

CHAPTER 15

LEADERSHIP IN THE ANTHROPOCENE—RECOGNIZING AND COUNTERACTING INEQUALITIES IN RELATION TO THE NATURAL WORLD

TIMO MEYNHARDT

“Too little too late” is the alarming assessment of the Earth4All initiative regarding the extent and speed with which the major ecological challenges of our time are currently being tackled.¹

Today the ecological issue is noticeably taking center stage. Natural disasters, the extinction of species, and the increase in extreme weather events make it clear that the climate crisis is no longer something

abstract—nobody can turn a blind eye to it. Associated with this are new questions of equality and inequality in the life chances of individuals and the collective. How are burdens shared between different population groups and the generations? Who benefits from social inequalities caused by the climate crisis? And, above all, who loses out?

Exactly fifty years after *The Limits to Growth*, the first report to the Club of Rome, the authors of the Earth4All study, used a system-dynamic computer model to conclude that a “giant leap” is needed to avert irreversible changes on Earth, changes that are leading to ecological and social catastrophes and destroying the physical foundations of human existence. They call for “extraordinary turnarounds” to avoid tipping points beyond which negative developments can no longer be stopped. The melting of the glaciers, the rise in sea levels, or the further weakening of the Gulf Stream are examples of this.

The idea of an *Earth for all* goes hand in hand with the idea that the common good must be thought of in planetary terms today more than ever. This turnaround proposal is nothing less than an attempt to abandon a model for living and economics based on the controllability of the Earth and to search for a new narrative for the habitability of the Earth. At

least since the onset of industrialization, the idea of using natural resources effectively and efficiently to increase the quality of life has been dominant, but it is becoming increasingly clear that this approach—which was fraught with conflict from the start—is reaching its limits and going beyond them will result in the destruction of the natural foundations of life.

The price of increasing prosperity by exploiting the Earth system and all its resources might mean being forced into a different way of life and economy. This brings with it an enormous leadership task, which above all requires openness to possible alternatives.

Against this backdrop, new social movements are emerging, climate policy is becoming a central policy area, and the economy is aligning its visions and strategies with the idea of a socio-ecological transformation of capitalism. However, the current approaches are too timid and not just for climate activists—“too little too late” indeed.

In the following essay, after a brief description of a few basic ideas of the Earth4All approach, I would like to draw on the Leipzig Leadership Model to show what leaders and decision-makers can use as a guide when facing the complexity of socio-ecological challenges. In the end it will become clear that the key to change lies first and foremost within ourselves. It

depends on our willingness to recognize an opportunity to reshape our relationship with the natural world and, in doing so, to draw upon the experiences of earlier epochs in human history as well.

THE NEED TO TAKE ACTION IN THE INTEREST OF VIABILITY/SURVIVABILITY

Even more clearly than in the study of the limits to growth, today the focus is on “planetary boundaries,”² i.e., the question of the limits of the safe space in which human activities can develop without the risk of unleashing processes in the natural world and the environment that can severely restrict or even destroy life on Earth. One example is the melting of the glaciers as a result of human-induced global warming. Even if the effects do not manifest themselves in the same way in all regions and areas, they are triggered by interdependencies on a global scale in which we are all potentially involved.

Nine ecological factors are currently being discussed in connection with planetary boundaries: climate change, ocean acidification, stratospheric ozone depletion, atmospheric aerosol loading, biogeochemical cycles, freshwater consumption, land system change,

biosphere integrity, and the release of novel compounds. If the appropriate load limits are exceeded, according to the hypothesis, the foundations of humanity are at stake. The concept of load limits, originally developed by Earth system and environmental scientists, is by no means limited to ecological factors but is concerned equally with social principles such as peace, social justice, and participation in society.³

At this point, it is worth taking a quick look at the concept of load limits. The background is the theory of complex systems and its application to the interaction between human beings and the environment. The starting point is the assumption that humans have an impact on the dynamic balance of nature through their consumption of resources and their behavior, and as a result can alter this balance. If a critical point (“tipping point”) and thus a load limit is reached, the system becomes unstable and its behavior unpredictable. It can no longer process the “stress” in the same way as before and cannot return to the old state of equilibrium, but rather reorganizes itself dynamically. In such situations of phase transition, chaotic states can emerge before a new ordered state develops. The decisive factor in the approach to dynamic complex systems is not the constant self-organization of the Earth “system,” but the acceptance that human

influence has grown significantly since industrialization. The scientific evidence for this is clear and ranges from population growth to environmental pollution and water consumption. “The growth of industrialized societies, largely since the 1950s, has pushed Earth out of the Holocene boundary conditions. We are in unknown territory.”⁴

