

RESEARCH ARTICLE

Out-group homogeneity as evidence of left-right identification in multi-party democracies

Nick Lin¹, Lie Philip Santoso²  and Randolph T. Stevenson³

¹Institute of Political Science, Academia Sinica, Taipei, ROC, ²Division of Social Science, Duke Kunshan University, Kunshan, China and ³Department of Political Science, Rice University, Houston, USA

Corresponding author: Lie Philip Santoso; Email: lie.santoso@dukekunshan.edu.cn

(Received 24 October 2024; revised 14 October 2025; accepted 24 November 2025; first published online 06 February 2026)

Abstract

Are citizens in western democracies developing affective attachments to the Left and Right as social-political groups? If so, one can hardly imagine a more consequential development for understanding the electoral behavior of Western publics. However, previous evidence suggesting such attachments are important (and growing) comes from a small number of single-case studies. In this paper, we expand the evidentiary basis for this idea by implementing a method that leverages existing survey data to test whether citizens in western democracies, over a long time period, have developed such group-based attachments. Specifically, we use surveys in which respondents place parties on the left-right scale to test for the existence of an out-group homogeneity effect between potential Left and Right identifiers. We argue that this pattern provides compelling indirect evidence of such group attachments and shows that the effect is both widespread across western democracies and increasing over time. As a proof of concept, we fielded original surveys in Denmark, Italy, and Sweden and found that our direct Left/Right attachment measures are strongly associated with the indirect evidence documented in our cross-national analyses. Thus, this paper provides an empirically justified call for scholars to invest in the development of appropriate survey batteries that directly measure affective attachments to the Left and Right in a large set of countries.

Keywords: left-right identification; affective attachment; out-group homogeneity; multi-party democracies; affective attachment

Henri Tajfel described attachment or identification with an in-group as ‘that part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that group membership’ (1981: 255) and scholars have frequently invoked this idea to describe voters’ psychological attachments to (or identification with) political parties (Campbell, Converse, Miller et al. 1960; Green, Palmquist and Schickler 2002).¹ A mountain of work has shown the relevance of partisan

¹We use the terms ‘psychological attachment’, ‘attachment’, ‘identification’, and ‘psychological identification’ with (or to) a group interchangeably. The concept we label with these terms includes a psychological sense of belonging and emotional investment in the group and the literatures, the most relevant reported below, often emphasize these affective components of identity. However, there are accounts of the ‘outgroup homogeneity effect’ – the central theoretical models in this paper – that instead rely on the cognitive aspects of identity and so it is important not to narrow our concept to only its affective aspects.

attachments to vote choice, policy preferences, perceptions of party positions, party leader evaluations, perceptions of ‘objective’ facts (e.g. about the economy), and much more.² In this paper, we explore a related idea that, while it has received far less attention than partisan attachments, it is potentially as important to the political behavior of voters in multi-party democracies. Specifically, we ask if western publics in multi-party systems have developed (or are developing) psychological attachments to the Left and Right as socio-political groups – in addition to (or instead of) partisan attachments?³

Several lines of research in political science have suggested the answer to this question is *yes* – and that the consequences of this development are profound. One example of this profundity comes from Bølstad and Dinas (2017), who show that standard models of spatial voting (including both proximity and directional models) produce quite different predictions when spatial models are modified to account for voters’ Left/Right identities.⁴ More generally, scholars who have begun to investigate the nature and extent of Left/Right attachments have argued that in addition to their implications for electoral behavior, such attachments also have implications for parties’ electoral strategies, the extent to which party systems will tend toward bipolar competition, the extent and nature of system level electoral volatility (with more intra-block and less inter-block volatility), the extent and nature of strategic voting (with attachments to ideological groups facilitating strategic voting over parties in the same ideological block), patterns of partisan conflict and cooperation (e.g. why parties seldom ‘leap-frog’ each other on the ideological space), and the distribution of electoral support for different potential governing coalitions (Hagevi 2015; Bølstad and Dinas 2017, Kekkonen and Ylä-Anttila 2021, and Oshri, Yair and Huddy 2022, Lee, Santoso and Stevenson 2025).

Despite the obvious conclusion that Left/Right attachments should matter, direct evidence remains limited to a small set of surveys in a few contexts. As a result, the idea has not yet gained traction among scholars running major cross-national survey projects (like the CSES or ESS) or national election studies. This creates a dilemma: we need broader survey coverage to establish whether Left/Right attachments are widespread and developing alongside or replacing traditional partisan attachments; but allocating scarce survey time to this question is only warranted if the phenomena is known to be widespread and important.

In this paper, we offer a solution to this dilemma. We show how existing survey work in western democracies – in which respondents are asked to place parties on the left-right dimension – can be used to provide *indirect* evidence of psychological attachments to Left/Right groups. Further, since our method can be applied to historical survey data from many countries, we can both characterize how cross-nationally widespread the phenomena is and how it has changed over time. Specifically, we argue that existing survey work can be used to measure the extent to which respondents who *might* have attachments to Left/Right groups evidence an *out-group homogeneity effect* (OH) – that is, the tendency to perceive members of an out-group as more internally similar than members of one’s own group. If they do (for a given country at a given time), we argue this should be considered strong indirect evidence that such attachments are present.

To preview our results, we find consistent and robust indirect evidence (from 20 countries between 1996 and 2020) that western publics have developed psychological attachments to the

²This literature is so vast and well known among political scientists that we forgo an extensive list of citations here. Readers new to this area can read Oscarsson and Holmberg (2020).

³We focus on multi-party systems because our empirical approach requires multiple parties on both the left and right. Consequently, we offer no insight into whether Left/Right identities can develop independently of partisan identities in systems with only a single party on either side. Moreover, our findings apply only to democracies where the Left-Right divide is salient and structures political competition.

⁴Scholars have shown it *matters* theoretically whether we consider Left-Right identification in voting models. Specifically, Bølstad and Dinas show that voters’ support for parties (and their perceived placements of parties) fit spatial models that incorporate such identities (via a two-stage voting process) better than models that ignore this possibility.

Left and Right as social-political groups and that these attachments have grown over time – in line with rising left-right polarization and ‘block politics’ (Mair 2008; Aylott 2011; Strøm and Bergman 2011). Further, to validate this indirect approach, we included direct measures of Left/Right attachments on three surveys in Denmark, Italy, and Sweden. Consistent with our indirect evidence, those who are more attached to either the Left or the Right, using this direct measure, perceive greater OH with respect to those groups.

Overall, this paper makes three contributions. First, it repurposes the OH effect, which is traditionally used to study perceptions of variation within out-groups, as an indirect measure of psychological attachment to ideological groups. Though indirect, this measure is grounded in a well-established social-psychological tradition that links perceived out-group similarity to group identification. Second, by leveraging existing survey data, this approach allows us to analyze Left/Right attachment across many more countries and historical periods than previously possible. This greatly expands the evidentiary basis for assessing the existence of such attachments and allows us to explore potential mechanisms that might drive their development. Third, we demonstrate construct validity of this indirect measure by showing that the OH effect correlates with direct measures of Left/Right attachments in three countries.

Existing evidence that voters in multi-party democracies identify with the Left/Right as socio-political groups

The most direct evidence that voters may be developing Left/Right identities instead of (or in addition to) their partisan identities comes from Hagevi (2015); Kekkonen and Ylä-Anttila (2021) and Oshri, Yair and Huddy (2022). In Sweden, Hagevi (2015) found that 41% strongly identified with the Left or the Right block (74% including weak identifiers), while only 25% strongly identified with a party. In addition, half of the strong block identifiers either did not identify with any party or only weakly identified with one. Thus, Hagevi concludes (p. 74) that ‘the increasingly weak link between citizens and parties has, to a significant degree, been replaced by bloc identifications’. Similarly, Kekkonen and Ylä-Anttila (2021) found Finnish voters were more likely to express a close affinity to a bloc of parties located on one side of the ideological spectrum than to a single party.

Oshri, Yair and Huddy (2022) come to similar conclusions in Israel where they examined the impact of a comprehensive ‘attachment to an ideological group scale’ on vote choice, political participation, attitudes toward political rivals, motivated reasoning, and reactions to new information. Specifically, they argue that the ‘ideological “left” and “right” . . . mean more than certain policy directives regarding the economy or society; rather, they signal group belonging and group competition – who is “us” and who is “them”’ (p. 4). Further, they conclude that, ‘Left versus right, or liberal versus conservative . . . reflect symbolic group identities that carry considerable affective significance for voters, in both the US and Europe . . . and such affinities independently affect their political behaviour and attitudes’ (pp. 4–5).

Finally, an older tradition of scholarship has long recognized the possibility that individuals might identify with the Left/Right, instead of (or in addition to) parties. For example, Arian and Shamir (1983) argued that in Israel, ‘left and right labels . . . do not denote ideology and surely do not reflect ideological conceptualization and thinking’. Instead, these voters use the left-right dimension to affectively orient themselves to the political parties and to sort them (and other individuals) into two affectively charged categories: the ‘Left’ and the ‘Right’ (pp. 140–42). Similarly, in his influential work exploring the left-right concept, Bobbio (1996) explicitly recognizes the affective nature of these distinctions for many people. Specifically, he argues: ‘because the left/right distinction has very strong axiological connotations, people who belong to either side will tend to define their own side with words that are axiologically positive and the other side with words that are axiologically negative’ (pp. 37). This clearly suggests that the concept of left and right, as is used in politics, may not be a neutral classification of ideologies, but instead involves emotional and value-based attachments.

