

Nationalist ideology, rightwing populism, and public views about climate change in Europe

Joakim Kulin, Ingemar Johansson Sevä & Riley E. Dunlap

To cite this article: Joakim Kulin, Ingemar Johansson Sevä & Riley E. Dunlap (2021): Nationalist ideology, rightwing populism, and public views about climate change in Europe, Environmental Politics, DOI: [10.1080/09644016.2021.1898879](https://doi.org/10.1080/09644016.2021.1898879)

To link to this article: <https://doi.org/10.1080/09644016.2021.1898879>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



[View supplementary material](#)



Published online: 23 Mar 2021.



[Submit your article to this journal](#)



Article views: 466



[View related articles](#)



[View Crossmark data](#)

Nationalist ideology, rightwing populism, and public views about climate change in Europe

Joakim Kulin ^a, Ingemar Johansson Sevä ^a and Riley E. Dunlap ^b

^aDepartment of Sociology, Umeå University, Sweden; ^bDepartment of Sociology, Oklahoma State University, USA

ABSTRACT

Rising rightwing populism (RWP) potentially constitutes an obstacle to climate change mitigation, as European RWP parties and politicians often espouse climate change skepticism and oppose climate policies. Meanwhile, their party positions and issue stances have also become increasingly characterized by nationalism. Using *European Social Survey* data from 2016, we show that public attitudes consistent with nationalist ideology are clearly linked to voting for RWP parties and that people who hold these attitudes are more likely to be skeptical about climate change and to oppose policies that increase taxes on fossil fuels. With regard to policy attitudes, we find that nationalist ideology is more influential than traditional left-right political ideology, environmental values and political trust. The results also reveal substantial cross-national differences, as nationalist ideology is linked more closely to public views about climate change in Western European countries, where RWP parties with a nationalist rhetoric have had recent electoral successes.


KEYWORDS Climate change skepticism; climate policy attitudes; nationalism; rightwing populism; political ideology; European Social Survey (ESS)

Introduction

Parallel to the increasing threat of climate change to human societies, many Western democracies have recently experienced a rise of rightwing populism (RWP) and increasing support for RWP parties (Inglehart and Norris 2016). Meanwhile, RWP politicians and the parties they represent commonly – if not universally (Ruser and Machin 2019) – express skepticism about climate change and oppose climate change mitigation policies, especially those that involve international and multi-national cooperation (Lockwood 2018, Hess and Renner 2019, Schaller and Carius 2019, Forchtner 2019a). This suggests

CONTACT Joakim Kulin  joakim.kulin@umu.se

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

 Supplemental data for this article can be accessed [here](#).

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

that growth of RWP may constitute a significant obstacle to efforts to mitigate climate change (Schaller and Carius 2019).¹

The theoretical literature has explored the linkages between RWP and rejection of the climate change agenda, that is, recognizing climate change as a serious problem requiring mitigation (Lockwood 2018), but our empirical knowledge both of how ideological orientations tied to RWP and support for RWP political parties influence *public* beliefs about climate change and support for climate change mitigation policies is very limited. This is especially notable in the Western European context where RWP parties have had considerable success during recent decades (Inglehart and Norris 2016).

An increasingly prominent feature distinguishing Western European RWP parties from other parties is their emphasis on nationalist themes such as opposition to multiculturalism and internationalism (Eger and Valdez 2019, see also Golder 2016, Woertz 2017). It is therefore not surprising that RWP parties and politicians frequently support local and national environmental policies that protect the countryside, nature and the 'home-land' (Schaller and Carius 2019, Forchtner 2019b, Tosun and Debus 2020), but often express skepticism about global environmental problems like climate change and oppose policies to address them (Forchtner and Kølvråa 2015, Forchtner 2019a). Those RWP parties and politicians who do acknowledge the reality of climate change tend to adopt a narrow 'climate nationalism' agenda which focuses on the limited measures their nations can adopt like improved public transportation, while rejecting supranational (global or European Union) policies (Ruser and Machin 2019, Schaller and Carius 2019). Although there is considerable evidence concerning the stances of RWP parties and politicians on the science and policy dimensions of climate change (Hess and Renner 2019, Schaller and Carius 2019, Forchtner 2019a), we know little about the links between attitudes consistent with key ideological components of contemporary RWP, such as nationalism, and beliefs about climate change and support for climate policies among the general public, especially cross-nationally.

We argue that there is a tension between acknowledging or acting on climate change *and* subscribing to several core tenets of nationalist political ideology. While the ideological underpinning of cosmopolitanism (i.e. that humanity constitutes a single moral community) constitutes a core imperative of the climate change agenda (Beck 2010), nationalism broadly defined represents the antithesis of cosmopolitanism in this regard; it prioritizes national interests over global concerns such as climate change. However, according to Calhoun (1993, p. 215), '... "nationalism" and corollary terms like "nation" have proved notoriously hard concepts to define'. Hence, nationalism can refer to a range of phenomena, involving for instance nation-building as well as identity-making processes (Gingrich and Banks 2006, Tamir 2019). We focus on *recent* forms of (neo)nationalism found

primarily in many western European countries (see, e.g. Eger and Valdez 2019) that emphasize boundary maintenance by promoting the defense of national sovereignty as well as the pursuit of cultural protectionism and opposition to immigration (see also Gingrich and Banks 2006, Eger and Valdez 2015, The Economist 2015). These core tenets of nationalist ideology clash with binding international or European Union (EU) climate treaties and increasing flows of climate refugees, both of which are inescapable realities in times of intensifying climate change. Since nationalist ideology is not easily reconciled with accepting the climate change agenda, we expect those adhering to a nationalist ideology to be more likely to express climate change skepticism and oppose mitigation policies.

In this study, we extend existing cross-national research on public views about climate change and the roles of political ideology and political party support. These studies have demonstrated that political conservatives and rightwing party supporters, especially in Western Europe and Anglophone nations, are more likely to be skeptical about climate change and to oppose climate policies than their political opponents (McCright *et al.* 2016, Hornsey *et al.* 2018, Poortinga *et al.* 2019, Smith and Mayer 2019). Using European Social Survey data from 2016 covering 23 predominately European countries, we distinguish and systematically investigate the influence of nationalism, as a coherent and *distinct* political ideology, on climate change skepticism and opposition to climate policy. We also investigate the relationship between nationalist ideology and support for RWP political parties, *and* compare their respective importance for public views about climate change.

Finally, the prominence of nationalist ideology in RWP and other political movements, as well as the extent to which nationalist claims have been linked to issues of climate change in political discourse (for instance by RWP parties), very likely differ across national contexts. Consequently, we also investigate *cross-national differences* in the strength of the relationship between nationalist ideology and views about climate change. Due to the theoretical tension between nationalist ideology and the climate change agenda, combined with the prominence of nationalist ideology among Western European RWP parties, we expect a particularly strong relationship between attitudes consistent with nationalist ideology and views about climate change among the publics of Western European countries.

Previous research

Climate change skepticism

Previous research on climate change skepticism distinguishes between *trend*, *attribution* and *impact* skepticism, reflecting skepticism based on whether people think climate change is occurring, is human-induced and is harmful

(Rahmstorf 2004, Poortinga *et al.* 2019). While majorities in most countries express belief in global warming, the role of humans in causing it, and its harmful impacts, a non-negligible share of the population in many countries still express some form of doubt or skepticism² (Tranter and Booth 2015, Poortinga *et al.* 2019). The latter's views stand in sharp contrast to the overwhelming scientific consensus about anthropogenic climate change (Cook *et al.* 2016). Given the discrepancy between the findings of climate change science and lay beliefs, a large number of studies have investigated a wide range of covariates associated with skepticism, such as demographic factors, environmental values and political orientation (see Hornsey *et al.* 2016).

Studies of Western nations find that the most crucial determinant of climate change beliefs is political orientation. Early research on the role of political ideology and partisan identification was conducted primarily in the United States of America (USA) and found that political conservatives and self-identified Republicans are considerably more likely than liberals and Democrats to express skeptical views toward climate change (McCright and Dunlap 2011), and this pattern has continued and even intensified (Leiserowitz *et al.* 2020). In the European context, however, polarization between left-leaning and right-leaning individuals appears to exist primarily in Western European nations, where it is much less stark than in the USA (McCright *et al.* 2016, Hornsey *et al.* 2018, Poortinga *et al.* 2019). An exception is the United Kingdom (UK) which, like the other Anglophone nations of Canada and Australia, has a level of polarization that is closer to that in the USA (Smith and Mayer 2019).

