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Are would-be authoritarians right? Democratic support and citizens’ left-right self-placement in former left- and right-authoritarian countries

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ABSTRACT

Conventional wisdom dictates that the more citizens lean towards either end of the ideological spectrum, the lower their support for democracy. The main model pitted against this “rigidity-of-the-extremes model” is the “rigidity-of-the-right model”. This model assumes that rightist citizens are less supportive. This study proposes and empirically demonstrates the validity of an alternative model, which we call “the authoritarian legacy model”. This model predicts that whether leftist or rightist citizens are less supportive of democracy depends on countries’ experience with left- or right-authoritarianism. To evaluate its validity, we present a systematic comparative investigation of the relation between citizens’ ideological and democratic beliefs, using European and World Values Survey data from 38 European countries (N = 105,495; 1994-2008). In line with this model, our analyses demonstrate that democratic support is lowest among leftist citizens in former left-authoritarian countries and among rightist citizens in former right-authoritarian countries. We find that this relation persists even among generations that grew up after authoritarian rule. These findings suggest that traditional ideological rigidity models are unsuitable for the study of citizens’ democratic beliefs.

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Democratic support; left-right self-placement; ideological rigidity; authoritarian legacies; political history; extremism and democracy

Introduction

Who opposes democracy? In their seminal work The Authoritarian Personality, Adorno, Frenkel-Brunswik, Levinson and Sanford proposed that would-be authoritarians share fundamental ideological beliefs. In recent years, this work has regained significance. The rise of radical right movements and strongman politics seem to indicate that democracy is not fully uncontested.¹ For this reason, scholarship has sought to understand the relation between citizens’ ideological and democratic beliefs. Two models have been proposed to study this relation. The “rigidity-of-the-extremes
model” dictates that the more citizens lean towards either end of the ideological spectrum, the lower their support for democracy. The main theory pitted against this model is the “rigidity-of-the-right model”. This model predicts that citizens on the right end of the spectrum are less supportive. In this study, we propose a third model, which we refer to as the “authoritarian legacy model”. This model posits that whether leftist or rightist citizens are less supportive depends on historical experiences with left- or right-authoritarianism. To evaluate its validity, we present a systematic comparative investigation of the relation between citizens’ ideological and democratic beliefs across countries.

To substantiate our argument, we combine insights from the literature on cognitive rigidity, authoritarian legacy effects and elite behaviour in post-authoritarian countries. We argue that reminders of the past regime provoke two types of responses. The first response occurs among citizens who maintain a positive reading of the past. These citizens may enjoy the societal order one would typically find under authoritarian rule or feel that the past regime was particularly effective in catering to their ideological preferences. In effect, they may feel more inclined to identify with the past regime’s ideological or democratic beliefs. The second type of response occurs among citizens who maintain a negative reading of the past. These citizens may be appalled by the regime’s authoritarian practices (e.g. repression and violence) or believe that only democracies are able to cater to their ideological preferences. Consequently, they may become more supportive of the regime’s antipode: pro-democratic ideological opponents. If this is the case, leftist citizens should be less supportive of democracy and rightist citizens more in countries such as Slovakia or Poland. Inversely, rightist citizens should be less supportive and leftist citizens more in countries such as Austria and Greece.

Our study offers several contributions. Empirically, we demonstrate that existing models of ideological rigidity are unsuitable for the study of democratic beliefs. In particular, we refute the assumption that the relation between citizens’ ideological and democratic beliefs is invariant across countries. This finding is consequential for comparative democracy research, in which it is standard practice to make such assumptions. Our study also offers an important theoretical refinement of arguments made in earlier research on legacy effects in new democracies. That is, we draw on evidence that even a distant legacy establishes pressures to reaffirm democratic values and discredit authoritarian ones. Our argument is, therefore, particularly suited to study long-term legacy effects on citizens’ political beliefs. Methodologically, we contribute by developing non-linear tests of our expectations. To this end, we pool data of 105,495 individuals in 38 European countries from the European and World Values Survey (1994–2008). We take advantage of the variety of historical backgrounds to assess how the relation between citizens’ ideological and democratic beliefs varies with countries’ political history. We subsequently leverage variation in individuals’ birthyear to assess whether these effects persist despite processes of generational replacement.

Theory and hypotheses

Ideological rigidity models

In the early 1950s, scholars such as Adorno and colleagues and Rokeach first articulated the hypothesis that authoritarian-minded citizens are similar in their ideological
rigidity. They argued that the defining psychological traits of these less democratic citizens – e.g. intolerance, overconfidence, distress, dogmatism and simplicity – pushes them towards certain (extreme) ideological beliefs. Popular and scholarly belief is that these traits push less democratic citizens towards either end of the ideological spectrum. Social psychologists labelled this assertion the “rigidity-of-the-extremes model”. The main model pitted against it is called the “rigidity-of-the-right model”. This model differs in its insistence that citizens with rightist beliefs are more cognitively rigid and, thus, less supportive of democracy.

