ORIGINAL ARTICLE

Broadening the study of morality in multiparty settings through a novel dictionary translation and validation methodology

Clara Husson [1] | Nicola Palma [2]

[1]School of Social Sciences, University of Mannheim, Mannheim, Germany

[2]Department of Political and Social Sciences, University of Bologna, Bologna, Italy

Correspondence
Clara Husson, School of Social Sciences, University of Mannheim, Mannheim, Germany.
Email: chusson@mail.uni-mannheim.de

Abstract

Individuals' exposure to morality elicits instantaneous intuitions and influences personal behavior without rational thought or reasoning. Despite our increasing knowledge about the ideology-driven use of morality in bipartisan systems, we lack a good understanding, on the one hand, of political actors' use of moral appeals in multiparty settings and, on the other hand, of what incentives besides ideology lead political actors to strategically use morality. To fill this gap, we examine parties' use of moral appeals applying newly translated versions of the Moral Foundations Dictionary (MFD) into four languages (French, German, Italian, and Spanish) to party manifestos. Our analysis focuses on 31 elections in nine European multiparty systems over the last two decades. Our findings suggest that the use of morality is ideology-driven for some moral foundations, whereas some other moral domains are being used by political actors according to an issue-dependent logic. From a methodological perspective, this article proposes (i) a fully reproducible semi-automatic translation procedure and (ii) an innovative time- and resource-efficient dictionary validation methodology based on formally translated documents.

KEYWORDS
electoral communication, morality, multilingual dictionary approach, quantitative text analysis

INTRODUCTION

Morality is a central concept in all fields of study related to the human thinking process. It can elicit instantaneous intuitions and influences personal behavior without rational thought or reasoning (Haidt, 2001), allowing individuals to effortlessly make judgments and to automatically discern whether something is right or wrong. In the realm of politics, since individuals are receptive to moral appeals, political actors resort to morality in order to trigger an emotional reaction in the target audience (Clifford, 2019; Haidt & Joseph, 2004).

Previous research in the US bipartisan system indicates the linkage between political ideology and distinct moral perspectives, at both the individual (Graham et al., 2009; Haidt & Graham, 2007) and the party level (Lewis, 2019; Lipsitz, 2018; Sagi & Dehghani, 2014). However, despite our increasing knowledge about the ideology-driven use of morality in bipartisan systems, we lack a good understanding of political actors' use of moral appeals in multiparty settings. More specifically, can we detect distinct patterns in the way political actors employ moral appeals within multiparty contexts?

In this article, we tackle this question theoretically relying on the moral foundations theory (MFT; Graham et al., 2009). Originally developed to trace the evolution of morality in different populations and cultures (Haidt & Joseph, 2004), the MFT was subsequently used to analyze the impact of morality in many diverging scholarly fields of research (see Egorov et al., 2020; Harper & Harris, 2017). On the one hand, we analyze whether consolidated findings on the link between political actors' ideology and their use of moral appeals hold in multiparty systems. On the other hand, we expand the analysis beyond the widespread theoretical mechanism that considers ideology as the only determinant of political actors' recourse to moral appeals, examining to what extent the type of issues being addressed (sociocultural vs. economic issues) might influence a party's recourse to morality.

To quantify morality in political texts, we rely on translated and validated versions of the Moral Foundations Dictionary (MFD), which identifies five specific moral foundations: *Care-Harm*, *Fairness-Cheating*, *Loyalty-Betrayal*, *Authority-Subversion*, and *Sanctity-Degradation* (Graham et al., 2009). The existence of the MFD greatly facilitates the study of morality, especially through quantitative text analysis aimed at detecting the presence of the moral foundations in a given corpus. However, the fact that the original MFD is exclusively available in English remains an obstacle to the generalization of existing findings in various fields of study outside the English-speaking area. To fill this gap, in this article we present four validated translations of the English version of the MFD into French, German, Italian, and Spanish.

The contribution of this article is twofold. First, this study enriches the existing literature in political psychology by investigating political parties' use of morality in multiparty contexts. Our findings present compelling evidence that within multiparty frameworks, political actors' resort to moral appeals is influenced not only by their ideology but also by the specific issues they tackle. Second, from a methodological perspective, we develop a semi-automatic dictionary translation method that is entirely and easily replicable for languages beyond those included in our study. Furthermore, this article constitutes a novel attempt to introduce a procedure for dictionaries' validation based on officially translated documents that, unlike traditional validation methodologies based on multilingual surveys or human coders (Bos & Minihold, 2022; Matsuo et al., 2019), offers an efficient and resource-saving alternative for scholars.

Moreover, the methodological innovations presented in this article hold promise for a broader application in the study of values and beliefs in politics, extending beyond the scope of the MFT. It is important to acknowledge that similar approaches can be applied to other values-based theories in the realm of political science, such as Schwartz's universal values (Schwartz, 1994) and Douglas's grid-group cultural theory (Douglas, 1999). These theories

have been examined in relation to the MFT and offer a different perspective on values and beliefs in politics (see, e.g., Johnson et al., 2022).

STUDYING MORALITY IN A POLITICAL CONTEXT: THEORY BUILDING AND HYPOTHESES

The moral foundations theory

The MFT is an influential pluralist theorization of morality developed in the psychology literature that, in contrast to monist conceptualizations of morality (see, e.g., Kohlberg, 1971), conceives it as a multidimensional phenomenon (Graham et al., 2009). MFT stems significantly from the Social Intuitionist Model (SIM) of moral judgment (Haidt, 2001), which posits that moral judgments predominantly arise from emotional and intuitive processing of moral stimuli, followed by subsequent reasoning and deliberation. Expanding upon the SIM, MFT represents a descriptive model of moral psychology, specifically focusing on moral judgment. It conceptualizes morality to encompass a spectrum of human moral judgments, values, and behaviors, grounded in underlying moral intuitions and emotions. Central to MFT is the assertion that human moral judgment predominantly operates through intuitive, nonrational processes.

MFT determines specific criteria and assumptions that a given moral dimension needs to fulfill to become a universally shared moral foundation. A moral concern should be a breeding ground for debate, elicit an instantaneous and affective reaction, be widespread across different cultures, be innate, and contain an evolutionary component, implying that it should change and develop as individuals engage in moral discussions and debates over time (Graham et al., 2012). Five moral dimensions have been shown to meet these criteria: *Care-Harm*, *Fairness-Cheating*, *Loyalty-Betrayal*, *Authority-Subversion*, and *Sanctity-Degradation*. The foundations of *Care-Harm* and *Fairness-Cheating* are often referred to as individualistic foundations, meaning that they are moral dimensions occurring at the individual level, whereas the three remaining foundations are considered as binding foundations, with the social function of focusing on dynamics between individuals at the group level.

Each moral foundation is reflecting the dichotomous contrast between vices and virtues (Graham et al., 2009). The *Care-Harm* foundation aims at capturing the ability to feel compassion and empathy for others. Actions that prioritize caregiving and mitigate harm are considered morally virtuous, whereas those resulting in harm or showing indifference to welfare are judged morally vicious. The *Fairness-Cheating* foundation is based on the values of justice, cooperation, reciprocity, and fairness. Behaviors that uphold fairness and reciprocity are perceived as virtuous acts, whereas those involving cheating, exploitation, or injustice are deemed morally condemnable. The *Loyalty-Betrayal* foundation captures the virtues of patriotism, self-sacrifice, solidarity, and allegiance to a group or community. Thus, actions that exemplify loyalty and contribute to group unity are esteemed, whereas acts of betrayal, unfaithfulness, or disloyalty to the community are considered morally reprehensible. The *Authority-Subversion* foundation is concerned with obedience and respect for hierarchical structures, authority figures, and social norms. Behaviors aligning with established norms, rules, and roles are regarded as morally virtuous, whereas insubordinate acts challenging or undermining authority are considered morally vicious. Finally, the *Sanctity-Degradation* foundation is related to the preservation of purity and sacredness and to the avoidance of contamination. It encompasses moral concerns related to bodily integrity, sacred values, and aversion to moral transgression. Actions that uphold purity, cleanliness, and sacredness are deemed morally commendable, whereas those violating taboos or defiling sacred values are considered morally offensive.

Initially, the MFT was a theory of cultural psychology developed to trace how morality changes in different populations and cultures (Haidt & Joseph, 2004). The MFT gained relevance in the field of political psychology by investigating whether individuals who share the same ideology have a similar understanding of morality, and in comparative party politics, to attest whether this linkage between morality and political ideology also holds at the party level.

Morality and ideology at the individual level

Studies on the moral attitudes of American citizens have established a link between their political ideology and their moral orientation: Liberals are more receptive to individualistic moral foundations, whereas conservatives are more responsive toward the binding foundations (Graham et al., 2009; Haidt, 2012; Kivikangas et al., 2021). The political psychology literature highlights, on the one hand, the effect of moral appeals on the preferences and voting choices of the electorate through the activation of emotional patterns in individuals (Jung, 2020; Ryan, 2014, 2017). On the other hand, other scholarly contributions point out the mobilizing effect of emotions and, therefore, politicians' attempts to strategically trigger voters' emotional appeals (Brader, 2005; Marcus et al., 2000). In this frame, the use of moral appeals might be a payoff strategy for vote-seeking political actors. The recourse to moral appeals in their outside communication translates into incentives for a party's members to express their preferences through voting (Jung, 2020; Lipsitz, 2018).

