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FRAMING CONFLICTS OF EUROPEAN ENERGY TRANSITIONS AND THE RESCALING OF POLISH EXPERTISE

ALEKSANDRA LIS, *CLIMATE AND ENERGY POLITICS IN POLAND: DEBATING CARBON DIOXIDE AND SHALE GAS*

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Aleksandra Lis's book *Climate and Energy Politics in Poland: Debating Carbon Dioxide and Shale Gas* offers a nuanced analysis of Poland's post-accession energy transition processes from a science and technology study (STS) perspective. Lis draws from Sheila Jasanoff's (2004) approach of analysing co-productions – the social dynamics that influence the understanding and governing of new entities, such as new technologies or resources. Unlike many STS studies, which compare cross-nationally emerging entities to grasp different social values and meaning-makings, Lis focuses here on Poland and compares two key debates of the early to mid-2010s: first, Poland's attempts to adapt the European Climate Change and Energy Package 2020 to its national context (2008–2009) by seeking country- and sector-specific adjustments for carbon dioxide within the European Trading System (ETS); and second, the shale gas debate (2011–2016), when Poland pursued the technological advancement of hydraulic fracturing despite critical voices from many other European countries.

Across four chapters, Lis examines the tensions between EU climate and energy initiatives and Poland's domestic priorities for economic prosperity. Through her case studies, she highlights the challenges of aligning

national interests in affordable energy with European demands for solidarity and shared climate goals, and shows the complexities of the negotiations over what common "European" goals mean. Her analysis is underpinned by an impressive amount of empirical data, including nearly 200 interviews conducted in five different research projects, primarily with Central and Eastern European (CEE) stakeholders in Poland and Brussels, as well as participant observation at over thirty climate, energy, and shale-gas-related events across Europe. Although Lis does not specify how she triangulated the data, she supplemented her own collected data with published interviews conducted by the political scientist Grzegorz Makuch (2014), along with systematic document and media analyses.

Illustrating her points with the statements of her interviewees, Lis persuades the reader that it is "not only" key historical moments – such as the systemic change in 1989 and the European Union accession in 2004 – that are central to Poland's transitions, but that "profound transitions, though less celebrated and publicized, also occur due to the emergence of objects that demand new interpretation and reorganise relations between different actors" (Lis 2020: 105). What makes Lis's proposition particularly valuable is that it highlights the analytical perspective on objectification – how newly implemented entities, such as carbon dioxide and shale gas, reshape knowledge productions and governance structures on the local, national, and EU level.

A particularly intriguing aspect of Lis's analysis is her discussion of aspects of Europeanisation and (de-)Orientalisation. She illustrates how Poland's engagement with climate and energy policies is shaped by both external pressures and self-positioning strategies. For example, in Chapter 1, "New Energy Objects and the (De-)Orientalisation of Poland," Lis addresses the central question of who still has the right to economic growth in times of climate change, and this sets up her exploration of the "development discourse" in reference to Arturo Escobar (1995). She traces the discourse back to the 1997 Kyoto negotiations, where CEE countries such as Poland were designated "economies in transition" (EIT) (Escobar 1995: 8). This status reinforced narratives of developmental lag and the Orientalisation of Eastern Europe. Politicians and business actors have since used the status to demand solidarity in their development pathways – a practice Lis identifies as being central in post-accession Poland, including in its climate and energy policies. What is primarily problematised here is the capacity of new EU member states of the CEE region to acknowledge their positions:

> [I]t is important to consider whether CEE actors have the capacity to produce knowledge about themselves and how this can be made politically efficient for their own interests. These questions involve reflecting on the processes of rescaling CEE states, which struggle to find a relevant scale for their own politics around climate and energy issues. However, it is also important to consider whether, in an interconnected world, when faced with the global challenge of climate change and with low knowledge-production capacities, they are capable of defining the scale of their action on their own. (Lis 2020: 15)

What comes through in the last sentence of the quote is Lis's repeated questioning of whether, against the backdrop of urgent countermeasures against climate change and the need for international solidarity, Polish politicians and economic actors are also strategically using self-Orientalising narratives to gain leeway in connection with emissions reductions, as Lis describes in her first case study in Chapter 2, "The Production of Expertise, Scaling, and Carbon Dioxide in Poland."

