The Digital Public Square: Understanding the Dynamics of Data, Platforms, and News

Thomas Edward Glaisyer

Submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

under the Executive Committee

of the Graduate School of Arts and Sciences

COLUMBIA UNIVERSITY

2019

ABSTRACT

The Digital Public Square:

Understanding the Dynamics of Data, Platforms, and News

Thomas Edward Glaisyer

This dissertation examines the nature of the American digital public square in the 2010's, a place where people learn about and come together to discuss matters of public concern. The newly digital public square is a key component of any functional democracy in the twenty-first century. The dissertation seeks to shed light, not only on the capacities of today's news media institutions to produce and efficaciously distribute news and information and support a capacity for discussion and deliberation that provides a "public intelligence" on matters of concern, but also on the newly enlarged role of the public in new rituals of digestion of such news.

The work draws upon multiple systems-focused analyses of the public square, interviews, and analyses of news production, the economics and dynamics facing those who both produce and distribute news, and the broader literature about and studies of the public square.

Despite the manifest uncertainty regarding how journalism will be supported and the success of a politics where rhetoric is often untethered to the truth, a temptation still exists to see the changes to the public square in a piecemeal fashion and to assume the institutions, business models, and practices of the future will be minor modifications on or variations of the past. Much scholarship concludes that the patterns of decay and growth in this area will eventually generate equilibria in terms of press freedom, news production, news distribution, and engagement that are familiar, no less efficacious than, and only marginally distinct from those of the latter half of the twentieth century. In his book *The Marketplace of Attention*, Professor James Webster concludes that "the cultural ballast provided by the old media will remain with us," and that

polarizing forces will meet their match with the forces that concentrate public attention (Webster 2016).

In contrast, this dissertation argues that the combination of forces acting upon the digital public square and its emergent dynamics in the late 2010s means it is already functioning in a qualitatively different manner than the largely analogue public square of the past and, as structured, it is increasingly failing to serve individuals, groups, communities, the public writ large, and most importantly our democratic processes. This argument is built on insights from my nearly a decade of work in the media reform community—specifically, from three systems analyses I developed leading the Public Square Program at the Democracy Fund of the dynamics surrounding civic engagement and the production of local news, the dynamics of audience attention, and public trust and press freedom. After making the case for the difference that already exists, the dissertation argues that, without engagement of a wide range of actors (civic, political, and commercial) in support of much-needed changes to institutions, along with policies that will support a renewal of civic media and a focus on new practices more appropriate for the rituals of the digitally and data-infused world we live in, it is entirely possible the public square will fail to adequately support democratic ends. The dissertation concludes with recommendations to avoid this outcome.

TABLE OF CONTENTS

LIST OF CHARTS, GRAPHS, ILLUSTRATIONS

ACKNOWLEDGMENTS

That said, it has been the support, counsel and often forbearance of my partner in life and everything else, Eloise Pasachoff, that has permitted me to undertake the journey that resulted in this dissertation. The time I've needed has taken me away from family responsibilities and required her to shoulder far more responsibility than is fair. I am glad to be writing these acknowledgements as it indicates not only the end of this piece of work, but the beginning of a new phase in my life with more time for Eloise as well as for our children, Sam (aged 10) and Jessica (aged 6), both of whom haven't known life without "Daddy's dissertation." Sam and Jessica, thank you for your patience too.

All that's left to say to the many colleagues and interlocutors I've neglected to mention is this: Thank you for making this a better piece of work. All weaknesses are mine. Any strengths are a result of the insight that you've given me.

DEDICATION

To Sam and Jessica

Plus est en vous

Long may you live in a democratic society

PREFACE: DIGITIZATION OF THE PUBLIC SQUARE AND JAMES W. CAREY

This dissertation is a response to a question I've been wrestling with since 2005, as a midcareer master's degree student at Columbia University's School of International and Public Affairs. That year, after more than a decade as an engineer-turned-management-consultant focused on technology and change, I wrote several term papers that, from my current vantage point, rather naively described some possible implications of the democratization of our news media and public square by virtue of the adoption of what I then termed "social computing technology." It was the height of the blogosphere; Facebook had just taken off; LinkedIn was new; RSS feeds were in fashion. In my naiveté, I assumed (alongside other techno-utopians, such as John Perry Barlow, Howard Rheingold, Stewart Brand; many in the tech sector; and scholars such as legal scholar Yochai Benkler, Journalism Professor Clay Shirky, and techno-sociologist scholar Zeynep Tufekci[1]) that the use of such tools would qualitatively and unambiguously improve our public life and, in so doing, would not only become crucial to a richer democratic life but would prevent such acts as mass atrocities (Glaisyer 2005).[2]

---

[1] John Perry Barlow famously crafted the Declaration of the Independence of Cyberspace (Barlow 1999). Tufekci who focused on the social implications of such technologies in a recent article offering her perspective on their impact, reflected recently that in a talk in 2012 that she "shared in the optimism. I myself hailed from the Middle East and had been watching dissidents use digital tools to challenge government after government" (Tufekci 2018). No less optimistic about the nature of the internet was Benkler, who said in his 2006 *Wealth of Networks* that part of the purpose of his book was "to render the optimism about the democratic advantages of the networked public sphere a fully specified argument" (Benkler 2003, 11).

[2] In my defense, optimism at the beginning of periods of technological change isn't a new phenomenon (Segal 1985). The noted scholar and techno-optimist Marshall McLuhan was similarly convinced in 1960 with respect to an earlier age. In a lecture to the Third Annual Conference on the Humanities that ended, "If the exercise and exchange of inexhaustible knowledge raises the quality of man, then in the electric age he will have his first universal opportunity to be richly human" (McLuhan Ortved and Staines 2003, 33).

Soon after I finished my master's degree, however, and began work helping nonprofits in Washington, D.C., understand the then-new social media landscape, I realized I knew little about how such technological transitions occur broadly in society. In my previous career in engineering, I had seen the digitization of manufacturing change not only what could be produced but also how it was produced. My immediately pre–graduate school consulting work in the private sector assisting large organizations to manage the vast and often wrenching changes resulting from the deployment of large-scale and very sophisticated administrative systems also turned out to be helpful. It left me willing to accept that the nature of the public square would likely be very different than before, but it gave me little insight into *how* it would be different. As I sought to understand and explain the overlapping logics of the newly digital public square, I recognized that social scientists, legal scholars, economists, and historians of communications, as well as scholars of science and technology studies, could teach me a lot. I therefore returned to Columbia as a PhD student in the Graduate School of Journalism to interrogate the issues further.

In 2007, I first encountered the writings of James Carey. I was struck by his account of how the advent of the locomotive accelerated the speed at which news traveled, and how the advent of the telegraph changed the nature of the news altogether, because, (he argued) its travel was no longer limited by the speed at which one can move a physical object (Carey 1989, 203).[3]

---

[3] Enamored as I am of Carey's insights, he is faulted for being overly simplistic and perhaps inaccurate as news began to travel faster than a physical object earlier in history with the appearance of the optical telegraph in France (John 2015). It is also worth noting that the notion of a single technologically determined logic of the telegraph also misreads history. The deployment of the telegraph in the United States played out the way it did as a result of the interplay of the technology with politics and culture and it wasn't for several decades that the public writ large experienced its benefits directly (Hochfelder 2012, 32–73; John 2015, 6).

This insight and another of Carey's insights with respect to communication as ritual (and how we should be attentive to those rituals as we seek to understand our digital public square) have animated much of my thinking since then.

In some sense, the dynamics I envisaged in 2005 came to pass quite quickly. Social media were seen as empowering, especially for young people—for example, in the 2008 U.S. election, they appeared to facilitate the election to the presidency of a candidate initially disfavored in his party.[4] Two years later, in the Arab Spring of 2010, crowds empowered by the fusion of internet connectivity and more traditional broadcast media grasped for power in the Middle East and North Africa (Howard and Hussain 2013). That same year, however, I hypothesized in a chapter I wrote for a handbook on digital activism that, although I'd argued in that first master's term paper that these tools might empower citizens and strengthen democracy, they would not universally do so, and they might, in fact, empower repression instead (Glaisyer 2010). Events subsequently unfolding in many Middle Eastern countries in 2012 seemed to suggest my newer caution was valid.

This dissertation is a further meditation on these themes in the context of the digital public square inside the United States in the mid-2010s. It takes insight gained from the privileged positions I've held, first as a Knight Media Fellow at New America, a think tank headquartered in Washington, D.C., where I was a Knight Media Policy Fellow between 2009

---

[4] The same may be said of the election of President Donald Trump in 2016 though that may have come about as much from the successful orchestration of public attention by the candidate's campaign as the mis-use of the new communications infrastructure by foreign actors on his behalf who gamed the algorithms of our digital public square.

and 2012, and since 2012 as a program director and, later, a managing director at the Democracy Fund, a foundation dedicated to strengthening and supporting a healthy democracy within the United States.[5] These roles have given me a bird's eye view into the changes underway in a newly digitized, data-infused, and (currently) surveillance-economics-centric public square.

The argument I advance is informed by a number of "*Information Needs of Communities*" cases studies of media in several cities I managed at New America and several systems analyses of the dynamics facing the public square undertaken at the Democracy Fund. It is supplemented by interviews of experts from the field of news and information. Crucially, it applies a systems approach, echoing Carey's own dissertation, to understanding how the digital public square is changing and may continue to change in the future and the challenges the changes present (Pooley 2016). The work concludes with my prescriptions for those involved in leading the institutions that play a role in meeting the news and civic information needs of the American public and its democracy as well as those setting policy in that realm.

Completing the final draft of this dissertation in the summer of 2018 has felt particularly challenging. President Donald J. Trump's rhetoric vis-à-vis the press as "an enemy of the people" and "fake news" forms an auditory backdrop (Grynbaum 2017).[6] The tweets, a daily

---

[5] The scope of any such project in the field of democratic reform can be expansive. The Democracy Fund identified six principles around which it orients its work: (1) The dignity of all individuals and the equal protection of their rights under the law. (2) Voting. (3) Constitutional checks and balances and respect for the rule of law. (4) A participatory, vibrant public square, including an independent, free press. (5) Informed dialogue and principled compromise. 6. Political leaders and elected officials who act with integrity (Democracy Fund 2018). The scope of my work and this study is been focused on (4).

[6] I will also note that this is far from the first time that a President has found the practices press less than satisfactory. President Thomas Jefferson, an early supporter of the press who

reminder that powerful political actors have newfound and unmediated access to the public

(Johnson and Gold 2017); and alarm bells have to be raised by the emergence of data about the

infusion of news into our media diets biased by bots, influenced without transparency from

abroad, that seek to influence algorithms, sometimes aided by companies using proprietary

methods of "psychographic analysis" of data.[7] Furthermore, the myriad of scandals and the

pressures on Congress and the courts to defend democratic norms seem to sharpen the need to

understand our public square. Understanding the adequacy of the supervising intelligence of the

press, as Nerone might call it, or whether the monitorial citizen is adequately informed, as

Schudson might ask, has felt more topical than it has in the past.

