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How Rural is Rural Populism? On the Spatial **Understanding of Rurality for Analyses of Right-wing** Populist Election Success in Germany*

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ABSTRACT In this article, the authors take up the thesis of the narrative that the support for right-wing populist election successes is located in rural areas. For the case of the German right-wing populist party Alternative für Deutschland (AfD) the authors propose a complex definition of rurality, and perform a quantitative small-scale analysis of the national election results in Germany in 2017. They examine the potential connection between a high share of votes for the AfD and the rurality of a municipality. The results show that in eastern Germany, the fairly rural municipalities have comparatively high AfD vote shares, whereas in western Germany, the fairly rural and the non-rural municipalities have similar AfD vote shares. Therefore, it appears that the thesis that rural areas are the source of the support of right-wing populism applies to some, but not to all rural areas of Germany.

Introduction

In recent years, the rise of right-wing populist parties and movements has been observed in many countries. Often, the support for these parties is rooted mainly in rural areas. This phenomenon is also known as rural populism (see, e.g., Jadhav 2021; Mamonova, Franquesa, and Brooks 2020). It has, for example, been observed that the votes of people living in "flyover country" and "the Rust Belt" were crucial for the victory of Donald Trump in the 2016 U.S. presidential election (Rodríguez-Pose 2018). The rural vote for Trump has been put into the context of an intensified competition caused by the globalized market economy and a general decline in the incomes of specialty crop farmers in the Western states and farmers in the

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Southern and Midwestern states (Montenegro de Wit et al. 2021). Similarly, in Europe, the modernizing reforms of the Common Agricultural Policy of the EU have put pressure on many farmers to expand their businesses and intensify their farming through technology, and have led them to become increasingly dependent on bank loans, the food industry, and retail chains (Mamonova et al. 2020). By promising the prioritization of smallholder agriculture over multinational enterprises, Jobbik became the largest opposition party in Hungary in 2018, winning 19 percent of the vote (Lubarda 2020). Similarly, in Ukraine in 2019, right-wing populist parties attempted to win votes by making agricultural demands in response to growing rural resentment among farmers due to their fear of land grabs in the course of land reforms aimed at opening up the market (Mamonova et al. 2020). Moreover, in Italy, the government formed by the Lega party criticized the EU for "not defend[ing] Italian farmers against unfair international competition, thus threatening both the economic sustainability and the cultural relevance of Italian agriculture" (Iocco, Lo Cascio, and Perrotta 2020:743). While Turkey is not part of the EU, it is in its geographical neighborhood. Turkish right-wing populist regimes increased their support in rural areas by implementing social, agricultural, and infrastructure policies that target rural workers and small-scale farmers who have been negatively affected by oligarchic and urban-oriented policies (Edelman 2020).

However, it is important to note that not all of the issues in connection with rural areas that right-wing populist parties try to address are exclusively agricultural in nature (Bernstein 2020). Many right-wing populist parties and movements connect the idea of national identity and culture with rural areas. For example, the concept of national identity promoted by Jobbik is heavily based on centuries-old traditions of rural culture, and on the idea of thriving by using produce made in the home country (Lubarda 2020). Similarly, in Italy, the leader of Lega, Matteo Salvini, stated in front of supporters: "We want to eat and drink the fruits of our work, the fruits of our land, from Trento to Palermo" and "not those arriving from the other side of the world" (Iocco et al. 2020:743). Thus, Salvini described agricultural and food-producing rural areas as essential sources of national identity (Iocco et al. 2020). At the same time, as the example of the armed citizen militias of the decentralized Patriot movement in the U.S. shows, people who have a right-wing national identity and a xenophobic attitude live mainly in rural areas, as has been shown to be part of a historical continuity (Berlet and Sunshine 2019).

In other countries where rural areas have undergone substantial structural changes, and where agriculture and agrarian culture thus play a relatively minor role, economic decline and the deterioration of rural living conditions are often invoked to explain support for right-wing populism.

In England, 55–45 percent of the voters in rural areas voted for Brexit (Brooks 2019), with the vote for leaving the EU mainly being concentrated in northern and eastern rural areas of England that are disadvantaged and experiencing industrial decline (Rodríguez-Pose 2018). Moreover, the Spanish right-wing populist party Vox has attracted high levels of support in rural areas, and particularly in Castilian-speaking areas, by addressing the frustration and the feeling of being "left behind" among people living in areas that have experienced decades of agricultural decline, depopulation, and impoverishment (Mamonova et al. 2020). In Germany, as well, a connection between rurality and support for the recently successful right-wing populist party Alternative für Deutschland (AfD) has been reported (Diermeier 2020; Franz, Fratzscher, and Kritikos 2018; Richter and Bösch 2017), in particular for the rural areas of eastern Germany, which are experiencing negative population growth and economic challenges (Bergmann, Diermeier, and Niehues 2018). It has also been shown that the weaker the services of general interest are in an area, the higher the level of support is for the AfD (Diermeier 2020). Similarly, in France, the right-wing populist party Rassemblement National (formally Front National) is trying to win over structurally weak rural areas (Almeida 2018; Ivaldi and Gombin 2015). Marine Le Pen repeatedly visited medium-sized and small towns in France as part of her election campaign in 2013 with the title: "Tour de France of the Forgotten" (Almeida 2018:15, own translation). While claiming that political leaders are not interested in those areas, Le Pen promised to give them a public voice. In her 2017 campaign, Le Pen continued to address rural France, and focused on promising more support for services of general interest in rural areas (Almeida 2018). According to Christophe Guilluy, the willingness to vote for Le Pen in the 2017 election increases with increasing distance to the next train station (Altwegg 2018; Diermeier 2020). Indeed, Le Pen was able to gain support in western semi-urban and rural areas that were not previously far right-leaning (Almeida 2018). These conditions for the support of rightwing populism have been interpreted as a "revenge of the places that don't matter"—meaning that places and regions with limited development prospects and a growing perception of futurelessness causes many of these places "to revolt against the status quo [...] [via] the ballot-box in a wave of political populism with strong territorial, rather than [individual] social foundations" (Rodríguez-Pose 2018:189).

However, other research has generated more nuanced findings on the spatial location of right-wing populism, showing that support for right-wing populism is not located exclusively in rural areas. For example, the Tea Party movement in the U.S. is not primarily active in rural areas and small towns. Indeed, to have a greater impact, the movement has

held numerous events in larger and mid-sized cities, as well as in suburbs (Cho, Gimpel, and Shaw 2012). For anti-European voting, the factor of rurality matters less than for populism. Analyses that have considered moderate anti-European parties have reported that the direction of the effect reverses, with people in urban areas being more likely to vote for an anti-European party (Dijkstra, Poelman, and Rodríguez-Pose 2020). Moreover, besides in the poor, strongly agricultural, and historically right-wing rural areas with many migrant farm workers, the Spanish right-wing populist party Vox has achieved its greatest successes in urban areas where the upper-middle and upper classes reside; that is, around Madrid (Mamonova et al. 2020). Furthermore, the AfD has attracted support in areas of western Germany characterized by very high population densities and poor economic conditions, as well as in urbanized areas of southern Germany with a good economic situation (Bergmann et al. 2018).

