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- CLIMATE CHANGE DRIVES TRANSFORMATION
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“Transformation” as a New Critical Orthodoxy

The Strategic Use of the Term “Transformation” Does Not Prevent Multiple Crises

“Transformation” is an umbrella term which places the ecological crisis in a broader context. To foster societal change, opinion leaders of the transformation debate are focusing on cooperation and learning, existing political, cultural and economic institutions, and trust in incremental change. However, these leaders are not questioning existing power relations. This bias may partly explain why social-ecological transformation has not yet occurred. A more analytical understanding of transformation can complement and correct some of these shortcomings in order to better understand the obstacles to policy change.

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“Transformation” as a New Critical Orthodoxy. The Strategic Use of the Term “Transformation” Does Not Prevent Multiple Crises
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Almost five years ago, the German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen, WBGU) published its report *World in Transition* and initiated an important and diverse debate, at least in the German-speaking world, about transformations towards sustainability (WBGU 2011).¹ At the same time, international flagship reports by international institutions and think tanks also referred to the concept (WBCSD 2010, NEF 2010, DESA 2011, UNECE and UNDP 2012). Scientific and social scientific debate on the subject is intense (overviews in O’Brian 2012, Brie 2014, Nalau and Handmer 2015, Brand and Wissen 2016). Research programmes – for social sciences in particular – and project calls focus on this concept (JPI Climate 2011, Hackmann and St. Clair 2012, Brand et al. 2013, Driessen et al. 2013).

Social-ecological or *societal transformation* appears to be an umbrella term that constitutes a new political-epistemic terrain. It is not as prominent as sustainable development was, beginning in the 1990s. And currently, a term such as Green Economy probably attracts more political attention. At the recent *Conference of the Parties (COP)* to the *United Nations Framework Convention on Climate Change (UNFCCC)* in Paris, for example, “transformation” did not play a certain role. However, it seems that discussions about transformation have a similar function to those around sustainable development in the 1990s, putting the ecological crisis into a larger context and uniting different fields of thinking and

action against business-as-usual strategies. In comparison to the beginning of the era of sustainability concerns, the context has changed dramatically.

Firstly, the complexity of problems, especially the causes and consequences of climate change, and the urgent need to act are broadly acknowledged.

Secondly, interpreting the ecological crisis as suggested in mainstream sustainability debates, as a particular problem and policy field, does not enable us to adequately manage it. “Something” more profound is required. Whereas sustainable development always contained a managerial core, the new perspective needs to consider the complexity and non-linearity of challenges.

Thirdly, the economic and financial crisis – and the related crisis of political representation as well as the ascent of extremist right-wing parties in many European countries – clarifies that the ecological crisis is one of multiple crises; and that it needs to be dealt with in more comprehensive, i. e., transformative ways.²

Fourthly, the term “sustainable development” and its initial embedding in the *UNFCCC*, the *Convention on Biological Diversity (CBD)* and *Agenda 21* emerged in a time prior to the second phase of globalisation and the rise of the “emerging economies” in the 1990s. Then, environmental problems and solutions were mainly located in the Global North (a good example is the Kyoto Protocol from 1997, with responsibilities only for countries listed in *Annex I* and *II* of the *UNFCCC*, i. e., the industrialised countries). >

¹ In German: *Die Große Transformation*, in English: *The Great Transformation*.

² One reviewer contended that the term “multiple crisis” is questionable due to different time scales. Indeed, those different scales do exist between, e. g., the financial and the ecological crisis (as spatial differences exist as well). However, the notion denotes that the different crises have their own logics and that they are, at the same time, interrelated (Demirović et al. 2011, NEF 2010).

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This has changed enormously in the last 20 years. Any attempt to deal with the severe crisis should refer to *global* transformations (occurring, of course, in highly uneven ways and with differentiated responsibilities). This changing context seems to render transformation – with its radical semantics – more attractive than sustainable development.

Transformation of What, How and by Whom?

Social science contributions to and debates about transformation are increasing at a very fast pace though the concept is used in quite different ways.³ The assumptions about societal dynamics that cause climate change, environmental degradation and other problems and crises vary. This also applies to the very understanding of the problems to be dealt with, processes of political and societal management, the roles of different actors and of (different forms of) knowledge, among others. Some contributions focus more on the state, changing values and bottom-up pioneers of change (e. g., WBGU 2011) while others see private enterprises as key players (WBCSD 2010) or put their emphasis on technological change (DESA 2011).

