



COVERING CYBER

Media Coverage of Cyber Issues: *2019-2020 Update*

Sean Aday, Ph.D.

Institute for Public Diplomacy and Global Communication

George Washington University

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MEDIA COVERAGE OF CYBER ISSUES SINCE 2014

ABOUT THE REPORT

This report updates the 2019 study, “Media Coverage of Cyber Issues: 2017-2018 Update” with analysis of coverage in mainstream media during 2019 and the first half of 2020.

As with the last report, this study sees continuing patterns in coverage of cyber-related issues in major mainstream American media. In particular, cyber continued to be covered more in-depth than it was when these analyses began in 2014, and for the most part the same types of stories dominated the attention of news organizations, especially those about hacking and cybersecurity. In 2020, however, cyber largely fell off the news agenda as the impeachment of President Trump, a contentious election season, the outbreak of the COVID-19 global pandemic, and renewed calls for racial justice in America following the killings of several African-Americans, including George Floyd, dominated the news agenda. The report discusses implications of these and other findings.

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About the Author:

Sean Aday is an associate professor of media and public affairs and international affairs at George Washington University.

About IPDGC:

The Institute for Public Diplomacy and Global Communication at George Washington University is a leading organization in the field of public diplomacy and global communication issues. It is jointly administered by the Columbian College of Arts and Sciences and the Elliott School of International Affairs.

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EXECUTIVE SUMMARY

This study analyzed coverage of cyber-related issues in the *New York Times*, *Washington Post*, CBS Evening News, FOX News Channel's "Special Report," and CNN's "The Situation Room." It covered the period from January 2019 through the end of June, 2020. The major findings from this analysis are:

- **Overall trend:** The previous two reports showed a steady increase in coverage of cyber issues beginning in 2015, and that trend continued through the end of 2019. Some of this reflected continuing interest in stories that had dominated coverage during the earlier periods studied, such as questions about technology companies invading user privacy, and Russian interference in the 2016 Presidential election and possible collusion with the Trump campaign, which became part of the story of President Trump's first impeachment. This cycle also saw renewed interest in the cybersecurity threat posed by China, especially as it relates to Huawei and 5G technology.
- **Cyber is still often a hacking and cybersecurity story:** Looking at "main subject," these were still among the most commonly covered aspects of cyber in mainstream news, especially on broadcast news.
- **News focused much more on the technology industry during this period than in the past.** Especially in newspapers, stories about the business side of the tech industry, issues related to user privacy, and reporting on technological innovations were more prominent than in the past.
- **Continuing an encouraging trend, cyber stories were increasingly covered substantively and more in depth in 2019 and 2020 as compared with earlier years.** The vast majority of stories about cyber issues were framed *thematically* or *substantively* (e.g., what this means and what can be done about it), as opposed to *episodically* (e.g., a hack happened, for example). Newspapers were most likely to do so, but even on broadcast news (which studies have consistently found tend to be more episodic due to the relative brevity of their stories) more than 70 percent of stories were reported in a deeper, more substantive way.
- **Reversing a trend found in the last report, cyber went back to being a largely U.S.-centric story. In the first report that covered the period from 2014-2017,** between 74 and 85 percent of cyber stories were U.S. focused. That number dropped to about 65 percent in 2017-2018, but returned to about 4 in 5 stories during the 2019-2020 period.
- **A new "villain" dominated cyber stories in 2019-2020: Tech Companies.** Although the Russians and hackers still were among the top five most commonly identified "villains" in cyber stories during this period, tech companies themselves dominated this category. This reflects the myriad ways news focused on stories about the industry highlighted above, but also continuing concerns about privacy and security and the increasing attention given to these issues by Congress and the executive branch, as well as state and foreign governments and entities. In addition, the U.S. government itself came under scrutiny for its role in surveillance and other privacy issues and many stories framed it as a villain, too. Finally, China returned as a major offender.

- **Who speaks?** Expert sources dominated reporters' rolodexes, though corporate officials and Members of Congress also had their say. Perhaps reflecting the preponderance of substantive reporting on cyber issues during this period, reporters looked to experts and advocates to make sense of these complicated topics. The dominance of the tech industry as a focus of news also led to more interviews with those officials, though increasing government scrutiny is also reflected in the frequency of legislators being quoted.

