

(Regional) jobs vs. the climate.

A Critical Discourse Analysis of the German coal phase-out debate.

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Abstract

To reach its climate goals, in 2020, Germany decided to phase out coal as a particularly emissions-intensive source of energy. Although environmental associations demanded a much earlier date for the phase-out, the final coal phase-out law set the phase-out date to 2038.

One factor responsible for delayed climate action are discourses that highlight the downsides of climate policies, including the negative social consequences such as the loss of industry jobs. I examine how the argument of job losses was used in the political debate in the time preceding the coal phase-out law.

The analysis reveals that these arguments were less focused on the social injustices experienced at the level of the individual workers but were scaled up to the affected regions that already experienced disruptive structural change in the past. The political effort not to overburden these regions served to justify a delayed coal phase-out.

Keywords: just transition, coal regions, structural change, climate delay, scalar politics

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1 Introduction

In order to reach the goals of the Paris Agreement to limit the increase in global mean temperature to well below 2°C or preferably 1.5°C, rapid and large-scale decarbonization efforts are necessary. In response, Germany, having emitted the sixth largest share of cumulative emissions globally as a country (Evans, 2021), passed a climate law in 2021 to become carbon neutral by 2045 (Bundes-Klimaschutzgesetz, 2019/2021).

Since the German energy supply, especially the supply of electricity, significantly relies on fossil energy sources such as coal, the German energy sector carries huge potential emissions savings. In 2020, the German government passed a coal phase-out law setting the phase-out date of coal to the year 2038. However, the decision and the law were criticised for not being ambitious enough. Under the current schedule, German coal-fired power plants will be shut down and taken off the grid too late for Germany to be able to stick to international climate protection targets such as the Paris Agreement. In order to meet these targets, an earlier coal phase-out would be required (Oei et al., 2020). Actors supporting the continued use of coal for the generation of energy however defend coal as a reliable and cheap source of energy. They warn that phasing out coal from the German energy mix would lead to job losses as well as structural disruption (Markard et al., 2021). The latter arguments warning against the consequences that the loss of jobs would have for the industries affected by climate policies rely on the construction of an insurmountable incompatibility between the protection of jobs and climate or environmental policies. This perception is very persistent and has negative impacts on the acceptability of climate policies (Vona, 2019). The constructed *jobs vs. the climate* divide plays employee representatives and environmental advocates off against each other, which leads to resistance and a slowed and insufficient transition (Kalt, 2021).

The concept of a *just transition* constitutes one approach to overcome this divide between jobs and the climate by advocating for a transition towards decarbonisation that is fair and just, and which treats workers as a central interest group (McCauley & Heffron, 2018). Despite the justified importance of workers and their demands which should be considered in any transformative process that could adversely affect them, discourses of transformations' social costs can however also be instrumentalised to erode political support and to delay climate action. Lamb et al. (2020) identify such appeals to social justice as one of a set of discourses which they term "discourses of climate delay" (p. 2). These appeals to social justice emphasise the social costs and other downsides of climate policies which helps responsible actors to justify their political inaction and a lack of climate policies. Discourses that are deliberately constructing climate policies as a huge social burden and overstate their

disruptiveness while overlooking potential benefits that could accompany the transition as well could be categorised as delay discourses. Delay discourses mainly serve to delay climate action and to protect the status quo (Lamb et al., 2020). If climate policies are to be implemented early enough to be successful, it is necessary to identify, understand and neutralise the delay strategies that are currently hindering effective climate action.

1.1 Aim and Research questions

My aim with this thesis is to contribute to the understanding of how the loss of jobs in the German coal mining industry is used as an argument against the phase-out of coal and how the issue is used to justify a delayed transition despite the urgency to decarbonise.

The topic is highly relevant to sustainability science. Since large-scale transformations of different systems such as the energy system are necessary to combat climate change (Grin et al., 2010), it is equally essential to understand why and how these climate transitions are delayed.

I investigate how key actors in the German energy policy debate frame the loss of jobs that accompanies the phasing-out of coal by making use of Fairclough's framework of Critical Discourse Analysis (CDA) as well as theoretical entry points on Just Transition, discourse, ideology and hegemony as well as scalar politics. My analysis is guided by the following three research questions (RQs):

RQ1: What role does the social justice issue of lost jobs take in the debate about the phase-out of coal prior to the passing of the coal phase-out law?

RQ2: How are these job-related arguments used to justify a delayed phase-out of coal?

RQ3: What are the consequences of this and how did this discourse manifest in the final phase-out decision?

1.2 Thesis Outline

Following this introduction, chapter 2 will provide background information on the chronology of the German coal phase-out and the contestation of the role of jobs in this context. In chapter 3, I will introduce the three theoretical entry points that will guide and support my Critical Discourse Analysis. Chapter 4 introduces the methodology of this thesis and explains the selection of material for the analysis as well as the analysis process. Since the third dimension of Fairclough's framework for Critical Discourse Analysis considers discourse a sociocultural practice which explains the discourse practice and therefore gives the discourse meaning, analysis and discussion in CDA cannot be clearly

distinguished. Therefore, the analysis and discussion are not separated but combined into chapter 5. Chapter 6 completes this thesis by reflecting on the findings and making some concluding remarks.

2 Background

2.1 Chronology of the German coal phase-out and outlook

The foundations of the German *Energiewende* (energy transition) were laid in the 1970s and 1980s, triggered by anti-nuclear movements and growing interest in renewable sources of energy in the following decades. These ambitions were strengthened by growing awareness of the need for climate protection (Hake et al., 2015). In the decades that followed, Germany for instance adopted the Renewable Energy Act in 2000 to prioritise the feed-in of electricity from renewable sources into the power grid and to guarantee their producers fixed feed-in tariffs. Additionally, Germany stopped subsidising the extraction of hard coal which led to the closure of the last German hard coal mine in 2018 and also decided to phase out nuclear energy by 2022.

Lignite however continues to be mined in Germany and to play an important role in the German energy supply. Today, the three major lignite mining districts in Germany are the Rhenish lignite mining area in western Germany in the federal state of North Rhine-Westphalia, the central German coal field at the border between Saxony and Saxony-Anhalt and the Lusatian coal district at the border between Brandenburg and Saxony, both in eastern Germany (see Figure 1).

Germany is a federal republic and therefore consists of 16 partly federal states with their own tasks and functions which are called Bundesländer or Länder. The Länder are governed by individual state governments that also represent Länder interests at federal level through the Bundesrat.

The Rhenish lignite mining area possesses the biggest lignite deposit in Europe (LANUV, n.d. b) and, together with the Lusatian coal

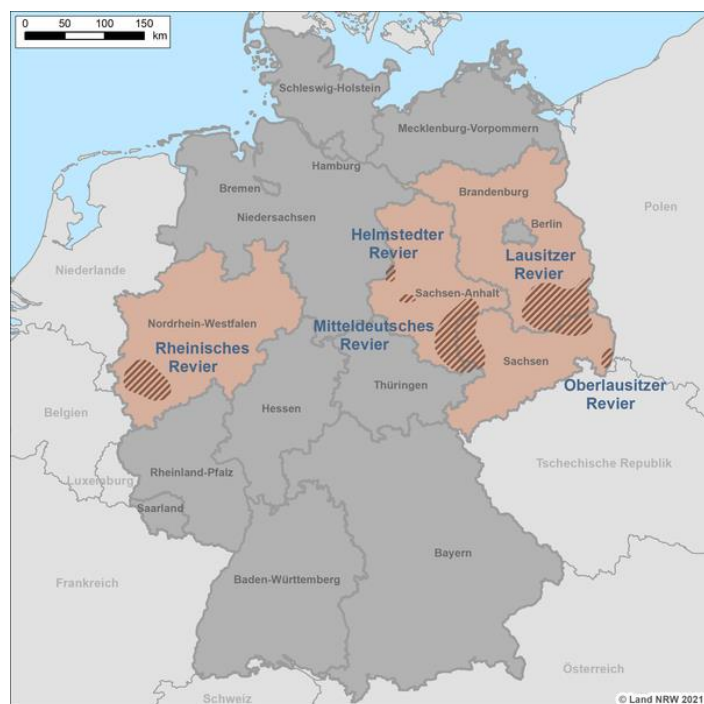


Figure 1: Major lignite mining areas in Germany. The three biggest lignite mining areas in Germany from west to east are the Rhenish lignite mining area [Rheinisches Revier] in North Rhine-Westphalia [Nordrhein-Westfalen], the central German coal field [Mitteldeutsches Revier] at the border between Saxony [Sachsen] and Saxony-Anhalt [Sachsen-Anhalt] and Lusatia [Lausitzer Revier] at the border between Brandenburg and Saxony (LANUV, n.d. a).

district, accounts for the majority of employees in the German lignite industry (Statistik der Kohlenwirtschaft, 2022). Despite decarbonization efforts, coal still accounted for 25% of electricity generation and 16% of the total energy supply in Germany in 2020 (IEA, n.d.), thereby defending its position as a source of energy of high significance.

