# Polarization in 2016 

Matthew Gentzkow<br>Stanford University

## 1 Introduction

This is the year of Donald Trump. It is the year Republican primary voters applauded proposals to build fences on the border and to ban Muslims. It is the year that the leading Democrat in New Hampshire polls was a self-proclaimed socialist who favored 90 percent top tax rates and a $\$ 15$ per hour national minimum wage. It is the year we all decided once and for all that those on the other side of the political divide didn't just have different priorities, didn't just hold different opinions, but were out to destroy the country and everything it stands for. Americans in 2016 are more politically divided than ever before.

Or are they? In 1980, commentators were wringing their hands about electing as president an actor whose bellicose rhetoric would bring us to the brink of nuclear war. In the 1950s and 60s, civil rights split the country into warring factions. In the 1860s, of course, those factions actually went to war. And many who have looked closely at the data conclude that the depth of divisions in the current American electorate has been wildly overstated.

What is really happening to the American electorate matters for anyone trying to navigate today's political waters. Sharp partisan divisions are at the center of every committee vote, every regulatory action, every judicial appointment in Washington. Correctly diagnosing the source of these divisions is key for anyone who wants to understand, predict, or influence policy.

For digital media companies, polarization matters for another reason: digital technology is not only affected by the outcomes of our fractured political process, it is widely perceived to be a big part of the cause. The travails of traditional media and the rise of overtly partisan outlets seem intimately linked to the growth of the Internet. Recent research has claimed that a single tech company could potentially determine the outcome of the next election. A growing chorus calls for regulation to promote a plurality of voices, most notably in Europe but also in the US and around the world.

What do we really know about the extent to which political polarization in the American public is increasing, and the role of digital media in driving this trend? Academics continue to debate the answer fiercely, and many important questions remain unanswered. But looking closely at the data reveals a picture that is both clearer and more nuanced than either the popular discussion or the academic back and forth might suggest.

## 2 Popular and Academic Debate

Whatever the truth about ideological polarization, there is no question that we talk about it more now than in the past.

Figure 1 shows the dramatic increase in discussion of polarization since the mid-twentieth century. The plot is based on data from Google Books Ngram Viewer. It shows how often phrases like "ideological polarization" and "political polarization" occur in books published in English. $\square^{1}$ To normalize for overall trends in discussion of politics, I divide the total count of polarizationrelated phrases by the total count of the words "Republican(s)" and "Democrat(s)."

The Google Books data are only available through 2008, so the plot does not show how discussion of ideological polarization has trended in the last seven years. Over the span of the available data, however, it suggests that the large increase happened from 1960 to 1990, with the series holding steady from 1990 to 2008.

That political division in America is deeper now than ever before is a recurring theme in this discussion. A prominent example is the 2008 bestselling book The Big Sort by Bill Bishop. Based largely on an analysis of voting patterns, Bishop argues that Americans are increasingly segregating themselves politically, becoming more and more likely to live around others who share their political views. In 1976, for example, less than a quarter of Americans lived in "landslide" coun-ties-those that voted overwhelmingly for one candidate or another in the presidential election. By 2004, almost half of Americans did (p. 6).

Bishop (2004) concludes:

Today, most Americans live in communities that are becoming more politically homogeneous and, in effect, diminish dissenting views. And that grouping of like-minded people is feeding the nation's increasingly rancorous and partisan politics.

A number of academic studies also find evidence that polarization is on the rise. Abramowitz and

[^0]

Notes: Figure plots the total count of polarization-related phrases present within the Google Books Ngram Viewer divided by the total count of "Republican(s)" and "Democrat(s)" present in the same data.

Figure 1

Saunders (2008, p. 542), for example, conclude based on a detailed analysis of survey and exit poll data:

Since the 1970s, ideological polarization has increased dramatically among the mass public in the United States.... There are now large differences in outlook between Democrats and Republicans, between red state voters and blue state voters, and between religious voters and secular voters. These divisions are not confined to a small minority of activists-they involve a large segment of the public and the deepest divisions are found among the most interested, informed, and active citizens.

On the other side, however, a number of eminent scholars argue that these studies misread the data, and that increasing polarization is largely a myth.