Without giving too much away in these early pages, I hope you find the analysis, much of

it carried out well before 2016, persuasive and explicative of the most important dynamics facing

our public square—dynamics that are the result of multiple processes, many of which have been

occurring over decades. That said, I must state I find it difficult to underestimate the challenges

---

became less satisfied when he was its target regarding his relationship with Sally Hemmings
(Daly 2012, 76–77) wrote in correspondence:

> "Nothing can now be believed which is seen in a newspaper. Truth itself becomes
> suspicious by being put into that polluted vehicle…. I will add, that the man who never
> looks into a newspaper is better informed than he who reads them; inasmuch as he who
> knows nothing is nearer to truth than he whose mind is filled with falsehoods & errors….
> Perhaps an editor might begin a reformation in some such way as this. Divide his paper
> into 4 chapters, heading the 1st, Truths. 2nd, Probabilities. 3rd, Possibilities. 4th, Lies.
> The first chapter would be very short." Jefferson quoted in (Daly 2012, 78)

[7] Although it is unclear at this point whether the proprietary techniques deployed by
Cambridge Analytica were of more consequence than less novel exploits of the social media
platforms, the activity of foreign organizations in purchasing advertisements or managing large
sets of automated accounts is well documented (Kim et al. 2018).

we're facing vis-à-vis maintaining a minimally viable space for open consideration of the sorts of

political questions or policy challenges that need to be addressed by any country in the early

twenty-first century.

That I may be overtaken by new practices, technologies, and economics is something I

have sought to wrestle with in my analysis. The seeming fragility of our political system has also

loomed large.[8] If this dissertation provides insights to others toiling to understand and perhaps

also strengthen our public square, it will have done its job. I must leave it to the reader (and

history), however, to judge whether in my analysis I am too critical of the current weaknesses of

our public square or too modest in my prescriptions for future action.

---

[8] Authors such as Professor Tim Snyder and former Secretary of State Madeline Albright have recently published books that ask us to take lessons from current and prior ages in which democratic political order was imperiled (Snyder 2017; Albright 2018). The rise of populist leaders abroad could also suggest that, in some sense, the current configuration of factors is not unique to the United States (Inglehart and Norris 2016). Masha Gessen's recounting of the collapse of what passed for an open politics in Russia since 1990s and the parallels that can be drawn from it to the state of politics in the United States only gives further pause (Gessen 2017)

Chapter 1: Instability in the Digital Public Square

Our Republic and its press will rise or fall together. An able, disinterested, public-spirited press, with trained intelligence to know the right and courage to do it, can preserve that public virtue without which popular government is a sham and a mockery.

—Joseph Pulitzer

Joseph Pulitzer, a publisher not known to shy away from a dramatic, provocative headline when he could construct one, strongly believed in and often proclaimed the contribution a robust press, resilient in the face of criticism and holding broad credibility and social authority, makes to America. As Julia Guarneri has documented, the newspapers in cities around the country at the turn of the century were beacons of a new urban America (Guarneri 2017, 14) The press was just that in Pulitzer's day—news distributed in paper form after being printed by mechanical devices that used movable type technology—and although we are in a different age with a news environment facilitated by many more technologies, Pulitzer's claim is one I take at face value: the American republic, and the democracy that underpins it, requires such an institution, and its continued existence in the modern public square is not one that can be taken for granted.

This study is not unambitious. It seeks to interrogate the nature of the modern digital public square, a place where people can learn about and, if they feel so moved, come together to vigorously debate matters of public concern. Key to this interrogation is shedding some light on the capacities of today's press to serve up raw material for such discussions.

The term "press," however, is far from adequate as a starting point for an analysis of the role of news and information in sustaining democratic institutions and practices in the second decade of the twenty-first century. The press of the eighteenth century, though considered an

institution, was hardly autonomous, organized, or expert in the way we think of the news media today (Clark 2006). The public square contains a broad array of institutions that are broadly understood to be, in aggregate, the news media. Not only does the term Pulitzer uses seem anachronistic today, when most people get their news from electronic devices; his paean to the press as an institution fails to explain how its "trained intelligence" preserves "the public virtue" (Barthel et al. 2015).

A more sophisticated hypothesis about the role of the news, information, and public engagement (outside of voting in elections) in modern-day U.S. democracy is necessary if we are to understand and evaluate critically its efficacy in an ever more digitized public sphere. For this I turn to James Carey's admonition that

> Republics require conversation, often cacophonous conversation, for they should be noisy places. That conversation has to be informed, of course, and the press has a role in supplying that information. But the kind of information required can be generated only by public conversation; there is simply no substitute for it. We have virtually no idea what it is we need to know until we start talking to someone. Conversation focuses our attention, it engages us . . . The task of the press is to encourage the conversation of the culture, not to preempt it or substitute for it or supply it with information as a seer from afar.
>
> (Munson and Warren 1997, 219)

The practices, processes, and infrastructure – and the policies that shape all three – support the ability of the public to engage in necessarily cacophonous conversation are the focus of this research.

Assembling this analysis in the aftermath of the 2016 election cycle, which was the most expensive federal election season ever, illustrates only more acutely the weaknesses in the public square, since elections are times when the news media are assumed to play an influential

investigative role (Parnes and Cirilli 2015; Center for Responsive Politics 2018). Theoretically investigation spurs dialogue, dialogue leads to action, most saliently voting. Yet, of the 435 voting congressional representatives up for reelection in the House of Representatives, 377 were considered safe, unlikely to be dislodged in the absence of multiple localized political earthquakes that were as likely as black swan events (Cook Political Report 2016). Of course, a host of factors has led to this stability in representation; it is not, however, unreasonable to assume that, should the press have provided more reporting, not all of those on track for near certain reelection would have attained it. There are of course many factors – gerrymandering is one oft cited – and it is but one data point, but the inefficacy of journalism in a public square where audience attention is both fragmented and distracted and thoroughly infused with paid-for messages must raise questions.[9]

Paradoxically, several among the more numerous than usual candidates for the presidential nomination were considered unlikely as general election victors, or even as nominees of parties of which they were not members or had only recently joined. They were seemingly viable because the increasingly social-media-centric digital public square rewarded celebrity, bluster, and appeals to extremes. Journalism, though it produced many exposes and opinion pages that concluded almost unanimously that one presidential candidate was unqualified, was ignored by many voters (Arrieta-Kenna 2016; Master 2016).

These facts point to the possibility that, in some complicated way, the press, or—as more properly identified today—the institutions of the digital public square, are failing democracy.

---

[9] I address this later in the study, but I will note that I see value in journalism stemming from robust reporting providing accountability through investigation and mobilization as well as via informing the public (Schudson 2008, 11–26)

How can candidates for national office sustain themselves when their chances of prevailing in a general election are close to zero (Confessore and Yourish 2016)? How can so few candidates have a chance of unseating congressional incumbents in a general election, despite a widespread lack of trust in Congress?[10] Have we entered an environment in which media are unable to take aspiring political elites or actual governing elites to task effectively?

To claim to understand the contours of the digital public square in 2017 requires significant argumentation. Though I conclude this study pessimistically, it did not start out seeking to pin a utopian or dystopian label on the future of the digital public square, but rather to shed light on the crucial dynamics that affect the distribution of news, the production of news, and the digestion by the public of that news and information.[11] We must consider all three if we are to understand how to strengthen the institutions of the news media, their practices, and the policies that will best underpin the news ecosystem.

The argument presented here is that despite competition between commercial outlets continuing to be a factor the pressures now faced by the news media institutions are fundamentally different from those with which they contended in the early twentieth century.

---

[10] According to the Gallup Organization, trust in Congress has hovered around 10 percent for the last eight years, after falling gradually from 42 percent in 1973 (Gallup Inc. 2018).

[11] "Digestion" is a novel term to use to describe the activities of the "people formerly known as the audience" (as Jay Rosen proclaimed them) but I use it deliberately to mean the reception of, engagement with, and recirculation of news where engagement with news is often in some sense generative (Rosen 2006a). An alternative term "consumption" seems ill fitting for a public good and merely using "reception" seems inadequate in the modern context where engagement with news is often generative and its consumers are now so much more a part of the news process than they used to be.

The context Pulitzer was operating within was one in which advertising revenue grew twenty-six fold between 1880 and 1910 (Guarneri 2017, 19). Cutthroat competition among papers for readers existed with papers using advertising gimmicks and seeking readership through scoops and printing dramatized stories over multiple days (Guarneri 2017, 24–26).[12]

In contrast, over the last decade, advertising revenue for print publications has shrunk precipitously, and online advertising dollars do not reward the outlet as print dollars did. The norms and practices news professionals have long held to sustain legitimacy, many of which emerged in the early twentieth century, now appear far from adequate. Audience relationships are frayed, and public trust in news institutions is at a historic low (Gallup Inc. 2015; Feldman 2016). Moreover, the statutory environment in which news producers and distributors operate is ill-suited to modern technology having been designed for a telephone era of a prior century and for the most part analog broadcasting of radio and television updated last by the Telecommunications Act passed in 1996. The regulatory enforcement is seemingly motivated by a desire to un-enforce regulations and the principle of economic efficiency trumps that of localism and the public's interests in having a healthy public square.[13] These pressures collectively create a set of dynamics that will require news institutions to seek strength from

---

[12] It is worth noting that during that period, as Guarneri informs us, newspapers were central to the development of urban life and in some sense, a symbiotic relationship also arguably existed between the paper and the growth of the department store not able to advertise daily the range of its wares. Moreover, as papers expanded and their prices were lowered, reading them became a more solitary activity and less intensive than it had been (Guarneri 2017, 34–35).

[13] The Ajit Pai led FCC has since his appointment in 2017 has rolled back net neutrality rules and media ownership regulation among a number of other deregulatory efforts and has focused on privileging economic analysis in its decisions (Shernstein and Yerardi 2018; B. Fung 2017; Pai 2017).

different practices and to follow a model that relies increasingly on collaboration among organizations. The funding of news institutions by advertisers is unlikely to continue at past levels (Newspaper Association of America 2014), and new sources of funds to produce the necessary news information and legitimacy will be required to sustain a public square that supports democratic engagement.

Moreover, the current environment is far from stable, and the outcome—the nature of the media institutions and the public square that will exist in the future—is far from preordained.

