

**A Holistic View on Polarization:
Attitudes, Emotions, and Partisanship as Elements of Social Identity Construction**

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Abstract: Scholars are divided whether polarization reflects an issue-driven or affect-driven phenomenon. Here we propose a holistic understanding of polarization that conceptualizes attitudes, emotions, and partisanship as interacting elements involved in the regulation and communication of political social identities. We validate this view using data from US-American crowdworkers (N = 396) and the 2020 ANES (N = 8280). We apply a novel methodological approach that combines strengths from belief network analysis and item response theory. To test a set of pre-registered hypotheses, we estimated an attitude network based on item-responses to eight political key matters and located participants in the network. Data revealed strong correlations between participants' network location, partisan identification, and affective group-bias. A subsequent vignette study suggested that participants categorized and affectively evaluated others using attitudes as identity cues. We conclude that re-considering the role of attitudes as social regulation “tools” can provide an enhanced understanding of polarization dynamics.

Keywords: Polarization; Belief Network Analysis; Item-Response Theory; Political Attitudes; Social Identity Theory

The present research uses the social identity approach as theoretical framework to reconcile competing views on driver of polarization. We believe that a great deal of ongoing disagreement within the wider polarization literature results from an interpretation of attitudes and emotions as competing rather than mutually informative elements underlying social identity construction, development, and performance. We are applying a recently developed methodological approach that is rooted in belief network analysis and item-response theory (Carpentras et al., 2021) that provides researchers with a tool to examine alignments of attitudes, emotions, and partisan identification. The purpose of the presented research is not to add to the discussion whether society is becoming more polarized or not, but to present a fresh theoretical and methodological look on the key drivers of social division, and potential social functions of polarization.

Competing Views on Polarization

The question whether society is becoming more divided is vividly debated among scholars. A great deal of research on polarization has focused on the US context, often comparing changes in the degree of attitude overlaps between Democrat and Republican voters. While the general public tends to overestimate the degree of social division in relation to important societal issues (Westfall et al., 2015), empirical investigation has yielded mixed results on the topic. Some scholars are seeing the US society as strongly polarized (e.g. Abramowitz & Saunders, 2008). Others, however, consider the narrative of a polarizing society merely as a “myth” (Fiorina & Abrams, 2008). A great deal of this controversy results from a different understanding of how polarization should be operationalized (Lelkes, 2016). A prominent definition of polarization involves a shifting from moderate to extreme attitudes. While there is consensus that extremity shifts been taken place at the elite level and among party activists, similar dynamics cannot be observed among the wider public, therefore leading some scholars to reject the public polarization hypothesis altogether (e.g. Fiorina et al., 2008). An alternative definition of polarization focuses on degree to which citizens align political attitudes over a wider range of issues into distinguishable partisan belief sets. According to this view, polarization is indicated by disappearing cross-cutting links in citizens’ political beliefs rather than by a shifting to the extremes (e.g. Abramowitz, 2010). While some data is backing up this position (Abramowitz & Saunders, 2008), the overall evidence for this conceptualization of polarization is mixed depending on

different ways of measurement, issue domains, and subgroups (Baldassarri & Park, 2020; Lelkes, 2016).

Given these inconsistencies, the concept of “affective polarization” focuses primarily on the emotional representations between members of different ideological camps. Contrary to findings on issue polarization, there is little doubt that partisan animosity considerably increased in the US over the last decades (Iyengar et al., 2019). A noticeable assumption is that affective polarization between partisans has grown widely independently from the extent of actual attitude disagreement (Iyengar et al., 2012). Congruently, data presented by (Mason, 2015) suggested that large parts of the electorate identify with a political party (and derogate opponents) without holding elaborating issue positions. However, another analysis presented by Bougher (2017) linked partisanship primarily to ingroup favoritism and belief dissimilarity to outgroup derogation; notably a finding consistent with the notion that ingroup love is more central to social identification than outgroup hate (Brewer, 1999).