The relationship between political ideology and skepticism appears to vary even more in studies that include nations outside of Europe, North America and Australia (Tesler 2018, Lewis *et al.* 2019). However, many comparative studies use broad, traditional measures of political ideology or partisan orientation. For instance, while a few studies include measures of ideological positions such as endorsement of free-market ideology (Smith and Mayer 2019) and commitment to democratic principles (Lewis *et al.* 2019), most employ left-right (or liberal-conservative) party identification or self-placement on a political left-right scale (for an overview of earlier studies see McCright *et al.* 2016).

Another set of studies using non-representative samples (e.g. students) or representative samples from single countries finds that a number of political attitudes associated with RWP are related to climate change beliefs. For instance, in a longitudinal study of New Zealand undergraduates, Stanley *et al.* (2017) find that rightwing authoritarianism, measured with a 30-item scale, has a strong and consistent impact on climate change skepticism. In another study, using a nationally representative sample from Norway, Krange *et al.* (2019) find that people who oppose immigration in general are also more likely to endorse climate change skepticism. However,

generalizability issues aside, it is unclear to what extent these attitudes represent key ideological tenets of RWP.

Attitudes toward climate policies

Fossil fuel taxes are often considered to be a particularly effective way of reducing greenhouse gas emissions since they impose the previously externalized costs associated with such emissions on those who emit, thereby making polluters pay for their harmful emissions (Fairbrother 2016a, Baranzini *et al.* 2017). Support for climate policies such as fossil fuel taxes has been tied to a range of variables such as climate change knowledge, beliefs and risk perceptions, perceived scientific consensus, basic values, and social and political trust (for an overview, see Drews and Van Den Bergh 2015, see also Leiserowitz 2006, Harring and Jagers 2013, Smith and Mayer 2018, Fairbrother *et al.* 2019).

Similar to the literature on climate change skepticism, research on attitudes toward climate change mitigation policies has identified political orientation as a key determinant of public support. For instance, previous studies of attitudes toward fossil fuel taxes have consistently demonstrated that conservatives and rightwing voters are more likely to oppose such taxes (Harring and Jagers 2013, McCright *et al.* 2013, 2016, Harring *et al.* 2017, Smith and Mayer 2018). In fact, previous research consistently shows that political ideology is an important driver of support for a wide range of environmental policies (for an overview, see Jagers *et al.* 2018), but that the effects of ideology (and related attitudes) on policy support differ considerably across countries (e.g. Fairbrother 2016b).

Most studies of support for climate (and other environmental) policies focus on individuals' subjective placement on the well-known political left–right continuum (Fairbrother 2016b, Harring *et al.* 2017). A few studies also focus on more specific ideological dimensions, such as free market ideology (Smith and Mayer 2019), commitment to democratic principles (Lewis *et al.* 2019) or normative views about the role of government in protecting the environment (Kulin and Johansson Sevä 2019). Moreover, public support for environmental taxes and related policies is also heavily influenced by other factors associated with RWP, such as political (dis)trust (e.g. Harring and Jagers 2013). One study focusing on the willingness to pay higher taxes for environmental protection finds that 'the importance of trust far surpasses that of political ideology' (Fairbrother 2016b, p. 375, see also Fairbrother *et al.* 2019). However, few studies have focused on specific ideologies tied to RWP such as nationalism and how these ideological orientations influence climate change beliefs and policy attitudes.

Theoretical rationale

Lockwood (2018) identifies two explanatory frameworks to account for the tension between RWP and 'the climate change agenda'. First, according to a structuralist approach, RWP gains traction within the electorate among those who are marginalized economically and politically – i.e. those 'left behind' by globalization. In relation to climate change, however, empirical support for the structuralist approach is mixed, as studies have shown that socio-economically disadvantaged groups are not necessarily more skeptical about climate change or more hostile toward climate policies than are other groups (Tesler 2018, Lewis *et al.* 2019). Although structural factors may have fueled the rise of RWP, Lockwood (2018) argues that the effects on public views about climate change are more likely due to the ideological content of RWP.

Proponents of RWP typically promote a presumed cleavage between 'the people' and 'corrupt elites,' indicating that anti-elitism and political distrust are key characteristics of RWP (Inglehart and Norris 2016). Such a conceptualization of RWP has led scholars to describe it as a 'thin' ideology, in the sense that it has to be filled with more concrete ideological content in order to become politically meaningful (Stanley 2008). A few recent studies have examined anti-establishment stances or authoritarianism and tied them to challenges in sustainable energy transformations or to environmental protection in general (Fraune and Knodt 2018, McCarthy 2019, Forchtner 2019a). However, studies that focus on specific ideological dimensions characteristic of RWP parties and investigate the relationship between individuals' ideological orientations and their views about climate change and climate policies are lacking.

Recent research on the content of party platforms demonstrates that many RWP parties in Western Europe 'increasingly make nationalist claims, articulating more support for a national way of life and greater opposition to multiculturalism, internationalism, and the European Union' (Eger and Valdez 2019, p. 17). Some scholars even argue that nationalism is the 'master concept' of RWP, permeating party platforms and political rhetoric (Bar-On 2018). Results from empirical research further highlight the increasing prominence of nationalism in RWP, showing that nationalism has become a highly important ideological dimension among RWP voters (Eger and Valdez 2015, Lubbers and Coenders 2017).

We contend that the tension between RWP and the climate change agenda, to a large extent, is attributable to the prominence of nationalist ideology among RWP political parties. At the psychological level, different mechanisms could provide accounts of how this tension is manifested in terms of public beliefs and policy preferences in relation to climate change: for instance, as psychological defense mechanisms in response to an undesirable reality (Cohen 2013) or simply as an expression of conflicting interests

between nationalist claims and the reality of climate change as well as its solutions (Lockwood 2018). In the following sections, we outline how and why several core tenets of nationalist ideology come into conflict with acknowledging and acting on climate change.

Nationalist ideology and climate change

Most definitions of nationalism entail ‘the pursuit . . . of a set of rights for the self-defined members of the nation including, at a minimum, territorial autonomy or sovereignty’ (Barrington 1997, p. 712). Considering that addressing the immense threat posed by climate change will require international cooperation and global agreements that infringe to some degree on national sovereignty, nationalists should be reluctant to recognize the threat posed by climate change or to support mitigation policies (Forchtner and Kølvråa 2015).

Nationalism also typically involves ideas about a homogeneous and distinct national culture and ‘a heightened concern that foreign influences erode the homogeneity and distinctiveness of national culture’ (Schatz *et al.* 1999, p. 155). Due to the inevitable consequences of climate change for displacement and transnational migration flows of climate refugees across borders (Davis *et al.* 2018), nationalists should therefore perceive climate change as a threat to their national culture. Furthermore, nationalism also tends to involve economic protectionism (Halikiopoulou *et al.* 2012). For instance, nationalists often view migration as an economic threat resulting in an increasing strain on national public finances (Colantone and Stanig 2019).

A central tenet of nationalist ideology centers on anti-globalism (Eger and Valdez 2019). As the public discourse about climate change and its solutions often distill into ‘national interest’ versus ‘thinking globally’ (Hovden and Lindseth 2004), those with a strong national and weak global attachment should be more likely to prioritize national interest over international cooperation in relation to climate change (Devine-Wright *et al.* 2015).

Voting for RWP parties

Previous research has shown that political communication and elite framing influence people’s concerns about climate change (Brulle *et al.* 2012) as well as public support for climate change mitigation policies (Linde 2018). Furthermore, when an issue is abstract and politically polarized, as is climate change, political allegiances and partisan cues are especially important (Guisinger and Saunders 2017, Tesler 2018). Given that RWP parties and politicians often display skepticism about climate change and oppose climate policy (Forchtner and Kølvråa 2015, Reed 2016, Schaller and Carius 2019, Lockwood 2018), the views expressed by RWP politicians and party

platforms are very likely to influence RWP voters' beliefs and preferences. Hence, in addition to the effects of nationalist ideology, support (via voting) for RWP parties is likely to be related to climate change skepticism and opposition to mitigation policies.