Morality and ideology at the party level

Some studies have investigated the linkage between morality and ideology at the party level in the US context. Sagi and Dehghani's (2014) work, focusing on the abortion debate in the US Senate, suggests that findings at the individual level reflect at the party-level unit of analysis. Recent works based on political ads from the 2008 US presidential election (Lipsitz, 2018) and on the 2016 US presidential primary debates (Lewis, 2019) consolidate their findings showing that the liberal party uses more *Care-Harm* and *Fairness-Cheating*, whereas the conservative party relies more on *Authority-Subversion, Loyalty-Betrayal*, and *Sanctity-Degradation*.

Extending the analysis beyond the US context, some scholars have studied how morality and ideology interplay when considering multiparty systems. First, Parker et al. (2019) analyzed Australian prime minister (PM) speeches and found that liberal PMs use more individualistic foundations, whereas conservative PMs rely to a greater extent on binding foundations. However, their findings also demonstrate that the recourse to morality is more strongly influenced by PMs' individual characteristics, rather than being primarily dictated by political ideology. Second, Zúquete (2022) focused on the Portuguese multiparty system by analyzing transcripts of parliamentary debates. The results suggest that in the Portuguese context, parties possess a moral identity of their own as they use morality based on both their stance on the left–right dimension and their status as incumbent vis-à-vis opposition parties. Third, Bos and Minihold (2022) found partial evidence for an ideology-driven use of moral appeals in Germany, Austria, and the Netherlands. Their study concludes that left-wing parties are more likely to use *Fairness-Cheating* appeals, but no conclusion could be drawn on the use of *Care-Harm*, *Authority-Subversion*, or *Loyalty-Betrayal* appeals.

These somewhat conflicting results, in contrast to those observed in the US bipartisan system, highlight the need for further research delving into the recourse to moral appeals in multiparty settings. Building on this literature, we formulate the following hypotheses, aimed at consolidating previous findings on the linkage between morality and ideology:

Hypothesis 1. The more left-wing a party is on the left–right scale, the more likely it is to emphasize the moral domains of *Care-Harm* and *Fairness-Cheating.*

Hypothesis 2. The more right-wing a party is on the left–right scale, the more likely it is to emphasize the moral domains of *Authority-Subversion, Loyalty-Betrayal*, and *Sanctity-Degradation.*

Nevertheless, some scholars argue that the use of moral appeals by political actors must take into account the fact that some policies lend themselves to a greater moralization as compared to other "non-moral policies" (Wendell & Tatalovich, 2021). Although the current literature still debates on whether economic issues should be considered moral or nonmoral (Abramowitz, 1995; Laver & Garry, 2000; Ryan, 2014), it is increasingly acknowledged that sociocultural issues, such as abortion, stem cell research, and social justice programs, are subject to a heightened degree of moralization (Clifford & Jerit, 2013; Haidt & Graham, 2007; Haidt & Hersh, 2001; Sagi & Dehghani, 2014). Although relevant studies examine how morality shaped policy attitudes toward noncultural topics such as foreign policy (Kertzer et al., 2014), we seek to investigate whether sociocultural issues are inherently more susceptible to being imbued with moral content. This leads us to test the following hypothesis:

Hypothesis 3. Sociocultural issues are overall discussed more morally than economic issues.

Finally, we investigate whether the differences between left-wing and right-wing political parties hold depending on whether we consider, on the one hand, the type of issues being addressed and, on the other hand, the parties' stances on sociocultural versus economic axes of competition. Bos and Minihold (2022) examine political parties' recourse to moral appeals considering not only parties' locations on the left–right ideological dimension but also their stances on economic and sociocultural issues. Furthermore, this analysis is consistent with previous studies that highlight how parties' mutual interactions take place in multidimensional political spaces where sociocultural issues flanked economic issues in shaping party competition (see Rovny & Whitefield, 2019). Differentiating manifesto statements on whether they deal with cultural or economic issues allows us to examine whether differences among party families in their recourse to morality exclusively depend upon their ideology or whether the issue being addressed might influence their recourse to morality as well. Hence, we formulate the following hypotheses:

Hypothesis 4a. The more left-wing a party is on the sociocultural scale, the more likely it is to emphasize the moral domains of *Care-Harm* and *Fairness-Cheating* when addressing sociocultural issues.

Hypothesis 4b. The more right-wing a party is on the sociocultural scale, the more likely it is to emphasize the moral domains of *Authority-Subversion, Loyalty-Betrayal*, and *Sanctity-Degradation* when addressing sociocultural issues.

Hypothesis 5a. The more left-wing a party is on the economic scale, the more likely it is to emphasize the moral domains of *Care-Harm* and *Fairness-Cheating* when addressing economic issues.

Hypothesis 5b. The more right-wing a party is on the economic scale, the more likely it is to emphasize the moral domains of *Authority-Subversion, Loyalty-Betrayal*, and *Sanctity-Degradation* when addressing economic issues.
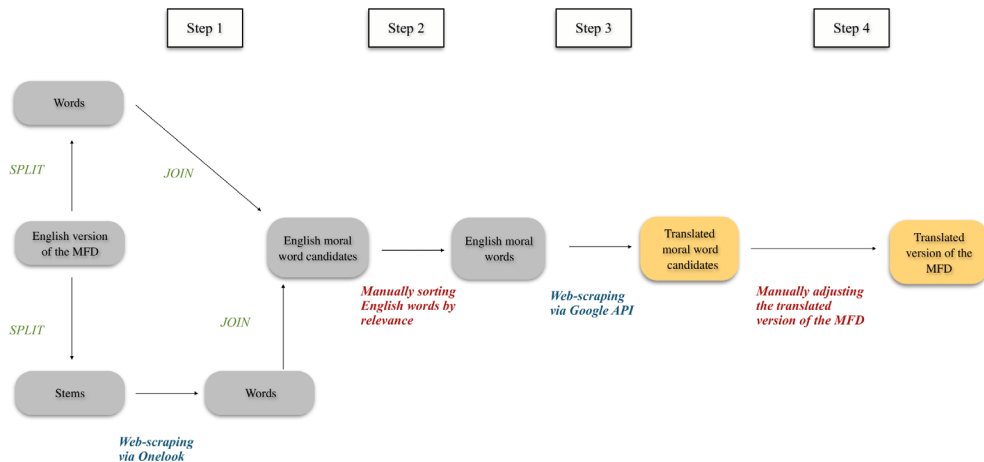
FIGURE 1 Conceptual map.

CREATION OF A MULTILINGUAL MFD

Translation procedure

Inspired by the translation methodology employed by Matsuo et al. (2019) to create the Japanese MFD, this article applies a semi-automated translation methodology (see Figure 1). We consider Jung's (2020) recent version of the MFD that revisited the traditional version of the MFD, developed in the psychology literature, in order to render it more suitable for political contexts.[1]

The first step of our translation methodology aims at building a set of English words per moral foundation that will then be used for the translation. For each moral foundation, relying on web-scraping tools on the website OneLook, we gather the most recurrent words associated with each word stem included in the English version of the MFD. In the second step of the procedure, we manually excluded words that were not relevant for our purpose, namely, the study of morality (see Section 1.4 of the supplemental material for further details about the manual adjustments we performed). Thus, we obtain a set of words for each moral foundation of the English dictionary. In the third step, automated translation tools are applied to the English MFD to obtain the first draft of the French, Italian, German, and Spanish versions of the MFD. This translation procedure aims at achieving cross-language reliability among five languages. In the fourth step, we perform a hand-coded procedure aimed at adjusting the newly translated MFD by erasing some potential defects that could lead to biases when applying it. We perform some structural and language-specific adjustments (see Section 1.4, Step 4—Adjustment of the translated MFD of the supplemental materials).

After proceeding to the automated gathering of every word contained in the English version of the MFD (Step 1), manual sorting by relevance of the new corpus of words for the study of morality (Step 2), automated translation of the English MFD (Step 3), and manual adjustments of the translated MFD (Step 4), we obtain the final versions of the French, Italian, Spanish, and German MFD.

---

[1]They noticed that some words might not contain a moral dimension on their own when referred to political settings. As an example, the word "opposition" is considered in psychology to refer to the moral foundation of subverting authority, whereas the word "opposition" is often used in political science to qualify opposition parties in contrast to governing parties.

Validation procedure

To accurately compare the English version of the MFD with its translated versions into the languages under study and ensure that they all capture the same words related to the different moral foundations, we rely on officially translated documents in all five languages. The main corpus used to validate the translated MFD, the *EU-Reports Corpus 2*, contains 509 documents corresponding to all substantive reports produced by the European Parliament during the 2014–2019 legislative period. The choice to use EU reports is motivated by the fact that they allow us to rely on a unique source of textual documents that provide the simultaneous official translation in different languages.[2]

Previous attempts

The only works to our knowledge that have attempted to translate the MFD into foreign languages are the ones by Matsuo et al. (2019) into Japanese, by Bos and Minihold (2022) into German and Dutch, by Zúquete (2022) into European Portuguese, and by Carvalho et al. (2020) into Brazilian Portuguese. We find some methodological limitations in these translation attempts, mostly when it comes to the dictionary validation procedures. First, Matsuo et al. (2019) and Zúquete (2022) validated their translation of the dictionary by comparing the performance scores of native respondents who answer the version of the Moral Foundation Questionnaire (MFQ) in the target language with the responses of English respondents who completed the English version of the MFQ. This validation method is very reliable, mostly to control for potential culture-inherent biases, but also very time and resource consuming. In this article, culture-inherent biases are limited when considering the European area.