Certainly, both interpretations have their validity and can co-exist in praxis. Some people may hold strong partisan social identities with low attitudinal anchoring, while others may hold strong partisan attitudes without identifying as a partisan group member. Distinguishing between issue-driven and affect-driven elements of polarization is therefore useful to obtain nuanced insights into drivers of socio-political macro-level dynamics. However, in this research, we would like to advance beyond the common depiction of social identities as mainly (hostile) affective phenomena, and of attitudes as rational considerations of the individual self. We present an alternative view on polarization that suggests a dynamic and reciprocal relationship between attitudes, emotions, and partisanship in social regulation (Quayle, 2020; Reynolds et al., 2021; Turner & Oakes, 1986). More simply, we propose that attitudes, emotions, and intergroup distinctions underly the creative construction of “we-ness” and “other-ness” in the psychological political landscape. The advantages of such an “organic” approach are not only theoretically relevant, but may offer a more holistic view on a complex topic and a fragmented academic debate. To support this aim also methodologically, we present a network-oriented approach that allows researchers to investigate relationships between different features of polarization from a single theoretical outlook.

Polarization as Social Regulation

The social identity approach is one of the most recognized theoretical frameworks to explain social regulation within social psychology and critical elements of it have inspired related disciplines (e.g. political science, political psychology) as well. One critical aspect, however, that we believe deserves further attention, concerns the *social creativity* individuals use to generate and perform collective selfhood in interaction with a given context. Social identities are inherently dynamic, and individuals creatively exploit the available means to construe selfhood in accordance with inherent psychological goals and contextual demands. For example, recent popular subcultures have included *Teddy Boys*, *Beatniks*, *Hippies*, *Punks*, *Hip-Hoppers*, *Yuppies*, *Goths*, *Emo's* and many others. These identities are (or were) enacted by means of recognizable clothes, language, behavior, music choices etc. Many of these are now lost to our culture, except in fancy-dress parties, while others have taken their place within mainstream culture. The argument we are making here is that political attitudes can and do serve a similar function when it comes to the construction, enactment, and regulation of political partisanship. More explicitly, we propose that attitudes are used to enact political identities; and observing such enactments allows people to infer the identities of others (c.f. Klein et al. 2007)

Empirical research provides evidence, indicating that the adoption of political attitude positions is informed by group identity management in the way that group members tend to embrace group normative attitude positions (Goren et al., 2009). In addition to such “top down” adjustments a fast-growing body of research demonstrates that attitude sharing provides a functional basis for the bottom-up construction of social identities as well (McGarty et al., 2009; Postmes et al., 2005). These “opinion-based groups” have been identified to reliably predict group perceptions and group behavior in a range of pressing social-political issues such as migration, climate change, and Covid-19 related health behavior (Akfirat et al. 2021). As with other genuine social identities, attitude sharing is not merely a socio-cognitive phenomenon but occurs in synthesis with emerging group norms for group behavior and group related attitudes. The growing relevance of social media for political discourse likely promoted the possibilities to connect and organize and mobilize under the banner of shared (dis)agreement (Lüders et al., 2021), and on the wider scale supported the emergence of competing social narratives (Bliuc et al., 2021).

Research suggests that in the US context, competing narratives about the ideal organization of society became increasingly embedded with Democratic and Republican partisanship. Well-aligned (i.e. sorted) political identities are a strong predictor of affective polarization, hence, suggesting a reciprocity in the organization of attitudes, emotions, and partisan-oriented social identities. Notably, while sorting processes did not fully match macro level attitude shifts (Mason, 2015) it is important to note that from a social identity perspective there is no reason to expect group members to inevitably embrace extreme attitudes but rather such attitudes that are seen as ingroup normative (Mackie, 1986). Group norms are subject to social creativity and embedded into a given social reality. For instance, while for some groups, holding extreme attitudes may be functional (e.g. in order to provoke social change) other groups may define themselves explicitly in distinction to outgroups with extreme viewpoints. Additionally, one would expect variation in “normative pressure” to hold a specific attitude position on a specific topic based on the group-defining relevance of an issue (e.g. one would expect vegans to be less tolerant towards “fuzzy” viewpoints on animal exploitation compared to vegetarians or flexitarians). It is worth noticing that a similar logic applies to the organization of group-related emotions where outgroup animosity (i.e. as captured by affective polarization) may be a consequence of social regulation, although not an inevitable one (Iyer & Leach, 2008). The existing literature provides plenty of examples of drivers of affective polarization, including attitude-related phenomena like sorting and disagreement (Minson & Dorison, 2022). The critical point we are making here is that (group normative) attitudes and emotions are flexible and dynamic in that sense that both are socially negotiated in interaction with a given context.

