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Engaged Reflections – Reflected Engagements

Introduction to the Topic and the Contributions

Helge Kminek, Anna Geyer and Markus B. Siewert

According to Goethe's *Faust* (1987), the task of science is to recognise what holds the world together at its innermost core. This task is to be expanded today. Against the backdrop of the realisation that science and research are not and cannot be value-free, an awareness of their ethical responsibility for society is forming. This is all the more accurate in light of the fact that humankind – above all the Western industrial societies of the Global North – is working towards the destruction of its own basis of life. We call this the *environmental question*. The latest IPCC report does not give us the all-clear but rather, in this context, scientists and researchers are increasingly making it their explicit task to co-operate in handling this problem.

Furthermore, there is an increasing awareness that interdisciplinary as well as transdisciplinary boundaries between science and practice must be bridged for the purpose of progress in knowledge production and problem solving. This requirement arises in connection with the environmental question. Due to its multidimensional nature, science and research will only be able to contribute systematically to solving the problem if it engages with the practical complexities which are otherwise reduced for the sake of knowledge generation.

This means that for successfully dealing with the environmental question, (i) science and practice, viewed dichotomously, are separate but dependent on each other. Yet, if one thinks dialectically, (ii) science and practice cannot be completely differentiated. (i) In dichotomous thinking, science is characterised by the fact that, freed from the pressure to act, it can reflect on practice in an unbiased way, point out its blind spots and develop proposals for solutions. Hence, science is not and cannot be practice. On the other hand, practice faces responsibility for its actions, although it can only ever justify its decision afterwards. After all, every practice of action must always be justified and justified in retrospect. This is the case even if one announces a certain action and justification in advance. (ii) Considered dialectically, science is itself a form of practice,

namely when it faces its responsibility and strives to contribute to solving problems. Conversely, practice is science when the actors, within the scope of their possibilities, systematically reflect on their practice and consciously incorporate research results into their actions.

This kind of science is engaged reflection and this form of practice is reflective engagement. It is this dialectic self-understanding that the transdisciplinary contributions of this anthology have in common. *Transdisciplinary Impulses towards Socio-Ecological Transformation* is the product of a lecture series, which took place at Goethe University Frankfurt during the winter term of 2019/2020. It was part of a teaching project by the editors on Education for Sustainable Development within the framework of the quality teaching fund at Goethe University.

The volume starts with a contribution by *Jonathan Maskit* which is located in the tradition of phenomenological aesthetics. He descriptively explores whether possibilities of movement in cities enables or prevents different experiences. If one relates the contribution to the various questions concerning the design of transport infrastructure in terms of sustainability, then his philosophical contribution opens up numerous perspectives and occasions for reflection. At the same time, it indicates what philosophical reflections can contribute to the question of transformation to sustainable societies.

The humanities approach is followed by a social science contribution. *Diana Hummel* examines the significance of global population dynamics for sustainable development in the Anthropocene. She reconstructs different positions in this highly controversial scientific debate and exposes the “Social Ecology” approach which tries to overcome the separation of nature and the social. Her reflection leads to the question of the responsibility of science and normativity. She concludes by invoking six principles for inter- and transdisciplinary research.

In the third contribution to the anthology, *Christian Stache* puts forward his central thesis that a return to Marx’s critique of capitalism is necessary. For this, a critique of Donna Haraway’s approach takes on a central argumentation of demarcation. The approach is accused of putting nature and society in one, which is objectively wrong, as well as a strict dichotomy of nature and society. Only a Marxist-dialectical understanding of nature and society is appropriate. Furthermore, Christian Stache criticises the concepts of Education for Sustainable Development (ESD), arguing that they lack an adequate theory of society and description of the problem, for which a return to the work of Marx is decisive. Through his critique

of ESD, Christian Stache's contribution leads to the genuine contributions of educational science.

In the next contribution *Helge Kminek* combines issues of the Philosophy of Science and ESD. Underlying his contribution is the thesis that for the systematic further development of the debates on ESD, a science-theory informed ordering of these debates is necessary. To this end, he develops the first formal model that relates structural cornerstones to each other. The other contributions in the volume can be systematically located within this model.

Beer Albers presents a contribution to the philosophy of education and addresses whether ESD should pursue the goal of educating subjects to become mature and make autonomous reflective decisions (*Bildung*), or whether it should educate them to behave in a sustainable manner. Albers argues, following Hegel's theory of education, that the tension between education and autonomy on the one hand and education and conditioning on the other hand should be dialectically mediated and resolved at a higher level.

The contribution by *Franz Rauch, Günther Pfaffenwimmer* and *Renate Hübner* proposes that communication is a central dimension for educational processes in the context of Education for Sustainable Development. This thesis is substantiated by giving an insight into the development of a network of schools, in the sense of ESD, with reference to further background theories. The article thus highlights the importance of organisational development of schools and educational institutions that want to establish, consolidate and further develop ESD.

Leon Fuchs, Christina Höjling and *Lena Theiler* reflect on a participatory special exhibition at the Senckenberg Naturmuseum Frankfurt with regard to the question of how museums can contribute to social change processes as places of learning for Education for Sustainable Development. For this purpose, they outline the special features of (natural history) museums as extracurricular places of learning in relation to ESD, present the practical implementation of the project and conclude with a summary of the main insights gained by the project.

Examining how sustainability can be implemented at institutions of higher education, *Anna Geyer* describes the onset of a sustainable transformation at Goethe University, Frankfurt. She touches upon relevant actors, initiatives and projects, thereby underlining the importance of cooperation between academic, administrative and technical staff, political bodies and students. As critical barriers are highlighted and a first-hand account on the intricacies of pushing for

sustainable transformations is provided, this approach may be valuable especially to sustainability actors at other institutions of higher education.

The anthology ends with a contribution by *Georg Ehring*. Ehring is head of the economy and environment editorial department of the radio station *Deutschlandfunk*. He reports on his experiences of journalistic work on climate change and reflects on the question of what good journalism should look like in view of the dangers posed by unrestrained climate change.

The environmental question is *the* question of our time. At the last G20 meeting and COP26 conference in Glasgow, it must have become obvious to all participants – policymakers, non-governmental organizations and activists, business representatives, scientists – that a response is overdue, and that we are in dire need of action. Even though (almost) all agree on the problem, it is still heavily contested how to define, negotiate and implement the necessary solutions. In the meantime, the possibilities for successful counter-actions are shrinking. The contributions collected in this anthology address the environmental question from very different angles but share a common core: a call for engaged reflections and reflected engagement at various levels of society. In doing so, it is our hope that the collected essays help us towards a better understanding of the underlying structural intricacies, shed light on its tensions, point towards valuable lessons and even propose solutions to address the environmental question.

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Helge Kminek, Anna Geyer and Markus B. Siewert

Goethe, Johann W. von (1987 [1808]): *Faust*, part one. Translated by Nicholas Boyle. Cambridge: Cambridge Univ. Press.