Across the board, this research strand shows there is a strong—but not exclusive—linkage of support for right-wing populism with rural areas. However, the explanatory approaches for this association are thematically different, with some citing the agrarian dimension of these areas, and others referring to the economic decline of rural areas. Therefore, when studying right-wing populism at the spatial level with the inclusion of the aspect of rurality, it is necessary to take into account the specific policy approaches of the right-wing populist party under study, and to consider the party's strategy for appealing to rural areas. Furthermore, we note that while these previous studies focused on rural areas and sought to explain the spatial relevance of their support for right-wing populists, most did not define rurality explicitly (e.g., Berlet and Sunshine 2019; Edelman 2020; Iocco et al. 2020; Lubarda 2020; Mamonova et al. 2020; Montenegro de Wit et al. 2021). Therefore, it is not clear when an area is considered rural. This makes it difficult to adequately differentiate between rural areas and leaves readers with a vague understanding of which areas are being referred to (besides specific examples if mentioned). Only in some studies the understanding of rurality is made explicit, mostly referring to population density (e.g., Diermeier 2020; Dijkstra et al. 2020). However, an explicit and adequate understanding of rurality is relevant for the localization and further analysis of (rural) populism.

Using the example of the support for the AfD in rural areas in Germany, we want (1) to show what the party's content is, and how it tailors its message to rural areas; (2) to examine to what extent rural areas in Germany are heterogeneous, and, in turn, to explain why rural areas should not be lumped together as "left behind"; and (3) in the context

of our own quantitative analysis, to answer the question of whether the AfD really was mostly successful in rural areas in the 2017 national elections, while demonstrating the usefulness of relying on a differentiated definition of rurality. Thus, we would like to contribute a methodologically more nuanced treatment of the spatial-rural dimension of support for right-wing populism, and, in turn, to improve our understanding of the overall phenomenon. Furthermore, by helping to answer of the question of how policy measures should be directed spatially, our results can contribute to the development of successful policies.

The AfD and its Policy Approach for Rural Areas

Since its founding in 2013, the AfD party has gained notable levels of support in local, regional, and general elections. The AfD has been represented in the EU Parliament since 2014; it has been the largest opposition party in the German Bundestag since 2017; and it has been represented in all state parliaments since 2018 (Bücker, Schade, and Wiegerling 2019; Pfahl-Traughber 2019). Since 2015, research on the AfD has largely considered it to be a right-wing populist party (Bücker et al. 2019; Decker 2015; Franzmann 2018; Franzmann and Lewandowsky 2020; Jesse and Panreck 2017; Pfahl-Traughber 2019; Wolf 2017), in the sense of having a programmatic right-wing positioning with simultaneous recourse to populist rhetoric (Pfahl-Traughber 2019). Previous research has noted that it is not clear whether the AfD can also be labeled as right-wing extremist, a term that refers to the rejection of the democratic system, pluralism, and fundamental rights, while also negating the basic equality of people and using ethnicity as a prerequisite for political participation rights (Pfahl-Traughber 2019). However, the party as a whole cannot be classified as right-wing extremist, as it is split into three different wings. The liberal-conservative wing holds liberal economic positions; the national-conservative wing promotes positions on national identity; and the German nationalist wing has expressed some positions that can be considered right-wing extremist (Bücker et al. 2019; Jesse and Panreck 2017; Pfahl-Traughber 2019). Nevertheless, the party's development from its founding until 2017 is seen overall as a continuous movement toward the right (Bücker et al. 2019; Siri 2017), and partly toward the political right-wing extremist sphere (Pfahl-Traughber 2019; Siri 2017). All in all, the AfD is the first radical right-wing party with representation in the Bundestag since the end of National Socialism (Art 2018; Siri 2017).

The AfD was founded in 2013 as a response to EU financial and rescue policies that were implemented following the global financial crisis of 2007/08 (Bücker et al. 2019; Pfahl-Traughber 2019). The party wanted to

oppose the alleged lack of alternatives in EU policy, and to present other options (Pfahl-Traughber 2019). For example, the AfD called for the euro area to be dissolved, and for aid to countries in crisis to be refused (Bücker et al. 2019). With this criticism of EU monetary policy, the party filled a programmatic gap in the German political landscape of that time (Franzmann 2018). Currently, there are market liberal and social protectionist voices within the AfD (Bücker et al. 2019). In addition to the economic issues the debate about (Islamic) immigrants in Germany was the social context for the development of the AfD. The party has demanded changes in immigration law that would restrict immigration mainly to qualified workers; and it has opposed various forms of cultural modernization, such as women's quota and same-sex marriage (Bücker et al. 2019). In response to the emergence of xenophobic views and the dissatisfaction with asylum policy expressed by parts of the German population following the arrival of refugees into the country in 2015 (Bücker et al. 2019), anti-asylum, anti-immigration, and anti-Islam policies became the thematic focus for the 2017 national elections (Bücker et al. 2019; Franzmann and Lewandowsky 2020).

The AfD program for the 2017 national elections also included a rural agenda that suggested that rural areas lack infrastructure, jobs, and young people (Alternative für Deutschland 2016). Thus, the party's narrative strategy has picked up on elements of the popular media discourse on so-called "left behind" rural areas. According to this narrative, infrastructure policies have been changed so that forms of infrastructure such as train stops, health care facilities, Internet service, food provision, or even state public administration offices are only constructed or maintained (by private companies) when they are profitable enough. This is becoming less likely given that economic decline and out-migration in interrelation with infrastructure decline have lessened the demand for such services. The consequence of these policies has been that infrastructure in rural areas has thinned out and undergone a general process of decay, it is stated in the discourse (Deppisch 2021).

In their party program, the AfD criticizes the current policy instruments for the funding of rural areas as ineffective, and states that the promise of providing equal living conditions has not been fulfilled. The AfD, by contrast, promises to offer rural areas better prospects by supporting the agricultural and the mid-sized business sectors, as well as services of general interest in rural areas. According to the party's program, the AfD stands for "targeted investments and a wise settlement policy [...] for young families in rural areas" (Alternative für Deutschland 2016:93, own translation).

Finally, the AfD program addresses the diversity of rural areas, and calls for the option of applying individualized approaches to development. The party promises to decentralize political responsibilities and decision-making competences to the extent that it is reasonable to do so, and to promote the agency of the municipalities, including by reforming the distribution of finances. Until this ideal situation is achieved, the AfD said it intends to improve the infrastructure in these areas by providing them with access to fast Internet service and to mobile supply systems for items such as food (Alternative für Deutschland 2016).