Further, research and commentary on the modern development of Western European party systems hints at this same idea. This work has observed that party attachments have been steadily weakening in many western multi-party democracies, creating space (and perhaps demand) for superordinate attachments that voters can use to orient themselves to politics in the absence of (or in addition to) partisan cues (e.g. Dalton, McAllister and Wattenberg, 2002; Garzia, Ferreira Da Silva and De Angelis 2022). Likewise, many scholars have noted an increasing tendency toward bipolar block competition in the western democracies (e.g. Bale 2003; Mair 2008) that is often supported by a ‘presidentialization’ of multi-party competition in which Left and Right blocks approach elections as personalized contests between their respective block leaders (e.g. Poguntke and Webb 2005; Forestiere 2009). Indeed, based on such trends, Mair (2008: 226) concluded that:

*The balance of the European politics has appeared to shift in favour of the bipolar mode. This marks quite a substantial change in the functioning of European party systems . . . party competition is now more likely to mimic the two-party pattern through the creation of competing pre-electoral coalitions which **tend to divide voters into two contingent political camps**. [emphasis added]*

Given increasing levels of left-right block competition, scholars like Hagevi (2015: 74) complete the argument by suggesting that such competition will ‘result in emotional and intellectual attachments to these blocs in the electorate’.⁵ Indeed, Bantel (2023) demonstrates exactly such attachments, concluding that for the majority of western democracies, ‘comprehending affective polarization based solely on partisan divisions limits us to studying affective *partisanship* rather than affective *polarization*, ie the dislike of out-partisans rather than political out-groups’. Instead, he argues that political scientists should conceptualize the underlying structure of the left-right as demarcating two political groups (the Left and Right) to which individuals tend to develop psychological identifications in addition to, or instead of, partisan attachments (p. 2).

Overall, it is clear from different strains of the literature that voters in western democracies increasingly see the Left and Right as socio-political groups to which they can form psychological attachments. Understanding and quantifying this phenomenon should be a key research priority. Thus, our aim in this paper is to examine indirect evidence on this phenomenon across a broader set of countries and time periods than prior works.

Using the OH effect as indirect evidence of psychological attachments to the left and right as social groups

The OH effect is the tendency to perceive members of one’s own social group as more variable on a given trait than a relevant out-group. The OH effect has been empirically identified in many different social groups – including national groups (Haslam, Oakes, Turner et al. 1995), religious groups (Hewstone, Islam and Judd 1993), age groups (Linville, Fischer and Salovey 1989), artificial laboratory groups (Rubin, Hewstone and Voci 2001), and political groups (Ostrom and Sedikides 1992; Nicholson 2012). The OH effect is central in social psychology because differences in the perceived variability of traits across social groups can suggest differences in the extent to which individuals rely on and are confident in stereotyping, as well as levels of prejudice and discrimination (e.g. Rubin and Badea 2012: 367).

⁵A great deal of work has explored elements of the process of forming bloc-identifications as described by Hagevi. For example, Gschwend and Hooghe (2008) show experimentally that Belgian voters show increasing loyalty to left or right coalitions rather than individual parties. Forestiere (2009) emphasizes that modern Italian parties face significant incentives to be good representatives of their respective blocs. Nicholson et al. (2018, 2016) demonstrate that individuals hold superordinate political identities and can switch between them.

Most explanations of the OH effect draw on Self Categorization Theory (SCT) or Social Identity Theory (SIT). SCT-based accounts argue that people typically think about out-groups in intergroup contexts that highlight ‘us versus them’, which reduces attention to differences among out-group members and thus produces perceived homogeneity (Hornsey 2008; Leonardelli and Toh 2015). In contrast, people tend to think about their own group in intragroup contexts that prime ‘me versus us’, encouraging attention to within-group differences and leading to perceived in-group heterogeneity.

SIT-based explanations argue that people, motivated to protect self-esteem and maintain a positive social identity, perceive their in-group as more heterogeneous than a relevant out-group on negative traits. This enables individuals to maintain distance from a negative stereotype by attributing the trait to some in-group members but not to themselves, while seeing the out-group as consistently high on it. For example, a man may see all women as stubborn, but only some men as stubborn, ensuring sufficient variability to reasonably except himself from the negative stereotype. Of course, this explanation of the OH effect only applies to stereotypically negative traits (Kelly 1989; Voci 2000). As Rubin and Badea (2007) summarize, ‘the need for a positive social identity should motivate the perception of OH only on out-group *negative* traits, not on out-group *positive* traits’. Usefully, however, the key trait examined below is a stereotypically negative one and so this limitation (and consequent differences in trait level predictions from SCT and other theories of the OH effect) is not consequential for our study.

More generally, the main argument in this paper does not depend on the details of these different explanations of the OH effect. Instead, it follows for any explanation of the OH effect that requires an individual evidencing such an effect to identify with the relevant in-group. Essentially all published mechanisms that we have identified in the literature make this assumption.⁶ For example, in their 2012 review of the various mechanisms underlying the OH effect, Rubin and Badea (p. 368) begin with the following general characterization of the relevant literature:

The dominant focus in the study of perceived group variability has been the influence of *the perceiver’s group affiliation*. The classic finding in this area is that people tend to perceive significantly more variability among members of groups to which they belong (in-groups) than among members of groups to which they do not belong. [emphasis added]

Indeed, our reading of the literature is not only that the perceiver’s group affiliation is a ‘dominant focus’ of these explanations, but that it is a *necessary* (though not sufficient) condition for the effect to occur.⁷ That is, the various explanations all have the form: *If an individual identifies with group j and [various mechanisms] then the OH effect follows.*⁸

Consequently, we would not expect to observe an OH effect in the perceptions of individuals who do not identify with the relevant groups. In our case, this means that we would not expect individuals who do not identify with Left/Right groups to evidence such an effect. Likewise, the observation of such an effect for an individual or group of individuals should push us toward the conclusion that these individuals have such attachments.⁹

⁶Another explanation of the OH effect (less prominent than SIT and SCT) that make this assumption invokes differences in how ingroup members store or process ingroup versus outgroup information (Kononova and Le Mens 2020; Derreumaux, Bergh and Hughes 2022).

⁷The one exception is Rubin, Hewstone and Voci (2001), who argue that the OH effect may arise spuriously from a common measurement strategy in social psychology. However, since we do not use that common measurement strategy, their mechanism does not require ingroup attachment and cannot explain our results. Online Appendix E presents a placebo test that is inconsistent with their proposed mechanism or any alternative that bypasses ingroup attachment.

⁸Some theories predict an ingroup *homogeneity* effect under certain conditions and for certain kinds of perceived traits (especially for lower status groups). For our purposes, this means that while finding an OH effect for Left/Right groups implies that subjects identify with these groups, a null finding does not rule out such identifications.

⁹Of course, individuals who do not identify with a relevant ingroup or outgroup can certainly judge these groups’ variability on a trait. However, we would not expect such individuals to find one group more homogenous than the other.

For example, imagine someone living in Texas whose attachment to Texas is uncertain. If she consistently believes Texans to be less homogenous than Californians (or people from other states) on relevant traits, then we would take this as indirect evidence that she has identified as a Texan.¹⁰ Similarly, in countries (and time periods) where many voters have strong psychological attachments to the Left and Right as social-political groups, we should observe correspondingly large OH effects.

Estimating the OH effect for potential identifiers with left/right groups

The typical empirical study of the OH effect in social psychology starts with a set of subjects who are known *a priori* to identify with a group (typically, but not always, defined by race, ethnicity, gender, or class) and then asks those identifiers about individual-level trait variability in their own group and one or more relevant out-groups. Given our goal is to leverage the existing corpus of survey data on left-right party placements to estimate the OH effect for potential Left/Right identifiers across countries and over time, there are three ways that our design must necessarily differ from the typical social-psychological study. In this section, we discuss each of these design differences conceptually and save a detailed discussion of the exact measures we use until our Empirical Design section.

First, unlike the typical social-psychological study, we do not have information that designates survey respondents, *a priori*, as Left or Right identifiers. Our aim is precisely to infer whether such identifications exist from the presence or absence of an OH effect. Thus, the first challenge in our study is to identify sets of respondents who may plausibly be Left/Right identifiers (we call these ‘potential Left/Right identifiers’) and test for OH effects among those groups. Usefully, the surveys on which we rely provide two candidates for identifying pools of potential Left/Right identifiers: partisans of parties usually associated with the left/right and individuals who place themselves on the left or right of the center point on the traditional left-right self-placement question.¹¹

That said, given the need to identify potential Left/Right identifiers before testing for an OH effect, we also conduct a placebo test (reported in online Appendix E). Here, instead of using the criteria above, we randomly assign respondents to ‘potential Left’, ‘potential Right’, or non-identification groups, run all models on these random groupings many times, and average the results. As expected, these randomly constructed groups show no OH effect.