In June 2018, the German government, led by a coalition between the Christian Democratic Union and the Social Democratic Party, appointed the *Kommission für Wachstum, Strukturwandel und Beschäftigung* (Commission on Growth, Structural Change and Employment). The commission mostly got referred to as *Kohlekommission* (coal commission) in the accompanying public debate and in media coverage and I will adopt this term for this thesis as well. The coal commission was tasked to develop a plan on how to gradually reduce and ultimately phase out coal-fired power generation as well as recommendations on how to combine the coal phase-out with structural change and economic development. The coal commission consisted of 28 members with voting rights representing different social, political and economic organisations as well as three members of the German parliament and representatives of the affected federal states, all three with the right to speak but without the right to vote. In their final report, which was presented in January 2019, the coal commission recommended a coal phase-out by 2038 which was ultimately put into law in July 2020. Accompanying recommendations suggested to provide EUR 40 billion to support structural measures in the affected regions as well as additional compensation payments for the affected coal companies (Federal Ministry for Economic Affairs and Energy, 2019).

The recommendations of the coal commission, the later deviation from the original recommendations and the level of compensation payments received criticism from different directions. Some of the former members of the coal commission including representatives of environmental associations, of the people affected by mining in the Rhenish coal mining area and of climate science even considered the deviations from the original recommendations of the coal commission serious enough to justify an annulment of the compromise worked out by the coal commission (Praetorius et al., 2020). Other studies also came to the conclusion that the adopted climate protection measures of the German government are incompatible with international climate targets. Bringing the German climate coal phase-out in line with necessary climate targets would instead require a coal phase-out by 2030 (Oei et al., 2020).

In 2021, the coalition agreement of the newly elected government consisting of the Social Democratic Party, the Green Party and the liberal Free Democratic Party included the intention to “ideally” prepone the phase-out of coal-based power generation to 2030 (Koalitionsvertrag, 2021). This

announcement was met with scepticism by actors such as the state government of Sachsen and several coal companies (MDR Sachsen, 2021). However, since the Russian invasion of Ukraine, the German dependence on the import of Russian gas has taken up most space in the public debate on energy supply and considerations of an earlier coal phase-out have mostly come to halt. Still, the envisaged accelerated expansion of renewables in the next years could help maintain the feasibility of an earlier coal phase-out by 2030 despite simultaneous reductions in gas consumption (Hauenstein et al., 2022).

2.2 The contestation of the role of jobs in the German coal phase-out

Jobs are taking a central role in the debate on the German coal phase-out. This is evidenced in the coal commission's official name "Commission on Growth, Structural Change and Employment" putting an emphasis on the significance of employment in the orientation of the commission. Given that a phase-out of a whole industry would lead to significant job losses, it is reasonable that actors who are directly or indirectly affected by these consequences such as workers, unions or local governments react with resistance to the subject. However, a hardening of these fronts contributes to strengthening the jobs vs. the climate divide potentially delaying necessary transitions (Kalt, 2021).

Although employment numbers have been decreasing annually, in 2021, according to the lignite industry, 17,948 people were still employed in lignite mining, with the Rhenish coal field accounting for 8,481 employees and the coal field in Lusatia accounting for 7,362 (Statistik der Kohlenwirtschaft, 2022). However, the controversy that even mere employment numbers can cause shows how politically loaded the overall topic of employment in the coal mining industry is in Germany. In 2017, a report commissioned by the Federal Ministry for Economic Affairs and Energy (RWI, 2017) got criticised by environmental associations for overstating the number of employees in the Lusatian coal field. They criticised that the published numbers included employers of the *Lausitzer und Mitteldeutsche Bergbau-Verwaltungsgesellschaft*, a management company that redevelops the former coal mines which is owned and paid for by the German government. By including this company's employees, the environmental associations criticise, the report overstates the number of employees in the coal mining industry and its economic relevance in the affected regions (Stäude, 2018).

Studies published by more coal-critical institutions, by contrast, got criticised by the lignite industry for understating the number of employees in the coal mining industry and their economic relevance. In 2018, the German Environment Agency for their part commissioned a report that came to the conclusion that the climate protection sector targets for 2030 could be reached without any

compulsory redundancies in the lignite industry. This would be possible because of the age structure of the employees and the fact that nearly two thirds of them would be retiring by 2030 anyways (Hermann et al., 2018). This report in turn received criticism from the German Lignite Industry Association who accused the report of lacking contact with reality and of deliberately understating the social significance of occupations in the lignite industry since it ignores the importance of new hires (DEBRIV, 2018). Still, other studies again argue that the expansion of photovoltaics and wind energy would create enough new jobs to even overcompensate for the loss of jobs in the coal industry, at least in the Rhenish coal mining area (Oei et al., 2018). These examples illustrate how the debate on the role as well as the magnitude of employment in the lignite industry has become highly contested since it serves the reasoning of different actors who are driven by opposing interests.

Other research has already started to explore the role that the argument of job losses takes in the debate on the German coal phase-out. Kalt (2021) assesses how labour and climate movements are drawn into a conflict about what makes a just transition that puts them in opposition to each other. However, Kalt emphasises that the jobs vs. the climate divide is only a narrative and should not be considered a natural law. The inability to overcome this narrative pits workers against environmentalists and mainly benefits coal corporations while contributing to further slowing down the necessary transitions. Markard et al. (2021) identify the argument of job losses as one of the arguments that pro-coal actors in Germany urge to point towards the downsides of decarbonisation efforts and the energy transition in order to justify their demands for a slower transition. This delay strategy is a drift from their previous rhetoric in which they were openly opposing the phase-out of coal to protect their interests. The strategy is for example demonstrated by the Länder governments who change from arguing against the phase-out of coal towards acknowledging its necessity while however trying to maximise the financial support they receive. Markard et al. connect this strategic behaviour to Lamb et al.'s (2020) framework of discourses of climate delay which demonstrates how pro-coal actors' behaviour resulted in a transition that is significantly slower than demanded by environmental actors.

3 Theory

I use three theoretical entry points to guide and support my analysis of the discourse surrounding the loss of jobs in the context of the German coal phase-out which will be presented in the following section. The theoretical underpinnings of my analysis are the framework of Just Transition, the interrelated complex of discourse, ideology and hegemony as well as the concept of scalar politics.

3.1 Just Transition

The arguments brought forward in the debate on the right time and conditions for a phase-out of coal in Germany all carry assumptions about what makes the German energy transition a just process, for example in terms of climate justice or in relation to the consequences for the affected workers and their wider social environment. The theoretical framework of Just Transition therefore supports my analysis by providing guidance when identifying the justice claims put forward in the analysed material.

While originating from labour unions' activities to protect workers from potentially negative impacts of environmental policies (Stavis & Fellis, 2015), today, the term Just Transition describes a justice framework that brings together the justice scholarships of climate justice, energy justice and environmental justice. These justice scholarships are respectively concerned with distinct questions about the impact of climate change on vulnerable groups, issues related to energy production and consumption, and the social impacts of environmental concerns. Just Transition aims at uniting these three different justice scholarships in order to provide a higher comprehensiveness than the individual frameworks are able to (McCauley & Heffron, 2018). The Just Transition framework can serve as an analytical justice framework, but since there are different understandings of the concept of just transition, it can also be applied for other theoretical purposes such as socio-technical transition studies or in governance. Some of these applications' different conceptualisations come with tensions between them (Wang & Lo, 2021). Generally, a just transition can be defined as "a fair and equitable process of moving towards a post-carbon society" (McCauley & Heffron, 2018, p. 2).

The three justice scholarships share two of their dominant frames of analysis, distributional and procedural justice. Distributional justice addresses questions of who bears the costs and who enjoys the benefits of a transition and includes questions of risk, responsibility and vulnerability. Distributional injustices can manifest differently in climate justice and energy justice which is why it is important for a just transition approach to unite the three different justice scholarships' perspectives to identify all possible injustices (McCauley & Heffron, 2018). Procedural justice deals with issues of decision making and participation in the decision-making process (Sovacool et al., 2019) which can also be relevant for the acceptance of these decisions (McCauley & Heffron, 2018). To complete the Just Transition justice framework, McCauley and Heffron (2018) add a third justice dimension termed restorative justice. In comparison to the other two justice dimensions, restorative justice has not been explored and developed to the same extent yet. It deals with questions of correcting the harm that was caused in the transition process and with restoring justice.

The idea of a Just Transition was especially shaped and promoted by labour unions putting the workers of industries affected by environmental policies at the centre of a just transition (Stevis & Felli, 2015). Since this focus can however easily support the narrative of a “jobs vs. the environment” divide, the Just Transition framework is promoted in particular as “a potential turning point” (McCauley & Heffron, 2018, p. 3) that can overcome this conflict by combining these two interests.