The press in early American democracy

The newspaper media, once the only manifestation of "the press," of course emerged centuries before internet connectivity and has only recently utilized the technologies described above. Early newspaper cultures developed within state-sanctioned printing monopolies in Europe. In what were then the British colonies, its birth is arguably mistakenly dated to the publication by the now notorious Benjamin Harris in Boston of a single issue of "Publick Occurences both Forreign and Domestick." Aspiring publisher as he may have been, he had failed to get permission to publish from the Crown and in including a short story concerning the French King's infidelity and another concerning a native tribe allied with British authorities he ran afoul of official authorities and was swiftly banned (Daly 2012, 26; Nerone 2015, 30–31). The next publication called the "Boston News-Letter" was established in 1704; but the press only came into its own in the run up to and aftermath of American independence (Daly 2012, 28–49). Importantly, the Bill of Rights included an amendment, ultimately enshrined in the Constitution as the 1st Amendment, that included 'Congress shall make no law... abridging the freedom of

speech, or of the press,' a phrase that is now seen as the charter for the practice of journalism in modern America.[14]

American democracy and the role of the press in it is not new to criticism. The significant role of the news media has been dissected since the founding of the republic. In fact, in *Democracy in America*, Alexis de Tocqueville wrote that "the influence of the liberty of the press does not affect political opinions alone, but it extends to all the opinions of men, and it modifies customs as well as laws" (Tocqueville 1835, 140). Though Tocqueville himself did "not entertain [a] firm and complete attachment to the liberty of the press," he "approve[d] of it more from a recollection of the evils it prevents than from a consideration of the advantages it ensures" (Tocqueville 1835, 140). Yet even with such a mild endorsement, he further argues, "The liberty of the press is not merely a guarantee, but it is the only guarantee, of their liberty and their security which the citizens possess." His observation that "there is scarcely a hamlet which has not its own newspaper" (Tocqueville 1835, 144) is an inspiration for this study. Tocqueville himself read a lot into what he saw in his travels in America as he sought to support his aspirations for how governance should develop in France—undoubtedly he failed to appreciate the role the federal government played in setting the conditions for a healthy press or understand that despite the plethora of local papers they generally didn't contain much local

---

[14] Though the First Amendment is pointedly referred to today when attacks are levelled on the news media today it has to be recognized that at the time the First Amendment was ratified it the press though at a scale where it played an important role, it was nothing like the autonomous expert institution that we consider the modern press corps (Clark 2006). Moreover, the first cases litigated at the Supreme Court weren't until the First World War and the cases to which many hold up as enshrining the ideal of press freedom occurred only in the 1960's and 70's.

news—but the vibrant media environment he saw was vital to sustaining the still young experiment in democracy (John 1995, 37–42).[15]

The penny papers that were started in the 1830's signaled a move away from political patronage which had sustained earlier papers and towards a reliance on circulation revenue (Schudson 1981, 16–19) and often a tabloid or sensationalist style of reporting (Daly 2012, 90–91). The impact of the telegraph was felt early with a New York precursor to The Associated Press being formed in 1846 (Daly 2012, 107). The technological development and deployment of the steam powered press and the rotary press in the late 1830's and 1840's permitted a growth in circulation just as the building of roads, canals and railroads permitted faster distribution (Daly 2012, 114)

Over subsequent decades the practices of the journalist developed and its status began to attract college educated men to its ranks (Schudson 1981, 61–68). By the 1890's the style of reporting had become more focused on facts and science. This drive can be attributed partly the emergence of government collected data, the training of some prominent journalists in a scientific discipline and partly due to a desire to ground progressive reform on facts (Schudson 1981, 71–87).

By the twentieth century, the press had acquired the trappings of an independent industry. They began to become more skeptical in their approach to reporting following the emergence of

---

[15] Skocpol notes that Tocqueville himself had anti-statist purposes for writing Democracy in America so it is not surprising that his account of democracy stressed voluntary associations and failed to see the hand of the federal government in the structure of the local newspaper (Skocpol 1997).

propaganda around World War I and facing the newly minted profession of public relations agents (Schudson 1981, 121–44). On this basis, they produced news alongside advertisements that made these organizations for multiple decades ever-more profitable institutions.

Much important journalism occurred within organizations that would not have existed at the scale it did without the industry's commercial independence.[16] The interplay between this commercial success and appeals to freedom from government constraints reached their zenith in the important Pentagon Papers case.

Given we are entering a time in which the advertising model that has long been crucial to the support of ubiquitous news production has declined precipitously, after an increasingly healthy period from the end of the Second World War to 2005. Many newspapers are shadows of their former selves, with even the major paper in Philadelphia making a transition to nonprofit ownership (Picard 2015; Baughman 2015). Understanding the impact of this is central to what follows.

Of course, democracy in the early American Republic of Tocqueville's day, which he saw as resting on a level of social equality not present in aristocratic Europe, was far from a modern-day imagining of inclusive democratic ideals. Participation in democratic practices such as voting excluded many and had only just been extended beyond white male landowners, and the election existed as less a contest of ideas than an opportunity to offer filial support for one or more individuals already known to the voter (Schudson 1998). Even then, however, the

---

[16] The late Canadian scholar Harold Innis made an interesting argument that such commercial independence in the United States came from the 1st Amendment that he said "provided bulwarks for monopolies" (Innis quoted in Carey 1989, 163)

sustenance of a space for discussion of public matters was essential to creating a decentralized market in information across the country (John 1995, 37, 41).

Today, when the democratic franchise extends to all citizens over the age of eighteen, the digital public square in the United States must serve a much larger and more diverse population. Moreover, it must serve people who, though shown by Putnam to be more weakly connected through traditional civic institutions in recent decades than in the past, are far more aware of each other through their use of digital devices and social media feeds, and who filter their own and their friends' media consumption through social media and the use of personal mobile devices (Barthel et al. 2015; Putnam 2001). In short, characterizing the news media institutions and their role today in the digital public square requires more than making an argument about the nature of what might have been considered the press. Any understanding that does not consider the nature of the organizations and technologies of distribution and engagement and how they can be manipulated whilst ordinary citizens themselves edit, publish, and circulate news and commentary on that news is inadequate. And any discussion of the role of information in democracy needs to take a hard look at who serves as information gatekeepers when the monopolies of print and broadcast no longer ensure some form of quality control and culpability

The role of the public in the press

Only twenty-five years ago, the idea that a member of the public had any role to play in the production of news other than being quoted as a bystander would have been laughable. In today's world, in contrast, it is fair to say the unmediated bystander, witness, or polemicist has gained a place where his or her apparent authenticity has almost equal currency with a trusted and experienced reporter for covering breaking news of many types (Vis 2013). In war reporting, a bystander with a phone often permits a reporter unable to gain access to still report (Bennett 2013). Journalists receive guidance on how to use social media in the preparation, writing, and

promotion of stories (Tenore 2011). "Social media editor," a role that can consist for the most part of harvesting and republishing insights from the public, has become a common job title across many news media organizations (Willnat and Weaver 2014).

Moreover, circulation, once a straightforward, simple process in which the producer of the news content either published it in print on daily deadline or broadcast it via television, is now much more complex. Nowadays, circulation of news often happens as a result of almost constant interactions among the receiver of the news item, the item of news, and an algorithm that proposes stories to consumers to read or watch based on their past reading and watching preferences.[17] Sometimes this is aided by surveillance of individuals and their friends in a recursive loop (Matsa and Mitchell 2014), which occurs because Google and Facebook, the digital platforms used by a huge proportion of the American public, have emerged as (what I will term) digital observatories or panopticons of the public's moods, rhetoric, and actions. Unlike newspapers, these platforms have, until recently, disclaimed their editorial role; rather, they cast their powerful and sophisticated algorithms as neutral arbiters of simple relevance as they select what appears in our news streams (Barthel et al. 2015; Pasquale 2016). The designers employed by Google, Facebook, and Twitter in Silicon Valley, though slow to admit it, have embedded value judgments into the software code they have built, privileging some news items over others on our screens (Constine 2016; Facebook Help Center 2018).[18] These choices have a profound

---

[17] It is worth noting that the receiver may be a passive reader or a more motivated advocate or paid propogandist. Of course, distinguishing between receivers of information in the latter category may be very difficult and contested.

[18] Arguably their unwillingness to acknowledge the implications of their outsized role in the public dialogue around politics has meant they have been slow to respond to nefarious efforts to manipulate public opinion.

effect on what people see, read, and can act upon. Where they now admit their role as editors of what we see, the leaders of the platforms cling to the rhetoric of free expression and are loath to assume the responsibilities of the press (Zuckerberg 2016; Borchers 2017).

In such circumstances, against what yardstick can we measure the efficacy of the news media as a medium to inform or hold accountable and, more broadly, the digital public square and the health of contemporary civil society? As discussed below, the Habermasian public sphere and subsequent critiques provides a framework for analysis that serves as such a yardstick (Habermas 1991, 88).

The Public Sphere

The political theorist Jurgen Habermas conceived the term "public sphere" in *The Structural Transformation of the Public Sphere*. Building on an analysis of bourgeois life in England around 1750, Habermas argued that three elements were essential for a public sphere to exist: disregard for status; rational critical debate about something of "common concern"; and "inclusivity" (Habermas 1991, 36–37). He claimed, the public sphere existed in coffee houses and public houses of England, where areas of common concern *were* discussed and the discussion sustained through the media of small presses and literary salons (Habermas 1991, 51). Notwithstanding that the "public sphere" Habermas described might never have lived up to his ideals, his criteria for the idealized public sphere remain a useful tool (Dahlberg 2004).[19]

---

[19] There have been a number of critiques of Habermas' analysis many of which have been assembled by the scholar Craig Calhoun in his book *Habermas and the Public Sphere* (Calhoun 1993).

The Concern of this Study

The concern of this study, computer network–facilitated society of the twenty-first century, is obviously very different from the seventeenth- and eighteenth-century society on which Habermas based his conception of a limited bourgeois public sphere. The unfolding history of media of the early twenty-first century is coming to be seen as increasingly divergent from that of 1500 to 2000. The earlier period was a time when the printed word contained within the form of books gradually subsumed cultural practices centered on oral storytelling. During this era, described by Thomas Pettitt as "the Gutenberg parenthesis," the preeminent texts were authored by a very few (Pettitt 2010). Today new digital technology and mastery of data are emerging as the defining global influences. Uncertainty abounds regarding the effects of media on the public, and no one is ready to predict an end to the turmoil engendered by this massive increase in communicative capacity. Thus, this new era might at some point be remembered as "the digital tilde"—a moment when change and ambiguity, rather than stability, are the norm.[20]

The Future of the Press

The future digital public square, though not digitally determined—in the sense that the adoption of a technology is assumed to lead to a particular outcome—will be shaped over the next several decades by the further interplay of digital technology with the public and the institutions that make up what used to be called the press and is now more properly called the news media. Moreover, subjects of news can now publish directly be they politicians,

---

[20] I have chosen the word tilde as it refers to not only the Spanish accent when placed over the n, but is also known as the squiggly or twiddle and in some sense suggests the instability of media in this era.

organizations, or movements. The impact of this interplay on the production and distribution of the news and the influence of journalism will be significant.