ResIN: A Holistic Approach to Polarization

As stated in the beginning, with this research we are not aiming to outline whether societies are becoming more divided or not, nor do we favor one operationalization of polarization over another. Instead, we are using the recently developed Response Item Network approach (ResIN; Carpentras et al., 2021; 2022) to corroborate our theoretical interpretation of attitudes, emotions, and partisanship as reciprocally connected factors underlying the regulation of political group identities. Note that an exhaustive introduction and validation of the mathematical characteristics of ResIN has been provided

elsewhere (Carpentras et al., 2021). In the next lines, we will focus primarily on the functionality of ResIN with regard to the present research context.

In resemblance to other belief network analysis methods, ResIN builds up a correlation network based on responses to a set of attitude items. A unique factor of ResIN, however, is that it incorporates elements of Item-Response Theory which dramatically enhances its flexibility. By treating each item response as a single nominal variable (i.e. chosen vs. not chosen), ResIN breaks up the ordinal structure of an item and re-builds it under consideration of the full network. For instance, a survey that includes 10 Items of which each follows a 5-point scale would result in a total network of 50 interrelated nodes. These nodes would be organized based on correlations between item-responses (not based on correlations between single items as in belief network analysis), thereby locating associated item-responses in relative spatial proximity. A main advantage of this is that ResIN allows the depiction of multiple belief systems within a single network without supposing an underlying symmetry. These belief systems may comprise extreme and central attitude positions which provides us with a deeper understanding of the normative alignment of attitude of different “strengths”. Once a network space is built from the underlying attitude structure, single individuals may be located in the center, at the periphery, or outside of a specific belief system. As we will see later, this distinction is critical since we show that the relative position of a person within a network can inform affective and symbolic elements of social regulation.

Present Research

In the present research, we use the recently developed ResIN approach to test a set of pre-registered hypotheses concerning the proposed reciprocity of attitudes, emotions, and partisanship in social regulation. The research is located in the US political context and focuses on the organization of partisan identities (i.e. as Democrat vs Republican). The structure of the analysis is as follows:

Firstly, we extract an attitude network based on participants responses to a set of socio-political key issues. We do not formulate any a priori hypotheses regarding the network’s organization. However, we chose a set of attitude items which previously had been associated with ideological and partisan-based cleavages (Dinkelberg et al., 2021; Malka et al., 2014). Consequently,

we expect these attitudes to cluster roughly into two different belief networks. In a second step, we test our central assumptions that connect structural features of the obtained attitude network with intrapsychological representation of partisanship. In other words, based on the overall network structure, we make inferences about the psychological ongoing of individuals who are located within this network. To this aim, we pre-registered the following two hypotheses:

H1: The position of a participant within the obtained attitude network correlates significantly with self-reported level of partisan social identification (i.e. as Democrat or Republican).

H2: The position of a participant within the obtained attitude network correlates significantly with self-reported level of affective polarization.

To enhance the robustness of our findings, we repeat these two steps with representative data from the 2020 American National Election Survey (ANES). In a third and last step, we follow a quasi-experimental design to validate our wider claim that political attitudes can be exploited for social regulation. More specifically, we test whether exposing participants to a single attitude position expressed on a vignette can reliably inform differences in social judgement. On a cognitive level, we test whether participants use attitudes to categorize others as ingroup and outgroup members. On an affective level, we test whether relative attitude differences correspond to level of affective polarization. More formally, we pre-registered the following two hypotheses:

H3: The extent to which participants categorize someone as ingroup or outgroup member based on an observed attitude will be informed by that same attitude's network position.

