

JURIST v. Supreme Court Database: Using NLP to Identify Salience, Language, and Viewership Trends in Legal News Coverage

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Executive Summary

Our research project uses natural language processing techniques (NLP) to analyze coverage scope and language in JURIST's legal news and commentary coverage of the Supreme Court of the United States (SCOTUS) since 2004. News media hold a critical role in shaping public understanding and perception of the Supreme Court as most public communication about the highest court in the land almost exclusively relies on press coverage. We investigate JURIST's historic coverage of the Court for two reasons: First, we hope to gain insights into topical and linguistic shifts in JURIST's Supreme Court coverage over the last 15 years. Second, as JURIST stands as a non-mass media publication for legal professionals, scholars, and members of the public, it is important to assess the breadth and depth of the organization's Court content to ensure that JURIST maintains comprehensive and fair coverage of Supreme Court caseloads. While we only examine JURIST Supreme Court coverage in this research project, the methods we employ can be applied more broadly among news media; we show how news organizations can understand and evaluate their own Court news coverage by scope, language, and reader engagement.

Our project has three sections, each of which examines an aspect of Supreme Court coverage: case salience, coverage language, and reader engagement. In each section, we examine either JURIST news or commentary articles, or a combination of the two. While JURIST news comprises legal news articles written by in-house law student staff, JURIST commentaries are op-ed pieces written primarily by various external guest commentators, e.g., law professors, legal professionals, policymakers, law students, etc. The date ranges of the news articles and commentaries in our research vary across the three sections because of data and project scope limitations, which we further explain in the methodology subsections. A flowchart is provided below to further outline our research structure.

- I. **For Part I (case salience)**, we analyze **JURIST news** coverage from May 2004 through 2019. We only examine news through 2019 because we compare this JURIST Supreme Court news coverage to the Washington University Supreme Court Database (SCDB), which includes SCOTUS cases through the 2018-19 term. We examine salient decision types along three dimensions: issue area, case disposition, and vote margin. This analysis helps point to gaps in JURIST's coverage by case categorization.

- II. **In Part II (coverage language)**, we examine only **JURIST commentaries** to highlight trends in how legal scholars and practitioners portray the Supreme Court in commentaries, or op-eds: the framing of the Court as partisan and Court decisions as strategic and whether this language has increased over time. We analyze commentaries published from May 2004 through May 2020.
- III. **Part III (reader engagement)** examines **both JURIST news and commentaries** and points to public consumption, namely how readers engage with JURIST’s articles in each of the categories laid out in the first two research sections. Due to limited reader metric data availability, we analyze JURIST pieces from January 2013 through December 2019.

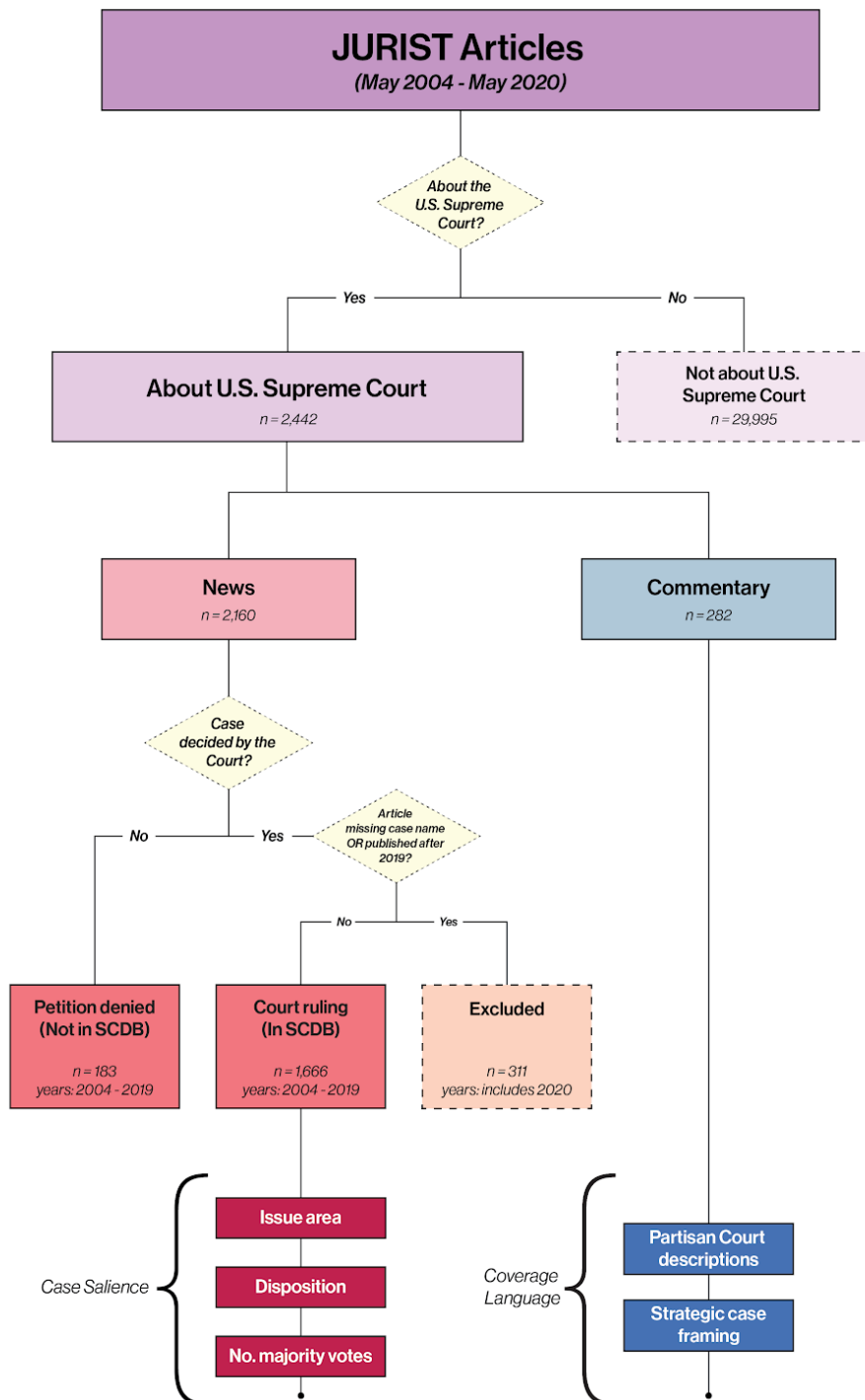
In the case salience section, we find that on average across 15 years—as compared to the absolute number of SCDB SCOTUS docket cases—JURIST reports more on cases that either (1) are about the First Amendment, (2) were reversed and remanded by the Court, or (3) received a final 9-0 vote margin. Our use of “overreporting” refers to JURIST covering certain categories of cases *proportionally* more than the actual amount of such cases in the SCDB.