The question here is not one of understanding a transition to a dominant new media institution that contains organizations, which within a category (such as newspapers or broadcast television channels) are broadly similar to each other; but, rather, of understanding the heterogeneous range of outlets that may combine elements of multiple mediums. Nor is it a question of understanding separately how news and information will be produced or how they will be distributed or how individuals will interact with the technology. The challenge is to synthesize an understanding of all of these. Doing so will answer whether our Internet-enabled digital public square is likely to provide for richer possibilities of productive democratic discourse or the reverse, and under what conditions it will do so; and, ultimately, these answers will provide a basis for normative judgments about important priorities for public policy, institutional design, and journalistic practice.

A Deweyan optimist might hope the new configuration emerging between journalism and a technologically enabled public sphere will bring the "great community" into focus (Dewey 1927). One with more Lippmanesque aspirations for the way our public sphere develops might hope any reconfiguration of organizations and the news professions will favor specialization and permit political observatories of higher expertise to come properly to fruition. The intention in this analysis is not to privilege Dewey's or Lippman's normative preferences above one another, however. It is to interrogate the digital public square and its institutions, policies, and practices

with respect to several of the functions journalism can play in society, as identified by Michael Schudson(Schudson 2008).[21]

Schudson argues that democracy relies on citizens having been provided with sufficient expert information to fulfill capably a "monitorial obligation" to scan for information upon which they may act (Schudson 1998). This study aims to determine how Schudson's idealized monitorial citizen will be informed in the digital public square. What will be the nature of the institutions through which citizens will obtain expert information on subjects of public importance? First to be considered are the commercial pressures on local news institutions and the opportunities they face, since without distribution the news media cannot inform the public. Second, the nature of investigative journalism in 2016 and how it is changing. Finally, the possibilities for mobilization or engagement with the news and information by the public are considered.

Below is outlined the theoretical context within which is situated an empirical argument about the nature of news media that can support what, following from Schudson's suggestion in the *Good Citizen*, what I term "Schudsonian monitoring" in the modern digital public square (Schudson 1998, 310–11). The empirical data then bring into focus the key dynamics of the news media and their role in the public square.

The argument of this study

The chapters summarized below argue that the turmoil taking place in the news media as their commercial economics have collapsed represents only the beginning of a profound

---

[21] The three functions to be examined are "investigation," "informing the public," and "mobilization." The other functions Schudson mentions are omitted, not because they are unimportant, but because the three selected seem poised to be most significantly transformed by the move to a digitally enabled public square and the emerging digital ecosystem of news.

challenge to the nature of the news media and, by implication, the nature of the modern public square. I argue that this change will result from the influence of three intersecting dynamics arising from the adoption of digital communications technologies:

1. Changes in the sustainability of institutions dedicated to informing the public

2. Changes in investigative journalism

3. The capacity of the public to be part of the public square.

4. The nature of the institutions that make up the digital public square.

This study evaluates these changes with reference to the three Habermasian elements of the public sphere: inclusivity, disregard for status, and rational critical debate about topics of common concern — and interrogate the effect of the above mentioned changes on the efficacy of the digital public square.[22] The news industry, especially at the local level, is desperately seeking new means of financial support. Investigative journalism is in flux, its strength increasingly based on different skills from those used in the past. Yet digital platforms provide possibilities to bind journalism more tightly to discussions in the public sphere, which will make it more relevant, powerful and persuasive with its audiences.

The nature of the digital public square today is undergoing a profound change—a phase change, so to speak. The entirety of this change is ill understood by individual actors; neither the producers, nor the distributors, nor the consumers are yet adequately aware of the challenges it generates or the opportunities it provides. The analysis that follows seeks to explicate how the

---

[22] I am conscious that there are factors outside of the public square driven by political and economic forces beyond those I consider that are acting on the institutions, processes and practices I interrogate, but given a need to bound this study I have not been able to consider all factors. Specifically, I have omitted consideration of polarization as a political strategy, and have only lightly touched upon the use of mainstream media as a political foil, or the broader dynamics created by the global finance markets.

newly emerging news and related institutions processes and practices are changing, that the emerging future state appears less supportive of democratic engagement and and I argue that the new institutions will need to collaborate more with each other and adopt news practices that place the audience more centrally in their work. It concludes that this constitutive moment has profound implications for how public opinion will arise and how much public oversight of governance will occur and the priorities we need to be concerned with in strengthening our ever more digital public square. Understanding whether (or more likely how) these changes will affect the offline and online information architecture of civil society and the public sphere writ large is an important question that needs to be addressed. The political economy that supports the news media will likely be very different from that of the recent past. Can Schudsonian participation survive, allowing those monitorially inclined citizens enough knowledge and agency to represent a meaningful challenge to the comfort of those imbued with the responsibilities of governance? Will they act as Schudson envisaged through formal legal or election processes or will they be more inclined to act through movements challenging from the outside? The rest of this chapter reviews the argument in summary.

Chapter Overviews

Chapter 2: Methods

This chapter outlines the approach taken to the study, which relies on interviews and a small amount of quantitative analysis. Several chapters draw considerably on analysis of third-party research, much of it carried out as part of a larger media reform project that includes this study, as well as several interviews by protagonists in the various fields addressed. The contribution this study makes, however, is to assemble the research into a coherent whole via the application of a systems mapping analysis which has not been adopted extensively in the field of media and communications.

Chapter 3: Who will distribute news and information?

This chapter considers the sustainability of news outlets by examining the range of pressures on local institutions because these pressures will likely be felt most severely at the local level. No longer are local media understood merely to be a very few (for the most part) commercial institutions—the local newspaper, a few network TV affiliates, and a couple of radio stations. News producers at the local level have proliferated as costs to distribute have fallen to zero with the advent of the Internet. Some provide no more than commentary on top of the news produced by the larger institutions, but many mediate news consumption for specific audiences.

Understanding sources of stability for the institutions within the new ecosystem—an ecosystem that is far less profitable for news producers and yet must report on powerful institutions at the local level—is key. Here the conclusion is that such stability will result from a different and more diverse set of revenue sources than in the past, and it will likely be elusive unless an ethic of appropriate collaboration can be built among institutions that must learn to regard each other much less as competition to be beaten at all costs.

Chapter 4: The paradox facing investigative journalism

The commercial decline of traditional news media is well known. Accountants report forecasts of lower income to senior management, layoffs are executed, and those reporters still employed dutifully report on the layoff of their colleagues. This commercial decline is far from the whole story, however, and it is only one of the changes affecting investigative journalism.

Investigative reporting, once a profession populated by only the most experienced reporters employed within large, relatively conservative commercial institutions, is now occurring in a wider range of organizations and is engaging a more diverse set of what might be termed "information entrepreneurs." These are people who may or may not have the skills of the traditional journalist—though they likely hold dear an ethic of press freedom or freedom of

information—and who may never expect to work within a traditional media organization. Moreover, these entrepreneurs need to have greatly different capabilities from those of the journalists of the past for two important reasons. First, they need to be able to analyze digital data; and, second, they need to be able to protect themselves from digital surveillance on the one hand and, on the other, threats from litigants alleging libel and defamation – possibly for the purpose of financially draining and browbeating the news outlet rather than ultimately prevailing.

Chapter 5: Making news matter

Public engagement with the news and with others in the public sphere, such as politicians, is changing. All outlets with online presence have the capability to receive audience feedback directly on their sites or indirectly through social media. Moreover, politicians themselves can conduct direct two-way communications with the public, utterly removing the news media as intermediators. No longer do the politicians need to rely on third parties to broadcast their messages and, in doing so, accept the news media's curation and commentary. This disintermediation requires the news media to develop new practices, so they can reinsert themselves as validators and curators and reimagine the relationship between journalism and its audience.

Chapter 6: Power, politics, and the twenty-first century public sphere

The crux of this study is to reveal the issues that need to be addressed as a result of the changes revealed in the earlier chapters. The analysis and conclusions presented in chapter 6 bear on how media and political processes may work to reveal something of the nature and dynamics of our democratic life, given these changes. It concludes by making recommendations for news and other institutions within the public square.

Chapter 7: Addressing the instability in the digital public square

The ability to communicate openly on a massive, many-to-many scale comes paired with the possibility that all such communication can be surveilled by governments or the advertising industry. These two aspects of our society are threaded through the analyses in this study of investigation, distribution, and mobilization. The digital transformations in communications mentioned above permit almost perfect surveillance, collection, aggregation, and analysis of massive amounts of data. For those with a civil liberties bent, this capability seems to presage a dark future. That said, the concomitant change in the digital connectivity that enables open communication will undoubtedly transform news producers, markets, and movement building.

To sustain themselves, I argue in this chapter that the news media of the future must place at its heart a different set of more activist stances than they have in the past and fight for a set of positive media freedoms (that help sustain their institutions) in ways that the Post Office Act of 1792 did rather than merely seek to sustain the negative freedoms (of interference by government) provided by the First Amendment, on which they have most recently heretofore relied. The future of this sector will require actors within it to seek legitimacy and strength from different sources and embrace an ethic more akin to that of the journalist Ida Bae Wells. Wells a pioneering African American journalist, born a slave and freed by the Emancipation Proclamation first co-owned a paper in Memphis and when the offices of that paper were destroyed as a result of an investigation of lynching of black men published an extended account in the *New York Age* and subsequently as a 100 page pamphlet (Serrin and Serrin 2002, 179–82). The quotation from a poster advertising a lecture of hers seems no less apt to day as it was in 1892 "The way to right wrongs is to turn the light of truth upon them (Bay 2010, 176)." However, it will take courageous work not only by editors and journalists, but by policymakers

and operators of platforms as well, if we are to have a digital public square that rights wrongs, and sustains democracy.

Chapter 2: Methods

This study covers a lot of ground. Chapters 3, 4, and 5 make specific claims about the distribution and production of journalism, as well as the reception of, engagement with, and recirculation of what is distributed. Chapters 6 and 7 argue that the U.S. digital public square, including the journalistic ecosystem, has, as a whole, been transformed as digital technology has permeated it. They call for specific reforms, as well as the adoption of principles that would productively underpin necessary innovations, institutional changes, and new policies related to media and communications.

To support these arguments, I have applied a form of systems analysis and mapping (not often used in the field of communications research) that ties together a heterogeneous set of objects of analysis. Supporting this overarching approach are interviews of protagonists in the various fields addressed and a small amount of descriptive quantitative analysis. Several chapters draw considerably on third-party research, as well as my work in the field of media reform, which has brought me into contact with a wide range of many people who are actively seeking to strengthen our public square. The various research modes are detailed below.