H4: The relative spatial distance in the network between a participants' own attitude and an observed attitude will significantly correlate with affective polarization.

Participants and Material

Ethical approval

The presented research received ethical approval from the ethical advisory board of (BLINDED).

Participants

We recruited a sample of $n = 402$ participants through the crowd working platform Prolific Academic in exchange for monetary reward. Participants were eligible to run the survey if they were a) at least 18 years old, b) US residents, c) native English speakers, d) in support of US Democrats, Republicans, or Independents, and e) obtained at least 98% approval from previous surveys. We excluded six participants who did not pass an attention check at the beginning of the survey, leading to an effective sample size of $n = 396$. The gender distribution was: 50.5% males, 48.7% females, and 0.8% non-binary. Most participants were White Americans (83.6), followed by African Americans (7.8%), hence, leaving 8.6% to other ethnicities. The mean age of the sample was 34 years ($SD = 11.7$; Range = 18 – 81). On a categorical scale, 58.1% self-identified as Democrats, 28% as Independents, and 13.9% as Republicans. To match this distribution with the real population, we re-weighted each group using the recommended weights (Gallup, 2021)¹.

Material

Participants were invited to take part in an online survey with a mean completion time of 8 minutes and 20 seconds. After providing informed consent, participant responded to a set of items that assessed political viewpoints and indicated their partisan identification.

Political Attitudes

We used a set of eight political attitude items (Supplementary A.1) covering topics such as abortion, immigration, gun regulation, and gay marriage. Each items followed a 5-point Likert type format ranging from strong disagreement to strong agreement. All items were coded in a way that disagreement referred to liberal positions and agreement to conservative positions (e.g. “abortion should be illegal”; “The federal government should make it more difficult to buy a gun” [reversed]).

¹ We also re-run the analysis without re-weighting the sample and obtaining qualitatively similar results.

Partisan Identification

We used single items (Postmes et al., 2013) to measure partisan identification as Democrat, Republican, and Independent (e.g. “I identify with American Democrats”). Participants responded to each item on a 7-point scale with 1 indicating maximum disagreement and 7 indicating maximum agreement.

Affective Polarization

We asked participants to respond to three feeling thermometer items, measuring evaluations of Democrats, Republicans, and Independents respectively on a 100-point scale ranging from 1 = *cold/unfavorable* to 100 = *warm/favorable*. We calculated affective group-bias as relative group scores (i.e. by subtracting Republicans from Democrat ratings).

Quasi-Experimental Protocol

The second part of the survey included a quasi-experimental protocol. We introduced this section with the following instructions: “*On each of the following pages you will see a person expressing a view on one of the political issues we asked you about earlier. Based on what you know about them, you will be asked to guess their political orientation and say how you feel about them.*”

We randomly presented each participant eight (out of 40) attitude vignettes with each vignette expressing a specific position from one of the same eight attitude items (Figure 1). The vignettes were followed by a set of questions that measured social categorization and social evaluation. To measure social categorization, we asked participants to evaluate on three items whether the person represented by the manikin on the vignette is a Democrat, Republican, or Independent. Each item followed 100-point format, ranging from 1 = *definitely not a [e.g. Democrat]* to 100 = *definitely a [e.g. Democrat]*. A second item assessing affective polarization used the previously described feeling thermometer. We calculated relative group scores (i.e. Republican – Democrats) to operationalize social categorization and evaluation.

Figure 1: Stimuli used in quasi-experimental protocol

Abortion should be illegal.

Fully Disagree

In terms of political orientation, this person is....

definitely not a Democrat 0 10 20 30 40 50 60 70 80 90 100 definitely a Democrat

definitely not a Republican 0 10 20 30 40 50 60 70 80 90 100 definitely a Republican

definitely not an Independent 0 10 20 30 40 50 60 70 80 90 100 definitely an Independent

How do you feel towards this person?