A prominent example is Stanford political scientist Morris Fiorina and his co-authors. In Culture War? The Myth of a Polarized America, Fiorina, Samuel Abrams, and Jeremy Pope argue that Americans are not as deeply divided as the popular narrative would suggest, and that evidence for increasing divisions has been overstated. They point out that most Americans hold moderate views
on most issues, that a large share of the electorate does not self-identify with a strong political ideology, and that the distributions of views on issues and self-reported ideology have been largely stable over time. In a subsequent review of the evidence, Fiorina and Abrams (2008, p. 563) conclude: "The most direct evidence... shows little or no evidence of increased polarization."

Other teams of researchers have reached similar conclusions. Glaeser and Ward (2006, p. A125) examine evidence on geographic segregation and polarization more broadly. They find the claim that "America's political divisions are increasing" to be one of the "myths of American political geography." Ansolabehere et al. (2006, p. 99) conclude that "the great divide across the American states is not really much of a divide at all."

How do scholars looking at the same data reach such different conclusions? As often happens, much of the disagreement comes from the way they define the question. There are many ways to define polarization, and for any given definition there are numerous ways of implementing it empirically.

Rather than rehash the scholarly back and forth, let us look directly at the data. In the process, we can update the picture to account for changes in the last decade, after the time when most of the studies just mentioned were published.

## 3 A Look at the Data

### 3.1 Self-reported ideology and party identification

An obvious place to look for evidence of polarization is the way Americans summarize their own political views. One version of this is party identification: we might expect polarization to show up as more and more Americans identifying strongly with one party or the other. Another is selfdescribed ideology: we might expect to see more and more Americans describing themselves as strongly conservative or liberal, and fewer describing themselves as moderate.

The gold standard for such data has long been the American National Election Study. This is a nationally representative survey conducted before and after each presidential election, going back to 1948. The questions focus on political views and attitudes, voting intentions, and perceptions of political candidates. The data are particularly valuable because many questions have been asked in


Notes: Figure shows the proportion of respondents to the American National Election Study survey who identify as Republican, lean Republican, identify as Independent, lean Democrat, or identify as Democrat. The post-2012 data comes from a separate survey conducted by the Pew Research Center and is rescaled in such a way that the overlapping time periods have the same mean.

Figure 2
a consistent form over many years.
Party identification is one of the few questions asked consistently all the way back to 1948. Respondents are asked whether they identify as a Republican or Democrat. Those who do not state an affiliation are then asked whether they "lean" toward one party or the other.

Figure 2 shows how the responses have evolved over time. $2^{2}$ At striking odds with common perception, we see no evidence whatsoever of growing polarization, in the sense of increasingly strong identification with the parties. If anything, there is a small trend in the other direction, with fewer respondents stating a clear party affiliation and more either calling themselves independent or saying they "lean" one way or the other.

Figure 3 shows a related measure: the evolution of self-reported ideology. These questions go

[^1]Political Ideology


Notes: Figure shows the proportion of respondents to the American National Election Study survey who identify as very conservative, conservative, moderate, liberal, and very liberal. The post-2012 data comes from a separate survey conducted by the Pew Research Center and is rescaled in such a way that the overlapping time periods have the same mean.

Figure 3
back to the early 1970s. Respondents are asked to place themselves on a 5-point political scale: "very liberal," "liberal," "moderate," "conservative," "very conservative."

Here, again, we see no evidence of growing polarization. Very few Americans describe themselves as "very" conservative or liberal. Of the rest, the shares calling themselves "conservative," "liberal," or "moderate" have remained remarkably stable, with no hint of a move toward the extremes in recent years.

These facts are key planks in the case that growing polarization has been overstated. Something like figures 2 or 3 would seem to be the most straightforward way to look at how Americans' political views have evolved, and they both show striking stability.

Those on the other side of the debate would argue that these simple measures mask the most important trends.

### 3.2 Voting

Where, then, do we see evidence for growing polarization? One place to look is the way people vote. We might expect polarization to show up as more people voting consistently for only Democrats or Republicans. We might also expect to see the likelihood of voters changing their votes from one election to the next falling, and-following the argument in The Big Sort-voters of different political stripes becoming increasingly segregated geographically.

In fact, actual voting might seem to be a better measure than self-reported political views. People don't always tell the truth on surveys, and we may be inclined to describe ourselves to surveyors as more moderate than we really are. Voting is closer to the kind of "revealed preference" measure economists prefer: a real decision, in a natural context, whose stakes give people an incentive (even if weak) to reveal truthfully what they think.