Conversely, JURIST underreports cases that either (1) are about criminal procedure, (2) the Court reversed, or (3) had a five-justice majority vote. However, we do not find distinct trends over time in the relative composition of JURIST news coverage by the aforementioned case categories (e.g., issue area, case disposition, and voting margin); there are no clear patterns in JURIST’s coverage of Supreme Court cases as compared to the Supreme Court caseload.

Similar to the case salience section, the coverage language section finds that there are no clear trends over time in the proportions of commentaries that use partisan Court descriptors or strategic case framing language. However, we observe that a large proportion of commentaries use strategic case framing.

The reader engagement section concludes that, in absolute terms, news articles *and* commentaries about criminal procedure cases, cases that were affirmed or reversed and remanded, or cases with 9-0 or 5-justice vote coalitions attracted the most viewership from readers. But when examining “normalized reader engagement” (proportional to the number of articles per year), due process and private action cases attract the most reader interest, as well as cases that were reversed and remanded or affirmed, and those with near-unanimous (8-justice majority) or split (5-justice majority) Court decisions. We also discover that (1) polarized language and article viewership positively correlate and (2) readers are exposed to high levels of strategic case framing over time.

Flowchart: Research Project Structure



Higher quality image available [here](#).

U.S. Supreme Court Coverage over Time

[Figure: https://www.datawrapper.de/_/k1V2q/]

While JURIST's news coverage of SCOTUS decisions increased over the last 15 years, growing from only 3 to 10–13% of all news reporting, JURIST experienced several declines in Supreme Court-focused commentaries. From 2004 to 2011, the relative volume of op-eds about the Court nearly halved, dropping from 14% to 7% of all commentaries. Interestingly, the percentage of Supreme Court commentaries more than doubled in 2012, reaching its peak of 17%. The proportion of Court commentaries plateaus for four years before again declining to almost 6% by the end of 2019. Though the frequency of commentaries about the Supreme Court exceeded that of Court news coverage for most of the last 15 years, 2017 marks the year in which JURIST news coverage surpassed commentaries; during the years of the Trump administration, JURIST dedicated more of its news space than commentary space towards Court cases.

CASE SALIENCE

Introduction

Which types of Supreme Court cases are more salient in JURIST news coverage in terms of issue/topic area, decisions as compared to other Court actions, and decision margins? How has this changed over time?

This section explores the types of cases that receive more JURIST news attention in terms of issue area, case disposition, and final majority vote. Inspired by Collins and Cooper's 2011 paper, "Case Salience and Media Coverage of Supreme Court Decisions: Toward a New Measure," case salience refers to the types of Court cases that are considered important and noteworthy, as measured by the amount of media coverage a case garners. Thus, our usage of "case salience" refers to the Supreme Court decisions *JURIST* deems as important (not necessarily the overall population), or which are salient in *JURIST* Court coverage, as evidenced by the greater reporting granted to some types of cases over others.

Methodology

Between May 2004 and December 2019, we identified 2,101 JURIST news articles about U.S. Supreme Court decisions (cases that were recently decided or to be decided by the Court at the time of publication). To obtain additional case information, we linked these news articles to Washington University School of Law's SCDB—one of the most comprehensive up-to-date databases on Supreme Court cases that contains case-related information such as the issue, issue area, case disposition, number of majority votes, and various other fields for every Supreme Court case decided between terms 1946 through 2019, inclusive. We used the SCDB since it is the most comprehensive and updated Supreme Court case database available to the public. With more than 60 variables, it includes information about case issue areas (coded as 14 categories with an associated key), dispositions (as measured in 9 categories with an associated code), majority votes (5–9), and various other fields for every Supreme Court case decided from terms spanning 1946 through 2019. A special feature of the SCDB is that it is compatible with computational

analysis, as it has “an interface that is in line with modern technology and which will allow users to directly calculate and view relationships among the variables in the database” (Spaeth et al., 2019). The SCDB is unique in its systematic characterization of SCOTUS cases into codified outcome and topic variables, a process performed and verified by legal scholars, making it a definitive source on Supreme Court research for journalists, academics, and legal professionals. For more information on the detailed coding criteria, please see the [SCDB Codebook](#).

We matched each news article to the SCDB by the name of the Court case covered in the news piece, which was extracted using rule-based matching based on string-matching, named-entity recognition, and part-of-speech tagging. Because the SCDB only covers cases up to the 2018–2019 term, we removed news articles published after 2019 or that were otherwise unable to be linked to the SCDB from our analysis, as these articles cover cases outside of the scope of our matched database; around 14% of our initial database of SCOTUS news articles published from May 2004 to May 2020. We also excluded 9% of these articles about cases where the Court denied the petition (for a writ of certiorari) to hear the case; JURIST news covers a fair number of these cases, e.g., “[Supreme Court justice denies application to stay airline merger](#)” and “[Supreme Court turns away challenge to high school coursework about Islam](#).” For these 183 articles, we created a separate word cloud of frequently-used words in article transcripts to understand the range of topics covered, sizing each word to its disproportionate use.

With our remaining sample size of 1,666 SCOTUS decision-related news articles published through 2019, we first examined the proportion of all news articles linked to the SCDB in a given year that fell within each of our case salience categories (issue area, disposition, and vote margin). In order to derive the topics disproportionately reported by JURIST, we used the SCDB as a benchmark and compared JURIST coverage each year to the frequency of actual occurrence in the Supreme Court docket for each of the three dimensions.

Please see Appendix A for the full methods details.

Figures

- Annual Compositions
 - [Top 5 Issue Areas in JURIST SCOTUS Coverage](#)
 - [Top 5 Voting Margins in JURIST SCOTUS Coverage](#)
 - [Top 5 Case Dispositions in JURIST SCOTUS Coverage](#)
- Annual Comparisons
 - [JURIST–SCDB Issue Area Coverage Difference](#)
 - [JURIST–SCDB Voting Margin Coverage Difference](#)
 - [JURIST–SCDB Case Disposition Coverage Difference](#)
- Intersection:
 - [Top 10 Issue Areas by Case Dispositions in JURIST SCOTUS Coverage](#)
- Articles where petition denied:
 - [Word cloud](#)
- Methods footnotes (supplementary figures to include with methods section):
 - [Top 10 Issue Area and Case Dispositions in JURIST SCOTUS Coverage](#)

- [Case Disposition by Court Action Verb](#)

Results

Word Cloud

It is important to note that an overwhelming majority of cases are denied certiorari by the Supreme Court as the Court only “accepts 100–150 of the more than 7,000 cases that it is asked to review each year” (United States Courts, para. 3). But of the near 200 JURIST articles about cases that were denied certiorari, there is a large focus on California and the Ninth Circuit, likely due to many relevant cases originating from that jurisdiction. Prevalent “company” and “public” terms allude to denied certiorari cases involving corporate and public law. Many cases also appear to be about abortion or same-sex marriage, as evidenced by their high word frequencies.