The Earth4All authors are in agreement: “The Earth has entered a new geological epoch: the Anthropocene. This paradigm shift in our understanding of both civilization and the Earth system is as profound as Copernicus’s conclusion that Earth orbits the sun or Darwin’s theory of natural selection.”⁵

The diagnosis of such a fundamental change in basic scientific concepts is—as with the aforementioned paradigm shifts—contentious and the cause of fierce controversies whose outcome is unpredictable. For example, the issue of prioritizing values is obvious when scientific statements of probability are used to justify political measures. The sense of uncertainty is even greater when proposals are made that go far beyond environmental protection in the stricter sense and, at best, have an indirect impact.

However, the body of evidence concerning observable changes is so overwhelming that a simple “business as usual” seems unrealistic. It is irresponsible towards

future generations not to include ecological issues in decision-making processes in politics, business, and society. More pressingly, these issues are becoming a question of survival for our modern way of life.

This urgency is increasingly being recognized. In all areas of society, we can see a wide variety of initiatives and innovative approaches that are looking for ways out and alternatives and are not satisfied with a “too little too late” scenario. Bruno Latour and Nikolaj Schultz even describe a new “ecological class” that could form as a group, cutting across ideological camps and becoming involved in new constellations.⁶

It quickly becomes clear how ecological, moral, and political issues are interwoven and influence each other. For example, heatwaves, droughts, heavy rainfall, or rising sea levels affect individual regions and population groups more profoundly than others. As in any process of change, there will be winners and losers and new forms of equality and inequality will emerge, which can be expressed, for example, in access to attractive habitats. Overall, the ecological challenges might become a catalyst for social developments. This is not a new phenomenon in human history. But how can today's forms of society respond successfully to social inequalities in the interests of the common good?

We can see the Earth4All model as an attempt to identify these wider contexts and to understand their interdependencies that will influence our way of life and economy over the coming years. These are systemic challenges that require active intervention and leadership in politics, economics, and civil society.

From an Earth4All perspective, extraordinary turnarounds are needed in five key areas, which are presented in the form of “policy roadmaps.”⁷ These are geared towards the social structures that can have a major impact on how humans behave as inhabitants of the Earth and how they shape the Earth:

1. Poverty. Low-income countries should adopt new rapid economic growth models that secure well-being for the most vulnerable. A starting point is reform of the international financial system to de-risk and revolutionize investment in low-income countries. *Key policy goals: GDP growth rate of at least 5% per year for low-income countries until GDP is greater than US\$15,000 per person per year; the introduction of new indicators for wellbeing.*
2. Inequality. Shocking levels of income inequality must be eliminated. This can be achieved through progressive taxation and wealth taxes, empowering

workers, and dividends from a Citizens Fund. *Key policy goal: The wealthiest 10% take less than 40% of national incomes.*

3. Empowerment of women. Transforming gender power imbalances requires empowering women and investing in education and health for all. *Key policy goal: Gender equity that will contribute to stabilization of world population below nine billion by 2050.*
4. Food. To transform agriculture, diets, food access, and food waste; by 2050 the food system must become regenerative (storing vast volumes of carbon in soils, roots, and trunks) and nature positive. Local food production should be incentivized, and excess inputs of fertilizers and other chemicals significantly reduced. *Key policy goals: Healthy diets for all while protecting soils and ecosystems and not expanding the amount of land, overall, devoted to agriculture; dramatically reducing food waste.*
5. Energy. We must transform energy systems to increase efficiency, accelerate the rollout of wind and solar electricity, halve emissions of greenhouse gases every decade, and provide clean energy to those without. This will also deliver

energy security. *Key policy goal: Halve emissions approximately every decade to reach net zero emissions by 2050.*⁸

It is immediately clear that these turnarounds would involve nothing less than a radical system transformation. This only seems over-ambitious if we assume that there is a viable alternative or forget that the status quo of our current way of life is itself the result of numerous system transformations. The authors are aware that their proposals are to be seen as interventions in highly complex systems that have their own logic and history and whose development cannot be predicted. So, they define so-called “levers” which they expect to have a particularly high impact and which in turn can have an effect on other areas.

