Series rights of nature / biocracy

A publication of HAUS DER ZUKUNFT, Hamburg

# *ABSTRACTS*

## *Series rights of nature / biocracy*
## *Volume 1–20*

Edited by
Eberhard Seidel and Georg Winter

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Abstracts
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Abstracts

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# ABSTRACTS

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Eberhard Seidel and Georg Winter

Translated by Erich Schildhauer

Metropolis-Verlag
Marburg 2019

**Bibliographic information published by Die Deutsche Nationalbibliothek**
Die Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available on the Internet at <https://portal.dnb.de>.

Metropolis-Verlag für Ökonomie, Gesellschaft und Politik
http://www.metropolis-verlag.de
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ISBN 978-3-7316-1376-3

# Foreword

The wall between our technological civilization and nature must fall. The objective is the reunification of technological civilization and nature. Full recognition and implementation of the Rights of Nature are an important prerequisite for this reunification.

With a total of 32 contributions, the twenty-volume book series "Business Publications on RIGHTS OF NATURE / BIOCRACY" (published by HAUS DER ZUKUNFT, Hamburg) seeks to provide an impetus for the inclusion of this subject in the field of economics, in particular in business administration.

If the subject is to achieve more widespread acceptance, it has to be integrated in all relevant specialist disciplines, including law and political science, economics, social and educational sciences, sociology, psychology and social psychology, and natural sciences, especially biology, particularly bioecology, in short all "life sciences". The reception of the rights of nature / biocracy in economics, especially business administration, is by no means just one aspect among many. The basic character of the economy for all forms of work and life among humans means that the reception in economics has a high degree of relevance for the reception in all other relevant specialist disciplines. As stated in the editor's and publisher's preface to each volume: Inasmuch as the rights of nature are constantly violated in the economy, it is there that

these rights – and biocracy as their epitome – have to prove themselves in the field.

The editor's and publisher's preface included in each of the twenty volumes provides a clear substantive motto for the contributions: *Above all creativity, and therefore the courage to express what may be unfinished or vulnerable to attack!* Because the courage to explore new paths can be subject to particular criticism, the editor and publisher explicitly "exculpated" the contributing authors from the start.

As such, we are pleased all the more that we were able to win over so many authors, including many young authors, to contribute to the series.

The concept of the series of business publications, as well as the coordination and academic supervision of over 30 authors were exclusively in the hands of Prof. Eberhard Seidel. Thanks to his initiative, the subject of the rights of nature, which was previously illuminated solely from a legal point of view, is now also viewed from the business perspective. Prof. Seidel's commitment led to the formation of the German business network for the rights of nature and thus is sustained.

Our thanks go out not only to Prof. Eberhard Seidel, to all the authors and to the translator Erich Schildhauer, but also to the publishing house Metropolis-Verlag Marburg and its director Hubert Hoffmann. Without his understanding and his valuable editorial support, the series of twenty volumes and the collection of abstracts presented here would not have come about.

Hamburg, March 2019
HAUS DER ZUKUNFT, Georg Winter

## Series rights of nature / biocracy
## Volume 1-20

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 1, ISBN 978-3-7316-1116-5**

*Eberhard Seidel*

# Biocracy and the Brundtland triad. The rights of nature in the context of economics and organization

## Abstract

This volume describes the fundamental relation between the two complexes "rights of nature / biocracy" on the one hand and „economics and organization" on the other hand, in two ways:

- First of all, there are logical-analytical relations as to the conceptual differentiation between the two complexes: Rights of nature are organizational norms in the field of organization and economic restrictions (constraints) in the field of economics.
- Secondly, there are empirical-synthetic relations as to the factual connection between the two complexes:

The factual connection is chiefly a goal-means connection. It is about the realization of biocracy and the rights of nature (*goal*) in the field of economics through organizational *means* (methods and instruments).

The main subject of the book, presented in section III "Biocracy and the Brundtland triad", is a discussion of the biocracy concept vis-à-via the prevailing doctrine and opinion in the area of environmental or sustainability management in both

the public and private sector. The Brundtland triad, the highly attractive consensus model in politics and science as well as economic doctrine and practice, is the essence of mainstream thinking. Biocracy, on the other hand, is still a very marginal concept and is looked upon with considerable skepticism. This suggests that the Brundtland triad might be taken as a source of hope for solutions and support for biocracy.

This hope is in vain. The Brundtland triad

- does not undertake any serious attempt at achieving operationalization,
- is, with its core feature of equal rank, not really operationalizable,
- would, if operationalized, be unsuitable because equal rank, in its nominal definition, is clearly not sufficient to even approach sustainability.

The Brundtland triad is an illusionary fabrication with serious negative consequences. Actual realization of biocracy and sustainability requires a reversal of the proto-operational rank weighting in the current hierarchy triad of labor, capital and environment. Implementing this reversal would also mean the cancellation of a serious „*systemic reversal*", including a serious *violation of holistic existence* (*rationality break*), in the system of human economics.

Nevertheless, Brundtland triad and biocracy dual remain ambivalently interconnected. The modified Brundtland triad, for example, can be seen as a prerequisite for the success of assumed biocratic voting rights. Biocracy is a – fruitful and useful – pragmatic fiction in the sense of the philosophy of 'As if' according to Hans Vaihinger.

In their economic activities, humans have made the greatest error they could make in their calculations: *to tally the bill without the host*. Only nature actually „produces" anything,

therefore nature is the only real and true "host". Humans, on the other hand, are consumers and, as such, are even parasites. Biocracy can and should help to tally the bill not without, but more and more with the host in future. Only biocracy will provide a way to come close to *sustainability* and *viability of human economic activity*.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 2, ISBN 978-3-7316-1117-2**

*Thomas Göllinger*

# Biocracy – The Evolutionary-Economic Foundations

## Abstract

From a systemic-evolutionary perspective, the ecological question arises from inter-systemic competition between the biosphere and the anthroposphere; as the depth of penetration into the biosphere increases, there is a danger of disturbed coevolution.

Against this background, it is fitting to consider the interactions between these systems in terms of evolutionary economics. How is ecologically adapted business management possible in the context of the evolving biosphere and anthroposphere?

Anthropogenic economy is subject to both entropic and self-organizing processes. Hence, this tug-of-war needs to be illuminated more precisely. In addition to a discussion of advanced thermodynamic concepts, the focus is on their connection with the concepts of evolution.

Knowledge about the functional principles of the biosphere is not only necessary to limit the intensity of intervention, but can also provide valuable information for the design of anthropogenic metabolic and value-added systems according to natural models. For example, for the anthropogenic use of energy, it is possible to derive the match criteria from the organizational properties of the natural energy flux.

An adequate economic interpretation of the sustainability issue can be achieved through differentiated consideration of the concept of natural capital. Economics and biosphere can be interpreted as specific categories of living systems. This brings up certain conditions for sustainable interaction between biosphere and anthroposphere. Of central importance is the evolutionary view of natural added value, which regards production as a cyclic process.

The evolutionary economic view of the connection between economic activities and strains on nature is not limited to the problem of exhaustion of natural resources, but explicitly addresses the problem of the increasing depth of intervention arising from anthropogenic activities. This ranges from consideration of changes in resource stocks and material flows, through changes in material cycles and the disturbance of control circuits, to the influence of natural self-organization and change of evolutionary direction.

The socio-economic auto-organizational process of order evolution is still largely organized at a low level of complexity and is characterized by relatively inefficient technologies, an ecologically inconsistent metabolism and a low level of information networking. The material-energetic (metabolic) incompatibility is a result of the asynchronous evolution of biosphere and anthroposphere.

The fundamental extension of the conventional environmental-economic point of view to include evolutionary economics is significant for the analysis of systemic ecological-economic interconnections for several reasons:

1. This approach allows the economy to connect with modern and advanced theories (in the natural and social sciences) pertaining to self-organization, evolution and systematics.

2. These concepts enable a better understanding of the developmental conditions and functions of ecological systems.
3. Thus the anthropogenic production system can be analyzed with regard to its non-compatibility with the biosphere; only then can the (deeper) causes of the ecological problem complex be understood.
4. Based on this broader understanding of systemic ecological-economic interconnections, adequate solutions can be developed that transcend simplistic concepts.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2016, Volume 3, ISBN 978-3-7316-1183-7**

*Eberhard K. Seifert*

# Nature – Thought – Creation

## Abstract

Volume 3 of the series contains an „excursus" with after-thoughts on each of the subjects nature, thought and creation:

1. Goethe's essay Nature: Aphorisms (1783/1828) – since its publication a reference work in controversies regarding anti-mechanical views of nature.
2. A publication on "biocracy" by Alfred Köster (1963), the first in the German-speaking world discovered in the course of research to date, which makes reference to philosophical thought ('theorem of sufficient reason'), as well as scientific thought (physics/Einstein).
3. The current encyclical 'Laudato Si' by Pope Francis 'on caring for the common house' (2015), the first historical 'eco' proclamation of the Apostolic See to all people, not only Christians.

The respective 'after-thoughts' on and brief reviews of these three documents address guiding (especially philosophical) questions, which are dealt with in more detail in the volume: „Biocracy – Criticism of Forgetting Nature" on the topic of

nature and its history, in particular with a view to possible connection points for biocratic perspectives and a corresponding bio-economics, as well as to the whole project of conceptual development of biocracy in interdisciplinary (e.g. temporarily institutionalized) research and communication contexts.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 4, ISBN 978-3-7316-1132-5**

*Volker Stahlmann*

# Intrinsic rights of nature – for whose benefit?

**Abstract**

It is a truism that nature does not need to have rights granted to it by humans. It has its own rights and its own value, without our having to rack our brains over it. If we do grant nature intrinsic rights, then we do this in the vested interest of humans themselves, because the rights of nature are of fundamental importance for human life and are the basis for any kind of economic added value. The Federal Republic of German should therefore follow the lead of Ecuador and add the intrinsic rights of nature to their constitution, inserting the following text in Article 1 (1a) of their Constitutional Law: "The natural basis of existence is under special protection by the State. Actions taken by the State shall respect the natural environment and protect its intrinsic value cross-generationally as the basis for dignified human livelihood."

This would be a logical further development of our positive legal order, correcting its highly anthropocentric orientation at the very outset. But it would also be a kind of "final rescue attempt" to constrain our apparent freedom of unlimited consumption and to place quality of life and just distribution ahead of growth.

The emphasis on nature as the primary basis of value-creation would make the Brundtland triad appear in a different, solely future-oriented target weighting:

1. The respect, conservation and revitalization of nature.
2. The development of a society that promotes prosperity, cultural diversity (not only from a material, consumerist perspective).
3. The organization of the economy as part of society, divided complementarily as a domestic economy with its own work and a commercial and social economy.

The necessary change in base values throughout the population and among decision-makers in politics, business and society still seems far removed for the project of humanistic biocracy. Nonetheless, lateral movements towards a more natural, sustainable development are unmistakable. These include renewable energies, organic agriculture, community-oriented and money-free self-sustaining economic structures, as well as tendencies towards decentralization and regional economic cycles. Numerous small to medium-sized enterprises are pursuing strategies to ensure that their business processes are environmentally and socially responsible, independent of growth, and consumers are becoming increasingly committed to ecologically and socially fair products.

So that the intrinsic rights of nature are more than just a good idea on paper, cultural, decentralized counter-flows of post-growth society have to be encouraged and supported. The development of an eco-centered, cultivated and humanitarian social order could then be a model that benefits all of humankind.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 5, ISBN 978-3-7316-1141-7**

*Hans-Ulrich Zabel*

# Biocracy approach – habitat design and behavioral perspectives

## Abstract

To counteract the destruction of the natural basis of life, sustainable development is needed. The biocratic approach provides a path to operationalizing such a development that gives priority to ecology within the triad of economy, social issues and ecology and, by doing so, brings survivability into focus.

Georg Winter as the creator of the modern biocracy approach (particularly in combination with the concept-related works of Eberhard Seidel) develops the central demand of survivability out of the analytic diagnosis of civilization's "life-threatening" alienation from the requirements of the inclusion of nature, namely that the "reunion between technological civilization and nature", in addition to human rights, also requires the development, discussion, and establishment of "rights of nature".

In this part of Volume 5, the following fields of study are dealt with:

1. *Biocratic approach and sustainable development:* The Biocratic approach is characterized as impulse generator and operationalization aid for sustainable development, whereby connections to effectivity and efficiency of the

economy are also drawn (keyword e.g. nature protection as an economic requirement).

2. *Rights of Nature: Requirements and limits:* Starting from the outlines of the rights of living organisms/animals (referring to interests, goals, standards, objects of protection, institutional insurance) problems and limitations are demonstrated (system, capacity, recognition and modelling limits as well as behavioral barriers). The conclusion drawn is that the protection of individual animals and species encounters difficult obstacles (nature itself is a dynamic system of development and decay, of eating and being eaten; certain existing animals and species, such as raccoons, should not be protected but combated for the sake of species diversity). From this it is derived that it is not the protection of individuals and species that should be at the foreground, but rather the protection of habitats. The focus should be on the principles of natural cycles (provision through disposal, unity of growth and limitations of growth, diversity, foresight and, of course, programmed behavior activation). These ecological cycle principles, in turn, are translated into techno-economic system elements.