Issue Area

Of the top five issue areas found in JURIST coverage (civil rights, criminal procedure, economic activity, First Amendment, and judicial power) criminal procedure cases are the most *underreported* when compared to SCDB cases—cases that were granted certiorari and received a final ruling. On average, JURIST’s coverage of criminal procedure cases is around 1 percentage point (pp) below its Supreme Court docket counterpart whereas First Amendment cases are *overreported* the most at 1.5 pp above the SCDB. JURIST news coverage of civil rights cases is the *closest* to the actual amount of such cases ruled upon in the Supreme Court over the past 15 years as its average pp difference from the SCDB is only 0.1 pp.

By case issue area, criminal procedure cases comprise, on average, around 27% of JURIST news articles about the U.S. Supreme Court—the largest average proportion. Meanwhile, First Amendment cases have the lowest average composition at 6.7% across the 15 years. Despite JURIST covering criminal procedure cases the most in absolute terms, such cases are still underreported when compared to cases that the Supreme Court ruled upon. The opposite is true for First Amendment case coverage.

Case Disposition

Of JURIST’s top five case dispositions and compared to the SCDB, JURIST most *overreports* reversed and remanded cases (with the average pp difference as 1.2) and most *underreports* reversed cases (with an average pp difference of around -1). JURIST coverage of affirmed cases is the *closest* to the amount of such cases decided upon in the Supreme Court over the past 15 years due to its average difference being a mere -0.2 pp. 2004 is notably more stratified compared to subsequent years as the difference between JURIST coverage and the SCDB for affirmed cases that year is -22 pp. (the greatest *underreported* value over the 15 years) while reversed and remanded cases have an 18 pp difference (the highest degree of *overreporting* over the time frame). Ensuing years show that JURIST comes closer to the actual proportion of cases decided by the Supreme Court in terms of disposition as outlined in the SCDB.

In terms of annual case disposition compositions of U.S. Supreme Court news articles, JURIST covers reversed and remanded cases the most in absolute terms. On average, reversed and remanded cases account for 39.1% of Supreme Court news articles. Affirmed and reversed (or vacated) in part and

remanded cases comprise 2.2% of JURIST’s SCOTUS news articles—the lowest annual average of the top five case disposition areas.

Majority Votes

Compared to SCDB cases and of the top five voting categories (majority votes of 5, 6, 7, 8, and 9), JURIST most *underreports* cases with a final “9 majority” vote. On average, its coverage falls 3.4 pp below the actual proportion of nine-majority Supreme Court decisions. JURIST *overreports* cases with a five-Justice majority vote the most at 3.6 pp. JURIST six-justice majority vote reporting most *closely* aligns to the proportion of such cases ruled upon in the Supreme Court over the past 15 years as its average difference is only 0.2 pp.

In absolute terms, JURIST news articles cover cases that received a final 9-0 or *unanimous* voting margin the most, comprising 31.9% of Supreme Court articles on average across 15 years. This is notable because, despite JURIST discussing nine-justice majority cases more than all other types of voting margin cases, such cases are still underreported in relation to the amount of 9 majority vote cases ruled upon in the Supreme Court. Of the top five majority voting categories, JURIST covers 7 majority vote cases the least, as such articles comprise 11.5% of Supreme Court news articles on average.

Examples

The following three examples illustrate how JURIST news articles link to the three SCDB categories.

The JURIST article, “[Supreme Court to rule on drug sniffing dogs](#),” covers a criminal procedure case (*Florida v. Harris*) regarding the Fourth Amendment, in which the Court ruled 9-0 to reverse the actions of the lower court. Published in 2012, the article includes each of the most *underreported* categories in case salience’s three sections.

The 2018 “[Supreme Court to hear public access TV case](#)” article is a reversed and remanded case that exemplifies JURIST’s most overreported categories within case salience’s three sections. It covers *Manhattan Community Access Corp. v. Halleck*: a First Amendment case about employee harassment that was reversed and remanded by a final 5-justice majority vote.

“[Supreme Court hears arguments in disability benefits, patent cases](#)” published in 2018, discusses a disability benefits case that received a final six-justice majority vote. This civil rights case, *Biestek v. Berryhill*, was affirmed. The article includes Part I categories that are closest to actual SCDB decisions in terms of issue area, case disposition, and majority votes.

Conclusion

To summarize, JURIST news coverage overreports First Amendment cases, cases with a split majority vote, and reversed and remanded cases. JURIST underreports criminal procedure cases, cases with a final 9-0 majority vote, and reversed cases. JURIST is closest to the SCDB in terms of proportions of civil rights cases, cases that had a six-justice majority vote, and affirmed cases.

There are no correlations between time and the various difference proportions across issue area, case disposition, and majority vote: none of the categories have linear trends over the 15 years. This shows that there are not consistent degrees to which JURIST over or underreports certain topics and categories; such reporting does not occur at increasing or decreasing rates over time. Thus, the most informative metric—a more holistic and general analysis—is over vs. underreporting in terms of average proportion differences between JURIST and SCDB cases across the given time frame. So while there are not consistent case salience trends over time, the degree of general over vs. underreporting as evidenced by each of the average proportion differences being within 3.6 pp of zero—though typically much less in issue area and case disposition coverage—is consistently low and notable.

COVERAGE LANGUAGE

Introduction

How has the language used in JURIST's Supreme Court commentaries shifted over time, with regards to partisan descriptions of the Court and strategic framing of cases?

This section explores how the language used in JURIST's Supreme Court coverage—specifically in JURIST commentaries—has changed over time with regards to strategic framing and partisan Court descriptions. Are there more references to Court partisanship over time? What trends in Court strategic portrayals have occurred over the past 15 years? To answer these questions, we study two topics, which we define below:

- “*Partisan Court Descriptions*”: This term captures whether commentators describe the U.S. Supreme Court and its members by their political ideologies. For example, are justices, the Court, or case rulings often described as being “conservative” or “liberal”? This term does not capture whether articles are framed in a partisan manner, but rather whether there are explicit references to the U.S. Supreme Court in ideological terms.
- “*Strategic Case Framing*”: We drew inspiration for this section from Hitt and Searles's 2018 paper, “Media coverage and public approval of the U.S. Supreme Court.” While Hitt and Searles focus on “game framing,” we prioritize a somewhat different term: “strategic case framing.” This term captures whether the Court and its bench or decisions are discussed using strategic language (e.g. words involving winners vs. losers or descriptions related to competitive and militaristic endeavors) explicitly. It differs from “game framing” since “game frames” are more complex and harder to identify as they frame events in terms of *political* winners and losers, which requires more context. Words like “winner,” “strike,” “attack,” “lose,” etc. do not necessarily show “game framing,” but do show “strategic court framing.”