cold/unfavorable 0 10 20 30 40 50 60 70 80 90 100 warm/favorable

Results

Step 1: Extracting an Attitude Network

To produce an attitude network, we dummy-coded each scale position (i.e. response-option) for each item as 1 = *selected* or 0 = *not selected*. Since each of the eight items followed a 5-point

format, the resulting network comprised 40 nodes (8items x 5 response-options = 40 nodes). For estimating links between two selected attitudes, we calculated phi correlation coefficients (Guilford, 1941) with the following formula:

$$\phi = \frac{n_{11}n_{00} - n_{10}n_{01}}{\sqrt{n_{1\bullet}n_{0\bullet}n_{\bullet 1}n_{\bullet 0}}}$$

The symbol n_{yz} represents the number of rows in which the first column is equal y and the second column is equal z . For example, n_{11} is the number of rows in which both columns are equal 1. When one of the two entries is marked with a dot, such as in $n_{y\bullet}$ a variable may be either 1 or 0. Therefore, $n_{1\bullet}$ is the number of rows in which the first column is equal 1 independently on the value of the second column. To build up the attitude network, we estimated the cartesian position of each attitude position via Networkx forced-directed positioning algorithm (Hagberg et al., 2008) in Python. Consequently, attitude response-items more frequently chosen together are joined by shorter, thicker links, whereas attitude positions that were chosen less frequently together joined by thinner links. These differences are also reflected spatially by the fact that attitudes that participants frequently selected together are shown in relative proximity whereas attitudes that rarely co-occurred in a single participants' responses are shown further apart.

Figure 2a depicts the extracted attitude network. A visual inspection of the network reveals two attitude clusters. Strikingly, one cluster almost exclusively contained extreme attitudes indicated by strong disagreement with each of the eight items. A second cluster was built from a wider range of attitude responses ranging from mild disagreement to maximum agreement. Note that these nuances would remain undetected by methods that consider Likert-type items as intervals or use arbitrary cut-offs, hence revealing a major advantage of the ResIN approach. To understand whether partisanship was a latent factor overlaying the two clusters (Figure 2b), we generated a heatmap by correlating the possibility of selection of each node with participants self-reported partisan identification²; this is mapped to the color of the node (more negative correlations are coded as red, more positive as blue

² To simplify the interpretation, we build the heatmap based on self-identification as Democrat and Republican. For heatmaps including independents see Supplementary (C).

and close to 0 as grey). This strategy indicated that the extreme cluster corresponded to a latent Democrat belief system, whereas the looser cluster corresponded to a latent Republican belief system. Supplementary (B) provides an overview of the specific issue positions that correspond to each cluster.

Figure 2: Extracted Attitude Network

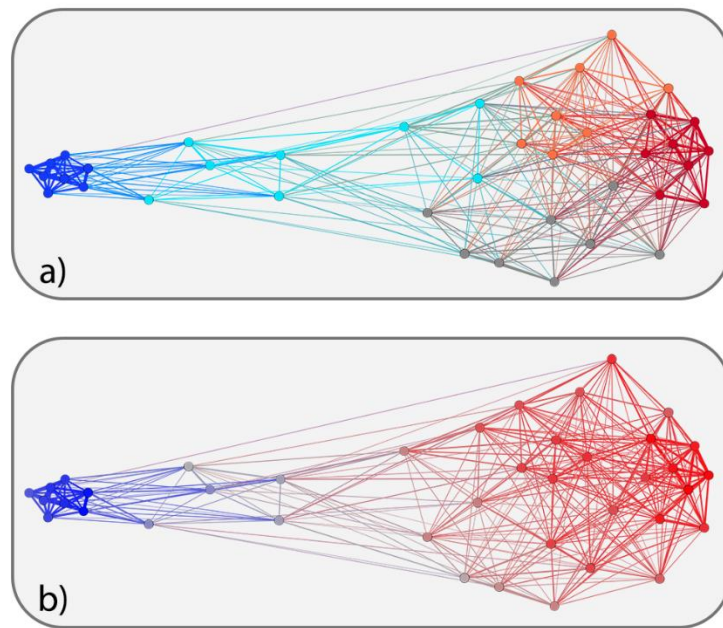


Figure 2a: A visual representation of the extracted attitude space revealing a distribution of forty attitudes into two cluster. Note: Dark Blue = Strong Disagreement; Pale Blue = Moderate Disagreement; Grey = Neutral; Orange = Moderate Agreement; Red = Strong Agreement.