Second, our surveys do not ask respondents to evaluate the *variability* of other *individuals* on a characteristic. Instead, our surveys ask respondents to indicate the *positions* of a set of *parties* on a relevant trait dimension. The first difference (position placements vs. variability judgments) is easily addressed because respondents are typically asked about several parties and so we can construct a measure of perceived variability from the several perceived party placements.

The second difference (a focus on parties instead of individuals) is well justified if people can think of parties as members of ideological groups. Usefully, there is a huge literature in social psychology that attests to the fact that people often rely on exemplars when making judgments about the members of social groups, including their traits and variability in those traits (Linville, Fischer and Salovey 1989; Smith and Zárate 1992; Hogg 2001; Platow and van Knippenberg 2001; Barreto and Hogg 2017; Bröder, Gräf and Kieslich 2017). Work in political psychology makes the same point for partisan groups (Myers and Hvidsten 2025; Nicholson, Coe, Martinsson et al.

¹⁰For explanations of the OH effect inspired by SCT, this applies to any trait. However, for explanations of the OH effect that are inspired by SIT, this is only for stereotypically negative traits.

¹¹Using left-right self-placement to identify potential Left/Right identifiers is not tautological, despite the linguistic overlap. Left-right self-placement traditionally captures an individual’s overall policy orientation, whereas identifying with the Left/Right reflects a psychological attachment to these camps as social groups. Nothing inherent in the standard self-placement question would generate an OH effect for Left and Right groups absent such attachments. A voter may place herself on the left because her policy preferences are left-leaning yet feel no psychological bond with ‘the Left’ as a social group and may not even view it as a meaningful object of identification.

2016). For example, Myers and Hvidsten (2025) show that exposure to information about counter-stereotypical partisan exemplars (party elites) changes individuals' levels of partisan animosity. Even more relevant, Nicholson, Coe, Martinsson et al. (2016) found that Swedish survey respondents rated politicians from different parties as much less distinct from each other when the politicians were framed in terms of the superordinate ideological (left-right) groups in addition to a partisan frame. Individuals had no problem thinking of party leaders as members (and exemplars of) left-right social groups when that frame is activated – as it is when they are asked to place parties on a left-right scale.¹²

Finally, political scientists studying partisan polarization in the US, such as Iyengar and Westwood (2015), have taken a similar view – explicitly including organizations, like the NRA and Greenpeace, as exemplars of Republican and Democratic social groups, respectively. Given this, we think it is reasonable to assume that when asked to place parties on the left-right, respondents think of these parties as members of (and even exemplars of what it means to be a member of) the Left or Right – so that when they place out-group parties much closer together than in-group parties this is due to the same psychological process that leads to the oft-demonstrated OH effect in assessments of individuals.

Third, the typical studies of the OH effect normally ask respondents to rate groups on unidirectional trait scales (so a higher score indicates 'more' of the trait). In contrast, our left-right placement scale is inherently bi-directional (it gives a position rather than an amount of the trait). This matters because much of the OH effect literature distinguishes between stereotypically negative and positive traits (e.g. SIT-based explanations), – an idea that does not map neatly onto a positional scale. We argue, however, that left-right ideology can be viewed as two separate dimensions that tap the extent of (either left or right) ideological *extremity*. Such extremity is generally viewed as stereotypically negative (Peterson 2005; Simas 2020), making these traits especially likely to exhibit OH effects under SIT.

Moderators of the OH effect

Although the OH literature makes clear that attachment to a relevant group is necessary for the effect to occur, it does not imply that attachment alone is sufficient. Indeed, several reviews of the voluminous literature on the OH effect have identified contextual factors that can moderate, eliminate, or even reverse the effect. This is important to our analysis because it suggests several variables, relevant to our setting, that should either amplify the OH effect for some of our cases or cause it to vary across our respondents, countries, and overtime in ways that we can investigate empirically.

Specifically, the previous literature has established that the OH effect is larger for real social groups than for artificial laboratory-constructed groups (Ostrom and Sedikides 1992; Boldry, Gaertner and Quinn 2007), for groups in direct competition (Judd and Park 1988; Ackerman, Shapiro, Neuberg et al 2006), and for traits viewed as stereotypically negative (Rubin and Badea 2012; Rubin, Hewstone and Voci 2001). Since the Left and Right are *real, competing* groups, our setting is one in which we should expect such effects (if indeed people have developed Left/Right attachments). Likewise, as noted above, the trait we examine (parties' left-right policy positions) can usefully be characterized as ideological extremity, a generally negative trait.

In addition, the previous literature has identified several contextual variables that are likely to induce variation in the OH effect across our respondents, countries, and overtime. These include

¹²Arian and Shamir (1983) famously argued that many voters use the left-right dimension primarily to organize patterns of partisan cooperation and conflict, rather than as a policy dimension – that is, they see the Left and Right as categories that *delineate which parties are friends and foes*. Further, Lee, Santoso and Stevenson (2025) provide cross-national conjoint evidence confirming this view, especially among less sophisticated voters.

real group variability in the target trait, the strength of group attachments (ie a bigger OH effect for stronger identifiers), and the extent of intergroup distinctiveness (ie a bigger OH effect when few individuals identify with both groups).¹³

Real Variability

There is, of course, real variation in the policy positions of parties – and voters’ beliefs about the homogeneity of these positions among Left and Right parties may well reflect this reality. Thus, in all the empirical analyses below, we control for the level of real policy difference between parties. In addition, since we construct our estimate of perceived variability in left-right policy positions by aggregating across relevant parties, we also include controls (in all our empirical models) for the number of parties on the left and right, respectively.

Identity Salience

Regarding the salience of group membership, the social-psychological literature (e.g. Simon and Pettigrew 1990; Lee and Ottati 1995) suggests that stronger attachment to a group increases motivation to maintain a positive social identity, thereby amplifying the OH effect. Thus, we include this moderator in our analysis using two proxy measures. First, we use a measure of extremity in left-right self-placement as a proxy for the strength of attachments to Leftist or Rightist groups. Second, we use the respondent’s strength of attachment to one of the parties in the Left/Right groups.¹⁴ For both measures, we expect bigger OH effects among respondents who have higher scores on these proxy measures. To avoid confusion, these two proxies for the contextual variable ‘strength of attachment to the Left/Right’ are distinct from the indicator variables we used in Table 1 to identify potential Left/Right identifiers (and so among whom we looked for an OH effect).

Intergroup distinctiveness

Jetten, Spears and Postmes’s (2004) meta-analysis links the size of the OH effect to intergroup distinctiveness, which is simply the extent to which there are few individuals identifying with both groups. Thus, in a period of increasing polarization (and especially affective polarization) between the Left and Right in Western democracies (Mair 2008; Holmberg 2009; Aylott 2011; Hagevi 2015), we should expect the size of the OH effect among Left/Right identifiers to be increasing over time in tandem with increasing levels of Left/Right polarization. As noted earlier, Peter Mair and others have argued that bipolar politics has been displacing traditional multi-polar politics in many democracies, and this may drive the development of Left/Right attachments over time (as Hagevi suggests). Thus, after presenting aggregated results, we explicitly model heterogeneity in the Left/Right OH effect over time, showing that the effect has been growing apace with polarization.

¹³Other moderators identified in the social-psychological literature are unlikely to be relevant here. These include group status (Boldry and Kashy 1999), power (Guinote, Judd and Brauer 2002), familiarity with out-group members (Linville, Fischer and Salovey 1989), in-group threat (Rothgerber 1997), and social position (Rubin and Badea 2012). In advanced Western democracies, Left-Right politics does not feature the kind of enduring status or power asymmetries seen between groups defined by race, gender, or class. Although electoral fortunes shift, neither side is persistently dominant in ways that would make these moderators relevant.

¹⁴If identification with the Left/Right partly replaces party identification, then the strength of partisan identification will be an imperfect proxy. However, we doubt that this kind of replacement is so extensive that the proxy has no value. More plausibly, many people likely have Left/Right attachments alongside their traditional party attachments. In that case, the strength of partisan identification should still serve as a useful proxy for Left/Right identification. Further, for both this measure and the left-right self-placement, if superordinate identifications with the Left/Right are absent in each country or time period, neither variable should moderate the size of a Left/Right OH effect.

Finally, beyond the moderators suggested by the socio-psychological literature, the political science literature on how voters perceive parties' left-right positions points to additional factors we need to account for. Fortunato and Stevenson (2013) and Adams, Weschle and Wlezien (2021) show that voters tend to perceive parties as having more similar positions on the left-right scale when the parties cooperate formally in cabinets or informally in many other ways. Thus, all the analyses below control for the 'purity' of left or right parties' cooperation patterns in government – that is, whether they cooperate only with parties on their own side.

Therefore, a summary of our empirical project (focusing on leftist voters, but the same applies to rightists) is simply:

If survey respondents who identify with a leftist party or place themselves on the left of the left-right dimension, judge the set of rightist parties to be more homogenous in their left-right positions than the set of leftist parties, we will take this as evidence for the existence of a Left/Right OH effect and infer that such respondents have (on average) developed psychological attachments to the Left as a social group (in addition to, or instead of, usual partisan attachments).