Second, Carvalho et al. (2020) used a back-translation as translation and validation strategy. By not considering synonyms, this type of word-for-word translation does not necessarily imply that, when applying two dictionaries on texts written in their respective languages, the translated dictionary accurately detects the semantic meaning of the words detected by the English version. The comparative use of both dictionaries remains limited. In the analysis carried out in this article, we test how accurately each dictionary detects words with respect to the word-detecting power of its original English version.

Third, Bos and Minihold (2022) validated their translated versions of the MFD by comparing their performance to classify as moral 100 randomly selected party manifesto lines with the hand-coded classification performed by humans. The extremely small sample size and the potential biases that human coders might have while classifying the statements render their validation procedure weak. To test the comparative word-detecting power of their dictionary, we applied our validation strategy using their dictionary. We made a Pearson's correlation test using their German version of the MFD and the original English version of the MFD on the main corpus we used for the validation test, namely, *EU-Reports Corpus 2*. The result shows that when considering the overall level of morality detected by their German version of the MFD compared to the original English MFD, the coefficients show a nonsignificant correlation: −.03 [−.30, .25]. This lack of correlation might be due to pitfalls in their translation procedure, such as not adjusting for language specificity.

Thus, in this article, we introduce a reproducible time- and resource-efficient validation strategy based on officially translated documents.

---

[2]See the methodological appendix for an overview of additional corpora used as robustness checks to validate the translated MFD, relying on officially translated EU reports and speeches.

TABLE 1 Pearson's correlation coefficients for *Morality* computed using the *EU-Reports Corpus 2 (main).*

	1. English	2. Italian	3. French	4. German
1. English				
2. Italian	.96** [.95, .97]			
3. French	.98** [.98, .98]	.98** [.97, .98]		
4. German	.95** [.94, .96]	.95** [.94, .96]	.96** [.95, .96]	
5. Spanish	.96** [.95, .97]	.96** [.95, .97]	.97** [.97, .98]	.96** [.95, .96]

Note: Values in square brackets indicate the 95% confidence interval for each correlation.

$*p < .05$; $**p < .01$.

Validation strategy and results

We perform validation tests to ensure that the translated versions of the MFD are detecting, in their respective language, morality words as accurately as the original English version. As a validation test, we perform Pearson's correlations on the *EU-Reports Corpus 2*.[3] We create subsamples of EU reports classified by languages. Then we create one variable per language named *Morality*, representing the number of detected moral words that we correlate across the five different languages. Table 1 presents Pearson's correlation coefficients for *Morality* across languages, performed on the *EU-Reports Corpus 2*, along with their significance level and confidence intervals. Results of the correlation test are positive and statistically significant for each language combination. Table 1 clearly shows that when considering the overall level of morality detected by each translated MFD compared to the original English MFD, the coefficients show a very high positive correlation. These results demonstrate that, overall, the moral words translated in French, Italian, Spanish, and German are accurately representing the moral words included in the original English version of the dictionary. This allows us to validate the translation of the English MFD into French, German, Spanish, and Italian. Moreover, when considering the overall level of morality detected by each translated MFD compared to each other, the coefficients also show a very high positive correlation. This allows us to attest to the reliability of the dictionaries across the translated languages.[4]

EMPIRICAL ANALYSIS

To investigate parties' recourse to moral appeals in their electoral manifestos, we rely on the Comparative Manifestos Project's corpus (CMP), which unitizes parties' formal electoral programs into quasi-sentences, each one corresponding to a specific statement (Volkens et al., 2020). Our analysis is based on 329,004 statements, covering nine countries and 31 elections. Table A1 in the appendix provides a comprehensive description of the data set by summarizing per country all parties considered in each election under study. We focus on Austria, Belgium, France, Germany, Ireland, Italy, Luxembourg, Spain, and the United Kingdom.

---

[3]We encourage future research to investigate the results of validation tests performed to compare the accuracy of dictionary translations achieved through traditional survey approaches and our innovative methodology based on correlation tests.

[4]Note that results of the correlation test on the *EU-Reports Corpus 2* are positive and statistically significant for *Vices* and *Virtues*, as well as for all moral foundations, and for each language combination (see supplemental material for further details).

Descriptive analysis

Figures 2–4 provide a descriptive overview of the use of morality in the countries under study according to the different party families. We rely on the categorization provided by the Chapel Hill expert surveys (Jolly et al., 2022), with the only exception that we merged Christian Democrat and conservative political parties under the common denomination of conservatives. Figure 2 traces the evolution over time in the use of morality across the nine countries included in the analysis. The graphical illustration clearly provides evidence of the existence of cross-countries differences in the level of moralization of the political discourse. To detect the extent to which political parties moralize the content of their electoral manifestos, we compute a dichotomous variable that, for each statement, signals the presence of the five moral foundations. We find that 11% of the electoral manifesto statements contain a recourse to the moral domain of *Care-Harm*; around 8% of the statements refer to *Fairness-Cheating*, *Loyalty-Betrayal*, and *Authority-Subversion* appeals; and 3% of the statements incorporate a recourse to the moral foundation of *Sanctity-Degradation*.

Figure 3 shows the proportion of moral appeals contained in the electoral manifesto statements for six party families: radical left-wing parties, socialists, liberals, conservatives, radical right-wing parties, and greens. The results of a one-way ANOVA test, $F(5, 128.36)$, $p < .001$, confirm that there is a statistically significant difference in the extent to which political parties moralize the content of their manifestos based on their ideology, with at least one ideology group that significantly differs from the others in terms of the proportion of moral appeals included in its electoral program. Political parties on the left side of the political spectrum moralize more than right-wing political parties. Post hoc comparisons conducted with the Bonferroni method reveal that socialists recur to a greater extent to moral appeals than conservatives; similarly, radical left parties moralize their electoral manifestos more than their radical right counterparts.
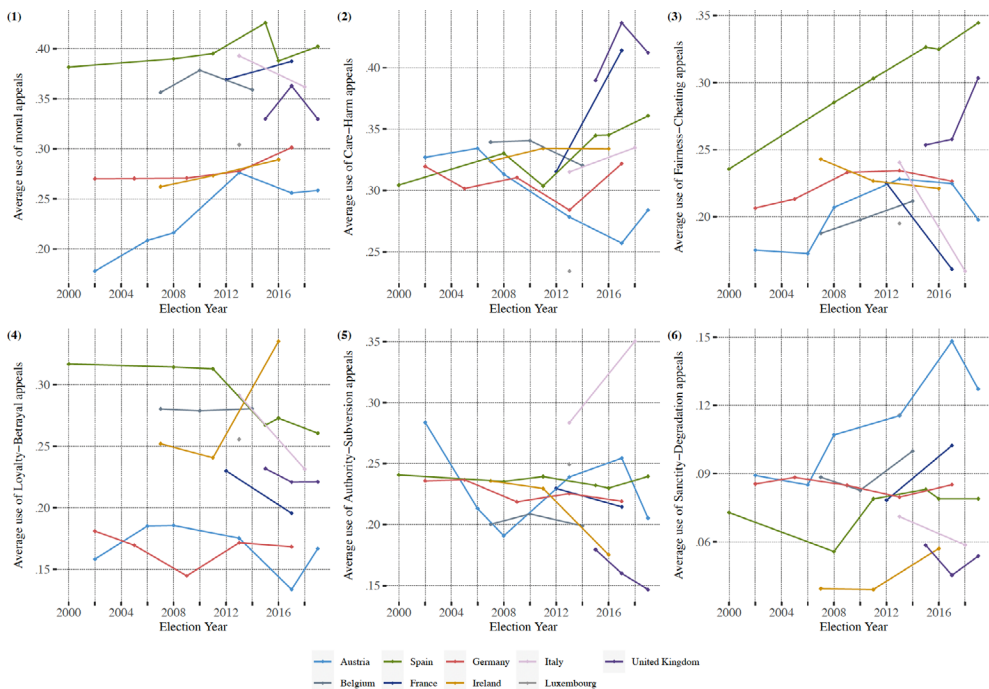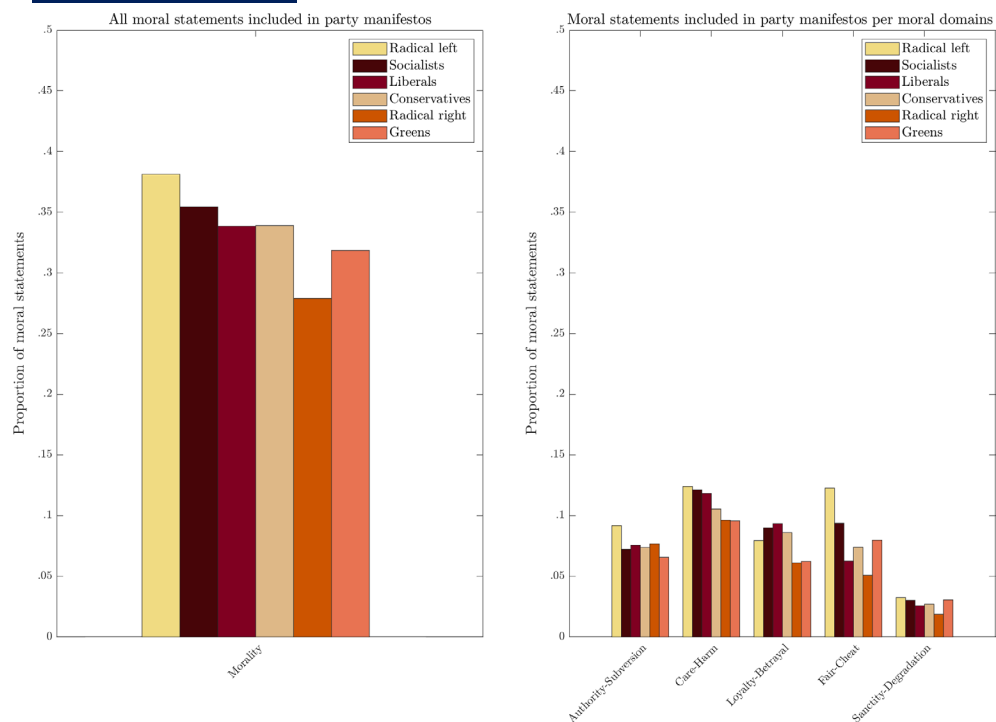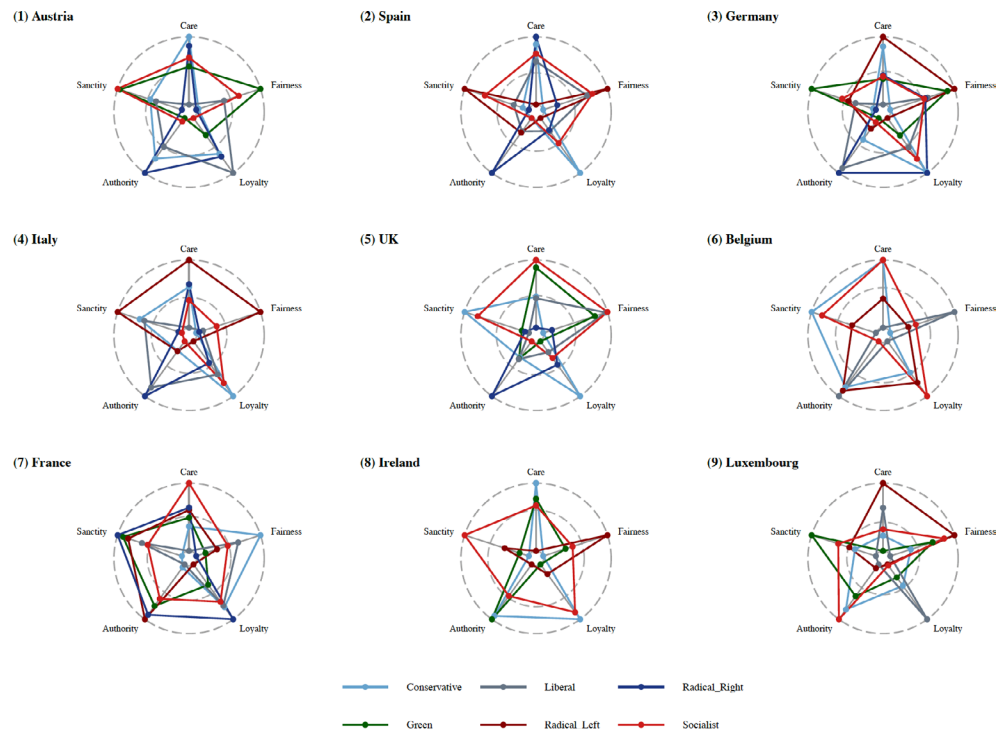

