become dominant, with the public discussion - and sometimes heavy protest - in view of morally and ethically controversial scientific and technological advances¹⁵. This track consists in taking the role of ethical consultants to authorities of different kinds as well as to firms, often by insisting on the prevalence of

¹² *E.g.* Drenth et al., 1999, *European Science and Scientists Between Freedom and Responsibility*. Then the annexes in Lenk and Ropohl, 1987, 311-363; *Medizinische Ethik im Alltag*, 1999, 435-587; Shea and Sitter-Liver, 1989; Berthoud and Sitter-Liver, 1996. (The last two publications were issued on behalf of the Conference [today the Council] of the Swiss Scientific Academies.)

¹³ In 2003, ALLEA published a «Memorandum on Scientific Integrity. On standards for scientific research and a National Committee for Scientific Integrity (NCSI)». Cf. also the Bibliography, 21 f. - In 2002, the Swiss Academy of Medical Sciences had already decided on and published a respective set of guidelines and norms; cf. again the Bibliography on 19 f.. - The Council of Swiss Scientific Academies (CASS) had also been active on the international level, see 2001 and Sitter-Liver, 2001 - Note that these are but a few examples out of an impressive series of codes, analyses, and declarations issued on different organizational levels and throughout the world. - Cf. also European Science Foundation (2000), *Good scientific practice in research and scholarship* (Policy Briefing 10, December 2005). Strasbourg.

¹⁴ *E.g.* the Human Rights Network.

¹⁵ Take human therapeutic and reproductive cloning or research on human stem cells as just two examples.

scientific truth and by claiming particular ethical competence in the public debate, though not rarely on rather swampy grounds.

Strengths, omissions, and failures

This short – and doubtless incomplete – survey may encourage one to adopt van Oostrom's optimism. The national academies and particularly their international umbrella organizations had and still have a prominent role to play in this endeavour of creating universal ethical understanding and moral practice. Not directly depending on economic interests or political ambition, they stand the test as stronghold of independence, at least in the double sense of reflecting possible vested interests and dependencies, and of allowing critique and neutralization of such dependencies within their domain. By their very terms of reference, they ought to be and as a rule are motivated to open the field for controversial discourse, aiming at clear, enlightened, and reflected advice to third parties, the general public, and more particularly to social, economic, and political decision-makers. In this they have been offering notable achievements allowing the solution of urgent problems in the general and thus truly public interest. And yet, there remain at least two domains in which the scientific and scholarly communities are still far behind of what would have been one of their intrinsic obligations.

Decades ago, Charles Percy Snow deplored the grave gap between what he termed the literary intellectuals and the scientists - the representatives of the humanities, the empirical social and the natural sciences, as we might put it today, still in a rather reductionist way (Snow, 1969). That gap has not yet been filled, notwithstanding the notorious demand of inter- and transdisciplinary co-operation. Quite to the contrary, we experience the imperialism of the language of science¹⁶, particularly of the so-called life sciences. And the gap was even carelessly jumped over by the contention that the new and truly third culture would be formed by scientists with philosophical competence, leaving aside the knowledge and wisdom gathered by the traditional humanities¹⁷.

¹⁶ J. Andereg's expression. Cf. also id., 1999, 83-92.

¹⁷ Brockmann, 1996, Introduction, 15-35. (The English original *The Third Culture* was published a year before (New York: Simon & Schuster, 1995).

An important part of the difficulties we face when engaging in the quest of ethical understanding seems to stem from cultural differences inherent in the overall scientific system and causing deafness where open ears, intellectual alertness, and curious hearts were needed. The academies of arts and sciences have still a long way to go in their firm, it is true, attempt to better that harmful situation.