Empirical design

To empirically explore the argument laid out above, we rely on a wealth of cross-national survey data available from the Comparative Study of Electoral Systems (CSES). The final dataset we assemble contains responses to relevant survey questions made by over 120,000 respondents from 20 advanced Western democracies in the period 1996–2020 (86 surveys). Table A1 in online Appendix A summarizes the countries and surveys covered by our work.¹⁵

To capture voters' perceptions of in- and out-group heterogeneity, we use survey items in which respondents place parties on the left-right dimension. We categorize parties as either leftist or rightist by first calculating the average left-right placement of each party based on responses from all respondents. If a party's average placement is less than the midpoint, we classify it as leftist and if the average is greater than the midpoint, we classify it as rightist.¹⁶ Since the party placement questions use a 0–10 scale, parties with average positions greater than 5 are assigned to the rightist group and those less than 5 to the leftist group.¹⁷ In the vast majority of cases, this simple rule classifies parties on the left and right in exactly the way most informed observers would. However, to ensure the robustness of our results to this classification, in Appendix B we replicate our results using four alternative classifications that exclude various sets of parties for which a left/right classification may be ambiguous.¹⁸

After separating parties into Left and Right, we measure each respondent's perceived ideological heterogeneity using two different indicators.¹⁹ Our first measure is $Het_{ij} = SD_j^R - SD_j^L$, where SD_j^R is the empirical standard deviation of respondent j 's placements of all rightist parties and SD_j^L the standard deviation of respondent j 's placements of all leftist parties. Increasingly

¹⁵We treat the Flemish and Wallonian party systems in Belgium as separate cases in all our analyses (including when we estimate country fixed effects).

¹⁶An alternative to the midpoint would be the location of the median voter. We have done this, and it does not change our substantive conclusions.

¹⁷No parties were placed exactly at 5 in our sample.

¹⁸These alternatives include: (1) excluding from the analysis any party (in a given survey) whose mean left-right position is not statistically different from 5; (2) excluding all parties whose mean left-right position falls between 4.8 and 5.2; (3) excluding parties whose left-right classification changes over time; and (4) excluding parties whose party-family classification (as defined by CSES experts) is ambiguous.

¹⁹Our measures of perceived ingroup and outgroup heterogeneity require at least two parties on both the Left and Right. Thus, we exclude surveys where only one party falls into either group. And again, we control for the number of parties in each group.

positive values of this variable indicate that the respondent perceives the rightist parties to be more ideologically heterogeneous than the leftist parties (while increasingly negative values indicate the opposite).

Our second, alternative, measure (Het_{2j}) relies on respondents' perceived ideological distances between parties. For each respondent, we first calculate the absolute value of her perceived pairwise left-right distance for every party pair in each of the Left/Right groups. We then sum these perceived pairwise differences for all party pairs in a group, average it over the total number of pairs in the group, and finally calculate the difference between the Left and Right groups.

Formally, the measure is $Het_{2j} = \frac{2}{r(r-1)} \sum_{m=1}^{r-1} \sum_{n=m+1}^r |p_j^m - p_j^n| - \frac{2}{l(l-1)} \sum_{s=1}^{l-1} \sum_{t=s+1}^l |p_j^s - p_j^t|$, where p_j^m and p_j^n represent respondent j 's placements of party m and n associated with the rightist party group (with r members) and p_j^s and p_j^t represent respondent j 's placements of party s and t associated with the left party group with l members). As with Het_{1j} , more positive values of Het_{2j} indicate relatively more perceived heterogeneity for the rightist group over the leftist group.

Once we have calculated Het_{1j} and Het_{2j} for each respondent,²⁰ we must then identify each respondent as a potential Left identifier, a potential Right identifier, or neither. As discussed above, we do this in two different ways (and show, in Appendix B, that these classifications are robust to several alternative classification strategies). First, we categorize a respondent as a potential Leftist identifier if she placed herself from 0 to 3 (inclusive) on the 0–10 left-right scale, a potential non-identifier (the reference group) if she placed herself between 4 and 6, and as a potential Rightist identifier if she placed herself at or greater than 7.²¹ In the tables below, we name the two indicator variables capturing potential Left/Right identifiers *Right Self Placement* and *Left Self Placement*.

The second proxy is the respondent's self-reported party identification. Specifically, we assign all respondents who identify with a leftist party as potential Leftist identifiers, those that identify with rightist parties as potential Rightist identifiers, and everyone else as potential non-identifiers (the reference group, including non-partisans and partisans of the parties that do not belong to the Left or Right).²² In the tables below, we call the two relevant indicator variables *Right Partisan* and *Left Partisan*.

Empirically, we expect *Right Self Placement* and *Right Partisan* to be positively associated with our dependent variables, while *Left Self Placement* and *Left Partisan* to be negatively associated with the dependent variables. In other words, people who place themselves to the right (left) and who identify with parties on the right (left) tend to see the rightist group as more (less) heterogeneous than the leftist group.

Control variables

In addition to our dependent variables and major explanatory variables, we also include a set of control variables, as discussed above. First, using information from the ParlGov project (Döring and Manow 2016), we construct the variable *Cabinet Purity*, which is the difference between the percent of rightist and leftist parties in a cabinet at the time of the survey.²³ This variable ranges

²⁰ Het_1 has a mean of 0.100 and a standard deviation of 1.401, while Het_2 has a mean of 0.083 with the standard deviation of 1.815.

²¹Either expanding the centrist area to 3–7 or reducing it to exactly 5 does not change our substantive conclusions. These results are presented in Appendix D5.

²²Changes to the definition of which parties are classified as Left or Right (see Appendix B) have the appropriate downstream effect on the classifications of voters who are partisans of these parties.

²³We have also estimated the models with various alternative measures of cabinet purity, and none make a substantive difference in the results. These include incorporating the cardinal left-right positions of cabinet parties into the measure and using different definitions of what constitutes a 'centrist' party.

from 1 to -1 , where 1 means that all cabinet parties are from the rightist group while -1 means that all cabinet parties are from the leftist group. Again, Fortunato and Stevenson (2013) demonstrate that citizens tend to see parties ruling together in the cabinet as ideologically close to each other. Thus, we expect this variable to be negatively associated with our dependent variables.²⁴

Second, we control for the *Number of Rightist Parties* and the *Number of Leftist Parties* on which our heterogeneity scores were calculated. These variables simply measure the total number of leftist and rightist parties that respondents could place on the left-right scale in the CSES survey.

Third, in keeping with the literature on the OH effect that finds true trait heterogeneity to be strongly associated with perceived trait heterogeneity, we control for a measure of the true ideological heterogeneity of the left and right parties.²⁵ Specifically, we define *True R-L Heterogeneity* in the same way as our DVs (and match this measure to the DV in each specification) but instead of using each respondent's party placements to build the measures, we use the average placement of each party across all respondents.²⁶ The summary statistics of these variables are presented in Table A2 in Appendix A. Finally, we include fixed effects at the country and the year levels to account for unobserved variables at each of these levels that might impact perceived relative heterogeneity.²⁷

Results

To investigate whether the respondents across our 20 countries and 86 surveys exhibit the OH effect for Left/Right groups, we estimate a set of linear regressions in which the dependent variable is either Het_{1j} or Het_{2j} and the main independent variables (those above the horizontal line in Table 1) are indicators for whether a respondent is a potential Left identifier, Right identifier, or neither (the baseline). The results are summarized in Table 1. In Models 1, 3, 5, 7, we rely on left-right self-placement to identify potential Left/Right identifiers, while in Models 2, 4, 6, 8, we use party attachment (to left or right parties) instead.

Both dependent variables used in Table 1 capture the extent to which respondents perceive the rightist party group to be more ideologically heterogeneous than the leftist party group. Further, for both our indicators of potential Left/Right identifiers, the baseline category is a respondent who was not classified as a potential Left/Right identifier. Thus, evidence of an OH effect for our respondents corresponds to positive coefficients for the variables *Right Self Placement* and *Right Partisan* and negative coefficients for *Left Self Placement* and *Left Partisan*.

Clearly, the results in Table 1 show exactly these effects (all statistically different from zero) and are robust to the different model specifications in the table (as well as to the many additional specifications and alternative measures reported in the Appendices).

This clear evidence of an OH effect is exactly what we would expect if our potential Left/Right identifiers have, in fact, developed psychological attachments to the Left and Right as social

²⁴Since this variable is positive for more 'pure' rightist cabinets (so when rightist parties should be seen as more ideologically homogenous) and negative for more pure leftist cabinets – and because our DVs are coded so that a positive value means the right is *less* ideologically homogeneous, the expected direction of the association is negative.

²⁵As with all our variables that depend on left-right classifications of parties, these values change appropriately when we use different rules for classifying parties as left or right (see Appendix B).

²⁶Using the mean placement as an estimate of the true party position (rather than a manifesto position) is common in cross-national studies of political behavior, provides essentially the same rank ordering of parties that alternatives do (Fortunato, Stevenson and Vonnahme 2016), and has the advantage that it is available for all parties included in each survey.

²⁷Our results are similar with or without these country- and year-fixed-effects. Moreover, our conclusions remain even if we replace country- and year-fixed effects with random effects or with fixed effects at the survey level.