3.2 Discourse, ideology & hegemony

Since my thesis analyses the role of jobs in the discourse on the phase-out of coal, it is necessary to first define the term “discourse” and its capacity to influence the understanding and perception of social events and phenomena. Discourse is also highly interlinked with ideology and hegemony in the way that discourse can be ideological and reproduce power relations. The German discourse on the phase-out of coal is subject to many different interests and power relations, which is why these three concepts support my thesis by providing the theoretical basis for analysing discourse and its impact on social outcomes.

A discourse can be defined as “*a particular way of talking about and understanding the world (or an aspect of the world)*” (Jørgensen & Phillips, 2002, p. 1, italics in original). Through discourse, “meaning is given to social and physical phenomena” (Hajer & Versteeg, 2005, p. 175). The more people rely on a certain discourse to conceptualise phenomena in the world and the more the discourse is manifested in institutions, the bigger its influence becomes until it can ultimately be considered a dominant discourse (Hajer, 2006).

Since discourse practice has the ability to reproduce existing discourses, it is also able to reproduce existing power relations that are manifested in these discourses, which can make discourse ideological. This links discourse to concepts such as ideology and hegemony. While discourses can be considered dominant once they become highly influential or institutionalised, similarly, ideology can become “naturalised” (Fairclough, 2013, p. 67) which is a reason why “analysis of ideology requires analysis of discourse” (Fairclough, 2013, p. 26).

The concept of hegemony as a conceptualization of power can be traced back to Antonio Gramsci and describes “the establishment, maintenance and contestation of the social dominance of particular social groups” (Fairclough, 2003, p. 41) and the preservation of “relations of power through producing consent or at least acquiescence” (Fairclough, 2013, p. 73). Discourse can also be considered “an aspect of a hegemonic struggle that contributes to the reproduction and transformation of the order

of discourse of which it is part” (Jørgensen & Phillips, 2002, p. 76). A discourse that has reached a high degree of institutional influence and which contributes to upholding and reproducing power relations can therefore be described to have reached discursive hegemony (Hajer, 2006). Discourse therefore plays an important role for both ideological and hegemonic struggles.

Based on these connections, Buschmann and Oels (2019) argue that discourse and hegemony also play an important role in explaining the stability of systems and their resistance to transitions, also known as lock-ins, as well as their role in policy changes. They emphasise the impact of discourse in justifying the use of specific technologies and discuss how their institutionalisation allows them to reach hegemony and thereby stabilise existing development paths.

3.3 Scalar politics

When arguing about whether and when coal should be phased out from the German energy mix, both proponents and opponents can be witnessed to build their arguments on the potential consequences in the present or future and on the consequences for individuals or larger social groups. Since this argumentative behaviour is highly defining for how the discourse on the German coal phase-out is formed, scalar politics constitutes an insightful third theoretical entry point to support the discourse analysis of this thesis.

Nyberg et al. (2018) introduce the concept of scalar politics that describes how actors mobilise support for positions that are legitimising the usage of fossil fuels by alternating between and connecting different spatial and temporal scales. This behaviour is made possible by the fact that the phenomenon of climate change, as well as the related policies and practices, operate on different scales: climate change is a global phenomenon which is scaled down to national and regional scales when addressed in policies and practices. Similarly, although already measurable and impactful today, climate change discourses are mainly focusing on future events which are confronted with other differentiated present and future interests. Since actors want to protect their local short-term interests, scaling, the “discursive process of producing spatial and temporal boundaries for understanding an object” (Nyberg et al., p. 238), allows them to gain support for their position by both connecting and disconnecting selected spatial and temporal scales. This enables dominant actors to uphold a hegemonic position that legitimises the continued use of fossil fuels. Simultaneously, it enables them to take contradicting positions on both supporting fossil fuel extraction as well as climate action. In the most extreme form, this allows them to argue for the continued extraction of fossil fuels in the name of climate action, while on the contrary ultimately contributing to climate delay.

4 Methodology

Methodologically, my thesis is based on a Critical Discourse Analysis (CDA) which will be presented in this section. I begin by discussing considerations of epistemology and ontology before introducing the three-dimensional framework for CDA proposed by Norman Fairclough. This is followed by justifications for how I selected actors and texts to be represented in the analysis and an explanation of how I approached the coding process of the selected material. The section is concluded with a brief discussion of methodological limitations.

4.1 Epistemological and ontological considerations

The version of Critical Discourse Analysis that I apply in this thesis follows a three-dimensional framework suggested by the linguist Norman Fairclough. In contrast to other discourse analysts, Fairclough promotes a critical realist ontology (Fairclough, 2005). Critical realism is a philosophy of science that distinguishes between the external reality of the social world and our description of what is observable of this reality. However, since it is these unobservable structures and their effects that create the structures that are observable, they can still be theorised (Bryman, 2012). This relationship between the unobservable elements and the observable structures these elements generate results in a critical realist analysis of discourse not to be limited to the analysis of discourse in itself but also the relationship of discourse to non-discoursal elements. Analysing the relationship between the two implies that they are both epistemologically and ontologically different. Since Fairclough's three-dimension framework relates discourse to the social practice surrounding it, it can be situated in critical realism (Fairclough, 2005).

4.2 Critical Discourse Analysis

Discourse Analysis operates on the general assumption "that language profoundly shapes our view of the world and reality, instead of being merely a neutral medium mirroring it" (Hajer, 2006 p. 66). Language serves to construct discourses "in ways that give the impression that they represent true or false pictures of reality" (Jørgensen & Phillips, 2002, p. 14) and thereby creates discourses that appear to be true and a representation of reality. Because of these properties, language is considered to "generate[s], and as a result constitute[s], the social world" (Jørgensen & Phillips, 2002, p. 9).

The analysis of discourse examines both the structure of arguments and the practices through which these arguments are produced and expressed. It enables the analysts to understand how the contributions of participants in a discussion shape and define how a problem is discussed, which solutions are presented and allows them to evaluate the influence of these discourses (Hajer, 2006).

Analysing discourse thus comes with the “capacity to answer “how” questions” (Hajer & Versteeg, 2005, p. 177): by analysing how discourses define different societal phenomena, discourse analysis can identify a discourse’s influence and “the social consequences of different discursive representations of reality” (Jørgensen & Phillips, 2002, p. 21). Discourse analysis also plays a significant role in determining why policies turn out the way they do (Hajer & Versteeg, 2005).

Critical Discourse Analysis (CDA) additionally has the goal to “investigate and analyse power relations in society” (Jørgensen & Phillips, 2002, p. 2), it “takes account of factors beyond the text itself and emphasises the role of language as a powerful resource that is related to ideology and sociocultural change” (Preiser et al., 2021, p. 274). In CDA, language is not only considered a tool to describe and communicate information (Jørgensen & Phillips, 2002), instead it is also seen as a “vehicle for the exercise of power” (Preiser et al., 2021, p. 274) which CDA aims to disclose in the analysis.

Fairclough proposes a three-dimensional analytical approach to conduct CDA. This method of discourse analysis sees any kind of discourse as “a piece of text, an instance of discursive practice, and an instance of social practice” (Fairclough, 1992, p. 4) and is depicted in Figure 2.

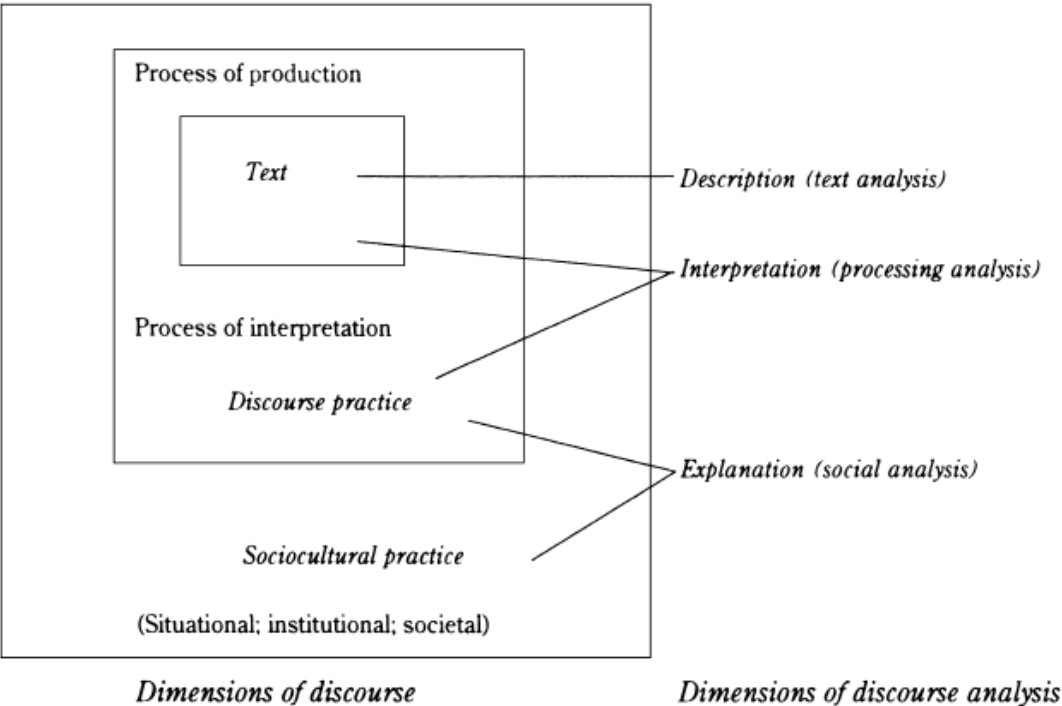


Figure 2: Fairclough's three-dimensional analytical approach to Critical Discourse Analysis. Discourse is seen as text, discourse practice and sociocultural practice. Discourse analysis consists of the dimensions of description, interpretation and explanation (Fairclough, 2013, p. 133).