Data and methods

To study the potential influence of nationalist ideology and voting for RWP parties on public views about climate change, we use data from the European Social Survey (ESS) collected in the year 2016. The dataset is based on representative samples of the adult population across 23 predominately European countries (European Social Survey 2020). The study includes these countries (with abbreviations): Austria (AT), Belgium (BE), Czech Republic (CH), Estonia (EE), Finland (FI), France (FR), Germany (DE), Hungary (HU), Ireland (IE), Israel (IL), Iceland (IS), Italy (IT), Lithuania (LT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Russian Federation (RU), Spain (ES), Sweden (SE), Switzerland (CH), Slovenia (SI), and United Kingdom (UK).

Dependent variables

We focus on two key outcomes in terms of public views about climate change, namely skepticism and policy attitudes. Building on previous research, we measure climate change skepticism by focusing on the critical dimensions of trend, attribution and impact skepticism (Rahmstorf 2004, Poortinga *et al.* 2019), using three items from the ESS asking respondents to what extent they believe that the earth's climate is changing, that it is anthropogenic, and that it has bad consequences. In line with previous research using these items, a principal component analysis (PCA) finds only one latent factor, with strong factor loadings (>0.6) for all three manifest items (cf. Fairbrother *et al.* 2019), indicating that this underlying skepticism factor accounts for a considerable amount of variation in the manifest items measuring trend, attribution and impact skepticism. To capture individuals' overall tendency to be skeptical about climate change, we use the standardized factor scores (mean centered, with a standard deviation of 1) representing each respondents' score on this latent skepticism factor (higher scores = greater skepticism). We measure attitudes toward climate change mitigation policy using an item asking respondents if they favor or oppose increasing taxes on fossil fuels. For the analyses, we standardize this variable and code it so that higher values reflect greater opposition to fossil fuel taxes. In Appendix 1 of the online Supplementary Materials, we provide a more detailed account of question wordings, response scales, and coding of all variables included in this study.

Independent variables

To measure attitudes consistent with nationalist ideology, we use a set of items tapping the previously discussed dimensions of national sovereignty, cultural and economic protectionism, and national identification and attachment. Focusing on *national sovereignty*, such preferences are often manifested as opposition to the EU and the United Nations (Vasilopoulou 2009). To capture public preferences with regard to national sovereignty, we use two items asking respondents about their views on European unification and their trust in the United Nations. To measure *cultural* and *economic protectionism*, which often manifest in the perception that immigrants pose a threat to the culture or economy of one's country (Mudde 2007, Schneider 2008, Eger and Valdez 2015), we use two items asking whether cultural life in one's country is generally undermined or enriched by immigration and whether immigration is generally good or bad for the economy. Finally, we measure *national identification* and *attachment* by constructing a variable based on how emotionally attached respondents feel to their country relative to the EU. To capture individuals' underlying tendency to embrace a nationalist ideology, we extract factor scores using PCA (yielding one latent factor, with strong or moderate factor loadings). High scores on the factor are indicative of nationalist attitudes.

To measure voting for an RWP party, we recode the country-specific voting variables in the ESS into political party families (cf. Mair and Mudde 1998), based mainly on the most recent version of the Comparative Manifestos Dataset (Volkens *et al.* 2018). However, due to dated information for some of the countries in the Manifestos data, we use additional sources to recode parties to align more accurately with their current content/focus (see Appendix 1 in the online Supplementary Materials for more detail on party coding and Table 1 in Appendix 2 for the list of parties in each country coded as RWP).

Control variables

To ensure that nationalist ideology (and its relationship to views about climate change) is not primarily a reflection of broader rightwing ideological orientations, we also include traditional political ideology in our analyses using an item measuring subjective left–right placement. We also include a number of control variables identified in the literature, namely social trust, political trust, and environmental values. For the analysis focusing on climate policy attitudes (support for an increase in fossil fuel taxes) as the dependent variable, we also include climate change beliefs (level of skepticism) and concern (level of worry about climate change). All variables are standardized (z-scores) – that is, grand means centered with a standard deviation of 1. Finally, we also include the demographic variables gender (1 = man, 0 = woman), age (in years), and education (in years) as controls.

To study the effects of nationalist ideology on beliefs about climate change and climate policy support across European countries, we use multilevel analysis (Snijders and Bosker 2011). This enables us to not only take into consideration the nested structure of the data (individuals nested in countries), but also to estimate random effects with regard to nationalist ideology. Estimating random coefficients means that the slope for the effect of nationalist ideology is allowed to vary cross-nationally, thereby enabling assessment of differences in effect sizes across countries. We then use both fixed and random coefficients to assess the overall impact of nationalist ideology on climate change beliefs and policy preferences cross-nationally.

Results

We first examine the cross-national salience of nationalist ideology as well as its relation to voting behavior, with a special focus on voting for RWP parties. In [Figure 1](#), the mean factor scores reveal major cross-national differences in the extent to which people adhere to nationalist ideology, most notably between Eastern and Western Europe. For instance, while the mean factor scores are relatively high in many Eastern European countries such as Russia, Hungary and Czech Republic, they are substantially lower in many Western European countries such as Iceland, Sweden, Spain and Finland. These cross-national differences reflect to a great extent the overall cumulative salience of the attitudes underlying the measure of nationalist ideology (see Supplementary Materials, Appendix 2, [Figure 1](#)).

Turning to the relationship between nationalist ideology and self-reported voting behavior, we expect endorsement of nationalist ideology to be higher among RWP voters than those voting for other parties. However, considering that previous research linking RWP to nationalism has found this link mainly in Western Europe, we examine the relationship between nationalist ideology and RWP voting in Western and Eastern European countries separately. [Figure 2 \(a,b\)](#) show the means and confidence intervals (95%) for our nationalist ideology measure across different political party families. The results show that people who vote for RWP parties in Western Europe are considerably more likely to hold attitudes consistent with nationalist ideology ([Figure 2 \(a\)](#)). In Western European countries, voters for RWP parties on average score approximately 0.7 to 1.1 units or higher on the nationalist ideology measure compared to voters for most other parties and even higher relative to supporters of Green parties. In contrast, people who vote for RWP parties in Eastern Europe are not such strong outliers in terms of nationalist ideology ([Figure 2 \(b\)](#)). In Eastern European countries, voters for RWP parties on average score only marginally higher than voters for most other parties and even score lower than some other parties' voters (e.g. Left). These results indicate that nationalist ideology, at least as we measure it

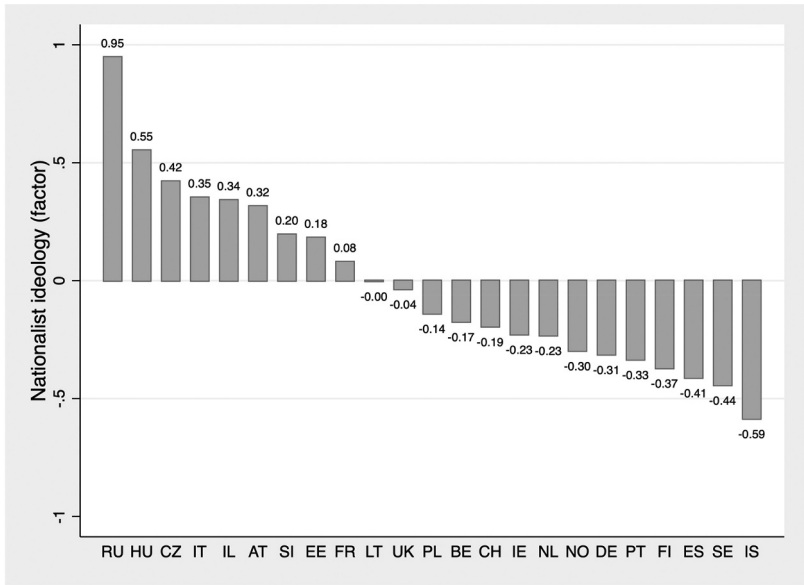


Figure 1. Mean score for nationalist ideology (factor), by country.

here, is closely linked to RWP politics in Western Europe (Eger and Valdez 2019). However, the results also show that nationalist ideology is not exclusive to RWP voters, and that these ideological views exist at least to some extent among many voter groups, especially in Eastern Europe.