Here, Lis describes the European framing conflicts over the ETS design, which co-produced multiple, politicised categories of carbon dioxide: "free and priced carbon dioxide, Polish carbon dioxide, European carbon dioxide, future carbon dioxide from German investments in Poland, carbon dioxide fleeing outside of Europe together with European growth, etc." (Lis 2020: 47). As Lis highlights, these categories were highly political, tied to conflicting scales of national and European priorities, and implying different visions for development. However, the production of these categories also showed that within European structures of governance, the state's capacity to produce expertise and define its economic and political interests is distributed across a network of actors who span national borders. For example, Polish state actors enhanced their understanding of the ETS reform and the future position of Polish power-sector companies once they engaged in conversations with experts from various industry associations and state officials from other EU member states. This is what Lis calls "frame alignment" (2020: 112), that is, in this case, the Polish actors understood the existing policy infrastructures and negotiated in a way that can be seen as an amalgamation of ideas coming from German power-sector corporations, European industry associations, and other CEE governments – all filtered through the interest of Poland's coal-based electricity-producing sector (Lis 2020: 59–60).

Given these findings, there might be some doubts concerning the concept of "self-Orientalisation" mentioned above. Framing post-socialist states as engaged in self-Orientalisation may implicitly suggest that their engagement with climate politics – on a European or even global scale – is primarily reactive rather than co-productive. Especially when referring to Escobar and his academic work about different visions of development, it may be more productive to analyse these dynamics through concepts such as strategic self-positioning or negotiated Europeanisation. Lis discusses the latter term in depth in her last chapter, arguing for a flat rather than top-down perspective on Europeanisation. Considering the debates in post-colonial studies, which have only just begun to address the role of CEE countries systematically (Grzechnik 2019), and in order to better understand Poland's urge for energy sovereignty and differing notions of development, it would have been valuable to place more emphasis on Poland's socialist legacy and its influence on current energy debates.

Poland's socialist legacy is equally important for understanding Lis's second case study, in Chapter 3, "The Production of Expertise, Scaling, and Shale Gas in Poland."

In the early 2010s, Poland was considered a leading candidate for shale gas development based on American resource (over-)estimations. Poland wanted to attract foreign investments in order to align its energy security goals with its economic diversification, and to that end it sought to simplify its regulatory processes. Lis demonstrates how Poland actively lobbied for a European regulation in favour of shale gas extraction, framing such a regulation (and particularly Donald Tusk's proposition for an Energy Union) as a common EU response to energy security issues. Despite mostly sceptical or even critical voices from other member states, such as France, Bulgaria, and Germany, Poland sought to convince the EU that, considering the earlier conflicts between Ukraine and Russia, the extraction of unconventional gas was crucial in order to be less dependent on Russian gas imports and gain stronger energy independence. Aside from these geopolitical framings, Poland also shaped the production of scientific knowledge about fracking risks. For instance, the Polish Geological Institute conducted baseline environmental studies at seven sites, producing region-specific data for risk assessment – unlike other European countries, which relied mainly on US data. This empirical foundation not only bolstered Poland's domestic regulatory efforts but also informed the European Commission's broader assessments, elevating Poland's expertise within European discussions. Lis argues convincingly that the establishment of

the European Science and Technology Network on Unconventional Hydrocarbon Extraction (UH Network) by the Joint Research Centre in 2015 served as a "scaling mechanism" of Polish expertise. By integrating Polish research into EU-level policy dialogues, the network exemplified how shale gas became a multiscalar object, bridging local, national, and global dimensions (Lis 2020: 64, 77–80). Although low investment and ineffective regulatory reform meant that Poland's shale gas initiative was never realised on a commercial scale, this case shows how new expert knowledge recalibrated regulatory structures, for instance, through the discussion of environmental impact assessments specific to shale gas.

On that note, Lis's case studies are inspiring in regard to adopting a long-term perspective on objectification and scaling processes – not only concerning energy entities but also for the residual effects of these energy entities. Lis illustrates this convincingly in Chapter 4, "Co-Production of Sociopolitical Orders: Energy Objects, Publics, and the State," where she mentions the problematisation of post-fracking waste. This issue has been highlighted in the EU context, particularly by Polish hydrogeological experts. However, it had limited political resonance in Poland and only gained broader attention later, through European meta-studies developed during the post-exploration phase of shale gas extraction. This example transports Lis's findings into current debates in the field of STS; the issue concerns the visibility and invisibility of energy residues as a byproduct of modern industrial activates (cf. Boudia et al. 2021). In this way, the focus not only narrows to carbon dioxide as a so-called residue of the fossil fuel industry but broadens the perspective on our chemical environments and the long-term impacts of extractive industries. In light of recent events, particularly the Russian–Ukrainian war, EU sanctions, and the subsequent rise in US energy exports to Europe, the relevance of shale gas and hydraulic fracturing technology has acquired new dimensions. As the United States solidifies its position as a dominant exporter of natural gas and oil through its fracking activities, the interplay between the extraction of unconventional fossil fuels and global CO_2 reduction goals will continue to be an important issue.

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