This failure is at the roots of another and commonly known difficulty with which science in particular is confronted, *i.e.* the replacement of the exuberant belief in the goodness of scientific progress by scepticism and even contempt for scientific and scholarly achievement (though usually accompanied by mostly unconscious or at least unreflected use of and everyday pleasure in very many of such achievements). The phenomenon is notorious under the heading of fading acceptance of science in society. It is less familiar as the lack of acceptance of societal needs and positions by science. Both science and society (a common expression which is itself purporting a gap that is not acceptable neither in the light of systems theory, nor in sociological and economic, not even in epistemological critique) stand up against each other with expectancies and demands as if they were autonomous entities with legitimate claims, instead of acknowledging their mutual pervasion and entwinement. Too many scientists still think that the general public needs one-way enlightenment about what they do, and that then the problem of trust would be dissolved. True communication would mean, however, accepting mutual critique and advice, and honouring different and maybe not easily reconcilable interests. Here, too, the academies and analogous scientific and scholarly bodies are confronted with an important task that needs modesty (or humility, as Ayse Erzan put it, cf. above) as well as competence. Striving after an understanding in fundamental moral and ethical queries either produced by science and scholarship, or being their research object, would certainly form an essential element in building a common vessel of truth, trust, and peace for a successful trip on uncertain waters.

Main concerns of today's societies, nay humanity, should stand in the foreground of such endeavours. They are commonly well known, and should encompass global challenges, such as the fight against poverty and hunger, and the ensuing need to re-examine and eventually modify the rules of actual economic systems with their theories; ecological deterioration of the globe; decent water, housing, and energy supply for everybody, but particularly for the less privileged; control of

overall population growth. They ought to include problems created by biomedical development such as human cloning and genetical engineering of living substances, with their ensuing economically driven patenting issues. These are but a few examples of the many globally relevant concerns waiting for thorough co-operative investigation by scientists and scholars and the innumerable professional institutions. And they are of high social, cultural, and political relevance, on national, regional, and global levels.

Needless to stress that generally stopping science and scholarship would not result in any favourable and fruitful solution. Yet both science and scholarship do need guidance – and limitation - springing from two equally important sources: firstly emerging from within the scientific and scholarly cultural project of humanity, and secondly stemming from outside, offered by societal and imposed by political entities situated at various levels. However, the prerequisite of any successful guidance are values shared by the scientific and scholarly community and, in the end, by the universal community of - if not moral friends, then at least - moral relatives. This may sound quite utopian to many ears, particularly of those of the all too prudent and clever pragmatists. Yet it outlines an ideal that we must not dismiss if we sincerely care about true mutual understanding and generally life supporting peace and solidarity.

Difficulties to overcome

Enlightened optimism presupposes that the quest for shared values and norms face explicitly a number of serious difficulties. They must be handled so as to save the quest from ending in a vague and 'abstract utopia' (Bloch, 1965, p.124-132). I shall briefly address three of these difficulties.

The first difficulty is of a theoretical nature. It dwells in the controversy about universally acceptable normative arrangements; in the doubt whether these are at all possible and, if so, desirable. The post-modern interpretation of our world has become notorious: We are living in culturally surroundings where there are no more any generally

binding moral instances¹⁸. The search for meaning and orientation has become individualised; the ethical teaching that, in principle, every interest must be taken seriously on its own ground, is now a truism; the quest for at least a 'minimum concept of natural law' (Hart, 1061, p.189-195) has seen itself being reduced to the very general, thus abstract demand never to use a fellow human as a mere means¹⁹; to the contention that the accepted minimal significance of the concept of human dignity is given by the person's right not to be degraded and humiliated (Balzer etc., 1998, p. 28-31), and to accept that the idea of symmetry precedes that of asymmetry (Tugendhat, 1986, p. 334-336). In political discourses as well as in the notorious self-assertion accompanying almost naturally activities of intercultural encounter, the possibility and the acceptability of a universally adequate and obliging interpretation of the notion of human dignity has been theoretically questioned, while its non-universalisability has been dramatically affirmed on practical grounds. Insisting on the indisputable validity of intracultural, particularly intrareligious rules, provides just one of the most telling examples.²⁰

The second difficulty deepens the first one. It concerns by far not only, yet particularly scientific and scholarly associations proud to stress their independence as political consultants. Science and technology are not a world of their own but part of what has been named the socio-economic-technological system²¹. Scientific and technological research and development are to a high degree controlled by private enterprises and therefore driven by economic interests and boundary conditions.