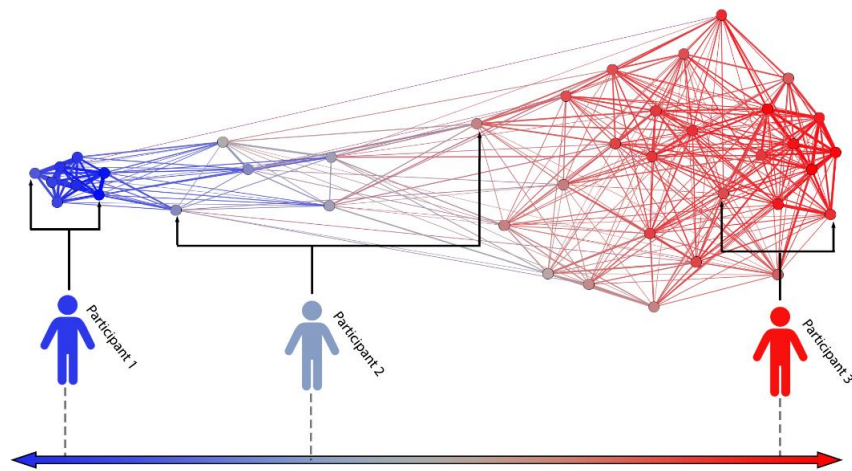
Figure 2b: Two attitude clusters depicting a latent Democrat (blue) and Republican belief set (red).

Step 2: Confirmatory Analysis

To test our first set of hypotheses, we located each participant within the attitude network. To this end, we calculated participants position scores by averaging the location of all nodes that corresponded to participants' responses over all eight items. For instance, if a participant would

strongly disagree with all eight items, that same participant would be located within the centre of the Democrat cluster. Conversely, a participant who would strongly disagree with only half of the items and mildly disagree or be neutral towards the other half of items, would be located somewhere in between the Democrat and Republican cluster (Figure 3).

Figure 3: Participants' Position in the Attitude Space Based on Averaged Item-Responses



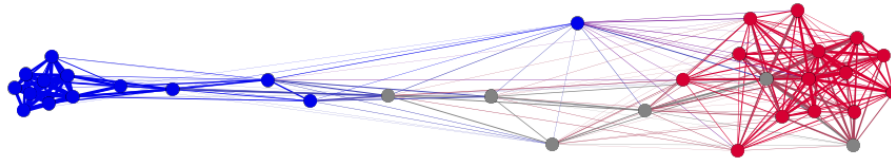
Simplified illustration with two (out of eight) attitudes per participant. Left: A participant who is holding only Democrat attitudes; Center: A participant holding one Democrat and one Republican attitude; Right: A participant holding two Republican attitudes.

We tested our first hypothesis by correlating participants position scores with their relative level of identification as Democrat or Republican. The results supported our prediction, indicating a strong and highly significant association between partisan identification and participant position in the network, $r = .72, p < .001$. The more closely participants were located within one of the two clusters (see figure 3 for a visual example), the more they identified as Democrat or Republican, respectively. Following the same procedure, we correlated participant position with affective group-bias, which we used as an indicator for affective polarization. Again, the results revealed a strong and highly

significant relationship between the two variables, $r = .73$, $p < .001$. In sum, the findings indicated that the two observed attitude clusters in the extracted attitude space correspond to both, partisan-based group identification (H1) and affective polarization (H2). The results therefore support our first set of hypotheses which derived from the theoretical view on attitudes, emotions, and partisanship as interrelated phenomena relevant to the regulation of political social identities.