Table 1. Determinants of in-group heterogeneity and out-group homogeneity

		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
		(Het ₁ = Diff. in SD of party placements)				(Het ₂ = Diff. in sum of pairwise distances)			
Leftist voter	(−)	−0.053** (0.010)		−0.059** (0.010)		−0.082** (0.013)		−0.087** (0.013)	
Rightist voter	(+)	0.057** (0.009)		0.051** (0.009)		0.078** (0.012)		0.072** (0.012)	
Leftist partisan	(−)		−0.119** (0.010)		−0.124** (0.010)		−0.154** (0.013)		−0.162** (0.013)
Rightist partisan	(+)		0.170** (0.010)		0.137** (0.010)		0.216** (0.013)		0.193** (0.013)
Cabinet purity (% Rightist Parties - % Leftist Parties in Cabinet)	(−)			−0.045** (0.008)	−0.050** (0.008)			−0.122** (0.013)	−0.125** (0.013)
# of Right Parties	(+)			0.189** (0.009)	0.185** (0.009)			0.065** (0.020)	0.054** (0.020)
# of Left Parties	(−)			−0.104** (0.010)	−0.097** (0.010)			−0.093** (0.019)	−0.071** (0.019)
True R-L heterogeneity	(+)			0.522** (0.015)	0.513** (0.015)			0.349** (0.046)	0.368** (0.046)
Constant		−0.266** (0.026)	−0.275** (0.027)	−0.409** (0.036)	−0.412** (0.037)	−0.532** (0.034)	−0.543** (0.035)	−0.672** (0.048)	−0.682** (0.049)
Country & year fixed effects		✓	✓	✓	✓	✓	✓	✓	✓
Observations		124875	122109	124875	122109	124875	122109	124875	122109

Standard errors in parentheses, ***P* < 0.01.

groups.²⁸ Thus, these results are clear indications that such psychological attachments are likely real, should get more attention from students of political behavior, and that direct measures of these attachments should be included in future voter surveys.²⁹

Beyond the results in Table 1, the literature highlights several moderators of the OH effect that should matter in our context. Specifically, we will have more confidence in the message of Table 1 if it is also the case that the OH effect changes across contexts in ways that the literature suggests it should. Thus, in the next two sections we examine (1) whether the OH effect is stronger for individuals likely to be more strongly attached to the Left/Right, and (2) whether the OH effect is increasing over time, as we would expect given rising left-right (affective) polarization in most western democracies.

The conditioning effect of attachment strength

As discussed above, the literature on the OH effect suggests that individuals with stronger in-group attachment should exhibit a larger OH effect. To test this, we created two different indicators identifying the respondents most likely to be strongly attached to a Left/Right group.

First, in models that use left-right self-placement to identify potential Left/Right identifiers, we assume that those farther from the center of the left-right scale are the respondents most likely to identify strongly with the Left/Right. We operationalize this with two dummy variables: *Far Left Self Placement* for respondents placing themselves at 0–2 on the 11-point left-right scale and *Far Right Self Placement* for those at 8–10. The reference group (coded 0 on both dummies) are those who place themselves from 3–7, inclusive.

Second, in models that use party identification to identify potential Left/Right identifiers, we assume that respondents who identify more strongly with a (left or right) party are the most likely to identify strongly with the Left/Right.³⁰ Using the 5-point party attachment question in the CSES, we create two dummy variables, *Strong Left Partisan* and *Strong Right Partisan*, that indicate partisans who consider themselves ‘very close’ to one of the parties we have identified as a left or right party.³¹ All other respondents, including non-partisans, partisans identifying only weakly with parties belonging to the left or right, and partisans identifying with parties that are not connected with the left or right, are the reference group.

Next, we estimate the same set of models in Table 1 adding these new variables. Clearly, we expect the estimated coefficients on these new dummy variables to be in the same direction as the corresponding variables in the previous models and that the effects for these individuals will be larger than for weaker potential identifiers.

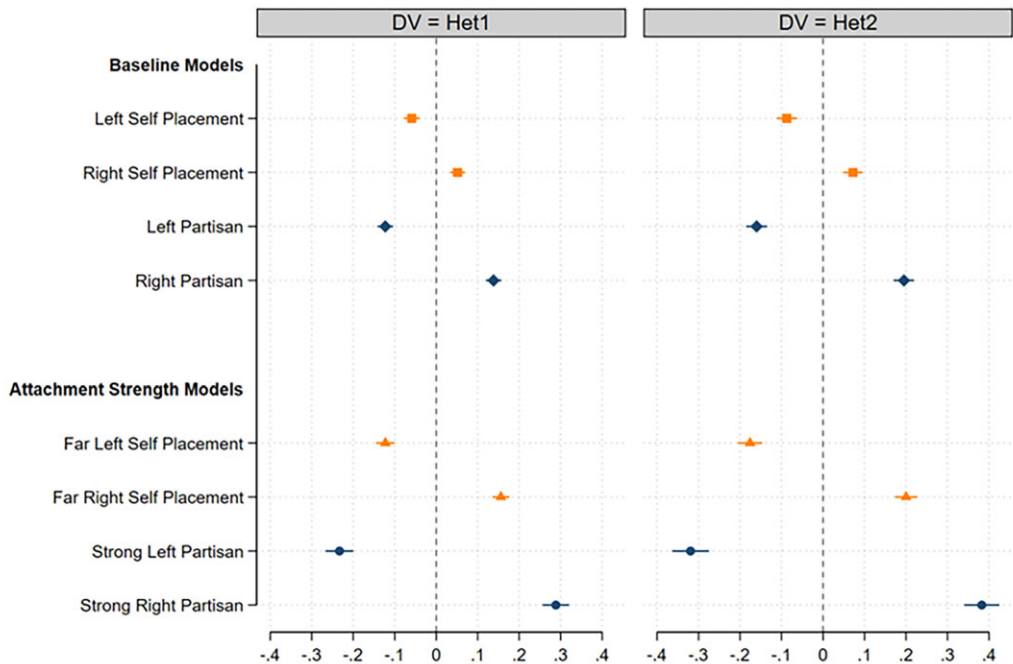
The key results are presented in Figure 1, including coefficient estimates and 95% confidence intervals, and the full results in Table C1 in Appendix C. The left panel shows results for the DV *Het_{1j}* and the right panel for *Het_{2j}*. Clearly, these results meet our expectations. The size of the OH effect for individuals who place themselves far to the left (right) or who are strong right (left)

²⁸By examining country-specific analyses, we also demonstrate that this OH effect is a widespread phenomenon across countries in our sample. See Appendix J for the results.

²⁹An additional question concerns whether there is any asymmetry in the magnitude of the OH effect between the Left and Right identifiers. To test this possibility, we examine whether the difference in the absolute values of the estimated coefficients for Left and Right identifiers is significantly different from zero. Based on the estimates from the models reported in Table 1, we find that the OH effects are largely symmetric.

³⁰The plausibility of this assumption is supported by Bantel’s (2023) recent study, which finds that, similar to evidence from the US showing that strong partisans are more affectively polarized (Huddy, Bankert and Davies 2018; Mason 2015), affective polarization along the Left-Right divide is stronger among those who are more strongly attached to a party.

³¹The coding of these variables changes appropriately when we estimate models using alternative definitions of which parties are left and right (see Appendix B for our party classifications and alternative classifications).



Points are coefficients on the corresponding variables from the models in Table C1 in Appendix C. Bars are 95% confidence intervals.

Figure 1. The effect of the strength of group attachment.

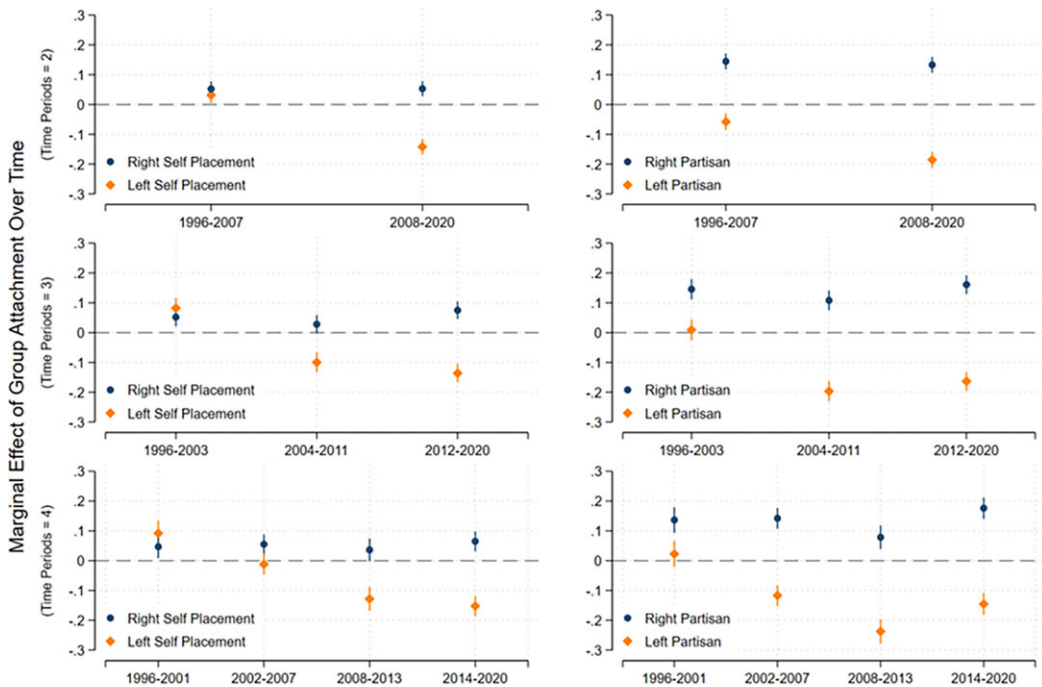
partisans is almost twice the size of the effect in the baseline models. This is consistent with the predictions of the literature on individual heterogeneity in the OH effect and so should increase our confidence that these effects are real – and that voters are indeed developing psychological attachments to the Left/Right groups.