¹⁸ Cf., for many, Dahrendorf, 2002, 104. - It is a scandal, Svend Andersen, president of *Societas Ethica* said in August 2002 in Brussels, that the plurality of options in ethics has been accepted.

¹⁹ E.g. Engelhardt, 1991 and Tugendhat, 1986, 323-338, both echoing I. Kant.

²⁰ Today's newspapers and magazines are full of striking examples; I do not think I need to cite any of them. However, I cannot help but highlight firstly the USA in their pragmatic contradiction when claiming to be the worldwide guarantor of the human rights, while at the same time, with reference to so-called national interests, trampling those very rights underfoot; secondly the daily lunacy of asking to kill and of killing hundreds and thousands of not involved and innocent human beings under the pretence of securing a particular human right or an indefinite number of those rights.

²¹ Ropohl, 1991, chapters 1 and 5, part. 118, astonishingly omitting here the military aspect of that system.

Public statistics tell us that an important part and in some countries, like Switzerland, more than half of the funds invested in pure and applied research is spent by the private sector. It is not an irrational guess to hold that freedom of research, one of the highly praised human or fundamental rights is generally (sic) very limited under such conditions. The same applies to publicly funded research since such research has to support the country's competitive position, and the apparently obvious needs of the political community. Freedom of research is one of the major arguments put forward by politicians and scientists when programmes and projects result in public controversies. Yet it seems that such defense is usually highly interest driven, and it calls another suspicion: that it serves to make one overlook, dismiss, or forget to what important extent research activities are in fact commissioned work, determined and thus limited by mostly economic, but also societal, political, and even military preferences.²²

When I maintained that this was also true for publicly promoted research and development, then I did so considering that their determining policy is usually fashioned by respective private lobbying. It is neither a secret nor astonishing that societal expectations together with personal ambitions influence even the so-called fundamental or non-oriented research. Being part of that complex system with its manifold interrelations and network processes, the scientific and also the scholarly associations are far from being independent of the social, political, economic, and military struggles. If they issue ethical guidelines and codes of ethical conduct for their professional communities - a pedagogical and ordering function of high significance - their statements cannot be considered as if they were universally acceptable by nature. The fact that infringements may be politically and economically successful and then become firstly excused, later legitimate, is a proof: Representatives of the Swiss National Science Foundation arguing successfully that the rhythm of research advances is superior to the one of political decisions, provides an actual example.²³ In June 2005, this argument was echoed by the majority of the Swiss National Parliament voting the legal status of pre-implantation diagnosis, in contradiction to

²² "Sometimes, the scientific community is behaving like a cartel. Only more dangerously." (Dahrendorf, 2002, 107; author's translation).

²³ The Foundation did so in defence of its decision to finance a research project using imported human embryonic stem cells while production of those cells in the country is forbidden on constitutional and legal grounds .

its former legal dispositions.²⁴ - In January 2003, Christopher Reeves had produced another telling example. He related trials on human paraplegic subjects applying the so-called therapeutic cloning. Asked to provide more details he refused to do so on the ground that scientific progress needed peer-review and other internal measures before it could and should be made public.²⁵

Yes, there are examples demonstrating the opposite: the public unmasking of major infringements of rules and good scientific practice, and the heavy consequences of those guilty of such moral crimes. The sudden fall of the South Korean 'national hero' Hwang Woo Suk, a cloning expert, is probably the most recent prominent example.²⁶ But such internationally disseminated cases are rare; they might be covering a reality which the respective community prefers to veil. Setting personal experiences aside, the many well documented and commented cases of blunt fraud and crime within that community and its military and political environment provides an acceptable ground for such a suspicion.²⁷

The normative statements of academies and professional associations are themselves often enough fruits of material and rhetorical compromise. They ought to be critically analysed and interpreted, *i.e.* submitted to an open discourse reaching beyond their confines, and indispensable for assessing and assuring their potential universality. In short, ethical statements of scientists, scholars, and their institutions are far from being truly authoritative; they are but one voice, though a highly meaningful one in the general strive for normative orientation within society.