3. *Behavioral aspects:* A behavioral model is presented which in addition to cultural conditioning and situational influences contains genetic conditioning as a central behavioral determinant. Genetic conditioning (for the most part still stemming from hunter-gatherer times) influence behavior within natural environments and social structures toward serving life (which directly entails serving the species and the group). They thus provide the behavioral background of the biocratic approach.

4. *Synthesis: Habitat protection/cycle orientation and behavior activation:* Based on the correspondences between the behavioral model and the biocracy approach, elements of decision basis and organizational implementation (the "-cracy" component in biocracy in the sense of democratic organization and implementation) are developed. The following components are dealt with individually with reference to requirements and possibilities of a design compatible with bureaucracy: Growth limitation, diversity, ethics, protection of nature, labor, science and technology, and extension of monetary regulations.

The selected components illustrate that the biocracy approach permeates economic and societal life in its entirety and that this permeation requires further exciting research.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 6 (2 articles), ISBN 978-3-7316-1167-7**

*Georg Müller-Christ*

# Biocracy or Oikoscracy: The triad of economy, society and nature in a different setup

## Abstract

The discourse on biocracy can be taken as an impulse to think about nature's place in the positioning game of business and society.

Such a positioning game actually takes place, it is often discussed in science and politics, whether in texts or speeches, and ultimately it comes down to who is going to set the rules for this game. In the first part of these reflections, we look at the game of economics, ecology and society (or nature, business and society) as has been observable so far in discussions on sustainability. These reflections lead us to the question whether we could be facing a confusion of purpose and means, in which the means (humans and nature) are revalued economically until they become purposes themselves again. The presumed reason why this is so is: The positioning of the triad is not absolute, but depends on the level of consciousness of the actors who set the rules for the game (spiral dynamics).

Is there a way to express the interplay of the triad other than through discursive processes and normative positing? In the second part of this paper, an approach based on Systemic Constellation is used to express the interplay of nature, the economy and society in a completely different way. System

Constellation is an unknown method for many but, when experienced, it is almost always accepted. Spiral Dynamics is also a concept that is not yet known to many but is almost always found convincing when presented. The paper comes to the following conclusion:

*The interplay between business, society and nature is not an absolute given. It depends on which people look at the spheres with which structures of consciousness. Providing the one speechless sphere of the three with a language and a voice and creating a biocracy is only one of the conceivable solutions. Another possibility is to turn the relatively simple sphere of the economy as a purpose-means optimizer into a connecting and mediating link between the restrictions of nature and the infinite needs of society. The rights of nature are not assured by power and domination, but by cooperation between the spheres in a kind of household community (Oikoscracy). Such an Oikoscracy is proposed here as a solution.*

*Rüdiger H. Jung*

## Strengthening of orientation towards meaning in leadership action through biocracy-sensitive personnel management

**Abstract**

At first glance, linking the biocratic ideal with entrepreneurial leadership seems far-fetched. On closer inspection, however, it becomes evident that the integration of a new appreciative relation to nature into employer-employee collaboration can present a strong counterbalance to the loss of meaning in the workplace. These considerations are based on the basic principle of philosophical anthropology, that humans are beings

whose existence include value relatedness and the search for meaning. We link this conception of humans with a consideration regarding the special meaning potential of nature-related, biocracy-sensitive responsibility.

Whereas body and psyche distinguish humans only slightly from other living things, they are, in their spiritual dimension, as spiritual person, free and "elevated above the dichotomy of organism and environment" (Max Scheler). A core feature of the spiritual person is the pursuit of virtue, which also explains the ability of humans to confront the reality they find themselves in and "hurl a forceful 'No' at it" (Max Scheler). (This anthropoligical understanding also explains the role change of industry representatives which Müller-Christ observes in his experiment regarding the interaction of nature, economy and society; see the contribution of Müller-Christ on "Biocracy or Oikoscracy".)

Only in accordance with spiritual personality do humans pose the question of the meaning of their own existence; and in value-related behavior they find answers to the question of meaning, and the "will to meaning" (Viktor Frankl) receives a chance for deep fulfilment as a motivational factor sui generis through a sense of value and purpose.

Turning to nature and the resulting experience of values holds a special potential for a feeling of meaning (Konrad Lorenz). Even if possible social superstructures and subsequently constructed existential and consume-related necessities distract us from this natural experience of meaning, the potentiality remains. The biocracy approach can greatly expand the observational and interactive space for value relations and meaning orientation; it creates contact points for value realization and sense of meaning.

When employees and management in different fields and levels of hierarchy report deficits in meaning (for which there is empirical evidence), it seems sensible to consider the inte-

gration of an appreciative relation to nature into the employer-employee collaboration. Creative approaches to biocracy-sensitive entrepreneurial action can present a strong counterbalance to loss of meaning in the workplace. In addition to the theoretical derivation, a scenario is presented to describe the character of the executive Leo Arduc, a department chief who conquers the hearts of her co-workers with a biocracy-sensitive management style by re-introducing them to the possibilities of value experience and sense of meaning in the workplace.

The scenario serves as an example for a grass-roots approach on the micro-scale of a single company, which can have an effect beyond individual efforts and eventually play the ball to decision makers on the macro-scale via mechanisms of self-organization. However it is an approach that first demands emotional resources of managers and their direct employees on the micro-scale, meaning that it offers the opportunity to experience oneself in the realization of values through nature-related commitment and thus find answers to the question of meaning, which is also ever present in professional life. Just such a grass-roots approach may be a promising way to create enthusiasm for "an intermediary third category 'garden'" (Eberhard Seidel) between the extremes of sheer wilderness and anthropogenic-parasitic civilization.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 7, ISBN 978-3-7316-1171-4**

*Ralf Isenmann*

# Biophilic economy – from nature as a bag of resources to nature as a model

## Abstract

The essay in volume 7: "Biophilic economy – from nature as a bag of resources to nature as a model" marks a step on the way to biocracy in order to help assure the rights of nature in the context of the economy and its exploitation of nature's resources and functions. This step focuses on basic assumptions in the economy, below the discussion of "the right instruments of environmental politics". It is concerned with theory formation and development in economics, more precisely in business economics; it is interwoven with the history of dogma; and it references, in a methodically and conceptually supported way, the theory and ethics of science, in particular natural philosophy.

Such an endeavor should not be approached in a "slam dunk" way or as an "in medias res" process, but rather integrated into the business-ethical context of balancing economics and ecology, as this symbolizes a structural change towards a biophilic economy. The extension of our understanding of nature, from a "bag of resources" towards a partial model, is embedded in the guiding concepts and principles of a viable and sustainable economy: This means that the economy has to be conceived and designed to be biophilic, that is

life-sustaining, life-increasing and life-enhancing, combining conservative and progressive aspects.

By integrating nature and its ecological resources into the economic value creation and environmental impact scheme, the economy, at the level of its basic assumptions, will see itself more and more in a fair exchange with nature as a part of the encompassing ecosystem.

Minimum substantial maintenance of nature and its ecological resources would appear to consist of applying them in the sphere of economics, following the triad: value, value appreciation, value creation Thus nature would be recognized as a necessary, even if not sufficient, basis for economics and business. This extension and supplementation of the understanding of and relationship to nature opens up the opportunity to extend the traditional, narrow analytical and object-oriented view of nature as a „sack of resources" beyond the „management rules of sustainable economics" and to learn from nature as an exemplary source of innovation: from its smart phenomena, its evolutionary strategies in dealing with matter, energy, information, space and time, as well as its basic functional principles.

The essay in Volume 7 is intended to illustrate the idea of considering nature as a model of economic activity and to show that this point of view seems to be possible, comprehensible and helpful, even if it may contradict traditional thinking patterns in economics.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 8, ISBN 978-3-7316-1160-8**

*Eberhard Seidel*

**Environmental cost accounting as a component of biocratic controlling Rights of Nature / Biocracy**

## Abstract

The subject of this volume is operational environmental cost accounting as a component of biocratic controlling, something that can only be hoped for in the distant future. After a brief sketch of the controlling concept in accounting, environmental cost accounting is presented as a socio-economic component of biocratic controlling. A short sidelight falls finally on environmental monitoring as the bio-ecological component of biocratic controlling.

Due to the still elementary development level of the topic, following an outline and overview and an introductory consideration of environmental protection and cost accounting, the main focus is placed on the conceptual clarification of "environmental costs". In addition to a sidelight on the course of development of concept formation, an attempt is made to systematize and summarize the level of concept development achieved so far. Are environmental costs (a) all of the allocated or calculated operational costs of a company, or (b) parts thereof, or are environmental costs (c) outside the scope of operational costs allocated or calculated to date? Each of the three questions can be affirmed in certain respects and, in addition, allow different logical combinations:

- Environmental costs are all operationally allocated and calculated costs and additional costs.
- Environmental costs are part of the allocated and calculated costs and additional costs.

With regard to environmental cost accounting in the narrower sense, the procedure is twofold: Firstly, environmental cost accounting is placed within the scope of the conventional actual full cost accounting. The areas involved are environmentally relevant cost type accounting, environmentally relevant cost center accounting and environmentally relevant cost unit accounting. An overview is then given of the existing approaches to environmental cost accounting. Ecology-oriented accounting approaches in the area of external costs, conventional business accounting approaches and modern process-oriented accounting approaches are differentiated. Approaches with flow-cost or process-cost orientation are currently the most promising approaches to environmental cost accounting, theoretically and practically.

Operational implementations of such accounting approaches are best understood as "projects" and addressed with the usual tools of project work. Section II.6 sheds some light on current practical project work and points out procedural and organizational aspects in the development of an environmental process cost calculation. "Environmental performance" is a facet of environmental costs, but remains an individual, albeit indispensable, target category. In an excursus, the general win-win maxim with regard to environmental cost accounting is criticized. Relationships between economic (internalized) and environmental (externalized) environmental costs under twelve movements (strategies) are discussed.

A brief summary and outlook complete the main part. Development requirements for environmental cost accounting with regard to closing the gap, at some point in the future,

between environmental cost accounting and environmental monitoring are discussed in a final chapter.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 9, ISBN 978-3-7316-1178-3**

*Jürgen Freimann*

# Nature as a Stakeholder

## Abstract

The biocracy approach aims to change the political-legal framework to make companies take responsibility in their business activities for respecting the independent rights of nature. This volume poses the question whether this can be achieved.

It begins by examining the company image that underlies the biocracy approach. The author comes to the conclusion that the approach is based on the conventional shareholder company image. Unlike the competing stakeholder company image, the conventional image does not include an independent company ethic. It regards economic ethics as purely institutional ethics, leaving business actions, which are aimed solely at financial profit, unaffected in principle.

In this respect, the biocracy approach is short-sighted. There is abundant evidence showing that the postulates of institutional ethics have little effect, even if they are expressly anchored in the constitution, as is the case with the postulate of socially binding property ownership or the equality of men and women. What is needed is a fundamental cultural change in society and in companies that leads business participants to reflect on the ethics of their own business actions.

However, such a cultural change conflicts with the long-term trends in global cultural development, such as the fetishization of economic growth, the elimination of moral boundaries in money-oriented economic patterns of action, the growing nature of modern societies and their role model function for large parts of the rest of the world. These trends are responsible for the fact that most people pay so little attention to the conservation of nature, despite existing knowledge.

The author raises the question of whether and how it might be possible, nevertheless, to initiate such a fundamental cultural change and what contribution might be made by integrating the independent rights of nature into the legal system. He discusses possible drivers of such a change, as well as potential obstacles. In closing, he submits three proposals for the extension of company organization that could help make independent constitutional rights of nature effective at company level: Mandatory standardized sustainability reporting, regular stakeholder dialogs with “attorneys of nature”, and establishment of a Sustainability Board in all larger companies.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 10 (2 articles), ISBN 978-3-7316-1165-3**

*Andreas Troge*

# Biocracy: Positioning the Magnet Correctly

## Abstract

The vision biocracy, that is, the idea of bringing the "domination of life" as a state of higher order into human societies, fits both our experiences and the foreseeable challenges of protecting our natural resources: Experience teaches us that, despite some success, we are too slow; the challenge is that the erosion of our natural resources is likely to continue or even accelerate.

What are the necessary prerequisites for the vision of biocracy not to become an illusion?

1. Widespread consciousness in the population, that we have reached nature's limits and are headed toward its lasting destruction, so that we can no longer turn to the exploitation of new resources like a wandering bandit, but rather have to treat the natural basis of our lives with care;

2. The insight that the laws of evolution and the "meta-state Nature" do not relieve us as human beings of our responsibility to make long-term, at least not predictably wrong decisions for the preservation of the natural basis of life, instead of allowing natural evolution to prevail without any criticism (even against humans). Which natural re-

sources should be protected with higher or lower priority, for how long, and for what reason?

