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The wickedness of net-zero policy: scales in policy discourse

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ABSTRACT

Broad goals on climate change are largely set at international and national levels, whereas the tangible action required to tackle the challenge of climate change is essentially implemented at a local and individual level. The paper investigates how international policy discourses on climate change are adapted in local government, analysing a data set from a council debate in Germany about the EU programme '100 Climate-Neutral and Smart Cities by 2030' and the textual and discursive networks created by that debate. The analysis is based on recordings from the council and committee debates, the different versions of motions, as well as the broader textual networks produced by the debate. Although the debate did not result in this city taking part in the programme, it initiated a wider debate within the urban society and increased the influence of local policy expertise. The article contributes to the agenda of critical policy discourse analysis by outlining the role of epistemological and ontological scales in the connection of global and local policy discourses, which contribute to the complexity and wickedness of climate change as a policy problem.

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Introduction

Climate change is the 'ultimate wicked issue' (Pollitt, 2016, p. 79), as it will ultimately threaten our survival (Gills & Morgan, 2020; Harvey, 2021; Ripple et al., 2021), but its solution involves almost all layers of government. It is essential 'that government policy-making is joined-up across sectors and levels of government. This is a big ask, given our long history of talking enthusiastically about joining up but only occasionally doing it effectively' (Pollitt, 2016, p. 79).

The idea of 'wicked problems' entered policy research with Rittel and Webber (1973), who distinguish 'tame', well-defined problems in natural sciences from social science problems that are almost always 'wicked'. This means they are complex, and effective solutions are difficult. Wicked problems do not have a definitive formulation, and each problem is unique. In the further development of policy research, the category 'wicked

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problem' was often used as a rhetorical resource to draw attention to certain problems – although, as Turnbull and Hoppe (2019) point out, this was already the case in Rittel and Webber's original article, as they used it to critique a reductionist approach to policy making. Lönngren and van Poeck (2021) offer a literature review that demonstrates the incredible range of applications of this concept in the sustainability literature in terms of theoretical status, rhetorical functions and epistemological functions. In this article, I aim to make a theoretical contribution to the policy literature on the concept of wickedness: There is a discursive element to the wickedness of policy problems that are tackled at multiple layers of policy making.

The necessity of the local in climate change policy is already acknowledged in Agenda 21 at the earth summit in Rio (Eckersley, 2018, p. 5) and is also understood by political scientists who study the central-local link from a capacity or formal competence point of view. For reasons of space, this literature on climate governance will largely need to be ignored in this paper, as I will focus on policy formulation and debate as a linguistic practice at the local level, which has been taken for granted by social and political scientists.

Linguists have critically examined political discourse at the national level for decades, as they understand language as central to the process of the formation of public knowledge and policy, because engagement with political issues happens through language (Chilton, 2004; Kranert & Horan, 2018). But only recently have they turned to policy making as a separate discursive domain to underpin policy studies questions with linguistic tools. While policy analysis as a field of political science has a long tradition, it has changed considerably from a purely positivist and technocratic approach to an analysis that focuses on language and communicative practices (Fischer et al., 2017). In an attempt to provide critical policy analysis with systematic linguistic tools, Montesano Montessori et al. (2019) developed a new research programme of 'critical policy discourse analysis' (CPDA). Within this agenda, I am proposing to analyse policy discourse across political scales by investigating how political actors in local government frame and negotiate the transition to climate neutrality (henceforth I will use the term 'Net-Zero'), and how they adapt (inter)national discourses to fit the local contexts.

Using a case study from the City of Halle, Germany, I aim to show, how the recontextualisation of discourses between different political scales and the construction of these scales by local actors contribute to the wickedness of the policy problem 'Net-Zero'. This article contributes to the longstanding debate on wicked policy problems from a discourse-analytical perspective grounded in linguistics. It outlines issues in policy discourses caused by ontological and epistemological scales in sustainability discourses. The introduction of the concept of scales into discursive institutionalism (DI) and CPDA substantially improves the theoretical apparatus to understand collaborative discourses between institutions at different levels of the hierarchy of policy making. The linguistic operationalisation of DI, the detailed linguistic analysis of the corpus comprised of policy debates, policy papers and interviews provide a methodological operationalisation of DI that can be applied to data from a multiplicity of contexts.

In what follows, I will first introduce and contextualise the case study and present the research questions. I will then present a concept of policy discourse and the role of scales in its analysis.

The case study: data and research questions and methodology

In October 2021, the EU commission published a call for participation in an EU Mission ‘100 climate neutral cities in Europe by 2030’. At the initiative of a local climate NGO *Halle Zero*, three left-wing parties *SPD*, *Die Linke*, *Bündnis 90/Die Grünen* and a local party *Die MitBürger & Die Partei* brought forward a motion for the city of Halle/Saale in Germany to apply for this programme.