In their current form, the predictions derived from these two models are mutually exclusive. The reason for this is that they assume that cognitive rigidity affects citizens’ beliefs in the same way everywhere: no matter the context, less democratic citizens tend to lean more towards either end of the spectrum or just the right end. In what follows, we propose an alternative model to study the relation between citizens’ ideological and democratic beliefs. We call this the “authoritarian legacy model”. To be sure, in proposing this model, we do not refute the established knowledge that cognitive rigidity constitutes the basis of citizens’ ideological and democratic beliefs. Instead, we reject the idea that this rigidity influences mass political behaviour in different countries in the same way.

**The authoritarian legacy model**

**Authoritarian legacies**

The central premise of authoritarian legacy research can best be understood as a criticism of the idea of a “zero hour”. This idea holds that it is possible to facilitate a complete break with the authoritarian past and start with a clean slate. Authoritarian legacy scholars refute this idea. They argue that one will always be able to find traces of the past regime in the present. The vehicles of these traces may be material. They may take on the form of literature, education, popular culture, architecture, democratic propaganda, etcetera. The vehicles of these traces may also be human: citizens may socialize their children into particular beliefs that they acquired due to their experiences with authoritarianism. In effect, citizens living in former authoritarian countries are exposed to many traces left behind by the past regime, irrespective of whether they have lived through it or not. In this study, we focus on traces resulting from the two most salient traits of twentieth-century authoritarian regimes in Europe, that is their authoritarianism and extreme ideologies. That is, communist and socialist states were authoritarian and left-wing. Others, such as Nazi Germany or military regimes in Spain and Greece, were authoritarian and right-wing.

The purpose of legacy research is to demonstrate that these traces affect individual, elite and mass political behaviour. The authoritarian past, then, serves as an additional contextual factor that one would not find elsewhere that needs to be taken into account when studying political behaviour. In this case, authoritarian legacies may affect political behaviour because the word “authoritarianism” calls to mind images of the past regime. Besides, the label “left” calls to mind the images of the past regime in countries with a left-authoritarian legacy and the label “right” in countries with a right-wing legacy. In other words, the past creates an interpretative lens through which citizens judge the meaning of these words. In effect, citizens in former authoritarian countries
are more likely to believe that their ideological and democratic beliefs say something about their support for the past regime or its practices.

**Two types of legacy effects**
The connotations the word “authoritarianism” and the labels “left” and “right” have acquired in former authoritarian countries are, therefore, hardly neutral. They evoke specific images of what living under the rule of the past regime would look like. In the following paragraphs, we theorize that citizens’ ideological and democratic beliefs are (directly or indirectly) influenced by the authoritarian past. In particular, we theorize two types of legacy effects.

This first type comprises the traditional understanding of legacy effects. It envisions legacies as an inheritance from the past regime. This effect occurs among citizens who maintain a positive reading of the past and adjust their political beliefs accordingly. There are two reasons why citizens would feel more inclined to maintain such a positive reading. The first reason mirrors the argument put forward in the cognitive rigidity literature. This explanation acknowledges that even after democratic transition, some citizens prefer the societal hierarchy and order one would typically find under authoritarian rule. These less democratic citizens experience democratic freedoms as a burden rather than a privilege. Of course, the stronger these feelings are, the less these citizens would mind identifying with the ideology of the past regime.

A second reason why citizens would maintain a positive reading of the past regime is that they support its ideological practices, values, or policies. These citizens feel attracted to the ideological core of the past regime and commend authoritarian forms of government for their ability to follow through on their promises. That is, authoritarian governments need not compromise and are, therefore, particularly effective in realizing their policies. Besides, these citizens are reminded of a time where supporting the regime’s ideological beliefs ensured that one would be entitled to its benefits. For this reason, some citizens may be more embrace of authoritarian forms of government. For instance, in former communist countries, this should mean that citizens who develop a typically “left-wing” (communist) preference for a planned economy are more sympathetic towards authoritarianism.

The theoretical mechanisms behind the first type of legacy effects have received a substantial amount of attention in legacy literature. By contrast, this literature has mostly overlooked the reactions among those who maintain a negative reading of the past. However, various studies within the fields of militant democracy, party politics, and media coverage in post-authoritarian countries suggest that disassociating oneself with the beliefs of the authoritarian predecessor is a common practice. Once again, there are two reasons why this type of legacy effect would occur among citizens. First, some citizens feel appalled by the authoritarian traits of the past regime. Their cognitive characteristics are the opposite of the would-be authoritarians described in the work of Adorno and colleagues. They are characterized by high levels of cognitive flexibility and commend democracy for the freedoms it grants to them and others. These citizens remember the past regime for its atrocities, violence and repression. Of course, they are reluctant to identify with the ideology of the past regime. Even more so, they may feel more inclined to identify with the opposite ideology, which they might conceive as the voice of democratic activism.