Covering Cyber

INTRODUCTION

This report updates the 2019 “Covering Cyber” study – which looked at media coverage of cyber issues from 2017 through 2018 and was itself an update to the original report covering 2014-2017 – by continuing the analysis of major mainstream media outlets through the first half of 2020. This report shows some consistencies with those earlier analyses, but also some important differences. What is clear from the three reports is that coverage of cyber-related issues has become more varied and more substantive over the years. At the same time, however, 2020 saw a dramatic decline in the amount of coverage as the media struggled to keep up with the onslaught of news created by the impeachment of President Trump, the COVID-19 pandemic, racial justice protests, and the presidential election. In one of the most news-saturated years in modern times, cyber issues largely fell off the news agenda, especially on broadcast news.

Based on findings in the previous two reports, which showed that cyber coverage was limited primarily to the largest newspapers and broadcast news channels, this report streamlined its methodological approach to focus on coverage in the latter. What we learned from the earlier studies is that contractions in the news industry, especially in print, have led to local news organizations largely ignoring all but the most significant national and global news stories, choosing instead to use news services to provide what limited stories they run. Many simply reprinted *New York Times* stories, which were already part of our coding. It was vanishingly rare for a local newspaper to utilize its own limited staff to produce original reporting on cyber. For that reason, this report analyzed coverage in the *New York Times* and *Washington Post* on the print side, and the CBS Evening News, CNN’s “The Situation Room,” and Fox News Channel’s “Special Report” for broadcast news. Decades of research has shown that the three network newscasts (i.e., ABC, CBS, and NBC) do not differ significantly in their news agendas or framing, so choosing one of the three was seen as sufficient. CNN and FNC have well-established differences in their approach to news, and represent different audience constituencies. Finally, we chose “The Situation Room” and “Special Report” because they were the closest in terms of mission and time of day to the network’s evening newscasts.

Like the earlier studies, this report analyzed critical variables such as: the main topics covered, their frames, what sources were quoted, and, where relevant, who the “villains” were in cyber stories. These tell us not only what aspects of the broad topic of “cyber” made the mainstream news agenda, but at least as importantly the way in which they were discussed and who had access to that framing. At the same time, this report, like the two that preceded it, tell us the story of cyber by showing us what *isn’t* covered and who *doesn’t* get to tell the cyber story in the news.

FINDINGS

As the past two reports have shown, news coverage of cyber steadily increased from 2014, the first year studied in this ongoing project, through 2018. Since this report focused on the most important newspapers and newscasts, Figure 1 shows the apples-to-apples comparison with the same news organizations since 2014. Although in 2018 these outlets significantly grew their coverage of cyber-related issues, 2019 saw a dramatic increase of more than three times the previous year's coverage.

What accounts for this increase? A couple of likely explanations jump out of the analysis. First, even though this is a significant year-over-year jump, it continues an overall trend we've seen since this project began in 2014. In other words, cyber as a macro-level topic is simply becoming more and more integrated into myriad aspects of culture, business, and policy, and news coverage is capturing that fact. Second, and related, Facebook itself – and its founder and CEO Mark Zuckerberg – were the spotlight of many stories, many (though not all) of them negative, in a way that no tech company had been in prior years. Finally, as cyber becomes more prominent in people's lives, so do concerns about it, and 2019 was a kind of watershed year in which those concerns were suddenly addressed more often and in more contexts. Importantly, for example, the U.S. Congress got more involved than it had been before in beginning to hold tech companies accountable for possible invasions of customers' privacy. In addition, cyber threats from foreign adversaries – especially the Russians, Chinese, and Iranians – continued to be important parts of the news about cyber. And as the country came out of one presidential election tainted by cyber hacking and prepared to embark on another that many feared would be plagued by similar or worse meddling, news organizations were covering these cyber stories from a variety of angles.