The EU-Programme ‘100 climate neutral cities in Europe by 2030’ is part of the larger policy *Mission Horizon Europe 2021–2027*. This major EU project was framed as a ‘mission’ as it was modelled on the moon landing mission, combining research programmes, policy development and investment to mobilise both private and public institutions as well as the citizens to produce innovative and long-lasting solutions to the core challenges of our time. Five missions were named by the EU: combatting climate change, oceanic pollution and cancer, developing climate neutral cities as well as sustaining soil health and food security (Shabb et al., 2022). The core idea of the mission approach is to foster market-driven solutions via an entrepreneurial state, which would allow to de-silo governance structures through bottom-up approaches to innovation. This approach was widely criticised as it underestimates the complexity of creating consensus across levels of governance, and because it demonstrates ‘insufficient understanding of the challenges and complexity of participatory engagement of citizens and stakeholders in the mission approach’ (Shabb et al., 2022, p. 3).

In this paper, I will present empirical evidence for the complexity of these policy debates from a political discourse perspective by addressing three research questions:

- (1) How can the theoretical concepts of scales and textual trajectories be integrated into the programme of critical policy discourse analysis?
- (2) How can we model the policy discourse between different scales?
- (3) To what extent is complexity in local net-zero discourse reduced or increased in the local implementation phase?

I will answer these research questions by analysing a corpus of text that includes:

- ‘100 Climate Neutral and Smart Cities by 2030 – Info Kit for Cities’ (European Commission, 2021) and short version ‘What is in it for my city and how can we become part of it’ (European Commission, 2021);
- all versions of the motion ‘Bewerbung für das EU-Programm zur Klimaneutralität bis 2030’ and amendments;
- transcriptions of two council plenary debates (November 2021, cited as 20211124-DEBATTE-SR, and February 2022, cited as 20220223-DEBATTE-SR);
- debates in the Climate Protection Committee (Ausschuss für Klimaschutz, Umwelt und Ordnung) January and February 2022;
- debate in the Finance Committee (Ausschusses für Finanzen, städtische Beteiligungsverwaltung und Liegenschaften), February 2022;
- the brochure ‘Klimaneutralität in Halle Roadmap 2045’ (Energie Initiative Halle, 2022);

- six interviews with politicians and stakeholders (approved by the Faculty Ethics committee, University of Southampton, Faculty of Arts and Humanities, ERGO Number 72131).

The Council and committee debates were recorded by the council and published on the YouTube channel of the city of Halle, from which they were downloaded and transcribed. Methodologically, I undertook a close reading of my corpus and analysed it by annotating all mentions of timespaces, all deictics, actors, as well as all core political concepts in the debate (such as 'Net-Zero', 'city climate contract'), using NVivo. While future papers will focus in more detail on these linguistic elements, here I will focus on the question of the influence of scales on the debate.

Theoretical background: epistemological scales and scales as orders of discourse

There has been a broad range of studies on climate change discourse from linguistic discourse analysts in the last decades, most of which focus on discourse in the media as well as national and international discourses (Bailey et al., 2014; Boykoff & Boykoff, 2004; McKewon, 2012). Carvalho (2018, p. 491) points out that 'much research is also needed beyond the press'; however, her examples all stay in the area of media construction of climate change as well as national debates.

In this paper, I take a different perspective: I am interested in policy discourse as a specific field of action within political discourse. Following the programme of Critical Policy Discourse Analysis (Montesano Montessori et al., 2019), I will base my analysis on a methodology that operationalises theoretical elements from policy analysis with discourse-linguistic methodologies to understand, how policies are negotiated across scales and how scales are constructed in Net-Zero discourses at local level.

The policy analysis approach most informed by developments in discourse analysis is the discourse institutional approach developed by Vivien Schmidt (2008, 2017). It forms part of the new institutionalist approaches to policy and was developed as an alternative to rational choice, historical and sociological approaches to policy making. As part of the ideational turn in policy research, Schmidt is interested in the dynamics of change in policy making and hence theorized about

ideas and discourse in their many different forms, types, and levels as well as in the interactive processes of policy coordination and communication by which ideas and discourse are generated, articulated, and contested by 'sentient' (thinking, speaking, and acting) agents. (Schmidt, 2017)

In policy making, Schmidt distinguishes between coordinating discourse in the policy sphere and communicating discourse in the political sphere. She describes the policy sphere as comprising policy makers such as government officials, lobbyists etc. that generate policy ideas and arguments. These often form discourse coalitions (Hajer, 1993) which collaborate to change social ideas and narratives. The political sphere on the other hand is made up of elected officials, party members, policy makers, media etc. who engage in contesting ideas, forming a public opinion, but also in the translation of policy ideas by political actors 'into language and arguments accessible to the general public' (Schmidt, 2017, p. 181). Schmidt concedes that both spheres are

interconnected as interactive processes (Schmidt, 2017, p. 181). In this paper, I will argue that this interconnection is particularly strong in policy discourses across scales, as policy ideas settled at one scale are almost always debated on other scales: Local contexts on the one hand demand adaptation of global policies, and on the other hand local politicians have their own political goals in communicative discourse and employ strategies of (de-)legitimation and (de-)politicisation accordingly in the context of their political culture (Kranert, 2019). This of course makes these discourses more difficult to control and policy outcomes are even more difficult to predict.