Second, some citizens may be appalled by the memory of the past because they maintain different ideological beliefs. They remember the authoritarian past as a
time that citizens with similar ideological convictions were at risk of being persecuted or assassinated. \(^{19}\) To these citizens, democracy represents a system in which they have the freedom to express their ideological beliefs and that, to some degree, will cater to their needs. The memory of the past may, therefore, reaffirm their democratic values. The more citizens disagree with the ideological beliefs of the past regime, then, the more supportive they may be of democracy.

These mechanisms need not apply to all citizens for legacy effects to occur. It is very well possible that only a share of the population deliberately adjusts their political beliefs in accordance with their reading of the past. That being said, the remainder of the population may still be indirectly affected by these mechanisms. For instance, their political beliefs may be influenced by citizens who are subjected to these mechanisms, or they may learn to associate the labels “left” and “right” with “good” or “bad” in another context, without knowing its historical origins.

**Empirical implications and evidence**

The authoritarian legacy model has various implications for the relation between citizens’ ideological and democratic beliefs. Furthermore, if we find evidence in favour of this model, we offer an important innovation to earlier models of ideological rigidity. Our novel model has two empirical implications. The first implication is that the direction of the relation between citizens’ ideological and democratic beliefs depends on countries’ authoritarian history. In particular, our model predicts that lower levels of democratic support are associated with leftist beliefs in former left-authoritarian countries and with rightist beliefs in former right-authoritarian countries. These expectations imply a break with earlier ideological rigidity frameworks and existing democracy scholarship, which assume that the relation between these two beliefs is invariant across contexts. The second implication is that the shape of this relation depends on countries’ authoritarian history. That is, if less democratic citizens are pushed towards one end of the spectrum and more democratic citizens towards the opposite end, we should find that the relation takes on a more linear form in former authoritarian countries than elsewhere. The “rigidity-of-the-extremes” model may, therefore, only correctly predict citizens’ democratic support in countries without a legacy of left- or right-authoritarianism. Likewise, the “rigidity-of-the-right” model may only correctly predict citizens’ democratic support in countries with a legacy of right-authoritarianism.

Thus far, a comprehensive analysis of legacy effects on the relation between citizens’ ideological and democratic beliefs (and the shape thereof) is still lacking. However, the findings of extant studies in this area are consistent with our argument. Focusing on post-war Italy, La Palombara and Waters find that support for authoritarian alternatives is considerably higher among rightist (48.0%) than among leftist (42.5%) citizens. \(^{20}\) In Central and Eastern Europe, both Dalton and Tufis reveal leftist citizens to be least supportive of democracy. \(^{21}\) The data collected by the Pew Research Center shows similar patterns, with rightist citizens being most supportive of authoritarian alternatives in former right-authoritarian Germany and Italy. In Venezuela, a country that has been ruled by left-wing strongmen since 1999, on the other hand, they find leftist citizens to be most supportive of authoritarian rule. \(^{22}\) The argument discussed above can bring together all these findings. In particular, we can derive two expectations:
**Hypothesis 1:** (a) Rightist beliefs are associated with lower levels of democratic support in former right-authoritarian countries and (b) leftist beliefs in former left-authoritarian countries.

**Hypothesis 2:** The relation between citizens’ ideological and democratic beliefs is (a) different in former authoritarian countries and (b) follows a more linear pattern than elsewhere.

**Data and methods**

**Data: European and World values study**

For this study, we rely on cross-sectional survey data collected within the framework of the European and World Values Study. The advantage of these surveys is threefold. First, five survey-wave combinations (1994–2008) include a seven-item measurement of democratic support, tapping into both support for democracy and the rejection of authoritarian alternatives. Second, these surveys include all countries in the European region, thereby ensuring a substantial variability in countries’ political history. Finally, their over-time availability permits us to assess the durability of legacy effects. The data in these surveys were collected through a sample representative of the adult population, using face-to-face interviewing techniques. Countries with a history of both right- and left-authoritarianism (i.e., Hungary and East Germany) were not included in our analyses. The pooled dataset comprises 105,495 respondents in 38 countries (country-level response rate between 71% and 89%).

**Variables**

This study aims to assess whether the authoritarian past affects the relation between citizens’ democratic and ideological beliefs. In the theory section, we formulated two arguments why this would be the case, one in which democratic support was the dependent variable and one in which left-right orientation was the dependent variable. Although the analysis techniques we use still require specifying one as an independent and the other as the dependent variable, we can retain this bidirectional nature by alternating between dependent variables. In the results section, we report the results of two sets of analyses, one using democratic support as the dependent variable and the other using left-right orientation. For the sake of parsimony, we only discuss the analyses using democratic support as the dependent variable. As the remainder of this study shows, the second set of analyses yields exactly the same conclusions.