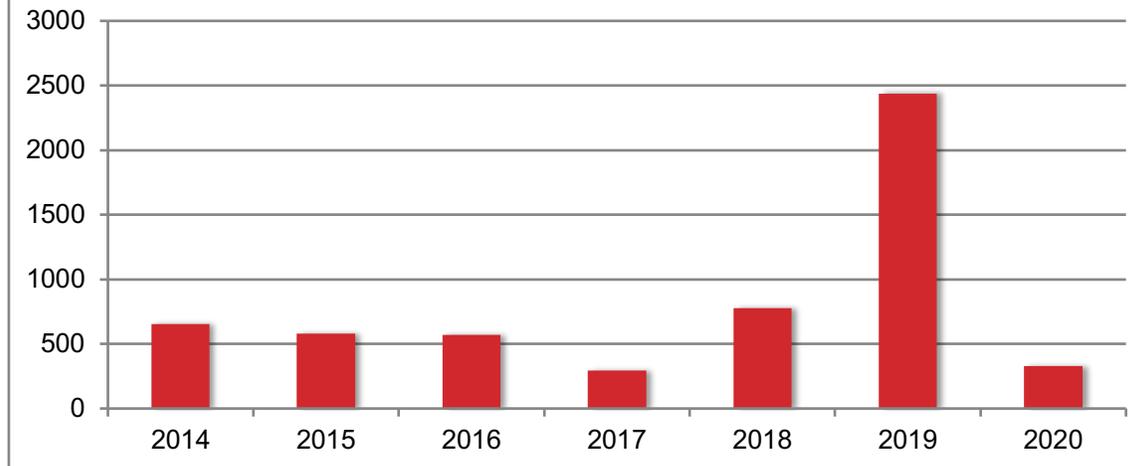
Yet in 2020 we see a dramatic reversal in this multi-year trend, as news about cyber dropped off the news agenda by 87 percent. One reason for this is obvious: "2020" became a meme unto itself for a reason, after all. Even just in the first six months covered in this study the United States alone saw the following major, historic stories dominate headlines: only the third impeachment of a president by the House of Representatives in U.S. history; a global viral pandemic the likes of which hadn't been seen in a century; the COVID-related crash in the global economy and stock markets; massive social unrest and a collective and long-overdue reckoning on race in America following the brutal – and in some cases recorded – abuse and killings of African Americans by white vigilantes in Georgia and police officers in other cities; and the Democratic Party primaries and beginning of the presidential election season, just to name a few things. These issues not only dominated the attention of news organizations, they also understandably became the focus of other institutions who make the news, including news about cyber, such as Congress, The White House, and even in many ways the tech industry itself. In this environment, cyber issues simply got squeezed out of the news hole.

A second and somewhat related reason for the sharp decline in coverage in 2020, at least for cable news, has to do with shifting formats in the evening newscasts. Both CNN and FNC's programming during this time slot have gradually evolved into more panel-oriented discussions about the news, pegged to a few major stories, rather than a menu of the many newsworthy items from the day. This was exacerbated early in the COVID storyline when the

White House had Trump giving long daily briefings, often during this time slot, that also ate up time that might have been devoted to other stories.

Clearly (or at least, hopefully) 2020 will be an outlier, and the world will return to “normal” in coming years. Should this happen, we would expect to see a return to the earlier trend of cyber stories occupying an increasingly central place on the mainstream news agenda.

Figure 1: Total Cyber-Related Stories Coded By Year, Print & Broadcast News*



**New York Times*, *Washington Post*, CBS Evening News, CNN “The Situation Room,” and Fox News “Special Report”

The latest period studied showed some consistencies in the types of cyber-related stories in the news, but also some dramatic changes. The most significant shift, which is most evident in newspaper coverage, saw news about the tech industry itself become more central to the overall media diet (Table 1). Whereas in past years, hacking and cyberattacks dominated the top spots in the list of most commonly covered stories about cyber in mainstream news, in 2019 and 2020 newspapers were most likely to cover stories about the business side of the tech industry (e.g., mergers and acquisitions, labor issues, etc.), tech products, and privacy issues related to tech companies and their customers. Even the fifth most commonly covered topic, “legislation/policy,” was primarily about Congress and other state, federal, and international government bodies wrangling with the industry and its growing influence and challenges.

On the broadcast news side, things looked roughly similar to earlier years, with stories about hacks, surveillance, and cybersecurity dominating coverage. Here, too, though, technology’s imposition on individual privacy occupied one of the top spots in coverage. In a sign of the kinds of threats the U.S faces from abroad, and the nature of its own methods of

addressing those threats, cyberwarfare also received a great deal of coverage during this period.