3. In order to make responsible decisions for ourselves and the rest of the nature, we have to learn not to implement corrections of various mistakes here and there, mostly in retrospect. Instead of trying to redirect our numerous individual cases of misconduct towards nature with a great deal of force, like turning iron fillings against the force of incorrectly positioned magnets, i.e. our overriding behavioral incentives, it is a matter of making fundamental improvements in favor of nature. Correctly placed magnets are the necessary prerequisite for the iron fillings to orient themselves in the right basic direction, without requiring intervention per individual case: To this end, institutional reforms are needed that fundamentally counteract the myopia of decisions in state and society, because the human time scale is inadequate for the protection of nature.

4. In the public sector, the Federal President could act as sustainability advocate against the notorious myopia of parliaments and governments, provided he or she is granted the right to veto parliamentary and governmental resolutions if these decisions could be expected to obstruct intergenerational prosperity, including the natural basis of life. This would require a special legitimation of the Federal President, for example, by being elected by a federal assembly that in turn is elected directly by the people. It would be helpful to have a Sustainability Council assigned to the Federal President to provide consultation with regard to sustainability issues; the members of the Sustainability Council would have to be completely independent of any party or special economic interests.

5. In the social sphere, our ownership structure is „system-relevant" for nature, to quote a term from the bank rescue scheme in the context of the global financial crisis (starting in 2008) and the euro crisis. Obviously, limited liability companies (in Germany, corporations and Ltd) can take more risks – even to the detriment of nature – than entrepreneurs who bear full responsibility for their companies' liabilities. The former favors short-term behavior, the latter transgenerational. Since it is unlikely that full liability of entrepreneurs with their private assets could be introduced any time soon, particularly in the international context, the following measures could lead in the right direction, i.e. to a new positioning of the magnet: increased equity ratios in the balance total, requirement of additional capital contributions by the capital owners, delayed payment of premiums and delayed recognition of retirement pensions for managers, both of which only in cases where the company is still faring well after several years.

6. Looking ahead, the question arises as to how private and public ownership of productive assets can be delineated so that it helps to preserve the natural basis of life as far as possible: The question is: What do we want to regard as our natural basis of life in the long term, and why? A social discourse may help here, but can provide neither truths, nor behavioral certainties. Nevertheless: It could help to achieve more directional certainty in the distinction between decisions and behavior that are in favor of and those that are at the expense of the natural basis of life – as can currently be observed with regard to the final disposal of highly radioactive waste in Germany.

Conclusion: The first central steps towards biocracy already show a high „air resistance coefficient". But perhaps this will increase the perception of this important idea.

*Wolfgang Seidel*

**Biocracy as an approach to solving the socio-ecological transformation?**
Cursory considerations

**Abstract**

The production and consumption patterns of Germany and many other industrialized countries are resource-intensive, environmentally harmful and still not sustainable, despite all the initiatives for ecological realignment. Individual technical solutions such as increased energy efficiency, greener technologies and conventional instruments of environmental politics have made certain progress in recent decades and are still required. But this will not be sufficient for us to achieve the necessary and already ongoing social transformation to a decarbonized, resource-saving lifestyle. Biocratic concepts may perhaps provide important impetus to the discussion of timeless and universal values. But the value of a vision is measured primarily in regard to the feasibility of the specific measures derived from it. There are (also) various legal and practical issues that arise in this context. The article outlines a number of these issues.

In legal terms, the introduction of biocracy presupposes the recognition of the rights of nature's non-human goods (or resources) to enable their representation in a political system. The concept of stewardship without granting of individual rights is conceivable, but in the end it would likely fall short of providing a sufficient legal foundation for biocratic systems. Current constitutional law assumes that, in a legal system committed to the dignity of humans, there can be no individual rights of non-humans. In its absoluteness and rigidity, this determination seems questionable. To enable analysis of the

further changes of the legal system required for biocracy, the anthropocentrism underlying our legal order would have to be overcome. A first step in this direction could be the right of collective court action in environmental protection laws and the environmental appeals act. Due to the logically requisite anthropogenic control, however, various legal design issues also arise if the individual rights granted to the non-human environment are actually to become effective.

Numerous questions and issues also arise with regard to the practical realization of biocratic concepts. Nearly all major issues in environmental, climatic and resource protection are global challenges. Economic cycles are globalized to a very significant degree. We are therefore faced with the fundamental difficulty of breaking down planetary ecological requirements to the national, regional or municipal level. It is also necessary to clarify on which organizational level the implementation of "biocracy" would make the most sense. Moreover, the question arises as to the weighting and distribution of votes for the different environmental compartments within their parliamentary representation.

Irrespective of the limited chances of practical realization for the foreseeable future, there is an intrinsic value in the (academic) discussion of biocratic concepts, inasmuch as it can result in important changes of perspective in the often deadlocked discussions on environmental policies. In the mid term, this can help clarify the difficulties and limitations of anthropocentric environmental protection. After all, anyone who is committed to the protection of human rights cannot perpetually refuse to protect their basic foundation.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2016, Volume11 (3 articles), ISBN 978-3-7316-1190-5**

*Thomas Göllinger / Frank M. Weber*

# Businesses and the ecological challenge from a systemic perspective

**Abstract**

This article shows how companies can meet the ecological challenge by taking proactive steps. An essential component is the development of an ecological corporate policy that takes the various relationships between companies and stakeholders into account and integrates them into appropriate strategies. However, the situation to be analyzed is frequently characterized by great complexity and diverse interdependencies that cannot be adequately captured using conventional methods. This article therefore attempts to present possible solutions against the background of a system-oriented approach.

In this context, a distinction is drawn between the normative, strategic and operational dimensions of modern management theory, thus allowing a structured analysis of the interaction relationships of companies with their respective environments. In addition to these environmental relationships, aspects of system dynamics must also be considered, as

they provide important indicators with regard to possible interventions in complex social systems. Various concepts are addressed which ultimately enable the derivation of a five-dimensional ecological corporate policy. These dimensions are widely subject to extensive statutory regulation, which companies often encounter by introducing formalized environmental management systems. The prevailing interaction relationships between companies and the regulatory institutions for environmental protection are therefore examined in a systemic context in order to identify strategic options for an innovation-oriented corporate policy and corresponding public environmental policy. In connection with the concept of "hybrid regulation", the article closes with a presentation of innovation-promoting alternative to existing environmental regulatory models.

*Thomas Göllinger / Hannes Gaschnig*

**The Energy-Transition between Path-Modification and "Great Transformation"**

## Abstract

With the energy policy decisions of recent years, the "Energy-Transition" has again come into the spotlight, at least for Germany. The intention is not only to phase out nuclear energy, but also to turn away from the use of coal. Although the change of path from a system of fossil-nuclear energy genera-

tion to regenerative energy generation was successfully initiated in Germany, it is still in an early to middle phase of development and its further development and outcome seem quite uncertain.

This corresponds with the realization that the actors involved have very diverse and sometimes contrary ideas as to the direction, scope, speed and influenceability of the energy transition at the crossroads between path modification and "Great Transformation". From the perspective of economics, it is a question of actively managing structural change in the energy sector, including regulatory and economic issues and also taking ecological and social perspectives into account, in order to minimize societal dissent.

Against the conceptual background of path dependency, this article deals initially with different concepts, timeframes and models of change and transformation as applied to the energy sector. Such a conceptual framework enables (further) development of phase models for the energy transition with regard to various dimensions.

The search for feasible paths is impaired by the fact that future interdependencies, opportunities and risks of the different path variants can hardly be extrapolated. The game-changing conditions include a number of general risks for the energy system, such as potentially exorbitant costs to the general public that can arise from any change of path and the resulting reduced public acceptance of the energy transition. In addition, new path dependencies will emerge in the course of the energy transition as a result of competition between the different (old and new) technologies that are likely to gain in importance through the different phases of the energy transition. To avoid following unfavorable paths, it is essential to develop a systemic understanding of these challenges.

*Thomas Göllinger*

**Growth, decoupling and the sustainability gap**

**Abstract**

Fundamental preservation of the "rights of nature" in the spirit of biocracy presupposes a reduction of the depth of intervention into the ecosystem through anthropogenic activities. On the one hand, some relief can be achieved, at least in principle, by decoupling resource consumption from economic performance; on the other hand, such efforts are often neutralized by further economic growth. Clearly, it is necessary to consider not only the connection between economic activities and the consumption of natural resources, but also the limits of decoupling as well as the options for further growth. Thus, efficiency enhancements and improvements in the ecological compatibility of the anthropogenic metabolism arrive at their respective natural and economic limits. One possibility would be the adaptation of further growth activities based on the effectively achieved degree of decoupling. In this context, however, there is a "sustainability gap" as to the current situation: The proportion of economic performance is too high in relation to sustainable metabolism. The question is what paths can be taken to close this "sustainability gap" and what are the timeframes for this to happen. On the one hand, immediate or even short-term closure of the "sustainability gap" is practically impossible for socio-economic reasons; on the other hand, a permanent or long-lasting gap will lead to irreversible damages in the biosphere. As such, it is important to close the "sustainability gap" in the medium term by way of a "critical growth path".

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 12 (2 articles), ISBN 978-3-7316-1182-0**

*Thomas Göllinger*

**Biocracy – Integrative Sustainability Strategies**

**Abstract**

In order to secure ecological sustainability, the use of all three strategy options is essential: efficiency, consistency and sufficiency. This is supported particularly by the fact that the social players, of their own accord, bring out inventions and innovations from the entire range of options that are waiting for their chance to be implemented. Moreover, the three strategic options each have specific restrictions, which argues against a one-sided preference for any particular strategic option.

Efficiency innovations, for example, allow a direct decoupling of economic output and resource consumption on the one hand. On the other hand, this not only leads to saving of resources, but often to a more cost-effective supply of goods and thus to an increase in demand (economic and psychological rebound effects) and, indirectly, to an increased consumption of resources, effective stress relief for nature and the environment can, at least in principle, be achieved by means of consistency innovations, which make material flows, with regard to their ecological quality, compatible with the fitness criteria of natural material cycles. However, this also triggers psychological rebound effects, as the ecological relief leads to reduced problem awareness among consumers and therefore increased consumption desires can be expected.

Due to the systemic limitations of efficiency and consistency strategies, the sufficiency strategy is also an important component of an integrative sustainability strategy. The sufficiency strategy is important both in its manifestation as quantitative sufficiency with regard to size, and as qualitative sufficiency with regard to the specific composition of the consumed shopping basket. The mutual interdependencies between these options are manifold and complex; possible influences range from inhibition of the other two options due to forced realization of a certain type of strategy, to mutual promotion through self-reinforcing effects. Hence, a concerted innovation cascade, including organizational and institutional innovations, is called for.

The particular challenge for an integrative sustainability strategy results from the complex intertwining of strategic approaches, with a multitude of mutually inhibiting and complementary factors. Neither „carry on", nor the demand for a radical change of direction are realistic perspectives. In keeping with the systemic realization that the solutions of today are going to become the problems of tomorrow, today's problems are in turn the results of yesterday's solutions. Overcoming them will still require technological, organizational and institutional innovations; but also the clear awareness that these innovations will be neither sufficient nor free of further problems.

*Thomas Göllinger / Gabriele Harrer*

**Biocybernetics and sustainability** – dialog on the „basic principles of biocybernetics" and their significance for environmental sustainability and the „rights of nature". Acknowledgment on the occasion of the 90th birthday of Frederic Vester

**Abstract**

Regarding concepts that support the strengthening of natural rights, biologically and ecologically inspired approaches are of particular importance for obvious reasons. Biocybernetics, as developed and propagated by the German systemic scientist Frederic Vester (1925-2003) since the 1970s, is one such nature-inspired concept. The "Eight Basic Principles of Biocybernetics", in particular, provide a set of instruments for understanding and adequately dealing with complex systems, focusing on preserving and strengthening nature, while at the same time enabling the transfer of acquired insights to other problems.

This dialog with Gabriele Harrer, who worked closely with Frederic Vester for over eighteen years, provides a deeper understanding of the background and development of the eight biocybernetic principles as well as an overview of the different applications of this approach.

In all his works, Vester regarded the eight biocybernetic rules as the basic principle of viability, and especially the "via-

bility and sustainability" of systems. They serve as guardrails for orientation in the design of viable and sustainable systems. This can be illustrated based on examples from nature, but also from business and society.

The first rule, for example, states that negative feedback in a system or subsystem has to take precedence over positive feedback with regard to correlations; or the second basic rule that the system function has to be independent of growth. The other rules cover further basic principles that also play an important role in the field of green economy. A very important point here is the importance of biocybernetic principles for the strategic dimension of the sustainability discussion; this is evidenced by the typical strategic approaches of efficiency, consistency and sufficiency, all of which are systemic components of the eight principles. For Vester, it was clear that a solution to our civilizational problems cannot emanate from a single approach, but only from a skillful, systemically based nexus of different approaches.