FIGURE 2 Recourse to morality across countries and over time.

FIGURE 3 Moral appeals in manifesto statements per party families. $N = 291{,}185$. Proportion of moral appeals included in each electoral manifesto's statements grouped by party family.

FIGURE 4 Profile of moral domain per country.

Figure 4 plots how party families' use of moral appeals differs per country. Political parties do not systematically present comparable patterns in their recourse to morality in each country included in the analysis. For example, socialists' moral domains seem to be similar in Spain and in the United Kingdom while presenting almost opposite patterns in Ireland. This descriptive overview does not allow us to draw any broader conclusion on the potential ideology-based use of moral appeals in multiparty systems. Therefore, we examine whether political parties differ in their emphasis on the five domains in which moral intuition can be categorized by means of implementing regression models based on conditional probabilities.

Consolidating existing findings in multiparty systems

For each of the five moral foundations, we perform country fixed effects conditional logit models with a dependent variable indicating whether each statement signals the recourse to the said moral foundation (see Table A2 in the appendix). This methodology allows us to control for any country-specific attributes. To construct our independent variable, we rely on the Chapel Hill expert surveys' estimates (Jolly et al., 2022). Relying on an 11-point scale, experts' evaluations provide parties' placement on the left–right dimension, with the value of 0 denoting a party on the left and 10 indicating a party on the right of the political spectrum. We are interested in creating a time-series data set with observations for each year in which an election takes place. However, expert surveys are generally conducted at specific time points, not necessarily coinciding with the years we are interested in. To overcome this lack of data, we assume a linear trend among different known observations, and we interpolate our estimates with a linear interpolation method. This technique allows us to estimate new points within a discrete range delimited by known observations. Considering parties' placements on a given dimension estimated in two distinct time periods, we are able to estimate parties' locations on the considered dimension for all years between these two time points. As control variables, we include in our analysis the year in which an election takes place, the length of each statement defined in terms of the number of words contained within ($M = 20.69$, $SD = 29.75$), and a dummy variable indicating the incumbent status of parties. This variable assumes the value of 1 if the party was in power at the time of election, and 0 otherwise. These external factors, such as the status of being in government or being an opposition party, as well as the influence of specific historical context that can lead to a greater moralization, might bias the results of the analysis.

Figure 5 shows the results of the five logistic regression models. The analysis provides mixed support for our hypotheses. Indeed, the more a party is located on the left side of the ideological continuum, the better chances it will have to emphasize the moral domains of *Care-Harm* and *Fairness-Cheating*. Conversely, the more right-wing a party is on the left–right scale, the more likely it is to emphasize the moral domains of *Authority-Subversion* and *Loyalty-Betrayal*. However, we do find that left-wing political parties rely to a greater extent on *Sanctity-Degradation* moral appeals than their right-wing counterparts. The explanatory variable assessing parties' positions on the left–right scale has statistically significant coefficients in all five models we performed.

Parties' moralization of economic versus sociocultural issues

To test our third hypothesis, we categorize moral statements depending on whether they deal with sociocultural or economic issues using the hand-coded CMP statement classification (Volkens et al., 2020). All the electoral manifesto statements referring to the themes of equality, traditional morality, law and order, multiculturalism, and those directed to unprivileged
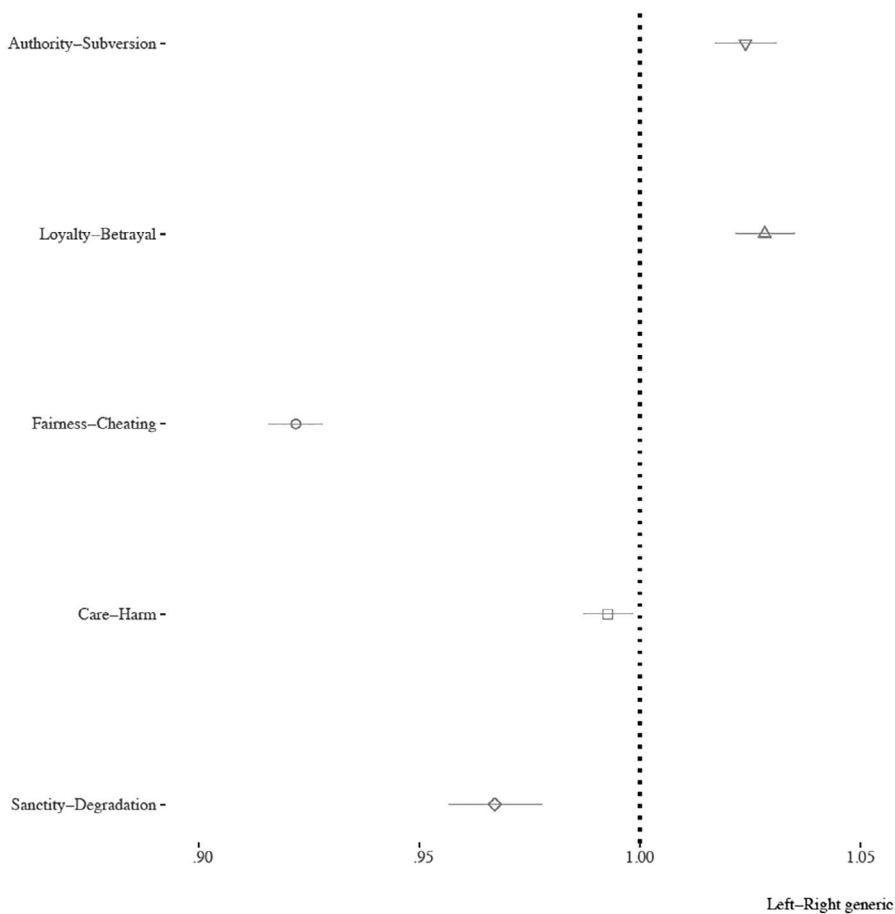
FIGURE 5 Moral appeals per moral foundations in manifestos' statements. $N = 329,004$. Conditional logit analysis of the effects of parties' placement on the left–right scale on the recourse to the five different moral foundations is shown. Odds ratios are derived from regression coefficients.

minority groups constitute the group of sociocultural statements. On the contrary, statements referring to market regulation, economic growth, public spending, and nationalization form the category of economic statements.[5] This results in 36,249 statements related to sociocultural issues and 36,082 statements related to economic issues. We perform the bootstrapped mean level of moral appeals in sociocultural and economic manifesto statements, respectively. The results show that parties' recourse to morality is more pronounced within electoral manifestos' statements that deal with sociocultural matters ($M = .48$; 95% confidence interval [.47, .48]) as compared to statements in which parties address economic themes ($M = .30$; 95% confidence interval [.29, .31]). Moreover, to further examine whether political parties moralize to a greater extent sociocultural issues, we estimate the likelihood of a manifesto statement dealing with sociocultural issues to contain a moral appeal (see Table A3 in the appendix). These findings provide empirical evidence that when a manifesto statement refers to sociocultural issues, the probability that this statement contains a moral appeal increases.