We chose these two topics to apply (1) the Hitt and Searles methodology to a different context and (2) newer technology (NLP) to quantify a historically more qualitative issue. Partisanship and game framing in media coverage is also a prevalent topic in the current political landscape.

Methodology

We identified 282 JURIST commentaries about the U.S. Supreme Court published between May 2004 and May 2020; due to the op-ed nature of commentaries and unlike news articles, these pieces are about any aspect of the Supreme Court and not limited to solely Court cases. To recognize partisan Court descriptors and strategic case framing terminology, we manually built two language “dictionaries”: (1) a partisan Court description “dictionary,” and (2) a strategic case framing “dictionary.” The partisan Court descriptions dictionary contains words and phrases such as “conservative wing,” “liberal Court,” and “right winger.” We created the dictionary through manual examination of a random sample of commentaries. We based our strategic case framing dictionary on Hitt and Searles's 2018 game framing database and modified it based on an examination of random commentary samples. Examples of terms from our strategic case framing language database are “attack,” “winner,” “loser,” “battle,” “strike down,”

and “fight.” These dictionaries are specific in the type and topic of coverage, tailored to JURIST commentaries about the U.S. Supreme Court. (See Appendices B and C for full dictionaries.)

We searched each of the Supreme Court-focused JURIST commentary transcripts for the terms in each of the two dictionaries using regular expressions: We counted the number of commentaries in which the author uses at least one partisan term or at least one strategy word; we also counted the number of times each term appeared in commentaries for each of the two dictionaries. Testing our language identification algorithm and dictionary against hand-identified instances of strategic wording in a random sample of commentaries yielded a high accuracy score for our automated dictionary coding mechanism.

To examine mentions of Supreme Court Justices in JURIST articles over time, we used regular expressions to scan for and tally the names of Justices (last names) who served on the bench anytime from 2004 through September 2020 in both news articles and commentaries. We did the project prior to Justice Amy Coney Barrett joining the bench. (See Appendix D for full list of Justices.)

Please see Appendix A for the details of the full method.

Figures

- Justices
 - [Supreme Court Justices \(2004–2020\)](#)
 - [Horse race of Supreme Court Justice mentions over time, for news articles and commentaries](#)
- Partisan Court Descriptions
 - [Partisan Court Descriptions Over Time](#)
- Strategic Case Framing
 - [Strategic Case Framing Over Time](#)
 - [Strategic Case Frame Word Rankings](#)

Results

Partisan Court Descriptions

From 2004 to 2020, JURIST’s 2018 coverage shows the greatest proportion of commentaries about the Supreme Court using partisan descriptions, with authors in 60.0% of such articles including ideological language. Other spikes in partisan descriptions occur in 2005, 2010, 2012, and 2016. JURIST Supreme Court articles in 2014 have the lowest proportion of partisan Court descriptions, with only 3.9% of all JURIST articles about the Supreme Court including partisan language. There is not a linear trend in the proportion of Supreme Court commentaries having partisan Court descriptions over time, showing that time and partisan language are not correlated in JURIST Supreme Court commentaries. Annual proportions of JURIST SCOTUS commentaries with partisan Court descriptions differ up to 56 pp between years, averaging to 25.0% over the 15 years.

The following article, “[After Texas: What’s at Stake for the Rest of the Country in Whole Woman’s Health v. Hellerstedt](#)” includes examples of partisan Court descriptions. Discussing a Supreme Court

abortion case, the author frames the Court in partisan terms, noting how the justice (particularly former Justice Kennedy) can vote along ideological fissures. The following are explicit examples of partisan Court descriptions:

- “The four *liberal justices* (Justices Ginsburg, Breyer, Sotomayor and Kagan) are all but certain to vote in favor of the plaintiffs”
- “If he decides to side with the *liberal wing* of the court...”
- “If Justice Kennedy chooses to join the more *conservative justices* in voting to uphold one or both sets of requirements...”
- “Another alternative is that Justice Kennedy does not join either the *liberals* or the *conservatives*”

Strategic Case Framing

JURIST coverage in 2018 has the greatest proportion of commentaries about the Supreme Court that use strategic case framing to describe the Court and its decisions, with all five of the commentaries about the Supreme Court that year (100%) framing in terms of strategy rather than policy. Framing SCOTUS decisions as politicized or strategic can decrease the support for the Court. According to Hitt and Searles (2018), game frame coverage of the Court not only reduces the favorability of the Court as an institution but also reduces the public's acceptance of Court decisions. These researchers, citing King (2012), illustrate this concept of "game frame":

The hazards of this reliance are best exemplified by the coverage of CNN and Fox News following the Court's ruling in National Federation of Independent Businesses v. Sebelius (567 U.S. 519 [2012], the original “Obamacare” ruling): on air experts erroneously concluded that the individual mandate was struck down by the ruling. Subsequently, reporters on both networks discussed the implications for stakeholders, declaring this decision: “A direct blow to President Obama.”

Commentaries in 2007 have the lowest proportion of any strategy framing, with 54.6% that year including such language. Similar to the partisan Court descriptions, there is no evident linear trend in the proportion of Supreme Court commentaries that use strategic case framing over time.

As an example of strategic case framing, [“Exaggerated Claims of 'Judicial Nullification' in Gun Cases”](#) frames a Second Amendment Supreme Court case in terms of winners and losers and through competitive and militaristic language. The following are example phrases of the commentary's strategic case framing.

- “If the case lacked merit under ordinary liability principles, they would *lose*; otherwise, they would *win*.”
- “Historian Joyce Lee Malcolm opens *a new line of attack* in her recent JURIST commentary.”
- “That result is deeply dissatisfying to the advocates, who have resorted to *a tired attack* on the courts”

The range in the annual proportion of commentaries is quite large, differing up to 45 pp between years; similar to the partisan Court descriptions. The large proportion of JURIST Supreme Court commentaries with instances of strategic case framing in their transcripts is also notable. Around 54.6% to 100% of commentaries in a particular year have strategic case framing language, averaging to 79.8% annually over 15 years. This may be due to the intrinsic qualities of both the court system and commentaries in general.

Courts are inherently adversarial—with clear winning and losing parties—and commentaries add opinions and critique. Our findings would likely be more surprising if they were in reference to news articles instead of commentaries.