From the implementation of these rules in the areas of planning and management, these steps were then implemented methodically and practically and developed over the years, leading e.g. to the development of the computer-aided biocybernetic planning and management tool "Sensitivity Model Prof. Vester®". This enabled the basic rules to be used e.g. in the development of a forward-looking strategy for the automotive industry or in the design of organic farming facilities.

In general, there is a major problem that needs to be taken into account both in systemic considerations and in the application of the basic rules of biocybernetics: As a result of our conventional training, we are accustomed to what is known as linear thinking; we believe that we can control the development of systems and obtain absolute security from them. The principle of biocybernetics, not only to see ourselves as

cybernetes or gubernators, but as a part of the system and not just outsiders standing at the helm, would lead to a different interaction with nature as well as with man-made systems.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 13 (2 articles), ISBN 978-3-7316-1184-4**

*Stefan Heinemann*

# Getting serious about the future – ethical and metaphysical reflections on biocracy as a way of thinking that ought not to be rejected all too hastily

## Abstract

"Biocracy" may offer certain angles of attack. Non-word candidate, battle cry or, at best, sparsely substantiated scientifically. For the key players in the new field of biocracy research, however, it is the historical chance to reorient the debate on environmental and sustainability issues semantically and in a way that ultimately shapes reality – a concept with enormous descriptive and normative potential.

This article outlines arguments in favor of a midway position that encourages us not to reject "biocracy" as a way of thinking all too hastily. To this end, ethical and metaphysical lines of thought are pursued that revolve around the relationship between what is and what ought to be, between economy and ethics, between economy and ecology, thereby laying a trail in order to understand the difficulties in dealing with the concept of biocracy reconstructively and, on the other hand, to outline arguments that may provide navigational perspectives between the Skylla of a descriptive and the Charybdis of a fatalistic fallacy.

In this sense, getting serious about the future means that the underlying meta-ethical concept of objective ethics leads us to rule out overly anthropocentric and naturalistic thinking as the basis for a compelling line of argumentation in favor of

(a critical variant of) "biocracy" and likewise a corresponding position of mediating between economy and ecology, and also calls on us to take a critical stance regarding the fundamental assumption of ineffectiveness of such biocratic notions.

*Thomas Heupel*

## Mega trends and global risks – their influence on and derived opportunities for biocracy?

**Abstract**

In this article, globally identifiable mega trends and risk factors are analyzed and the extent to which these may strengthen or weaken the topic of biocracy as to its future potential is explored. Based on the outlined mega trends and relevant global risks, ten theses are formulated:

1. **Demographic transition:** Ahead of us is a period characterized by an aging society and shrinking population in Western Europe. This stands in contrast to booming birth rates in the developing countries.
2. **Extensive individualization:** Individualism is becoming a global phenomenon, which will lead to changes in our social relationship networks. There will be a considerable decrease in strong social bonds and a significant increase in weak ones. Uniformity will be abandoned in favor of individual consumption patterns. The result is a transformation from mass market to micro market. Self-sufficiency and the do-it-yourself sector will increase.

3. **Industry 4.0 – digital life and work:** New media will continue to conquer not only our work environments, but also our everyday lives. Virtual reality is becoming reality, and likewise ubiquitous intelligence. The ongoing IT revolution, e.g. in the neurosciences, is creating new possibilities for artificial intelligence and robotics. On the other hand, control and surveillance will play an increasingly important role in the new transparent society

4. **Health industry as an economic factor:** Health awareness and the sense of personal responsibility for oneself is increasing worldwide.

5. **Social & cultural diversity:** Plurality of lifestyles between modern and traditional, competing value systems throughout the world, emergence of hybrid cultures. Gender 4.0 – the advance of women. Increasing importance of "female soft skills".

6. **New mobility patterns:** Increasing mobility worldwide, emerging mobility barriers, development of the transportation infrastructure, new vehicle concepts – new propulsion technologies.

7. **Knowledge-based economy & changes in the work environment:** Education and learning as the foundation, innovation as major driving force and competitive factor, new global knowledge elite – creative class. Continued increase in automation, dynamic work models (independent of location and time), flexible, interactive work structures. Open systems and networks: Dissolving boundaries between different industries, markets and companies.

8. **Climate change, pollution & reorientation in energy and resources:** $CO_2$ emissions and global warming, growing environmental issues in the developing and emerging

countries, clean technologies, increasing corporate responsibility. Shortage of strategic resources (fossil fuels, fresh water, minerals, metals), use of alternative energy sources and renewable raw materials, energy efficiency revolution, decentralized energy supply. Learning from nature: Biology as the leading field of science, bionic renaissance, swarm intelligence: new forms of social organization.

9. **Urbanization:** Strong growth of megacities, development of adapted infrastructure solutions, new forms of housing, ways of life, modes of participation.

10. **Globalization 2.0 – new political world order and increasing security threats worldwide:** Shift to Asia, global strategies with local or regional adaptation, emergence of a global middle class, globalized flow of capital. Rise of China and India to world powers, crisis of western democracies, renaissance of Russia, awakening in Africa. Third world participation in prosperity, nouveau luxury in China, India and Russia, sustainable consumption in western society (Lohas, Eco Chic, Moral Commerce). Smoldering cultural conflicts and "failed states", global terrorism, spread of weapons of mass destruction.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 14, ISBN 978-3-7316-1185-1**

*Ann-Kathrin Flentje / Christina Diroll / Thomas Heupel*

# Sustainability strategies of German companies and possible controlling and evaluation instruments

## Abstract

This article describes controlling and evaluation instruments used in sustainability management. Regarding the idea of sustainable business management, two concepts are explained in more depth. Basic information on "sustainability" and "controlling" is presented first. In short, sustainability has become increasingly important in recent years, and developing legal and social demands have led more and more German companies to address this topic. Controlling has evolved through the individual stages of evolution into a strategic management instrument, which has suitable preconditions for alignment with sustainability.

The extent to which sustainability aspects can be integrated into traditional cost accounting will be shown. The concept of flow cost accounting distributes the costs for material, processing and disposal to the different material flows. This can help uncover possibilities to reduce costs. Sustainability-oriented cost management can be regarded as the basis of sustainability controlling. Later on, factors are presented that may promote or inhibit successful implementation. It is to be noted, that correct allocation of costs to a specific decision object is not always possible. In addition, the process of determining and representing the corresponding flow costs

proves to be very time-consuming. On the other hand, the result is a detailed description of the quantities, values and costs allocated to the respective material flows. A high level of cost transparency can thus be achieved with regard to company operations, and corresponding measures can be derived, developed and implemented.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume15, ISBN 978-3-7316-1186-8**

*Yanglan Wang / Thomas Heupel*

**Green Controlling**

Integrated sustainability management in corporate governance – a global comparison of China and Germany

**Abstract**

Environmental awareness among the Chinese population has increased significantly. As early as the 1990s, almost every Chinese household had solar cells installed on the roof. Granted the impression is that the metropolises are suffocating in traffic chaos, but the increasing number of electric bicycles and scooters and even charging stations for electric vehicles cannot be overlooked. So, what is the situation in China regarding sustainability and to what extent are companies focused on sustainability strategies and on monitoring these strategies through differentiated controlling methods? This article examines the status quo in the areas of energy consumption and CO2 emissions in a comparison of Germany and China. Subsequently, the implementation of Green Controlling in German and Chinese companies is compared.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume16, ISBN 978-3-7316-1187-5**

*Karsten Ney / Thomas Heupel*

**Green Controlling**

Derivation of a sustainability-oriented balanced scorecard for the automotive supply industry

**Abstract**

The objective of this article is to illustrate the need for sustainable business orientation. For the automotive supply industry in particular, the implementation of sustainability as part of company philosophy is to be reviewed. The role of controlling in this context will be considered. What can controlling contribute to a sustainable business orientation and is it even necessary or sensible for controlling to be involved? The Balanced Scorecard is an established instrument for implementing business strategies. The article looks into how this controlling instrument can be used to meet the special requirements of a sustainable business orientation and whether its use is also suitable for the automotive supply industry. A recommendation regarding implementation of the sustainability concept with the aid of the balanced scorecard is presented for the different supplier groups based on their individual requirements, and possible implementation options are described.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume17 (2 articles), ISBN 978-3-7316-1188-2**

*Stefanie Kuschmann / Thomas Heupel*

# Balanced Scorecard as a control instrument for corporate social responsibility

## Abstract

In the late 1990s at the World Economic Forum in Davos, Kofi Annan, then UN Secretary General, called for a global initiative to help make companies act with more social and environmental responsibility. Looking at the development of recent years, this clearly is not a short-term phenomenon, but a long-term process of reorganizing the moral qualities of companies.

If having a good reputation is a company goal, it needs to put more focus on communicating about how it assumes social responsibility. The company has to talk more about what it does for society. By doing so it can, through its CSR efforts, significantly contribute to its reputation among stakeholders. Many mid-sized companies have been practicing this CSR approach for years. Unfortunately, there are still many companies where CSR is only used as an alibi function.

One of the major problems companies face when implementing a CSR approach is that their use of CSR is detached from all other management tools. And since CSR is not integrated into the business processes it does not constitute a strategic component. For the most part, CSR measures are only used to achieve short-term goals. On the other hand, the Balanced Scorecard has been an integral part of their man-

agement tools in many companies for years and is used for long-term planning. Actually, there are certain similarities between these two instruments: Both BSC and CSR management aim to implement operational planning with the aid of key figures. The key figure systems provide a quick and simple overview of the often complex structures and processes involved. It is not just a about key financial figures, but especially a question of capturing the so-called "soft factors". Both instruments are based on integration and value concepts that have to be adapted differently depending on the company. Although the BSC is focused primarily on ensuring long-term profitability and the CSR concept deals mainly with social and environmental issues, both areas are important for the lasting financial success of a company and hence its usefulness to the society. As such, it makes sense for the two concepts to be integrated in the company together. To what extent this is possible is explained in this article.

*Christoph Blessin / Thomas Heupel*

**Prospects and limitations of the Balanced Scorecard in non-profit organizations**

**Abstract**

"Out of love for people" – this is one of the slogans of the German Red Cross (DRK), one of the six leading umbrella associations in Germany that have joined together in the Federal Association of Non-statutory Welfare (BAGFW). The focus is on providing help and support for people who need it. The drive behind the services offered comes from love, which is essentially the basic ideas of humanity and charity. Financing

and profitability are not questioned in this motto. But without procuring the necessary resources, including personnel, financial and material means, as well as required equipment and expertise, these services cannot be provided for the benefit of the people. A frugal and goal-oriented use of resources is also the basis for the long-term preservation of the organization and thus for the future protection of people in need.

This article builds a bridge between services for people on the one hand and the business management perspective on the other. If finances are not seen as the ultimate goal, the question to be clarified first of all is: what goal are the activities of an organization geared towards. Once this question is answered, it is a matter of determining whether and how the instruments designed (almost exclusively) for use in the profit sector can be applied to non-profit organizations (NPOs) and adapting them as required.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume18 (4 articles), ISBN 978-3-7316-1189-9**

*Markus Will / Jana Brauweiler*

# What does Biocracy mean for Business?

## Abstract

*Biocracy calls for greater consideration of ecological aspects, ahead of business and socal aspects* (Doughnut model: E > B + S). With the pillar models ("Mickey Mouse" model: B > E + S) and the consensus-oriented model ("win-win-win": B = E = S), companies remain un-sustainable, because the essential characteristics of the unsustainable company remain in place, although minor improvements can be achieved when the business case is dominant ("low hanging fruits").

The essay presents the three sustainability models and their decision processes, exemplified by a hypothetical hazardous substance substitution test for (A) polycarbonate and its available technical alternatives (B) polyethylene, (C) polyethylene terephthalate (PET), and (D) polypropylene (PP), based on the criteria of health, environment, technical aspects, material costs, investment in facilities and customer acceptance. Only when the conditions of the biocracy approach are taken into account does the decision fall in favor of alternative (D) polypropylene, which is characterized by the

lowest environmental and health effects, but is also associated with high procurement costs and major investment requirements in the technical infrastructure. Under the prevailing social conditions and decision-making rationalities, and in the absence of mandatory legal requirements, this variant seems unlikely, unless the company has consciously chosen to undergo the improvement process from a non-sustainable to a sustainable business model. This requires more radical innovations, not only at the process level, but also at the level of the product and the product system, and including cultural changes (consumption patterns, etc.).

Even if the biocracy approach can be acknowledged as a further contribution of a great utopian vision, its connection facilities need to be further developed to enable a practical implementation.