In each case they indicate the measures through which the stated goals are to be achieved. In essence, these are aimed at a substantial restructuring of the capitalist mode of production and lifestyles, from the establishment of citizens’ funds, revitalization of trade unions, the complete transition to a fossil-free energy system, new growth models, a revolution in agriculture, a change in diet, re-regionalization of trade, financial independence for women and access to leadership positions, universal basic income, and

an increased pension, to reforms in the international financial system and a transformation in education.

The authors see what reads as a highly ambitious reform project as a “basis for a new social contract for functioning democracies in the Anthropocene”⁹ and as an investment in the future with entrepreneurial opportunities. The crucial idea lies in linking these approaches with the ecological issue. In other words, to prevent the destruction of the physical basis of human life, more and different measures are required than just environmental and animal protection measures. Essentially, then, the ecological issue is not a green question, because answering it covers all areas of life and requires a system transformation precisely with this aim. At this point, opinions differ, because the complexity of the phenomena does not allow us to decide where scientifically proven knowledge ends and where the political influence of experts begins.

I do not want to pursue the question of decision-making in (climate) policy here or question the consistency of the goals themselves. The quality and feasibility of the proposals must be debated through the democratic process and a compromise sought on which priorities to set.

This has also been done for a long time with increasing intensity. In business, it is about the implementation of

political guidelines that have been agreed at international level (the UN's Sustainable Development Goals), increased transparency (for example, the EU taxonomy), and new criteria for investments (for example, ESG standards). The ecological transformation is well underway in many companies.

One outstanding example from the political world is the decision of Germany's Federal Constitutional Court concerning the Federal Government's 2019 Climate Protection Act. In its decision, the Court finds the Act to be a violation of fundamental rights, because the distribution of greenhouse gas reduction burdens disadvantages future generations and thus restricts their freedom.¹⁰ This judgment concerning the intertemporal guarantee of freedom is a new phenomenon in the history of the Federal Constitutional Court, and it can be interpreted as signaling a paradigm shift. There has now even been the suggestion of an ecological constitutional framework.¹¹

Overall, this clearly shows how previous ways of thinking can be changed under pressure of circumstances. But how can the changing context of entrepreneurial activity be translated into the day-to-day work of leadership? How can we imagine such a combination?

ACCEPTING THE CHALLENGES OF LEADERSHIP

In uncertain circumstances, no one can reliably assess the effects and impacts of their own actions. It makes sense, therefore, to see yourself as part of a greater whole and to focus on your own contribution. Unlike focusing purely on outcomes and results, it is about getting involved to the best of your knowledge and belief, knowing that progress can only be controlled to a limited extent.

Instead of capitulating in the face of the challenge (“There’s nothing you can do anyway”) or suppressing it (“It won’t be that bad”), leadership can be measured by taking responsibility for a contribution—no matter how small it may be. The more complex the challenge, the more good leadership is defined by a contribution to the greater whole (the common good). What part of the challenge is mine? In what way can I get involved? The question of one’s own contribution becomes a key question for every leader, because if you want to lead, you have to contribute.

It is this understanding of the role of good leadership that underpins the Leipzig Leadership Model and makes it possible to establish a connection between the major challenges and one’s own actions in everyday life (Fig. 1).¹²