Robustness Check. To validate the robustness of the obtained findings, we replicated our analyses based on the 2020 ANES dataset (ANES, 2021). The dataset is particularly well suited for our research aims as it includes items similar or equal to those that we used for our own survey (Supplementary A.2). The ANES includes responses from 8,280 participants representing the national adult US-American society. The survey was conducted in two waves (i.e. before and after the 2020 presidential election). For our analysis we used mainly the first wave (two items, however, were only available in the second wave). Replicating the described procedure, we extracted an attitude space based on the correlations that underlie participants' item responses to eight political key issues. The extracted attitude space (Figure 4) was comparable to the one we obtained based on our own sample with a tighter Democrat cluster of mainly extreme attitudes and a somewhat looser Republican cluster with moderate to extreme viewpoints. We then calculated each participant's position in the attitude space by averaging the position of selected attitudes and correlated the obtained values with relative level of partisan identification (H1) and affective group-bias (H2). The obtained regression coefficients equaled those obtained with our convenience sample with $r = .73$, $p < .005$ for partisan identification and $r = .79$, $p < .005$ for affective group-bias.

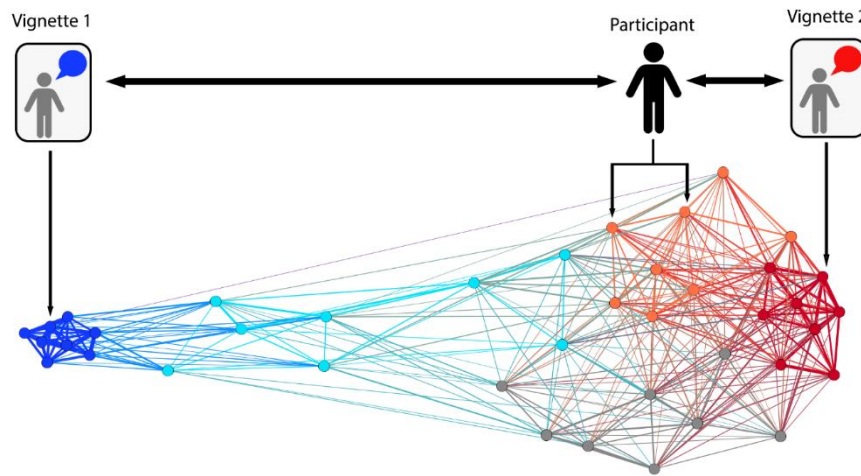
Figure 4: Attitude space obtained from the representative ANES dataset.



The midpoint of each scale has been color coded as grey, while all the others have been colored as either blue (Democrat) or red (Republican). Items with an odd number of levels (such as abortion) have been split only into red and blue as no central level was available.

Quasi-Experiment. The previous findings suggested that structural characteristic of the extracted attitude network can inform psychological elements of partisan regulation reflected *within the individual* (i.e. social identification, affective group-bias). We next tested whether the network characteristics can likewise inform how individuals *evaluate others* who are expressing relatively similar or different attitudes. Focusing firstly on the cognitive side of social judgements (H3), we correlated participants relative categorization of others as Democrat or Republican with the respective position score of an observed attitude in the network. The results revealed a strong, positive correlation, $r = .90, p < .001$. Simply put, participants revealed strong skills in identifying whether an expressed attitude corresponded to a Democratic or Republican worldview, hence suggesting that the obtained attitude network overlapped considerably with participants' social representation. Finally, we tested the prediction that relative attitude differences correspond to differences in affective evaluation (H4). Precisely, we hypothesized that larger attitude divergence would correspond to unfavorable evaluations whereas smaller attitude divergence should be related with favorable evaluations. We correlated participant own network position, with submitted feeling thermometer ratings after receiving an attitude vignette (Figure 5). The results suggested a moderate relationship of $r = .49, p < .001$, thus corroborating our fourth and last hypothesis.

Figure 5: Social Evaluation Based on Relative Attitude Divergence.



Graphical illustration of Hypothesis 4: Attitude divergence depending on participants' overall position in the attitude space and attitude positions expressed on vignettes inform social evaluation ratings. From this example, we can see how the participant (which selected two orange responses) is closer to vignette 2 (which expresses a red option) than to vignette 1 (which expresses a blue option).