*Gerd Winter*

The principle of ecological proportionality

**Abstract**

Mankind's impact on natural resources and natural cycles has become a dominant phenomenon of the state of the earth. Some see a new age emerging: that of the anthropocene. The impact is however not accompanied by sufficient capacity of human governance that can ensure a state of nature fit for the survival of humanity. For some time, human governance has tried to find and guard the thresholds of exploitation tolerated by nature. Overall, these times of „environmental pro-

tection law" have applied a trial and error approach, even where the precautionary principle was propagated. Humans have waited until nature – often irreversibly – proved that thresholds were overstepped. The preoccupation on nature's responses have blinded human eyes for the fact that not nature but humanity is the problem. Not nature's needs ought to be put into question, but rather human aspirations and the socio-economic structures fostering them. They are the driving factor of the uncontrolled anthropocene. They must be (self)regulated. Eco-proportionality is a tool to that effect. Asking for giving reasons for human objectives and their means, both as a social and a gradually emerging legal norm, it contributes to a new paradigm of rules governing human-nature interaction. Eco-proportionality is an analogy to the well-established principle of proportionality that was developed to check governmental powers in the state-citizen relationships. Eco-proportionality is designed to check society's powers in relation to nature. Like in the traditional principle, eco-proportionality requires four tests, namely a justifiable objective of action and the effectiveness, necessity and weighing of means. The principle is already present both as a social and legal norm. There is reason to suggest that it should enter into more spheres of societal practice and legal order, at the same time taking a more differentiated and ambitious shape.

*Gerd Winter*

# A Fundament and Two Pillars: The Concept of Sustainable Development

**Abstract**

The World Commission on Environment and Development (WCED), also known as the "Brundtland Commission" after the name of its chair, presented its report on "Our Common Future" in 1987. The work of the Commission was intense and controversial, yet the final text was adopted unanimously. Its central message was encapsulated in the term "sustainable development," understood as the use of natural resources in a manner "that meets the needs of the present without compromising the ability of future generation to meet their own needs". The Report ends with a dramatic appeal for urgency: "We are unanimous in our conviction that the security, well-being, and very survival of the planet depend on such changes, now". Almost 30 years have since passed. The article asks which meaning sustainability has taken over the years. The thesis is that the principle of sustainability has been padded out, drained of sense and, hence, disarmed. A renewed reading of the WCED Report suggests that the scope of the principle has to be defined more narrowly. Only if it can bite would it make sense to establish it as a principle or even rule of law. In its catch all shape it will rather be misused for greenwashing unsustainable practices. The proposed concept is one of stark sustainability, as visualized by nature as fundament and society and economy as columns, the whole carrying the roof – the future generations.

*Eberhard Seidel*

**Trouvaille in the Winter archive**

**Abstract**

This short article describes a work found in the Winter archive that highlights the fitting title of Gerd Winter's contribution: "Natur ist Fundament, nicht Säule (nature is foundation, not pillar)".

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2017, Volume 19, ISBN 978-3-7316-1191-2 (forthcoming)**

*Eberhard K. Seifert*

# 'Biocracy' – Critique of the oblivion towards nature from a bio-economic perspektive

## Abstract

In the opening article of this biocracy series, was stressed that it would only be possible to throw sidelights on this interesting and difficult subject with the aim of stimulating the discussion and promoting the topic.

The original working title for Volume 19 'Biocracy – critique of the oblivion towards nature' also refers to the fact that progressive damage to and even destruction of the environment has been a subject of criticism since the 1960s – looking, for example, at the pioneering work of the Club of Rome on 'limits of growth' as well as countless other, subsequent justifications and the increasing demands for countermeasures in favor of 'sustainable development' since the Rio Summit in 1992, further evidence is hardly needed here.

But 'critique' (as mentioned in Vol. 3) also means something greater, the outcome of critically examining and reviewing the causes that underlie the criticized facts, which in this respect can only be recognized by going into greater detail. In relation to 'oblivion towards nature' this would mean to critically investigate the 'oblivion' and the conditions that make possible a conception of nature that could help overcome it – a negative critique inasmuch as it includes the possibility of

determining that there is diversity in the oblivion, as well as a further going positive dimension of criticism with regard to non-oblivion towards nature, its perception and its assertion with priority. This allows us to take a positive perspective on biocracy, on the reign of living nature as an alternative, counterposed to oblivion towards nature.

This thread is picked up here, developed and continued for the bio-economic perspective indicated in the (sub)title, that is, with economic intentions that are based and developed outside of mainstream economic orientations.

However, it must first be conceded that the ideas and goals regarding 'biocracy' as new, expanded forms and structures of governance lie beyond the realm of over two thousand years of European experience and theoretical discourse. As such, these new approaches are, for their own part, in need of further basic theoretical justification as well as delineation vis-a-vis allegedly identical headings and conceptions that in fact are based on views and intentions with a completely different or even contrary orientation. Only then could systematic 'applications' be devised and substantiated. For new approaches, the field of possible (previous) knowledge should be explored first, In good Aristotelian tradition.

Hence, the first section of volume 19 deals with the milestone challenge of the conception of 'biocracy': firstly in relation to traditional forms of governance (1), then continuing with the question of what has hitherto been categorized under the term 'biocracy' (2), and also taking into consideration the broadly debated subject of 'biopolitics' (3) these days, in relation to the context of 'biocracy', but also the differences. For ensuing research desiderata on the basic theoretical foundations of 'biocracy' (4), approaches from natural science and philosophy as well as ethics are discussed.

On the basis of such a theoretical understanding of 'biocracy', the second main section looks at possible approaches

to a bio-economic perspective, which may comply with the biocratic concept. This begins with the recollection of an extraordinary and hitherto in the history of economic theory truly singular economic concept: a concept that, in the characterization of 'physiocracy' (5), followed a line of thought comparable to the suggested understanding of 'biocracy'. From this pre-revolutionary school of thought in mid-eighteenth century France, an arched connection is then drawn to two contemporary approaches to sustainable bio-economics: on the one hand with regard to a re-conceptualization of the basic physiocratic idea that 'only nature produces' (6), and on the other hand with reference to thermodynamic foundations and the entropy law for economic processes (7), both of which can be seen as preparatory and preliminary work from a biocratic perspective.

The closing words provide an overall summary, from which it should be possible to draw further references to research requirements and structures.

In keeping with the editor's approval and encouragement to express what is still in progress, unfinished or even vulnerable to attack, volume 19 essentially follows the common thread and outline for the book series, but does take the liberty of including excursions to and side notes on other fields than just those belonging to economics as well as to the backdrops and foundations of longstanding theoretical-historical research. In the context of 'oblivion towards nature', the subject of 'biocracy' under investigation – also in alignment with economics and bio-economics – can therefore be seen as a topic of continuous, guiding interest, that will be subject to further inquiry and development in long-term research activities. The conclusion to be drawn from my efforts is that – beyond individual or single-discipline contributions – this further development can best be achieved through multi-disciplinary discourse and temporary, task-specific work constellations.

**Series Rights of Nature / Biocracy, a publication of HAUS DER ZUKUNFT, Hamburg, publisher Metropolis-Verlag, Marburg 2015, Volume 20 (3 articles), ISBN 978-3-7316-1180-6**

*Hans Immler*

**Biocracy – does it offer a solution?**

## Abstract

Biocracy definitely does offer a solution. We need nature, but nature does not need us. So, nature gives us humans freedom, as long as we act with understanding and respect for nature. It puts us into hard bondage if we act with disregard for nature and its laws. Nature is our absolute ruler. Biocracy is our assignment. If we fail to fulfill this assignment, we will be subject to nature's autocracy.

We don't know what nature is. And so, we don't know the essence that rules over us. We go hacking at the rafters of evolution with mighty axes without really understanding what we are doing – good conditions for a negative rule of nature.

We think nature is what has not been touched or processed by humans. Taking this thought one step further, this means anything that has been processed is no longer recognized as nature. Thus the complex of industry came into being. But since almost everything is now processed, nature is disappearing, and everything is becoming industry. In that case there shouldn't actually be any problem with nature.

This is the illusion of industry: that it is not nature. But it is our real nature, albeit distorted, perilous, dubious. When we

recognize industry as our true nature, we will have a true awareness of nature.

Biocracy means the timespan nature provides for our lives. How we "shape" this timespan is up to us. And this will be the greatest task of future economics, as we shape nature through production and consumption.

*Renate Kirchhof-Stahlmann /*
*Volker Stahlmann*

**Biocracy from a female point of view – the appreciation of life**

**Abstract**

We are proud of our society of knowledge, but we are ignoring the obvious limits of growth, even though for over 40 years people have been pointing out that the Western growth model presents a threat to human existence. With the countless reasons and priorities that evidence this, there must be something more deep-rooted that makes us persist in the mechanics of old habits.

Our thesis is that, as a result of the male view of the world, humans generally overestimate their own capabilities, which has increasingly removed them from nature and from themselves. This hubris has been promoted by monotheistic patriarchal religions (Judaism, Christianity, Islam) for centuries.

A large part of the male population of the world still regard nature – and with it women – as objects that need to be controlled. A man's relationship to his own body and to life in general is not as strong as a woman's. The love of technology, the abstraction and artificialization of the world (the "homo oeconomicus", sprawling financial illusions, digitalization and virtualization of the world, the "strive to be victorious and stay ahead"), competition, as well as crime and wars are all essentially male properties, so that respect for "natural nature" (G. Altner) and the anchoring of nature's inherent rights in the constitution must be connected primarily with a change in male behavior. As Margarete Mitscherlich put it 25 years ago: "The future is feminine, or it does not exist!" But the emancipation of men is still in its infancy.

A balance between male and female characteristics is therefore necessary to get back in tune with nature and with oneself. "Female" is only partly bound to biological gender, but predominantly a role assignment from the respective sociocultural environment. If the inherent rights of nature are to be ready for decision and action, then our feeling and precautionary principle must recognize and respect the subject qualities of nature. Intellect and intuition have to interact.

Several developments do give us hope: Partner relationships are changing, working hours are becoming more flexible with work-life balance strategies (e.g. "seesaws" in family environments), part-time work and parental leave for men is growing slightly, quality of life is increasingly discussed in economics and in social practice. Cooperative, social forms of business outside of strict competitive logic and a money-free economy of trading and sharing are emerging. In all-day schools, boys are also taught household economics, there are critically reflective conventions on peaceful and health-conscious living for men, and an unstoppable advance of weak /

gentle ("solar instead of atomic") and bionic recirculating technologies.

These are all developments that can contribute, together with an interdenominational world ethos, to an increased respect for nature and its value for life.

*Richard Kiridus-Göller*

## Thoughts on the ethos of biocracy: the nomos of economics and the logos of life

**Abstract**

In order to justify a ruling principle, in the interest of survival, relevant knowledge on the mesh of relevant conditions has to be presented first. Biocracy appears to be systematically legitimized inasmuch as the economy's sustainability normatively presumes its viability.

Creating and safeguarding the means of viability are the genuine cultural function and biological purpose of the economy. Humans have to do business in order to live; acting in one's own interest, understood through true insight, is the controlling physiocratic principle. The ethos of biocracy includes derivations of the nomos of economics from the logos of the living being.

Based on bioscientific insights, biocracy is a reintroduction of deductive derivations as before with physiocracy, but now on a systemic theoretical basis. It is a matter of overcoming evolutionary economic immaturity.

The transformation of prevailing economic ideologies in the interest of socio-economic recovery cannot succeed without

orientation to the logic of living and inclusion of non-human "nature" in economic rationality. This may be self-evident in the field of medicine, but it is becoming more and more urgent in socio-economics.

Since economics does not begin with money and markets, but in life, social and economic sciences would have to „transcend biologically" from their theoretical foundations to the global systemic policy. This is particularly the case, because the basic biological structure of social consciousness is programmed for survival, but not adapted to the complexity of our industrial civilization.

In this respect, biology has a special educational value compared to the general educational value of the natural sciences.

The economy is not a living being, but life is an economic being. Anything that is contrary to life's conditions of existence falls under the verdict of natural selection. What is incompatible with the laws of the biosphere destroys itself.

With the globalization of the economy, the pressure is growing to follow the rules in place in the biosphere. Setting up corporate constraints that are consistent with the "constraints" of the biosphere is, in principle, not impossible, but it will require political backing. The adaptation of our social legal system to its bio-ecological physical foundation is essential.

The WHO's concept of health includes personal and social well-being, but not ecological health. This has to be expected as the ethical norm of a global economy, however.

In the relationship of the parts to the whole, biocratic ethics guides "fitness management" along the path from the resources to the benefits of sustainable economics. The basic life-sustaining meaning of "goods" is hardly present in the Anglo-American, but converges in their physical view with "bio-economics".