At first glance, voting data seem to scream increasing polarization. I mentioned above that the share of Americans living in "landslide" counties increased substantially from 1976 to 2004. Other studies show that voters have become less likely to split tickets across parties (Hetherington 2001; Mayer 1998), that county-level vote shares in presidential and house races have become more correlated (Fleisher and Bond 2004; Jacobson 2000, 2003), and that county-level vote shares have become more correlated over time (Bartels 1998).

There are two major problems with interpreting this as evidence of increasing polarization in the electorate, however. First, as emphasized by Fiorina and co-authors, how people vote depends on both their own ideologies and the characteristics of the candidates they are voting for. Suppose, for the sake of illustration, that all Americans are relative moderate, with some leaning left and others leaning right, and that the distribution of their political views has been completely unchanged over time. Suppose, however, that the candidates running for office have become increasingly extreme (a large body of evidence suggests that this is in fact the case). Then we could see exactly the patterns we just described in the data. When candidates are moderate, left-leaning and rightleaning voters might easily choose a Democrat in one election and a Republican in another, and the party they vote for might change from year to year. As the candidates become more extreme, however, such crossover voting becomes less and less likely: a left-leaner might now and then vote for a moderate Republican, but never for a right-wing extremist. Increasingly polarized voting



Source: Fiorina and Abrams (2008).
Figure 4
could thus be consistent with a completely unchanged electorate.
The second problem is that although measures of polarization have been trending upward, the magnitudes of these trends tend to be small, and the current levels are far from unprecedented by historical standards. Glaeser and Ward (2006), for example, show that the high year-to-year correlation of vote shares we observe today is actually close to the historical norm over the twentieth century. The upward trend we see in this correlation seems to be a reversion to business as usual following the upheaval of the 1960s and 70s, when the south switched allegiance from Democrats to Republicans.

### 3.3 Policy views

A third place to look for evidence of polarization is views on individual policy issues. Even if Americans are not more extreme in their overall self-described ideology, it may be that more and more take extreme positions on one side or the other of specific debates about health care, abortion, tax policy, gun ownership, global warming, and so on.

Indeed, Fiorina and Abrams (2008) argue that polarization should be defined as the emergence of two-peaked ("bimodal") rather than single-peaked ("unimodal") distributions of such views. This is illustrated in figure 4. The top panel shows a two-peaked (polarized) distribution, while the

Distribution of Voter Preferences on Economic Issues Scale and Moral Issues Scale, 1993-2002


Source: Ansolabehere et al. (2006).
Figure 5
bottom panel shows a single-peaked (unpolarized) distribution.
What the data show is that Americans views on issues are mostly single-peaked. For example, figure 5, from Ansolabehere et al. (2006), shows the distribution of voter preferences on a set of economic and "moral" issues as of the 1990s. The figure is formed by taking groups of questions from the National Election and a related data source, the General Social Survey, then taking the first principal components of the questions related to economic and moral issues respectively. The distribution of the economic index is clearly single-peaked. The moral issues index shows some evidence of bimodality, but is still tightly clustered near the center.

How have these patterns changed over time?
If we look at the distributions of responses issue-by-issue, the answer is basically no. Fiorina and Abrams (2008), for example, review evidence from a number of studies that find no systematic trend toward increasing spread in these distributions.

However, there is another way to cut the data that reveals more evidence of polarization. Suppose that instead of looking at the overall distributions, we compare the distributions for selfidentified Republicans and self-identified Democrats. Figure 6 shows this comparison for a number of policy questions taken from a recent study by the Pew Research Center (2014). The red line in each panel shows the average views of Republicans; the blue line shows the average views of

# Growing Gaps between Republicans and Democrats 

$\%$ who take the more conservative position on each question in the ideological consistency scale


Source: Pew Research Center (2014).
Figure 6

## Democrats.

On every one of these eight measures, we see the two lines diverging in the last ten years. On some, such as agreeing that "Government regulation of business usually does more harm than good," or "Government is almost always wasteful and inefficient," the divergence is striking.

The pattern becomes even starker if we aggregate these separate issue questions into a single index of conservative or liberal views. Figure 7 shows the distribution of these indices for Republicans and Democrats. The degree of overlap falls sharply from 2004 to 2014. Figure 8 shows that this is even more true if we focus on the subset of people who say they are politically engaged (vote regularly, follow government affairs).