As it has done in its characterization of the economic crisis of 2007/08 and the immigration of refugees (also called the refugee crisis of 2015), the AfD has described the development of rural areas in strongly negative terms, portraying it as a frightening demographic-infrastructural crisis. However, their suggested solutions to this crisis tend to be imprecise. What, for example, does a *wise settlement policy* look like? And where is the *reasonable boundary* for the decision-making competences of a municipality? The party's policy recommendations are either non-existent or very vague.

When we compare the AfD's program with that of other movements and parties of international rural populism in countries such as Ukraine or Turkey, it becomes clear that agricultural issues are less relevant to the AfD's rural agenda. The consequences of the agricultural policy of the EU for farmers are not the primary focus of the AfD's strategy to address the rural population. In addition, the cultural values proclaimed by the AfD are not linked to rural lifestyles or agriculture, as is the case for populist parties in countries such as Hungary and Italy. Instead, the AfD's program, like those of populist parties in France or Great Britain, is based on policy strategies aimed at rural regions where the economic, demographic, and infrastructure conditions are declining. Overall, we see that in line with the discourse on "left behind" rural areas, the AfD paints a mainly negative picture of rural life. Thus, the AfD contributes to the stigmatization of rural areas as hopeless, declining spaces without any prospects. At the same time, the party uses its own scaremongering to fuel its political success. Therefore, in the following chapter, we would like to take a more differentiated look at the structural conditions of rural areas in Germany.

The Structural Diversity of Rural Areas in Germany

Since the early 2000s, Germany's overall demographic development has been characterized by population decline and aging (Federal Office for Research on Building, Urban Affairs and Spatial Development 2017). Nevertheless, in the following, we would like to draw attention to current

small-scale differences by considering the country's population development (natural balance and migration) from 2012 to 2017. In most rural districts in eastern Germany, but also in parts of western Germany, population development was rather stagnant or negative over this period, with the population growing at a rate of 1.2 percent or less. Areas with population increases of 2.5 percent or more were located primarily in the south, in isolated parts of the northwest, and in the suburbs around Berlin in the east (Thünen Institute of Rural Studies 2020). It is predicted that by the year 2035, about 60 percent of all districts will have lost population. Rural districts in eastern Germany are likely to be particularly affected. Since the total population is expected to remain virtually unchanged, regional differences will increase (Sixtus et al. 2019).

When we look at Germany's economic development, we see that employment levels have generally grown in recent decades (Federal Office for Research on Building, Urban Affairs and Spatial Development 2017). In 2016, the average GDP (hereafter always in €1,000 per inhabitant) in Germany was 35.61. At 47.23, the average GDP in urban districts was clearly higher than that in rural regions, at 31.96 (Thünen Institute of Rural Studies 2020). This urban-rural divide has been observed in the past as well (Maretzke, Ragnitz, and Untiedt 2019). However, in 2017, there were also differences between rural regions. Rural districts with an average GDP of 28.1 or less were found mainly in eastern Germany, and to a lesser extent in western German districts. Rural districts with an average GDP of 31.5 or higher were mainly found in southern Germany and in the northwest (Thünen Institute of Rural Studies 2020). However, from 2011 to 2015, a relatively positive trend in GDP development was observed in eastern German regions in general, as well as in western Germany, particularly in structurally weak, peripheral regions (Maretzke et al. 2019).

To provide an impression of the availability and accessibility of services of public interest, a selection of examples follows. As many indicators show a west–east divide, we want to explicitly state that the eastern German regions continue to have the highest rates of preschool children in day care (Küpper and Peters 2019). With regard to broadband Internet access, it should be noted that in 2016, there were municipalities spread all over Germany in which less than 60 percent of households had Internet access with a download speed of at least 50 megabit per second. Many of the areas with high-speed broadband access were in large cities (Federal Office for Research on Building, Urban Affairs and Spatial Development 2017).

When we look at access to pharmacies, general practitioners, supermarkets, schools, and regular public transport, we see that poor access

is particularly prevalent in rural areas far from urban centers (Sixtus et al. 2019). It should be noted that more than 98 percent of the German population can reach supermarkets (in 2013) or general practitioners (in 2016) within 10 minutes by car. Thus, it is clear that there is no emergency when it comes to access to services of general interest. However, approximately 18 percent of the population need over 30 minutes by foot to access these services of public interest (Neumeier 2014, 2017). Accordingly, the assessment of the supply situation in these cases is strongly dependent on having access to a car, as well as the financial ability to use it. Public transport is not an alternative, because in 2017 around nine million people were not within walking distance of a frequently and regularly serviced public transport station (Federal Office for Research on Building, Urban Affairs and Spatial Development 2017).

Thus, it is clear that as a general statement, the claims that poorly situated rural areas are demographically declining or are suffering economically or in access to infrastructure have no empirical basis. Even if there are differences between urban and rural areas, a more nuanced picture of these differences is needed. In most respects, the southern regions perform better than the northern or eastern regions. All in all, we see that the mostly negative image of rural areas in the debate on rural populism does not match the actual structural situation of rural areas in Germany.

Are Rural Areas in Germany the Main Source of the AfD's Success?¹

When we look at the indicators considered in the various analyses explaining the AfD's vote share in the election, it is striking that the authors included the influence of the regions' rurality in their analyses. However, while they view rurality as a relevant factor, their operationalization of rurality is greatly simplified. Rurality is defined either by population density (Diermeier 2020; Richter and Bösch 2017) or by the density of craft enterprises (Franz et al. 2018).

A more complex approach on rurality is the typology of rural areas by Küpper (2016), who combined the spatial concept of real space, which describes space along its functional-material structures, with a relational understanding of space, which comprises the spatial relationship of a unit of space to its surrounding units of space. "In rural areas, a combination of spatial features is understood in terms of low settlement density, loose housing development, and a landscape characterized by agricultural and forestry areas, as well as a small number of inhabitants in the catchment

 $^{^1}$ This chapter of the article is partly based on a short, reworked German-language article for the general public (Deppisch, Klärner, and Osigus 2019).

area and a location peripheral to large centers" (Küpper 2016:4, own translation).

According to this definition, rural areas are no longer seen as dual in the sense of representing a clear urban-rural contrast, but as belonging to a spectrum (see Figure 1). This spectrum starts with very rural (i.e., very sparsely populated, remote) areas in green, continues with fairly rural (i.e., moderately sparsely populated, remote) areas, and ends with non-rural (i.e., very densely populated, central) areas in blue. In addition to very rural municipalities, small and medium-sized towns without proximity to a center are also counted as rural areas. When we apply this definition of rurality, about 90 percent of Germany is rural, and over 50 percent of the population live in rural areas (Küpper 2020).

We think that the understanding of rurality according to Küpper (2016) depicts the complexity of rural areas more adequately than operationalizations that refer only to either population density or the density of craft enterprises. In the following, we wish to show how this more nuanced understanding of rurality can be applied to the analysis of the localization of the support for the AfD and how the type of approach affects the results in terms of how rural the support for right-wing populism in Germany actually is.