In-group heterogeneity and OH over time

In this section, we investigate whether the OH effect for Left/Right groups is increasing over time, as we would expect if rising polarization has resulted in more individuals developing, or strengthening attachments to the Left/Right. To test this, we re-estimate Model 3 and Model 4 in Table 1 (ie DV = Het₁), interacting the key variables with dummies for several sub-periods.³² To illustrate these results, we plot the marginal effect of left-right group attachment on perceived heterogeneity and the associated 95% confidence intervals by type of voters and different sub-periods in Figure 2. The full estimated results are presented in Appendix G.

Once again, the results are consistent with our expectations. Regardless of the measures we employ to capture potential Left/Right identifiers or the ways we separate time periods, the size of the OH effect (ie the distance between the point estimates for left and right voters) as well as its consistency (a negative effect for leftist and a positive one for rightist) is increasing over time – with a clear and consistent OH effect emerging (as we might expect) only after 2008.

³²Using the same specification, we also re-estimate Model 7 and Model 8 in Table 1 (ie DV is Het₂), and it yields very similar results. Please see Appendix G for the full results.



Points are marginal effects for corresponding variables from the models in Appendix G. Bars are 95% confidence intervals.

Figure 2. Effect of group attachment on perceived heterogeneity over time.

Robustness

The main contribution that we make in this article is to answer an empirical question: Are citizens in multi-party western democracies developing psychological attachments to the Left and Right? Thus, it is particularly important that we explore the robustness of the results to plausible changes in model specification, measurement, and sample – as well as to construct appropriate placebo tests. While some of these checks are discussed in the text, the details of many others (and the justification for each) must necessarily be relegated to the appendix. Looking across all these various efforts, however, we can report here that the substantive (and, to a remarkable extent, the specific numeric) results reported in the main text are robust to a wide range of such changes, including:

1. Using four different schemes for classifying parties as left or right (and for excluding parties whose left-right classification may be ambiguous). [Appendix B]
2. Increases to the minimum number of parties on the left or right required for a survey to be included in the analysis. [Appendix D1]
3. Excluding all respondents who might reasonably be considered partisan extremists from the analysis (leaving only 44% of the original sample). [Appendix D2]
4. Excluding respondents who misplaced parties to the wrong group. [Appendix D3]
5. Excluding the party that a respondent is strongly attached to from the calculation of her perceived left-right heterogeneity. [Appendix H]
6. Using different methods for dealing with respondents who appear to reverse the left-right scale when placing parties (including doing nothing). [Appendix D4]
7. The use of plausible controls or not [All tables in the text and Appendix], different plausible measures of some controls [Footnote 21], specifications with or without country, time, or survey fixed effects, and specifications with country and/or time random effects. [Footnote 25]

8. Two different ways of measuring the dependent variable. [All tables in the text and Appendix]
9. Two different proxies for membership in groups of potential Left/Right identifiers. [All tables in the text and Appendix]

In addition, in a placebo test in which we randomly form thousands of different groups of potential Left/Right identifiers and re-run our main models on each, we find no hint of any OH effects (see Appendix E).

We have also produced country-specific estimates of our main models (with controls) for the post-2008 period (for both the strongest potential identifiers with the Left and Right and for all respondents). Of the 168 estimates for the strongest identifiers,³³ only one estimate is statistically different from zero and in an unexpected direction. For the broader post-2008 sample (including all potential identifiers), this number increases to only 11 (6.5% of the 168 estimates). Thus, it is clear that the aggregate estimates reported above are broadly representative of the direction and statistical significance of corresponding country-by-country estimates.³⁴ Further, as we show in Appendix K, we find that the OH effect is also present among high-knowledge individuals, indicating that the patterns observed in this paper are not primarily driven by asymmetric political knowledge – that is, they cannot be explained simply by low-information voters failing to distinguish between out-group parties due to lack of familiarity.

Finally, in Appendix F we provide an analysis of whether potential Left/Right identifiers perceive out-group members as ideologically more extreme than in-group members. While such an effect is not strictly implied by the OH effect, in our case – where the trait in question is ideological extremity – it seems likely that for individuals affectively attached to the Left/Right the two effects would occur together. That is, an in-group member would see the out-group as more homogeneously extreme than the in-group. This is exactly what we find.

Alternative explanations

While we contend that the argument and analyses presented above provide evidence that many voters identify with the Left and Right as socio-political groups, in this section we explore two alternative explanations for the OH effects that we report. Since we do not have space in the main text to present all the arguments and evidence for these alternatives, we provide a thorough discussion (with relevant empirical results) in Appendix H. Here, we simply summarize that discussion.

The first alternative explanation assumes a voter with standard spatial preferences who cares about accurately perceiving parties' positions in proportion to the likelihood of voting for them. For parties she would never consider supporting, she has little incentive to distinguish their policies beyond knowing they are 'far away'. By contrast, she has stronger incentives to differentiate among parties she might vote for – for example, all leftist parties for a left-leaning voter. Thus, when asked about rightist parties, she will have little specific information to distinguish them and so will simply report similar (rightist) positions for them all. In contrast, she will have invested time and energy in understanding the distinctions between the leftist parties and so will tend to spread them out (controlling for their real positions). This mechanism can thus lead to an apparent OH effect, without requiring any Left/Right attachment.

³³One estimate each for left and right potential identifiers, for 2 DVs, for 2 ways of classifying potential identifiers for 21 countries = $2 \times 2 \times 2 \times 21 = 168$.

³⁴These results are available upon request.

We construct a test of the implications of this alternative (versus our argument), by pointing out that if voters behave as prescribed by this alternative (ie investing in understanding the ideological positions of parties they might vote for and not otherwise) then we should see the weakest OH effects among those who are the strongest partisans. The reason is that strong partisans are unlikely to consider voting for any other party and so, according to the logic of this argument, have little incentive to invest in understanding the ideological differences between any of the parties. Only weak partisans or non-partisans will consider multiple parties and so (if these parties are confined to one side of the ideological spectrum) will produce the kind of spurious OH effect suggested by this alternative.

Our previous analysis of the impact of partisanship on the size of the OH effect, however, does not support this implication. Instead, we found the opposite: a large and robust positive effect of the strength of partisanship on the size of the OH effect (see Figure 1).

The second alternative explanation we explore in Appendix H is the (likely subconscious) desire of survey respondents who are partisans of a given party to protect the ideological distinctiveness of their party relative to others. Thus, they will tend to ‘push’ other parties away from the position of their party, which can result in a spurious OH effect (as illustrated in Appendix Figure H1.1). That said, this alternative yields an implication that directly contrasts with the implications of our story and thus allows a clear test between the two accounts. Specifically, as we show in Appendix H, this ‘partisan distinctiveness’ argument implies that if we recalculate our OH effect (for partisans) excluding their parties, the OH effect should be largest for partisans of leftist (rightist) parties located in the middle of their ideological group, and smaller for partisans of the most extreme or most centrist parties. Figure H1.2 provides the relevant results, which clearly refute this implication. Table H1.1 further demonstrates that the main results remain robust when we recalculate the dependent variables excluding each partisan’s supported party.

Using direct survey measures of left-right attachments: proof of concept

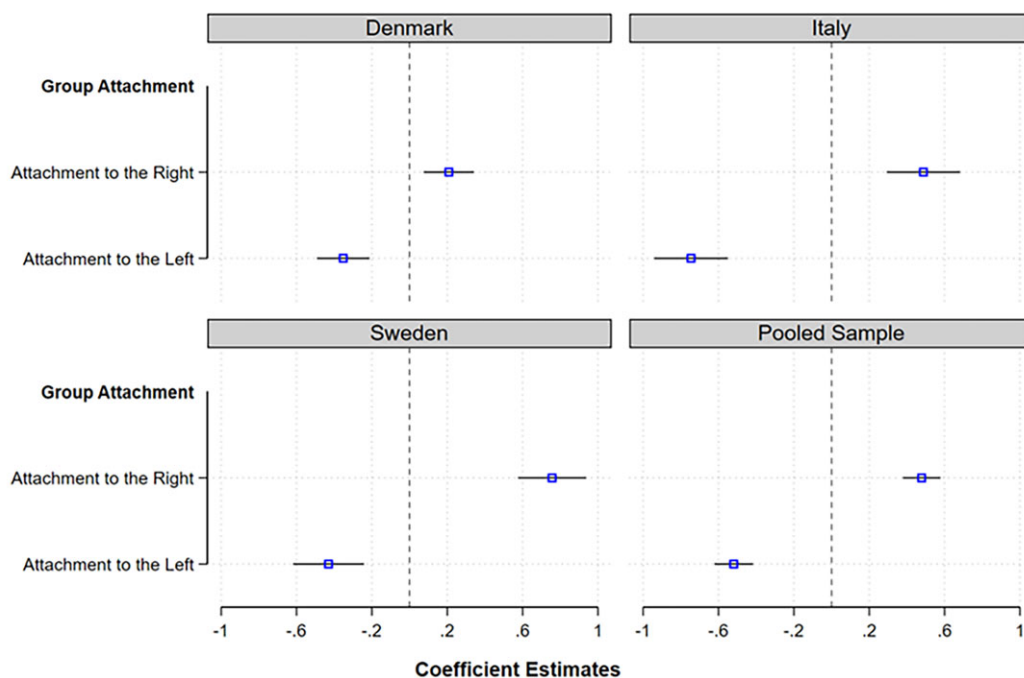
One motivation for doing the large-scale, indirect investigation provided above was to assess whether it makes sense to invest significant resources in collecting more direct measures of attachment to the Left or Right as socio-political groups. Clearly, our analysis suggests that such an investment is warranted. That said, we can also provide some preliminary evidence that such direct measures are likely to ‘work’ as expected. One way to do that is to build a multi-item survey battery that directly measures an individual’s psychological attachment to the Left or Right and then examine if that direct measure is associated, at the individual level, with the strength of the OH effect in left-right party placements.