How can the overall distributions on issues remain unchanged while the distributions for $\mathrm{Re}-$



Consistently
liberal
-

2004


2014


Source: 2014 Political Polarization in the American Public
Source: Pew Research Center (2014).
Figure 7
publicans and Democrats spread apart? The answer is that the correlation of peoples' views with their party identification has increased significantly. It is true that most Americans hold relatively moderate views on, say, immigration. But the frequency of Republicans holding pro-immigrant views, or Democrats holding anti-immigrant views, has decreased substantially.

Moreover, the correlation of views across issues has also increased. It used to be more common for people to hold liberal views on some issues (say social policy) and conservative views on others (say economic policy). Today, more people hold either liberal or conservative-leaning views across the board. This explains why the divergence we see in the histograms of figures 7 and 8 is more dramatic than the individual trends in figure 6 .

### 3.4 How we see the other side

All of the evidence above concerns how Americans describe their own political views or affiliations. To see the clearest evidence of increasing divisions, we need to look not at how they describe themselves, but how they see each other. To a dramatic degree, Americans now hold overwhelmingly positive views of their own co-partisans, and highly negative views of those on the other side of the political spectrum.

Among the politically engaged

1994


2004


2014


Source: Pew Research Center (2014).
Figure 8

As a starting point, we can return to the National Election Study. One of the longest-running questions in the survey asks respondents how they view the Democratic and Republican parties on a "thermometer" scale, where zero indicates feeling very "cold" toward them and 100 indicates very "warm." Partisans always feel more warmly toward their own party than toward the opposite party. The magnitude of the gap, however, can give us a sense of the depth of the division.

Figure 9 shows trends in this gap over time. The y axis in the figure is the average thermometer rating given to Democrats minus the average thermometer rating given to Republicans. The blue line shows this difference among self-identified Democrats; these numbers are positive, since Democrats on average feel warmer toward Democrats than Republicans. The red line shows the difference among self-identified Republicans; these numbers are negative, since Republicans feel less warm toward Democrats than Republicans. The dashed line shows the difference between the two series-the "difference in differences."

Up until the mid-1990s, these data showed little evidence of a growing partisan gap. Indeed, these were among the data that Glaeser and Ward (2006, p. A126) used to conclude that growing political divisions were a "myth." They noted the slight divergence apparent in 2000 and 2004, but surmised that this was "more of a George W. Bush effect than any ongoing move towards greater partisan hostility."


Notes: Using data from the American National Election Study, the red line shows the average favorability of Republicans towards Democrats minus the average favorabilty of Republicans towards Republicans on a scale from 0-100. The blue line shows an analogous time series for Democrats. The grey line plots the diference between the blue and red lines over time. The National Election Study changed the phrasing of their question over time. The square points represent the original phrasing, the x points represent the revised version of the question, and the circle points represent a similar question used in monthly political surveys by the Pew Research Center. The different time series are then rescaled so that the average values of the overlapping time periods are equivalent.

## Figure 9

In fact, we can now see that the mid-1990s marked a sharp break, and the blip up was very much the beginning of an ongoing move. Since then, partisan divisions have widened steadily, with the difference growing in every election cycle. As of 2015, the relative favorability of Democrats toward Democrats is a full 80 points greater than the relative favorability of Republicans toward Democrats.

In a recent Pew Survey, 27 percent of Democrats and 36 percent of Republicans said the opposite party's policies "are so misguided that they threaten the nation's well-being" (Pew Research Center 2014, p. 11). Among those with high levels of political engagement, defined by frequency of voting and attention to political news, roughly half of those on each side see the other as a threat

Trait Raitings


Notes: Plot shows the proportion of survey respondents who viewed the members of their own party (In) and their opposing party (Out) as intelligent and selfish. The data for 1960 comes from Almond and Verba (1960), while the data for 2008 comes from YouGov (2008).

Figure 10
to the nation.
Other survey questions capture the growing cross-party hostility vividly. Surveys in 1960 and 2008 asked respondents to rate the extent to which members of their own and the opposite party were "intelligent" or "selfish." As figure 10 shows, the differences between own ("in") and opposite ("out") party ratings were modest in 1960: respondents thought they and members of the opposite party were similar in terms of intelligence, and only moderately less selfish. By 2008, these gaps had grown dramatically.

The same surveys also asked respondents whether they would be displeased if one of their children married someone of the opposite political party. Figure 11 shows that, as of 1960, few people of either party indicated that they would be displeased. By 2008, more than a fifth of both parties said they would be displeased.