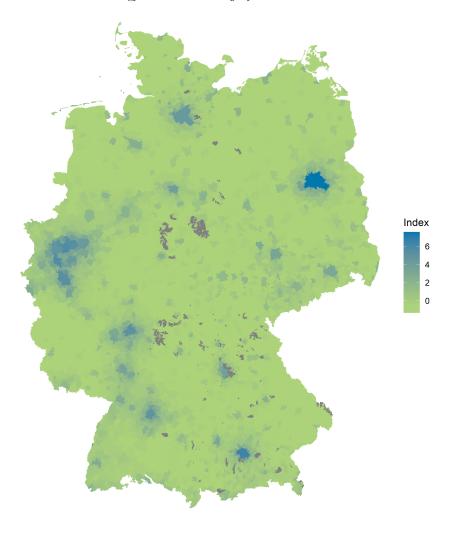
Data and Methods

On the basis of this differentiated understanding of rural areas, we have aggregated the election results of the municipal polling stations as municipal electoral districts provided by the Federal Returning Officer² to the level of the municipalities in our region-specific analysis. Using this approach, all election results in the constituencies, as well as the mail-in voters, some of whom form independent municipality-wide constituencies, are included in the results of a municipality, and form the basis for approximately 11,000 municipal election results. In the typology of rural areas by Küpper (2016), the rurality was calculated at the level of the municipal association. According to this index value, the index values of the association were assigned to the municipalities belonging to the association for this analysis.

A generalized additives model (GAM) is now applied to this initial dataset. The GAM is a generalized linear model extended by a non-parametric part (Hasti and Tibshirani 1990; Wood 2006):

$$y_1 = f_1\left(x_{1i}\right) + f_2(x_{2i}) + \eta_i^{lin} + \varepsilon_i = f_1\left(x_{1i}\right) + f_2(x_{2i}) + \beta_1 * x_{3i} + \beta_2 * x_{4i} + \varepsilon_i = \eta_i^{add} + \varepsilon_i$$

²For the data at constituency level as a zip file, see The Federal Returning Officer (2017).



Data landatlas.de; © GeoBasis-DE / BKG 2018, bundeswahlleiter.de

Figure 1. Rurality on the Level of Municipalities.

Here, the actual influence of each covariate is not modeled and smoothed linearly, but is instead modeled as non-parametric. For each point in the scatter-plot, a relationship between its position and the distances to other points at its position is considered and weighted (e.g., by

weighing lesser outliers, considering a normal distribution), and the smoothing parameters are estimated.³ Simplified, this results in⁴:

$$g(\mu) = f_1(x_1) + f_2(x_2) + X * \theta$$

where μ is the expected value, X corresponds to the design matrix, x_1 and x_2 are the AfD election results and the rurality value; and θ represents the parameter vectors, f_1 and f_2 are estimated as smoothing parameters, which also applies to θ . Use Hasti and Tibshirani (1990:49)

$$GCV = \frac{1}{n} \sum_{i}^{n} \left\{ \frac{y_1 - \hat{y}_1}{1 - \frac{1}{n} tr(H)} \right\}^2$$

as a cross-validation criterion. Here, tr(H) it is applied as a trace of the smoothing matrix, which is minimized. This is followed by an estimation of the model by penalized iterative reweighted least squares (Wood 2006:169–70, 137–9), which iteratively minimizes the sum of the penalized weighted least squares

$$\sum_{i}^{n} w_{i} \left(y_{i} - \eta_{i}^{add} \right)^{2}$$

with the weights w, in several steps. As soon as the coefficients remain the same, they result in the parameters of the estimation in the fitted model. In the scatter diagrams, these results are shown with a line, and additionally with the 95 percent confidence interval. R (R Core Team 2020)⁵ was used for the analysis.

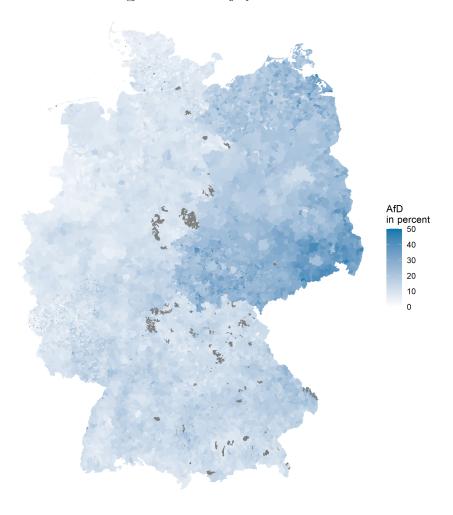
Results

The results of our analysis only partially confirm the link between rurality and higher levels of support for the AfD in the election. To get a first impression, we compare the depictions of the rurality with the depiction of the AfD's election results both at the municipal level, and separately as a spectrum (see Figures 1 and 2). In this comparison, it is already noticeable that the very rural municipalities are not necessarily the municipalities with the highest levels of support for the AfD in the election.

³The freely selectable height of the individual functions can lead to an identification problem; therefore, the functions are centered here.

⁴Whereby the expected value of the dependent variable and the predictor with a response function $h(\eta)$ is linked with a link function $g(\mu)\eta$.

⁵Version: 3.4.4; inter alia used packages: mgcv, gam, ggplot2, sf.



Data landatlas.de; © GeoBasis-DE / BKG 2018, bundeswahlleiter.de

Figure 2. AfD Election Results in the German National Election 2017.

Next, we look at the distribution of all German municipalities based on their levels of support for the AfD in the election as well as their rurality (see Figure 3). We see that municipalities that are on the borderline between very rural and fairly rural (index value at approx. –0.8) have the highest average levels of support for the AfD in the election, at approx. 15 percent. In contrast, the average levels of support for the AfD in the election of very rural (approx. –1.3) and non-rural municipalities

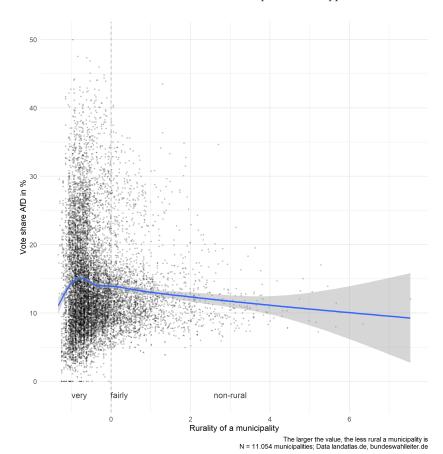


Figure 3. Vote Shares of the AfD in Relation to Rurality.

(approx. 2.0 and above) are below this level, with lows of approx. 10 percent. While the average levels of support for the AfD in the election of very rural municipalities rise sharply with declining rurality, the average levels of support for the AfD in the election of the fairly rural and non-rural municipalities fall more slowly with declining rurality.