## Appendix

*As the result of a prolonged illness, Prof. Seidel was prevented from writing his article "Towards a conceptual clarification of biocracy – Sidelights on 60 aspects" , which was originally planned as Volume 19 in the series. Thankfully, Prof. Seifert then took on volume 19. The abstract for Seidel's article was available early on. It conveys the main points of his planned article quite well and certainly gives an impression of its intentions and content. For this reason, the abstract – slightly extended and, as an exception, with annotations included – is provided here as a replacement for the omitted article. Its methodical explication is unquestionably indispensable for the reception of the concept of biocracy in economics.*

*Eberhard Seidel*
**A conceptual clarification of biocracy.**
Sidelights on 60 aspects

### Abstract

"*Biocracy*", as the essence of the "*rights of nature*", stands for an alternative model of human economic activity. Proto-operationalized[1] in a suitable way, the model is, in and of itself, *"technically feasible"*, *"ethically imperative"*, but nevertheless *"politically unviable"*.

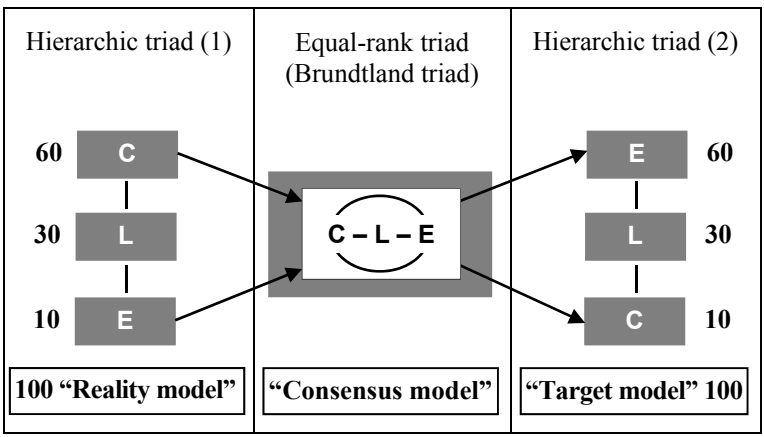
The main part of this article consists of sidelights on sixty aspects relevant to a conceptualization of biocracy. The aspects listed include related and neighboring concepts such as biosophy, biophilia, bioeconomy and physiocracy. Points of criticism and criticism-of-criticism are addressed. The major alternative to the concept of biocracy, *transhumanism*, is also

addressed. It is about biocracy in the narrower and wider sense, socio-external and socio-internal biocracy. It is a question of ambiguities, ambivalences, imparities and paradoxes. With regard to totality and duration, biocracy is the concept of paramount rationality[2] for action and the environment: It stands here in particular for the cancellation of the fundamentally fatal *"systemic reversal"*[3]. Efficiency, sufficiency and consistency based solution of the environmental problem, de-parasitization and re-mutualization are further keywords here. Biocracy thus becomes the concept of *ultimate vision and mission*: The liberation and indeed salvation of man from his (anthropogenic) parasitism, the pending completion of humanization through conclusion of the animal-human transition field (Konrad Lorenz) come into view. All this is achieved by biocracy (after its implementation, of course).

A key topic for clarification is the so-called *Brundtland triad*, as the prevailing doctrine and opinion (mainstream) in environmental circles up to this point. Our final definition of biocracy as "the necessary and sufficient condition for sustainable economic activity" is a consequence of the Brundtland triad. This discussion is carried out according to a proven maxim (for outsiders): "*Consider the prevailing opinion to be accurate and correct as long as possible*".

The basic connection between the Brundtland model and the biocracy model is shown in the figure:

*Figure:*
*"reversal of the status-quo hierarchic triad" as a transformation into the targeted hierarchic triad*




For the triad of labor, capital and the environment (L-C-E triad), the following are compared with each other for the first, second and third rank with a rank weighting of 60 to 30 to 10, as estimated by experts:

- on the left is the status-quo hierarchic triad (reality, non-sustainability) under (1),
- in the middle the Brundtland triad as equal-rank triad (consensus, mainstream) under (2),
- on the right the targeted hierarchic triad (biocracy, sustainability) under (3).

The targeted hierarchic triad is a reversal of the status-quo hierarchic triad with the ranks of capital and the environment exchanged.[4] The Brundtland triad – "*half-distance model*" of this reversal – is a *highly attractive consensus model* in science, business and politics. A positioning in this consensus model, in cooperative (rather than competitive) relation, is unquestionably in the interest of biocracy.

As a "*model of deception and self-deception*" the Brundtland triad proves to be a facade and a serious illusionary fabrication. Neither operationalized nor operationalizable, it is non-existent in the arena of practical environmental work[5], but at the same time it is extremely damaging: As a distracting and soothing facade, it obscures the real economic situation, in which the parasitic character of the economy is continually deepened and intensified.

A key issue for the clarification of biocracy will be the current change in position of prevailing doctrine and opinion. In "Economy-Business-Relations" (UBS) the Brundtland triad is in the process of being replaced by *transhumanism*[6] – the exact antithesis of biocracy. Supported by a storm of digitalization in information and communication, the model of a perpetually accelerating momentum of progress with unlimited promises of salvation, comfort and profit – "sustainability of the non-sustainable" – is now the more fascinating vision.

Thus biocracy remains marginal and is practically "derailed". It has nothing to offer that offsets the expectation of profits in the trillions within the given "system" with all its "idealistic-ideal rationality". This downsizing in real-empirical meaning, however, corresponds to an upgrade in ethical-normative significance. From the (presumed) cooperation model of the Brundtland triad, biocracy mutates to an (actual) admonisher and guardian, a thorn in the side of emerging transhumanism.

*Technology, ethics, politics of biocracy eo ipso of sustainability!*

It's not about being "capable"! If they wanted to, humans could maintain a sustainable economy.

Clearly there can be no skill deficit, and therefore no skill development requirements, when it comes to refraining from

action – not acting. The necessary action is becoming ever easier in the course of scientific and technological progress.

It's about being "willing"! Experience shows that even with a sufficient capability component, the production of the corresponding – globally sufficient – willingness component far exceeds all human political and organizational competence.[7] In addition to major motivational weaknesses of the environmental goal compared to working and capital goals, the ineradicable *problem sponge* plays a central role ("solve problems by feeding them"). In the positive feedback of growing environmental risks and increasing probability, the self-destruction of the system has long become its *normal expectation*: The history of humans and their economic activities began as a tragedy, and will most likely end as a tragedy.

However: The future is fundamentally open, and the ability to act means that the remaining chance of sufficient organization of willingness is not absolutely zero, but somewhat more than zero.[8] Biocracy is bearer, guardian, provider and caretaker for this *theoretical chance and hope*. In a literary-philosophical excursion, we reflect this chance of rescue and hope in corresponding ideas of Goethe and Heidegger.

The conclusion is: *"For anyone in environmental management who wants to maintain environmental sustainability as an actual, effective target of future economic activities, biocracy will be indispensable. The realization of sustainability is only attainable with and through the implementation of biocracy."*

***Notes:***

[1] Biocracy, interpreted correctly, does not aim to achieve the impossible goal of giving every living being or species of living beings a voice in the "Parliament of Life", but it does mean that bio-ecological concerns are given clear priority over socio-economic ones. Since the entire area is only accessible to ordinal measurement levels, a distribution in signif-

icance levels or ranking weights of 60 to 40 (out of the total 100) in favor of bio-ecological concerns yields the desired (minimum effective) extra weight.

[2] The article devotes an extensive study to the postulate of freedom from primary value judgments (as a criterion of science), whereby biocracy undoubtedly implies a primary value judgment. The study shows that the usual discrediting of biocracy as an unscientific, (solely) *"ideological-political concept"* is unjustified. Although criticism of ideological positions is always criticism from ideological positions (due to irresolvable limits of knowledge), the analysis shows the position of conventional scientific theory in this matter to be clearly more ideology-laden and, consequently, its assertion to be of greater irrationality.

[3] The exchange relationships between the implanted *"Techno-eco system Economy"* and its encompassing supersystem *"natural environment"* are not governed by norms derived from the supersystem (equilibrium), but by norms derived from the subsystem (growth). The part plays the role of whole and treats the whole as a part. This means a deep break in rationality in the form of a serious violation of wholeness. Sustainability of the system components (systemic harmony) requires that the interaction (exchanges) between the overall system and the subsystem, and also between different subsystems, are fundamentally governed by the interests of the overall system.

[4] In reality, this change of position between capital and the environment implies a ground-breaking reform of the global financial system. The *dominance of the financial sector* and *monetary capitalization* – as nearly perfect *institutionalization of anthropogenic parasitism* – are overturned. Instead, an ecology-oriented real economy is constituted, with the environment at first rank and labor at second, while capital at third rank is demoted to a subservient role. Such a reform would hit the prevailing neo-liberal economic theory at its core and would appear as regression to a (historically refuted) centrally planned economy. In fact, an acceptable decentralized *"new biocratic natural interest concept"* with system control competence is still completely up in the air.

[5] In reality, there has not been any movement at all from the status-quo hierarchic triad (1) to the triad of equal-rank between the three components. The (supposed) equal rank of E in the framework of the Brundtland triad was (de facto) always third rank in the context of the status-quo hierarchic triad (1). For the foreseeable future, this triad even ac-

quires a double function: It also functions as the target hierarchy triad of emerging transhumanism. "The eternal status quo" is already in line with the future objective. The system has become honest and fully commensurate with itself. *Neoliberalism as ultima ratio and (apparent) end of history!*

[6] Transhumanism stands for an immeasurable abundance of biotechnological and, in particular, medical research and development projects linked to the all-encompassing digitalization of information and communication: "Human Enhancement Technologies (HET)", "Brain-Computer-Interface (BCI)"; "Mind Uploading", "Cryonics", and so on. The extremely energy-intensive freezing of corpses for the purpose of attempting their subsequent resuscitation is one particularly illustrative example of the direction. Green and red genetic technology, organ replacement (even with the brain), life extension and rejuvenation are keywords here. In connection with the fusion of individual-single and terrestrial-global life in the unity of a single (high-level, continuous) consciousness, it is ultimately about achieving immortality at the level of individual life. This is a culmination of human hubris, as selfish as it is parasitic. Death of the individual is unquestionably nature's greatest invention, ensuring that there is always new, young and fresh life. In summa, transhumanism is the endeavor of secondary (man-made, artificial) creation based on deformation/transformation of primary (natural) creation. Seen in the light of ethics and environmental sustainability, this is the ultimate peek of anthropogenic parasitism in maximum monstrosity. Transhumanism is rationality reduced to the parasitic existence of man, intellect without reason or wisdom. It is also noteworthy that this "absolutely modern" design of life and science revives the complete program of medieval alchemy.

[7] For individuals and small groups, "capability" as such is already sufficient motivation for "willingness" in many fields of action. ("One wants what one is capable of, and one is capable of whatever one wants"). For large groups and even people as a whole, this is fundamentally different. An abyss (hiatus) forms between "capability" and "willingness" for various reasons. For the goal of achieving global environmental sustainability, this hiatus reaches its definitive extreme.

[8] To assess the chances of actual realization of biocracy – "in abstracto" and "beyond transhumanism" – the article sets forth a series of more or less plausible probability calculations. Necessary accompanying mea-

sures are also presented, for example with regard to the admissible legal and organizational forms of business enterprises. When viewed objectively, the probability of realization of biocracy lies well below one percent. In most cases, it is comparable to an individual lottery participant's chances of making the big win.

*Georg Winter*

# Fundamentals of "RIGHTS OF NATURE / BIOCRACY"*

## 1. On the current situation and its demand

Through the exploitation of natural resources and the strain put on the environment by pollutants, our technological civilization is becoming disconnected from our ecosystem on such a high level that, in the long run, the self-destruction of humanity seems not only possible, but exceedingly likely. Hence our most important future objective is the reunification of our technological civilization with our natural environment.

*The wall between nature and our technological civilization must fall!*

*It is about a quest for the reunification of nature and technological civilization!*

* This article is included at the end of each volume of the series "Business Writings on Rights of Nature / Biocracy", thus building a bridge to the next volume.

The basic demand of this reunification is the fundamental decision of human society for a sustainable path of development. The core condition for this in turn is the general recognition of the "rights of nature".

## 2. Phases of development in the relationship between nature and civilization so far

So far, four phases of development in the relationship between nature and civilization are to be noted:

### *1 Primary equilibrium phase – Homo integratus*

In the early history of humanity, there was a primary state of equilibrium in which the activities of humans hardly impacted the ecosystem. We can describe this phase as Homo integratus, humans integrated into nature.

### *2 Relative equilibrium phase – Homo occupans*

What followed was a state of relative equilibrium in which a structured exploitation of resources began, but did not overwhelm the ecosystem. Humans increasingly occupied habitats until they achieved a dominant position in the following phase.

### *3 Disequilibrium phase – Homo dominans*

Massive escalation of the technological activities of humans qualitatively developed into an endangerment of the long term existence of human life on earth.

#### *4 Critical phase – Homo isolatus*

We currently find ourselves in the fourth, critical phase in which humans in many countries on earth have physically and mentally isolated themselves from nature and denatured into Homo isolatus. People working in industry are often viewed merely as means of production, consumers as sources of profit, plants and animals as commodities.