We examine whether differences between political parties in their use of moral appeals hold when we consider their stances on the economic and sociocultural axes of competition, and

---

[5]We selected these specific issue categories from the Comparative Manifestos Project following the definitions that Chapel Hill used when creating *GALTAN* and *LRECON*, our main independent variables.

when we control for the type of issues being addressed. First, we separate manifesto statements related to economic policy from the ones dealing with sociocultural issues. Second, for each group of manifesto statements, we regress the five moral domains on parties' positions on the sociocultural and the economic scale, respectively (see Tables A4–A7 in the appendix). Parties on the left side of the economic axis call for an increased role of government in the economy, whereas parties on the right side want a higher degree of deregulation and less state intervention. Conversely, parties on the left side of the sociocultural axis favorably see an expansion of civil rights and individual freedoms, whereas parties on the right oppose sociocultural issues such as abortion rights and same-sex marriage (Jolly et al., 2022). To construct our independent variable, we rely on the CHES estimates on parties' positions on both economic and sociocultural (*GALTAN*) dimensions.[6] Figure A1 in the appendix shows parties' stances on the left–right economic and sociocultural scales. On economic issues, liberal, conservative, and radical right parties share similar positions, whereas on the sociocultural scale, liberal, socialist, radical left, and green parties have an antithetical position with respect to conservatives and radical right parties.

This empirical strategy allows us, on the one hand, to estimate the likelihood of an economic-related manifesto statement to include a specific moral foundation's appeal conditional on parties' stance on economic issues. On the other hand, we estimate the chances that a sociocultural-related manifesto statement contains a specific moral foundation's appeal dependent on parties' stance on sociocultural issues. Figures 6 and 7 show the results of the 10 logistic regression models. The results partially corroborate our hypotheses.

The analysis highlights that the more left-wing a party is on sociocultural issues, the more likely it is to emphasize the moral domain of *Fairness-Cheating*, but not the moral foundation of *Care-Harm*, which is more likely to be emphasized by right-wing parties. On the contrary, parties on the sociocultural right have more chances to resort to *Authority-Subversion* and *Loyalty-Betrayal* appeals, as expected by our hypothesis. As far as economic issues are concerned, we find wide support of our hypothesis according to which parties on the left of the economic axis have more chances to use *Care-Harm* and *Fairness-Cheating* moral appeals. Nevertheless, the results show that right-wing parties on the economic axis will have more chances to emphasize the moral domains of *Loyalty-Betrayal*, but they will not be more likely to emphasize *Authority-Subversion* and *Sanctity-Degradation* appeals, which instead will be used to a greater extent by left-wing political actors. Furthermore, the results confirm the unexpected findings regarding the use of *Sanctity-Degradation* by left-wing parties. More specifically, the more left-wing a party is on economic issues, the more likely it is to emphasize the moral domain of *Sanctity-Degradation* when addressing economic issues.

To check whether these findings hold when using a broader measurement for parties' ideology, we regress the presence of the five moral domains on parties' positions on the general left–right ideological scale (see Figures A2 and A3 in the appendix). The results seem to corroborate our explanation, according to which differentiating between economic and sociocultural issues might alter parties' recourse to the moral domains of *Care-Harm* and *Authority-Subversion* by left-wing and right-wing parties, respectively. The rationale behind these results can be due to the fact that parties' recourse to moral appeals belonging to the categories of *Fairness-Cheating* and *Loyalty-Betrayal* is dependent on parties' ideology, regardless of whether we are considering economic or sociocultural issues. On the contrary, parties' recourse to *Care-Harm* and *Authority-Subversion* appeals is influenced by the issues at play.

---

[6]We apply a linear interpolation method to construct a yearly estimate of parties' placements on both the economic and sociocultural dimensions.
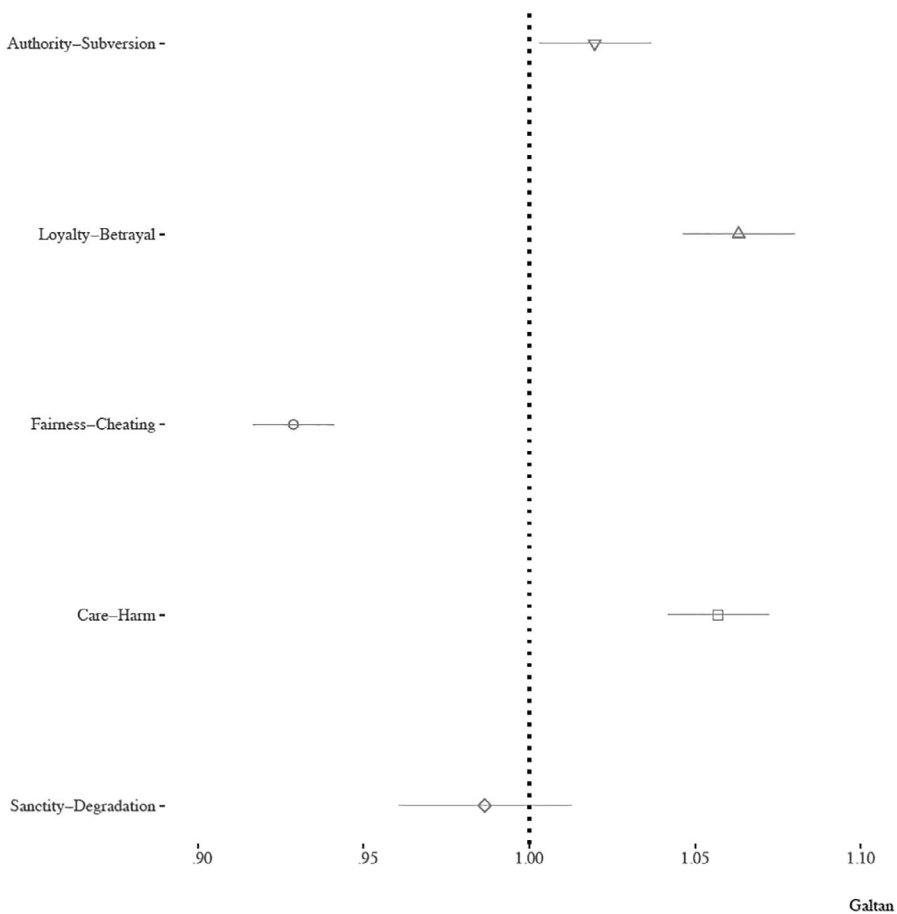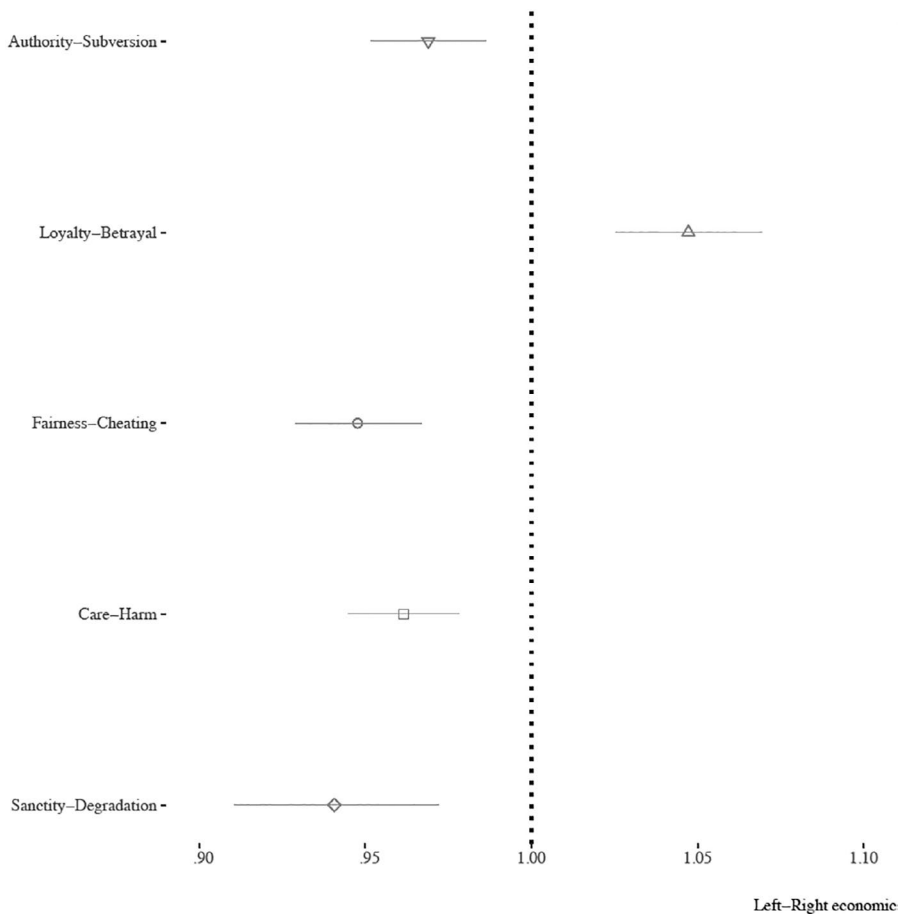
FIGURE 6 Moral appeals per moral foundations in manifestos' statements related to sociocultural issues. $N = 36,249$. Conditional logit analysis of the effects of parties' placement on the left–right sociocultural scale on the recourse to the five different moral foundations in sociocultural manifesto statements is shown. Odds ratios are derived from regression coefficients.