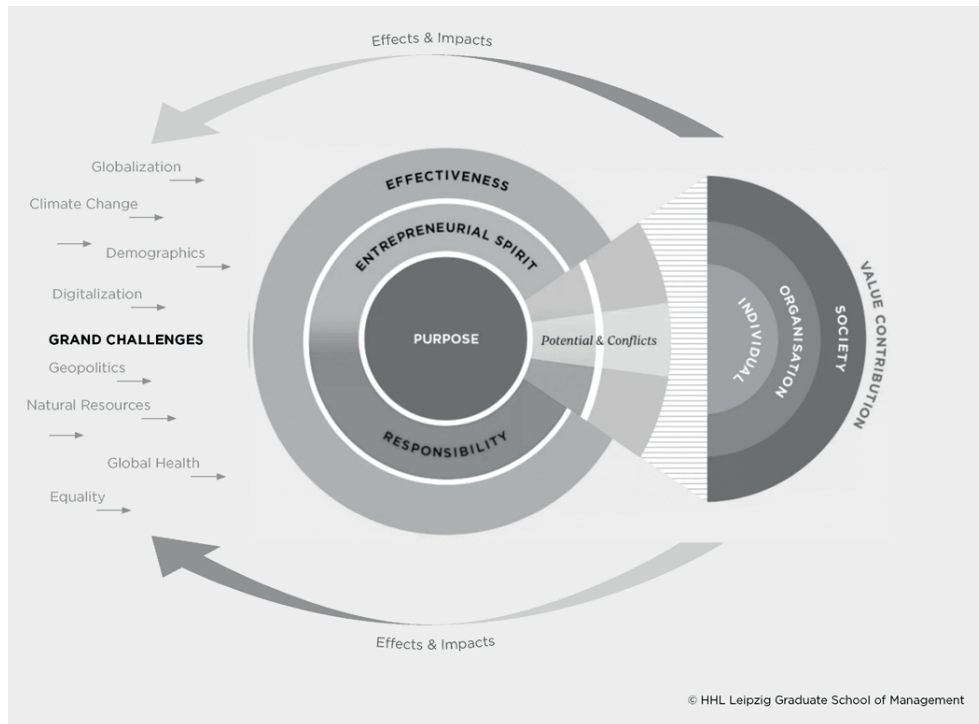


Fig. 1: *The Leipzig Leadership Model*

Between the (internal) acceptance of the challenges and one's own added value resides the work of leadership which, the Model argues, should be based on four core dimensions: purpose, entrepreneurial spirit, responsibility, and effectiveness.

1. The *Purpose* dimension emphasizes the ends–means relationship in leadership. On the one hand, there is the question of “why,” the meaning and purpose of leadership decisions. On the other hand, there is the question of “to what end,” the contribution to the greater whole. A purpose only emerges by combining both elements to create a motivating

promise of value that goes beyond the company's previous mission and vision.

2. In the *Entrepreneurial Spirit* dimension, the focus is on the ability to renew people, organizations, and society. It is about the very ability to act, create, and innovate. The resulting entrepreneurial spirit not only determines the success of start-ups but also plays an increasingly important role for established private and public companies in processes of transformation.
3. The *Responsibility* dimension is a condition restricting the pursuit of the respective purpose. It is about taking reasonable account of the legitimate expectations of society or, more precisely, of the stakeholders concerned in everyday (leadership) life, and that means above all not disadvantaging anyone unless there are legitimate reasons for doing so. What is feasible and desirable is not always what is responsible, and also the end does not justify the means.
4. The *Effectiveness* dimension deals with the question of the viable or correct path to take in an efficient way. Every purpose needs to be implemented

in a technically and methodically competent way given current and future conditions of scarce resources, competition and, last but not least, legal requirements. The development of goal-oriented strategies, structures, and processes is a basic prerequisite for good leadership.¹³

Using these four perspectives, leadership challenges can be analyzed and evaluated step by step. In other words, dealing with this makes the courses of action more concrete, namely the means and consistency by which an approach to leadership can be pursued.

In many situations, this frame of reference makes it possible to identify areas of tension in the first place, but also to recognize the kinds of potential associated with a decision or action. Above all, the appropriate kind of reflection prevents the viewpoint from becoming too restricted. For example, it is unclear whether exceeding (planetary) load limits in one area will actually have positive effects in other areas. The relevant point of the work of leadership in the paradigm of the Anthropocene is the willingness to adapt to the concept of load limits, to think in the form of dynamic processes, and to determine one's own contribution to the socio-ecological transformation from that position.