To begin with, text and its textual features are subject to a linguistic description and a textual analysis focusing on properties such as vocabulary and cohesion to make statements about form and meaning (Fairclough, 1992). Next, the discourse practice covers the process of the production of text and the process of interpretation of text. It assesses “the relationship between the (productive and interpretative) discursive processes and the text” (Fairclough, 2013, p. 132) and acknowledges that the consumption of a text depends on the social context and other social constraints. Since properties of text are always analysed in relation to their meaning and interpretation, the boundaries between these two dimensions, the analysis of text and the analysis of discursive practice, can to some extent be considered fluid (Fairclough, 1992).

Additionally, discourse is seen as sociocultural practice. The social analysis of this dimension of discourse aims at explaining “the relationship between the discursive processes and the social processes” (Fairclough, 2013, p. 132). Fairclough (1992) relates the social practice of discourse to ideology and hegemony and suggests “investigating discursive practices as material forms of ideology” (p. 87) with specific constructions of reality and other properties of text representing ideology in discursive practice.

Overall, this approach to discourse analysis is a critical approach because it aims at relating the characteristics and contents of texts to the power relations that determine the social practice and criticises these connections (Fairclough, 2013).

Because of these properties and CDA’s ability to explain the relationship between discourse and its social consequences, CDA serves as a suitable method to answer my research questions about the role of job losses in the justification of a delayed phase-out of coal and its manifestation in the final phase-out decision. Fairclough’s approach to CDA provides a guideline to relate discourse to social practices and thereby helps to explain how representations of reality materialise in social processes such as the German coal phase-out decision that is analysed in this thesis.

4.3 Actor and text selection

For the discourse analysis, I selected actors representing different groups that could generally be expected to invoke arguments against the phasing out of coal, especially arguments related to the loss of jobs in coal mining and coal-based power generation. For additional orientation, I used Markard et al. (2021)’s analysis of discourse networks in the discussion of the German coal phase-out which

indicates which actor groups were more likely to legitimise the usage of coal for energy generation. I also aligned my choice of actors with the classification of actors by Leipprand and Flachsland (2018) based on actors' positions between the conflicting interests of defending the status quo of the current energy regime or legitimizing changes to it. My final actor groups consisted of federal government representatives, representatives of the Länder governments, companies active in the mining of coal and its conversion into electricity as well as labour union representatives (a list of these actors can be found in Appendix A).

Whenever people's utterances and voices are reproduced and incorporated into a new text, this always carries a degree of recontextualization and a new framing that distorts the original message (Fairclough, 2003). However, since it is my intention to analyse how these particular actors frame the relationship between phasing out coal and the loss of jobs, appropriate material for the analysis was limited to materials reflecting direct statements by individual representatives of my chosen actor groups. I therefore searched exclusively for interviews, discussions and similar material and excluded any indirect reproductions of speech in news articles or reports. Hajer (2006) suggests that data that serves for analysing a discourse should not only reconstruct the arguments that are brought forward but argues that they should be representations of "*argumentative exchange*" (p. 73, italics in original) such as debates or panel discussions. To account for the dynamics between interviewers' critical inquiries or other panellists' confrontational arguments and my chosen actors' responses and justifications, I therefore searched specifically for interviews and discussions to compile the body of material for the analysis.

I collected this material by searching for combinations of the name of the chosen representative and keywords such as "coal", "coal phase-out" or "interview" in the time between January 2018 and January 2020. This covers a period of time that starts one year before the presentation of the report of the coal commission on January 26, 2019 and ends with the federal cabinet approving the draft bill for the coal phase-out on January 29th, 2020. The final coal phase-out law was then passed half a year later by the German Bundestag and the Bundesrat on July 3rd, 2020. This time frame therefore provides insights into both the argumentative strategy applied by the involved actors before the official recommendation of a fixed phase-out date as well as after this recommendation but before its enactment in a law. I used Google as a search engine to conduct the search for appropriate material but also went back- and forward between hyperlinks in relevant newspaper articles on related topics. In order to qualify as material for the CDA, texts needed to feature at least one reference to jobs or employees in the coal-mining sector.

With two of my initially targeted representatives not providing sufficient material to analyse and therefore being excluded from the analysis, the material for the CDA ultimately consisted of 18 spoken or written contributions in the form of radio, tv or newspaper interviews, panel discussions, talk shows, press conferences and the like provided by a total of 6 different actors (for a full list see Appendix A). Each person is represented with three contributions in the analysis material.

All of the people chosen as representatives for their actor group were holding this position for the whole of the assessed time period between January 2018 and January 2020, except for Peter Altmaier, the Federal Minister for Economic Affairs and Energy, who only started this role two months later in March 2018. However, since the first material considered in the overall analysis was only published in June 2018, I did not consider it necessary to include material representing Altmaier’s predecessor. An overview of all six representatives, their role and the publication dates of the analysed material can be found in Figure 3.

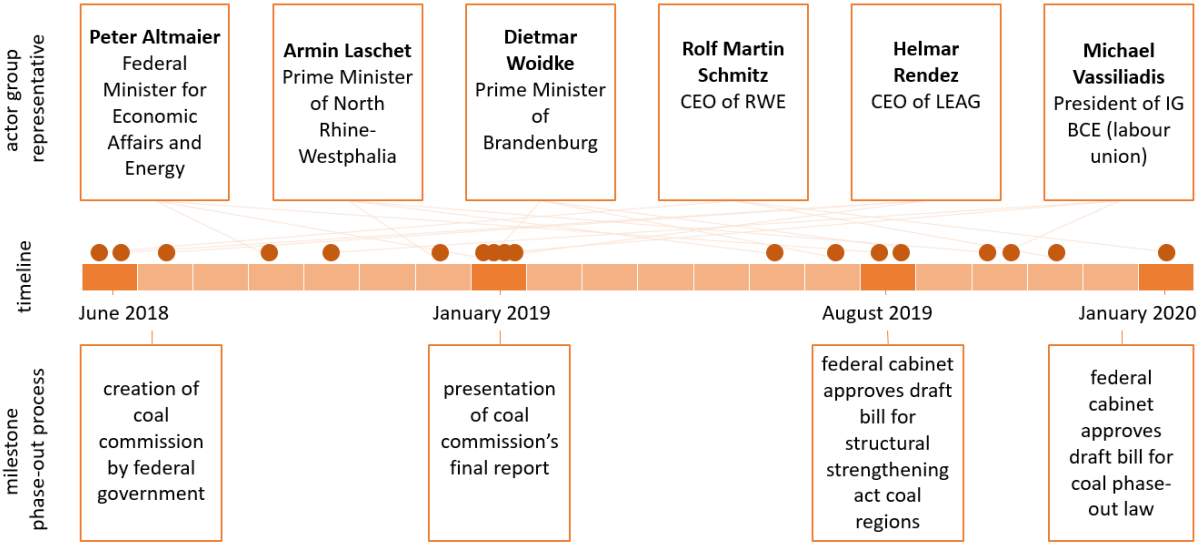


Figure 3: Timeline of the assessed time period before the presentation of the draft of the coal phase-out law with indication of important milestones in the process of reaching an agreement on the phasing-out of coal. Orange dots indicate the publication dates of the material that was analysed. In the analysed material, each person is represented with three publicly available interviews or similar contributions. The analysed material is scattered between June 2018, when the coal commission was created by the federal government, and January 2020, when the federal cabinet approved the draft bill for the coal phase-out law (own figure).

4.4 Coding Process

I started the coding process with a more concept-driven coding approach based on previous literature and established justice concepts. However, in the advancement of the coding process, I increasingly relied on a more open, data driven coding approach which is characterised by identifying recurring patterns in the material (Gibbs, 2007). This procedure of combining both approaches resulted in a set of coding criteria that was iteratively adapted during the coding process. Categories included patterns

not only concerning the effects on jobs but also utterances about regional and temporal scales, arguments against the phase-out of coal other than the loss of jobs and actors' positioning on the question of whether a coal phase-out should generally be supported or not.