Conclusion

Other than in 2005, partisan Court description spikes occur in election years. 2005 JURIST Supreme Court articles may include more partisan Court descriptions since 2005 was the year that Chief Justice Rehnquist died and Chief Justice Roberts joined the Supreme Court and was appointed as Chief Justice during his first time on the bench over more senior justices. 2018 may have the most partisan Court descriptions as that was the year that Brett Kavanaugh was appointed to the U.S. Supreme Court and his confirmation received ample media attention. It is interesting to factor “Justice mentions” into the analysis considering that Justice Gorsuch received more mentions than Justice Kavanaugh in 2018 JURIST Court-commentaries. This could be because Justice Kavanaugh was not confirmed until halfway through the year or because “Justice mentions” and partisan descriptions are not correlated. It is also interesting that spikes in partisan Court descriptions are not always in years where a new justice joins the Supreme Court bench or consistent across election years. Despite 2014 being a midterm election year, it has the lowest proportion of JURIST Supreme Court articles having partisan Court descriptions. This may be because it was not a *presidential* election year, it was an incumbent president’s second term, or because no Supreme Court justices were appointed during former President Obama’s last term.

Similarly, the proportion of JURIST Supreme Court commentaries that use strategic case framing vary widely between years, particularly in relation to election years with no apparent time trend. Supreme Court-focused commentaries in 2007 may have the lowest proportion of strategic language as it was President Bush’s last year in office. But the proportion of JURIST SCOTUS commentaries having strategic language in 2015 (former President Obama’s final year of his second term) was 93.3%, making that “last year of a presidential second term” logic inconsistent. Commentaries in 2018 may have the greatest proportion of commentaries with strategic language since, as mentioned previously, Justice Kavanaugh joined the Supreme Court that year and his hearing and confirmation attracted substantial media coverage and controversy. But, as aforementioned, it is important to note that Justice Kavanaugh was not mentioned the most in 2018.

Similar to the case salience section, our coverage language results show that time and proportions of partisan Court descriptions or strategic case framing language in SCOTUS commentaries are not correlated. This signifies that such coverage language is not increasing or decreasing at consistent rates. The lack of language trends may arise from JURIST commentaries being written by various, infrequent guest commentators—not a consistent editorial staff. As mentioned previously, a more general metric of average proportions of relevant commentaries with pertinent coverage language provides more insight into the nature of JURIST’s language trends. While there is not a consistent coverage language trend over time, the percentage of JURIST Supreme Court comments with partisan Court descriptions and especially strategic case frames is consistently large across years.

READER ENGAGEMENT

Introduction

How do readers engage with JURIST's Supreme Court coverage? In particular, what types of Supreme Court news and op-eds (in content and coverage methods) attract greater reader engagement?

While the first two sections are more internally-facing—analyzing JURIST's own U.S. Supreme Court coverage—this third and final section focuses on public consumption of JURIST Court news reports and commentaries. Namely, this section examines how readers engage with JURIST articles by the categories outlined in the case salience and coverage language sections: issue area, case disposition, final majority vote, partisan Court descriptions, and strategic case framing. This section aims to identify (1) which types of cases or which sort of coverage language attracts the most reader attention and (2) the types of cases and Court framing to which the public are more frequently exposed. By examining these two criteria in tandem with reader engagement, we can better understand how JURIST coverage patterns translate into readers' exposure to, and interest in, the Court.

Methodology

We first obtained relevant Google Analytics data on “year-pageviews”: JURIST pageviews for every article (news and commentary) for each year from January 2013 through December 2019. We linked these JURIST articles with their accompanying reader metrics. While some reader engagement metrics are available for articles published on the site *prior* to 2013 (since Google Analytics data accounts for all pages published on the site up to the designated year at which the pageview count is taken) we limit our analysis to the 1,226 JURIST articles *published from January 2013 through December 2019*. We did so due to data volume limitations, as well as to better represent reader engagement with then-covered Supreme Court cases topical to the time of publication.

We then investigated how reader engagement varied by different dimensions of case salience (issue area, case disposition, and number of majority votes) and coverage language (partisan Court descriptions and strategic case framing). We examined two measures of reader engagement: (1) cumulative total pageviews, or the total number of pageviews that an article with a certain dimension has accumulated up to a given year since 2013 or, if it was written after 2013, the date of its publication, and (2) normalized pageviews, or the total pageviews in a given year standardized by the number of articles over which the pageviews spread. We did this to obtain a “year-article-views” metric and account for dimensions that may have greater viewership because they are topics of frequent publication. An important note is that articles published earlier have more time to accumulate pageviews and may have higher cumulative readership than those that are published later. When examining reader engagement with articles that use partisan descriptions of the Supreme Court, we also hand-coded the linguistic extremity of each term (on a scale of 0 to 4 by increments of 0.5) and the ideological leanings (liberal, conservative, or neutral) of the partisan terms in our dictionary. For instance, the term ‘conservative majority’ was coded as ‘conservative’ with an extremity score of 3.

Figures

- Case Salience
 - [Pageviews \(cumulative/normalized\) by Case Salience Dimensions](#)
- Coverage Language
 - [Top 20 Strategic Words in Terms of Reader Engagement](#)
 - [Partisan Court Descriptions](#)

Results

Summary Statistics

On average, the *total number of pageviews* that any JURIST Supreme Court-related article published after 2013 received (news or commentary) over the seven years from January 2013 through December 2019, is 288.5 pageviews per article. While the average number of views of a news article is 274, less than the average, commentaries average a much-greater 626 pageviews. This is expected, as news articles are shorter, published more frequently and in higher volumes, and cover topics likely simultaneously covered by other news media sources. Commentaries, like op-ed pieces, are lengthier, published less frequently, and more unique in content. The average *year-pageviews*, or the total pageviews for an article in the year (approx.) following its publication, is 261.8 pageviews. Because we downloaded data at a page-year level, we estimated this value by weighting the pageviews in the second year of the article publication by the month index, e.g., if an article was published in April 2015, we calculated *year-pageview* by summing 2015 pageviews with 2016 pageviews multiplied by one-third (four for the month of April divided by the twelve months in a year). Like with the total pageviews metric, commentaries have a higher value than do news articles—497 as compared to 252 pageviews. The average *year-pageviews* does not differ significantly from the average *total pageviews* for news articles, suggesting that readers do not often view or return to news articles within a year of publication, likely because the articles are less relevant. In contrast, the average *total pageviews* is much higher than the *year-pageviews* for commentaries, suggesting that a significant number of people read, or previous readers may return to, JURIST Supreme-Court related commentaries even a year after the article has been published on the JURIST site.