If we analyze eastern and western Germany separately, however, a more differentiated picture emerges (Figure 4). The levels of support for the AfD in the election in the very and fairly rural municipalities of eastern German states differ from those in the non-rural municipalities. The share of votes for the AfD in the very rural municipalities initially rises from approx. 21 percent to approx. 28 percent as the rurality declines. Slightly below-average rural municipalities with an index value

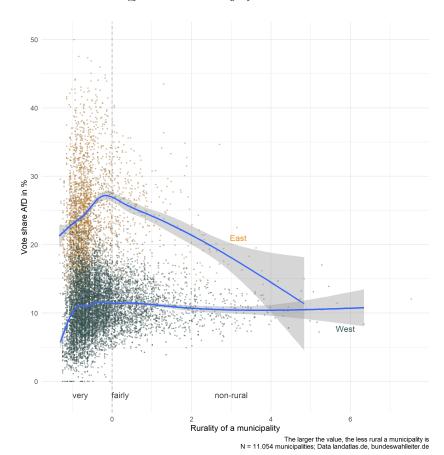


Figure 4. Vote Shares of the AfD in Relation to Rurality Differentiated by Eastern and Western Germany.

in the range of approx. -0.2 thus show the highest levels of support for the AfD in the election. However, these levels are still well above those of non-rural municipalities. Average and below-average rural municipalities with an index value of about -0.2 or higher show a declining average level of support for the AfD in the election. For eastern Germany, these findings confirm to some extent, albeit not as a linear trend, the obvious correlation between rural areas and high AfD vote shares in the election, especially in the fairly rural municipalities.

For western Germany, on the other hand, a different picture emerges. The average levels of support for the AfD in the election of very rural municipalities with an index value of -1.3 are around 6 percent here. As the rurality declines, the AfD's vote shares in the election in the

municipalities initially rise. However, the curve of the relationship between the levels of support for the AfD in the election and rural areas stabilizes at an index value of about -0.5 for fairly rural municipalities. The level of the average AfD vote share remains stable for fairly rural to very non-rural municipalities (with index values of about 0.3 to about 6, in a range from about 11.5 percent to 10.5 percent of the vote share). Regardless of how much more non-rural the municipalities become from this point on, the average AfD vote share remains in a similar range, and thus always above the level of those of very rural municipalities even in non-rural and very non-rural municipalities. Accordingly, in western Germany, we observe no connection between rurality and the level of support for the AfD in the election. On the contrary, we can see here that the level of support for the AfD in the election is lower in very rural municipalities than in fairly rural and non-rural municipalities. Moreover, we can observe that the average level of support for the AfD in the election is generally much higher in eastern German municipalities than in western German municipalities. Only in the case of very non-rural municipalities, from an index value of about 4, do the curves converge.

The interpretation of the difference in level between eastern and western German municipalities should be treated with caution. As the overall AfD results of the eastern German municipalities are at a higher level than those of the western German municipalities, the impression could arise that the eastern German municipalities are mainly responsible for the electoral success of the AfD in the 2017 federal elections. However, this is not the case. Of the 94 seats that the AfD held in the Bundestag in 2017, 62 seats, that is most, were due to votes of western Germany (excluding Berlin) (The Federal Returning Officer 2020). While in relative terms, the share of votes for the AfD is higher in the eastern German municipalities, the western German municipalities have more relevance for the overall result because many more voters reside in western than in eastern German municipalities.

In summary, contrary to the public discourse about rural areas as places with strong support for right-wing populism—which is also echoed to some extent in the research literature—we can only partly and to a limited extent confirm the connection between the rurality of a region and a higher level of support for the AfD in the election. Our results reveal a clear east-west difference. In eastern Germany, the fairly rural municipalities show a higher level of support for the AfD in the election than the urban municipalities. No similar connection is found for western German municipalities. Here, the very rural municipalities have equal or even lower levels of support for the AfD in the election relative to the

fairly rural and non-rural municipalities. For the development of policy measures in sight of the expansion of right-wing populism, these results show that it is important not to focus only on the smallest villages. In particular, the differentiation between very and fairly rural shows that small and medium-sized towns should not be forgotten. Especially in the case of western Germany, large cities are not immune to right-wing populism, too. Therefore, we should refrain from stigmatizing very rural areas as the roots of right-wing populism.

Discussion and Conclusion

The starting point of this article was the observation that in many parts of the world, right-wing populist movements and parties are finding support in rural areas, and explicitly address the people living in these areas in their political agendas. Overall, this phenomenon is referred to as rural populism. A closer look shows that this phenomenon can have different manifestations (which may also overlap in their concrete manifestations). There are right-wing populists who refer to the economic plight of farmers in rural areas, as is the case in Ukraine and Turkey. Other populists, however, focus on the preservation of rural traditions that are of central importance for national cultural identity, as is the case in Hungary and Italy. Last but not the least, there are right-wing populists who are primarily seeking the votes of people living in rural areas with declining economic, demographic, and infrastructure conditions by promising better prospects and equal living conditions in these areas, as we have explained in more detail using the example of the AfD in Germany.

In this context of the debate on rural populism and "the revenge of the places that don't matter" (Rodríguez-Pose 2018:189), it is clear that rural areas are often portrayed as structurally weak, declining areas without any prospects. The AfD also uses primarily this narrative, which is known in the German public media discourse as the story of the "left behind" rural areas (Deppisch 2021). Accordingly, rural areas are portraved in a homogeneous manner, and are usually cast in a purely negative light. We have shown, however, that there is considerable structural diversity in the rural areas across Germany. In addition to the less well-positioned rural areas in northern and eastern Germany, there are also many prosperous rural areas in southern Germany. This differentiation is important, because the stigmatization of rural areas could make them less attractive to businesses and individuals who might choose to locate there, and it could also reduce the chances of the implementation of potentially successful policies. For example, the Berlin scientist Reiner Klingholz demanded a demolition premium for those rural areas that could no longer be saved (see, e.g., Wunder 2014). Such policy approaches could exacerbate the phenomenon of rural populism by apparently confirming the feeling of being "left behind" and of hopelessness, as well as the belief that people in rural areas lack prospects, and that politicians no longer care about them.

Moreover, we then took a closer look at the widespread claim that support for the AfD is particularly concentrated in rural areas. When answering this descriptive question, how rurality is understood is particularly relevant. When we looked at previous research on the success of the AfD in the election using structural data, it is striking that these studies used a relatively simplified definition of rurality that referred to either the population density or the density of craft enterprises. In this context, we proposed the application of a more differentiated definition of rurality when interpreting the location of the support for the AfD in the election. We relied on a typology of rural areas in which an area is considered more rural the lower the settlement density or the number of people in the catchment area is, the looser the housing development is, the more peripheral the area is, and the more the landscape is characterized by forestry or agriculture.