4.5 Limitations

Even though I based my selection of actors on previous studies and classifications by Markard et al. (2021) and Leipprand and Flachsland (2018) to identify actors likely to defend the continued usage of coal for energy generation that classifies them as a discourse coalition, these actors are still far from being a homogenous group. Additionally, not only do these different actor groups pursue different interests, but the individual groups they represent are also heterogeneous as interest groups in themselves. An example is pointed out by Wang and Lo (2021) referring to the disagreements that are experienced within and between labour unions in the context of transitions. The limited amount of analysed material per actor can only depict a fragment of their position and the decision to use one individual person to represent a full organisation comes with a certain risk to take a more subjective opinion as a proxy for a whole organisation. Therefore, this thesis' analysis cannot be used to make in-depth comparisons between the actor groups' position. Nevertheless, all these actors contribute to forming and creating the public discourse around the role of the loss of jobs in the coal phase-out and are in a powerful position to shape the discourse. Therefore, this thesis is still able to fulfil its goal of analysing the construction of this discourse as a whole, unaffected by the mentioned limitations.

5 Analysis & Discussion

In the following, I will present the results of the CDA by combining the analysis and the discussion to account for Fairclough's understanding of the relation between the discursive dimensions of discourse as text and as sociocultural practice. I will begin by illustrating the main discourses and themes that I identified in the process of the CDA in subchapter 5.1. Then I will move on to subchapter 5.2 to discuss how these discourses surrounding the loss of jobs in the coal industry serve the reasoning for a delayed phase-out of coal and how these discourses' influence shaped the final phase-out decision.

5.1 Thematic key discourses

5.1.1 Social justice for coal workers

Even though the loss of jobs in the coal industry and the need to create new jobs are a recurring topic in the debate preceding the coal phase-out law, these arguments are only rarely making the connection to these job losses being an issue of social justice. Explicit appeals to social justice are rare. One exception is Peter Altmaier's statement that "there must be no compulsory redundancies,

because employees have contributed the least to the fact that we have a climate problem” (A1¹). This statement exhibits an element of distributional justice and a reference to the “polluter pays principle” which is a justice principle that assumes that those who have caused pollution and environmental damage should also bear the resulting costs of it (Caney, 2010). With workers not having contributed to the climate crisis, the burdening of workers in his opinion is unjust.

In other cases, social justice implications are used as rhetorical questions but without expanding further on the point raised, with Michael Vassiliadis, the chairman of the Mining, Chemical and Energy Workers Union (IG BCE), asking: “Who actually pays for this with their job - and is that still fair?” (V3). Another justice issue raised is the circumstance that workers are bearing a disproportionately big share of the costs of the coal phase-out, according to Rolf Martin Schmitz, CEO of RWE AG, who claims that: “our employees bear the major burden of the German coal phase-out” (S3).

However, explicit statements appealing to social justice like the ones above are the rare exception in the coal phase-out debate and fade into the background. This first result of the analysis is noteworthy. Given that the just transition framework originated from unions’ efforts to protect workers from negative impacts and that one of the coal commission’s main focuses were issues related to employment, the very small number of justice claims that directly concern coal workers is surprising. This also means that, against expectations that could arise from focussing on a framework of just transition, the discourse in this particular case is not built upon justice issues related to coal workers. Instead, the assessed discourse creates a different image of the coal phase-out and the associated challenges that focuses on other issues.

5.1.2 Security of supply and energy prices

What is more present in the discourse are arguments related to the importance of the security of energy supply and the affordability of electricity. These arguments highlight the advantages of coal-based energy or warn against the risks that could accompany a phasing-out of it. The role which these factors take becomes clear in statements such as “The "Growth, Structural Change and Employment" Commission is not to be concerned solely with climate protection, but it should reconcile this with security of supply, competitive electricity prices and social aspects.” (S1).

Coal, as is repeatedly stated, provides a “secure and reliable electricity supply” (W1), it is “the cheapest energy source at the moment in the German energy supply” (W1) and phasing out coal would make

¹ All quotes in this analysis were originally stated in German and translated to English for this thesis

the electricity supply “more insecure” (V1). All of this makes coal “the inner defence of the power supply system” (R1). These arguments are mainly used in contrast to renewable forms of energy whose “contribution [...] to security of supply is minimal” (R1) and which will continue to be unable to supply Germany with enough renewable energy “because we don't even have the areas to build these systems” (S2).

Security of supply and low energy prices are important because of their far-reaching impact. Other industries are dependent on these two factors, especially energy-intensive ones which are presented to question the phase-out's consequences: “ok, we're phasing out now, but tell us, where do we get the electricity from for the steel industry, for the aluminium industry, for the chemical industry?” (L3). Additionally, “It is not only important for the industry [...] but it is also important for each individual household.” (W1), especially since “It [security of supply] is one of the foundations of our prosperity” (R1).

Even though the importance of a secure and affordable supply of energy can of course not be denied, these arguments illustrate how these factors are used to legitimise coal and delegitimise renewable sources of energies. This argumentation peaks in the questioning of whether renewables would ever be able to supply Germany with reliable energy due to a lack of space even after the necessary speeding up of its expansion. These specific arguments are not related to the role of job losses in the coal mining and energy generation industry; however, they are important to highlight since they still appear to be one of the main arguments in the discussion.

5.1.3 Regional focus – a different aspect of justice

While there are only few statements framing the loss of jobs as a social justice issue that is affecting the employees of the coal industry, the importance of these jobs for the regions in which the coal industry is located is however emphasised extensively across the material. This goes as far as the claim that the loss of 600 jobs itself, under the condition that there are social plans in place to cushion this, “is not a drama, but for the region it is a drama that 600 young people cannot find new employment” (W2).

Generally, the importance of young people for the regions is repeatedly emphasised since “we want young people to find their perspectives there” (W2). Furthermore, there is the notion that not only would a loss of industry jobs have negative consequences for the region, but the further loss of apprentice positions would create an additional burden for the region and “force young people to

leave the region” (R2). The region needs to be attractive in the future since “it is about the children and the grandchildren of the people now working in lignite” (V1).

It becomes apparent that what is most worrying about the loss of jobs in the coal industry is not the total number of jobs lost but the fact that these jobs are concentrated in regions which will lose one of their major employers and in some cases do not feature alternative industries. This is also what the feasibility of the phase-out of coal then becomes measured against, whether it is “bearable for the region” (W2). Additionally, it makes it a political responsibility to support the affected regions to bear the consequences of a policy decision, “to help the region, to let the creation of value that is removed result in new jobs” (L2). It then also becomes necessary to “establish equal living conditions in Germany” (L1) which could be considered a question of nationwide justice and equity for the affected regions.

To some degree, the regional challenges are framed differently for eastern Germany than for western Germany. In the case of coal mining in eastern Germany and especially the Lusatian coal district, actors are concerned about the direct job losses in the coal industry because of a lack of alternative industries that could provide jobs since “there are few industrial structures around” (L1). In contrast, in the Rhenish coal mining area in western Germany, actors are less concerned about the loss of jobs even though “we are imposing the largest share [of lost jobs] on North Rhine-Westphalia” (L2). Actors are more optimistic because in the Rhenish coal mining area, “there are also other industries in the area where skilled workers are needed” (L1). However, they are concerned about jobs further down the production line in industries that depend on the supply of affordable energy because “we have the electricity-intensive industries with us” (L3). These differences show that the perceived regional effects differ to some degree and cannot be fully generalised. However, it also shows that despite these differences, it appears to be a similar strategy to rely on a regional story line rather than one based on coal workers as individuals.

Whether or not the German coal regions will be able to transition successfully will also determine whether other countries and regions will follow this example and start a transition themselves:

“We need examples for other regions. Europe has 41 coal regions, and if Germany manages to show perspectives in the coal regions, create new jobs, turn these regions into thriving regions, even with less and less coal-fired power generation and the whole phase-out, then there will be imitators. If that doesn't succeed, then there will be no imitators in Europe, and certainly

not worldwide. And then, unfortunately, we won't have done a good thing for the global climate either.” (W1)

While on the one hand this calls for Germany to take a role model function, it also contains a warning that if the transition fails in the way that the regions cannot bear the phase-out and the lack of new jobs, this negative example will create a barrier for transitions in other countries to happen. It implies that if the climate is considered more important in the (regional) jobs vs. climate divide, the climate will lose nevertheless.

5.1.4 The right time to phase out

What is important to note is that there is no expression of outright opposition to the phasing-out of coal per se; the debate centres around the when, not the if. Several actors express that they are generally agreeing to the need to phase-out coal, saying that ending coal is “right” (L2; W2) and that they are even “advocating the phasing out of coal” (L3). It is also acknowledged that coal would have been phased out eventually anyway, since “in the 40s there would have been the end anyway” (W2) and “there would have been a complete coal phase-out over the next 30 years anyway” (S2).

However, there is clear opposition whenever the possibility of an earlier phase-out of coal is debated. The phase-out date of 2038 was presented in the coal commission’s final report in January 2019 and therefore became part of the continuing discussion in the second half of the time period analysed in this thesis, even though it had not been put into law yet. This phase-out date is considered “very ambitious” (L2). An earlier phase-out is rejected, since “we are nowhere near the point where we could afford to phase out coal more quickly” (W2). The possibility of phasing out coal by 2030, which is the date demanded by environmental groups and which would be necessary to stick to the goals of the Paris Agreement, is labelled as “not doable” (S1).