The third difficulty flows from the second. As elements of the socio-economico-technological and military system, scientists and scholars depend on its processes and interrelations. Being functional, they can be used. And since power relations are inherent to the system, they may be abused. Where abuse meets their proper interests, corruption may ensue. This is not a secret either. Ralf Dahrendorf gave an apt description of what is at stake, in one of his recent interviews, resuming what many authors had already displayed: Scientists must not be left alone. Their ways of pursuing their proper interests and of defending their

²⁴ Cf. *"Forschung ist Politik weit voraus"*, 2005, 11.

²⁵ Sidney, Reuters 24.1.03, cf. *Science et Cité Newsletter*, Bern 4.2.03.

²⁶ Cf. *Klon-Forscher Hwang als Fälscher entlarvt*, 2005.

²⁷ Cf. *e. g.* S. Loue, 1999, chapter 1.

convictions are often dogmatic and sometimes misleading. Since in all important ethical questions an economic interest may - and frequently does - come into play, "there will always be a scientist who can be bought" (2002, p.107). Of course, this does not mean that buying always plays a role where scientific and scholarly controversies appear. Striving after truth necessarily implies critique and controversy. However, while dissensions and public controversy among scientists and scholars are set, processes of ruling them out by powerful, sometimes institutionalised mainstream positions are also evident. Sociologically speaking, this is again neither extraordinary nor astonishing. But it encumbers ethical contributions and positions as well as formal statements of individual scientists or their corporations with a mortgage.

Scientific and scholarly achievements, impact, and obligations

In spite of those difficulties and often aware of them, scientists, scholars, engineers, and their institutions were successful in coming to terms with moral and ethical challenges.

Experiencing moral and in general cultural change, ever more induced by the growth of scientific knowledge and technological competence, they considered their normative activity as work in progress and in consequence reviewed and modified their former findings and statements when need was at hand. The work on international ethical guidelines for biomedical research involving human subjects provides a telling example. Starting with the 'Doctors' Trial' at Nuremberg in 1947, an intensive process of reflection, formalised decision-making, and reviewing lead to the joint CIOMS and WHO's²⁸ 2000 edition of the respective guidelines. They are exemplary in that they not only give voice to scientific expertise and interest, but explicitly integrate universal political and thus societal reflection and development. They ground their essential concepts on humane concern of true universality and in consequence provide a solid platform for tackling controversial concretisation and application. This prominent example is by no means unique. Together with comparable guidelines issued by national and international professional bodies, it proves that the hope of overcoming

²⁸ Council for International Organisations of Medical Sciences (CIOMS) and World Health Organization (WHO).

difficulties and achieving viable universal norms through the endeavour of scientists and scholars is a reasonable one.

The Opinion of the European Group on Ethics and New Technologies (EGE), issued on 4 February 2003, provided a respective testimony again giving rise to legitimate hope. The Opinion deploys 'Ethical Aspects of Clinical Research in Developing Countries'. Not only does EGE ground its considerations on the European Charter of Fundamental Rights (28.9.2000), particularly "on the indivisible and universal values of human dignity, freedom, equality and solidarity", but it also enumerates the fundamental principles it has been recognizing since its beginning, maintaining that they are universally accepted. Among them, we come across the principles of non-exploitation, non-discrimination, and non-instrumentalisation; the principle of individual autonomy; the principle of justice and the principle of beneficence and non-maleficence; the principle of proportionality, "including that research methods are necessary to the aims pursued and that no alternative more acceptable methods are available", and others.²⁹ The quest for generally acceptable ethical principles is not without any hope, and has proved successful. Even if we should maintain that this is true only on the general level, we have to admit that unanimity regarding principles remains a necessary condition for more concrete ethical, moral, and political understanding.