Schmidt (2008, p. 311) argues that ‘tracing discursive processes of coordination and communication is a way of showing why ideas may succeed or fail’. In this paper, I do exactly that: I propose to trace coordinating and communicating discourses across political scales, employing a linguistic methodology called textual trajectories. The basic assumption of this methodology will significantly extend the theory of discursive institutionalism: As all discourses are contained, negotiated and transmitted in texts and through intertextual and interdiscursive relations (Fairclough, 2003, pp. 36–38), so are policy discourses. Text production, in discursive terms the process of entextualisation (Bauman & Briggs, 1990; Blommaert, 2005; Silverstein & Urban, 1996), is a sense-making process in organisations and institutions, and part of the process of institutionalisation (Phillips et al., 2004). These entextualised ideas travel and get remobilised in new contexts, i.e. their meaning is adapted in a new context, a process we call recontextualisation (Blommaert, 2005). To describe this process of transmitting and transforming policy across scales, we will next integrate the concepts of textual trajectories, genre ecologies and scales into the discourse institutional approach. This integrated theory will then be used to analyse how core elements of the EU policy are debated in a local council and lead to new policy texts that set out local policies.

On the surface, the travelling of discourses from more global political actors such as the EU to very local actors is part of a system of delegation and sharing of power and accountability, which can be analysed as textual trajectories. Textual trajectories capture ‘the changes, movements and directionalities of spoken, written and multimodal texts [...] across social space and time’ (Maybin, 2017, p. 416). This involves processes of entextualisation, in which discourse participants actively encode experiences and ideas as more or less permanent texts. Once an idea is encoded in a text, it can be recontextualised – transferred into a different context. Thus, despite the fact that texts are culturally understood as coherent and durable entities, they can be reused time and again and lifted out of their original institutional setting, a process in which these elements change meaning.

Tracing textual trajectories allows us to understand how ideologies and knowledge are reconfigured between (inter)national politics and local politics. While Iedema and Wodak (1999) demonstrate how chains of recontextualisation in institutional processes lead to objectification and depersonalisation, and replace informal interactions with formal arguments, I will show in this study how the opposite process works – how a highly reified EU policy was adapted to the local level and re-concretised again to fit the differing realities of different locations.

Most texts travel locally or within a layer of policy making, and those local travels also lead to recontextualisation. Here, however, we are here concerned with how the differing material and discursive realities of the hierarchical and nested political structures between supranational and local lead to changes of meaning through recontextualisation. These

hierarchical and nested political structures can be conceptualised as scales. This concept gained prominence in multiple social sciences disciplines in recent decades, but particularly in geography (Moore, 2008; Swyngedouw, 1997; Uitermark, 2002), in policy analysis (Papanastasiou, 2017a), and in linguistics (Bartlett, 2019; Blommaert, 2005).

Scales such as 'local', 'regional' and 'national', 'the international community' etc. are first and foremost discursively constructed categories employed by discursive actors to make sense of the hierarchy of timespaces in which they live and act (Jones, 1998). This type of scale is called 'epistemological scales'. In a process called 'scalecraft' (Papanastasiou, 2017b, p. 1046), these concepts can be mobilised strategically as part of the discursive repertoire of political actors (Chilton & Schäffner, 1997; Kranert, 2019; Muntigl, 2002): They can be used to (de-)legitimise, (mis-)represent and (de-)politicise policies, for example, by claiming that climate action can only be taken at a supranational scale it can delegitimise local climate policies.

Ontological scales on the other hand are institutional and contextual differences between different layers of the policy making process. This is an analytical concept developed to capture scalar effects, be they political, economic or, in our case, discursive. Although Moore (2008) argues for the abandonment of the ontological category, as it overstretches the idea of scales, there are merits for it in discourse analysis: Scales in an ontological sense help us understand how texts are recontextualised. These scales are not just spaces, but TimeSpaces, as social events develop in both time and space combined (Wallerstein, 1998). In a discourse-analytical sense, TimeSpaces are indexical orders created through semiotic practices. They can be located as parts of orders of discourse: networks 'of social practices in its language aspect' (Fairclough, 2003, p. 24). Here, discourses, genres and styles interact: the language used shapes social practices (for example how we understand local politics) and is shaped by social practices (e.g. the traditions and rules of debating local politics, the genre formats of policy papers). In a very concrete sense, this means that different sizes of TimeSpaces in policy making, such as local government, national government and supranational institutions have different interests, processes and abstractions.

A further relevant element of the orders of discourse are genres and genre ecologies. Genre can be understood as 'ways of acting' (Fairclough, 2003, p. 206) and as 'more or less effective and binding "solutions" to the "problems" of social life, while communicative genres are more or less effective and binding solutions to communicative problems' (Luckmann, 2014, p. 353). Each institutional structure has their own genres of policy making, with their own conventions, and these genres such as white papers, bills and consultations constitute an ecology of genres and discourses (Stöckl & Molnar, 2018, p. 262). Clearly, changes in these ecologies, such as adding websites explaining government policies or the streaming of council meetings are also part of social and institutional change.