Below we estimate such correlations to provide a preliminary *direct* test of the argument we have made (and demonstrated indirectly) above. Specifically, we rely on a series of original pilot surveys that we conducted in Denmark, Italy, and Sweden, on which we were able to include question batteries designed to directly measure respondents’ psychological attachment to the Left and, separately, to the Right.³⁵

The survey information, specific questions, justification, estimation strategies, and detailed results are provided in Appendix I (we used appropriate IRT models to estimate attachment to each group from a well-validated group attachment question battery). Figure 3 summarizes the main result:

These findings indicate that individuals who are more psychologically attached to the Left or the Right as socio-political groups exhibit a greater OH effect in their left-right placements of the parties. Those strongly attached to the Right (Left) perceive parties on the Left (Right) as more

³⁵Each survey included approximately 1,000 respondents recruited via Qualtrics LLC’s online panels in December 2021, with age and gender quotas based on national census distributions.



Points are coefficients on the corresponding variables from the models in Table I2 in Appendix I. Bars are 95% confidence intervals.

Figure 3. Effect of group attachment on perceived group heterogeneity.

homogeneous than those who are weakly attached. This individual-level, direct evidence reassures us that the widespread and growing OH effect that we have observed across many countries reflects genuine psychological attachment to the Left and the Right.

Conclusion

We began this paper by highlighting the empirical literature that has begun to demonstrate that some western voters are developing psychological attachments to the Left and Right as social-political groups and highlighted the implications of this development for intragroup and intergroup volatility in vote choices, the frequency and nature of strategic voting, voter satisfaction with electoral outcomes, and a myriad of other important political behaviors and attitudes that have long been tied to such affective political attachments. This is an important paradigm shift, indicating that political competition in multi-party systems may, in practice, be perceived by voters as dividing into two broad camps, with far-reaching consequences for our understanding of coalition politics, intra-bloc strategic voting, and polarization. Indeed, if this phenomenon is cross-nationally widespread and growing (as we have argued it is), one can hardly imagine a more consequential development for understanding the electoral behavior of Western publics.

Unfortunately, however, the empirical work on this topic so far has been confined to a few isolated surveys and so has not yet motivated scholars to invest in directly measuring these attachments across a broad set of Western democracies. The purpose of this paper was to indirectly examine if this phenomenon appears to be happening in a large set of countries over a long-time period, with the goal of deciding if investment in more direct measurement is warranted. Our results suggest clearly that it is. Specifically, we show that the OH effect for Left/Right groups is robustly apparent in many Western democracies and that it is growing over time – as we

would expect if such attachments developed in tandem with increasing levels of bipolar political polarization (as some scholars have suggested).

That said, our evidence is *indirect*. Consequently, it cannot serve as the final measure of the extent and nature of Left/Right attachments. Only direct measures (ideally built from carefully constructed question batteries), which we have attempted to do, will provide the kind of precise estimates of these attachments that are necessary if we are to understand: (1) their relationship to partisan attachments – e.g. do they exist alongside partisan attachments or do they replace them?, (2) their implications for voting behavior (including strategic voting), (3) their effect on satisfaction with electoral outcomes and thus democratic stability. Such direct measures will also be necessary to properly characterize cross-national differences in the extent and nature of these attachments and then to explore the causes of these differences. For example, do such differences reflect corresponding differences in the extent of left-right polarization (Gidron, Adams and Horne 2020), differences in electoral institutions, or something else?

While these questions should be the subject of future work, we conclude with a preview of one important downstream consequences of psychological attachment to Left and Right groups (and one that – if absent – would mean such attachments are probably not worth trying to measure): the impact of psychological attachment to the Left and Right on the distribution of support for parties – controlling for psychological attachments to individual parties. Does an attachment to the Left and Right impact voting above and beyond psychological identities? In Appendix L, we use the direct, individual-level, measures of psychological attachment to the Left and (separately) to the Right that were mentioned above (and explained in Appendix I) along with measures of respondents' partisan attachments to show that the impact of psychological attachments to the Left and Right on vote choices in Sweden, Italy, and Denmark are both sensible and consequential. In general, greater attachment to the Left or Right is strongly associated with respondents' support for parties that are seen as farther left or right, respectively, even after controlling for partisan attachments.

Thus, we conclude with an empirically justified call for students of comparative political behavior to invest in the development of appropriate survey batteries across a large number of countries to directly measure psychological attachments to the Left and Right alongside traditional partisan attachments. At the same time, our findings suggest that such attachments may already be shaping electoral behavior, structuring party competition, and influencing democratic attitudes across many Western democracies.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/S147567652610070X>.

Data availability statement. The data and replication files for this paper are publicly available on the EJPR website.

Funding statement. The authors do not receive any funding for this project.

Competing interests. The authors declare no competing interests.

References

- Ackerman, J.M., Shapiro, J.R., Neuberg, S.L., Kenrick, D.T., Becker, D.V., Griskevicius, V., Maner, J.K. and Schaller, M. (2006). 'They all look the same to me (unless they're angry): from out-group homogeneity to out-group heterogeneity'. *Psychological Science*, 17(10), 836–840.
- Adams, J., Weschle, S. and Wleziën, C. (2021). 'Elite interactions and voters' perceptions of parties' policy positions'. *American Journal of Political Science*, 65(1), 101–114.
- Arian, A. and Shamir, M. (1983). 'The primarily political functions of the left-right continuum'. *Comparative Politics*, 15(2), 139.
- Aylott, N. (2011). 'Parties and party systems in the North', in T. Bergman and K. Strøm (Eds.), *The Madisonian Turn: Political Parties and Parliamentary Democracy in Nordic Europe* (pp. 297–328). University of Michigan Press.