Case Salience

i) Issue area:

Looking at coverage from 2013 through 2019, JURIST news reporting on criminal procedure cases consistently attracts the most reader engagement, with article viewership nearly doubling that for economic activity cases, the next closest case topic. The top five issue areas viewed by readers closely follow those found in JURIST coverage, with the exception of due process cases taking First Amendment cases' place. When we examine normalized reader engagement, in which the total page views each year are standardized by the total number of JURIST articles to which this viewership corresponds, a very different pattern emerges: news coverage of due process and privacy cases attract the most reader interest, followed by civil rights and criminal procedure. Interestingly, First Amendment cases receive a relatively low level of viewership given the number of articles published, yet, as we have noted in our previous analysis, they are the most overreported type of case by JURIST.

Private action cases also emerge as a topic of rapidly growing popularity among readers, rising from the second *least* viewed case issue area type in 2013 to the sixth *most* viewed case by 2020. Though private action cases receive a low number of cumulative reader views, they amass a relatively large number of pageviews when accounting for the number of articles published about the topic. This result is driven by the fact that JURIST published only [one news article](#) about a private action case, a 2014 article about *Brandt Revocable Trust v. United States* on the Court’s ruling that the U.S. does not retain implied ownership of railroad right-of-way properties. However, this article attracted 2,000 total views from readers, nearly nine-times the average number of pageviews for a news article, demonstrating that JURIST’s private action case coverage, namely this article’s coverage of the case, has an outsized impact on readers.

ii) Case disposition:

Cumulative readership patterns for case disposition follow that of JURIST coverage; cases reversed and remanded (in which the Court reversed the lower court’s decision and sends the case back for further proceedings) or affirmed (where the Court upholds the lower court’s decision) garner the most reader engagement. However, examining normalized pageviews, readers are most interested in news articles about cases that were either affirmed and reversed (or vacated) in part and remanded (in which the Supreme Court affirms part of a judgment, reverses or vacates other parts, and sends the case back to the lower court for further proceedings) or denied petition or dismissed appeal (the Court declines to review a lower court’s judgment, or denies petition for writ of certiorari).

ii) Majority votes:

Articles about cases with 9-0 and 5-4 (or 5-3) decisions consistently attract greater reader interest than do those with other decision margins. This demonstrates that JURIST exposes the public more towards either *unanimous* (9-0) or *split* (5-4 and 5-3) Court decisions. Interestingly, as we previously found, JURIST most *underreports* cases with the 9 majority vote count but most *over-covers* cases with a 5 majority vote. Articles about cases with 8-1 (or 8-0) decisions, or *near-unanimity*, quickly outpace other vote alignments to rise to the third-most viewed case type by the end of 2019. Interestingly, using a normalized page view count, readers engage more with articles about cases that have 8-1 (or 8-0) decisions and, as with cumulative pageviews, 5-4 (or 5-3) decisions, which are *near-unanimous* and *split* Court decisions.

Coverage Language

i) Partisan Court Descriptions

For commentaries published between 2013 and 2019, the linguistic polarity of partisan Court descriptions tends to positively associate with pageviews (normalized), as demonstrated by the positive linear trend line on the bubble chart. This suggests that a greater number of readers are more exposed to commentaries with stronger partisan descriptions of the Court or that commentaries with more “polarized” partisan terms generally have higher reader viewership. Commentators use a greater number of different conservative references to the Court as compared to liberal references—17 as compared to 14 terms. Conservative partisan Court descriptions are more likely to have stronger wording than are liberal partisan Court descriptions, as they generally have higher extremity scores. Conservative terms tend to lie below the trend line, save a few outliers, and thus have a below-average reader viewership given the extremity of the language used. For neutral terms, higher extremity also seems to correlate with lower average

pageviews. There are several interesting outliers to note in the bubble chart, both of which are conservative terms that sit far above the trend line and suggest outsized reader engagement given their linguistic extremities: “right winger” and “conservatism,” with averages of 2,711 and 2,994 pageviews per article, respectively.

ii) Strategic Case Framing

The total pageviews vary in accordance with article count and the most frequently used strategic case framing terms (“win,” “force,” and “lose”) also have the greatest number of total pageviews on commentaries using the strategic term, with the highest pageview count of nearly 90,000. However, there remains very little difference in the average pageviews across strategic terms despite significant differences in total pageviews, fluctuating between 600 and 900 average pageviews. Thus, accounting for article count, readers seem to be relatively equally exposed to the top 20 strategy terms. Regardless, the high total pageview count demonstrates that there are a large number of viewers who are exposed to commentaries with strategic case framing. There are several terms with outsized average viewership given the number of articles that contain the term: (1) “opponent”: the seventh most frequent term with around 1,200 views per article; (2) “resist”: the fourteenth most frequent with around 1,300 views per article, and (3) “attack”: the twelfth most frequent with around 1,600 views per article.

Conclusion

JURIST commentaries about the Supreme Court published between 2013 and 2019 have a greater average total number of pageviews and are more likely to gain significant viewership even a year after publication than are news articles written in the same period. Analyzing reader engagement with news articles published between 2013 and 2019 by the three dimensions of case salience (issue area, case disposition, and final majority vote), we find that the size of reader impact (as measured by total pageviews) directly correlates with the number of articles published for a given case type, i.e., the pageview rankings by case salience type closely follows that of occurrence frequency in JURIST’s historical archive. However, in terms of reader interest as measured by *average* or *normalized* pageviews (which standardizes total pageviews to account for the number of articles published about a case type) the patterns vary significantly, suggesting that the types of Supreme Court cases that receive large amounts of JURIST coverage may not necessarily garner high levels of reader interest.

Based on normalized pageviews, articles covering cases about due process, privacy, and civil rights issues attract the most reader interest of all Supreme Court case issue areas. First Amendment cases attract relatively low levels of normalized viewership yet are the most overreported type of case by JURIST. This may be driven by either readers’ ability to learn about these cases from other news outlets or the sheer volume of JURIST’s coverage of First Amendment cases. In contrast, the lone article that JURIST published covering a private action case gained a large viewership far greater than the average attention attracted by news articles, suggesting that there is reader interest in private action issues and may be room for expansion of JURIST coverage in that issue area. Cases that were affirmed and reversed (or vacated) in part and remanded had the greatest reader engagement (normalized) but also comprised the smallest slice of JURIST’s top five case dispositions. Readers are also most interested in *split* court decisions (5-4 or 5-3), which are the most overreported articles by JURIST, as well as *unanimous* or *near-unanimous* vote coalitions, which are underreported by JURIST.