Linguistic and social practices are dependent on TimeSpaces, as language users orient to TimeSpaces and their indexical orders in a different way: Civil servants and politicians at the EU level will experience policy making differently and produce different texts from local politicians and council officers. Attached to these different scales are also differences in discursive power: Whether this is access to discourse (as in being in the room and being allowed to speak), having the financial and time resources to take part, or having the power to formulate policy.

Changing scales means indexing different social norms and expectations in discourse: Often, lower scales are understood as momentary, local and situated, while higher scales are constructed as timeless and translocal (Blommaert, 2010, p. 35). As texts travel between these orders, they are recontextualised repeatedly, so textual trajectories through these indexical orders alter the meaning of pieces (Blommaert, 2005, p. 76).

Bartlett (2019) demonstrates how this works in his analysis of the recontextualisation of sustainability discourses. Ontological scales of orders of discourse in policy making capture the difficulty of rescaling signifiers such as ‘fishing’ in EU policies and local action on the Outer Hebrides, as these are ‘two distinct systems of opposition which are not hierarchically nested but incommensurate’ (Bartlett, 2019, p. 257).

Therefore, when looking at textual trajectories of net-zero discourses, we necessarily have to draw on scales as both epistemological and ontological, both are intertwined. I in my analysis, I will show how epistemological scales are politicised in local Net-Zero discourse, but also how ontological scales understood as orders of discourse can be politicised and have a recontextualisation effect, and therefore both concepts are needed to explain some effects in policy discourses between scales.

Results and discussion

The effects of orders of discourse and genre ecologies

For the reader to understand local discursive scales as an order of discourse, I will need to explain the actors, genres and social practices involved in this policy making case study. The policy debate about the EU programme was initiated by *HalleZero*. *HalleZero* is a local branch of *GermanZero*, an NGO that combines ‘policy and advocacy work with grassroots campaigning as well as collaboration with strategic partners to generate a critical mass of citizens that will send an unmistakable signal to policymakers’ (German Zero, n.d.). The NGO has a network structure and is driven by local groups as local issues vary. In Halle, members of *HalleZero* regularly monitor council debates and actively collaborate with political parties committed to NetZero. As *HalleZero* became aware of the EU call, it proposed a motion for the city to apply for the programme to the three left-wing parties *SPD*, *Die Linke*, *Bündnis 90/Die Grünen* and a local party *Die MitBürger & Die Partei*. The information from the EU was published in October 2021, and the motion was first debated in the main committee (Hauptausschuss) in November 2021. The deadline for the application to the EU programme was set as 31st January 2022 – four months after the publication, with the Christmas period in the middle.

Part of the rules of debating motions in local councils in Germany is that motions should be scrutinised in committees, and there is an automatic right to move them into committees from the main council debate without a vote if a motion has not been in any of the relevant committees. This allows more detailed scrutiny, but can also slow down the policy process, an issue that was anticipated by the proponents of the motions, so the motion was moved first in the main committee to avoid this problem: Once a motion has been debated in a committee, there is no automatic right to move it into committees, and a majority in the plenary would be needed.

Invited to the session of the main committee, in which the motion was first presented, was the CEO of the *Stadtwerke Halle* – a city-owned utility services provider active in energy and water supply as well as mobility. The position of the *Stadtwerke Halle*

Group was that the aim to achieve NetZero by 2030, which was core to the EU programme, was problematic to their own efforts to achieve NetZero as early as possible: In their view, climate neutrality would not be achievable in all sectors by 2030, especially not in domestic heating supply, and promising it could damage their financial credibility and ability to find funding for infrastructure change to achieve NetZero by 2045 (according to the federal law) or earlier. Not originally invited, but present to monitor the public meeting was Maria Schubert from HalleZero, and the proponents of the motion asked to grant her the right to speak in the committee, which the committee did.

Between the committee debate and the main council debate a few days later, the Stadtwerke Halle group intervened with the parties who moved the motion and also presented their doubts in the main debate. A motion to move the motion back to committees for scrutiny was successful after a vote – and with that, the original aim to apply for the EU programme became unfeasible. A clear ontological scalar obstacle here was the short deadline by the EU that did not take into consideration the complex decision practices and elements of communicating discourse in local government.

In the debate, however, a further indication for the mechanism of ontological scale appeared: the orientation of actors towards the proposed instrument of a ‘City Climate Contract’ within the EU programme. This instrument is proposed in the briefing document (European Commission, 2021), which on 124 pages describes the aim, role, eligibility criteria etc. of the programme. The programme aimed to encourage one hundred cities to become climate neutral by 2030, so all cities have a template on how to achieve climate neutrality by 2050.