We now continue with the main part of the analysis centering on the influence of nationalist ideology on public views about climate change. Focusing first on the results for climate change skepticism, we present four models in Table 1 where a model including all control variables except RWP voting (Model 1) is complemented with models introducing nationalist ideology and voting for an RWP party separately (Models 2 & 3) as well as together (Model 4). The results show that nationalist ideology is positively associated with climate change skepticism, even when controlling for RWP voting (Model 4). In fact, when included in the same model, the effect of RWP voting is slightly reduced from Model 2 while the effect of nationalist ideology is consistently strong (and even increases from Model 3 to 4), indicating that nationalist ideology is a more important predictor of climate change skepticism than is RWP voting. Furthermore, the effect of nationalist ideology is also notable relative to the effect of traditional left-right ideology (even though the latter's effect is larger in Models 3 and 4), since it demonstrates that nationalism's unique ideological influence on climate change skepticism cannot be reduced to the standard political left-right orientation.

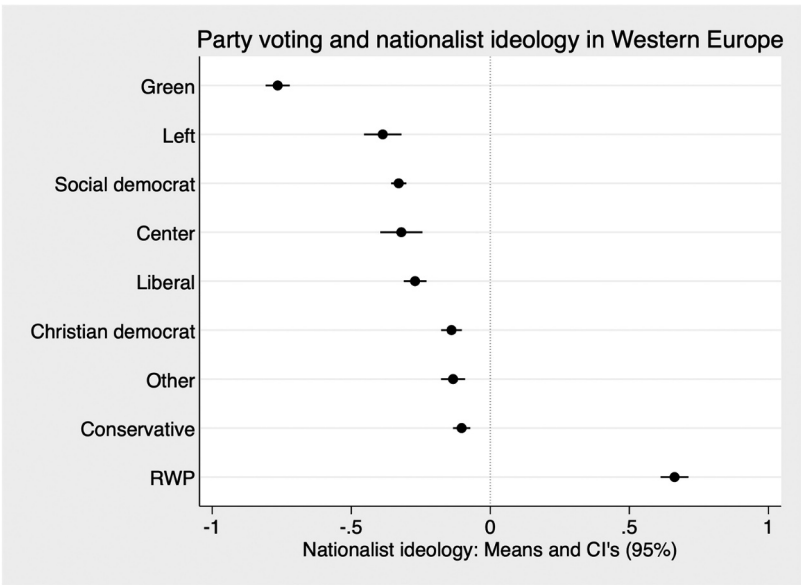


Figure 2a. Nationalist ideology (factor) means and confidence intervals (95%), by party family, in Western Europe.

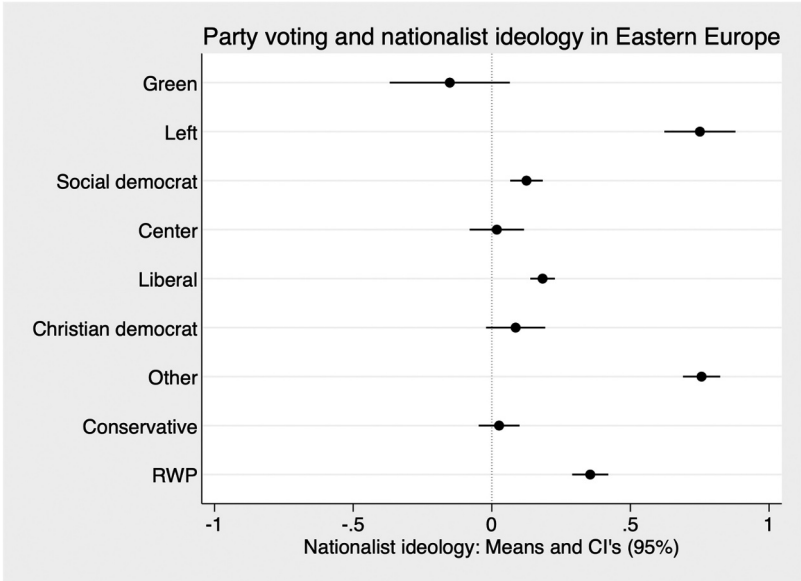


Figure 2b. Nationalist ideology (factor) means and confidence intervals (95%), by party family, in Eastern Europe.

Table 1. Multilevel analysis: climate change skepticism.

	Model 1	Model 2	Model 3	Model 4
	Coef. (Std. Err.)	Coef. (Std. Err.)	Coef. (Std. Err.)	Coef. (Std. Err.)
Gender (1 = male)	0.040*** (0.010)	0.050*** (0.012)	0.036** (0.010)	0.047*** (0.013)
Age (years)	0.005*** (0.000)	0.006*** (0.000)	0.005*** (0.000)	0.006*** (0.000)
Education (years)	-0.030*** (0.001)	-0.029*** (0.002)	-0.029*** (0.001)	-0.027*** (0.002)
Political ideology (rightwing)	0.110*** (0.005)	0.120*** (0.006)	0.107*** (0.006)	0.118*** (0.006)
Political trust	0.068*** (0.006)	0.061*** (0.007)	0.083*** (0.006)	0.075*** (0.008)
Social trust	0.033*** (0.006)	0.028*** (0.007)	0.040*** (0.006)	0.032*** (0.008)
Environmental values	-0.191*** (0.005)	-0.193*** (0.006)	-0.194*** (0.006)	-0.197*** (0.007)
Voted for RWP party		0.033*** (0.007)		0.026*** (0.007)
Nationalist ideology			0.043*** (0.006)	0.049*** (0.008)
Intercept	0.107* (0.050)	0.024 (0.056)	0.092 (0.050)	-0.013 (0.055)
var(_cons)	0.042*** (0.013)	0.041*** (0.012)	0.040*** (0.012)	0.037*** (0.011)
var(Residual)	0.869*** (0.006)	0.848*** (0.008)	0.864*** (0.007)	0.844*** (0.008)
Log likelihood	-47,099.1	-31,012.5	-42,520.2	-28,322.0
n	34,881	23,167	31,556	21,197

Dependent variable: Climate change skepticism. All coefficients represent fixed effects. All variables (except socio-demographic variables gender, age and education) are standardized (factor scores or z-scores), i.e. grand mean centered with a standard deviation of 1.

Further, unsurprisingly we find a strong negative effect of environmental values on climate change skepticism, as people who value the environment are less likely to express climate skepticism. Finally, in contrast to expectations, we also find that higher levels of social and political trust are associated with *greater* climate change skepticism. While surprising in light of prior studies showing the generally positive effects of trust on, for instance, climate change mitigation behaviors (e.g. Cologna and Siegrist 2020), these results fall outside the focus of the present study but deserve further attention in future studies.

In Table 2, we present corresponding models for climate policy attitudes, that is, opposition to increasing fossil fuel taxes. These models add climate change skepticism and concern (level of worry) as controls, since it is reasonable to assume that policy attitudes at least partly reflect people's beliefs and concern about the problem that the policies aim to address. The results show that nationalist ideology is positively associated with opposition to increasing fossil fuel taxes in both Models 3 and 4, and that the effect of RWP voting is reduced once nationalist ideology is introduced (compare

Table 2. Multilevel analysis: opposition to increasing fossil fuel taxes.

	Model 1	Model 2	Model 3	Model 4
	Coef. (Std. Err.)	Coef. (Std. Err.)	Coef. (Std. Err.)	Coef. (Std. Err.)
Gender (1 = male)	0.018* (0.010)	0.030* (0.032)	0.024* (0.011)	0.036** (0.013)
Age (years)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Education (years)	-0.022*** (0.001)	-0.023*** (0.002)	-0.015*** (0.001)	-0.016*** (0.002)
Political ideology (rightwing)	0.071*** (0.005)	0.064*** (0.006)	0.049*** (0.006)	0.045*** (0.007)
Political trust	-0.146*** (0.006)	-0.139*** (0.007)	-0.092*** (0.006)	-0.090*** (0.008)
Social trust	-0.054*** (0.006)	-0.050*** (0.007)	-0.025*** (0.006)	-0.020** (0.008)
Environmental values	-0.048*** (0.006)	-0.050*** (0.007)	-0.049*** (0.006)	-0.053*** (0.007)
Climate change skepticism	0.064*** (0.006)	0.069*** (0.007)	0.064*** (0.006)	0.070*** (0.007)
Climate change concern	-0.125*** (0.006)	-0.130*** (0.008)	-0.111*** (0.006)	-0.116*** (0.008)
Voted for RWP party		0.054*** (0.007)		0.034*** (0.007)
Nationalist ideology			0.167*** (0.006)	0.168*** (0.008)
Intercept	0.130** (0.047)	0.148** (0.056)	0.070 (0.049)	0.070 (0.057)
var(_cons)	0.034*** (0.010)	0.040*** (0.012)	0.037*** (0.011)	0.041*** (0.012)
var(Residual)	0.865*** (0.007)	0.862*** (0.008)	0.845*** (0.007)	0.842*** (0.008)
Log likelihood	-46,005.3	-30,684.8	-41,536.4	-27,982.6
n	34,127	22,783	31,082	20,959

Dependent variable: Opposition to fossil fuel taxes. All coefficients represent fixed effects. All variables (except socio-demographic variables gender, age and education) are standardized (factor scores or z-scores), i.e. grand mean centered with a standard deviation of 1.