We can predict two alternative development axes, each with three phases of development:

## 3. "Business-as-usual scenario" starting from the critical phase

#### *1 Confrontational phase – Homo egocentricus*

In the business-as-usual scenario, humans enter a confrontational phase in which they live only for their immediate benefit as Homo egocentricus. By doing so, they risk, in the medium and long term, extreme destruction and damage – an acceleration of climate change, catastrophic famine in other countries, military conflicts over scarce resources and regions that are still ecologically functional.

#### *2 Destructive phase – Homo anarchicus*

The transition into the next phase, the destructive phase, is fluent. It is marked by overpopulation, mass mortality, wars over migration and resources, self-defensive terrorism, and a breakdown of social, cultural and economic order. It is the hour of Homo anarchicus with its survival-of-the-fittest aggression.

### *3 Secondary equilibrium phase under exclusion of humanity – Homo extinctus*

The final phase of this scenario is the secondary equilibrium phase, which arises when the overstraining of the ecosystem through emissions, the total exploitation of resources and the existential wars between the remaining population groups have led to the extensive extinction of humanity and subsequently to the protection of nature from further intrusion by humans. At the end of the business-as-usual scenario, we find an extinct human race, Homo extinctus, which once believed itself to be Homo sapiens.

## 4. Change-of-course scenario starting from the critical phase

Our hope and motivation is that starting at the critical phase, a change-of-course scenario is also possible.

### *1 Reorientation phase – Homo solidarius*

A reorientation phase will lead to the formation of Homo solidarius, which develops responsibility for disadvantaged sections of the population, for developing countries in need of aid, for future generations, and for the protection of nature and biological diversity. The realization of the self-endangerment of humanity will lead to national laws and international contracts that will prevent ecological depletion.

### *2 Adaptation phase – Homo fraternus*

What follows is an environmentally conscious adaptation phase in which a sense of responsibility and actions based on

solidarity develop into a culture of fraternity. The fraternal human, Homo fraternus, acts as a member of a family which encompasses all living beings, all current and future generations of humans, plants and animals on the entire planet. The economic system is integrated into the ecosystem, which then gradually heals.

#### *3 Secondary equilibrium phase with inclusion of humanity – Homo reintegratus*

While at the end of the first scenario (business-as-usual) nature enters a secondary equilibrium phase without the participation of humanity, the change-of-course scenario leads to nature entering a secondary equilibrium phase which includes human participation. Increased environmental consciousness, bitter experience, and scientific discovery come into effect. Humans reintegrate themselves into the ecosystem, thus becoming Homo reintegratus. The technological civilization of humanity has reached a state of permanent harmony with nature.

## 5. Position and awareness on the crossroads of the two development alternatives

Almost tragically, numerous truly environmentally conscious entrepreneurs struggling for the ecological optimum are aware that their enterprise is – directly or indirectly, more or less – participating in the depletion of earth's finite resources and by polluting the atmosphere, even within legal boundaries, contributing to the continuing destruction of the environment.

Thousands of entrepreneurs are under way to loosen this entanglement in the global work of destruction. Many intro-

duce a management system that gives direction to all areas of the enterprise, from employee training to logistics, from product development and production down to the architecture of the production facilities, providing orientation not only toward economic success but also toward environmental protection ("environmentally conscious business management"). Some even include additional social factors ("Corporate Social Responsibility", CSR). These entrepreneurs experience that in many cases, it is possible to minimize resource usage and atmospheric pollution and, by doing so, improve their enterprise's economic success and ability to compete on the market.

However, far-sighted entrepreneurs are aware that by such methods they can reduce, but not entirely eliminate their enterprise's contribution to the global work of destruction. The current general economic framework makes it impossible for entrepreneurs to truly act sustainably. Their production would become so expensive that competitors who do not take sustainability into account and thus have lower costs would elbow them off the market.

Courageous entrepreneurs face this dilemma by going beyond entrepreneurial optimization and also becoming active on a macroeconomic level, i.e. in areas such as civil voting, associations and economic politics.

There is a necessity to work for the creation of sustainability-oriented frameworks of economic activity. What we need is a pertinent ecological *framework arrangement*. The core point here is – as mentioned repeatedly – the recognition of *"rights of nature"*.

## 6. "Human Rights" and "Rights of Nature"

Generally, nature is not dependent on humans granting it rights. In fact, humans are dependent on nature offering conditions for life that make their survival possible. Nature doesn't care if climatic changes, volcanic eruptions or diseases encroach upon the constitutional right of humans to physical well-being.

Nature is above every species it has produced, including the human species and its legal system.

By "granting" nature its own rights and thus placing it on the same level as humans within our legal system, humanity is also serving itself. The best way for humans to protect themselves is by protecting nature from themselves. If humans recognize and enforce a basic right of all living beings to exist, this represents a survival strategy for humans as well. In the long run, it will not be possible to enforce human rights without recognizing the rights of nature.

"Human rights" require "rights of nature". Many of the rights granted to humans in the "Universal Declaration of Human Rights" lose their meaning in the case of continued destruction of the environment. Someone who has no access to drinkable water due to environmental destruction will have little use for the human right to freedom of speech. The human right to property becomes a farce when a tsunami caused by climate change rolls over the towns of an island.

But human rights need rights of nature not only in order to assert themselves and retain real meaning, but also to gain a watertight justification

Human rights were conceived mainly as liberties. But liberty does not mean being allowed to do anything one wants. Liberty is not capricious freedom; it is the freedom to do what does not harm others. In this way, liberty is defined by the limits and rights of others, thus being defined and limited. By

addressing nature as a carrier of its own rights and thus as a legal subject (instead of simply a legal object) one does no more and no less than placing it on one level with the "others".

In that case, rights of nature occupy the same rank as human rights, and that is the key facet of their recognition that makes them enforceable. The legal systems of many states already demand that the concerns of nature be taken into account in some well defined way. Recognizing nature's own rights, however, clearly goes a step further!

"Rights of nature" are not to be confused with the natural rights of humans in the sense of natural law. According to the teachings of natural law, humans gain certain basic rights not because these rights are given to them by the state, but simply through being a human and thus a natural, rational being. The "rights of nature" on the other hand describe rights given to other living things by state jurisdiction.

There is a big difference between charging humans with certain duties toward nature – as in current jurisprudence – and giving nature its own basic rights. This difference will manifest itself in public consciousness, future judicial developments, and political agendas

Even in times of slavery and serfdom, there were more or less binding codes of conduct for the treatment of slaves and serfs. But the abolition of slavery and serfdom did not come until the people were given their own rights by the legal systems – regardless of their social standing.

*The same applies and will apply to the "rights of nature"! Putting them on an equal footing is the lever for actual implementation and enforcement.*

## 7. "Rights of nature" and "Biocracy"

Humanity must realize that all states of the world are superseded by a state of higher order. This state is nature. The state territory is the biosphere, the state populace is the totality of all life forms, and authority of the state is the evolution of all life. The state form is biocracy, a government of life.

If humans wish to survive, they must reproduce the biocratic order they live under along with all other life forms in the order of their respective nation-states. This does not exclude the simultaneous fulfillment of ethical and cultural demands of humans; on the contrary, it constructively includes them.

Throughout the course of history, the circle of those who contribute to the formation of state consensus has – apart from certain regressions – continually increased:

- From solitary rule (monarchy, tyrannis) to the rule of the few (aristocracy, oligarchy) onward to the rule of the majority (polity, democracy).
- This development continues within democracy: from the class-based vote to the general vote; add to this the expansion of the circle of those eligible to vote (introduction of women's suffrage, the right of foreigners to vote, the reduction of the voting age).[1]

The next consistent step is the expansion of participation to humanity's fellow creatures. It leads us from democracy to

[1] Cf. Eberhard Seidel / Eberhard K. Seifert (2011): „Biokratie" – Weiterentwicklung politischer Willensbildung ("'Biocracy' – further development of political consensus formation") in: Seidel, E. (publisher), Georg Winter – Pionier der umweltbewussten Unternehmensführung ("Georg Winter – pioneer of environmentally conscious business administration"). Festschrift for Georg Winter in light of his 70th Birthday, Marburg, p. 495.

biocracy. By taking this step, the human state makes sure that the survival interest of all living beings is secured in state ordinance, represented in parliament, and implemented in practical politics in such a way, as if the living species had a seat and a say in parliament. A number of basic expedient legal instruments have already been developed by the legal sciences. What seems like a utopia actually represents a survival strategy for humans as well.

Evolution granted humans rationality and thus a quantum leap in terms of power. Nature will drive humans to extinction unless they balance this quantum leap in power with a quantum leap in ethical consciousness. Such ethics demand that we preserve life, foster life, and allow life to flourish.

Let us briefly sum up:

*The state form biocracy is an expanded democracy in which not only humans but all living things are recognized as populace, equipped with basic rights and – by means of appropriate forms of representation – represented in parliament. The state form biocracy means: to respect human dignity, to preserve and foster life, to resolve value conflicts with conscientious consideration, and to resolutely defend endangered life.*

*The conceptual connection between "rights of nature" and "biocracy" can be described as follows – by all means in the sense of a formal definition:*

- *The sufficiently comprehensive codification of the rights of nature represents the normative conception of biocracy.*
- *The sufficiently comprehensive implementation and conservation of the rights of nature represents the descriptive realization of biocracy.*

*The total recognition of and adherence to the "rights of nature" represents the* ***implementation of biocracy.***

## 8. Augmentation of the Declaration of Human Rights through a Declaration of the Rights of Nature

On December 10th 1948, the general assembly of the United Nations passed the "Universal Declaration of Human Rights".

Precisely 60 years later, on December 10th 2008, a group of renowned experts followed my invitation to the HAUS DER ZUKUNFT in Hamburg to discuss if and how the "Universal Declaration of Human Rights" should be expanded to include a "Universal Declaration of the Rights of Nature".

The basis of the discussion was the outline of the Declaration of the Rights of Nature which included the following regulations:

> „Every living thing possesses natural dignity and the right – within the boundaries of natural cycles and food chains – to live according to its nature.
>
> Humans have the duty to preserve and protect each other and their fellow creatures. They are to protect the individual creature, the population and the species, as well as the natural cohabitation (biotope) and the landscape as a habitat.
>
> Humans may only interfere with the living rights of their fellow creatures in such cases in which they are pursuing goals which, after rational consideration, appear to have priority.
>
> Humans may not interfere with the living rights of their fellow creatures if the same goal can be achieved through different or milder means.
>
> The signatory states are to ensure that the rights of nature and the observation of the duties of humans are enforced by means of civil law, penal law, administrative law and all other areas of jurisdiction."[2]

The only country thus far to incorporate the rights of nature into its constitution is Ecuador. The man responsible for this achievement is Alberto Acosta who, on October 20th 2009, following an invitation by the Federal President of Germany in the course of the event „Diversity of Modernity – Perspectives of Modernity" talked extensively about the rights of nature in a keynote presentation. Our initiative, in collaboration with Alberto Acosta, is currently developing a strategy for further steps.[3]

## 9. Biocracy Prize for juristic works on participatory rights of nature

In 2008, on the 20th anniversary of the research center for environmental law at the University of Hamburg, I founded the Biocracy Prize for juristic discussions about participatory rights of nature, which was awarded for the first time in 2010, and the second time in 2013.

The research center for environmental law at the faculty for legal sciences, University of Hamburg, which is directed by Hans-Joachim Koch, the former long-standing chairman of the expert council for environmental questions of the German federal government (2002-2008), describes the assignment for the prize as follows:

[2] Outline for a Declaration of the Rights of Nature on initiative of Dr Georg Winter, expert discussion in the HAUS DER ZUKUNFT 10.12.2008 in Hamburg.

[3] 3rd Discussion round „Vielfalt der Moderne" ("Diversity of Modern Times") following the Initiative of the Federal President on 20.10.2009 in Berlin, with a keynote presentation by economist Alberto Acosta about the Ecuadorian constitution, which postulates the indigenous concept of „sumak kawsay", or „good life".

> "Art. 20a of the [German] constitution obligates the state to protect the natural necessities of life and the animals in responsibility to future generations. In the democratic process of consensus formation, however, nature and future generations do not have a voice. Rather, they must rely on the parliaments to appropriately and voluntarily commit to the protection of nature and the future, and on the administrations to consistently take legislative action in this regard.
>
> In order to implement effective protection of nature and the environment, legal instruments are being developed to allow for effective representation of intergenerational environmental protection in political and executive decision making processes on a national level, but also in the European Union and in the framework of the international community.
>
> This includes, among other things, further development of public participation, class action, and organizational structures of the state which can secure the observation of environmental concerns in a joint effort."[4]

Putting the aforementioned areas of concern into more concrete terms, the research center for environmental law at the University of Hamburg has named research fields in which scientific works for the "Research prize for jurisprudential works for the protection of the natural necessities of life and the animals" which I founded.[5]

[4] Cf online: http://www.haus-der-zukunft-hamburg.de/download/umweltrecht/biokratiepreis-auslobungstext.pdf, from 10-03-2011.

