## Proceedings on the Workshop "Resources and Strukturwandel", Centre for Interdisciplinary Regional Studies (ZIRS), MLU Halle-Wittenberg, 5-6 March 2020

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On March 5 and March 6, 2020, ZIRS hosted an interdisciplinary workshop on "Resources and Strukturwandel". The discussion revolved around the question how resources are phased-in or phased-out and how that results in regionally or locally experienced socio-economic transformations (*Strukturwandel*).

After a brief introduction by Katja Müller and Jonathan Everts, John Eidson reported his anthropological findings on the coexistence of coal mining and agricultural production in the coal region near Halle and Leipzig (*Mitteldeutsches Revier*). People in that area experienced the decline of coal mining and related industries in the aftermath of 1989 as an attack on their heritage. The massive job losses in the sector also fostered a language of Strukturbruch (structural break) rather than Strukturwandel. 30 years later, with a complete shutdown of coal-mining looming, many still feel themselves and their industry, which they are very nostalgic about, misrepresented.

Coal mining in Germany was also the topic of the following presentations. Ludger Gailing, Timon Wehnert, and Katja Müller complemented Eidson's contribution through covering other mining areas in Germany (the Rhinish area, the Ruhr area, and the Lausitz). Gailing emphasised, from a geographical point of view, the role of place-making, territory-creation, networking and spacemaking (following the TPSN approach of Jessop et al. 2008). These are all arranged in relation to a resource (in this case coal), and are consequently unsettled when that resource ceases to be relevant and extracted. Gailing reported findings from his fieldwork in the Rheinisches Braunkohlerevier. Historically, companies, politicians and unions together produced the identity of the energy region. After the experiences in the Rhein-Ruhr area, ideas of a "preventive" and "planned" Strukturwandel emerged (institutionalised now through the Zukunftsagentur Rheinisches Revier). Through a new terminology such as "Innovationsregion", Strukturwandel became discursively legitimised. This, however, has not led to the end of lignite mining, as is now well known through the protest camp at Hambacher Forest. Originally, protests were staged by local groups and involved concerns around devastation of villages and lowering of the water table. Only later became local places strategic targets for staging global protest, involving a rescaled place-making. An interesting side note is the question of symbolic buildings and structures signalling the transformation. Can wind farms or something else become similar icons of regional identity as open coal pits, shaft towers and power plants?

Wehnert sought to contextualise the more recent decline of mining regions by pointing out historical and demographic dynamics. First of all, all mining areas face structural change eventually, through depletion, competition and/or new paradigms. Second, much of the boom experienced by mining regions is historically a fairly new phenomenon and sometimes, as in some cases it dates only back to just after World War II. The pattern of mining regions is thus often less one of long term decline but of boom and bust. Third, however, the structural change has been underway for much longer than often acknowledged. From the late 1950s to the late 1960s the jobs in coal mining in both East and West Germany were cut in half due to mechanisation. Later, cheaper coal became increasingly imported. Overall, in all of Germany, of the 750,000 jobs in coal mining in 1957, only 50,000 remained in 2016. Despite frequent claims of huge job losses due to Strukturwandel, Wehnert also

pointed out that in the Ruhr region, the number of jobs remained constant from the 1960s until today. Shortages were due to changes in the makeup of the workforce, notably women entering the job market in significantly higher proportions then previously.

Müller compared India, Australia and Germany, and drew attention to the renewable energy production in the three countries, demonstrating the energy transition in all three countries. However, making new resources the nodal points of energy production implies larger changes than the term transition suggests. Strukturwandel in this sense is more encompassing and influences large parts of society. In turn, the broader impacts of energy transitions need to be analysed. A case in point are issues with energy democracy as witnessed in relation to wind parks in Brandenburg. A new law demands that companies pay 10,000 EUR per turbine annually to affected communities. While this law is obviously intended to increase support for wind energy production, local people state that this feels to them like a buy-out and that they have no intention of being corrupted. This all suggests there is more than just a transition of modes of electricity production underway but a more all-encompassing change which could be discussed in terms of innovations (Bijker et al. 2012).

India was also the regional focus for Arne Harms, who described with reference to ethnographic research in Himachal Pradesh how World Bank programmes define forests as carbon sinks and enrol the local population in afforesting programmes. Through payments to local people for planting and tending to trees, forests are rendered into a financial resource. In other words, forests are made into archipelagos of "non-development", represent stranded assets, but are made to work. Village groups became guardians of forest plots. The scheme receives validation through audits including regularly measuring the height of trees. Non-development is ingrained in the landscape, with a high degree of control but undermined and undone on the ground through livestock grazing, apple plantations and marihuana plantations. Harms sees the longterm effects of carbon forest projects as highly unstable. These forests will not stay forever, they burn easily, are easily cut down, die in drought. There is a clash of temporalities with the longterm goals of protecting and creating new forests and the timescale of development projects of three to four years (with possibly one extension).

The question of time was also relevant for Simon Runkel, who tried to connect shrinking cities to theories of degrowth. Runkel kicked off his presentation with a quote from one of geographies founding fathers, Elisee Reclus, who wrote in 1880 that resources are utilised to prolong the life of humans and are there to make humans happy. This hint towards "the good life" is, following Runkel, still a feature of today's discourse in relation to resources. However, its meaning has changed and we are now debating how less resource use would make us happier and how more frugal life styles represent the vision for a good life. Empirically, Runkel relates this question back to shrinking towns and communities, where not any kind of growth will return in the foreseeable future. Managing Strukturwandel in these places may benefit from an active engagement with degrowth theories, that seek to develop alternatives of leading good and healthy lives in the face of economic and (here) demographic decline.