DISCUSSION

This article is the first, to our knowledge, to explore, at the party level, recourse to moral appeals in a multiparty setting across countries, political ideology, and type of issue being addressed. First, we analyze whether consolidated findings on the link between parties' ideology and their use of moral appeals holds beyond bipartisan systems. We find that political parties show a similar ideology-driven use of moral appeals in multiparty settings, as in the US context. We also observe that *Sanctity-Degradation* is a moral domain mostly attributable to left-wing parties, and not to right-wing parties. Second, we challenge the theoretical mechanism exclusively focusing on the ideology-driven use of moral appeals by political actors. Our findings demonstrate that, overall, sociocultural issues tend to be framed in moral terms more frequently than those related to economic issues. Furthermore, the use of *Care-Harm* and *Authority-Subversion* moral domains differs based on the type of issue being addressed and political parties' perspective on the economy and on society.

Our findings indicating that *Sanctity-Degradation* serves as a moral domain primarily associated with left-wing political parties in European multiparty systems align closely with existing research. Based on cultural theory, Johnson et al. (2022) propose that this moral

FIGURE 7 Moral appeals per moral foundations in manifesto statements. $N = 36{,}082$. Conditional logit analysis of the effects of parties' placement on the left–right economic scale on the recourse to the five different moral foundations in economic manifesto statements is shown. Odds ratios are derived from regression coefficients.

foundation extends beyond traditional associations with social and political conservatism, as outlined in the MFT framework. Additionally, Koleva et al. (2012) show how moral intuition on the *Sanctity-Degradation* dimension better predicts individual stances toward so-called culture war issues, such as immigration, abortion, euthanasia, same-sex marriage, and global warming, than political ideology. The result we observe could be influenced by the political agenda of left-wing parties. They engage more extensively in cultural war topics, leading them to rely to a greater extent on the moral domain of *Sanctity-Degradation* compared to their right-wing counterparts. Furthermore, recent studies on the use of moral appeals in political elite communication show that political parties on the economic left are more likely to use *Sanctity-Degradation* moral appeals in their electoral manifestos (see Bos & Minihold, 2022).

The shift in the recourse of *Care-Harm* by the right when addressing sociocultural issues, as well as the emphasis of *Authority-Subversion* by the left when discussing economic issues, opens two avenues for discussion. On the one hand, past studies highlight a correlation between higher perception of social danger and higher emphases on the binding foundations (see Van Leeuwen & Park, 2009). The increased recourse to the binding foundation of *Authority-Subversion* by left-wing political parties when discussing economic issues might be attributed to their collective-oriented, rather than individualistic, economic approach, which makes

them more likely to perceive the economy as a potential societal threat for individuals. On the other hand, it demonstrates the need to consider the multidimensional nature of ideology. The left–right divide of political ideology has the advantage of being an established and convenient framework into which new issues can easily be integrated. However, it also has the drawback of overlooking significant political distinctions (Grendstad, 2003a; Knutsen, 1995). Following this perspective, scholars question the conventional left–right axis as the sole over-arching factor in elucidating variations in value dimensions. Drawing on Douglas's (1999) grid-group cultural theory (CT), they argue that in multiparty systems, the left–right spectrum inadequately reflects the substantial diversity in values (Grendstad, 2003a, 2003b; Hornung & Bandelow, 2022; Olli & Swedlow, 2023). Hence, accounting for the ideological multidimensionality might elucidate why certain moral foundations traverse the left–right ideological continuum in European multiparty systems, contingent upon the issue at hand.

This article expands the existing scholarly contributions in the literature focusing on morality and politics in two ways. From a political science perspective, this result provides evidence that political actors' use of moral appeals is not exclusively ideology-driven but also topic-dependent. Future research should seek to investigate whether there might exist a potential strategic recourse to moral appeals by political actors on specific topics. If this is the case, the question to what extent other determinants might lead political actors to resort to moral appeals becomes relevant. Furthermore, upcoming studies should consider the benefit of the combined use of textual analysis techniques and traditional survey analysis to study the use of morality on both the supply and demand sides. Text analysis tools using the MFD allow scholars to grasp the use of morality in political communication outputs, whereas survey research could focus on how the recourse to moral appeals might influence public opinion. From a methodological perspective, our novel, easily reproducible dictionary translation and validation methodology provides scholars with a valuable tool for translating the MFD into further languages and, thus, facilitating the study of morality in political science and other academic disciplines.

At this point, it is important to mention potential limitations of our study. First, regarding our case selection, we only focus on all possible countries considering the languages in which we were able to accurately translate the MFD into, while keeping a coherent regional scope. Second, we exclusively focused on the existing MFT framework. Agreeing that probably more than five moral foundations exist, MFT scholars could consider, for example, the values of *Liberty/Oppression* as being a good candidate to become the sixth moral foundation (Graham et al., 2013; Haidt, 2012; Iyer et al., 2012). Our innovative dictionary translation and validation procedure can provide future research with the opportunity to investigate the presence of further moral foundations outside the English-speaking area. Moreover, incorporating this sixth moral foundation might enable scholars to predict social libertarianism and egalitarianism, and therefore broaden the implication of their work to other value-based theories, such as Inglehart's postmaterialism (1990). Third, some limitations may arise from the application of the MFD. Since its creation, new tools have been used to analyze morality in texts. Garten et al. (2018) developed a Distributed Dictionary Representation (DDR) of the MFD. DDR performs better than traditional dictionary approaches, as it is able not only to detect moral words but also to attest to the semantics of a given text. Nevertheless, despite not being the most innovative methodology, we believe that the benefit of relying on translated versions of the MFD lies in the fact that our work builds on numerous existing findings, allowing for comparability and replicability to analyze morality in politics. Future research should consider applying these innovative methodologies outside the English-speaking context.

ACKNOWLEDGMENT

Science Association in Glasgow, and the three anonymous reviewers for their very valuable feedback on the earlier versions of this manuscript. Open Access funding enabled and organized by Projekt DEAL.

ORCID
Clara Husson https://orcid.org/0000-0003-0703-5268
Nicola Palma https://orcid.org/0000-0001-6590-7664

REFERENCES

Abramowitz, A. I. (1995). It's abortion, stupid: Policy voting in the 1992 presidential election. *The Journal of Politics, 57*(1), 176–186.

Bos, L., & Minihold, S. (2022). The ideological predictors of moral appeals by European political elites; an exploration of the use of moral rhetoric in multiparty systems. *Political Psychology, 43*(1), 45–63.

Brader, T. (2005). Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions. *American Journal of Political Science, 49*(2), 388–405.

Carvalho, F., Okuno, H. Y., Baroni, L., & Guedes, G. (2020, November). A brazilian portuguese moral foundations dictionary for fake news classification. In *2020 39th International Conference of the Chilean Computer Science Society (SCCC)* (pp. 1–5). Coquimbo, Chile: IEEE.

Clifford, S. (2019). How emotional frames moralize and polarize political attitudes. *Political Psychology, 40*(1), 75–91.

Clifford, S., & Jerit, J. (2013). How words do the work of politics: Moral foundations theory and the debate over stem cell research. *The Journal of Politics, 75*(3), 659–671.

Douglas, M. (1999). Four cultures: The evolution of a parsimonious model. *GeoJournal, 47*(3), 411–415.

Egorov, M., Kalshoven, K., Pircher Verdorfer, A., & Peus, C. (2020). It'sa match: Moralization and the effects of moral foundations congruence on ethical and unethical leadership perception. *Journal of Business Ethics, 167,* 707–723.

Garten, J., Hoover, J., Johnson, K. M., Boghrati, R., Iskiwitch, C., & Dehghani, M. (2018). Dictionaries and distributions: Combining expert knowledge and large scale textual data content analysis: Distributed dictionary representation. *Behavior Research Methods, 50,* 344–361.

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. In *Advances in experimental social psychology* (Vol. *47,* pp. 55–130). Academic Press.

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology, 96*(5), 1029–1046.

Graham, J., Nosek, B. A., & Haidt, J. (2012). The moral stereotypes of liberals and conservatives: Exaggeration of differences across the political spectrum. *PLoS One, 7*(12), e50092.

Grendstad, G. (2003a). Comparing political orientations: Grid-group theory versus the left-right dimension in the five Nordic countries. *European Journal of Political Research, 42*(1), 1–21.

Grendstad, G. (2003b). Reconsidering nordic party space. *Scandinavian Political Studies, 26*(3), 190–217.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*(4), 814–834.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research, 20*(1), 98–116.

Haidt, J., & Hersh, M. A. (2001). Sexual morality: The cultures and emotions of conservatives and liberals 1. *Journal of Applied Social Psychology, 31*(1), 191–221.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus, 133*(4), 55–66.

Harper, C. A., & Harris, A. J. (2017). Applying moral foundations theory to understanding public views of sexual offending. *Journal of Sexual Aggression, 23*(2), 111–123.