A large body of additional research has dug deeper into the nature of cross-party antipathy.

Inter-Party Marriage


Notes: Plot shows the proportion of Republican (Democrat) survey respondents who would be displeased if their child married a Democrat (Republican). The data for 1960 comes from Almond and Verba (1960), while the data for 2008 comes from YouGov (2008).

Figure 11

Iyengar (2015), for example, uses the Implicit Association Test, a standard psychological measure of subconscious positive or negative associations. The test is famous for revealing pervasive evidence of subconscious associations related to race (whites have a much more negative association with blacks than whites; associations for blacks are more balanced). In fact, negative associations with the opposite party are significantly stronger than negative associations with the opposite race.

### 3.5 Summing Up

The data paint a richer and more nuanced picture of political polarization than the popular discussion would suggest.

On one hand, it remains true that most Americans do not self-identify with extreme ideologies or hold extreme views on issues such as abortion or redistribution. The distributions of views on issues are mostly single-peaked, and have remained relatively stable over time.

At the same time, the increasing correlation of views across issues, and between issues and party identification, mean that it is more accurate now than in the past to describe Americans as divided into two clear camps. We are less likely to find people holding liberal views on some issues and conservative views on others, or to meet a liberal Republican or conservative Democrat. More and more, who we support for president predicts how we feel about the full spectrum of issues, from taxes and redistribution, to social policy and gun control, to the environment.

Perhaps the most disturbing fact is that politics has become increasingly personal. We don't see those on the other side as well-meaning people who happen to hold different opinions or to weight conflicting goals differently. We see them as unintelligent and selfish, with views so perverse that they can be explained only by unimaginable cluelessness, or a dark ulterior motive. Either way, they pose a grave threat to our nation.

## 4 Polarization and Digital Media

To the extent that polarization is rising, what is the cause? Popular discussion and some recent research provide an obvious candidate explanation: the Internet.

An early, influential example of this argument is the book Republic.com by Cass Sunstein (2001). Sunstein argues that the Internet is creating "echo chambers," where partisans will hear their own opinions, biases and prejudices endlessly reinforced. He writes: "Our communications market is rapidly moving" toward a situation where "people restrict themselves to their own points of view-liberals watching and reading mostly or only liberals; moderates, moderates; conservatives, conservatives; Neo-Nazis, Neo-Nazis" (p. 5-6). This increases polarization and limits the "unplanned, unanticipated encounters [that are] central to democracy itself" (p. 9).

More recently, Pariser (2012) argues that we are not only self-selecting into echo chambers, we are being steered into them whether we like it or not. In trying to show us content we will click on, Google's personalized search results and Facebook's personalized news feeds screen out content we are most likely to disagree with, and create a comfortable bubble of like-minded information.

Epstein and Robertson (2015) argue that the effects on American democracy could be profound. They conduct laboratory experiments in which potential voters are shown manipulated search results that favor one side of the political spectrum or the other. They then ask participants
about their voting intentions. They find large effects, which, if extrapolated outside the laboratory, would imply that large companies such as Google could determine the outcome of many national elections.

Perhaps the most influential-and seemingly incontrovertible—indictment of digital technology is that it has dramatically undermined the business model that supports high-quality journalism. Not only has the Internet seemingly destroyed traditional newspapers, but search engines and aggregators online capture a large chunk of the paltry returns that might accrue to those producing original content online.

To many, all of this suggests an urgent need for government regulation. The regulatory reaction has been particularly strong in Europe, where calls to maintain a diversity of digital voices has been central to antitrust action against Google and Microsoft, as well as more specific actions with regard to aggregators such as Google or Bing News.

What do we know about the extent to which digital technologies really are driving polarization? There is some strong circumstantial evidence. Looking back at figure 9, we see that the inflection point in our measure of apathy was the mid-1990s. This is the point that the two lines that had been evolving in parallel for twenty years suddenly began to diverge, and it also happens to be exactly the moment when the Internet became a mass phenomenon.

Moreover, any look at the content of the Internet seems to confirm our worst fears. There are political sites on both sides with significant readership that are far more extreme than anything that existed in traditional media. A look at any Internet comment thread or message board reveals a level of vitriol and unabashed partisanship that one would never see in an old fashioned letter to the editor or op-ed piece.