A central tool for this is the idea of a ‘Climate City Contract’. The policy text provides a metalinguistic commentary that transparently lays out the indexicalities of the concept: it is called a ‘memorandum of understanding’ (European Commission, 2021, p. 2) and ‘not legally binding’ (European Commission, 2021, pp. 1, 2), so technically, it is not a contract. Effectively, the Commission proposes a policy document that is calls metaphorically a ‘contract’, using this metaphor as a metalinguistic signal, but employing a fair amount of metalinguistic discourse to explain its metaphoricity and symbolic use:

(1) Use of the word ‘contract’ is intended to indicate a clear political commitment on the part of the city to its citizens as well as to the Commission and to the national and regional authorities. The contract will encompass a range of activities including setting up large scale EU R&I demonstrators, establishing innovative models for city governance and citizens’ engagement and an Investment Plan. (European Commission, 2021, p. 2)

Linked to this suggested policy document is a symbolic activity of signing the so-called contract, ‘witnessed by the Commission’, as well as the ‘award’ of a label. From a discourse-linguistic perspective, the EU is establishing a whole genre ecology here, that is intended to increase the visibility of the policy change and activities of the programme. Genres such as ‘contract’, ‘signing of a contract’, ‘label’ and ‘awarding of a label’ form an ecology of genres and discourses (Stöckl & Molnar, 2018, p. 262) that interact within the social system, but that can also be reinterpreted when recontextualised. In what follows we will see two effects of genre ecologies and ontological scales: on the one hand a renegotiation of the understanding of the ‘climate city contract’, and on the other hand the establishment of new genre ecologies as a result of the debate.

An indication that ontological scales are at work in the recontextualisations of policy ideas becomes very clear when we observe how the local actors in the debate orient to the function of the genre of 'climate city contracts'. While the proponents of the motion recognise the function of the Climate City Contract and almost word for word cite the functional description of the genre from the EU policy, the amendment by the city administration reinterprets the 'contract' idea financially and legally:

(2) Die Risiken aus einer Fixierung der Ziele in einem Vertrag mit der EU sind derzeit unabsehbar.

The risks from fixing the targets in a treaty with the EU are currently unpredictable.

(20211117-ANTRAG-OB-AE; 20220223-ANTRAG-CDU-AE, highlighting MK)

This text is originally part of the justification of the amendment by the city administration and mayor; later, however the same words are adopted in CDU amendment justification.

The complex metalinguistic description in the EU policy paper is here reduced to 'contract with', indexing the legally binding genre. This is supported by the comment later in the amendment text that even the non-binding link with the EU might have legal effects and could therefore pose a significant risk to the city of Halle:

(3) Mit der Selbstverpflichtung zur Klimaneutralität bis 2030 und dem Abschluss eines diesbezüglichen Vertrages entstehen der Stadt Halle (Saale) und ihren Unternehmen zudem erhebliche Risiken, da nicht auszuschließen ist, dass sich Dritte auf die Wirkung der Selbstverpflichtung auch dann berufen können, wenn sie gegenüber der Europäischen Kommission rechtlich nicht verbindlich ist (Schutzwirkung zugunsten Dritter).

The voluntary commitment to climate neutrality by 2030 and the conclusion of a contract to this effect also entail considerable risks for the city of Halle (Saale) and its companies, as it cannot be ruled out that third parties may invoke the effect of the voluntary commitment even if it is not legally binding vis-à-vis the European Commission (protective effect in favour of third parties).

(20211124-ANTRAG-OB-AE; 20220113-ANTRAG-CDU; 20220209-ANTRAG-CDU-AE)

According to my interviews, this reinterpretation was brought into the debate by the local utility corporation *Stadtwerke Halle*, which also saw a risk to its own business model if NetZero by 2030 was promised, as they argued this was not possible in all sectors (but in some), and some investors they relied on might see it as problematic if infrastructure such as part of the natural gas net become defunct before its full amortisation period. This is very much a local context, as not all cities in all EU member states still have communally owned utilities. The finance structure, the political involvement as well as the orientation towards climate change in different localities can differ considerably. In our case study, the *Stadtwerke Halle* saw themselves very much as a driver of the transformation in energy use, which became clear in the next stage of the debate, when two major decisions were made: Firstly, the referral into the committees led to a situation where an application for the EU programme became impossible as the deadline could not be met. And secondly, the *Stadtwerke Halle* group decided to offer a positive way forward for Halle's NetZero ambition by developing a programme called 'Roadmap 2045' (Energie Initiative Halle, 2022) in collaboration with the 'Energie-Initiative Halle (Saale)', a network of local businesses and city owned utility providers to work on energy systems transformation. This resulted in a changed motion that promised to reach

NetZero earlier than the national target of 2045, and most importantly set up three new policy tools: The renewal of the climate policy statement, the 'Roadmap 2045' as an initiative that the city administration should draw on, and the establishment of a climate protection council.