Table 1: Most Common Main Subject in Cyber Stories, Print and Broadcast News

Newspaper Main Topics	Broadcaster Main Topics
Business (14.9%)	Cyber Attack/Hacking (22.6%)
Technology (12.8%)	Surveillance (19.4%)
Privacy Issues vs. Tech (12.5%)	Privacy Issues vs. Tech (14.5%)
Cyber Attack/Hacking (10.8%)	Govt. Cyber Security (11.3%)
Legislation/Policy (10.6%)	Cyberwarfare (11.3%)

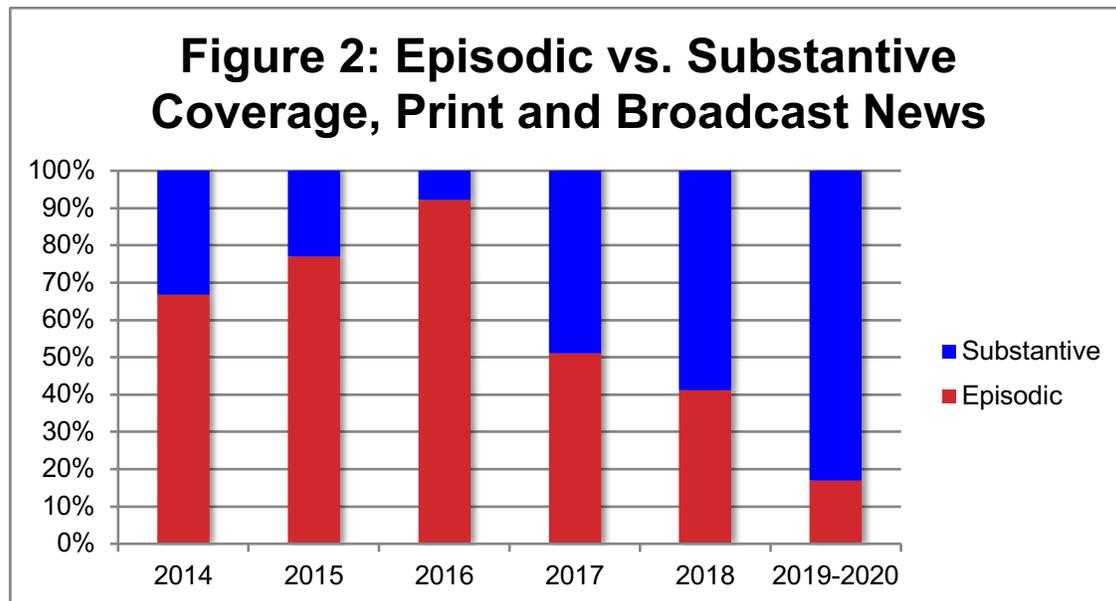
One of the consistent findings in decades of research on mainstream news coverage is that the press tends to cover virtually every type of story in an episodic, sometimes even superficial manner. This has been shown to be especially true for broadcast news, mostly because of its smaller news hole and other medium-specific demands. The three reports that comprise this project have shown something different, however. Beginning in 2017, news organizations began increasing the amount of more thematic, or substantive, coverage of the various topics that fall under the broad cyber umbrella. This trend continued dramatically in the 2019-2020 period (Figure 2), with 83 percent of cyber-related stories taking a more in-depth look at the complex issues being covered. This compares with about 59 percent in 2018 and about 49 percent in 2017, and the low water mark of about 8 percent in 2016.

This matters for a few reasons. First, it means that audiences are getting thorough, thoughtful coverage of stories that are too complicated for more typical episodic framing. The news media don't always do this with complex stories – as already mentioned, in fact they rarely do – but in this case they are. This isn't to imply that each story, or even the typical story, about cyber is a long, *New York Times Magazine* or "60 Minutes" style expose. In fact, the vast majority are normal in length. The difference is simply *how* they are being told: by discussing causes and implications, and even possible solutions where relevant. Second, research shows that episodic stories tend to decrease government or societal accountability for political and social challenges, leading audiences to be more likely to put the onus on individuals for causing and solving these problems. By contrast, more substantively, or thematically, framed stories tend to have the opposite effect and lead audiences to think about the role of society, government, and other institutions in addressing issues. Given the complexity of most cyber issues, this seems ideal. Finally, this appears to be a new and universal norm in coverage of cyber, as evidenced by the fact that in broadcast news, which as already mentioned are usually even more episodic in their coverage than newspapers, about 70 percent of stories were substantively framed, not much different than the roughly 80 percent of print news stories.