- Bale, T. (2003). 'Cinderella and her ugly sisters: the mainstream and extreme right in Europe's bipolarising party systems'. *West European Politics*, 26(3), 67–90.
- Bantel, I. (2023). 'Camps, not just parties. The dynamic foundations of affective polarization in multi-party systems'. *Electoral Studies*, 83, 102614.
- Barreto, N.B. and Hogg, M.A. (2017). 'Evaluation of and support for group prototypical leaders: a meta-analysis of twenty years of empirical research'. *Social Influence*, 12(1), 41–55.
- Bobbio, N. (1996). *Left and Right: The Significance of a Political Distinction*. Polity Press.
- Boldry, J.G., Gaertner, L. and Quinn, J. (2007). 'Measuring the measures: a meta-analytic investigation of the measures of outgroup homogeneity'. *Group Processes & Intergroup Relations*, 10(2), 157–178.
- Boldry, J.G. and Kashy, D.A. (1999). 'Intergroup perception in naturally occurring groups of differential status: a social relations perspective'. *Journal of Personality and Social Psychology*, 77(6), 1200–1212.
- Bolstad, J. and Dinas, E. (2017). 'A categorization theory of spatial voting: how the center divides the political space'. *British Journal of Political Science*, 47(4), 829–850.
- Bröder, A., Gräf, M. and Kieslich, P.J. (2017). 'Measuring the relative contributions of rule-based and exemplar-based processes in judgment: validation of a simple model'. *Judgment and Decision Making*, 12(5), 491–506.
- Campbell, A., Converse, P.E., Miller, W.E., and Stokes, D.E. (1960). *The American Voter*. John Wiley.
- Dalton, R.J., McAllister, I. and Wattenberg, M.P. (2002). 'The consequences of partisan dealignment', in R.J. Dalton (Ed.), *Parties Without Partisans* (1st ed., pp. 37–63). Oxford University Press.
- Derreumaux, Y., Bergh, R. and Hughes, B.L. (2022). 'Partisan-motivated sampling: re-examining politically motivated reasoning across the information processing stream'. *Journal of Personality and Social Psychology*, 123(2), 316–336.
- Döring, H and Manow, P. (2016). 'Parliaments and Governments database (ParlGov): information on parties, elections and cabinets in modern democracies'. Development version. Available at: <http://www.parl.gov.org>.
- Forestiere, C. (2009). 'Kirchheimer Italian style: catch-all parties or catch-all blocs'. *Party Politics*, 15(5), 573–591.
- Fortunato, D. and Stevenson, R.T. (2013). 'Perceptions of partisan ideologies: the effect of coalition participation'. *American Journal of Political Science*, 57(2), 459–477.
- Fortunato, D., Stevenson, R.T. and Vonnahme, G. (2016). 'Context and political knowledge: explaining cross-national variation in partisan left-right knowledge'. *The Journal of Politics*, 78(4), 1211–1228.
- Garzia, D., Ferreira Da Silva, F. and De Angelis, A. (2022). 'Partisan dealignment and the personalisation of politics in West European parliamentary democracies, 1961–2018'. *West European Politics*, 45(2), 311–334.
- Gidron, N., Adams, J. and Horne, W. (2020). *American Affective Polarization in Comparative Perspective* (1st ed.). Cambridge University Press.
- Green, D.P., Palmquist, B. and Schickler, E. (2002). *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. Yale University Press.
- Gschwend, T. and Hooghe, M. (2008). 'Should I stay or should I go? An experimental study on voter responses to pre-electoral coalitions'. *European Journal of Political Research*, 47(5), 556–577.
- Guinote, A., Judd, C.M. and Brauer, M. (2002). 'Effects of power on perceived and objective group variability: evidence that more powerful groups are more variable'. *Journal of Personality and Social Psychology*, 82(5), 708–721.
- Hagevi, M. (2015). 'Bloc identification in multi-party systems: the case of the Swedish two-bloc system'. *West European Politics*, 38(1), 73–92.
- Haslam, S.A., Oakes, P.J., Turner, J.C., & McGarty, C. (1995). 'Social categorization and group homogeneity: changes in the perceived applicability of stereotype content as a function of comparative context and trait favourableness'. *British Journal of Social Psychology*, 34(2), 139–160.
- Hewstone, M., Islam, M.R. and Judd, C.M. (1993). 'Models of crossed categorization and intergroup relations'. *Journal of Personality and Social Psychology*, 64(5), 779–793.
- Hogg, M.A. (2001). 'A social identity theory of leadership'. *Personality and Social Psychology Review*, 5(3), 184–200.
- Holmberg, S. (2009). 'Partisanship reconsidered', in R.J. Dalton and H. Klingemann (Eds.), *The Oxford Handbook of Political Behavior* (1st ed., pp. 557–570). Oxford University Press.
- Hornsey, M.J. (2008). 'Social identity theory and self-categorization theory: a historical review'. *Social and Personality Psychology Compass*, 2(1), 204–222.
- Huddy, L., Bankert, A. and Davies, C. (2018). 'Expressive versus instrumental partisanship in multiparty European systems'. *Political Psychology*, 39(S1), 173–199.
- Iyengar, S. and Westwood, S.J. (2015). 'Fear and loathing across party lines: new evidence on group polarization'. *American Journal of Political Science*, 59(3), 690–707.
- Jetten, J., Spears, R. and Postmes, T. (2004). 'Intergroup distinctiveness and differentiation: a meta-analytic integration'. *Journal of Personality and Social Psychology*, 86(6), 862–879.
- Judd, C.M. and Park, B. (1988). 'Out-group homogeneity: judgments of variability at the individual and group levels'. *Journal of Personality and Social Psychology*, 54(5), 778–788.
- Judd, C.M. and Park, B. (1993). 'Definition and assessment of accuracy in social stereotypes'. *Psychological Review*, 100(1), 109–128.

- Kekkonen, A. and Ylä-Anttila, T. (2021). 'Affective blocs: understanding affective polarization in multiparty systems'. *Electoral Studies*, 72, 102367.
- Kelly, C. (1989). 'Political identity and perceived ingroup homogeneity'. *British Journal of Social Psychology*, 28(3), 239–250.
- Konovalova, E. and Le Mens, G. (2020). 'An information sampling explanation for the in-group heterogeneity effect'. *Psychological Review*, 127(1), 47–73.
- Lee, S, Santoso, L.P. and Stevenson, R.T. (2025). *Heuristic Inference and the Left-Right: An Experimental Analysis of How Voters Form Their Left-Right Images of Parties* Forthcoming, Cambridge: Cambridge University Press.
- Lee, Y.-T. and Ottati, V. (1995). 'Perceived in-group homogeneity as a function of group membership salience and stereotype threat'. *Personality and Social Psychology Bulletin*, 21(6), 610–619.
- Leonardelli, G.J. and Toh, S.M. (2015). 'Social categorization in intergroup contexts: three kinds of self-categorization'. *Social and Personality Psychology Compass*, 9(2), 69–87.
- Linville, P.W., Fischer, G.W. and Salovey, P. (1989). 'Perceived distributions of the characteristics of in-group and out-group members: empirical evidence and a computer simulation'. *Journal of Personality and Social Psychology*, 57(2), 165–188.
- Mair, P. (2008). 'The challenge to party Government'. *West European Politics*, 31(1–2), 211–234.
- Mason L. (2015). 'I disrespectfully agree: the differential effects of partisan sorting on social and issue polarization'. *American Journal of Political Science*. 59(1), 128–45
- Myers, C.D. and Hvidsten, T. (2025). 'Who is the Party? The effect of counter-stereotypical Partisan exemplars on inter-party stereotypes and affect'. *Political Behavior*, 47(3), 1317–1338.
- Nicholson, S.P. (2012). 'Polarizing cues'. *American Journal of Political Science*, 56(1), 52–66.
- Nicholson, S.P., Carman, C.J., Coe, C.M., Feeney, A., Fehér, B., Hayes, B.K., Kam, C., Karp, J.A., Vaczi, G. and Heit, E. (2018). 'The nature of party categories in two-party and multiparty systems'. *Political Psychology*, 39(S1), 279–304.
- Nicholson, S.P. Coe, C.M., Martinsson, J. and Heit, E. (2016). 'Setting boundaries: how categorical perception sets political parties apart from each other in crowded multiparty systems'. MPSA, Chicago.
- Oscarsson, H. and Holmberg, S. (2020). *Research Handbook on Political Partisanship*. Edward Elgar publishing.
- Oshri, O., Yair, O. and Huddy, L. (2022). 'The importance of attachment to an ideological group in multi-party systems: evidence from Israel'. *Party Politics*, 28(6), 1164–1175.
- Ostrom, T.M. and Sedikides, C. (1992). 'Out-group homogeneity effects in natural and minimal groups'. *Psychological Bulletin*, 112(3), 536–552.
- Peterson, D.A.M. (2005). 'Heterogeneity and certainty in candidate evaluations'. *Political Behavior*, 27(1), 1–24.
- Platow, M.J. and Van Knippenberg, D. (2001). 'A social identity analysis of leadership endorsement: the effects of leader ingroup prototypicality and distributive intergroup fairness'. *Personality and Social Psychology Bulletin*, 27(11), 1508–1519.
- Poguntke, T. and Webb, P. (Eds.). (2005). *The Presidentialization of Politics: A Comparative Study of Modern Democracies* (1st ed.). Oxford University Press.
- Rothgerber, H. (1997). 'External intergroup threat as an antecedent to perceptions in in-group and out-group homogeneity'. *Journal of Personality and Social Psychology*, 73(6), 1206–1212.
- Rubin, M. and Badae, C. (2007). 'Why do people perceive ingroup homogeneity on ingroup traits and outgroup homogeneity on outgroup traits?' *Personality and Social Psychology Bulletin*, 33(1), 31–42.
- Rubin, M. and Badae, C. (2012). 'They're all the same! . . . but for several different reasons: a review of the multicausal nature of perceived group variability'. *Current Directions in Psychological Science*, 21(6), 367–372.
- Rubin, M., Hewstone, M. and Voci, A. (2001). 'Stretching the boundaries: strategic perceptions of ingroup variability'. *European Journal of Social Psychology*, 31(4), 413–429.
- Simas, E.N. (2020). 'Extremely high quality?' *Public Opinion Quarterly*, 84(3), 699–724.
- Simon, B. and Pettigrew, T.F. (1990). 'Social identity and perceived group homogeneity: evidence for the ingroup homogeneity effect'. *European Journal of Social Psychology*, 20(4), 269–286.
- Smith, E.R. and Zárate, M.A. (1992). 'Exemplar-based model of social judgment'. *Psychological Review*, 99(1), 3–21
- Strom, K and Bergman, T. (2011). 'Parliamentary democracies under siege?' in K. Strom and T. Bergman (Eds.), *The Madisonian Turn: Political Parties and Parliamentary Democracy in Nordic Europe* (pp. 3–34). The University of Michigan Press.
- Tajfel, H. (1981). *Human Groups and Social Categories*. Cambridge University Press.
- The Comparative Study of Electoral Systems (www.cses.org). CSES INTEGRATED MODULE DATASET (IMD) [dataset and documentation]. February 27, 2024 version. doi: 10.7804/cses.imd.2024-02-27.
- Voci, A. (2000). Perceived group variability and the salience of personal and social identity. *European Review of Social Psychology*, 11(1), 177–221.