The need to create new jobs before the old ones in the coal industry disappear adds another temporal aspect that can be used as an argument to further delay the phase-out. Political leaders insist that they “want to see new jobs before we get out of lignite” (L1) and that they “must have them [the new jobs] before [the phase-out]” (W2). This serves to justify a coal phase-out in the more distant future rather than sooner and to some degree also delegitimises discussing and implementing the phase-out as long as there are no job-creation measurements in place yet. In combination, this helps to legitimise a delayed phase-out.

Simultaneously, the temporal urgency and the impact of every additional year of coal mining and energy generation are called into question by challenging “whether it is really right for one or two or three years to take billions in compensation to power plant operators” (W1).

These examples show how the discourse is organised in a way that helps to justify delaying the coal phase-out. The impact on climate change and the general need to phase out coal are not questioned but explicitly acknowledged which is why the discourse is not about climate denialism or scepticism where certain actors pursue the strategy to question the need to phase out fossil fuels in the first place. This also makes it less vulnerable to criticism. However, the discourses analysed in this thesis still aim at justifying the delay of the inevitable phase-out of coal since delaying it serves the interest of those operating in the coal industry and of those being politically responsible for the regions that will be structurally affected by the phase-out.

5.2 Consequences and discourse manifestation

5.2.1 Scalar politics to turn jobs into regional jobs and to deal with contradictions

When arguing against what they consider a too early date to phase out coal or pointing out the risks and burdens that will come with it, the analysed actors activate different spatial and temporal scales to support their arguments and the resulting discourse. Temporarily, with statements such as “the new jobs must first be created before the old ones are eliminated” (A1), they establish an order in which things are supposed to happen: first the creation of new jobs, then the phase-out of coal, lastly climate change in the more distant future. Thereby, the creation of new jobs is framed as a temporal condition for the phase-out of coal. Climate change is accepted as unavoidable but still considered a phenomenon in the more distant future with the outlook that “stopping it is already a challenge that people no longer dare to take on, but at least doing everything possible to limit it in the coming years and decades” (W3). By claiming that “the topic is highly emotional” (V1), it is also framed as something highly emotionalised that should not be exaggerated. Whether coal is phased out earlier or later is not discussed from a perspective focused on the impact of these additional emissions, but from a perspective focused on the economic costs of the job losses to the regional economy and to the national budget.

Spatially, the effects of the disappearance of the coal industry are almost always immediately scaled up from the impact on workers to the impact on the regions in which the coal industry and therefore the jobs are concentrated. In the most extreme form this is done when calling the loss of jobs a drama for the regions but not a drama for the workers. This is a discursive strategy that strengthens the

discourse's storyline and makes it more resistant to discursive opponents who would question these particular jobs' economic relevance. The total number of jobs left in the German coal industry has already decreased significantly over the last decades to less than 20,000 jobs and it would be easy for opponents to argue on this basis that their remaining significance in a country with a population of more than 80 million people is limited. However, scaling the issue up to create a regional challenge rather than an individualised one contributes to a coherent narrative that enables the discourse actors to defend their resistance to an immediate phase-out of coal without having to prepare for argumentative counterattacks.

For instance, it cannot be denied that Lusatia is a structurally weak region that would suffer economically if the coal industry disappeared without any measures to cushion the social effects. Compared to the Rhenish coal mining area which also features alternative industries, the transition in Lusatia will be relatively more challenging. Additionally, as a region located in the new eastern states of Germany that belonged to the German Democratic Republic until 1990, Lusatia has been affected and economically weakened by the structural changes that came with the reunification of the two German states. When the prime minister of Brandenburg Dietmar Woidke claims that the goal of the coal phase-out should be to "turn these regions into thriving regions" (W1), in the literal German original he speaks about "*blühende Regionen*" or "flowering regions". This is an interdiscursive reference to the former chancellor Helmut Kohl who used the metaphor of "*blühende Landschaften*" ("flowering landscapes") to express his ambition to turn the new eastern states of Germany into economically thriving states. However, this ambition failed and the new eastern states experienced the opposite of the intended development in the wake of reunification, deindustrialisation and high rates of unemployment. When Woidke picks up this expression and thereby makes a reference to this discourse of the 1990s, the term carries a tacit warning that the structural change of the 2020s and 2030s should at all costs avoid a repetition of turning ambitions for flowering regions into the opposite. This historical reference increases the discourse's resistance to counter voices and implies the need to provide sufficient support to the region to avoid the repetition and aggravation of historical harms.

Any attempts to argue against these structural disadvantages of the coal region Lusatia could easily be exposed as wrong. Additionally, anyone making such an argument would also deliberately imply that it is legitimate to sacrifice these entire regions for climate protection and thereby become highly vulnerable to accusations of ignoring social justice issues. Additionally, they would risk ignoring what has been perceived as historical injustices in the eastern coal regions. With the region already having gone through a phase of major structural change, high numbers of dismissals and an outflow of people

after the German reunification, people have historical reasons to fear that the final phase-out of coal might lead to a repetition of this experience (Gürtler et al., 2020).

The narrative that scales up the job losses to become a regional issue is therefore more resistant than an alternative narrative that would address job losses in a more general, individualised way. This applies especially to the coal regions in eastern Germany where the narrative of regional jobs is additionally tied to the regional history and historical injustices experienced by the regional population.

In this particular context, the often referred to jobs vs. climate divide that is present in a lot of environmental discourses could also be considered to be applied to a different level. If a construction of climate protection in opposition to jobs operates on a rather low, individual level, there is a wide spectrum between this and the much broader level of constructing climate protection as an opposition to economic prosperity in general. Both are named by Lamb et al. (2020) as examples for elements of climate delay discourses that strategically appeal to social justice by emphasising the societal downsides of climate protection measures. In the assessed discourse, this constructed divide is applied to frame climate protection as a contradiction to regional development. This could be considered a scalar application of one of the common divide variations and delay discourses in a way that is most helpful to support the dominant discourse of this particular case.

The reliance of the dominant discourse on a story line with a regional focus can then also help to explain the lack of explicit justice claims in the discourse that address the injustices experienced by the workers in the coal industry. From a justice perspective focused on a just transition, the discourse exhibits a surprisingly small number of justice claims as I showed in subchapter 5.1.1. The raised justice questions that directly refer to the situation of the affected workers mainly relate to a distributive perspective on justice as to who bears the costs or carries the greatest burden of the transition by paying for it with their jobs. This distributive perspective is found again when the discourse is moved to the regional scale and raises questions of whether it is appropriate for the regions to bear most of the social costs of the transition and how this affects equal living conditions in Germany in a negative way. Rather than building the discourse on the injustices experienced by the workers, it is again the regions that are moved into focus.

There is not necessarily a shift from the individual worker level to the region from a perspective of procedural justice since procedural elements are not explicitly addressed in the examined texts and since representatives of both the different state governments as well as employee representatives and labour unions were part of the coal commission and therefore able to participate in the decision-

making process. In contrast, elements of restorative justice take a central role in the discourse. However, support for workers and people is usually referred to as “help for the people *in these regions*” (A3, italics by author) with the goal to “maintain and expand jobs *in the affected regions*” (A3, italics by author). Again, this moves the discourse from the individual level to the regional level. It also resonates with the fact that the discourse builds on the structural differences between different regions in Germany and emphasises the disadvantages experienced by the coal regions in eastern Germany, especially Lusatia. The demand for a late phase-out date and the insistence on the need for the creation of new industrial jobs before the phase-out of the coal jobs that both take a central role in the discourse therefore carry elements of both distributional and restorative justice on a regional level. Both discursive themes build on the costs being distributed in a just way and the need for enough time to compensate the regions for the lost jobs and to restore justice.

Because of this focus on the regions, other issues that would take a more central role in the discourse if it was addressing job losses on a more individualised level are not very present either. For instance, what is only rarely included in the discourse are cultural elements or the personal relation that people have towards their job and the implications for their identity. Buchholz (2021) highlights the importance of these relations for the formation of coal workers’ identity in the Lusatian coal field and concludes that a just transitioning approach would need to recognise these identities as well. However, in the discourse I assessed, these aspects are often excluded, and discussants instead focus on the regional economy and other economic factors such as the comparably high pay of coal industry jobs which makes them harder to replace. Still, the discourse is of course not only influenced by what is given a forum but also by what is deliberately or unintentionally excluded. For example, only after further inquiry by the interviewer about the role of coal for the region’s identity, this topic even comes up in one of the public interviews that were used as a source of analysis material for this thesis. In that particular TV interview, North Rhine-Westphalia’s prime minister Armin Laschet is explicitly asked by the interviewer “How attached is North Rhine-Westphalia to coal? How much is it identity and home?” to which he answers that “the whole region was shaped by coal” and that “it still shapes the people in the Ruhr region” (L2). Of course, it is also due to the interviewer asking specifically about the role of coal for the identity of the federal state of North Rhine-Westphalia, but here again it is talked about how the region as a whole was shaped by the coal industry over the decades. Aspects of the importance of this identity to individual people and the difficulties and resistances that come with the threat of losing this personal identity on an individual level are neglected in the discussion.