Models 2 & 4). With regard to effect sizes, the estimates for nationalist ideology demonstrate that it is the most important predictor in our models of policy attitudes, surpassing the influence of other key predictors such as traditional left-right ideology, environmental values and political trust. Thus, people who adhere to nationalist ideology are especially likely to oppose increasing fossil fuel taxes, a key mitigation policy. While previous studies of support for environmental taxes have found that political trust and traditional political ideology are some of the most influential determinants (Harring and Jagers 2013, Fairbrother 2016b, Fairbrother *et al.* 2019), our results suggest that nationalist ideology constitutes a crucial and previously neglected determinant of climate policy attitudes. All control variables have statistically significant effects in the expected direction, as social and political trust, environmental values, and climate change concern are all associated

with lower levels of opposition to increasing fossil fuel taxes, whereas climate change skepticism is associated with greater opposition.

The results presented in [Tables 1 and 2](#) imply that the ardent opposition to increasing fossil fuel taxes among people who adhere to nationalist ideology cannot be accounted for solely by their skeptical beliefs about climate change. To examine this puzzling finding in more detail, we investigate whether the strength of the relationship between climate change skepticism and opposition to increasing fossil fuel taxes is tied to individuals' adherence to nationalist ideology. In [Figure 3](#), we plot the marginal effect of climate change skepticism on opposition to increasing fossil fuel taxes at different values on the measure for nationalist ideology.

[Figure 3](#) shows that the relationship between skepticism and opposition to increasing fossil fuel taxes is weaker among those embracing nationalist ideology and non-existent among those who score highest on the nationalist ideology measure.³ This means that the relatively strong opposition to increasing taxes on fossil fuels among strong nationalists cannot be attributed to their levels of climate change skepticism. Rather, our results suggest that nationalist concerns, rather than beliefs and concern about climate change, influence policy attitudes among those with strong nationalist leanings.

Finally, to take into consideration the cross-national differences in the effects of nationalist ideology on views about climate change, we present

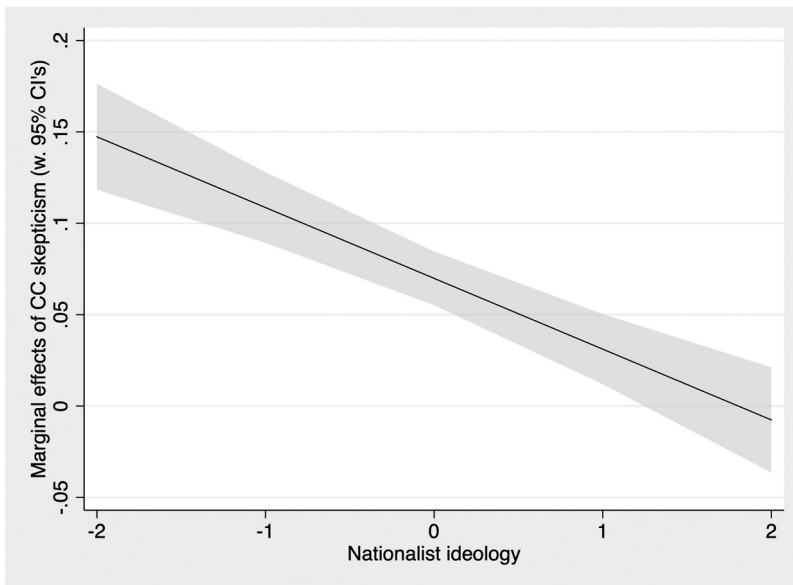


Figure 3. Marginal effects of climate change (CC) skepticism on opposition to increasing fossil fuel taxes at different levels of nationalist ideology (factor).

the total effect sizes for individual countries, based on both fixed and random effects in Figure 4 (a,b). As shown in Figure 4 (a), the effects of nationalist ideology on climate change skepticism are strong in several Western European countries – especially so in Norway, Finland, Sweden, Iceland, Belgium and United Kingdom. Meanwhile, in many Eastern European countries such as Russia, Hungary, Czech Republic and Lithuania (but also in Austria and Italy), the effects of nationalist ideology are *negative*, which means that nationalist ideology is associated with *less* skepticism in these countries. Another noteworthy finding is that the positive effects of nationalist ideology on climate change skepticism are strongest in the four Nordic countries in our study (Norway, Finland, Sweden and Iceland), which are all countries that display low average levels of nationalist ideology (cf. Figure 1).

Focusing on opposition to increasing fossil fuel taxes (Figure 4 (b)), nationalist ideology is associated with greater opposition in all countries except in Lithuania (where a relatively weak negative effect is found). However, as with climate change skepticism, the strongest effects of nationalist ideology are found predominately in Western European countries such as the Netherlands, Norway, Sweden, and Switzerland. Overall, the results in Figure 4 (a,b) demonstrate that, while attitudes consistent with nationalist

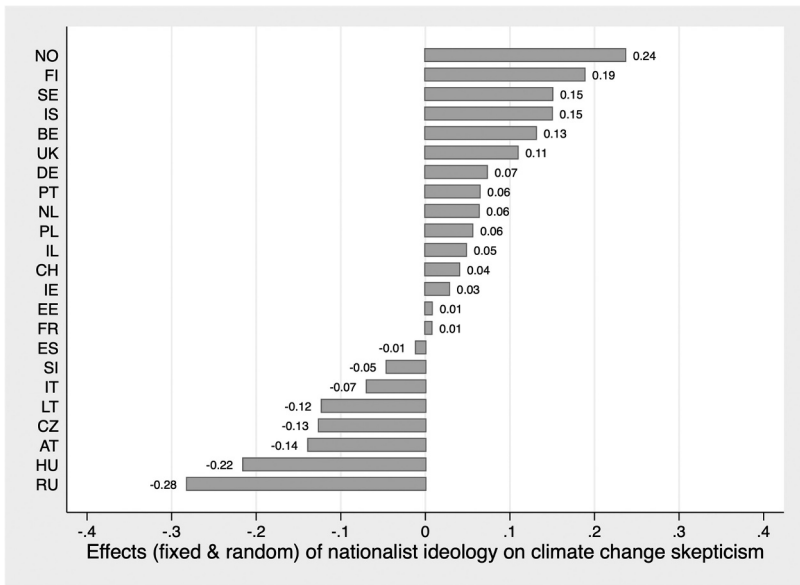


Figure 4a. Effects (fixed and random) of nationalist ideology (factor) on climate change skepticism, by country.

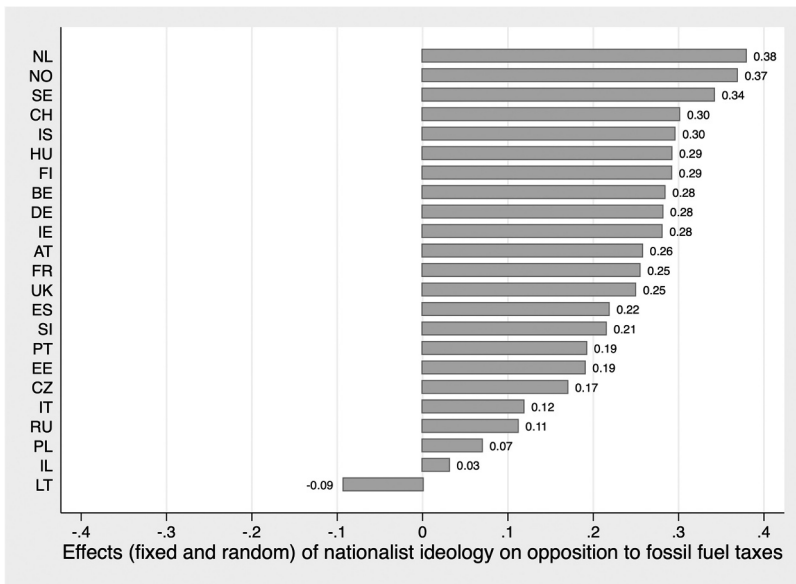


Figure 4b. Effects (fixed and random) of nationalist ideology (factor) on opposition to increasing fossil fuel taxes, by country.

ideology are more widespread in Eastern European countries (cf. Figure 1), we find the clearest evidence of their link with opposition to a fossil fuel tax increase among the populations of Western Europe, where increasingly nationalist RWP parties have frequently had notable success in recent years (Inglehart and Norris 2016).