Finally, the earliest studies of how people sort themselves on the Internet seem like smoking gun evidence of echo chambers. Early on, data on consumption of Internet news and opinion was limited, so researchers turned to something they could measure more easily: links. Looking at patterns of links among blogs, for example, showed two clear clusters, one blue, and one red (e.g., Adamic and Glance 2005).

This is evidence seems to provide strong support for the Internet-as-villain narrative. A more careful look at the data, however, suggests this is overstated at best, and may well be entirely incorrect.

There are at least three inconvenient facts.
First, and most simply, digital news and information sources are a far smaller part of Americans' news diets than many commentators imagine. To those of us who live and breathe digital technology, it seems obvious that nobody must read an actual print newspaper anymore, or get their news from old-fashioned broadcast TV. But most of the country does not look like Redmond or Cupertino. A 2013 McKinsey report, for example, concluded that as of that year all digital media sources-desktops, laptops, smartphones, and tablets included—accounted for only 8 percent of Americans' total news consumption time. Television accounted for a far larger 41 percent and, perhaps surprisingly, good old-fashioned print newspapers accounted for 35 percent.

This does not mean that digital media are not important, and it certainly does not mean that they will not have a large impact on the political landscape in the future. But it makes it hard to see how they (alone) could account for large trends in the attitudes and beliefs of the public at large over the last decade.

Second, detailed studies of Americans' consumption online reveal that the echo chambers phenomenon has been largely overstated. In Gentzkow and Shapiro (2011), for example, my co-author and I measures online behavior using clickstream data from ComScore, and compare it to offline media consumption as measured in surveys. We find that most Americans do not have highly partisan news diets. Rather, the fact that typical American gets his or her news mainly from sites like Yahoo or CNN shows audiences are representative of the (Internet-using) public at large. Many people do go to extreme sites, of course, but those who do are overwhelmingly heavy Internet users and also political junkies; they consume large amounts of information not only from partisan sources, but also from those in the center and even on the opposite side of the spectrum. True echo chambers are remarkably rare. Someone who got news exclusively from foxnews.com or exclusively from nytimes.com—sites with strongly partisan audiences, but not on the extreme fringe by any stretch—would have a more partisan news diet than 95 percent of Americans.

Finally, we now have a number of careful studies that directly measure media effects on attitudes and voting. Nobody has yet figured out how to do the comparison we would really like-how different would things be in a world without the Internet-because the randomized experiment where we re-run history without Al Gore's great invention turns out to be infeasible. But researchers have found a number of "natural experiments" that allow us to get some way toward
what we would like, measuring the impact of non-Internet media in the US, as well as the impact of the Internet in non-US settings where its rollout was more systematic. These studies provide strong support for the view that the Internet is powerful, revealing large impacts at the individual level. But when we take account of the audiences involved, these almost always imply small effects at the aggregate level. This suggests one of the key problems with Epstein and Robertson's (2015) claim that Google could single-handedly swing an American election: while its effects may be large in a laboratory setting where Internet search is the only source of information, the reality outside the laboratory is that search engines mediate a very small share of Americans' news consumption-a small slice of the already small 8 percent mentioned earlier.

## 52016 and Beyond

Putting the evidence together, it seems clear that polarization is a real, and serious phenomenon. Americans may or may not be further apart on the issues than they used to be. But clearly what divides them politically is increasingly personal, and this in many ways may be worse. We don't just disagree politely about what is the best way to reform the health care system. We believe that those on the other side are trying to destroy America, and that we should spare nothing in trying to stop them.

The media almost certainly play an important role in this, with the growth of partisan cable news standing out as likely to have been especially important. But the popular discussion that ascribes much of the blame to digital technologies has in many ways veered away from the evidence.

When we assess trends in society, we tend to get the direction right, but the magnitude and timing wrong. Those who predicted in the 1950s that we would all be talking by video phone were correct, but it took about 50 years longer than they imagined. In the same decade, many speculated that television might replace teachers in classrooms. They anticipated a possibility that remains very real, as online learning and digital content threaten significant parts of higher education, but the scale of this change is as yet nowhere close to the major transformation they imagined. In the same way, both the growing polarization of the electorate and the role of digital media in driving it are real, but it is crucial to keep a close eye on the data so as not to be guided by the changes we imagine might be happening rather than by those that actually are.

## References

Abramowitz, Alan I., and Kyle L. Saunders. 2008. Is Polarization a Myth? The Journal of Politics. 70(2):542-555.