In the Model's most recent update¹⁴ to include systemic aspects of feedback and dependency on the greater whole, the complex preconditions of a production system that enable the system in the first place are examined even more closely. This is intended to draw attention to actual effects and realistic impact targets. "Effects" aim to identify unintended influences while "impacts" identify intended influences of entrepreneurial activity on the social environment and the natural world. In the Model, this notion was previously linked to its contribution to the greater whole in terms of social value (the common good) and is now in the expanded Model linked more directly with the Grand Challenges. The Challenges drive the common good, so to speak, which can no longer be brought about without socio-ecological transformation.

As a result, the Model calls for thinking that takes account of cycles, dependencies, and a greater sensitivity to context. In other words, it is a pragmatic way of finding routes that do not formulate the ecological issue as a problem of compensation or reparation, but rather promote a new understanding of consumption, material prosperity, and a sustainable quality of life. The challenge is to avoid solutions (however innovative they may seem) that reproduce the very problems that need to be overcome. For example, why should

those who created the problems to begin with be those who are in a position to solve these problems? In general, caution is required if the effects and impacts of entrepreneurial activities are to be assessed.

An interim conclusion: in the Leipzig Leadership Model, a frame of reference has been developed that makes focusing on a company's social function and role the linchpin of good leadership. In this respect, it seems appropriate to address the complex embedding of entrepreneurial activities in a more comprehensive context. In the Anthropocene, this is characterized particularly by the ecological issue, the answer to which can no longer be found solely in the previous logic of our economic system. The Earth4All model provides one suggestion, and its translation into the concrete framework of entrepreneurial activity can be given a systematic structure through the Leipzig Leadership Model: the most demanding purpose comes to nothing if it is not implemented effectively, entrepreneurially, and responsibly. Conversely, in practice it is often hard to set activities in a wider context and to recognize one's own contribution to the greater whole. Good leadership today includes doing both: thinking in terms of the challenges of the Anthropocene and making relevant contributions visible as well as being judged by them. As a reality principle, it is important

to constantly reflect on and reassess the possibilities and limits of one's own actions.

GETTING STARTED

To gain insight into the role of the economy in this socio-ecological transformation requires experiences of becoming aware of one's own vulnerability and finiteness in the context of personal development. Today, "inner work" is an important part of leadership coaching because it is seen as a prerequisite for the ability to undergo external transformation.

Such a change in consciousness is certainly prompted by external conditions and can be accelerated by them. At the same time, we should not harbor any illusions that the need to take action will inevitably lead to a collective understanding of the necessity, primarily because the rationality of scientific knowledge is not self-enforcing and the idea of progress itself is constantly being questioned.

The idea of the "turnaround" in the Earth4All approach presupposes an optimism that developments in society can be directly influenced, which is hard to justify from a historical point of view. A system change can neither be mandated nor implemented

according to plan. Rather we should assume systemic-evolutionary developments that are difficult to predict and are full of surprises. The authors of the Earth4All model know this too and therefore prefer to speak of scenarios whose likely occurrence differ. They point to paths of development, the recognition of which can lead to more conscious decision-making and reasoning.¹⁵

With the emerging dominance of the ecological issue, it is not just the modern idea of progress, the notion of making the world controllable through scientific rationality, that is called into question. Today, the visible and foreseeable changes in our natural environment show how dependent we are on it and how we influence it through our actions. A new basic approach might include granting nature its own legal status with rights of self-defense such as individual people have, in the spirit of Bruno Latour's "parliament of things."¹⁶ When people understand themselves to be part of nature again, this changes the notion of nature's ability to be shaped.

The current situation is less about controllability and more about the habitability of the planet. This does not have to be seen as losing possibilities of taking action, but as opening up new opportunities.

"This mood makes itself felt everywhere, politically, socially, and philosophically. We are living in what the Greeks called the *kairos*—the right time—for

a ‘metamorphosis of the gods,’ i.e., of the fundamental principles and symbols.” David Graeber and David Wengrow begin their book, *The Dawn of Everything: A New History of Humanity*,¹⁷ with this quotation by C. G. Jung. In this book, which has received many international awards, the authors describe a new image of humanity’s past, of different social structures, economic systems, and ways of life. We begin to see the variety of possible forms of human coexistence that changes our understanding of historical processes. In this description, there is no evidence of clear logical progress from “primitive” hunters and gatherers to the present-day, modern way of life. Rather, we come to recognize a constant experimentation, discarding, discovering, and sometimes rediscovering of ways of living together in the community and with nature. This applies to all areas of life: the role of technology, the question of forms of ownership, the relationship with nature, with life and death, dealing with hierarchy and participation, etc. Quintessentially, the book is about relativizing our level of civilization in relation to earlier epochs of human history. Indigenous cultures in particular were much better able to live in harmony with and respect for nature.