Conservative descriptions of the Court are likely to be much more polarized than are liberal descriptions, though they are generally likely to be used in articles with viewership lower than the average number of pageviews for their extremity scores, save a few outliers. However, the two terms with highest average viewership are also conservative terms: “right wingers” and “conservatism.” Terms used more frequently in articles are likely to fall closer to the average count of pageviews given their linguistic extremities while outlier terms with exceptionally high (or low) average pageviews for the use-articles are used less frequently by commentators.

An important caveat to this analysis between reader engagement and case salience or coverage language is that the strength and direction of causality is difficult to determine, in part due to the presence of other factors influencing viewership (publication date, headline phrasing and attractiveness to readers, coverage of case by other news outlets, etc.). Because readers typically see an article’s headline before viewing the full article “page” and text, it is critical to note the type of information that may be available to readers in the succinct headlines. However, while high readership for news articles coverage cases in a given issue area indicates high audience *exposure* and can likely be attributed to *apriori* reader interest (as this information can be discerned from article headlines), high readership for commentaries with certain partisan or strategic framing likely does not suggest that readers actively seek out this type of coverage language, as these terms typically appear in article text and not the headline. Instead, this relationship solely exhibits high readership *exposure* to these types of language.

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Appendix

A. Additional Methodology Details

(i) Data Preparation

All JURIST news articles and commentaries published from May 2004 through May 2020 on the WordPress site were extracted using a custom XML parser, pulling entities like headline, content transcript, author, tags, etc.

We cleaned and subsetting historical JURIST *news* articles to capture articles only about U.S. Supreme Court decisions (cases that were recently decided or to be decided by the Court at the time of publication). We primarily rely on news article headlines to proxy inclusion in our desired subset, as JURIST headlines tend to follow distinct formats and include certain keywords when discussing Supreme Court cases, which we discovered through manual inspection of various articles. We tagged all news articles in a binary (about SCOTUS / not about SCOTUS) by searching for keywords in the headline, e.g., “The Supreme Court” or “U.S. Supreme Court.” We excluded state and international Supreme Courts using named-entity recognition.

We also cleaned and subsetting historical JURIST *commentaries* to extract only those about the U.S. Supreme Court. Unlike news articles, we did not limit these pieces solely to Court cases; they are about any aspect of the Supreme Court, including Justices, Court proceedings, etc. Deriving a subset of Supreme Court commentaries proved to be less straightforward than for the news articles, as commentaries tend to have more “creative” titles. We relied on keyword identification from both the commentary title and body transcript (first sentence or first paragraph), searching for “Supreme Court” and mentions of case names. As with the news articles, we excluded Supreme Courts of states or foreign countries using named-entity recognition.

(ii) Case Salience

To link the Washington University School of Law’s SCDB to the JURIST article database, we first extracted the first created a series of rule-based matchers using the SpaCy package in Python to identify the relevant Supreme Court case name and Court actions for each of the articles: Because Supreme Court cases have standard nomenclature of “A B v. C D,” our case name rule-based matcher identifies all unique Supreme Court case names mentioned in an article by searching for the keyword “v.” and the surrounding proper nouns, combining named-entity recognition and part-of-speech tagging to extract the full case names. We identified the Court action mentioned in the headline by developing a second Court action rule-based matcher using the SpaCy package. The rule-based matcher relies on part-of-speech tagging to pull the primary root verb(s), as well as the full verb phrase, e.g., a verb phrase of “decline to hear” and corresponding verbs of “decline” and “hear,” or a verb phrase of “to rule” and the accompanying verb “rule.” For the few headlines with no clear Supreme Court action (e.g., start with “Supreme Court:”), we used the first verb in the first sentence of the article body as the Court action. For articles that mention multiple case names, our algorithm treats the first case name listed as the recently-decided Supreme Court case of interest in each news article, assuming all others to be references

to precedents or other cases included to provide context. However, we manually inspected all 91 articles with multiple case names to select the correct relevant Court case. Without hand-selecting the relevant case, (Note: some of these articles covered multiple relevant Supreme Court cases, e.g., “The Supreme Court adds three new cases to docket,” but for these, we still only selected the first mentioned case).

Because JURIST articles often use abbreviated case names while the SCDB has the full case name, we rely on fuzzy string matching and the token set ratio (using the ‘fuzzywuzzy’ package) to match the two case names and, thus, link the two databases. We exclude several different types of Supreme Court-related news articles from our case salience analysis: First, we did not link around 9% of articles about cases where the Court denied the petition (for a writ of certiorari) to hear the case. These include articles such as “[Supreme Court justice denies application to stay airline merger](#)” and “[Supreme Court turns away challenge to high school coursework about Islam](#).” Second, we exclude an additional 11.1% of articles (240 articles) from our salience analysis because they had missing case names and were identified as those about cases ruled by the Court.

Thus, the breakdown of the 2,160 news articles about Supreme Court cases published from May 2004 to May 2020 is as follows:

- 77.1% (1,666 articles) are about cases decided by the Court up to, and including, the 2018–19 term and thus linked to the SCDB.
- 8.5% (183 articles) are about cases which had denied petitions and were not linked to the SCDB.
- 14.4% (311 articles) were excluded from our analysis because they either were identified as about cases ruled by the Court but were missing identifiable case names from the article text (240 articles) or covered cases after the 2018-19 Supreme Court term because they were written after 2019 (71 articles).

Once the SCOTUS JURIST article cases were linked to their corresponding SCDB case, we then analyzed the frequency of each of these three dimensions within the JURIST archive: case issue area, case disposition, and number of majority votes. In order to identify the topics disproportionately reported by JURIST and understand how JURIST’s coverage scope compared with the full Supreme Court docket in a given term, we used the SCDB as a benchmark. We compared JURIST coverage each year with the actual frequency of occurrence in the Supreme Court docket in each of the three dimensions, subtracting the frequencies of occurrence of the SCDB from those of JURIST articles.

For the 183 news articles about cases that were denied certiorari, we created a word cloud to identify common topics. We identified these articles by Court action (headline verb), which use phrases such as, “decline/refuse to hear,” “deny review of,” “decline to rule,” and “refuse/decline to take up.” These articles are about cases that the Supreme Court did not rule upon and are thus mutually exclusive from those examined in the previous case salience sections. To capture commonly paired words in this corpus, we used a bilinear interpolation. To display words that might capture the subjects of these articles, we removed legal terminology and terms related to Court proceedings and relied on NLTK part-of-speech tagging to remove verbs, adjectives, etc.

(iii) Coverage Language

To recognize partisan Court descriptors and strategic case framing terminology, we manually built two language “dictionaries”: (1) a partisan Court description “dictionary,” and (2) a strategic case framing “dictionary.” The partisan Court descriptions dictionary contains words and phrases that present the Court and Justices using political ideology or partisanship, e.g., conservative wing, liberal Court, and right winger. We created the dictionary through manual examination of a random sample of commentaries. We based our strategic case framing dictionary on Hitt & Searles’ 2018 game framing database and modified it based on an examination of random samples of commentaries. Examples of terms from our strategic case framing language database are: attack, winner, loser, battle, strike down, and fight. These dictionaries are specific in the type and topic of coverage, tailored to JURIST commentaries about the U.S. Supreme Court. (See Appendices B and C for full dictionaries.)