At this point, we must turn again to the undeniable fact that scientific, scholarly, and technological achievements are fashioning to a decisive degree our images of ourselves and of the world we are living in. An actual example has been provided by the recent findings within neurobiology and brain research, relevant to and highly questioning traditional concepts of freedom of will, autonomy, responsibility, and guilt - and therefore touching our expectations with relation to ethics and moral education³⁰.

The forming power to determine other essentials of human existence, and of the existence of living beings in general entails, at least for reasonable, *i.e.* morally open beings the obligation to participate in the endeavour of moral orientation and ethical critique. The public investment in the education and in the activities of individual scientists,

²⁹ Cf. paragraph 2.2, General Approach, of the above cited Opinion.

³⁰ Cf. Roth, 2001 and Singer, 2003. This contention has been criticized on good grounds and lead both authors to differentiate their positions. Yet this is not the place to enter into the exciting debate.

scholars, and engineers as well as in their frequently privileged social position, transforms it into an irredeemable moral duty, resulting also in the obligation to at least some form of political engagement. And this goes for their organisations, particularly for academies, as well.

Conclusion: Proposal for an ALLEA ethics agenda

Though the outline on which I ventured is not more than a sketch, it makes it clear that working for a world of moral relatives is not without any dangers and even pitfalls. But we have also seen, and this is an echo to the instructive conference papers, that sincere efforts are being made by the scientific community to meet the challenge, and that those efforts can be successful. For all those assuming the moral point of view (and whoever is asking moral respect from others has done so and is bound by the ethico-logical interdiction to succumb to the pragmatic contradiction), such a situation turns into a moral obligation – into the moral duty not to break with their engagement to commonly search for and eventually establish principles and norms destined to be shared by whoever is of good will and reasonable.

Yet the sketch also displayed that we cannot satisfy ourselves with remaining just moral *relatives*. The challenges of today's socio-economic, technologically and scientifically driven civilization are forcing us into more, if we truly wish to control the cultural conditions we have been creating. There are at least some fundamental values and principles we need to share, and be it only out of a vital interest to create and assure for each of us a solid basis for difference, dissent, and controversies (Sitter-Liver, 1994, p. 372-396).

Meeting that challenge, the scientific and scholarly community contributes to moral understanding within society at large, hopefully also on a global level. This hope is not a void utopia but, in the sense of Ernst Bloch, a concrete one (1965, p. 124-132) and therefore, again, an idea-driven duty we ought not to dismiss as long as we stick to the overarching ideal of being a moral, *i.e.* a universally oriented subject striving after what is good in itself. We would thus sincerely honour and truly preserve human dignity. But again, we cannot content ourselves with an all too scanty minimal ethics; more is needed.

The group that was preparing the 2005 conference had it at heart that the event should yield some practical outcome. Now it is not difficult to

take hold of numerous enlightening analyses, constructive pieces of critique, thoughtful advice, and helpful suggestions in the papers. They are working on a solid ground for circumspect decisions and firm actions, to be taken in globally relevant as well as in nationally and locally significant moral queries. Beside these results another outcome is at hand, with relation to ALLEA's proper ethical reflection and ensuing activities. A second look at the conference papers does indeed provide some elements of an ethics agenda for ALLEA itself. In conclusion, I would take up a few of these issues and suggest that they might be considered as elements of such a programme³¹:

1. A clear answer should be presented to the complex question about the role of scientists and scholars in the endeavour to find convincing and universally binding moral rules – for the development and the application of science and technology, of course, but not less reaching beyond and cultivating more general societal and political areas.
2. In the same way the analogous question should be answered concerning scientific and scholarly institutions, in particular national and international academies. Co-operation in this effort with such institutions should go without saying.
3. The contribution to and a leading function in the construction of general and specific codes of ethics (not just of good practice!) might be another element, complemented by proposals as to ways and means to enforce, to revise, and to further develop such rules. ALLEA may perhaps best serve this case by acting as an initiator and offering the platform allowing the directly concerned to turn the kick-off into success.
4. Advice and support, on demand, for member academies and other scientific bodies intending to draft such ethical codes seem to follow logically from that conception.
5. Assuring inter- and transdisciplinarity of the dialogue on ethics in science, technology, and scholarship corresponds to ALLEA's character. Rendering each dialogue an intercultural process, also and precisely in a purely European context, gives rise to a new challenge.

³¹ What follows is the draft of a personal balance I have to answer for. However, I gratefully acknowledge that it has been nurtured particularly by a discussion with Ludger Honnefelder, already in 2004.

6. With a view to moral and ethical enlightenment, and interested in enhancing respective personal and institutional potentials, ALLEA might engage in case-based analyses and recommendations concerning the principal implications of scientific, technological, and scholarly work. This should include the critical assessment of the specific role of scientific experts in social and political debate and confrontation.
7. Bring to light and make explicit for the public consciousness first the working conditions of the great majority of the researchers and second the complex and ambiguous networks *all* of them are active in, seems indispensable. This with a view of clarifying the meaning of the ever again invoked independence and autonomy of scientific and scholarly experts, the driving interest being to make their true advisory potential transparent and effective.
8. Peace, justice, equity, and solidarity being necessary conditions of all scientific and scholarly activity, the goal of proactively securing these conditions in the broad societal, political, and economic contexts is a moral must. It is not limited to national confines, particularly not to the formal area of the European Federation of Academies. The obligation implicitly holds as long as one honours the *universal* significance and the *global* pretention of the scholarly, technological, and scientific enterprise.
9. Today, ethics is at once demanded, trendy³², and looked down upon. Therefore, clarifying that it is not a barrier to the scientific and technological enterprise has become imperative and urgent. The general insight should be fostered that ethical reflection and ensuing moral commitment are indispensable conditions of the humaneness of that enterprise. One should insist on humanity being the ultimate goal and the prominent distinction of human beings, the practical testimony of their inherent worth and dignity. It should work for ethics to be seen as integral part of any correctly understood and evaluated scientific, technological, and scholarly activity. Remember Ayse Erzan's statement (*cf.* above): "Academies are not just

³² For a debunking short comment on the status of ethics, esp. entrepreneurial ethics, cf. Kaehlbrandt, 1991, 42 f.

another institute of excellence. They are the bearers of the humanistic tradition which is predicated upon the uniqueness, of the genius, the intrinsic worth of each and every human being."

10. It is but logical, then, that ALLEA should be ready to contribute to the development and the practice of education in ethics and to propagate ethical reflection in the broad public; to assist member academies and other learned bodies in this area, on their demand.
11. My last hint will remain controversial, and it depends on my interpretation of but a few exposures. I venture to add it all the same: The conception that ethics does not only concern human beings with their individual and social interrelations, but that the moral community encompasses any being in this our common world, not just because it is of any use to ourselves, but because it can be regarded as bearing an intrinsic worth – this idea, though well elaborated within the field of ecoethics, e. g. by deep ecology, is not (yet) widely held. Anthropocentrism in its various forms prevails, even though quite a number of reasonable arguments stand against its forcefully defended absolute or relative prevalence. I, too, take it that in today's overpopulated world with its dominating profit- and race-driven scientifico-technological civilization, it is no longer compatible with sincere sustainability, *i. e.* long-term existence also of human beings. It would therefore be appropriate to develop and propagate the conception of our world as an *oikos*: a home (*Heimat*) and a household coextensive with what we may call 'nature' – and to motivate the scientific community at large to open and maintain a discussion on the rationale and the practical consequences of such a conception.

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