It is not by chance that the concept of transformation remains vague. Nalau and Handmer (2015, p. 350) argue that “although the idea of transformation has become more prominent in particular among the scientific community, there is no clear consensus as to what the concept means in practice, how it could be evaluated, and what role transformative approaches play in disaster risk management, policy and practice” (cf. O’Brien 2012, p. 670).

This refers to a constitutive tension inherent in most usages of the concept. The radical diagnosis of ecological problems is accompanied by an incremental understanding of transformation processes themselves. At first sight, this is surprising because insights into the profound nature of problems and crises should lead to radical solutions, or at least proposals, to deal with the root causes. Instead, the tension between radical diagnosis and rather docile strategies is connected with an obvious – implicit or explicit – assumption that transformation processes can be better initiated and amplified within the current political, economic and cultural institutional system, dominant actors and related rationales.

Despite the fuzziness of the concept, Nalau and Handmer (2015, p. 350) conclude that transformation can be understood as “fundamental shift that questions and challenges values and routine practices and changes prior perspectives employed to rationalise decisions and pathways” (Nalau and Handmer 2015, p. 351). Or as Driessen et al. (2013, p. 1) put it, the concept of societal transformation refers not least “to alterations of society’s systemic characteristics and encompassed social, cultural, technological, political, economic and legal change”. Transformation implies non-linear change and no prioritisation of any temporal – i. e., short, medium or long term – or spatial scale, e. g., national or international (Brand et al. 2013).⁴

Beyond a general consensus that fundamental system change is required, the terrain is quite open and reflects different world-

views and approaches, interests and estimates about potential entry and starting points. To foster the understanding of a dynamic research field, I differentiate between two understandings of transformation: on one hand, the term is often used in a strategic sense (WBCSD 2010, NEF 2010, WBGU 2011, and most of the literature; overviews in O’Brien 2012, Nalau and Handmer 2015, Brand and Wissen 2016). On the other, the term is used to analyse past and present changes in order to assess and explain them (Haberl et al. 2009, Westley et al. 2011, Fischer-Kowalski and Hausknost 2014, UNEP 2011, Kates et al. 2012, Brand forthcoming).

Transformation as a Strategic Concept

Concepts that use transformation in a more strategic way provide ways of dealing with problems and crises that are assumed to be effective and socially desirable. This applies particularly for discourses about a new type of economy (e. g., Green Economy) but also for different understandings of prosperity, a greater and stronger role for the state, and the expansion of local production and consumption patterns. At a general level, a transition from non-sustainable change dynamics to sustainable ones, towards a post-fossil, a low-carbon or even a carbon-free future is claimed. Most contributions argue for a transformation that is widely accepted, inclusive and legitimate, which should occur through well-informed and transparent decision-making. Processes should be cooperative and not only top-down, a broad range of actors should be involved, and experts should play an important role.

The debate about the “Great Transformation” can be read as an attempt to strengthen existing political, economic and cultural institutions as well as positive examples and possibilities (e. g., Schneidewind 2013). Some studies underline existing problems of transformation: vested interests, especially in the “old” fossil industries and their highly organised interests, short-term orientations of politics, distributional conflicts, the North-South divide, and problems for future generations (e. g., WBGU 2011).

The analyses of problems and crises are in danger of being superseded by the wish to transform away from unsustainability. I call this application of the transformation concept a “new critical orthodoxy”. Its main characteristics are a radical problem diagnosis, promising far-reaching change, but also involving a rather incremental understanding of the processes and steps of social change in order to cope with the problems. The Greek word *orthós* means “right” and *dóxa* means “belief” or “opinion”. In that sense, orthodoxy is characterised as a belief system that is difficult to question.

³ I do not refer to the vast literature on transformation in general but focus on contributions that put social-ecological issues at the center. The broader central reference is without doubt Karl Polanyi’s major work from 1944, first entitled *The Origins of Our Time* and from the second edition onwards known by the well-known title *The Great Transformation* (Polanyi 2001).

⁴ I do not intend to give the right definition of societal, social-ecological, “Great” or sustainability transformations.

The strategic usage of the transformation concept does not pay sufficient attention to the structural obstacles to far-reaching transformation processes. At the macro-level, these include the ongoing expansion of the production and consumption of unsustainable commodities, a focus on economic growth at almost any cost, fierce world market competition, the development model of resource extractivism in Latin America and elsewhere, and “brown” industrialisation in China, as well as austerity politics in Europe.