Systems Analysis

James W. Carey deployed the term "system" in his dissertation, which had a theoretical bent, but the systems idea has also been applied little in modern communications research.[23]

---

[23] Interestingly, as communications scholar Jefferson Pooley points out, Carey appealed to the idea of thinking in terms of systems in the title and focus of his dissertation. Carey contrasted the approach he advocated to understanding the field with a Lasswellian approach that

Though widely adopted in the fields of management and engineering, systems analysis has not been used extensively in the field of journalism studies, or even in communications more broadly construed (Hughes and Hughes 2000).[24]

Crucial to understanding the digital public square, however, is to understand it as a product not only of its individual practices, technologies, and institutions, but, using Latour's language, of actors and actants and the relationships among them.[25] Consequently, this study seeks to gain an understanding of news production, distribution, consumption, and engagement from a systems perspective, or what we might view as an analysis of the new media ecosystem that I dub a "digital public square." To that end, the interviews and the analysis of third-party research presented here not only form the basis for arguments regarding the news; they are assembled to make a larger argument about equilibria and disequilibria in the increasingly digitized news media ecosystem that underpins our public square.

The argument begins from the premise that we need to be as concerned about the relationships among the objects in the digital public square as the objects themselves. I depict those relationships in diagrams of causal loops that represent a shared view of the dynamics

privileged ever narrower analyses. Arguing for a level abstraction, Carey defined a system as "a set of relationships that bind objects into determinate and regular unity" (Pooley 2016, 12–18).

[24] Though I wasn't aware of it until after undertaking the bulk of this study the cultural historian, Robert Darnton developed a graphical model to represent how books came about and permeated society. The approach to modelling in his article on the history of the book isn't entirely parallel with mine it does seek to link disparate actants and objects within a broader context (Darnton 1982).

[25] Although I mention here only in passing Latour's language and approach—I prefer the language and specificity of systems analysts—I do take from Latour a willingness to see agency in objects, which in my case constitute both institutions and practices.

acting upon media institutions, as ascertained through the consultative process described below.

In some respects, feedback loops—termed "runaway loops"—move the system toward a new

equilibrium. The new equilibrium may, of course, be seen as an improvement on the status quo;

in that case, the runaway loops are considered "virtuous." Those that move the system toward a

less desirable equilibrium are considered "vicious." Dynamics that reinforce an existing

equilibrium are referred to as "balancing" loops.

This approach has parallels to the actor–network theory advanced by Latour as a way of

explaining complex social systems, which has been applied in the field of communications by

Rasmus Kleis Nielsen and Lucas Graves (Nielsen 2012; Graves 2016).[26] That said, the roots of

my study are planted more firmly in "system dynamics" theory, an analytical approach originally

developed by Jay Wright Forrester at the Massachusetts Institute of Technology Sloan School of

Management (Lane 2007).

In a seminal article in 1958, Forrester discussed the potential value of the analysis and

study of "feedback control loops" for explaining and aiding the management of industrial

operations within organizations (Forrester 1958).[27] By 1968, the Ford Foundation had supported

research to apply the approach to "processes in social systems," allowing researchers to focus on

understanding the nature of systems and develop a set of principles to relate their structure to

---

[26] Although I have not addressed the field of science and technology studies more broadly
in this chapter, it is important to note that the Actor-network Theory (ANT) approach utilized by
Graves, Neilsen, and Boscozski came from that field through a collaboration between Steve
Woolgar, a founder of the field, and Latour.

[27] Although Forrester's article is seen as the seminal study that grounds the field, the
approach began to emerge from military activities during World War II. It was later applied
outside the military and industrial realm and used in analysis of the Great Society programs in
the 1960s (Hughes and Hughes 2000, 1–25).

their behavior (Forrester 1968). A key insight was that individual changes in the parameters of (or factors within) a system of moderate complexity often result in little change to their equilibrium. This can sometimes be explained by dilution of the impact of a change in a single parameter (or factor), but it often results from the propensity of dynamics—understood as a combination of multiple loops—to adjust to produce the same result (Forrester 1968). Only in some cases are changes to a variable or a combination of variables enough to induce a change in the state of the system.

This initial work identified several aspects of structure in systems. First and foremost is what Forrester called "the closed boundary," or the scope of the system being studied. Within that boundary "stock and flow variables" form the feedback loops and describe the relationships among the fundamental elements within a system. The stocks are the variables that describe the various states of the system, while the flow variables pertain to how one stock affects another (Forrester 1968).

Forrester's analysis of systems dynamics was extended to the environmental field by others in his lab (Meadows 2008). Meadows and her collaborators famously developed a model meant to describe the entire world system, which they described in their book, *Limits to Growth* (Meadows et al. 1972). Subsequently, in an arguably more productive effort, they focused on subcomponents of the world system they had earlier sought to describe in its entirety, identifying specific outcomes around environmental degradation with the objective of stimulating interventions in the systems to avoid the outcomes they considered most deleterious.

In parallel, the school of socio-technical systems (STS) studies developed in the context of organizational and management theory.[28] STS studies have been very focused on industrial production and the industrial relations within organizations rather than on organizational learning and change and the implications of socio-technical innovation, on which this study focuses. The challenge, as Kaghan and Bowker wrote in 2001, has been to take the strengths of both ANT and STS and synthesize an approach that leverages the strengths of these pragmatic and culturalist approaches, while at the same time benefiting from more rationalist, economistic, and bounded approaches (Kaghan and Bowker 2001).

More recently, systems dynamics have been deployed by those working in the field of peace and conflict (Ricigliano 2012), who selected the approach to foster "comprehensibility and comprehensiveness" in the analysis of conflict assessment situations, where historically the approaches used had resulted in fragmented rather than holistic analysis and programming (Ricigliano and Chigas 2011). In his approach, Ricigliano seeks to describe any bounded system in terms of causal loops that address structural, attitudinal, and transactional factors and relationships. Structural loops address dynamics that describe the relationships among factors at an institutional level; attitudinal loops apply at the intergroup or relational level; and transactional dynamics address process-level factors. In some sense, Ricigliano's approach is an attempt to marry the open-endedness of ANT with a more practical socio-technical approach that incorporates (via the identification of transactional factors) a functionalist approach.

---

[28] STS studies has the same acronym as science and technology studies, but they are distinct fields.

This research set out to use Ricigliano's approach to systems mapping as an analytical tool that takes a bounded view of the new media ecosystem, decomposes the factors (or elements) within the system, and describes the interconnectedness among the factors, including the polarity of the relationships as well as any nonlinearity that emerges from their interactions (Ricigliano and Chigas 2011).[29]

Finally, this research and mapping effort aimed to identify leverage points in the systems to guide the choice of specific reform efforts that might move the equilibria in the direction of a more efficacious digital public square. Later analytical chapters build on the leverage points identified and outline principles and strategies developed in the initial analysis.[30]

Systems Maps

The discussion of the analysis that follows refers to three systems maps developed during this study. Elements of these maps are referenced throughout the study through references to particular loops (that is, dynamics) and factors described in each. A comprehensive description of all dynamics referenced in each map is included in an appendix at the end. The first map was developed to explain the dynamics surrounding the production of local news and public engagement in civic affairs, while the second encompasses the factors affecting public attention to the news media. The third map seeks to explain the pressures that have been influencing the

---

[29] I must note that Ricigliano and colleagues of his coached the team I led in doing the systems mapping and analysis.

[30] The closest analogue to the approach I have deployed here in the context of analyzing democratic engagement are the alternative models developed by Fung et al in their article "Six Models for the Internet + Politics" (A. Fung, Gilman, and Shkabatur 2013). That said their models are much simplified.

level of public trust in journalism and the extent of press freedom in the United States. In some sense, the third systems map rearticulates many of the dynamics in the local news and public engagement systems maps and benefits from lessons learned along the way.[31]

The maps themselves were developed in three separate consultative processes. While the processes varied in length and complexity, all followed the same general arc of eliciting a set of factors from a subset of experts and connecting the factors by labeling them so the experts could broadly agree that the links and polarity (indicating whether X led to more of Y or less of X and vice versa) were correct. After the workshop, a search was conducted for academic papers and evidence from industry that supported or disputed the dynamics identified. In parallel, a number of small group and one-on-one meetings took place with experts, some of whom were involved in generating the data based on which the maps were developed and others to whom the maps were entirely new.

Local News and Participation Systems Map

The local news and participation systems analysis was developed by Democracy Fund in a process whose purpose was to obtain an understanding of the specific dynamics facing local news production and distribution.

―――――――――――――――――

[31] Specifically, the first map, focused as it is on the dynamics facing news outlets and their publics at the local community or state level, seeks to explain the dynamics of news production, the economics of news outlets, and how news serves the public, but it omits two weaknesses that became evident in 2016—the ways in which mis- and disinformation could more easily enter the public square, as well as the threats, both technological and rhetorical, to press freedom.

Focus Group 1

As a starting point, a group of more than thirty news industry experts was prompted in an online survey to complete the following sentence: "You can't understand how local journalism enables or inhibits a healthy democracy unless you understand . . . " The answers were synthesized into ten topics the group discussed further during a two-day workshop to which all were invited.[32] Ultimately, twenty-nine outside experts attended, including nine journalists or former journalists, three scholars, six foundation program officers, and eleven other experts from the field of journalism and local news.

During the workshop the participants were assigned to small groups that sought to bring together a diverse set of perspectives on the ten topics that emerged as priorities out of the online survey, plus two topics (diversity and civic education) that were suggested by participants on the first day of the workshop. The output from these groups was then rendered graphically as a map, with individual loops linking factors that influence the production of local news.[33]
As noted above, the analysis was, in some ways, a practically focused application of Latour's actor–network theory, whereby the participants in the workshop were first asked to consider a dynamic facing local news and then develop a list of upstream causes and downstream effects for that dynamic. These causes and effects were divided into those that are structural—that is, those

---

[32] In summary, these topics were economic forces affecting journalism; failure of local media to meet information needs of their communities; the ways in which local journalism can have an influence on a community; the way technology has expanded sources of information; how the public consumes local news; the national, state, and local resources available to support media; lack of transparency by leaders; disintermediation by politicians and campaigns of local media; unequal access to broadband infrastructure; and professional incentives and culture. The full set of responses is listed in the appendix.

[33] The dynamics around civic education were ultimately considered out of scope and omitted from the final map.

related to the nature of the system itself; attitudinal—those related to norms and relationships within the system; and transactional—those related to the processes within the dynamic. Figure 1: Upstream - Downstream SAT Analysis provides an example of this analysis of a dynamic. It lists the upstream causes and downstream effects identified by a small group of workshop participants when asked "how economic forces inhibit the ability of local media to produce high-quality public affairs and investigative journalism" and divides their impacts into those considered structural, attitudinal, or transactional in nature.