To measure democratic support, we use an extended version of the “democracy-autocracy index”, proposed by Pop-Eleches and Tucker. This index consists of seven items on a four-point scale, ranging between “very bad” and “very good” or “disagree strongly” and “agree strongly”. Support for authoritarian rule is calculated as the mean of items asking whether respondents agreed that (1) having a leader who does not have to bother with elections and (2) having the army govern is a good way of government; and that democracies (3) do not have a well-functioning economic system, (4) are bad at maintaining order and (5) are indecisive. We use the mean of items asking whether respondents agreed that democracy is (1) a good way of government and (2) better than any other form of government to measure support for democratic rule. We construct the index by subtracting support for authoritarian rule from support for democratic rule. The outcome is an index ranging between full support for authoritarian rule (−3) to full support for democratic rule (+3), with a Cronbach’s
$\alpha$ of 0.755. Citizens’ ideological beliefs are measured using their self-placement on the left-right dimension, originally ranging between 1 “left” to 10 “right”.

The only truly independent – and exogenous – variables in this study are countries’ and citizens’ experiences with authoritarianism. To determine countries’ experiences, we first use V-Dem data to tentatively map all twentieth-century authoritarian regimes.\textsuperscript{26} To avoid relying on arbitrary cut-off criteria, we pinpoint the start- and end-dates based on identifiable historic events, such as transfers of power, coups and the first democratic elections. Annex A.1. contains a the justification for and validation of the start- and end-dates of each regime. Countries with a mostly uninterrupted experience with democracy since the turn of the twentieth century are considered democratic legacies. We classify countries with a history of fascism or military regimes as right-authoritarian and post-socialist or post-communist countries as left-authoritarian. The regime classification is visualized in Figure 1. We subsequently

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{regime_classification.png}
\caption{Regime classification.}
\footnotesize{Notes. The start- and end-dates of each regime, as well as the justification and validation of the classifications scheme, can be found in Annex A.1. The fill colour of countries that were excluded from the analyses is white.}
\end{figure}
use information about respondents’ birthyear to distinguish between respondents who have experienced authoritarian rule after the age of five and respondents who have not. This variable enables us to assess whether country-level legacy effects persist despite processes of generational replacement. A detailed overview of the age distribution by country is visualized in Annex A.2.

We also include several demographic controls to factor out the possible confounding influence of citizen characteristics. We first include two variables to permit analysis of generational differences: a continuous measurement for citizens’ age and a dummy for each survey-wave combination. Second, we include an ordinal variable gauging respondents’ level of educational attainment, ranging between “0” no formal education to “9” completed university-level education. Third, we measure political interest on an ordinal scale ranging from “1” very interested to “4” not at all interested. Finally, we include dummies for respondents’ sex and whether they are natives. Before running the analyses, we inverted the scales of inversely coded items and rescaled all variables to range between the values “0” and “1”. The summary statistics can be found in Table 1.

**Analysis strategy**

In analysing legacy effects, we face four methodological challenges: (1) identifying legacy effects, (2) assessing the durability of legacy effects (3) obtaining adequate estimations given our data, and (4) testing legacy effects. The first challenge involves separating legacy effects from other noise in the data. In particular, we wish to separate variation in the relation between citizens’ ideological and democratic beliefs explained by countries’ authoritarian past from variation explained by other factors. A good way to deal with this is by looking at how former patterns in authoritarian countries differ from those elsewhere. The variation they share, then, clearly has nothing to do with the authoritarian past, and the remaining variation can be attributed to countries’ authoritarian past. In other words, we can resolve this problem by using countries with a democratic legacy as a benchmark.

A second challenge arises when assessing the intergenerational durability of legacy effects. That is, it is statistically difficult to disentangle these so-called “cohort effects” from the potentially cofounding influences of age and period. To resolve this, we use age-period-cohort analysis techniques, which deal with this problem by including

<table>
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<th>Variable</th>
<th>N</th>
<th>Mean/Prop.</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.250</td>
<td>1.051</td>
<td>-3</td>
<td>3</td>
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<tr>
<td>Age</td>
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<td>0.179</td>
<td>0</td>
<td>1</td>
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<td>Educational Attainment</td>
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<td>0.339</td>
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<td>1</td>
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<td>0.156</td>
<td>Ref.</td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td>66,853</td>
<td>0.844</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Left-Right</td>
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<td>0.487</td>
<td>0.238</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political Interest</td>
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<td>0.499</td>
<td>0.298</td>
<td>0</td>
<td>1</td>
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<tr>
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<td>0.490</td>
<td>Ref.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57,481</td>
<td>0.510</td>
<td>0</td>
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<tr>
<td>Survey-Year: EVS 1999</td>
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<td>0.239</td>
<td>Ref.</td>
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<td>0.130</td>
<td>0</td>
<td>1</td>
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</table>
constrained specifications of age and period variables as controls. Imposing these constraints reduces the correlation between them. In our case, we include a dummy variable for each survey-wave (i.e. period), and we constrain the coefficient of age to be linear.28