By using an estimation on the basis of a GAM, we showed that in eastern Germany, the AfD is more popular in fairly rural areas than in very rural and non-rural areas. We also found that in western Germany, the level of support for the AfD is fairly high in rural areas as well as in nonrural areas, and is lower in the very rural areas. Therefore, we rejected the hypothesis that the more rural a region is, the higher the AfD's vote share in the election is per se. Our finding that right-wing populism is not an exclusively rural phenomenon is also in line with observations made in the international debate on rural populism. It is, for example, similar to arguments made about the Tea Party movement in the U.S. and the Vox party in Spain. However, the question of the localization of support for populism is important to ensure that policies are properly tailored spatially. For example, in the aftermath of the AfD's electoral success in the 2017 national election, and against the background of the far-ranging discourse about rural areas being "left behind," a new department for the homeland was established in the Federal Ministry of the Interior. At the beginning of the current legislative period, this ministry also initiated the Commission for Equal Living Conditions, which aims to improve social cohesion and equal living conditions, including in rural areas. Our results indicate that policies in this area should be directed not only at very rural areas of eastern Germany, but also at fairly rural areas of eastern and western Germany, as well as at non-rural areas. Thus, our results can contribute to the debate on rural populism and the

development of spatially differentiated policies, and help to ensure that the discourse of "left behind" right-wing populist rural areas does not overshadow policy development.

Of course, it should be emphasized that an analysis of the spatial contextual factors that are relevant for the success of the AfD that is based on structural data is not comprehensive if only rurality is considered. In order to determine comprehensively which spatial characteristics are associated with places with high levels of support for the AfD in the election, differentiated regression analyses that consider socioeconomic, demographic, and other factors in addition to rurality are necessary (as has been attempted by, e.g., Bergmann, Diermeier, and Niehues 2017; Diermeier 2020; Franz et al. 2018; Grözinger 2017; Kurtenbach 2019; Richter and Bösch 2017).

Furthermore, our approach is on a spatial level and thus cannot make any statements about individual voting behavior, but on spatial contextual factors. An inference from statements on a spatial level to individual behavior is not permissible, and is called an ecological fallacy (Schoen 2014; Winkler 2014). If, for example, a correlation is found in a spatial unit between a high AfD election result and a high average age, it must not be concluded directly that mainly elderly people vote for the AfD. From these results, we only know that where many older people live, an above-average AfD election result can be found. Therefore, analyses of AfD voting behavior based on individual data are also needed (see e.g., Arzheimer and Berning 2019; Berbuir, Lewandowsky, and Siri 2015; Kohlrausch 2018; Lengfeld 2017; Lux 2018; Schmitt-Beck, van Deth, and Staudt 2017; Schwarzboezl, and Fatke 2016). Overall, we think that both the analysis of spatial characteristics and individual voting behavior provide valuable insights for understanding the phenomenon of right-wing populism as a whole by complementing each other.

However, our core insight is that we showed that the operationalization of rurality is crucial for the analysis of where the levels of support for the AfD are highest. Thus, with our analytical approach, we propose the specific operationalization of the factor of rurality in this research context. It is important to statistically examine whether the connections established in past structural data analyses based on a simplified understanding of rurality remain valid when a more complex definition of rurality is used. Therefore, for further studies, we suggest applying a more complex understanding of rurality, such as the typology we proposed, to the topic of rural populism, as doing so will provide us with a more accurate and thorough picture of this phenomenon.

References

- Almeida, Dimitri. 2018. "Penser l'extrême droite en milieu rural: un récit de deux France?" apropos [Perspektiven auf die Romania] (1):13–32. https://doi.org/10.15460/apropos.1.1261.
- Alternative für Deutschland. 2016. "Programm für Deutschland. Das Grundsatzprogramm der Alternative für Deutschland." Retrieved September 21, 2018 (https://www.afd.de/wp-content/uploads/sites/111/2018/01/Programm_AfD_Online-PDF_150616.pdf).
- Altwegg, Jürg. 2018. "Verdammte der Globalisierung." Frankfurter Allgemeine Zeitung, November 27. Retrieved February 11, 2021 (https://www.faz.net/aktuell/feuilleton/debatten/christophe-guilluy-kritisiert-die-medien-und-die-elite-15910696.html).
- Art, David. 2018. "The AfD and the End of Containment in Germany?" German Politics and Society 36(2):76–86. https://doi.org/10.3167/gps.2018.360205.
- Arzheimer, Kai and Carl C. Berning. 2019. "How the Alternative for Germany (AfD) and their Voters Veered to the Radical Right, 2013–2017." *Electoral Studies* 60:1–10. https://doi.org/10.1016/j.electstud.2019.04.004.
- Berbuir, Nicole, Marcel Lewandowsky, and Jasmin Siri. 2015. "The AfD and Its Sympathisers: Finally a Right-Wing Populist Movement in Germany?" *German Politics* 24(2):154–78. https://doi.org/10.1080/09644008.2014.982546.
- Bergmann, Knut, Matthias Diermeier, and Judith Niehues. 2017. "Die AfD: Eine Partei der sich ausgeliefert fühlenden Durchschnittsverdiener?" Zeitschrift für Parlamentsfragen 48(1):57–75. https://doi.org/10.5771/0340-1758-2017-1-57.
- 2018. "Ein komplexes Gebilde. Eine sozio-ökonomische Analyse des Ergebnisses der AfD bei der Bundestagswahl 2017." Zeitschrift für Parlamentsfragen 49(2):243–64. https://doi.org/10.5771/0340-1758-2018-2-243.
- Berlet, Chip and Spencer Sunshine. 2019. "Rural Rage: The Roots of Right-Wing Populism in the United States." *The Journal of Peasant Studies* 46(3):480–513. https://doi.org/10.1080/03066150.2019.1572603.
- Bernstein, Henry. 2020. "Unpacking 'Authoritarian Populism' and Rural Politics: Some Comments on ERPI." *The Journal of Peasant Studies* 47(7):1526–42. https://doi.org/10.1080/03066150.2020.1786063.
- Brooks, Sally. 2019. "Brexit and the Politics of the Rural." *Sociologia Ruralis* 60(4):790–809. https://doi.org/10.1111/soru.12281.
- Bücker, Sinah, Sarah M. Schade, and Ulrike Wiegerling. 2019. "Die AfD: Woher sie kommt, wie sie funktioniert, wer sie unterstützt." Pp. 27–56 in *Die AfD—Psychologisch Betrachtet*, edited by E. Walther and S. D. Isemann. Wiesbaden: Springer Fachmedien.
- Cho, Wendy K. T., James G. Gimpel, and Daron R. Shaw. 2012. "The Tea Party Movement and the Geography of Collective Action." *Quarterly Journal of Political Science* 7:105–33. https://doi.org/10.1561/100.00011051.
- Decker, Frank. 2015. "Alternative für Deutschland und Pegida: Die Ankunft des neuen Rechtspopulismus in der Bundesrepublik." Pp.75–90 in Rechtspopulismus und Rechtsextremismus in Europa. Die Herausforderung der Zivilgesellschaft durch alte Ideologien und neue Medien, edited by F. Decker, B. Henningsen, and K. Jakobsen. Baden-Baden: Nomos.
- Deppisch, Larissa. 2021. "Where People in the Countryside Feel Left Behind Populism has a Clear Path"-An Analysis of the Popular Media Discourse on how Infrastructure Decay, Fear of Social Decline, and Right-Wing (Extremist) Values Contribute to Support for Right-Wing Populism." Thünen Working Paper 119a. Braunschweig: Johann Heinrich von Thünen-Institut. https://doi.org/10.3220/WP1613460042000.
- Deppisch, Larissa, Klärner Andreas, and Osigus Torsten. 2019. "Ist die AfD in ländlichen Räumen besonders erfolgreich?." Wissen Schafft Demokratie (5):74–87. https://www.idz-jena.de/fileadmin/user_upload/PDFS_WsD5/WEB_Idz_WsD_05.pdf.
- Diermeier, Matthias. 2020. "Ist mehr besser? Politische Implikationen der disparaten Daseinsvorsorge in Deutschland." Zeitschrift für Politikwissenschaft 30(4):539–68. https://doi.org/10.1007/s41358-020-00239-y.