[5] Cf online: http://www.haus-der-zukunft-hamburg.de/download/umweltrecht/biokratiepreis-auslobungstext.pdf, from 10.03.2011.

- Participation of the public in environmental matters – stock-taking and perspectives in international and European law as well as in German environmental law.
- State-level, European and international institutions as "attorneys of nature" – institutional and problems of transferring control competencies to independent specialized bodies.
- The idea of an international environmental court – institutional, procedural and competency-related aspects.
- Conservation of vital natural resources as a joint effort in political and administrative decision making bodies.

So far, the Biocracy Prize has been awarded twice, to four individuals in total.

## 10. From United Nations to United Nature – initiative for a Flag of United Nature

On December 10th 2008, marking the 60th anniversary of the Declaration of Human Rights, at 5 minutes to 12, four northern German environmental institutions raised the Flag of United Nature which I designed – as a symbol for the urgency of the amendment of human rights to include the rights of nature.

The participants were the HAUS DER ZUKUNFT in Hamburg, which had existed for ten years that day, the Eekholt Wildlife Park in Schleswig-Holstein, as well as the "Zukunftszentrum Mensch-Natur-Technik-Wissenschaft" (ZMTW; "Future Center Humanity-Nature-Technology-Science") in Niecklitz, Mecklenburg-Vorpommern, and the Embassy of Wildlife of the German Wildlife Foundation – all institutions that have played a pioneer role in the spreading of environmentally oriented knowledge in Germany.

The „Flag of United Nature" as it is named in contrast to the „Flag of United Nations" symbolizes peace with our planet earth with a blue circular area on a white background. Numerous white stars on the circular area represent the different forms of life in all their diversity. Humanity, symbolized by a yellow star, settles in equally among the totality of all life forms.

We humans are not just citizens of our state. We are also citizens of planet earth. We vouch for the entire biosphere and thus also for ourselves. May all nations; and also the United Nations; act out of this awareness. Our future hangs on a sovereign that is above nations and also above the United Nations. And the name of this sovereign is: United Nature.

Key aspects that went into the debates about the rights of nature on December 10th 2008 in the HAUS DER ZUKUNFT were ones I was already able to lay out at the "World Life Culture Forum" in Gyeonggi/South Korea. Invited as founder and representative of the HAUS DER ZUKUNFT, Hamburg, I held a presentation on June 21st 2006 on the topic: „From United Nations to United Nature – Harmonization between Human Civilization and Nature by Environmental Management and Biomimicry". At the end of the conference, the Flag of United Nature, donated by the HAUS DER ZUKUNFT, was carried through the enthralled assembly by a procession of students.[6]

Let us raise the Flag of United Nature together and embark towards a reunification of nature and our technological civilization.

[6] Winter, Georg (2006): From United Nations to United Nature – Harmonization between Human Civilization and Nature by Environmental Management and Biomimicry, presentation at the Life Economy Session of the World Life-Culture Forum in Gyeonggi, South Korea, 2006. In the conference transcription: world life-culture forum_gyeonggi, Life Thought and Global Salim (Livelihood) Movement – For a New Civilization of East Asia and Pacific, WLCF2006 Paper Book, p. 383ff.

## 11. 1993 – Biocracy discussed at an international economic forum for the first time

As early as September 9th 1993, I introduced my biocracy idea to representatives of the economy as chairman of the International Network for Environmental Management, INEM. For this I chose the International Conference on ECO-Management in Tokyo, where I held the second keynote presentation, next to the President of the Science Council of Japan, Dr. Jiro Kondo. Our general topic was titled: „Towards an Industrial Agenda for Sustainable Development". I had expanded the title of my presentation: „A Vision for the New Millennium".

The hosts of the conference were INEM, the Eco-Life Center (the Japanese membership union of INEM), and the United Nations University. The conference was supported on the Japanese end by the Ministry of International Trade and Industry (MITI), the Japan Environment Agency, and the Federation of Economic Organizations (Keidanren). On an international level, the conference was backed by the International Council for Local Environment Initiatives, the International Organization for Standardization, the United Nations Industrial Development Organization, the Foundation for Earth Environment, and the Global Environment Forum.

Important cornerstones on the way toward an environmentally conscious society and economy had been set: the Stockholm Conference of 1972, which brought environmental problems to the awareness of the global public; the report of the World Commission on Environment and Development (Brundtland Commission) from the year 1987, which brought the concept of sustainable development into the public eye; the World Industry Conference on Environmental Management, WICEM II, 1991 in Rotterdam, preceded by WICEM I in Versailles; and finally in 1992 in Rio de Janeiro, the International Industry Conference on Sustainable Development with the

ratification of Agenda 21, which in chapter 30 calls on industry to be fully committed partners in the realization of sustainable development.

The International Industry Conference on Sustainable Development, which took place in 1992 in the context of the Global Forum of UNCED in Rio de Janeiro, was organized by INEM in cooperation with its Brazilian membership union SIGA. This Industry Conference was the main contribution of global industry to the Global Forum, where a cross-sector exchange of opinions between different societal groups of the world took place, including labor unions, environmental initiatives, women's associations, youth groups, religious communities, scientific associations, and indigenous peoples.

The International Conference on Eco-Management, which took place in Tokyo in 1993, also stands in this context of economic history. It was the first international conference to follow the Global Forum of UNCED in which a conclusion could be drawn in terms of how far industrialists in the different countries had implemented, or were willing to implement, Agenda 21. While Dr. Jiro Kondo was invited as an exponent of science in broadest terms, I had received the invitation to the presentation as a representative of the international movement for environmentally conscious business management.

As of 1972, starting in the industrial enterprise Ernst Winter & Sohn, which at the time was a family business, I had developed and introduced the first integrated system of environmentally conscious business management, which focuses all areas and levels of business not only on economic success, but also on environmental goals. My 1987 book on environmentally conscious business management, based on practical experience, was translated into 12 languages and was the first on the topic in all countries. The European Union and the

Environmental Program of the United Nations supported the distribution of the book on the Winter Model.

To create a nation-wide exchange of experience, in 1984 the "Bundesdeutscher Arbeitskreis für Umweltbewusstes Management" (B.A.U.M. e.V.; "German Workgroup for Environmental Management") was brought to life. In 1991, B.A.U.M. e.V. – the earliest and largest environmental initiative of the economy – was, in the presence of the King of Sweden, taken up into the "500 Role of Honor" of the Environmental Program of the United Nations. B.A.U.M. e.V., which today counts over 500 companies as members, celebrated its 25-year anniversary in 2014.

Following the example of B.A.U.M. e.V. several business associations for environmentally conscious management have been founded in different countries with my help and in 1991, banded together to form the "International Network for Environmental Management" (INEM e.V.). I received the "Change the World best Practice Award" of the Club of Budapest in 2003 for the initiation and development INEM e.V., which already counted 19 membership unions in 1993, at the time of the Industry Conference in Tokyo. At that time (and later until 2004) I served as Chairman of B.A.U.M. e.V. and INEM e.V.

In my presentation in Tokyo in 1993, I postulated four possibly simultaneous courses of development of the global movement for environmentally conscious management. By the year 2000, the developments had not occurred on the scale I had deemed possible in 1993. Now in the year 2014, however, it has become clear that progress is being made along those four courses of development, even though they are still much too hesitant. My exact words in Tokyo were:

> "(1) The number of environmentally oriented businesses will reach a critical mass. Large and medium-sized businesses will practice environmentally oriented manage-

ment following an integrated system. Through successful example, these businesses will find imitators in their respective branches. In a sort of chain reaction, environmentally conscious management will spread globally to other businesses.

(2) The quality of environmentally conscious business management will experience a quantum leap. Pioneer businesses in different countries will cooperate with scientists to develop and successfully test a new model for environmentally conscious business management. This new generation of environmentally oriented business management will allow for an increase in value creation while simultaneously offering a drastic reduction of absolute resource usage and absolute strain on the environment.

(3) In numerous countries environmentally oriented businesses will greatly surpass their competitors in productivity and market share. State leaders will have introduced measures to realize environmental protection in all ministerial areas. These states will see existing or emerging economic frameworks that will bring about a strong entrepreneurial self-interest in environmentally oriented business management. Due to the taxation of energy and scarce resources, and due to extremely high costs of waste disposal, enterprises that save energy and minimize waste will have an extreme cost advantage. Because of the simultaneous easing of taxation on human labor, the pressure on businesses to cut jobs will have been reduced.

(4) The majority of management schools will promote an ethos of fairness not only toward humans, but toward all forms of life. The ethical demand for fairness toward all forms of life in the biosphere will at the same time be understood as a demand of practical rationality for the survival of humanity. "To preserve life, to foster

> life, to bring developable life to its highest value" (Albert Schweitzer) – This threefold demand will be recognized as a guideline for the thoughts and actions of broad circles of enterprise. Environmentally conscious business management and environmentally conscious state administration will be increasingly understood as the result of a lifestyle conscious of the internal world (internally conscious environmental consciousness)."

In the section "Visions of a new form of state in the new millennium" of my presentation in Tokyo in 1993, I developed the idea of biocracy in the following words:

> „In many countries today the form of state is democracy. The populace is the sovereign and enforces its will through a free election of political representatives. Democracy takes every human seriously as a citizen, even if they are poor, simple, fragile, or modest. It gives every citizen equal power through the right to vote.
>
> *1 Further development of Democracy*
>
> Democracy too is a form of state that requires further development. It must take seriously not only every human, but every living thing, a nettle as much as a cherry tree, a frog as much as a horse. For every living thing has its dignity and plays its part and in some way contributes to the preservation of the balance of nature. Plants and animals can't put in their vote in an election. Therefore, the state must ensure that the existential interests of these living creatures also be given political effectiveness.
>
> To achieve this, we must utilize different instruments of state and civil law: For example, the security of the natural necessities of life for humans, animals and plants must be given constitutional importance. The environmental minister must, just like the financial minister, be given a veto right in governmental decisions. Environ-

mental associations must receive the right to sue those who damage the environment to cease and desist, or to pay reparations. By these and other means the state must ensure that the existential interests of all living things be represented in governmental decision-making, in jurisprudence, and in every day economic activity.

*2 The break-through to biocracy*

Human democracy is in reality an oligarchy of the "naked apes". Measured in terms of biomass, humans represent a minority among the living creatures, and this minority overrules the disenfranchised majority. True democracy is only possible if we acknowledge that the "populace of earth" consists not only of humans, but also of plants and animals, in short, of the totality of all living creatures.

Shouldn't we make the totality of all living creatures the sovereign of the state? Shouldn't governments understand themselves as the carriers of a mandate of all living creatures and act accordingly? Shouldn't we develop human democracy into a democracy of all living creatures? We must achieve a break-through to a new form of state, namely biocracy. Human history has known monarchy, aristocracy, oligarchy and democracy. Shouldn't our time of increased endangerment of all life be ripe for biocracy?

In the biocratic parliament – metaphorically speaking – trees are equally entitled to a seat and a say. We should listen closely to the trees. We may find that they represent our true interests better that we do ourselves. Either we humans reach a democracy of all life, namely biocracy, or our species will one day end under the dictatorship of death.

If we reach for our visions, we will realize all that is possible. If we only aim for what is possible, we will be caught in routine and then our civilization will have no chance of surviving in the long run."

## 12. Final highlighting of current initiatives

The introductory statement on the current situation under point (1) above concerned larger global interrelations in a rather abstract way. Going back to this point, the following final comments should be dedicated specifically to current initiatives:

- In order to more strongly include the "voice of nature" in the current lively debate about the energy revolution, I funded and published a pamphlet concerning this question: Wicke, L./Schulte von Drach, M.C.: The energy revolution. More climate protection, but socially and economically viable, published by Georg Winter, Neumünster and Hamburg 2013.
- The HAUS DER ZUKUNFT in Hamburg is planning a conference for the end of November 2015 which is primed by the following series of texts:

**"RIGHTS OF NATURE / BIOCRACY" IN THE DIMENSION OF THE ECONOMY.**

The development of the concept of biocracy towards a fertile transdisciplinary and interdisciplinary term is to be further funded and pushed forward.

- In this context the Biocracy Prize I founded will, following the conference, also be opened to works in the areas of economic and educational sciences. An opening for the natural sciences had already taken place the last time the prize was awarded in 2013.[7]

[7] Award winner was Professor Berndt Heydemann, former environmental minister of the state of Schleswig-Holstein, in his function as chairman of the "Zukunftszentrum Mensch-Natur-Technik-Wissenschaft"

- The last raising of the Flag of United Nature occurred on May 18th 2014 at the cultural train station of Ottensoos near Nuremberg. Professor Volker Stahlmann, in the company of his spouse Renate Kirchhoff Stahlmann and numerous guests, raised the flag on a high flagpole in the entrance area of the train station.

Further raisings of the flag both in and outside the country will follow.

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ISBN 978-3-7316-1376-3