While the climate policy mission statement has become a common text for bigger local administrations in Germany, and Halle has had one since 2015, the 'roadmap' as a family of policy tools was a new process and campaign that grew out of the debate about the EU programme. Under this label, local competence on energy systems transformation was used to produce both a local auditing process of CO₂ emissions for all utility providers, as well as a whole host of promotional materials – a brochure, website, YouTube video (Energie Initiative Halle, 2024) – to gain new members of the network and organise a tangible plan to achieve Net-Zero. The proposal of this tangible plan was presented in one committee session, where a project manager working for the local energy provider presented a systematic way of auditing and planning CO₂ efficiency via a methodology they call 'umweltökonomischer Ansatz' ('environmental-economic approach').

The language of the PowerPoint presentation given by the project manager in the main committee, and the whole promotional material translates political aims into an economic-managerial discourse: The headline is about the affordability of the energy transformation ('Transformation gemeinsam und bezahlbar gestalten'), and CO₂ understood as something that can be accounted and audited ('CO₂ Abrechnung der Maßnahmen', 'CO₂ Bilanzierung Ausgangssituation'). The 'Roadmap' both explains a process to make the transformation more efficient but also makes local activities visible to the political debate in the city and integrates and already existing process into public policy. This is of course partly a type of claiming credit for what has already been done to mitigate a possible image of an obstructive force in the fight against climate change because of the position against a 2030 target. But it is also an exercise in translating between business and policy discourse, as well as an attempt of awareness raising for local expertise. This positive effect is an unintended outcome of the debate the EU funding call initiated, but one that is very much in the spirit of the Horizon programme.

A final promise of the motion is the support of a climate protection council (Klimaschutzrat), a deliberative and advisory instrument of citizen participation supported by HalleZero. This promise, however, is still lacking realisation to date: as HalleZero is leading this, but is an organisation of volunteers with much less power over discourse, as this presupposes resources. A crowdfunding campaign raised enough funds to ask for support of the project via a public grant, but a decision is still outstanding at the time of writing.

This change of the genre ecology of climate change policy in this local authority as a result of a debate initiated by a supranational policy is clearly the opposite process of objectification and depersonalisation discussed by Iedema and Wodak (1999): The policy problem to achieve NetZero locally and to use local competency led to the establishment of a more differentiated local policy genre ecology, involving a collaborative carbon planning system called 'Roadmap 2045' and the setting up of a climate protection council as a deliberative instrument. Both the importance and the problems of local politics however became clear in this case: Local solutions clearly matter, and the strengthening of local solutions was activated by the EU call, even though Halle decided not to apply. However, there is also a clear power differential between different local non-

governmental actors over this discourse of local solutions: The local utility provider has the capacity and the political backing to influence policy, it is forming a network with policy makers, as local politicians sit on the company's board. It has also got the organisational and monetary capacity to produce policy texts and genre such as the 'Roadmap 2045'. The more civil society-oriented climate protection council, proposed by the NGO HalleZero and supported by the motion of the city council, is still battling to be established and funded: It relies on a competitive grant by the agency ZUG (Über Uns | Zukunft – Umwelt – Gesellschaft (ZUG), [n.d.](#)), and no decision has been made to date. Once it is up and running, it would, however, it would be really interesting to see how this new forum influences the policy discourse at the local level.

Epistemological scales: time-spatial orders of climate change discourse

While scalar effects of orders of discourse add complexity via the process of recontextualisation, epistemological scales are part of (de-)politicisation and (de-)legitimation strategies as a type of scalecraft (Papanastasiou, 2017b, p. 1046). Scales as TimeSpace relations are crucial to climate change discourse, as global coordination is needed as much as local action, and debates are happening around what time commitments are needed to keep the Paris agreement of 1.5°C above pre-industrial levels in place. In the following, we will see that (de)politicisation in local debates means making decisions for local change, or deciding that local action is not appropriate level for climate action. In order to demonstrate that, I analyse, how political actors in the debate about the NetZero target 2030 construe different scales from the global to the local and how they are linked to different time scales.

Both the EU funding call and the local proponents of an application for the EU funding reference the Paris convention of limiting global warming to 1.5°C as a contractual obligation for all to act on all levels, and the local city as a necessary focus of climate action. The opponents of the motion, on the other hand, reference the Paris agreement with the argument that NetZero can *only* be achieved through international action, not through local action. This can be understood as a depoliticisation strategy against local action. A much stronger opposition to Net-Zero policy is brought forward by the construction of global scales as a competition of selfish national actors by the far right AfD speaker, naming 'the Africans', 'the Chinese', 'The Americans', and 'the Australians' as powerful actors against which local actors such as the city of Halle have no chance:

(4) Und die EU bleibt im Prinzip mit ihrer Wasserstoffstrategie, die ich grundsätzlich nicht falsch finde, aber sie bleibt trotzdem alleine, weil die Afrikaner haben einfach das Geld nicht das umzusetzen. Die können sich das nicht leisten doppelt Kraftwerke hinzustellen. Die Chinesen, die Inder, die wollen sich das nicht leisten, weil die mit uns im systemischen Wettbewerb stehen. Die Amerikaner sind sich gar nicht so richtig einig was sie eigentlich wollen. Biden sagt mal Ja, die Mehrheit hat er nicht mehr. Dann kommt vielleicht mal wieder ein Trump, der sagt Nein, wir machen da nicht mehr mit. Die Australier, die leben vom Kohleexport Und wir hier in Halle, wir signalisieren unseren Bürgern, wir können das Problem lösen. Wir können gar nichts lösen. (20220210-DEBATTE-KAU, AfD)