Zeray Yihdego drew attention to the legal side of resource extraction and the related changes. Yihdego's work on water dams in the Zambezi basin and the Omo-Turkana basin illustrated not only how international water law, the Sustainable Development Goals and the Food-Water-Energy nexus interrelate, but addressed the challenges of his interdisciplinary research. The workshop participants deepened this aspect of working across disciplines in an 'intervention' on methods, which demonstrated the multiplicity of approaches in the room. We nonetheless saw methodological overlaps across history, geography, ethnography, and law.

Following Yihdego, Dirk Hanschel broadened the legal focus by scrutinizing current legal statutes in the way they represent (facets of) the environment as a relevant stakeholder or even as a legal

entity. Law relates in multiple ways to resources and at multiple levels (e.g. national law, international law, written law, customary law). In the broadest sense, law defines property and the pertaining rights and duties (e.g. if you are allowed to dig for natural resources in your garden). Law is one mode of constructing and governing resources. In a sense, law also carves out its own reality. It has also a limited capacity to adjust quickly to changes but that is also how stability arises since law defies swift action. Law suits and courts are important aspects of dealing with resources and the environment. However, at some point, law needs to be changed as well to account for long term societal and environmental changes. There is also a distinction between so-called subjective and objective law. The latter regulates a certain matter. Subjective law gives individuals or groups (or companies) rights they are free to claim. For instance, if there are environmental rights and someone claims her/his rights are violated through climate change, climate change becomes a legal matter for courts to decide. In the future, Hanschel sees the possible rise of an "ökologischer Rechtsstaat" (Bosselmann 1992) as one interesting avenue for research and debate.

A lively debate unfolded around the concept of Strukturwandel. What does Strukturwandel comprise and how does the term relate to other concepts of change such as transition or transformation? One argument arising from the comparison of the rise of renewables in India and Germany was that there is more than one transition (as in 'energy transition') underway, as not only technology and economy interrelate here, but moral values and political practices are essentially part of such transformations. We discussed resources as assemblages or nodal points, which in consequence of their introduction or decline lead to changes in all aspects of society. Arguably, one of the novel things about current shifts is that resources are (also) introduced or phased out deliberately on ecological and ethical grounds. Tim Wehnert threw the term of "exnovation" (Heyen 2017) into the discussion as one possibility of understanding and managing the weaning off of past innovations. Furthermore, Strukturwandel might have in its common use a tendency to focus on the past. As Jonathan Everts made clearer in his presentation, Strukturwandel always refers to structures of the past that are as traces present through their absence (such as lakes in lieu of coal pits or museums in lieu of working factories).

In the final discussion, a number of topics for further research and debate were clearly delineated. Through all its connotations, Strukturwandel refers to real situations that encounter or endure. How do people live with and through such transformations? The management of Stukturwandel is another common issue. There appears to be increasingly the notion that transformations are manageable. Are they? And what are the different experiences in different places and in different times? Imaginaries of the good life have a decisive impact on all transitions and transformations. What are the roles of these imaginaries in the actual practices of future-making? Is the term Strukturwandel a traveling concept? What other concepts are used elsewhere and in other languages (and not just in English)? There are also ethical aspects connected to Strukturwandel. One has to do with justice, for example between different generations. Last but not least, there are unexpected effects of Strukturwandel such as new populist and nationalist tendencies. How do these unintended consequences emerge? How much are they directly linked to Strukturwandel and are some dynamics only coincidentally happen at the same time?

The workshop has led us to understand *Strukturwandel* as a non-linear, complex, and uneven process involving different actors and interests. In terms of time, this process entails simultaneous (even contradictory) temporalities, phases and rhythms. In spatial terms, *Strukturwandel* does not necessarily result in spatially and socially homogeneous landscapes, but rather in archipelagos, dynamic nodes or far-flung assemblages. Thus, paradoxes and frictions form an inherent part of *Strukturwandel*.

Strukturwandel takes place on different spatial and social scales; however, such scales are not a given. Rather, they are negotiated, made and unmade by and among the involved (human and non-human) actors.

Strukturwandel is a 'normative' and supposedly planned and pro-active (political, economic, legal) process, integrated into specific political discourses and regimes of value. Investigating these normative dimensions of Strukturwandel provides insights into the understandings and perceptions of 'state', 'citizenship', 'good life', 'politics', 'economy' and the 'future' at a certain place and in a given historical moment of social change.

However, *Strukturwandel* is also a material, bodily and affective process. It even comes with unexpected effects and unintended consequences. In this sense, *Strukturwandel* is innovative since providing potentials for new things to emerge, it provides 'nowtopias', that is, 'windows of spatial opportunities and commoning'. As we believe, these dimensions of *Strukturwandel* should be investigated, as well as their interconnections.

For this academic endeavor, it is essential to detach *Strukturwandel* from its use as a multiple politically instrumentalised ideological term, and to question it as imaginary. This can be done by putting diverse forms and processes of *Strukturwandel* in historical and comparative perspectives, and by investigating its socio-material complexities; such as, for instance, by pointing to the palimpsest character of *Strukturwandel* and by following historical traces and sedimentations of political, economic and social change through different temporal and spatial scales.

Furthermore, it is important to question the concepts of 'structure' and 'change' inherent in the notion of *Strukturwandel*. What and whose visions and understandings of 'structure' and 'change' does it entail?

'Politics of resourcing' are at the core of *Strukturwandel*. Accordingly, *Strukturwandel* triggers reconfigurations of extractivism and results in new forms of (post-)carbon democracies. It is key to investigate these new democratic designs -- forms of citizenship and participation emerging in the course of *Strukturwandel*. It is also of major importance to study the politics of resourcing as a sociomaterial process, including the emergence of resource status and value, but also potentialities of former resources as stranded but produced assets which can be repaired, recaptured, repurposed, recycled and reused.

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