Figure 1: Upstream - Downstream SAT Analysis
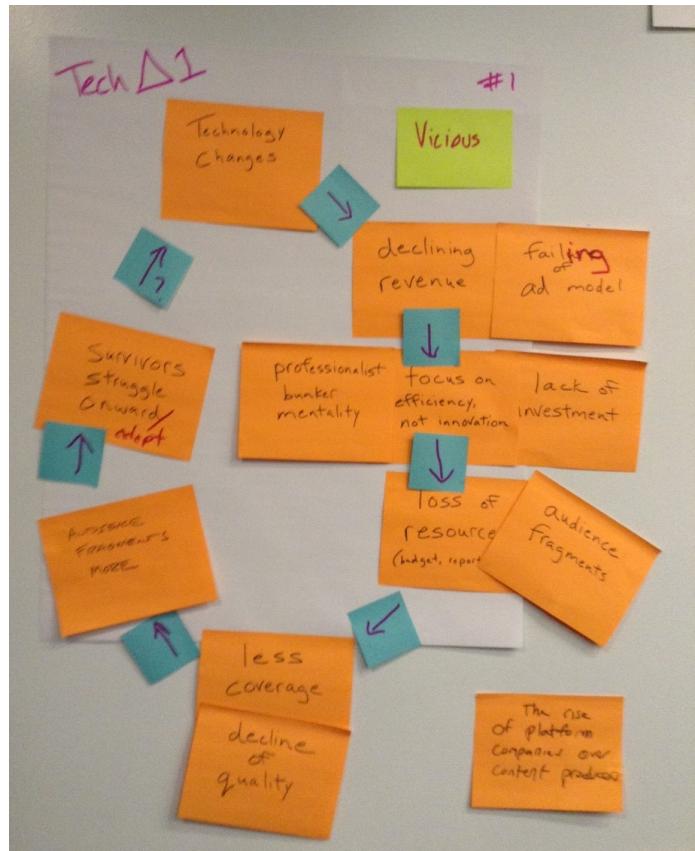
	Upstream Causes	Downstream
Structural	Economic downturn accelerated market failures/ decline of ad model	Smaller dinosaurs (old legacy outlets)
		Local TV news usually followed newspapers, which now don't cover those stories
	Technological changes: rise of internet as dominant; these changes uniquely affect local journalism - not being able to scale, dominant outlets are old behemoths that are now smaller;	Advent of tech that allows self-publishing, old reporters launched online news outlets in communities - challenge is the scale to get ad support is nearly impossible - how to sustain? Reporting without the scale.
	Change from system of using $ from ads for whatever news - no longer need ads in newspapers & no longer providing $ for news;	With fewer reporters, increased reliance on PR - govt, corp, nonprofits
	Policies that incentivize certain institutions & models (deregulation re Fairness Doctrine & Equal Time rule & ownership, consolidation)	Current rev model: still very low CMP rates (ads)
		Fewer reporters, less $, fewer editorial resources, decreased insitutional memory & greater reliance on PR
	Old model built on scarcity - one newspaper; end of scarcity; loss of scarcity	Fragemented audience
Attitudinal	What audiences are willing to pay for. Demand for free Info	Newer audiences are more open to technology & change
	How people prefer to physically get the news - not broadsheet newspapers	In journalism: sense of professionalism resisted technology, & led to bad websites
		Resisted potential new ad markets
		Increased importance of social media & search
		Missing the boat; failure to understand/study the audience & created better analytics.
		Zeitgeist: news is dead/dying - not a place for ads & info
		Failure to invent good digital ads & revenue models
		Pressure on ethics: story choices & stories
Transactional	Church/state (ads v. editorial) division got in the way of finding solutions - inside outlets & between them	Forced media to look at who will pay for this? Different forms of support: philanthropy, govt, supports, sponsors
	Legacy company practices (focus on efficiencies, etc.) to increase revenue before 1996 internet disruption caused problems after	Fewer reporters, less money, fewer editorial resources, less institutional memory

Subsequently, the workshop participants were asked to identify a factor (or, using Latour's term, an "actant") and suggest how it is related to, or changes, other factors. They were provided with one constraint: they were to identify factors that would form a loop that closed— that is, the final factor in the loop would act on the first. This requirement forced the participants to confine their thinking by encouraging them not to stray far from what they knew or hypothesize some indeterminate effect of a factor on something outside the bounds of the dynamics to be considered.

Finally, participants were asked to identify whether the loop was, in some sense, reinforcing and virtuous (in that it improved the provision or distribution of local news or increased civic engagement) or reinforcing and vicious (in that it impaired the provision or distribution of local news) or balancing (in that it was self-regulating and reinforced the status quo).

Figures 2 to 5 and the descriptions below show the feedback loops developed by the small group that worked on economic forces facing journalism. Each image identifies the variables and how they are thought to influence one another. The narrative below it explains the dynamic. (Each description was captured immediately after the construction of the loop and was either written down or recorded by one of the participants who developed the loop.)

Figure 2: Loop 1A: Economic Forces - Technology Disruption
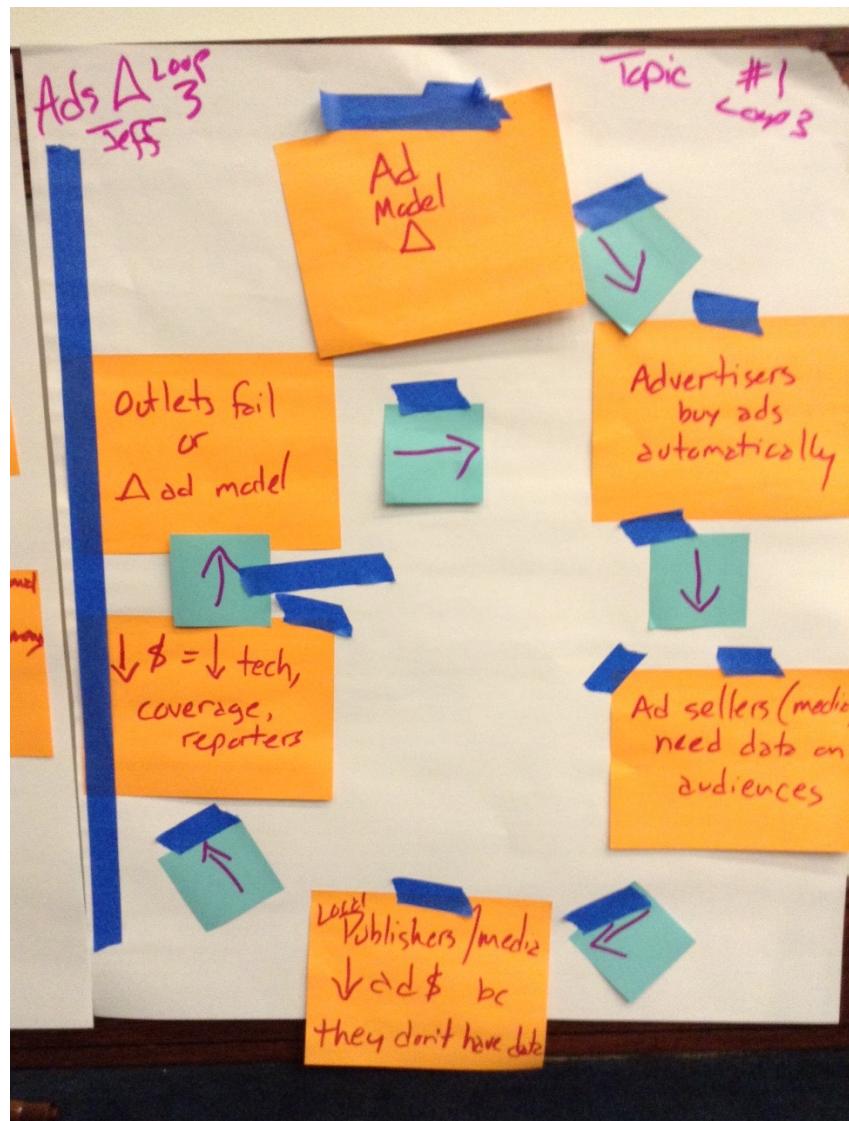
Technological changes send some legacy media into a death spiral: Tech changes lead to declining revenue & failing ad model; responses = (1) biz focus on efficiency not innovation, no focus on opportunities just CYA, (2) lack of investment, and (3) professionalist bunker mentality; this leads to loss of resources/budget/reporting (meanwhile, the audience begins fragmenting); this leads to less coverage & a decline in quality (at the same time, the rise of platform companies over content producers); and the audience fragments more; some media exit, and the survivors struggle onward/adapt, perhaps weakly adapt to change. Do they survive next wave of tech change? Vicious cycle.

Technological changes create shifts in the audience that some media embrace. Technology changes; causes audience to become community w/voice 2+/way communication; which encourages new media experiments; which brings in new people to journalism including entrepreneurs, inventors, innovators, creatives; they use new tech, new tools, research (at the same time, there is the rise of platform companies over content producers); which leads to finding new revenue streams (with lots of questions); this leads to increased hiring & coverage & quality; and they explore partnerships; which leads to growing audience, but still fragmented; which encourages more new media experiments. Virtuous cycle.

Figure 4: Loop 1C: Economic Forces - Advertising Technology
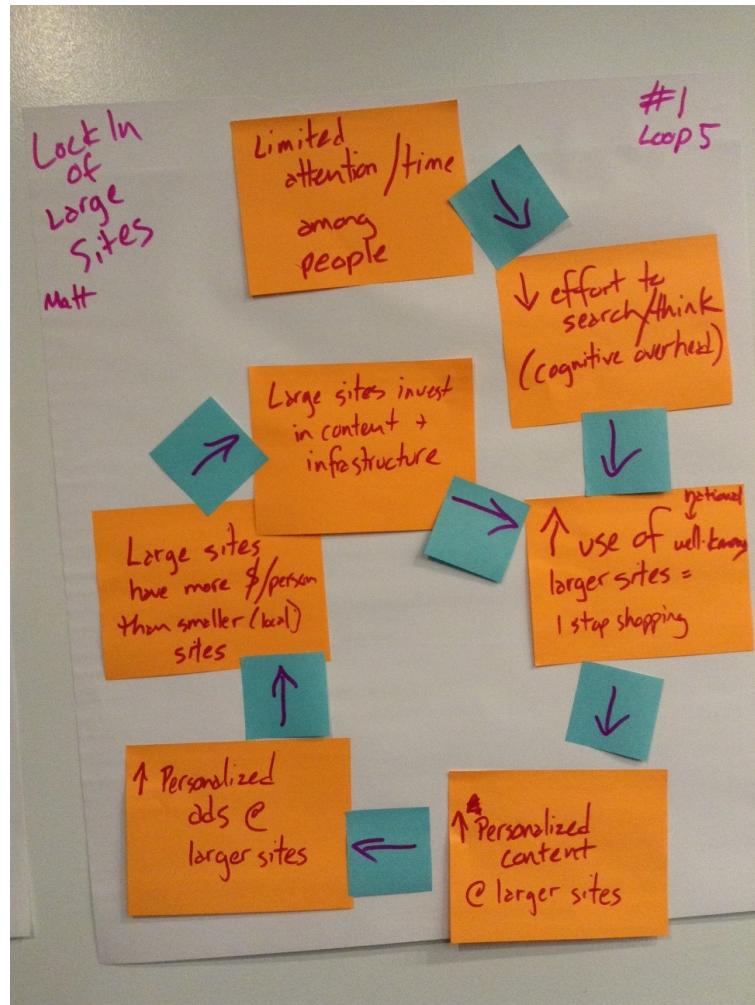
Ad model changes favor sites with audience data. Ad model changes lead to advertisers buying ads in automated methods rather than personal decisions; which means ad sellers (including media) need data on their audiences; which leads to a decline in ad $ among local publishers/media because they don't have those data; with less $, these local outlets have declines in coverage, reporters, tech infrastructure; which leads outlets to fail or to shift their ad models.