Hornung, J., & Bandelow, N. C. (2022). Party identification and cultural theory in Europe: Methodologically advancing comparative studies of the advocacy coalition framework. *Journal of Comparative Policy Analysis: Research and Practice, 24*(2), 117–137.

Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton University Press.

Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The psychological dispositions of self-identified libertarians. *PLoS One*, *7*(8).

Johnson, B., Brandt, M., Swedlow, B., & Turner-Zwinkels, F. (2022). *How alike are political values measures?: Comparing measures of universal values, moral foundations, cultural theory, and cultural cognition theory.* https://ssrn.com/abstract=4050134

Jolly, S., Bakker, R., Hooghe, L., Marks, G., Polk, J., Rovny, J., Steenbergen, M., & Vachudova, M. A. (2022). Chapel Hill expert survey trend file, 1999–2019. *Electoral Studies, 75,* 102420.

Jung, J. H. (2020). The mobilizing effect of parties' moral rhetoric. *American Journal of Political Science, 64*(2), 341–355.

Kertzer, J. D., Powers, K. E., Rathbun, B. C., & Iyer, R. (2014). Moral support: How moral values shape foreign policy attitudes. *The Journal of Politics*, *73*(3) 825–840.

Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J. E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin, 147*(1), 55–94.

Knutsen, O. (1995). Value orientations, political conflicts and left right identification: A comparative study. *European Journal of Political Research, 28*(1), 63–93.

Kohlberg, L. (1971). From is to out: How to commit the naturalistic fallacy and get away with it in the study of moral development. In *Cognitive development and epistemology.* New York Academic Press.

Koleva, S. P., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Tracing the threads: How five moral concerns (especially purity) help explain culture war attitudes. *Journal of Research in Personality, 46*(2), 184–194.

Laver, M., & Garry, J. (2000). Estimating policy positions from political texts. *American Journal of Political Science, 44,* 619–634.

Lewis, P. G. (2019). Moral foundations in the 2015-16 US presidential primary debates: The positive and negative moral vocabulary of partisan elites. *Social Sciences, 8*(8), 233.

Lipsitz, K. (2018). Playing with emotions: The effect of moral appeals in elite rhetoric. *Political Behavior, 40*(1), 57–78.

Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment.* University of Chicago Press.

Matsuo, A., Sasahara, K., Taguchi, Y., & Karasawa, M. (2019). Development and validation of the Japanese moral foundations dictionary. *PLoS One, 14*(3), e0213343.

Olli, E., & Swedlow, B. (2023). Cultural theory, rejection of cultural bias, and party preference. *Party Politics, 29*(2), 359–373.

Parker, P. D, Sahdra, B. K., & Ondaatje, M. (2019). *Individual Differences are a Better Predictor of Moral Language Use in Australian Prime Ministers' Speeches than is their Political Party.* https://doi.org/10.31234/osf.io/tzmdg

Rovny, J., & Whitefield, S. (2019). Issue dimensionality and party competition in turbulent times. *Party Politics, 25*(1), 4–11.

Ryan, T. J. (2014). Reconsidering moral issues in politics. *The Journal of Politics, 76*(2), 380–397.

Ryan, T. J. (2017). No compromise: Political consequences of moralized attitudes. *American Journal of Political Science, 61*(2), 409–423.

Sagi, E., & Dehghani, M. (2014). Measuring moral rhetoric in text. *Social Science Computer Review, 32*(2), 132–144.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues, 50*(4), 19–45.

Van Leeuwen, F., & Park, J. H. (2009). Perceptions of social dangers, moral foundations, and political orientation. *Personality and Individual Differences, 47*(3), 169–173.

Volkens, A., Burst, T., Krause, W., Lehmann, P., Matthieß, T., Merz, N., Regel, S., Weßels, B., & Zehnter, L. (2020). The Manifesto Data Collection. Manifesto Project (MRG/CMP/MARPOR) [computer file]. Berlin, Germany: Wissenschaftszentrum Berlin für Sozialforschung (WZB) [distributor], 2016. Version 2020b.

Wendell, D. G., & Tatalovich, R. (2021). Classifying public policies with moral foundations theory. *Policy Sciences, 54,* 155–182.

Zúquete, M. P. (2022). The morality of political speech in parliamentary debates: An analysis of parliamentary party dynamics, based on what they say and how they say it (Doctoral dissertation).

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

APPENDIX

TABLE A1 Summary of the parties considered in each election under study.

Countries	Election year	Parties
Austria	2002	FPO—OVP—SPO
	2006	BZO—FPO—GRUNE—OVP—SPO
	2008	BZO—FPO—GRUNE—OVP—SPO
	2013	FPO—GRUNE—LIF/NEOS—OVP—SPO—Team Stronach
	2017	FPO—GRUNE—LIF/NEOS—OVP—SPO
	2019	FPO—GRUNE—LIF/NEOS—OVP—SPO
Belgium	2007	ECOLO—PRL/MR—PS—PSC/CDH
	2010	ECOLO—PRL/MR—PS—PSC/CDH
	2014	FDF—PP—PRL/MR—PS—PSC/CDH
Spain	2000	CC—PNV—PP—PSOE
	2008	CC—CHA—EA/Amaiur/EHB—IU—PNV—PP—PSOE
	2011	CC—IU—PP—PSOE—UPyD
	2015	CC—EA/Amaiur/EHB—IU—PNV—PP—PSOE—Podemos
	2016	CC—Cs—EA/Amaiur/EHB—IU—PNV—PP—PSOE—Podemos
	2019	CC—Cs—EA/Amaiur/EHB—IU—PNV—PP—PSOE—Podemos—Vox
France	2012	AC—FN—NC—PG—PRG—PRV—PS—RPR/UMP/LR—UDF/MODEM—VERTS/EELV
	2017	FI—FN—LREM—PCF—PS—RPR/UMP/LR—UDF/MODEM—VERTS/EELV
Germany	2002	CDU—FDP—Grunen—LINKE—SPD
	2005	CDU—FDP—Grunen—LINKE—SPD
	2009	CDU—FDP—Grunen—LINKE—SPD
	2013	AfD—CDU—FDP—Grunen—LINKE—Piraten—SPD
	2017	AfD—CDU—FDP—Grunen—LINKE—SPD
Ireland	2007	FF—FG—GP—LAB—SF
	2011	FF—FG—GP—LAB—PBPA—SF—SP
	2016	DS—FF—FG—GP—I4C—LAB—PBPA—SF
Italy	2013	CCD/UDC—CD—FI/PDL—FdI—LN—M5S—PD—RC—SC—SEL—SVP—VdA
	2018	FI/PDL—FdI—LN—M5S—PD—SI—SVP
Luxembourg	2013	GRENG—ADR—LSAP—DP—CSV—DL

(Continues)

T A B L E   A 1   (Continued)

Countries	Election year	Parties
United Kingdom	2015	CONS—LAB—LIBDEM—PLAID—SNP—UKIP
	2017	CONS—DUP—GREEN—LAB—LIBDEM—PLAID—SF—SNP—UKIP
	2019	CONS—GREEN—LAB—LIBDEM—PLAID—SNP

T A B L E   A 2   Logit models with country fixed effects performed on the overall sample of manifesto statements (H1/H2).

Dependent variable					
	Care-harm (1)	**Fairness-cheating (2)**	**Authority-subversion (3)**	**Loyalty-betrayal (4)**	**Sanctity-degradation (5)**
Left–right generic	−.01* (.00)	−.08*** (.00)	.02*** (.00)	.03*** (.00)	−.03*** (.01)
Incumbency	.05*** (.01)	−.10*** (.01)	−.04** (.01)	.11*** (.01)	−.09*** (.02)
Statement length	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)
Election year	.01*** (.00)	.01*** (.00)	−.00** (.00)	−.00** (.00)	.01*** (.00)
Log-likelihood	−112,065.09	−89,748.44	−84,903.65	−89,572.02	−40,495.73
Deviance	224,130.19	179,496.87	169,807.30	179,144.04	80,991.46
Num. obs.	329,004	329,004	329,004	329,004	329,004

***p < .001; **p < .01; *p < .05.

T A B L E   A 3   Logit models with country fixed effects performed to estimate the effect of sociocultural versus economic content being a moral statement (H3).

	Morality
Sociocultural issues	.91*** (.02)
Incumbency	−.03 (.02)
Statement length	.04*** (.00)
Election year	.01*** (.00)
Log-likelihood	−44,011.29
Deviance	88,022.58
Num. obs.	72,331

***p < .001; **p < .01; *p < .05.

TABLE A4 Logit models with country fixed effects performed on manifesto statements relative to sociocultural issues (H4-GALTAN).

Dependent variable					
	Care-harm (1)	Fairness-cheating (2)	Authority-subversion (3)	Loyalty-betrayal (4)	Sanctity-degradation (5)
GALTAN	.06*** (.01)	−.07*** (.01)	.02* (.01)	.06*** (.01)	−.01 (.01)
Incumbency	.03 (.03)	−.13*** (.03)	−.12** (.04)	.10** (.04)	−.06 (.07)
Statement length	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)
Election year	−.00 (.00)	.04*** (.00)	−.02*** (.00)	−.02*** (.00)	.03*** (.01)
Log-likelihood	−13,756.66	−16,670.51	−10,889.10	−11,902.26	−5274.53
Deviance	27,513.32	33,341.01	21,778.21	23,804.52	10,549.06
Num. obs.	36,249	36,249	36,249	36,249	36,249

***$p < .001$; **$p < .01$; *$p < .05$.

TABLE A5 Logit models with country fixed effects performed on manifesto statements relative to sociocultural issues (H4-generic).