Discussion and conclusion

Our study contributes to the literature on the influence of political ideologies on public opinion about climate change, as we identify nationalist ideology as an important predictor of two key public responses in this regard – climate change skepticism and opposition to increasing fossil fuel taxes. Our results show that individuals holding attitudes consistent with nationalist ideology – an increasingly characterizing trait of Western European RWP parties – are more likely to be skeptical about the realities of climate change, and substantially more likely to oppose increasing taxes on fossil fuels.

In fact, with regard to opposition to fossil fuel taxes, we find that nationalist ideology is the most important variable in our analyses, surpassing other key predictors frequently found in the literature, such as traditional left–right ideology, environmental values and political trust (Harring and Jagers 2013, Fairbrother 2016b, Fairbrother *et al.* 2019). Furthermore, since the effect of traditional left–right ideology is not substantially reduced when including

nationalist ideology in our models, nationalism, at least as measured here, appears to constitute a distinct political-ideological dimension with a unique and independent effect on support for a key climate policy. This all suggests that nationalist ideology constitutes a crucial predictor of climate policy support that previous research has overlooked.

However, the relatively stronger opposition to increasing fossil fuel taxes among those subscribing to nationalist ideology does not appear to be explained by their higher levels of skepticism. Our results show that the relationship between beliefs about climate change and opposition to fossil fuel taxes is weak or non-existent among those who score high on our measure of nationalist ideology. This could at least partly explain why the link between beliefs about climate change and climate policy attitudes is surprisingly weak in many European countries (cf. Fairbrother *et al.* 2019).

Meanwhile, traditional left–right ideology is clearly more influential than nationalist ideology with regard to climate change skepticism, indicating that public skepticism is more strongly linked to mainstream political cleavages. However, when comparing the impact of nationalist ideology and RWP voting, nationalist ideology is more influential both with regard to climate change skepticism and climate policy attitudes. At the same time, the effect on skepticism is relatively weak, suggesting that the stark differences in climate policy attitudes (opposition to higher fossil fuel taxes) between those who subscribe to nationalist ideology and those who do not cannot be attributed to substantially higher levels of skepticism among the nationalists. Instead, our results demonstrate that, when those with strong nationalist leanings form their attitudes toward climate policies such as increasing taxes on fossil fuel, nationalist concerns appear to trump beliefs and concern about climate change. That a sizable share of the public sees a progressive climate policy agenda as challenging their strong sense of nationalism fits well with literature reporting that RWP parties and politicians may or may not express doubt or deny the reality of climate change, but nonetheless see many climate change policies as a cosmopolitan threat to national sovereignty (Forchtner 2019a, Kølvråa 2019).

Considering that the results differ across our two dependent variables, with weaker effects of nationalism on skepticism relative to its effects on policy attitudes, analyzing a more diverse set of public responses to climate change appears important in order to obtain a broader understanding of the impact of nationalist ideology on public views about climate change. For instance, since the effects of nationalist ideology on climate policy attitudes could vary in strength depending on the policy in question (e.g. taxes on fossil fuels versus subsidies for renewable energy), future studies should employ items measuring attitudes towards toward a broad range of climate policies. Future studies could also explore the role of nationalist ideology for personal behaviors that have important consequences for greenhouse gas

emissions (e.g. reducing household energy use). Further, given our use of a composite measure of overall skepticism, future studies could also examine the relationships between nationalist ideology and specific dimensions of skepticism (trend, attribution, and impact).⁴

Our results are similar to previous studies using broader measures of political ideology, showing that political polarization (i.e. left-right differences) with regard to climate change skepticism is far more pervasive in Western than Eastern European countries (McCright *et al.* 2016, Lewis *et al.* 2019, Smith and Mayer 2019). However, our results show an even starker discrepancy between Western (especially Nordic) and Eastern European countries, as the effects of nationalist ideology on skepticism are not only considerably weaker, but in some cases even reversed, in several Eastern European countries. This indicates that, while we find a fairly consistent pattern across most Western European countries, these relationships do not appear to follow the same logic in several Eastern European countries.

A case can be made that the generally stronger effects of nationalist ideology on public views about climate change in Western Europe is attributable at least in part to cross-national variation in elite framing and political communication (Brulle *et al.* 2012, Tesler 2018). For instance, the articulation by RWP (and other) politicians of tensions between nationalist claims and claims about climate change – such as the threat to national sovereignty posed by international climate treaties – might be more salient in Western than in Eastern European nations. Although the increasing articulation of (neo)nationalist claims in Western Europe suggests that this could be the case, the Manifestos dataset is inadequate for such analyses, since negative mentions of environmental and/or climate change claims are not currently available. However, the consistent opposition to climate policy legislation among many RWP parties in the European parliament (Schaller and Carius 2019) nevertheless appears to support this notion. Future studies should therefore explore the role of elite framing and political communication in explaining cross-national differences in the ‘nationalism-climate change nexus’. Moreover, while the unexpected, reversed effects in some Eastern European countries are perplexing, and deserve more in-depth exploration, this falls outside the scope of the present study.

Finally, to the extent that the tension between nationalist ideology and policy attitudes also involves a wider range of climate policies (beyond fossil fuel taxes), many efforts to mitigate climate change may meet serious public opposition as a result – especially in Western Europe where this tension appears most pronounced. Moreover, if a rising right-wing populism with an increasingly nationalist agenda is accompanied by intensified articulations of this tension, implementing a progressive EU or global climate agenda may be stifled by even more widespread public hostility. Future research should therefore pay greater attention to nationalist ideology as a potential obstacle

to the implementation of a wide repertoire of climate policies needed for successful climate change mitigation.

Notes

1. Schaller and Carius (2019) provide a detailed review of 21 RWP parties and their climate change agendas, focusing primarily on party platforms and votes in the European Parliament. While they find varying levels of skepticism toward climate science, they find broad opposition to most climate change mitigation policies. In contrast, Ruser and Machin (2019) focus on only three of these parties and highlight their differing stances on climate change, in our opinion underplaying the dominant pattern of skepticism and opposition to climate mitigation policies found among European RWP parties.
2. We use the term 'skepticism' in a broad sense, denoting beliefs that express different forms of doubt about, or outright denial of, the basic findings of climate science. In doing so we follow the widespread practice of using skepticism to describe public views while reserving 'denial' to describe the views and actions to actors involved in the promotion of climate change denial (Dunlap 2013).
3. We also ran this analysis replacing climate change skepticism with climate change concern (level of worry), which yielded similar results.
4. In a study of European nations, Poortinga *et al.* (2019) examine different dimensions of skepticism separately, but their focus differs substantially from ours.

Acknowledgments

We would like to thank Keith Smith, Wouter Poortinga, Malcolm Fairbrother, Sverker Jagers and Niklas Harring as well as three anonymous reviewers for helpful comments on earlier versions of the manuscript.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Swedish Research Council (Vetenskapsrådet) [2018-01531].