Figure 5: Loop 1D: Economic Forces – Innovation

Church/State Divide: Journalistic division between ads/editorial/tech creates restraints in innovation, which impedes new business models, which leads to attempts to launch joint efforts that fail, which confirms the sense that they can't or shouldn't work together and reinforces the division between ads/editorial/tech. Sometimes, an outlet will instead search for innovative models after a failed attempt to launch a joint effort, which leads to disruptive leadership and new/pilot efforts supported by resources, and then to successful cooperation among ads/editorial/tech, which then decreases the journalistic division between ads/editorial/tech.
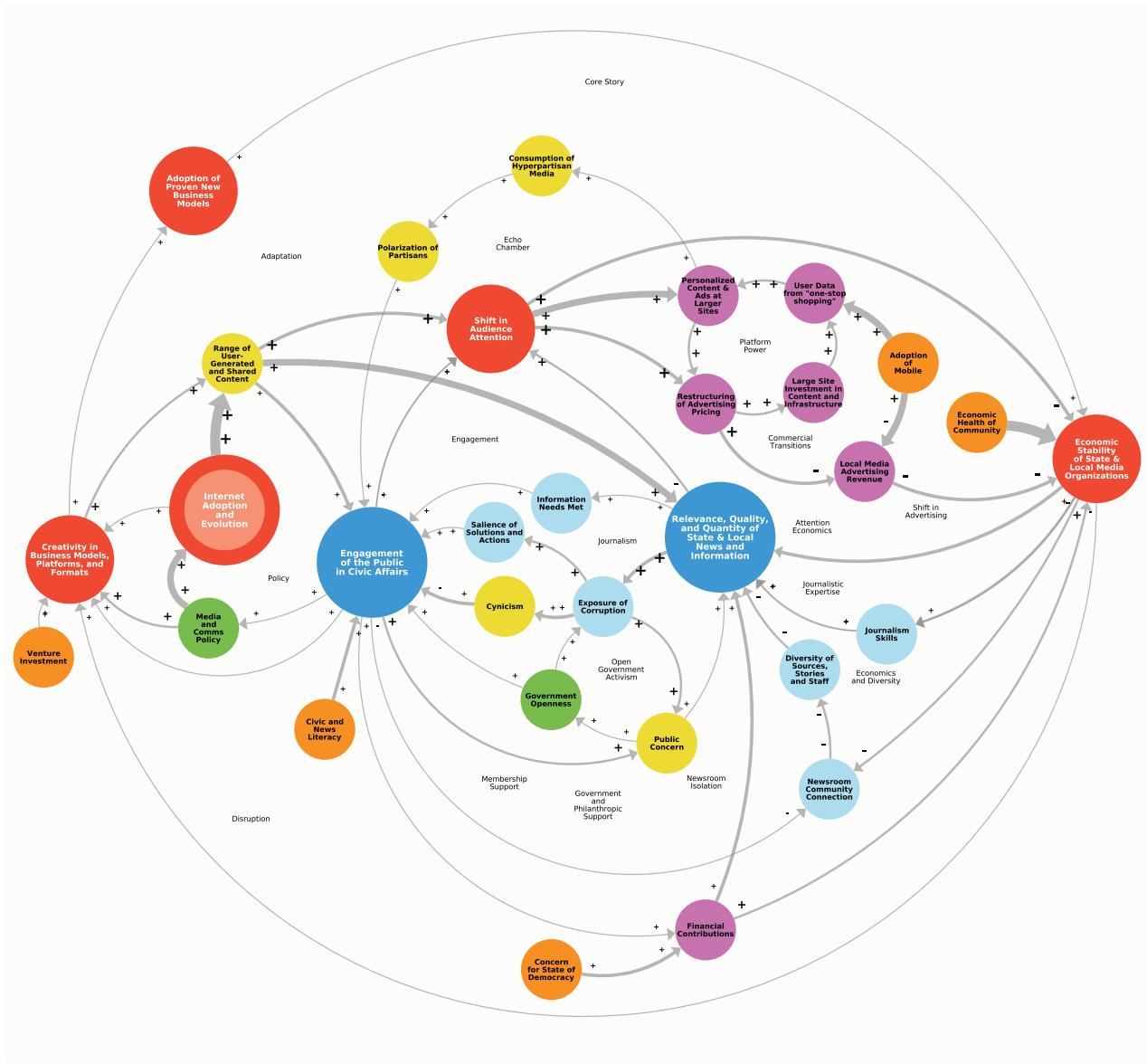
Lock-In of Large Sites. People have limited attention/time which leads them to limit their effort required to search/think (cognitive overhead); which increases their use of well-known, national, larger sites (1-stop shopping); which increases personalized content at these larger sites and increased personalized ads at these larger sites; this leads to larger sites having more $ per person than smaller/local sites; these sites then invest in content & infrastructure, which increases the use of these sites as locations for one-stop shopping.

Map Development

Following the workshop, a map was created to show the linkages among factors that influence local news. First, a subset of Democracy Fund staff met nearly every week to create an initial version of the map that included two or three loops generated during the workshop and the factors (that is, the "stock variables") judged most central to understanding the system. As this process was new to everyone involved and the focal point(s) of the map (that is, the independent variables we sought to optimize) weren't predetermined, it took several weeks for the group to find consensus on the core dynamics of the map. Upon completion of the core map, a group of five people assembled to incorporate into it all of factors and loops deemed relevant of those generated during the workshop.

Next, a small team of Democracy Fund staff iteratively synthesized the loops created in the first workshop, and linkages were made among individual loops, ultimately developing a map that integrated many of the insights the workshop produced. Many of its participants were then asked individually and in small groups to review the map and comment on its structure. Each loop was explained to them, and they were asked if they felt it represented a reasonable understanding of a dynamic facing local news. During the reviews changes and simplifications were made to the map. Often loops were combined or eliminated if it were felt the dynamic was either unimportant or effectively already part of another, adjacent loop. The final map is shown in Figure 7 Local News Map.

Figure 7 Local News Map

Workshop / Focus Group 2

Almost six months after the first workshop, a second focus group was convened for a single day. Many attendees were those from the first workshop, but a number of new participants were also included. The participants of this second workshop received an explanation of the map and were then asked to identify points of leverage (factors or loops) which, if acted upon, could be expected to have a disproportionate impact on the overall equilibrium of the system. The top

seven choices were creativity in business models, platforms, and formats (19 votes); newsroom–community connection (12 votes); adoption of mobile technology (12 votes); user-generated and shared content (9 votes); shift in audience attention (8 votes); engagement of the public in civic affairs (8 votes); and journalism skills (8 votes).

After they identified the leverage points, the participants were asked to prioritize them and suggest strategies to affect those considered most crucial. The underlying objective was to draw conclusions and identify interventions that would support a new, healthier, and more productive equilibrium. The four points the workshop participants thought provided the most opportunity to change the local journalism ecosystem were the newsroom–community connection; creativity in business models, platforms, and formats; financial contributions; and adoption of mobile technology.

Understanding the Audience Attention Map

The audience attention map was developed in the spring and summer of 2016 in conversation with communications scholar Professor Talia Stroud as a visual representation of the drivers of public attention to news and their implications for civic engagement, as identified by Stroud.[34] It was undertaken in response to a question posed to the mapping team about whether they understood the factors affecting audience attention. It was subsequently shared with a small group of scholars and industry affiliated experts in a day-long workshop in November 2016.

The map (Figure 8: Audience Attention Map) provides a visual key to a paper Stroud subsequently published (Stroud 2017), reviewing the existing scholarly literature seeking to

_____
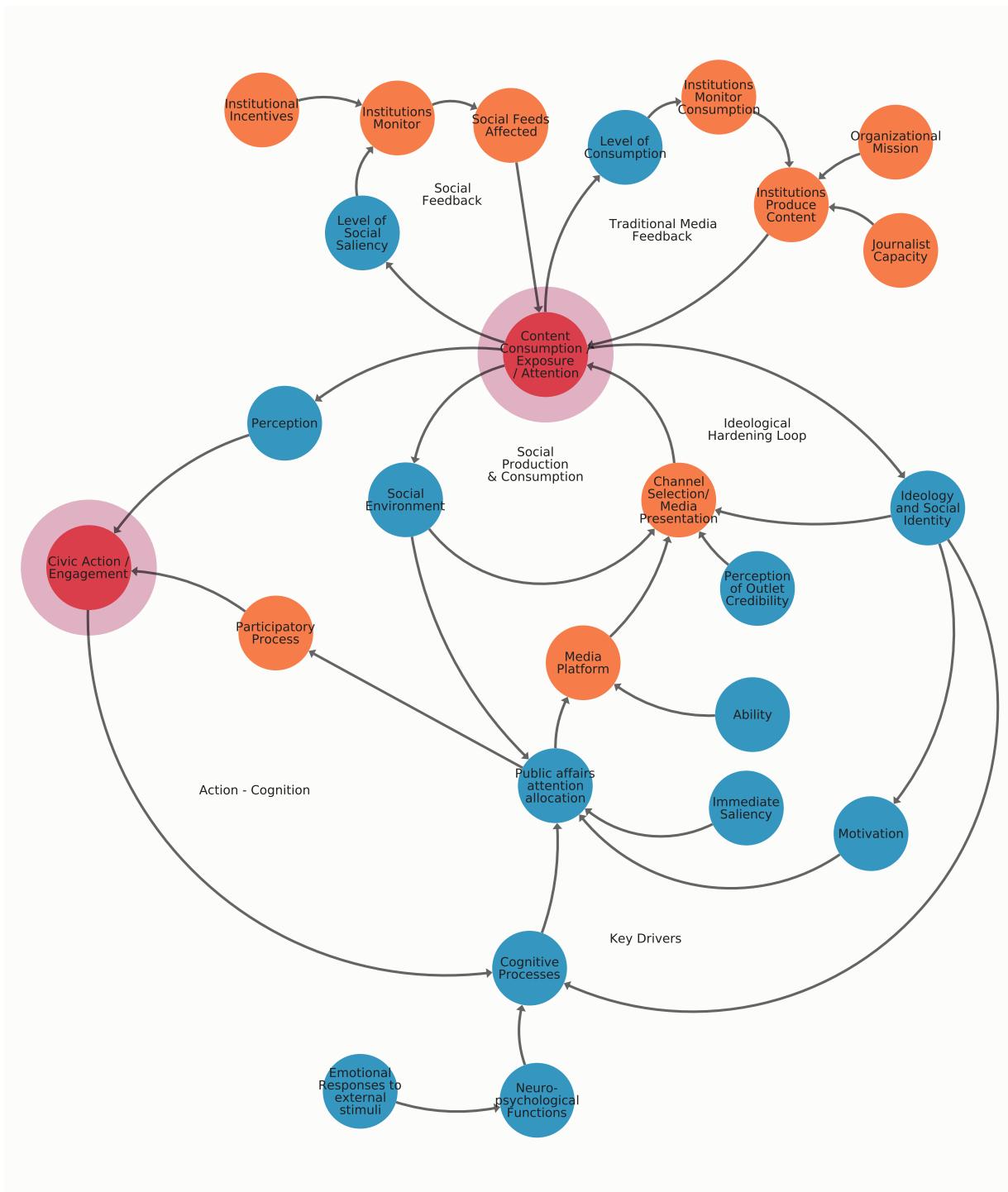
[34] Stroud subsequently published her analysis in a paper "Attention as a Valuable Resource" (Stroud 2017)