- Dijkstra, Lewis, Hugo Poelman, and Andrés Rodríguez-Pose. 2020. "The Geography of EU Discontent." *Regional Studies* 54(6):737–53. https://doi.org/10.1080/00343 404.2019.1654603.
- Edelman, Marc. 2020. "From 'Populist Moment' to Authoritarian Era: Challenges, Dangers, Possibilities." *The Journal of Peasant Studies* 47(7):1418–44. https://doi.org/10.1080/03066150.2020.1802250.
- Federal Office for Research on Building, Urban Affairs and Spatial Development [Bundesinstitut für Bau-, Stadt- und Raumforschung]. 2017. Raumordnungsbericht 2017: Daseinsvorsorge sichern. Bonn: Bundesinstitut für Bau-, Stadt- und Raumforschung. Retrieved June 10, 2020 (https://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/sonderveroeffentlichungen/2017/rob-2017-final-dl.pdf;jsessionid=3746E 19F2538D98511659D523A0DB575.live11291?__blob=publicationFile&v=1).
- Franz, Christian, Marcel Fratzscher, and Alexander S. Kritikos. 2018. AfD in dünn besiedelten Räumen mit Überalterungsproblemen stärker. Berlin: Deutsches Institut für Wirtschaftsforschung. Retrieved July 27, 2018 (https://www.diw.de/documents/publikationen/73/diw_01.c.578543.de/18-8-3.pdf).
- Franzmann, Simon T. 2018. "Von der Euro-Opposition zur Kosmopolitismus-Opposition. Der Fall der deutschen AfD." Pp. 365–402 in *Parteien und die Politisierung der Europäischen Union*, edited by L. Anders, H. Scheller, and T. Tuntschew. Wiesbaden: Springer VS.
- Franzmann, Simon T. and Marcel Lewandowsky. 2020. *Populismus? Populismen!: Programmatische Heterogenität rechtspopulistischer Parteien in Westeuropa.* Bonn: Bonner Akademie für Forschung und Lehre praktischer Politik. Retrieved February 5, 2021 (https://www.bapp-bonn.de/wp-content/uploads/BAPP_Publikation_Forschungs projekt_Populismus_final.pdf).
- Grözinger, Gerd. 2017. Der Erfolg der AfD bei der Bundestagswahl 2017: Eine regionalorientierte Analyse. Flensburg: Europa-Universität Flensburg. Retrieved June 10, 2020 (https://www.researchgate.net/publication/320584608_Der_Erfolg_der_AfD_bei_der_Bundestagswahl_2017_Eine_regionalorientierte_Analyse).
- Hasti, Trevor and Robert Tibshirani. 1990. Generalized Additive Models. Boca Raton, FL: Chapman & Hall/CRC.
- Iocco, Giulio, Martina Lo Cascio, and Domenico C. Perrotta. 2020. "Close the Ports to African Migrants and Asian Rice!': The Politics of Agriculture and Migration and the Rise of a 'New' Right-Wing Populism in Italy." *Sociologia Ruralis* 60(4):732–53. https://doi.org/10.1111/soru.12304.
- Ivaldi, Gilles and Joel Gombin. 2015. "The Front National and the New Politics of the Rural in France." Pp. 243–64 in Rural Protest Groups and Populist Political Parties, edited by D. Strijker, G. Voerman, and I. Terluin. Wageningen: Wageningen Academic.
- Jadhav, Adam. 2021. "Was It Rural Populism? Returning to the Country, 'Catching Up', and Trying to Understand the Trump Vote." *Journal of Rural Studies* 82:553–69. https://doi.org/10.1016/j.jrurstud.2020.10.008.
- Jesse, Eckhard and Isabelle-Christine Panreck. 2017. "Populismus und Extremismus. Terminologische Abgrenzung das Beispiel der AfD." *Zeitschrift für Politik* 64(1):59–76. https://doi.org/10.5771/0044-3360-2017-1-59.
- Kohlrausch, Bettina. 2018. Abstiegsängste in Deutschland: Ausmaβ und Ursachen in Zeiten des erstarkenden Rechtspopulismus. Düsseldorf: Hans-Böckler-Stiftung. Retrieved July 27, 2018 (https://www.boeckler.de/pdf/p_fofoe_WP_058_2018.pdf).
- Küpper, Patrick. 2016. Abgrenzung und Typisierung ländlicher Räume. Braunschweig: Johann-Heinrich von Thünen-Institut. https://doi.org/10.3220/WP1481532921000.
- 2020. "Was sind eigentlich l\u00e4ndliche R\u00e4ume?" Pp. 3–7 in L\u00e4ndliche R\u00e4ume. Informationen zur politischen Bildung (343), edited by Bundeszentrale f\u00fcr politische Bildung. Bonn: Bundeszentrale f\u00fcr politische Bildung.
- Küpper, Patrick and Jan C. Peters. 2019. Entwicklung regionaler Disparitäten hinsichtlich Wirtschaftskraft, sozialer Lage sowie Daseinsvorsorge und Infrastruktur in Deutschland und