By using the *kairos* quotation, Graeber and Wengrow want to point out that, at least in Western

societies, a radical change could once more be imminent, which in view of humanity's history hitherto, however, need not frighten us. What is new about today's situation is the unsettling ecological issue, as preserving the very foundations of life depends on our response to it. It doesn't seem too outlandish to talk about a new phase of experimentation and discovery.

Earth4All's alarming assessment of "Too little too late" regarding how to deal with the ecological issue is to be understood as a call to first answer the question of where one's own problem lies, in order to then explore what one's own contribution to new solutions might be. However, the turnarounds that we have discussed must also prove to be practicable and translate into concrete leadership work, as we argued using the example of the Leipzig Leadership Model. This then acts a kind of filter in the deliberation process.

No one can demand that leaders focus on the major challenges all the time in everyday business. However, we can ask that they show willingness to face these questions as reflective practitioners and locate their own actions in this context.

Leadership in the Anthropocene means helping oneself and others in an effective way to find a new approach to nature and life in general. Without an inner willingness to think of one's own existence in

terms of its dependence on others and the natural environment, the ecological issue remains at best a technique to be mastered for optimizing resource consumption and smart offsetting. It would be a mistake by other means to see the solution to these problems only in more innovation. It is more sustainable to see oneself as a resident with responsibility for the home we share. It is not enough if people see themselves as part of nature but attribute a separate value to it. The crucial step is the recognition of nature's agency. Only then can inequalities in relation to nature be suitably addressed.

It will be interesting to see how the regulatory interventions expected over the next few years in favor of making the economy and society greener will change practices. In the Anthropocene, good leadership also means recognizing and being able to counteract new (social) inequalities.

Notes

1. Sandrine Dixon-Declève, Owen Gaffney, Jayati Ghosh, Jorgen Randers, and Johan Rockström, *Earth for All. A Survival Guide for Humanity* (Gabriola BC, Canada: New Society Publishers, 2022).

2. Johan Rockström et al., “Planetary Boundaries: Exploring the Safe Operating Space for Humanity” in *Ecology and Society* 19 (2), 2009.
3. Kate Raworth, *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (New York: Random House Business, 2017).
4. Dixon-Declève et al., *Earth for All*, p. 15.
5. Dixon-Declève et al., *Earth for All*, p. 13.
6. Bruno Latour and Nikolaj Schultz, *On the Emergence of an Ecological Class. A Memo*, trans. Julie Rose (Cambridge: Polity Press, 2022).
7. Dixon-Declève et al., *Earth for All*, p. 5.
8. Dixon-Declève et al., *Earth for All*, p. 20 f.
9. Dixon-Declève et al., *Earth for All*, p. 22.
10. See https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2021/03/rs20210324_1bvr265618en.html (accessed January 30, 2023).
11. Jens Kersten, *Das ökologische Grundgesetz* (Munich: C.H. Beck, 2022).
12. Timo Meynhardt, Manfred Kirchgeorg, Andreas Pinkwart, Andreas Suchanek, and Henning Zülch (eds.), *Führen in der Krise: Herausforderungen an das Leipziger Führungsmodell* (Leipzig: HHL Academic Press, 2022).
13. Ibid., p. 18 f.
14. In the first version of 2017, the systemic perspective with the idea of value contribution at various levels in the system (individual, organization, society) was already in place and was reflected in the theoretical frame of reference. In the expanded version of 2022, the list of Grand Challenges was updated and the feedback to the Challenges concretized in the form of unintended effects and intended impacts.

15. The model used for Earth4All is based partly on the model that was used in the study *The Limits to Growth*. The scenario developed in the latter, “Business as Usual,” turned out in retrospect to be very realistic (cf. Dixon-Declève et al., *Earth for All*, p. 11).
16. Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 2004).
17. David Graeber and David Wengrow, *The Dawn of Everything: A New History of Humanity* (New York: Penguin, 2022).