Discussion

The presented results strengthen the premise that attitudes are involved in the construction of political social identities. Considering attitudes through a group lens consequently may enhance the understanding macro level dynamics like partisan polarization. In the first part of the analysis, Pearson correlation coefficients of $r > .70$ indicated strong interrelatedness between a participant's position within an attitude space and self-reported level of partisan identification, and affective group-bias. In other words, knowing about a person's standpoints over a set of issues may reliably inform to what extent someone identifies as partisan member and to what extent someone emotionally favors one's ingroup over a competing outgroup. Since we were relying on correlations, the obtained results cannot provide information about any underlying causality. However, our main goal was not to examine causal relationships but to promote an "interactionist" perspective on group construction (Turner & Oakes, 1986) that involves cognitive, affective, and symbolic markers of polarization. We had argued in the introduction, that social media has accentuated the importance of attitudes expression as an

instrument for social regulation. We tested these ideas more thoroughly with a quasi-experimental protocol in the second part of our confirmatory analysis. By knowing not more than a single attitude, participants were able to categorize a person as Democrat or Republican with remarkable accuracy, reflected by a correlation index of $r = .90$. In other words, participants were well aware about the organization of Democrat and Republican worldviews, at least as reflected in our item set. The fact that participants nevertheless made mistakes could be explained by the fact that group members tend to perceive attitude positions of outgroups as more extreme than they actually are (Fernbach & van Boven, 2022). Perhaps even more strikingly, participants showed noticeable differences in feeling thermometer ratings based on an observed attitude. Precisely, participants evaluated bogus persona with similar attitudes more favorably than persona with competing viewpoints, a relationship of after all moderate strength $r = .49$. In sum, the results consistently supported our hypotheses and therefore our proposed view on polarization as holistic societal phenomenon.

Theoretical implications

For the present research, we relied on the recently developed ResIN method and extracted an attitude space based on participants responses to eight political key matters in the US. Contrary to other belief network methods this approach enabled us to observe the belief systems of Democrats and Republicans without assuming an underlying symmetry (Boutyline & Vaisey, 2017). Indeed, the two belief systems are quite different in terms of coherence as well as in terms of attitudes extremity. Furthermore, contrary to methods such as hierarchical clustering (Murtagh & Contreras, 2012), ResIN does not binarily locate participants into one group or the other. Instead, people can hold attitudes of different groups and be located on the periphery of one or in between different belief systems, therefore providing a more nuanced understanding of group belongingness.

Our aim with this research was not to outline temporal dynamics as a proxy for whether society is dividing or not. Nevertheless, may the obtained cluster serve as snapshot of current bipartisan polarization between Democrats and Republicans in the US. The obtained network suggested that Democrat worldviews more than Republican worldviews are tightly centered around a set of extreme positions. This result may seem surprising both, theoretically in terms of consensus

seeking (Jost et al., 2003) as well as practically given the outbursts of extremity in the Republican camp that culminated dramatically in the January 6th Capitol attack. However, an interactionist interpretation might state that holding extreme (and thus unnegotiable) attitudes on important social-political issues has become increasingly identity defining for Democrats not least in response to Donald Trump's controversial presidency. Notably, this does not imply that Republicans in general tend to be more tolerant than Democrats nor that they can deal better with attitudinal uncertainty but simply that they construct their identity differently at this particular moment in time. For instance, research suggest that social category membership (e.g. being White, Christian) is more important for the construction of Republican than it is for Democrat identities at the present moment (Mason & Wronski, 2018). Fulfilling such normative criteria may hence qualify someone as group member even if that same person holds somewhat liberal views on gay rights or abortion.

Before closing this manuscript, we would like to stress that the association between identity and its material (e.g. attitudes; clothing; manners; language; food preferences; morality etc.) are dynamic and actively constructed. Future generations may look at the attitude-identity positions we report here as historical anomalies, just as we look back with surprise at the fact that Republicans fought for the abolition of slavery and Democrats for its preservation. We highlight the dynamic, recursive relationship between these levels as well: an identity cannot be meaningfully enacted if it does not exist in the imagination of some collective audience; and our collective identity enactments are what create the association between identity and its markers.

Online Supplementary

Supplementary and research documentation material can be retrieved from:

https://osf.io/s6vhg/?view_only=ac2f2a6ae5c24e3c8cfed3cbba9beb71

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