Dependent variable					
	Care-harm (1)	Fairness-cheating (2)	Authority-subversion (3)	Loyalty-betrayal (4)	Sanctity-degradation (5)
Left–right generic	.04*** (.01)	−.08*** (.01)	.04*** (.01)	.08*** (.01)	−.03* (.01)
Incumbency	.03 (.03)	−.12*** (.03)	−.14*** (.04)	.08* (.04)	−.04 (.07)
Statement length	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)
Election year	−0.00 (.00)	.04*** (.00)	−.02*** (.00)	−.02*** (.00)	.03*** (.01)
Log-likelihood	−13,771.22	−16,676.96	−10,883.58	−11,894.12	−5272.79
Deviance	27,542.43	33,353.91	21,767.15	23,788.24	10,545.57
Num. obs.	36,249	36,249	36,249	36,249	36,249

***$p < .001$; **$p < .01$; *$p < .05$.

TABLE A6 Logit models with country fixed effects performed on manifesto statements relative to economic issues (H5-economic).

| Dependent variable					
	Care-harm (1)	Fairness-cheating (2)	Authority-subversion (3)	Loyalty-betrayal (4)	Sanctity-degradation (5)
Left–right economic	−.04*** (.01)	−.05*** (.01)	−.03*** (.01)	.05*** (.01)	−.06*** (.02)
Incumbency	.08 (.04)	−.08 (.05)	−.04 (.04)	.08 (.05)	−.02 (.08)
Statement length	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)
Election year	.02*** (.00)	.02*** (.01)	.01* (.00)	.01* (.00)	.00 (.01)
Log-likelihood	−10,354.72	−8433.26	−9947.57	−7423.96	−3899.79
Deviance	20,709.44	16,866.51	19,895.14	14,847.93	7799.57
Num. obs.	36,082	36,082	36,082	36,082	36,082

***$p < .001$; **$p < .01$; *$p < .05$.

TABLE A7 Logit models with country fixed effects performed on manifesto statements relative to economic issues (H5-generic).

Dependent variable

|	Care-harm (1)	Fairness-cheating (2)	Authority-subversion (3)	Loyalty-betrayal (4)	Sanctity-degradation (5)
Left–right generic	−.04*** (.01)	−.06*** (.01)	−.03** (.01)	.05*** (.01)	−.08*** (.02)
Incumbency	.07 (.04)	−.08 (.05)	−.05 (.04)	.09 (.05)	−.01 (.08)
Statement length	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)	.03*** (.00)
Election year	.02*** (.00)	.02*** (.01)	.01* (.00)	.01* (.01)	.00 (.01)
Log-likelihood	−10,355.89	−8434.26	−9949.31	−7423.79	−3898.09
Deviance	20,711.79	16,868.52	19,898.62	14,847.57	7796.19
Num. obs.	36,082	36,082	36,082	36,082	36,082

***$p < .001$; **$p < .01$; *$p < .05$.
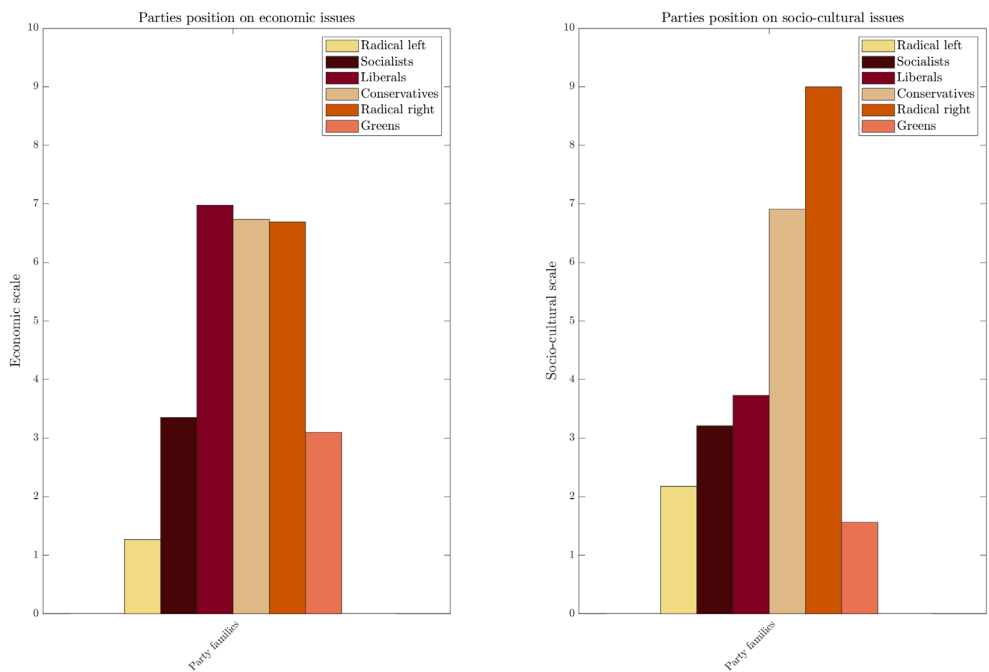
FIGURE A1 Parties' position on economic and sociocultural issues.
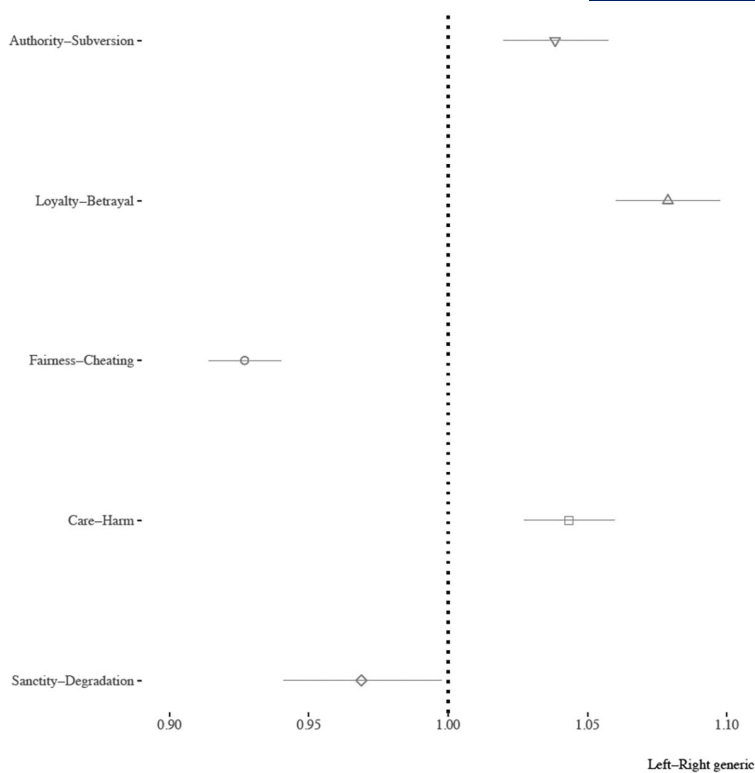
FIGURE A2 Moral appeals per moral foundations in manifesto statements related to sociocultural issues. $N = 36{,}249$. Conditional logit analysis of the effects of parties' placement on the left–right scale on the recourse to the five different moral foundations in sociocultural manifesto statements is shown. Odds ratios are derived from regression coefficients.
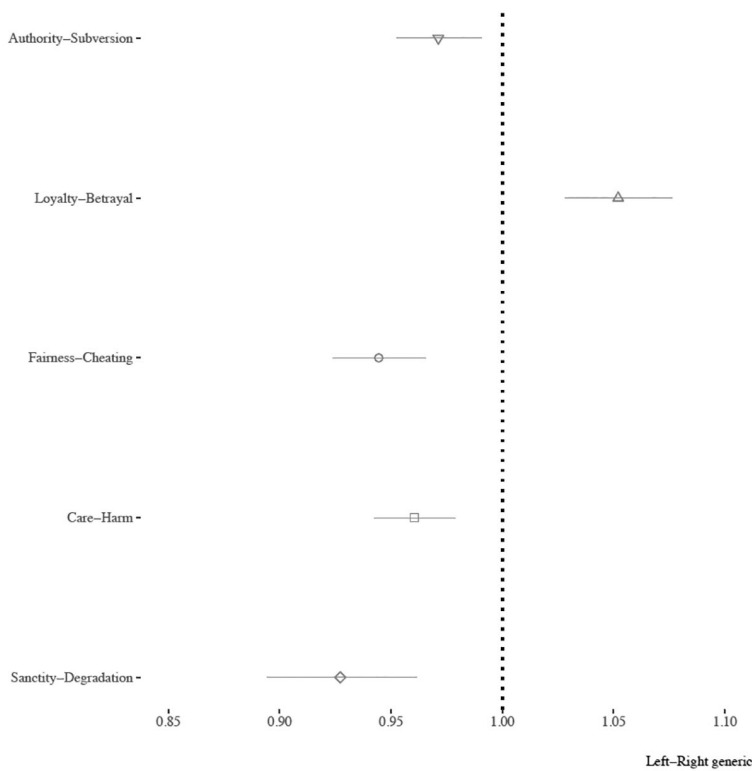
FIGURE A3 Moral appeals per moral foundations in manifesto statements related to economic issues. $N = 36{,}082$. Conditional logit analysis of the effects of parties' placement on the left–right scale on the recourse to the five different moral foundations in economic manifesto statements is shown. Odds ratios are derived from regression coefficients.