Taken together, these strategic framing decisions ultimately create a discourse that is relatively hard to overthrow because it builds on regional structural differences that opponents cannot or would not

want to put into question and not on the number of individual jobs which could be relativised more easily. The strategic decision to continuously highlight the importance of the economic prosperity of the affected regions and the emphasis on their function as a role model for other European coal regions even enables a discourse that is able to justify a slowed down phase-out of coal for reasons of climate protection. When justifying a later phase-out date with Germany's function as a role model and the risk that a hasty phase-out would scare other countries from even considering a decarbonization of their energy sector, a contradictory position is taken and defended as reasonable. This ability to uphold and justify internally contradictory positions is identified by Nyberg et al. (2019) as one of the results from the use of scalar politics. The assessed discourse in this analysis illustrates another example where the delayed phase-out of coal is justified by an interest in climate protection.

5.2.2 Regionally concentrated jobs become more worthy of protection

The dominance of this discourse results in the virtual impossibility to question the outstanding significance and importance of the regional coal jobs in the public perception. This circumstance might also contribute to understanding why the loss of the last jobs in coal mining is treated so differently than the loss of jobs that the wind industry experienced in the last decades. While the German coal phase-out provides EUR 40 billion in structural support to cushion the loss of less than 20,000 jobs, according to estimations by the Industrial Union of Metalworkers (IG Metall), the German wind energy sector lost between 35,000 and 40,000 jobs during the last decade because of a rapidly slowed down expansion of new wind turbines (IG Metall, 2020). These job losses in an industry highly relevant for the future of the German energy transition were met with far less political support measures implying reduced political interest.

This can of course be attributed to the fact that, in contrast to the coal industry, the wind industry is not highly concentrated in a small number of regions of which at least some completely lack alternative industries and sources of income which makes them dependent on the existing ones. Nevertheless, the wind industry and the expansion of renewable energy sources should be of high national interest. This difference in political interest in the protection of certain jobs is most likely also the result of weaker industry lobby power and less opportunity to create a commonly accepted narrative that would guarantee the wind industry similar protection measures based on an equally powerful discourse.

One more reason why the importance of regionally concentrated jobs was emphasised to this high degree in the German coal phase-out debate is also likely to be rooted in the German federalist system.

The implementation of many national decisions rests with the individual states who are responsible for certain state-based tasks themselves. The individual states are also involved in national legislation through the Bundesrat. The Länder in which the three major coal regions are located took an important role in the coal phase-out debate: there would often be several Länder prime ministers present at coal-related press conferences, and two of the four chairpersons of the coal commission were former Länder prime ministers too. Likewise, two of the six actors that were analysed for this thesis are Länder prime ministers because of their important role in the debate. The Länder have an interest in supporting the dominant discourse's focus on regional jobs in that it highlights the impact and importance of the affected jobs in a way that helps them to justify the need for structural support. Additionally, the re-election of regional governments is more dependent on protecting regional interests than that of the national government.

5.2.3 Discourse manifestation in structural support for the regions

With the coal commission's recommendation and the German government's decision to phase out coal by 2038 rather than earlier, the discourse actors were clearly successful in preventing what they consider a too early phase-out date. Additionally, the financial support that will be provided to cushion the social costs of the transition has a clear regional focus. Even though the coal commission also recommends an adjustment allowance for employees aged 58 and over to bridge the gap to retirement, which is more clearly related to individual workers, the big structural support sum of EUR 40 billion over the course of 20 years is designated for structural development in the affected states. In July 2020, when the German government passed the law that made the coal phase-out official, it passed a total of two laws, the *Kohleausstiegsgesetz* ("coal phase-out law", in full *Gesetz zur Reduzierung und zur Beendigung der Kohleverstromung und zur Änderung weiterer Gesetze* („Act to reduce and end coal-fired power generation and to amend other laws")) and the *Strukturstärkungsgesetz Kohleregionen* ("Structural Strengthening Act Coal Regions"). While the former determines the phase-out of coal, the latter implements the coal commission's recommendations to support the affected regions. The discursive focus on the regional impact of the coal phase-out is therefore clearly reflected in both the coal commission's report and recommendations as well as in the legal implementation of these recommendations. The discourse can therefore be considered a dominant discourse that has been institutionalised and that has reached discursive hegemony.

However, it still remains unclear how fast this structural support will ultimately be used in the affected regions and to what degree some of the planned measures will be able to cushion the effects of the

coal phase-out. For instance, so far, the structural support is reaching the coal regions slower than planned. Even though the federal budget was estimated to provide about EUR 508 million in financial support to the coal regions in 2021, only about EUR 4.9 million were actually spent (Giegold, 2022). Given that regional projects would also need time to develop before they could actually contribute to the regional infrastructure or provide jobs and income, the structural development would need to speed up significantly in the next years to replace the lost jobs in the coal industry by 2038 or even 2030. Furthermore, in addition to providing up to EUR 14 billion of the total structural strengthening sum to the affected Länder government as financial support, the national government itself intends to invest the other up to EUR 26 billion, for instance into the regional infrastructure and regional research institutes. The structural strengthening act also includes plans to create new regional jobs by establishing federal agencies in the former coal regions (Strukturstärkungsgesetz Kohleregionen, 2020). Though creating jobs, media coverage of these measures is critical, featuring people expressing doubts about whether new office jobs can replace lost industry jobs, partly also because of government agency jobs not creating jobs in related industries the way industry jobs do (Jeske, 2019).

These concerns also raise questions about the consequences if the structural support provided to the regions cannot fulfil the goal of structurally strengthening the regions and how this will affect the acceptance of the coal phase-out and other climate policies in Germany. If the structural support provided fails to satisfy expectations, the argument remains that the coal phase-out is a threat to the affected regions and therefore should not be rushed. Resistance against the phase-out of coal would likely carry on and continue to rely on the identified arguments. It is therefore critical to successfully build up the necessary infrastructure in the coal regions while simultaneously increasing renewable energy sources in order to weaken the dominant discourse and increase support for the coal phase-out as well as future climate policies.

Since the discourse is deeply rooted in the historical identity of the regions, climate policies and their implementation can only be successful if they do not convey the impression that they might come at the sacrifice of individual regions. This is also relevant for climate activists lobbying for a faster coal phase-out and a faster decarbonisation of the energy system. Based on my analysis, I would argue that strengthening the former coal regions and avoiding the impression that they are left to themselves will be essential for the German coal phase-out to gain the societal support necessary for a potential acceleration. The analysed case is an example of how both climate activists and labour representatives could benefit from joining forces not only to overcome the narrative of a divide between jobs and climate protection. Rather, they would also benefit by gaining vital support for necessary transformations addressing the climate crisis while simultaneously securing equal living conditions

across different regions. These kinds of regional arguments should obviously not be misused by other actors to lobby for a delayed phase-out of coal motivated by other interests than regional equity. However, at their core, the regional interests are historically justified and therefore should form an integral part of aspirations for a just transition that addresses both climate justice as well as regional concerns.

6 Conclusion

My aim with this thesis was to contribute to the understanding of how the lost jobs resulting from the German coal phase-out were used as an argument to justify delaying the transition of the German energy system during the negotiation process that resulted in the coal phase-out law in 2020. The critical discourse analysis of how different actors representing the national government, Länder governments, the coal industry and the labour union framed this issue and used it strategically revealed that the loss of individual jobs is not very present when it comes to job losses in general. More general arguments, such as security of supply and the need to continue providing affordable energy to the population and the national industries were more present. However, the job argument is central in constructing the coal mining regions as the major burden bearers of the energy transition. This is achieved by scaling the issue of lost jobs to the affected regions and highlighting the effects it will have on the regional infrastructure and the regional population. The discussion then also contains an element of social justice with its main focus on equal living conditions between different German regions and the moral obligation not to sacrifice the coal mining regions for climate protection. Lost jobs therefore take an important role in that they are *regional* jobs. The high concentration of the affected jobs in a small number of regions is then used as an argument to justify the delayed phase-out of coal. The actors emphasise the need for the regions to adapt to the structural changes and the need to create new jobs before the old ones disappear. Combined, this justifies delaying the coal phase-out for as long as structural adjustment measures need to be implemented. As a consequence, the German coal phase-out law set the phase-out to the year 2038 even though this will evidently be too late to stick to international climate targets such as the Paris Agreement. Still, the late phase-out date is framed as acceptable and necessary to avoid regional overburdening. Additionally, the German coal phase-out law promised EUR 40 billion over the course of 20 years to support structural strengthening measures in the affected regions to compensate for the loss of the coal jobs. Both the national commitment to the phase-out date and the high structural support show that the discourse reproduced by the assessed institutions reached a high degree of dominance and discursive hegemony, since it managed to be manifested in the final phase-out decisions.