- seinen ländlichen Räumen. Braunschweig: Johann-Heinrich von Thünen-Institut. https://doi.org/10.3220/REP1547565802000.
- Kurtenbach, Sebastian. 2019. Räumliche Aspekte des Rechtspopulismus. Düsseldorf: Forschungsinstitut für gesellschaftliche Weiterentwicklung. Retrieved June 14, 2020 (https://www.ssoar.info/ssoar/bitstream/handle/document/66435/ssoar-2019-kurtenbach-Raumliche_Aspekte_des_Rechtspopulismus.pdf?sequence=1&isAll owed=y&lnkname=ssoar-2019-kurtenbach-Raumliche_Aspekte_des_Rechtspopulismus.pdf).
- Lengfeld, Holger. 2017. "Die 'Alternative für Deutschland': eine Partei für Modernisierungsverlierer?" Kölner Zeitschrift für Soziologie und Sozialpsychologie 69(2):209–32. https://doi.org/10.1007/s11577-017-0446-1.
- Lubarda, Balsa. 2020. "'Homeland Farming' or 'Rural Emancipation'? The Discursive Overlap between Populist and Green Parties in Hungary." *Sociologia Ruralis* 60(4):810–32. https://doi.org/10.1111/soru.12289.
- Lux, Thomas. 2018. "Die AfD und die unteren Statuslagen. Eine Forschungsnotiz zu Holger Lengfelds Studie Die 'Alternative für Deutschland': eine Partei für Modernisierungsverlierer?" Kölner Zeitschrift für Soziologie und Sozialpsychologie 70(2):255–73. https://doi.org/10.1007/s11577-018-0521-2.
- Mamonova, Natalia, Jaume Franquesa, and Sally Brooks. 2020. "'Actually Existing' Right-Wing Populism in Rural Europe: Insights from Eastern Germany, Spain, the United Kingdom and Ukraine." *The Journal of Peasant Studies* 47(7):1497–525. https://doi.org/10.1080/03066150.2020.1830767.
- Maretzke, Steffen, Joachim Ragnitz, and Gerhard Untiedt. 2019. Betrachtung und Analyse von Regionalindikatoren zur Vorbereitung des GRW-Fördergebietes ab 2021 (Raumbeobachtung). Münster, Bonn, Dresden: Gesellschaft für Finanz- und Regionalanalysen; Bundesinstitut für Bau-, Stadt- und Raumforschung; ifo Institut. Retrieved June 14, 2020 (https://www.bmwi.de/Redaktion/DE/Publikationen/Studien/betrachtung-und-analyse-von-regionalindikatoren.pdf?__blob=publicationFile&v=10).
- Montenegro de Wit, Maywa, Antonio Roman-Alcalá, Alex Liebman, and Siena Chrisman. 2021. "Agrarian Origins of Authoritarian Populism in the United States: What Can We Learn from 20th-Century Struggles in California and the Midwest?" *Journal of Rural Studies* 82:518–30. https://doi.org/10.1016/j.jrurstud.2019.12.003.
- Neumeier, Stefan. 2014. Modellierung der Erreichbarkeit von Supermärkten und Discountern: Untersuchung zum regionalen Versorgungsgrad mit Dienstleistungen der Grundversorgung. Braunschweig: Johann-Heinrich von Thünen-Institut. https://doi.org/10.3220/WP_16_2014.
- 2017. Regionale Erreichbarkeit von ausgewählten Fachärzten, Apotheken, ambulanten Pflegediensten und weiteren ausgewählten Medizindienstleistungen in Deutschland—Abschätzung auf Basis des Thünen-Erreichbarkeitsmodells. Braunschweig: Johann-Heinrich von Thünen-Institut. https://doi.org/10.3220/WP1503653790000.
- Pfahl-Traughber, Armin. 2019. Die AfD und der Rechtsextremismus: Eine Analyse aus politikwissenschaftlicher Perspektive. Wiesbaden: Springer VS.
- R Core Team. 2020. R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. Retrieved June 14, 2020 (https://www.R-project.org/).
- Richter, Christoph and Lukas Bösch. 2017. Demokratieferne Räume?: Wahlkreisanalyse zur Bundestagswahl 2017. Jena: Institut für Demokratie und Zivilgesellschaft. Retrieved February 14, 2021 (https://www.idz-jena.de/fileadmin/user_upload/Demokratie ferne_Raeume_AfD_Bundestagswahl_2017.pdf).
- Rodríguez-Pose, Andrés. 2018. "The Revenge of the Places That Don't Matter (and What to Do about It)." *Cambridge Journal of Regions, Economy and Society* 11:189–209. https://doi.org/10.1093/cjres/rsx024.
- Schmitt-Beck, Rüdiger, Jan W. van Deth, and Alexander Staudt. 2017. "Die AfD nach der rechtspopulistischne Wende. Wählerunterstützung am Beispiel

- Baden-Württembergs." Zeitschrift für Politikwissenschaft 27:273–303. https://doi.org/10.1007/s41358-017-0104-1.
- Schoen, Harald. 2014. "Daten in der empirischen Wahlforschung." Pp. 109–31 in *Handbuch Wahlforschung*, edited by J. W. Falter and H. Schoen. Wiesbaden: Springer VS.
- Schwarzboezl, Tobias and Matthias Fatke. 2016. "Außer Protesten nichts gewesen? Das politische Potenzial der AfD." *Politische Vierteljahresschrift* 57(2):276–99. https://doi.org/10.5771/0032-3470-2016-2-276.
- Siri, Jasmin. 2017. "The Alternative for Germany after the 2017 Election." *German Politics* 27(1):141–45. https://doi.org/10.1080/09644008.2018.1445724.
- Sixtus, Frederick, Manuel Slupina, Sabine Sütterlin, Julia Amberger, and Reiner Klingholz. 2019. *Teilhabeatlas Deutschland: Ungleichwertige Lebensverhältnisse und wie Menschen sie wahrnehmen.* Berlin, Ludwigsburg: Berlin-Institut für Bevölkerung und Entwicklung; Wüstenrot Stiftung. Retrieved June 14, 2020 (https://www.berlin-institut.org/fileadmin/Redaktion/Publikationen/PDF/BI_TeilhabeatlasDeutschland_2019.pdf).
- The Federal Returning Officer [Der Bundeswahlleiter]. 2017. "Ergebnisse nach Wahlbezirken." Retrieved June 14, 2020 (https://bundeswahlleiter.de/en/bunde stagswahlen/2017/ergebnisse/weitere-ergebnisse.html).
- . 2020. "Bundestagswahl 2017: Wahlatlas: Anzahl der Gewählten nach Parteien." Retrieved June 27, 2020 (https://www.bundeswahlleiter.de/bundestagswahle n/2017/ergebnisse/wahlatlas.html#(wahlatlas-0f91b957-d02f-40bd-a3ae-865d9a48b1 f7/thema_ANZAHL_GEWAEHLTE_35/haeufigkeiten/bundeslaender/)).
- Thünen Institute of Rural Studies [Thünen-Institut für Ländliche Räume]. 2020. "Landatlas. Ausgabe 2020." Retrieved June 14, 2020 (https://www.landatlas.de).
- Winkler, Jürgen R. 2014. "Historische Wahlforschung." Pp. 729–67 in *Handbuch Wahlforschung*, edited by J. W. Falter and H. Schoen. Wiesbaden: Springer VS.
- Wolf, Tanja. 2017. Rechtspopulismus: Überblick über Theorie und Praxis. Wiesbaden: Springer VS
- Wood, Simon N. 2006. Generalized Additive Models—An Introduction with R. Boca Raton, FL: Chapman & Hall/CRC.
- Wunder, Oliver. 2014. "Kommt nur her, wir warten schon! Abrissprämie für Dörfer." Nordkurier, January 29. Retrieved February 8, 2021 (https://www.nordkurier.de/anklam/kommt-nur-her-wir-warten-schon-284660901.html).