ORCID

Joakim Kulin  <http://orcid.org/0000-0002-7610-9104>

Ingemar Johansson Sevä  <http://orcid.org/0000-0003-3349-5778>

Riley E. Dunlap  <http://orcid.org/0000-0002-7047-3757>

References

- Baranzini, A., Van den Bergh, J., Carattini, S., Howarth, R., and Padilla, E., 2017. Carbon pricing in climate policy: seven reasons, complementary instruments, and political economy considerations. *WIREs Climate Change*, 8 (4), 1–17. doi:[10.1002/wcc.462](https://doi.org/10.1002/wcc.462)
- Bar-On, T., 2018. The radical right and nationalism. In: J. Rydgren, ed. *The Oxford handbook of the radical right*. Oxford: Oxford University Press, 17–41.
- Barrington, L.W., 1997. 'Nation' and 'nationalism': the misuse of key concepts in political science. *Political Science & Politics*, 30 (4), 712–716.
- Beck, U., 2010. Climate for change, or how to create a green modernity? *Theory, Culture & Society*, 27 (2–3), 254–266. doi:[10.1177/0263276409358729](https://doi.org/10.1177/0263276409358729)
- Brulle, R.J., Carmichael, J., and Jenkins, J.C., 2012. Shifting public opinion on climate change: an empirical assessment of factors influencing concern over climate change in the US, 2002–2010. *Climatic Change*, 114 (2), 169–188. doi:[10.1007/s10584-012-0403-y](https://doi.org/10.1007/s10584-012-0403-y)
- Calhoun, C., 1993. Nationalism and ethnicity. *Annual Review of Sociology*, 19 (1), 211–239. doi:[10.1146/annurev.so.19.080193.001235](https://doi.org/10.1146/annurev.so.19.080193.001235)
- Cohen, S., 2013. *States of denial: knowing about atrocities and suffering*. Cambridge: Polity Press.
- Colantone, I. and Stanig, P., 2019. The surge of economic nationalism in Western Europe. *Journal of Economic Perspectives*, 33 (4), 128–151. doi:[10.1257/jep.33.4.128](https://doi.org/10.1257/jep.33.4.128)
- Cologna, V., and Siegrist, M., 2020. The role of trust for climate change mitigation and adaptation behaviour: A meta-analysis. *Journal of Environmental Psychology*, 101428. doi:[10.1016/j.jenvp.2020.101428](https://doi.org/10.1016/j.jenvp.2020.101428)
- Cook, J., et al. 2016. Consensus on consensus: a synthesis of consensus estimates on human-caused global warming. *Environmental Research Letters*, 11 (4), 048002. doi:[10.1088/1748-9326/11/4/048002](https://doi.org/10.1088/1748-9326/11/4/048002)
- Davis, K.F., et al. 2018. A universal model for predicting human migration under climate change: examining future sea level rise in Bangladesh. *Environmental Research Letters*, 13 (6), 064030. doi:[10.1088/1748-9326/aac4d4](https://doi.org/10.1088/1748-9326/aac4d4)
- Devine-Wright, P., Price, J., and Leviston, Z., 2015. My country or my planet? exploring the influence of multiple place attachments and ideological beliefs upon climate change attitudes and opinions. *Global Environmental Change*, 30, 68–79. doi:[10.1016/j.gloenvcha.2014.10.012](https://doi.org/10.1016/j.gloenvcha.2014.10.012)
- Draws, S. and Van Den Bergh, J., 2015. What explains public support for climate policies? A review of empirical and experimental studies. *Climate Policy*, 16 (7), 855–876. doi:[10.1080/14693062.2015.1058240](https://doi.org/10.1080/14693062.2015.1058240)
- Dunlap, R.E., 2013. Climate change skepticism and denial: an introduction. *American Behavioral Scientist*, 57 (6), 691–698. doi:[10.1177/0002764213477097](https://doi.org/10.1177/0002764213477097)
- Eger, M.A. and Valdez, S., 2015. Neo-nationalism in Western Europe. *European Sociological Review*, 31 (1), 115–130. doi:[10.1093/esr/jcu087](https://doi.org/10.1093/esr/jcu087)
- Eger, M.A. and Valdez, S., 2019. From radical right to neo-nationalist. *European Political Science*, 18 (3), 379–399. doi:[10.1057/s41304-018-0160-0](https://doi.org/10.1057/s41304-018-0160-0)
- European Social Survey. 2020. ESS-8 2016 Documentation report. Edition 2.2. Bergen, European social survey data Archive, NSD - Norwegian Centre for Research Data for ESS ERIC. doi:[10.21338/NSD-ESS8-2016](https://doi.org/10.21338/NSD-ESS8-2016)
- Fairbrother, M., 2016a. Externalities: why environmental sociology should bring them in. *Environmental Sociology*, 2 (4), 375–384. doi:[10.1080/23251042.2016.1196636](https://doi.org/10.1080/23251042.2016.1196636)

- Fairbrother, M., 2016b. Trust and public support for environmental protection in diverse national contexts. *Sociological Science*, 3, 359–382. doi:[10.15195/v3.a17](https://doi.org/10.15195/v3.a17)
- Fairbrother, M., Johansson Sevä, I., and Kulin, J., 2019. Political trust and the relationship between climate change beliefs and support for fossil fuel taxes: evidence from a survey of 23 European countries. *Global Environmental Change*, 59, 102003. doi:[10.1016/j.gloenvcha.2019.102003](https://doi.org/10.1016/j.gloenvcha.2019.102003)
- Forchtner, B., 2019a. Climate change and the far right. *WIREs Climate Change*, 10 (5), 1–11. doi:[10.1002/wcc.604](https://doi.org/10.1002/wcc.604)
- Forchtner, B., 2019b. *The far right and the environment: politics, discourse and communication*. London and New York: Routledge.
- Forchtner, B. and Kølvrå, C., 2015. The nature of nationalism: populist radical right parties on countryside and climate. *Nature and Culture*, 10 (2), 199–224. doi:[10.3167/nc.2015.100204](https://doi.org/10.3167/nc.2015.100204)
- Fraune, C. and Knodt, M., 2018. Sustainable energy transformation in an age of populism, post-truth politics, and local resistance. *Energy Research & Social Science*, 43, 1–7. doi:[10.1016/j.erss.2018.05.029](https://doi.org/10.1016/j.erss.2018.05.029)
- Gingrich, A. and Banks, M., 2006. *Neo-nationalism in Western Europe and beyond: perspectives from social anthropology*. Oxford: Berghahn.
- Golder, M., 2016. Far right parties in Europe. *Annual Review of Political Science*, 19, 477–497. doi:[10.1146/annurev-polisci-042814-012441](https://doi.org/10.1146/annurev-polisci-042814-012441)
- Guisinger, A. and Saunders, E.N., 2017. Mapping the boundaries of elite cues: how elites shape mass opinion across international issues. *International Studies Quarterly*, 61 (2), 425–441. doi:[10.1093/isq/sqx022](https://doi.org/10.1093/isq/sqx022)
- Halikiopoulou, D., Nanou, K., and Vasilopoulou, S., 2012. The paradox of nationalism: the common denominator of radical right and radical left euroscepticism. *European Journal of Political Research*, 51 (4), 504–539. doi:[10.1111/j.1475-6765.2011.02050.x](https://doi.org/10.1111/j.1475-6765.2011.02050.x)
- Harring, N. and Jagers, S., 2013. Should we trust in values? explaining public support for pro-environmental taxes. *Sustainability*, 5 (1), 210–227. doi:[10.3390/su5010210](https://doi.org/10.3390/su5010210)
- Harring, N., Jagers, S.C., and Matti, S., 2017. Public support for pro-environmental policy measures: examining the impact of personal values and ideology. *Sustainability*, 9 (5), 679. doi:[10.3390/su9050679](https://doi.org/10.3390/su9050679)
- Hess, D.J. and Renner, M., 2019. Conservative political parties and energy transitions in Europe: opposition to climate mitigation policies. *Renewable and Sustainable Energy Reviews*, 104, 419–428. doi:[10.1016/j.rser.2019.01.019](https://doi.org/10.1016/j.rser.2019.01.019)
- Hornsey, M.J., et al. 2016. Meta-analyses of the determinants and outcomes of belief in climate change. *Nature Climate Change*, 6 (6), 622. doi:[10.1038/nclimate2943](https://doi.org/10.1038/nclimate2943)
- Hornsey, M.J., Harris, E.A., and Fielding, K.S., 2018. Relationships among conspiratorial beliefs, conservatism and climate scepticism across nations. *Nature Climate Change*, 8 (7), 614–620. doi:[10.1038/s41558-018-0157-2](https://doi.org/10.1038/s41558-018-0157-2)
- Hovden, E. and Lindseth, G., 2004. Discourses in Norwegian climate policy: national action or thinking globally? *Political Studies*, 52 (1), 63–81. doi:[10.1111/j.1467-9248.2004.00464.x](https://doi.org/10.1111/j.1467-9248.2004.00464.x)
- Inglehart, R.F. and Norris, P., 2016. Trump, Brexit, and the rise of populism: economic have-nots and cultural backlash. *Harvard Kennedy School Faculty Research Working Paper Series*, RWP16-026.
- Jagers, S.C., Harring, N., and Matti, S., 2018. Environmental management from left to right—on ideology, policy-specific beliefs and pro-environmental policy support. *Journal of Environmental Planning and Management*, 61 (1), 86–104. doi:[10.1080/09640568.2017.1289902](https://doi.org/10.1080/09640568.2017.1289902)