This case could be considered a version of the jobs vs. the climate divide that focuses on regionally concentrated jobs through an element of scaling. I argued that this particular discursive argument is very specific for the German coal phase-out in that it is deeply rooted in German history as well as the German system of government. Future research could further investigate job-related arguments against the phase-out of fossil fuels in other countries to gain deeper insights into country-specific arguments that facilitate climate delays. Comparisons between different countries would help to identify how narratives of the role of lost jobs in fossil-based industries differ from each other. This would also support the development of targeted strategies to overcome these barriers to climate protection while taking very location-specific justice elements into consideration to ensure a just transition. Additionally, continuing to examine the German discourse in the coming years would allow insights into whether the structural support measures provided to the regions result in a changed perception of climate policies and reduced resistance to them.

In my thesis, I have shown that justice claims related to job losses do not necessarily need to address individual job losses but can be scaled up to the socio-economic effects on the regions that these jobs are concentrated in. I have shown how this phenomenon has contributed to creating a dominant discourse in the context of the German coal phase-out that has resulted in delaying the phase-out beyond what is compatible with necessary climate action. The case illustrates the need to address local concerns and fears in order to overcome climate delay, gain support for climate policies and achieve a just transition.

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Appendix

Appendix A

List of material analysed

Actor group		Representative	Role	Code	Reference
Federal government	Federal Ministry for Economic Affairs and Energy (BMWi)	Peter Altmaier	Federal Minister for Economic Affairs and Energy	A1	Polit-Talk Deutschland (2018, September 24). <i>maybrit illner vom 20.09.2018: Teurer Strom, billige Ausreden - Scheitert die Energiewende?</i> [maybrit illner from 20.09.2018: Expensive electricity, cheap excuses - Is the energy transition failing?] [Video]. YouTube. https://www.youtube.com/watch?v=U2hYdUBmDyg
				A2	Handelsblatt (2019, January 22). <i>Altmaier sieht keine große Blackout-Gefahr – und geht bei Nord Stream 2 auf USA zu</i> [Altmaier sees no risk of blackout - and compromises over Nord Stream 2 to the U.S.] [Video]. https://www.handelsblatt.com/unternehmen/energie/handelsblatt-energie-gipfel-altmaier-sieht-keine-grosse-blackout-gefahr-und-geht-bei-nord-stream-2-auf-usa-zu/23895106.html
				A3	Welt (2019, August, 28). <i>Altmaier erklärt, wie die Regierung den Kohleregionen helfen will</i> [Altmaier explains how the government intends to help coal regions] [Video]. www.welt.de/politik/deutschland/video199275722/Bundeswirtschaftsminister-Altmaier-erklaert-wie-die-Regierung-den-Kohleregionen-helfen-will.html
Länder governments	North Rhine-Westphalia	Armin Laschet	Prime Minister of North Rhine-Westphalia	L1	Heinemann, C. (2018, December 21). Ende der Steinkohle: „So gut bezahlte Arbeit gibt's so schnell nicht wieder“ [End of hard coal: "You won't find such well-paid work again so soon"]. <i>Deutschlandfunk</i> . https://www.deutschlandfunk.de/ende-der-steinkohle-so-gut-bezahlte-arbeit-gibt-s-so-100.html
				L2	phoenix (2019, June 05). <i>phoenix ländersache - Helge Fuhst im Gespräch mit Armin Laschet</i> [Helge Fuhst in conversation with Armin Laschet] [Video]. YouTube. https://www.youtube.com/watch?v=MPoxPdkttl

				L3	buchmesse (2019, October 19). <i>Klimakrise – Armin Laschet und Luisa Neubauer diskutieren auf der FBM19</i> [Climate crisis - Armin Laschet and Luisa Neubauer discuss at FBM19] [Video]. YouTube. https://www.youtube.com/watch?v=rODfOdxnhDw
	Brandenburg	Dietmar Woidke	Prime Minister of Brandenburg	W1	phoenix (2019, January 25). <i>phoenix tagesgespräch mit Dietmar Woidke (SPD) am 25.01.19</i> [phoenix tagesgespräch with Dietmar Woidke (SPD) on 25.01.19] [Video]. YouTube. https://www.youtube.com/watch?v=H_jGlxVHCX0
W2				Jung & Naiv (2019, July 28). <i>Ministerpräsident Dietmar Woidke (SPD) - Jung & Naiv: Folge 425 Wahl in Brandenburg</i> [Minister-President Dietmar Woidke (SPD) - Jung & Naiv: Episode 425 Election in Brandenburg] [Video]. YouTube. https://www.youtube.com/watch?v=kGSPIOZgN0c	
W3				Capellan, F. (2019, August 04). Ministerpräsident Woidke (SPD): „Klimaschutz braucht eine soziale Komponente“ [Minister President Woidke (SPD): "Climate protection needs a social component"]. <i>Deutschlandfunk</i> . https://www.deutschlandfunk.de/ministerpraesident-woidke-spd-klimaschutz-braucht-eine-100.html	
Companies in coal mining & energy production	RWE	Rolf Martin Schmitz	CEO of RWE	S1	Bröcker, M. & Höning, A. (2018, June 23). Interview mit RWE-Chef Rolf Martin Schmitz: „Ein Kohleausstieg bis 2030 ist nicht zu schaffen“ [Interview with RWE CEO Rolf Martin Schmitz: "A coal phase-out by 2030 is not feasible"]. <i>RP Online</i> . https://rp-online.de/wirtschaft/unternehmen/rwe-chef-rolf-martin-schmitz-kohleausstieg-bis-2030-unmoeglich_aid-23553795
				S2	Kindermann, K. (2019, November 17). RWE-Chef Rolf Martin Schmitz: „2040 sind wir klimaneutral“ [RWE CEO Rolf Martin Schmitz: "We will be climate-neutral by 2040"]. <i>Deutschlandfunk</i> . https://www.deutschlandfunk.de/rwe-chef-rolf-martin-schmitz-2040-sind-wir-klimaneutral-100.html
				S3	Höning, A. (2020, January 17). Kohleausstieg: RWE-Chef: „Der Preis, den RWE zahlt, ist hoch“ [Coal phase-out: RWE boss: "The price RWE is paying is high"]. <i>General Anzeiger</i> . https://ga.de/news/politik/deutschland/rwe-chef-der-preis-den-rwe-zahlt-ist-hoch_aid-48379543
	LEAG	Helmar Rendez	CEO of LEAG	R1	Stratmann, K. (2018, June 25). HELMAR RENDEZ: Chef des Energieversorgers LEAG warnt vor einem übereilten Braunkohle-Ausstieg [HELMAR RENDEZ: Head of energy provider LEAG warns against a hasty lignite phase-out.]. <i>Handelsblatt</i> . https://www.handelsblatt.com/politik/deutschland/helmar-rendez-chef-des-energieversorgers-leag-warnt-vor-einem-uebereilten-braunkohle-ausstieg/22724430.html

				R2	DEBRIV [Deutscher Braunkohlen-Industrie-Verein e.V] [German Lignite Industry Association]. (2018, July 26). <i>DEBRIV kritisiert Studie des Öko-Instituts zur Beschäftigungsentwicklung in der Braunkohlenindustrie</i> [DEBRIV criticises Öko-Institut study on employment and development in the lignite industry] [Press release]. https://braunkohle.de/debriv-kritisiert-studie-des-oeko-instituts-zur-beschaeftigungsentwicklung-in-der-braunkohlenindustrie/
				R3	Niederlausitz aktuell (2019, January 31). <i>Pressekonferenz zur Kohlekommission in der Lausitz</i> [Press conference on the coal commission in Lusatia] [Video]. YouTube. https://www.youtube.com/watch?v=u9uHGx1neu8
Labour unions	IG BCE	Michael Vassiliadis	Chairperson of IG BCE	V1	Frese, A. (2019, January 31). Gewerkschaftsboss Michael Vassiliadis: "Wenn wir die Klimafrage überdrehen, wird es gefährlich" [Labour union boss Michael Vassiliadis: "If we over-twist the climate issue, it will become dangerous"]. <i>Tagesspiegel</i> . https://www.tagesspiegel.de/wirtschaft/wenn-wir-die-klimafrage-uberdrehen-wird-es-gefahrlich-5533603.html
				V2	Büüsker, A.-K. (2019, January 26). Kohlekompromiss: IG BCE-Chef: Ergebnis insgesamt zufriedenstellend [Coal compromise: IG BCE boss: result satisfactory overall]. <i>Deutschlandfunk</i> . https://www.deutschlandfunk.de/kohlekompromiss-ig-bce-chef-ergebnis-insgesamt-100.html
				V3	Frese, A. (2019, October 28). IG Vorsitzender Vassiliadis: „Berlin ist nicht Hogwarts“ [IG Chairman Vassiliadis: "Berlin is not Hogwarts"]. <i>Tagesspiegel</i> . https://www.tagesspiegel.de/wirtschaft/berlin-ist-nicht-hogwarts-4113133.html