And in principle, the EU is sticking with its hydrogen strategy, which I don't think is wrong in principle, but it is still alone, because the Africans simply don't have the money to implement it. They can't afford to build double power plants. The Chinese, the Indians, they don't want to afford it because they are in systemic competition with us. The Americans don't really agree on what they

want. Biden says yes, but he no longer has a majority. Then maybe Trump will say no, we're not going to do it anymore. The Australians live off coal exports, and we here in Halle are signalling to our citizens that we can solve the problem. We cannot solve anything.

The federal or national level is a reference point in most debate contributions. This is partly due to the political logic of funding local action via national government grants, but of course also due to the political order centred around nation states. It is used as part of a conceptual metaphor POLITICAL SYSTEMS ARE BUILDINGS, describing national legislation as a 'framework'. This indicates that in political scalar thinking the local is embedded or built into the national, and can therefore only work in lockstep with national government. A 2030 ambition is therefore rejected as not in line with the national framework:

(5) Und da ist es nun mal einfach so, egal was wir in der Stadt tun, das wird auf das Weltklima keinen nennenswerten Einfluss haben. Und es geht uns nicht daran, hier irgendwas zu verschieben oder auszusitzen, so wie das hier schon von einigen als Vorwand kam, sondern wir wollen einfach die gesetzlichen Vorgaben einhalten. Es gibt Bundesgesetze und da stehen auch Jahreszahlen drin [...] Aber so lange die so sind, wie sie sind, gilt das für uns als Kommune und dann müssen wir das sozusagen auch umsetzen. (20220223-DEBATTE-SR, CDU)

And the simple fact is that no matter what we do in the city, it won't have any significant impact on the global climate. And we are not interested in postponing or sitting things out, as some people have already used as an excuse, but we simply want to comply with the legal requirements. There are federal laws and there are also annual figures in them [...] But as long as they are as they are, they apply to us as a municipality and then we also have to implement them, so to speak.

Even more, the different timescales between the international (EU – 2050), the national (Germany changed their policy from 2050 to 2045) are described as confusing and confused. Here, time and space are clearly linked in this scale-crafting depoliticisation: the disunity in the different upper scales that are construed as the centre of policy making indicates for the opponents of local action that the lower level will not have the power to take action.

A particularly interesting intervention in the council debate however comes from the local energy provider, who also uses the metaphor of the framework: the national timescale as a legal framework, arguing that this should be a reason not to debate the issue in a party-political, partisan fashion ('parteilich'):

(6) Ich glaube wir haben die Gelegenheit, und das ist auch unsere Bitte an Sie, dieses Thema gar nicht parteilich zu diskutieren. Es kommt nämlich nur darauf an, dass wir annehmen, dass es einen Rechtsrahmen in Deutschland gibt und der sagt Klimaneutralität ist spätestens bis 2045 mit bestimmten Einschränkungen herzustellen. Das ist fünf Jahre früher als im Rest Europas und jeder weiß, dass 2045 nicht erst 2044 beginnen kann, sondern dass man das jetzt tun muss, weil wir so lange Vorläufe in unseren Investitionsplänen haben. Halle hat aus unserer Sicht einen Vorsprung. Den kann man auch nachweisen. Vorsprung gegenüber anderen Städten und Gemeinden in Deutschland. Den gilt es mindestens aufrecht zu erhalten. (20220113-DEBATTE-KAU, Lux – Stadtwerke)

I believe we have the opportunity, and this is also our request to you, not to discuss this topic in a partisan manner. What matters is that we assume that there is a legal framework in Germany that says climate neutrality must be achieved by 2045 at the latest, subject to certain restrictions.

That's five years earlier than in the rest of Europe and everyone knows that 2045 can't just start in 2044, but that we have to do it now because we have such long lead times in our investment plans. Halle has, in our view, a head start. We can prove it. A head start over other cities and municipalities in Germany. We must at least maintain this lead.

In a previous intervention in the main committee, the CEO of the Stadtwerke Halle had explained the complex problematic signals a public pledge of a 2030 net-zero aim would send to investors (see above). Here, in the main plenary debate, he strategically depoliticises time with reference to national regulation: 2045 is a legal target. He does, however, politicise place: the city is compared to other places within the state and described to have a head start ('Vorsprung'), which it should keep. This feeds into the legitimisation and translation strategy of the 'Roadmap 2045' project outlined above, but is also an orientation towards the local as competent and active from this local actor.