It's difficult to know for sure what accounts for this positive trend. It could be that as cyber has become a more important story across a number of different topic areas, reporters on the various relevant beats are becoming more informed about the issue and that is showing in their coverage. Previous research on news coverage shows that when reporters with less

experience with a topic (e.g., general assignment reporters covering social protests) are assigned stories about it, they tend to file more superficial stories. By contrast, beat reporters develop expertise in their assigned area through a variety of means (including attending informative workshops like those sponsored by Hewlett), and this is reflected in their coverage. A second explanation could be that news organizations are adding cyber-specific beats, which would also be expected to lead to an increase in both amount and depth of coverage.

Figure 2: Episodic vs. Substantive Coverage, Print and Broadcast News



The Players in the Cyber Story

Who gets to tell our stories has a lot to say about how we as a society understand them. Sociologists and others who study news work and content have shown consistently over the years that mainstream news is largely source-driven, with reporters across a variety of beats and story types being especially dependent on elite sources such as government and law enforcement officials and experts at think tanks, universities, foundations, and the like. This project's three reports on coverage of cyber issues has shown the same patterns. The 2019-2020 period mostly just shifted the relative position of the most common sources to be quoted in stories, rather than dramatically changing who those individuals were (Table 2). Experts and advocates were in the top spot as they often have been, though they were relied on far more than they had been in the past. Although the last report showed corporate officials being quoted often, in the current period they moved back to 2017 levels at around 18 percent of overall quotes. This reflects the aforementioned increase in industry-related stories. Members of Congress also were frequently quoted during this period, as they were in previous years.

There are two major differences between the 2019-2020 years and those before, though. First, the President was rarely directly quoted in cyber stories during this period (only about 1 percent of the total quotes). As mentioned above, this was a particularly eventful time, especially for President Trump, and his attention was no doubt often elsewhere. Still, it's an interesting footnote that perhaps the most ubiquitously loquacious president in modern times (and one tied to one of the major hacking scandals in recent elections), a man who would sometimes tweet more than 200 times a day and thus injected himself into the news stream even more often than a typical president would, did not end up having his voice heard in (or, having much to say about) stories about cyber. The second, and perhaps more important, difference from earlier studies is that citizens were quoted far more than they had been before. In some ways this may reflect the increasing substantive coverage of cyber. Studies show that superficial and episodic coverage is especially driven by elite and official sources, but when reporters go deeper they often branch out and find a more diverse array of people to quote. Another explanation is no doubt that the emphasis on technology as a product and as a possible invasion of individual privacy led reporters to seek out more users and customers.

Table 2: Most Frequently Quoted Sources, All Stories 2019-2020

Source	Percentage of Total Quotes
Expert/Advocate	40.8%
Corporate Official	17.8%
Member of Congress	12.6%
Citizen	9.2%
Executive Agency Official and State & Local Official (tie)	5.9%

One of the aspects of coverage we've been tracking in this series of reports is who gets framed as a "villain" in cyber stories. Clearly not every story has a villain, but many do. Part of this reflects the fact that the types of stories that dominated coverage were often negative: invasion of privacy, hacking, cyberwarfare, surveillance, etc. Part of it is also the nature of news to focus on conflict, and to even have a negativity bias, as many studies have shown. Regardless, analysis of "villains" fleshes out some of the empirical data discussed already. For instance, it tells us something about who America's main adversaries are: China (11.6 percent) and Russia (9.5 percent) continued to be among the most commonly framed "bad guys" in cyber coverage, as they have been shown to be in earlier reports. Similarly, hackers were once again prominently featured as villains (13.6 percent). In this time period, though, the U.S. government, in its various incarnations (federal agencies, state and local governments, etc.) was the second most commonly identified villain (14.4 percent). Finally, in another indication of the dominance of industry-related stories in 2019-2020, technology corporations themselves were by far the most common offender in cyber stories (35.3 percent).