Moreover, the current critical orthodoxy does not question dominant rationales and institutions but relies on a liberal understanding of societies and a strong degree of trust in innovation and existing institutions to solve problems: “states” and “markets” are assumed as given, without problematising the bureaucratic logic of the state and the capitalist logic of the market. A broader understanding of the economy – beyond the formal market economy and wage-labour – as a basis for other forms of well-being and social-ecological transformations remains hidden. The strategic version of transformation is mainly motivated by the urgent need to avoid or at least slow down climate change and the exhaustion of the resource base (e. g., Hermwille 2016, in this issue). A critique of societal domination, society’s domination over nature and a perspective of emancipation are largely absent (Biesecker and von Winterfeld 2013, p. 164).

A Question of Power

The new orthodoxy presupposes that good arguments and learning processes will provide all relevant actors with adequate insights into the required transformation (cf. Bauriedl’s 2015 critique of cosmopolitan perspectives within the transformation debate), power- and interest-driven processes are not at stake (see Partzsch 2015 for a comprehensive understanding of power). And it shows little understanding of the conflict-driven character of modern societies. In fact, conflicts are related to social structures and the positions actors hold within them. They result from the interests of actors who want to maintain domination and power – e. g., mining companies, the coal industry or agro-industrial firms – and provoke resistance. The debate in *GAIA* about the WBGU report *Climate Protection as a World Citizen Movement* (WBGU 2014, Brunnengräber 2014, Leggewie et al. 2015, Bauriedl 2015) is exemplary in terms of a differentiated understanding of conflicts and the roles prescribed to civil society, nongovernmental organisations (NGOs) and social movements. The strategic version of transformation sees a function for civil society in pushing official public policy, opening alternative spaces, multiplying experiences but suggests it should not question existing political and economic structures and underlying rationales.

Policymakers – and behind them governments or states – are assumed to be interested in handling collective problems, and hence in creating general welfare. However, beyond the claim for adequate governance mechanisms that should promote sustainable politics (including a greening of the market and more involve-

ment of civil society organisations) it should be discussed in what sense these governance structures are part of the problem.

Finally, the dominant strategic transformation actors ignore that modern societies always transform. The question is not whether transformation takes place but in which direction and under what kind of logic and rationales (Brie 2014). There are positive examples, pioneers of change, incremental change and the existing technological, economic, political and cultural potentials for social-ecological transformations. But a too strategic usage of “transformation” counters its own most basic claims, i. e., a low carbon and resource-light society.

Transformation as an Analytical Concept

An analytical concept of transformation points to the highly asymmetric and hierarchical characteristics of societies where social and power positions are constituted in line with social relations of class, gender and race and are inscribed in economic, political and cultural relations. These characteristics are also assumed to be the basis of and reproduced by unsustainable societal nature relations. Therefore it is necessary to complement – not to replace – the strategic version of “transformation” with a more analytical one. Although the analytical usage also reflects a belief that things need to be changed in a profound way, it is intended to elicit a clearer understanding of different transformative dynamics and to create insights into the obstacles facing the strategies outlined above.

Furthermore, it involves analysing the contexts and barriers in addition to real and potential systemic changes. Certainly, this analysis does not depend on “objective” historical developments but also on ontological assumptions, concepts and criteria for analysis. Institutional approaches with their trust in existing institutions and their ability to adapt will give different answers to those of rational choice or social constructivism. They diverge from post-structuralist or historical-materialist approaches.⁵

Ontological approaches, the assumptions about societal structures, actions and dynamics, etc. remain not abstract or in a pejorative sense academic (i. e., distanced from reality) but are usually linked to experiences and empirical work and are highly political (Hay 2002, Marsh and Stoker 2010). This is not a question of explicit theorising but is usually more implicitly than explicitly present in the manifold analyses of the current world. It considers how we make sense of certain processes, incidents and ruptures, experiences and contingencies, smaller and deeper crises and their causes, explicit policies and their unintended consequences (think of economic programmes, such as laws to accelerate growth), technologies and the role of actors and power relations (Demirović 2014). This relates to assumptions about the required depth and durability of changes, of the means to ensure that transformative achievements are not reversible. >

⁵ For an attempt to formulate a critical theory of social-ecological transformation see Brand forthcoming.

To give an example: both the strategic and the analytical usages of the term “transformation” form part of contested processes to define social and social-ecological problems. There still seems to be a scientific division of labour, which consigns the realm of (global) environmental problems to the natural scientists, while the social sciences have largely accepted the natural science definitions as their point of departure – important notions here are “planetary boundaries” or “the Anthropocene”. There is a powerful truth regime, led by the natural sciences, regarding the nature of the problems. Most research and many research strategies are positivistic, i. e., they do not address the issue of the extent to which social – or even natural – sciences merely reflect social and natural “facts” and dynamics, but rather accept a breach between “reality” and its scientific construct. But, problems are not “just there” but are socially constructed as the ways to deal with them.