The third challenge involves obtaining adequate estimations of our effects. Doing so requires optimizing the estimation of the association between citizens’ left-right orientation and democratic support. In particular, we wish to obtain an estimation of left-right orientation [democratic support] for each legacy that best represents that of all units of analysis (i.e. countries) classified under that legacy. Obtaining an adequate estimation of the coefficient and standard error entails eliminating a possible bias introduced by the complicated, nested structure of the data. Using multilevel analysis techniques, with observations nested in countries, enables us to factor out the 13.63% variance explained by the clustering of respondents within countries. Another advantage of this technique is that it allows us to consciously impose and lift constraints on the cross-national variability in the strength of individual-level coefficients. Allowing the coefficient of left-right orientation [democratic support] to vary (i.e. random slopes), enables us to assess whether the average value of this coefficient varies along with countries’ authoritarian legacy. Rather than relying on the crude practice of interpreting p-values, we calculate 90% bootstrapped confidence intervals, thereby facilitating a 5% confidence level for our one-sided hypotheses. This procedure enables us to obtain a sampling distribution of plausible parameter estimates, which we visualize through coefficient plots. We consider a hypothesis fully supported when the upper and lower bounds align with our expectations. Models 1a to 1c are based analyses of a single legacy, using the following equation:

\[
y_{ij} = (\beta_0 + u_{0j}) + \beta_1 \text{Ideology} + \Sigma \beta X + \epsilon_{ij} \tag{1}
\]

in which \(y_{ij}\) denotes the value on democratic support for individual \(i\) in country \(j\), \(\beta_0\) the grand intercept, \(u_{0j}\) the deviation between the grand intercept and the intercept for country \(j\), \(\beta_1\) the fixed effect for citizens’ left-right orientation, \(\Sigma \beta X\) the coefficients for the control variables and \(\epsilon_{ij}\) the stochastic error for individual \(i\) in country \(j\). Model 1d uses the pooled data and models the interaction between countries’ legacy and citizens’ left-right orientation. The equation for Model 1d can be described as:

\[
y_{ij} = (\beta_0 + u_{0j}) + (\beta_1 + u_{1j}) \text{Ideology} + \beta_2 \text{Left Wing} + \beta_3 \text{Right Wing} + \beta_4 \text{Ideology} \cdot \text{Left Wing} + \beta_5 \text{Ideology} \cdot \text{Right Wing} + \Sigma \beta X + \epsilon_{ij} \tag{2}
\]

Equation 2 differs from Equation 1 due to the addition of dummies for countries’ legacy (\(\beta_2\) and \(\beta_3\)), the partition of the fixed effect for ideology into a grand coefficient \(\beta_1\) and a country-random part \(u_{1j}\) and a cross-level interaction between ideology and legacy (\(\beta_4\) and \(\beta_5\)).

The fourth and final challenge is testing legacy effects on the shape of the relation between citizens’ ideological and democratic beliefs (Hypothesis 2b). This is a challenge parametric techniques cannot address for at least two reasons. First, parametric techniques force us to make presumptions about the shape of these relations. This is problematic because these techniques may provide support for any specification, even if they are incorrect. Second, parametric techniques also do not provide a measure of linearity. This limitation makes it difficult to test our expectations formally. To address this challenge, we employ a nonparametric analysis technique: Generalised
Additive Mixed Models (GAMMs). In layman’s terms, this technique allows us to drop any presumption we might have about the shape of the relation. It furthermore ensures that the estimated shape of the effect reflects its actual shape. It does so by lifting the restriction that predictions must be a weighted sum of the predictors. Instead, this technique allows the outcome to be modelled as a sum of linear terms $\beta X$, combined with arbitrary (a priori unknown) functions $f(X)$ for the terms of interest.

In the case of GAMMs, these arbitrary functions $f(X)$ are (cubic) spline functions, which can be imagined as elastic line gauges bend on certain values of the scale of the variable of interest (i.e. “knots”). During the estimation procedure, GAMMs learn to find the optimal position for these knots. In our case, we use these techniques to produce smoothed curves and unbiased confidence intervals for citizens’ left-right orientation. As Equation 3 demonstrates, the specifications of these models is the same as for Models 1a to 1c, with the sole exception that the fixed effect for ideology is now estimated using a spline function:

$$y_{ij} = (\beta_0 + u_{0j}) + f(\beta_1 \text{Ideology}) + \sum \beta X + \epsilon_{ij}$$  \hspace{1cm} (3)

To test Hypothesis 2b, we look at a statistic evaluating to what degree the curve deviates from linearity: Effective Degrees of Freedom (edf). The higher the value of this statistic, the more the curve deviates from linearity. This statistic, therefore, allows us to formally establish whether the relation between democratic support and left-right orientation follows a more linear pattern in former authoritarian countries.