In part because of the increase in attention to Silicon Valley and the broader technology industry, including in terms of legislation and policy, and perhaps because of the impending U.S. presidential election, the percentage of domestic cyber stories rose back to pre-2018 levels. Whereas in that earlier period the percentage of U.S.-centric stories had dropped year over year from about three-quarters to about 65 percent, in the 2019-2020 period that rose back to about 80 percent. At the same time, stories related to China (3.8 percent) cracked the top five locations, and those coming out of Europe (5.2 percent) rose over previous years, reflecting the EU's increasing scrutiny of Big Tech's potential privacy and anti-trust issues.

CONCLUSIONS

Cyber, in all its myriad forms, has become an integral part of virtually every aspect of people's lives as we head into the third decade of the 21st Century. News media attention to these issues reflects this pervasiveness, as coverage has steadily increased since this project began in 2014, with the exception of 2020 when other once in a generation – or even once in a lifetime – stories crowded out those about cyber. Still, in 2019 mainstream news organization devoted much more attention to cyber than they had in previous years, and across a greater diversity of topics.

Perhaps the most significant trend these past three reports have documented is the dramatic increase in the proportion of stories about cyber that are given in-depth treatment in the press. This is a decidedly positive trend, not least because it signals that news organizations recognize both the complexity and the importance of the stories and are willing to find ways to explain them better to their audiences. It also shows that reporters are becoming well-versed in the nuances and complicated details of the stories. Given the significance of most of these cyber issues to people's lives, whether it be their personal privacy or national security, this is a good sign.

We also see this somewhat in the relative broadening of sources reporters quote in their stories. Granted, there is a lot of consistency in these data over the years. Still, this report showed citizens finally breaking into the conversation in a way they hadn't in the past. Given the nature of the topics in the news this cycle, many of which had to do with privacy and surveillance, this is a welcome change.

Still, the more things change the more they stay the same. Coverage of cyber still focuses a lot of attention on hacks and cybersecurity issues, especially related to government, be it America or other nations. Experts dominate sourcing, and most mainstream coverage is U.S.-centric. The primary "villains" in coverage are America's main foreign adversaries, China and Russia, and hackers more generally.

Coverage of cyber issues dropped off the news agenda precipitously in 2020 as other issues crowded them out. Going forward, it will be interesting to see if this is a one-off blip and coverage returns to its previous trends, or not. In particular, how the evening newscasts on cable cover these issues in the future, given formats increasingly devoted to discussion and, on Fox News especially given changes announced and evidenced in the first month of 2021, more partisan news, is an open question. One interesting and refreshing aspect of many cyber stories so far, with some obvious exceptions, has been that they haven't necessarily fallen into traditional or obvious partisan framing. In theory, this not only decreases the likelihood of more

superficial “he said-she said” reporting, it might also create the opportunity for more cooperative, bipartisan, and less polarizing approaches to addressing the many challenges posed by cyber.

APPENDIX 1: METHODOLOGY

The main thrust of this study involved an analysis of the *New York Times*, *Washington Post*, CBS Evening News, CNN’s “Situation Room,” and Fox News Channel’s “Special Report” from 2019 through the first half of 2020. Newspapers were selected based on their well-established prominence within the industry, tendency to set the agenda for other media, and findings in previous studies that regional papers did not cover cyber much at all, and when they did it was usually through the reporting of these news organizations or wire services. Because for each of the years studied the number of stories about cyber-related topics went into the low five figures, it was impossible to conduct a census of all stories and thus we sampled every third article retrieved for each news organization from databases such as Lexis-Nexis and ProQuest, and from Google searches.

Before coding began, a team of graduate student coders was trained to understand the variables of interest based on detailed coding guidelines devised by the Principal Investigator (available upon request). Coders then practiced on a set of stories not included in the sample that would ultimately be used for the study, in order to establish acceptable levels of inter-coder reliability before actual coding began. Once all coders reached acceptable levels of inter-coder reliability, the team began coding the articles in the sample drawn for the study.