We searched each of the Supreme Court-focused JURIST commentary transcripts for the terms in each of the two dictionaries using regular expressions: We counted the number of commentaries in which the author uses at least one partisan term appears and that in which the author uses at least one strategy word; we also counted the number of times each term appeared in commentaries for each of the two dictionaries. To test the accuracy of our language search-and-identification algorithm, we hand-coded for a random sample of 43 commentaries two criteria: (1) whether each article used partisan Court language, and (2) whether the article used strategic case framing. We then compared these manual binary classifications to our algorithm results and calculated F1 scores, which range from 0 (worst) to 1 (best). Our F1 scores were very high, with scores of **0.933** and **0.925** for partisan and strategy language, respectively, suggesting that our dictionary algorithm is an effective identifier for these two types of coverage language (calculated using ``f1_score`` from the ``sklearn.metrics`` package).

To examine mentions of Supreme Court Justices in JURIST articles over time, we used regular expressions to scan for and tally the names of Justices (last names) who served on the bench anytime from 2004 through 2020 in both news articles and commentaries. (See Appendix D for full list of Justices.)

(iv) Reader Engagement

We first obtained relevant Google Analytics data on “year-pageviews”—JURIST pageviews for every article (news and commentary) for each year from January 2013 through December 2019. We linked these JURIST articles with their accompanying reader metrics. While reader engagement metrics are available for articles published on the site *prior* to 2013 (since Google Analytics data accounts for all pages published on the site up to the designated year at which the pageview count is taken) we limit our analysis to the 1,226 articles *published from January 2013 through December 2019*. We did this to better represent reader engagement with then-covered Supreme Court cases topical to the time of publication.

We then investigated how reader engagement varied by different dimensions of case salience (issue area, case disposition, and number of majority votes) and coverage language (partisan Court descriptions and strategic case framing). We examined two measures of reader engagement: (1) cumulative total pageviews, or the total number of pageviews that an article with a certain dimension has accumulated up to a given year since 2013 or, if it was written after 2013, the date of its publication, and (2) normalized pageviews, or the total pageviews in a given year standardized by the number of articles over which the

pageviews spread. We did this to obtain a ‘year-article-views’ metric and account for dimensions that may have greater viewership because it is a topic of frequent publication. An important note is that articles published earlier have more time to accumulate pageviews and may have higher cumulative readership than those that are published later. When examining reader engagement with articles that use partisan descriptions of the Supreme Court, we hand-coded the linguistic extremity of each term (on a scale of 0 to 4 by increments of 0.5) and the ideological leanings (liberal, conservative, or neutral) of the partisan terms in our dictionary. For instance, the term ‘conservative majority’ was coded as ‘conservative’ with an extremity score of 3.

B. Coverage Language Dictionary: Partisan Court Descriptions

Download the csv file [here](#) (formatted to work with regular expressions).

balance of the Court	ideological balance	moderate
centrist	ideological composition	partisan efforts
closest philosophically	ideological efforts	partisan grounds
conservatism	ideological position	progressive agenda(s)
conservative agenda(s)	judge/justice ... conservative	progressive bloc
conservative bloc	judge/justice ... liberal	progressive colleague(s)
conservative colleague(s)	left(-/)wing/er(s)	progressive Court
conservative Court	liberal agenda(s)	progressive decision(s)
conservative decision(s)	liberal bloc	progressive direction
conservative direction	liberal colleague(s)	progressive judge(s)
conservative judge(s)	liberal Court	progressive jurist
conservative jurist	liberal decision(s)	progressive justice(s)
conservative justice(s)	liberal direction	progressive lines
conservative lines	liberal judge(s)	progressive majority
conservative majority	liberal jurist	progressive member(s)
conservative member(s)	liberal justice(s)	progressive nominate
conservative nominate	liberal lines	progressive nominee(s)
conservative nominee(s)	liberal majority	progressive position(s)
conservative position(s)	liberal member(s)	progressive predisposition(s)
conservative predispositions(s)	liberal nominate	progressive result(s)
conservative results(s)	liberal nominee(s)	progressive Supreme Court
conservative Supreme Court	liberal position(s)	progressive US Supreme Court
conservative US Supreme Court	liberal predisposition(s)	progressive wing
conservative wing	liberal result(s)	progressively moved
Court balance	liberal Supreme Court	Republican appointee(s)
Court's political balance	liberal US Supreme Court	right(-/)wing/er(s)
Democratic appointee(s)	liberal wing	swing(-/)vote

C. Coverage Language Dictionary: Strategic Case Framing

Download the csv file [here](#) (formatted to work with regular expressions).

Modified version of Hitt & Searles “game-frame” dictionary.

another round	hard(-)fought	retaliate
attack	hero	retaliation
ball game	high-stakes	routine plan
balls	ignited	score
bat	in a position	score points
bat rack	kicked	scored
battle	lead the charge	scored a big win
battle line	lightning rod	sore loser
big victory	lose	spike the football
blindsided	loser	spiking the ball
bruising battle	losing side	spray gunned
bullet	loss	square off
carrying out	lost	strategic
cat and mouse	lost the war	strike
challenge to	neck and neck	strike down
contingency plan	offensive	striking down
cripple	opponent	stronger position
curb	opposition	struck
dead heat	out of line	the odds are
deterrent	outmaneuver	third strike
dominating	pin \w+ down	thwarted
draw a line	pitch	tie-breaking vote
drum beating	plate	trading blow
end zone	positioned	turn of play
endgame	pound the drum	unbridled
engaging	prevailed	victory lap
escalate	primary conflict	win
faceoff	public fight	winner
fallout	punter	winning
fight	rally cry	winning side
force	rally the base	won
forced	rallying cry	won the battle
forces	rear guard	wrestled
gun to the head	resist	

D. Coverage Language Dictionary: Supreme Court Justices, 2004-2020*

Download the csv file [here](#).

*Note: Excludes Justice Amy Coney Barrett, as this analysis was done prior to her appointment.

Anthony Kennedy
Antonin Scalia
Brett Kavanaugh
Clarence Thomas
David Souter
Elena Kagan
John Paul Stevens
John Roberts
Neil Gorsuch
Ruth Bader Ginsburg
Samuel Alito
Sandra Day O'Connor
Sonia Sotomayor
Stephen Breyer
William Rehnquist