**Results**

**Legacy effects on the relation between citizens’ democratic and ideological beliefs**

The first and principal expectation of this study is that rightist beliefs are associated with lower levels of democratic support in former right-authoritarian countries (Hypothesis 1a) and with leftist beliefs in former left-authoritarian countries (Hypothesis 1b). To test this, we estimate a separate linear analysis for each legacy. The results of these analyses are presented in Models 1a to 1c in Figure 2.\textsuperscript{29}

These analyses provide full support for Hypothesis 1. The negative value of the coefficient for left-right orientation in Model 1a shows that in former right-authoritarian countries, the most rightist citizens are 0.59 points (9.83%) less supportive than the most leftist citizens. These findings are in line with the expectations formulated in Hypothesis 1a. Likewise, the positive value of the estimate for left-right orientation in Model 1b predicts that in former left-authoritarian countries, the most leftist citizens are 0.39 points (6.50%) less supportive than the most rightist citizens, thereby providing support for Hypothesis 1b.

To ascertain that these differences can be attributed to countries’ past, we benchmark the coefficients for left-right orientation in countries with an authoritarian legacy to that in countries with a democratic legacy.\textsuperscript{30} We expected this coefficient would be significantly different in former authoritarian countries than elsewhere (Hypothesis 2a). The main coefficient for left-right orientation in Model 1d (Figure 2) represents its correlation with democratic support in countries with a democratic legacy, and the interaction terms represent the deviation from this coefficient in former authoritarian countries. Model 1d fully supports our expectations. This
model predicts that in countries with a right-wing legacy rightist citizens are 0.53 points (8.83%) less democratic and in countries with a left-wing legacy leftist citizens are 0.33 points (5.52%) less democratic than their ideological counterparts. Elsewhere, rightist citizens are less democratic, but this difference is 5.32% (0.24) less than in former right-authoritarian countries. Hence, the analyses provide full support for Hypothesis 1b.

A final expectation was that countries’ authoritarian past would encourage citizens with a positive reading of the past to disassociate with the regime’s authoritarian and ideological beliefs, and citizens with a negative reading to disassociate from its beliefs. If this is the case, the relation between citizens’ ideological and democratic beliefs should be more linear in former authoritarian countries than elsewhere (Hypothesis 2b). To test this, we calculate an edf-statistic based on the results of nonlinear analyses. A lower value on this statistic indicates a higher degree of linearity. Figure 3 confirms our expectations. It shows that in countries with a democratic legacy, lower support is concentrated on both ends of the left-right spectrum. In former authoritarian countries, by contrast, lower support is concentrated on just one end. The edf-statistics tied to the estimations in former authoritarian countries confirm the tentative conclusion that the relation between left-right orientation and democratic support follows a more linear pattern in former authoritarian countries than elsewhere. The value of this statistic is considerably lower in these countries (7.82 in left-wing legacies, 8.05 in right-wing legacies) than that in countries with a democratic legacy (edf = 8.73). The analyses, therefore, provide full support for Hypothesis 2b.

These findings are important for several reasons. In general, our findings suggest that a core assumption of existing rigidity models, namely, its insistence that citizens’ democratic and ideological beliefs are related in the same way in every context, is incorrect. In
addition, these findings provide support for two important refinements of extant research on authoritarian legacies. They show that legacy effects exist in all former authoritarian countries, new and old alike. The nonlinear analyses furthermore show that authoritarian legacies do more than encourage citizens with a positive reading of the past to associate themselves with the past regime’s ideological and authoritarian beliefs: they also pressure citizens with a negative reading to disassociate themselves.31

The intergenerational durability of legacy effects

A central claim we make in our theory section is that legacy effects are able to transcend generations. We perform age-period-cohort analysis to test whether this is the case. These analyses include an interaction term between citizens’ ideology and whether or not they have experienced authoritarian rule. The inclusion of this interaction term permits us to estimate a separate line for citizens who have experienced authoritarian rule and those who grew up thereafter. The main coefficient of left-right orientation, then, represents its association with democratic support among citizens who grew up after authoritarian rule. The interaction term with experience represents the difference in the value of this coefficient for citizens who have experienced authoritarian rule. If the main coefficient is significant, we may conclude that the hypothesized legacy effects persist across generations.

Figure 3. Nonlinear test of legacy effects.

Notes. Figures are the result of Generalized Additive Mixed Models, with a cubic spline function estimation for citizens’ left-right orientation (knots = 10). The grey bound represents a 95% confidence interval around the predicted value. The edf-statistics can be read as measures of linearity and only apply to the conditional estimations. The lower the value of this statistic, the more linear a relation is.
The results for the linear analyses are visualized in Figure 4. The analyses provide strong evidence that the observed legacy effects survive processes of generational replacement. The main coefficient for citizens’ left-right orientation in Figure 4, Model 2a predicts that in former right-authoritarian countries, rightist citizens born after authoritarian rule are 0.61 points (10.17%) less democratic than their right-wing counterparts. Likewise, the main coefficient for left-right orientation in Model 2b predicts that in former left-authoritarian countries, leftist citizens born after authoritarian rule are 0.22 points (3.66%) less democratic than their right-wing counterparts. In other words, these analyses consistently show that legacy effects also occur among generations who grew up after authoritarian rule.