The local is generally politicised by various speakers in support of the 2030 target by framing it as the concrete, the zone of influence, often in connection with the catch term 'Stadtgesellschaft' (city community). Although a term widely used in debating local issues, it is here mainly used by proponents of local actions indexing the responsibility of local politicians for local people:

(7) Auf europäischer Bundes- und Landesebene kann die Politik viel theoretisch regeln, doch umgesetzt müssen die Klimaanpassungsmaßnahmen in den Städten und Gemeinden. Hier bei uns müssen wir mit den Herausforderungen für das direkte Lebensumfeld der Menschen umgehen und tragen eine Fürsorgepflicht für alle Mitglieder unserer Stadtgesellschaft. (20220223-DEBATTE-SR, Die Partei)

At the European federal and state level, politics can regulate a lot in theory, but climate adaptation measures must be implemented in the cities and communities. Here at home, we have to deal with the challenges for people's immediate living environment and have a duty of care for all members of our urban society.

Here, and in other examples, the core verb is 'umsetzen' (implement). It can indicate local power and responsibility as in example 7. However, it can also be understood as the lack of local power as in example 4 above, where the local is inextricably linked to the national framework, and local policy can only implement. But even in 7, the main scalar orientation is to national politics that needs to be implemented.

Conclusions: ontological and epistemological scales in local net-zero discourse

The presented case study demonstrates, how climate change discourse is deeply impacted by scalar structures of policy discourse. This is yet another element of wicked policy problems: the discursive coordination between political and geographic scales. While the collaboration between different scales – here the EU and a particular local council in Germany, on the surface seems a coordinating policy discourse in the sense of Schmidt's (2017) discursive institutionalism, the textual trajectories open it up to strategies of political discourse that would count as communicative discourses: Both the meaning of the policy initiative and the responsibility in the political system are renegotiated at the local level.

Contrary to some discussions particularly in geography (e.g. Moore, 2008; Papanastasiou, 2017a), both concepts of scales are needed to explain these complex processes:

Ontological scales are orders of discourse that influence meaning making when parts of text are recontextualised. Through textual trajectories, we can see that the reinterpretation and repolitisation of even small symbolic parts of policies can lead to unintended outcomes of a policy. In the case presented this was the reinterpretation and local delegitimation of 'climate city contracts', a genre that had different connotations which led to a decision against the proposed programme. However, this did not mean the EU policy was completely unsuccessful in this case: The funding call was the initiation of a coordinating discourse on more than one level: While the policy did not succeed in this case in initiating a coordinating discourse between Halle and other European cities by integrating Halle into the network of 'climate cities', as the policy instrument of a climate city contract did not travel well and the timeframe for the implementation did not fit the local context, it initiated a local coordinating discourse that highlighted local expertise for the energy transformation both in the public sector provision of energy, housing and transport, as well as in the involvement of the civil society. While there is of course global coordination needed, there are clear material actions that need to be coordinated locally and driven by local expertise: Changes in transport habits, localising food supplies, changing the housing stock, mitigating against climate change that is happening according to the local geography and many others. They need to be made visible in local policy discourse, and Halle attempted that both through the 'Roadmap' and the 'Climate Protection Council'. Of course, it remains to be seen how successful both policy tools introduced after this debate will be, and whether they can reduce some of the wickedness of the problem while keeping the focus on the local.

The analysis of local action also highlighted a further problem: a clear power differential between local policy actors – while the energy sector has direct access to policy makers and the necessary funding to initiate a project such as the 'Roadmap' quickly and comprehensively, this is more difficult for civil society initiatives such as the call for a climate protection council, which 2 years after the debate is still not up and running, but desperately needed make the voices of a broader city society heard.

Regarding epistemological scales, my analysis demonstrated how scalecraft is part of the political discourse on climate change: Politicians orient to established scalar structures such as the nation-state-centred political structure in states of the European Union and use the construction of central power and responsibility to depoliticise and delegitimise local action. Responsibility can strategically easily be abdicated to a higher, seemingly more powerful and appropriate level of politics. And even the voices that argue for local action partly construct the local as mainly dependant on the higher levels by framing local action as implementation ('umsetzen') rather than reframing the fight against climate change as a local action in its own right.

A final theoretical point needs to be made: In the discourse-analytical literature, policy construction is expected to reduce complexity and limit what can be said: According to Iedema and Wodak (1999), institutional policy processes lead to objectification, and Mulderrig et al. (2019, p. 6) argue that 'discursively construing the politically possible and desirable with respect to a policy problem is a necessarily reductive process, potentially limiting what can be said and thought about the social practice in question'. While this has been demonstrated in many cases and is due to the logic of decision-making, the case study analysed here indicates that cross-scales policy making leads to an increased complexity and visibility of voices in a policy making discourse, as described above. This is an effect of the interconnections

between coordinating and communicating discourses that are particularly strong across scales – arriving at a different scale, policy ideas are repoliticised and adapted to the local context. This of course makes policy writing at more global levels difficult, as local contexts are varied and local adaptation not easily predictable, which is why mission-led project approaches such as the ‘100 climate neutral cities by 2030’ are a sensible approach: They aim at local adaptation rather than at central regulation.

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