The Drivers of Transformation

Beside the object of transformation, more explicit reflections are required concerning its drivers, i. e., a great variety of actors and institutions, practices, norms and discourses, technologies and changing natural conditions, problems and crises themselves. Those drivers are historically contingent and concrete experiences play a role here, too. But as the abovementioned *GAIA* debate on a world citizen movement shows, the role of actors also depends on worldviews and assumptions about societal dynamics. For instance, the role assigned to the state in processes of social-ecological transformation is based not simply on evidence but also on analytical and theoretical assumptions: the state can be understood as a regulator and rule maker or as an object of rent-seeking on the part of powerful societal actors or – as formulated in critical state and governance theory – as a contested social relation that condenses social power relations and predominating discourses.

At the ontological and theoretical level, the institutionalist bias of many contributions to the transformation debate should be questioned or, at least, enhanced. Critical social theory disposes over a great variety of concepts to understand the manifold forms of dynamic stabilisation of unsustainable patterns of production, consumption and living, of public policies and public discourses, of interests and power relations, and of diverse forms of domination over people and nature. Those concepts are, to name a few:

- the capitalist mode of production and living,
- hegemony as a form of domination by consensus in a Gramscian sense,
- governmentality as coined by Foucault,
- regulation as a mode of dynamic stabilisation of crisis-driven and contradictory modern societies,
- the care economy as introduced by feminist economists,
- the imperial and post-colonial constitution of the world market and its effects on everyday lives and discourses.

A theorising of the state in the tradition of critical state and governance theory (Gallas et al. 2011) would help to understand the

structural obstacles – and possible spaces for action – of state agents and public policy.

Methodologically, a sophisticated concept of transformation brings us to systematic analyses of dominant trends that pursue unsustainable directions, of the structural obstacles of social-ecological transformation and the positive as well as failed experiences to overcome them. It implies research on conflicts and even violence, as well as analyses of the manifold tensions and contradictions that accompany transformation initiatives and experiences. Where the conflicts imposed by unsustainable actors are acknowledged, transformation research needs to reflect upon these and on the many strategies and experiences that counter them. Methodologically controlled considerations of the interlinkages between incremental changes or even ruptures and large-scale changes and their durable transformative structural effects are also required.

Why Is the Analytical Dimension Necessary?

The distinction between a strategic and an analytical usage must not be equated with the distinction between incremental (or reformist) and radical (or revolutionary) change. Without doubt, the strength of the transformation debate lies in the emphasis on incremental changes and their assumed potential to lead to far-reaching transformations. The necessary and empirically observable incremental changes need to be linked to the structural (including institutional) political, economic and cultural conditions – and related power relations – under which they take place. Without this, any transformation process remains within the narrow and insufficient corridor of ecological modernisation.

In order to clarify the usefulness of the distinction drawn here, a crucial question should be *how* current societies deal with the manifold dimensions of the ecological crisis, not *whether* they do this or not. The predominant capitalist economic system develops historically and spatially in variants and it might be able to deal with certain aspects of the ecological crisis, such as resource scarcity or the most adverse effects of climate change in some regions. But this will take place in a capitalist, imperial and patriarchal manner, i. e., characterised by some inclusion and much exclusion, with some attractive and productive components (for large parts of the global upper and middle classes), yet also many violent and destructive components. It will be spatially and temporally highly selective, with some reflexive dimensions to deal with nature without fundamentally questioning the domination-shaped and destroying tendency of modern societal nature relations.

A selective greening of the economy is already taking place, especially in the area of energy production. However, given the constraints outlined here, it is probable that transformative strategies like those of a Green Economy will be realised in a selective manner in some branches and some regions (Brand 2012, Fatheuer et al. 2015). A further valorisation of nature would be a significant constituent of crisis management and likewise of a new emerging capitalist formation, for the very reason that it is located at the interface of various crisis phenomena.

A concept of transformation that is mainly oriented at strategic questions at the cost of realistic analyses runs the danger – unintentionally – of preparing the epistemic-political terrain for a greening of capitalism that might safeguard acceptable living conditions in some regions and for some parts of humanity (cf. Brand and Wissen 2015). However, the far-reaching social-ecological transformations that shape political, economic and cultural structures and institutions over time and that come out of a radical problem and crisis diagnosis are likely to be missed.

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