We perform a nonlinear analysis to evaluate whether legacy effects on the shape of the relation between citizens’ ideological and democratic beliefs survive processes of generational replacement (Figure 5). We may conclude that legacy effects persist if the value of the effective degrees of freedom of the coefficient for citizens’ left-right orientation is lower than that in countries with a democratic legacy. Here, too, we find strong evidence that our hypothesized legacy effects persist across generations. The left panels in Figure 5 show that in former left-authoritarian countries, the relation is both more linear among citizens who have not (edf = 2.08) and citizens who have (edf = 6.86) experienced authoritarian rule than among citizens in countries with a democratic legacy (edf = 8.73). The right panels mirror these findings for countries with a right-authoritarian legacy. These panels show that the relation between citizens’ ideological and democratic
beliefs is considerably more linear among citizens who have not experienced authoritarian rule ($edf=7.11$) and those who have ($edf=5.95$) than among citizens in countries with a democratic legacy ($edf=8.73$).

What can we learn from these findings? If we take a closer look at the left panels of Figure 5, we see that in former left-authoritarian countries, deviations from linearity among citizens with direct exposure to authoritarianism are mostly located on the left side of the ideological spectrum. The right panels, by contrast, show that these deviations exist on both sides in former right-authoritarian countries. This observation yields an especially important conclusion. It tells us that the second type of legacy effect, that is the desire of citizens with a negative reading of the past to dissociate with the authoritarian and ideological beliefs of the regime, only exists in former right-authoritarian countries.

**Discussion**

Who opposes democracy? Despite growing concerns over the future of democracy, there is surprisingly little popular and scholarly agreement regarding the ideological
alignment of less democratic citizens. Most point to the ideological extremes as the main source of lower support. Others believe that lower support is exclusively concentrated on the right end. In this study, we proposed, tested and demonstrated the validity of another model, called the “authoritarian legacy model”. We showed that whether lower support is located on the left side, the right side or both sides of the ideological spectrum depends on historical experiences with left- or right-authoritarianism.

Our findings play well to several longstanding debates in political science. Theoretically, our study shows that the models political psychology has developed to study ideological rigidity are unsuitable for studying democratic support. To be sure, the overwhelming empirical evidence in favour of the authoritarian legacy model does not disprove any of the theoretical arguments fielded in political psychology. Citizens’ ideological and democratic beliefs may still very well be rooted in their cognitive rigidity. Instead, this study should be viewed as an invitation for scholars working in this field to take into account the historical background of a country, at least when studying democratic support. That is, we show that the validity of the predictions made by earlier ideological rigidity models is a matter of context. For example, our findings provide support for the “rigidity-of-the-extremes” hypothesis, but only in countries with a democratic legacy. Likewise, we found support for the “rigidity-of-the-right” hypothesis, but only in former right-authoritarian countries.

Our study also offers two additions to extant research on authoritarian legacy effects. First, we theorized a novel type of legacy effect, caused by citizens’ desire to disassociate with the ideological and authoritarian beliefs of the past regime. We investigated this by studying legacy effects on the shape of the relation between left-right orientation and democratic support. Our findings provide compelling evidence for this refinement of earlier theories. Our nonlinear analyses revealed that rightist beliefs imply stronger support for democracy in former left-authoritarian countries, as much as leftist beliefs imply weaker support. Inversely, leftist beliefs indicated higher support in former right-authoritarian countries, as much as rightist beliefs indicated weaker support. A second, related, contribution is that this extension enabled us to theorize legacy effects that are not only relevant in the context of new democracies. Our findings provided evidence that the authoritarian past structures the association between left-right orientation and democratic support in former authoritarian countries, old and new democracies alike.

The findings of our study are also empirically relevant for multiple reasons. In general, our findings confirm that the ideological beliefs of less democratic citizens are more similar in former authoritarian countries than elsewhere. Although not necessarily opposed to democratic government, these citizens may be swayed to support authoritarianism if they feel democratic government does not cater to their psychological needs or ideological interests. This means that an important condition for the mobilization of less democratic citizens is more strongly fulfilled in these countries than elsewhere. Moreover, we found that legacy effects are durable and do not disappear along the process of generational replacement. This conclusion is especially valuable, given that many other authoritarian legacy effects do tend to fade with generational replacement. In effect, our study suggests that legacy are more than just a short-term product of democratic transition and may help reactionary and democratic activist movements mobilize citizens decades later. This may explain why parties with an ideological link to the authoritarian past do not only have a stable
basis in new democracies, such as the Czechian Communist Party of Bohemia and Moravia (KSČM) but also in established democracies, such as the German National Democratic Party (NPD).