Adamic, Lada A., and Natalie Glance. 2005. The Political Blogosphere and the 2004 U.S. Election: Divided They Blog. Proceedings of the 3rd International Workshop on Link Discovery 36-43.

Almond, Gabriel A., and Sydney Verba. 1960. Civic Culture Study, 1959-1960 [Computer file]. ICPSR07201-v2. Ann Arbor, MI: Inter-University Consortium for Political and Social Research [distributor], 2009-02-12.

American National Election Studies. ANES Time Series Cumulative Data File (1948-2012). Accessed 2015.

Ansolabehere, Stephen, Jonathan Rodden, and James M. Snyer Jr. 2006. Purple America. Journal of Economic Perspectives 20(2):98-118.

Bartels, Larry. 1998. Electoral Continuity and Change, 1868-1996. Electoral Studies 17(3):301326.

Bishop, Bill. 2004. The Schism in U.S. Politics Begins at Home. Austin-American Statesman. April 4, 2004.

Bishop, Bill. 2008. The Big Sort: Why the Clustering of Like-Minded America is Tearing Us Apart. New York: Houghton Mifflin.

Epstein, Robert, and Ronald E. Robertson. 2015. The Search Engine Manipulation Effect (SEME) and Its Possible Impact on the Outcomes of Elections. PNAS 112(33):E4512-E4521.

Fiorina, Morris P., Samuel J. Abrams, and Jeremy C. Pope. 2006. Culture War? The Myth of a Polarized America. New York: Pearson Education.

Fiorina, Morris P., and Samuel J. Abrams. 2008. Political Polarization in the American Public. Annual Review of Political Science 11:563-588.

Fleisher, Richard, and John R. Bond. 2004. The Shrinking Middle in the US Congress. British Journal of Political Science 34(3):429-451.

Gentzkow, Matthew, and Jesse M. Shapiro. 2011. Ideological Segregation Online and Offline. Quarterly Journal of Economics 126(4):1799-1839.

Glaeser, Eward L., and Bryce A. Ward. 2006. Myths and Realities of American Political Geography. Journal of Economic Perspectives 20:119-144.

Hetherington, Marc J. 2001. Resurgent Mass Partisanship: The Role of Elite Polarization. American Political Science Review 95(3):619-631.

Iyengar, Shanto, and Sean J. Westwood. 2015. Fear and Loathing across Party Lines: New Evidence on Group Polarization. American Journal of Political Science 59(3):690-707.

Jacobson, Gary C. 2000. Party Polarization in National Politics: The Electoral Connection. In Polarized Politics: Congress and the President in a Partisan Era, eds. John R. Bond and Richard Fleisher. Washington, DC: CQ Press.

Jacobson, Gary C. 2003. Partisan Polarization in Presidential Support: The Electoral Connection. Congress and the Presidency 30(1):1-36.

Mayer, William G. 1998. Mass Partisanship, 1946-1996. In Partisan Approaches to Postwar American Politics, ed. Byron E. Shafer. New York: Chatham House.

Pariser, Eli. 2012. The Filter Bubble: What the Internet is Hiding from You. London: Penguin Books.

Pew Research Center. 2014. Political Polarization in the American Public.
Sunstein, Cass R. 2001. Republic.com. Princeton: Princeton University Press.
YouGov. 2008. Anglo-Saxon Attitudes: A Survey of British and American Views of the World.


[^0]:    ${ }^{1}$ The complete set of phrases is \{'ideological polarization', 'political polarization', 'partisan polarization', 'polarized congress', 'polarized house', 'polarized senate', 'polarized washington', 'polarized politics', 'polarize congress', 'polarize house', 'polarize senate', 'polarize washington', 'politically polarized', 'polarize ideologies', 'polarize partisans', 'polarized ideologies', 'polarized partisans', 'polarized ideology', 'polarized partisan', 'polarize ideology', 'polarize partisan', 'congressional polarization', 'congress polarized', 'washington polarization', 'house polarization', 'senate polarization', 'congress polarize', 'washington polarize', 'senate polarize', 'house polarize', 'congress polarized', 'house polarized', 'senate polarized', 'washington polarized', 'congress polarizes', 'senate polarizes', 'house polarizes', 'washington polarizes'\}.

[^1]:    ${ }^{2}$ This and subsequent figures use data from the Pew Research Center. The Pew Research Center bears no responsibility for the analyses or interpretations of the data presented here.