- Kølvraa, C., 2019. Wolves in sheep's clothing? The Danish far right and 'wild nature'. In: B. Forchtner, ed. *The far right and the environment: politics, discourse and communication*. London: Routledge; p. 107–120.
- Krange, O., Kaltenborn, B.P., and Hultman, M., 2019. Cool dudes in Norway: climate change denial among conservative Norwegian men. *Environmental Sociology*, 5 (1), 1–11. doi:[10.1080/23251042.2018.1488516](https://doi.org/10.1080/23251042.2018.1488516)
- Kulin, J. and Johansson Sevä, I., 2019. The role of government in protecting the environment: quality of government and the translation of normative views about government responsibility into spending preferences. *International Journal of Sociology*, 49 (2), 110–129. doi:[10.1080/00207659.2019.1582964](https://doi.org/10.1080/00207659.2019.1582964)
- Leiserowitz, A., 2006. American risk perceptions: is climate change dangerous? *Risk Analysis: An International Journal*, 25 (6), 1433–1442. doi:[10.1111/j.1540-6261.2005.00690.x](https://doi.org/10.1111/j.1540-6261.2005.00690.x)
- Leiserowitz, A., et al., 2020. *Politics & global warming, April 2020*. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication.
- Lewis, G.B., Palm, R., and Feng, B., 2019. Cross-national variation in determinants of climate change concern. *Environmental Politics*, 28 (5), 793–821. doi:[10.1080/09644016.2018.1512261](https://doi.org/10.1080/09644016.2018.1512261)
- Linde, S., 2018. Political communication and public support for climate mitigation policies: a country-comparative perspective. *Climate Policy*, 18 (5), 543–555. doi:[10.1080/14693062.2017.1327840](https://doi.org/10.1080/14693062.2017.1327840)
- Lockwood, M., 2018. Right-wing populism and the climate change agenda: exploring the linkages. *Environmental Politics*, 27 (4), 712–732. doi:[10.1080/09644016.2018.1458411](https://doi.org/10.1080/09644016.2018.1458411)
- Lubbers, M. and Coenders, M., 2017. Nationalistic attitudes and voting for the radical right in Europe. *European Union Politics*, 18 (1), 98–118. doi:[10.1177/1465116516678932](https://doi.org/10.1177/1465116516678932)
- Mair, P. and Mudde, C., 1998. The party family and its study. *Annual Review of Political Science*, 1 (1), 211–229. doi:[10.1146/annurev.polisci.1.1.211](https://doi.org/10.1146/annurev.polisci.1.1.211)
- McCarthy, J., 2019. Authoritarianism, populism, and the environment: comparative experiences, insights and perspectives. *Annals of the American Association of Geographers*, 109 (2), 301–313. doi:[10.1080/24694452.2018.1554393](https://doi.org/10.1080/24694452.2018.1554393)
- McCright, A.M. and Dunlap, R.E., 2011. The politicization of climate change and polarization in the American public's views of global warming, 2001–2010. *The Sociological Quarterly*, 52 (2), 155–194. doi:[10.1111/j.1533-8525.2011.01198.x](https://doi.org/10.1111/j.1533-8525.2011.01198.x)
- McCright, A.M., Dunlap, R.E., and Marquart-Pyatt, S.T., 2016. Political ideology and views about climate change in the European Union. *Environmental Politics*, 25 (2), 338–358. doi:[10.1080/09644016.2015.1090371](https://doi.org/10.1080/09644016.2015.1090371)
- McCright, A.M., Dunlap, R.E., and Xiao, C., 2013. Perceived scientific agreement and support for government action on climate change in the USA. *Climatic Change*, 119, 511–518. doi:[10.1007/s10584-013-0704-9](https://doi.org/10.1007/s10584-013-0704-9)
- Mudde, C., 2007. *Populist radical right parties in Europe*. Cambridge: Cambridge University Press.
- Poortinga, W., et al., 2019. Climate change perceptions and their individual-level determinants: a cross-European analysis. *Global Environmental Change*, 55, 25–35. doi:[10.1016/j.gloenvcha.2019.01.007](https://doi.org/10.1016/j.gloenvcha.2019.01.007)
- Rahmstorf, S., 2004. *The climate sceptics*. Potsdam: Potsdam Institute for Climate Impact Research.

- Reed, M., 2016. 'This loopy idea': an analysis of UKIP's social media discourse in relation to rurality and climate change. *Space and Polity*, 20 (2), 226–241. doi:10.1080/13562576.2016.1192332
- Ruser, A. and Machin, A., 2019. Nationalising the climate: is the European far right turning green? *Green European Journal*, September. Available from: <https://www.greeneuropeanjournal.eu/nationalising-the-climate-is-the-european-far-right-turning-green/> [Accessed 14 Jan 2020].
- Schaller, S. and Carius, A., 2019. *Convenient truths: mapping climate agendas of right-wing populist parties in Europe*. Berlin: Adelphi.
- Schatz, R.T., Staub, E., and Lavine, H., 1999. On the varieties of national attachment: blind versus constructive patriotism. *Political Psychology*, 20 (1), 151–174. doi:10.1111/0162-895X.00140
- Schneider, S.L., 2008. Anti-immigrant attitudes in Europe: outgroup size and perceived ethnic threat. *European Sociological Review*, 24 (1), 53–67. doi:10.1093/esr/jcm034
- Smith, E.K. and Mayer, A., 2018. A social trap for the climate? collective action, trust and climate change risk perception in 35 countries. *Global Environmental Change*, 49, 140–153. doi:10.1016/j.gloenvcha.2018.02.014
- Smith, E.K. and Mayer, A., 2019. Anomalous anglophones? contours of free market ideology, political polarization, and climate change attitudes in English-speaking countries, Western European and post-Communist states. *Climatic Change*, 152, 17–34. doi:10.1007/s10584-018-2332-x
- Snijders, T.A. and Bosker, R.J., 2011. *Multilevel analysis: an introduction to basic and advanced multilevel modeling*. London: SAGE.
- Stanley, B., 2008. The thin ideology of populism. *Journal of Political Ideologies*, 13 (1), 95–110. doi:10.1080/13569310701822289
- Stanley, S.K., Wilson, M.S., and Milfont, T.L., 2017. Exploring short-term longitudinal effects of right-wing authoritarianism and social dominance orientation on environmentalism. *Personality and Individual Differences*, 108, 174–177. doi:10.1016/j.paid.2016.11.059
- Tamir, Y., 2019. *Why nationalism*. Princeton, NJ: Princeton University Press.
- Tesler, M., 2018. Elite domination of public doubts about climate change (not evolution). *Political Communication*, 35 (2), 306–326. doi:10.1080/10584609.2017.1380092
- The Economist, 2015. The march of Europe's little Trumps. *The Economist*. Available from: <http://www.economist.com/node/21679855> [Published 10 Dec 2015; Accessed 14 Jan 2020].
- Tosun, J. and Debus, M., 2020. Right-wing populist parties and environmental politics: insights from the Austrian Freedom Party's support for the glyphosate ban. *Environmental Politics*, 1–21. doi:10.1080/09644016.2020.1813997
- Tranter, B. and Booth, K., 2015. Scepticism in a changing climate: a cross-national study. *Global Environmental Change*, 33, 154–164. doi:10.1016/j.gloenvcha.2015.05.003
- Vasilopoulou, S., 2009. Varieties of Euroscepticism: the case of the European extreme right. *Journal of Contemporary European Research*, 5 (1), 3–23.
- Volkens, A., et al., 2018. *The Manifesto data collection. Manifesto project (MRG/CMP/MARPOR). Version 2018b*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).
- Woertz, E., coord., 2017. *Populism in Europe: from symptom to alternative?* Barcelona: Centre for International Affairs, CIBOD Report #01.