Methodologically, this study offers two contributions arising from our decision to develop a nonlinear test of our expectations. First, using nonparametric methods enabled us to drop preconceptions regarding the shape of the relation between citizens’ democratic and ideological beliefs. Lifting these constraints enabled us to achieve higher levels of confidence regarding the shape of effects than a theoretically informed model specification would. This exploratory feature of nonparametric methods is especially valuable in studies like ours, in which there are various conflicting theoretical claims about the shape of a relation. Second, this approach permitted us to propose a novel way to study legacy effects. We argued and empirically demonstrated that the authoritarian past resulted in a more linear relation between citizens’ democratic and ideological beliefs. Besides, the exploratory nature of these analyses also enabled us to formulate more nuanced conclusions that would have gone unnoticed using only parametric methods. For instance, we did not find any evidence that more democratic citizens who experienced left-authoritarian rule were more inclined to identify with rightist ideological beliefs. By contrast, we did find evidence that more democratic citizens who experienced right-authoritarian rule were more inclined to identify with leftist ideological beliefs. This observation necessarily invites us to reflect on the reason why this is not the case in former left-authoritarian countries. A possible reason is that left-wing regimes were more consistent in their efforts to indoctrinate the masses than right-wing regimes. This regime characteristic may contribute to the homogenization, rather than polarization, of public opinion. This may explain why individual legacy effects are only found on the left side of the ideological spectrum. Further theorization and analysis on shape effects may, therefore, yield more nuanced conclusions about the influence of countries’ authoritarian past.

This tentative suggestion necessarily brings us to the discussion of other limitations and avenues for future research. First, in the theorization of legacy effects, we focused on countries with either a legacy of right- or left-authoritarianism. In effect, the arguments put forward here cannot be applied to countries with competing authoritarian (left- and right-wing) legacies, such as Hungary and East Germany. In these rare cases, both the left- and the right end of the ideological spectrum are tainted by an antidemocratic connotation. It is, therefore, unclear what the empirical implications for mass political behaviour would be. However, qualitative analysis of these cases can be very instructive, and they may even help further refine our theory. Knowledge on how citizens’ deal with these competing pressures may help us better understand which type of regime traces (e.g. reference in political debate, memorial sites, museums, popular culture) prevail in citizens’ considerations. Second, it is important to note that our finding that leftist citizens are less democratic in former left-authoritarian countries seems to be at odds with the observation that radical right parties are flourishing in some of these countries (for instance PiS in Poland). We believe that the reason for this is that the left-authoritarian past has enabled the radical right to acquire a pro-democratic reputation. This argument can be loosely substantiated by the fact that PiS entered the electoral arena as a pro-democratic party with a strong anti-communist rhetoric. This rhetoric may have permitted this party to ward off accusations of political extremism. More research is necessary to investigate whether this is the case.
Despite these shortcomings, it is clear that the implications of this study reach beyond the question which citizens are more likely to oppose democracy. Contrary to earlier research on legacy effects, our study shows that the authoritarian past establishes lasting and society-wide effects, that will not simply vanish with generational replacement. As such, this study tells us a great deal about the mobilization potential of reactionary and democratic activist movements across different countries.

Notes
2. Mounk, The People vs. Democracy; Rokeach, “Political and Religious Dogmatism.”
5. Adorno et al., The Authoritarian Personality; Popper, The Open Society; Gryzmala-Busse, Redeeming the Communist Past; Loxton and Mainwaring, Life After Dictatorship.
7. de Leeuw et al, “After All This Time.”
10. Minkenberg, Transforming the Transformation?
13. Adorno et al., The Authoritarian Personality; Rokeach, “Political and Religious Dogmatism.”
20. La Palombara and Waters, “Values.”
22. Wike et al., Globally, broad support.
23. The complete replication code for this study can be found in the following Github repository: https://github.com/sdleeuw2/Replication-Code-Democratic-Support-And-Left-Right-Dimension
24. To ensure that our findings are not dependent on a single case, we conducted a series of Leave-One-Out Tests (Annex B.1). These tests reveal that the exclusion of a single country, does not alter the results.
25. Pop-Eleches and Tucker, Communism’s Shadow.
27. We have treated this variable as continuous in the models. Using a categorical specification does not affect the estimations of the variables of interest.
28. Using a categorical specification does not alter the conclusions.
29. To better understand these country-level legacy effects, we investigated whether the strength of the relation between citizens ideological proximity to the authoritarian predecessor and their democratic support varies along the regime’s characteristics. The findings in Annex C.1. reveal this is not the case.

30. To ensure that these cross-national differences can indeed be attributed to the authoritarian past regime, and not just geographic differences in left-right alignment, we mapped several important correlates of the left-right dimension in Annex A.4 across legacies. This analysis shows that democratic support is the only correlate where the coefficient flows in the opposite direction in former left-authoritarian countries.

31. To determine whether this second type of legacy effect also applies to the extreme ends of the ideological spectrum, we compared the distribution of democratic support for citizens identifying as far-left (1 or 2 on the left-right scale) or far-right (9 or 10). The results are summarized in Annex A.3. and confirm that legacy effects apply to both ends of the scale.

32. e.g., on left-authoritarianism, see Pop-Eleches and Tucker, “Communist Legacies.”

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Bibliography