39

explain why people allocate their attention as they do. In it, Stroud reviews the literature related to emotional and neurobiological impulses—the classic explanation of "uses and gratifications sought and received" of media. She also reviews how social identity and social context may drive an individual's media choices. Stroud concludes by recognizing that the design of a platform, or channel, may drive attention as, ultimately, do the choices available. The two are very much connected, as the amount of media available is now so overwhelming that a key function of Facebook's and Google's technology is to identify to digesters of news what they may be interested in, either by passively identifying signals or actively eliciting input.

The map links all the above factors that affect how members of the public allocate their attention toward news or civic engagement or action. It also identifies the connection between the attention individuals pay to content as well as the attention to civic actions in a feedback loop. The map allows the reader to clearly see the drivers of attention and the interplay between those and dynamics related to traditional media and social media platforms.

The traditional media platform can respond only relatively slowly to changes in interest on the part of the public. It will obtain circulation or ratings data it can periodically merge with demographic data, but the nature of the feedback loop is far from instantaneous. Often, the data can take days or weeks to be processed. In contrast, the media platform that has access to online data can respond immediately, and those who have data on individual users (that is, social media) can likely not only incorporate feedback about mass engagement but may also build off inferences regarding individual neurobiological data, data related to prior consumption of particular content, user ability, perception of outlet credibility, and so on. In short, the map shows how informed that outlet can be about user preferences.

Figure 8: Audience Attention Map

Another insight the map provides is that the consumer of information is consuming it in a context that has some level of performativity. Users can instantaneously "like" or recirculate a piece of content with or without any sort of reflection. Moreover, they are likely to be rewarded through

some form of social kudos ("Likes" on Facebook or "Hearts" on Twitter) by others especially if they do so quickly. This is described in the map shown in the loop labelled "social production and consumption." Importantly this loop parallels an adjacent loop that describes how the same ritual of news digestion leads to ideological hardening and stronger clarity around social identity. The map also shows the ability provided by online platforms to move directly to civic action as a result of a change in perception related to a public issue. In Carey's terms, the ritual of exposure to news social media platforms is very different from the consumption of traditional news. It is far less of a reflective process, and—although in practice the platforms could provide a way to have a communal experience—they provide at this point an emotionally charged performative space, with everyone conscious that he or she could be onstage next.
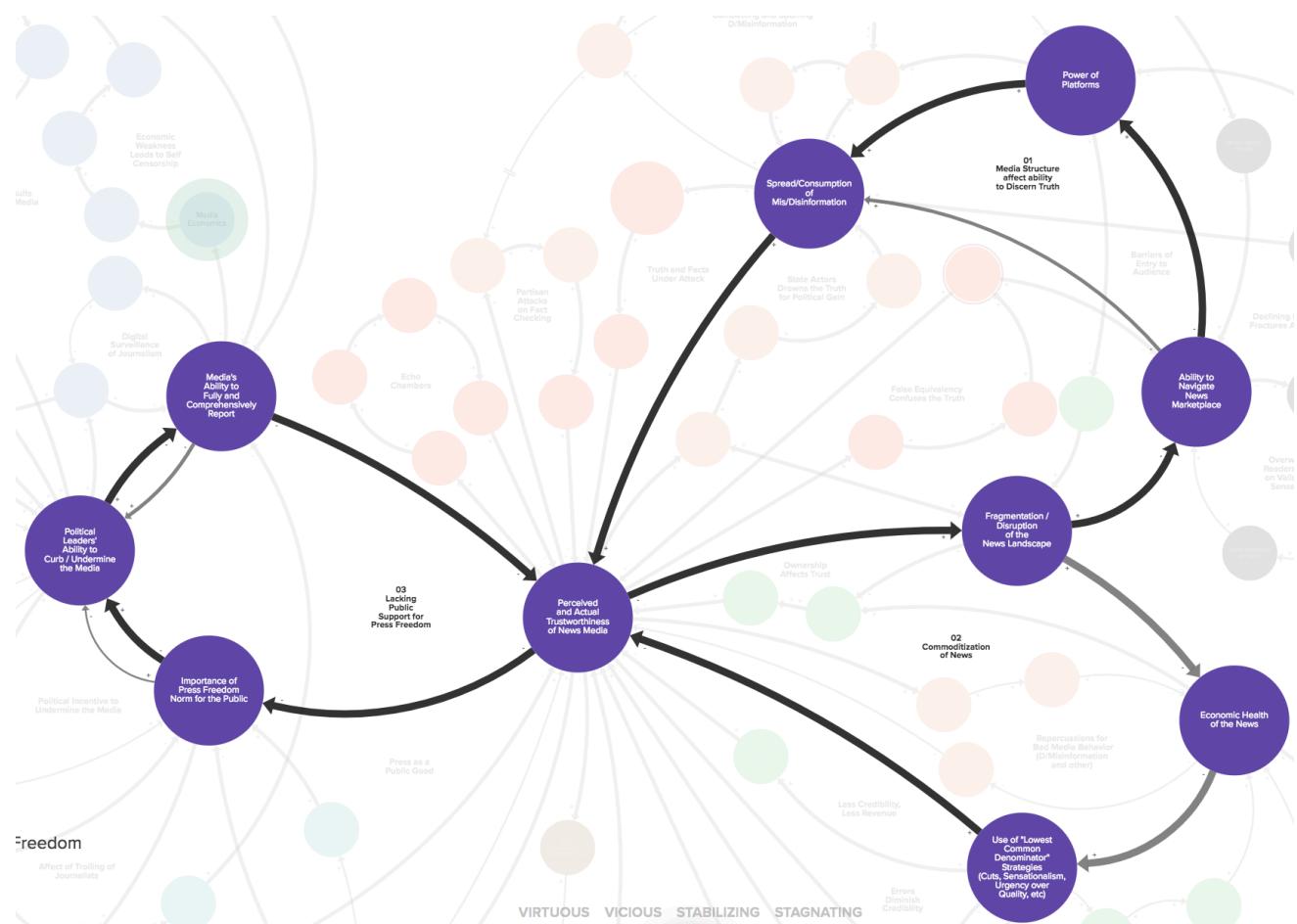
Trust in Journalism: Press Freedom Map

The map below (Figure 9: Trust in News Map) depicting factors that drive the perceived and actual trustworthiness of the media, is by far the most complex of the three. It was developed by a small group of Democracy Fund staff alongside a small number of invited experts as a means to understand the challenges facing news outlets in the context of an environment of sustained attacks on the credibility of the press, low trust expressed in the news media institutions, expectations of more aggressive prosecutions of whistleblowers and journalists, and a perception that the public is seeing more mis- or disinformation than it has before. Given prior experiences with mapping the process was abbreviated and built on insights from prior processes.

This map has three dynamics at the center of it: the commoditization of news; the inability to discern the truth; and public support for press freedom. The first dynamic is driven by the fragmentation of the news landscape that has led to weaker commercial returns, which has provided incentive to produce news that is less worthy of public trust. The second dynamic is

42

also generated by the fragmentation of the media environment and the challenges consumers face in navigating the news landscape. These challenges, which can be summed up as inability to discern the truth, have led to the use of search and social platforms which, as a result of the platforms' inattentiveness to the accuracy of the information they circulate, have increased the distribution of bogus news and information. The third dynamic, represents how, as a result of lower trust in media political actors can refuse to participate in normal engagement with the press, attack press freedom norms, and undermine journalists' credibility and their ability to report news. These dynamics are shown below.

Figure 9: Trust in News Map

<u>Overall Systems Mapping Process</u>

The process undertaken to generate these maps focused on drawing on the insights of experts in the field. The process had particular value, however, in that it brought together and integrated insights across many subfields, as well as drawing on tacit knowledge of non-scholarly experts from the news industry alongside those with scholarly knowledge. Practically speaking, it allowed this study to identify relationships, dynamics and make judgements about how easy they might be to change that otherwise may have been difficult to gauge or integrate.

Interviews and Analysis

Interviewees for this research included journalists, lawyers, technologists, and media business executives or those who work with such executives in the news industry. The interviews were conducted over a year's time using a structured protocol to cover essentially the same issues with each, although they varied in length and structure and, in some cases, focused only on matters in which the interviewee had a particular expertise, or of which I didn't already have an understanding. The questions typically included the following:

1. How has your role in journalism and the news media changed in the last five years? How has the institution you work in changed? Has it grown or shrunk? Have the skillsets of the employees changed?

2. With respect to activities you undertake related to investigative journalism: How much is "big data" part of your work? Are you concerned with questions of electronic privacy related to protection of your sources? Who are your competitors and collaborators in your work in the field of journalism and media? How has that changed over the last five years?

3. With respect to activities you undertake related to the distribution and "business" of journalism: What are the main sources of revenue for your organization? How have they changed over the last five years? What organizations do you collaborate with? Why do

you collaborate with them? How has your competition for readers, advertisers, and underwriters or sponsors changed over the last five years?

4. With respect to audience engagement with the content you produce: How has that changed over the last five years? How has your usage of third-party services for engagement changed over the last five years? Where are you seeing growth of audience engagement?

The individuals interviewed or experts consulted represented a cross section of people who work in the news industry, identified through selective or judgement-based sampling as those most knowledgeable in the field.

Other Methods

Throughout the analysis, quantitative data collected from websites or directly from organizations in the media industry are used to illustrate specific points. In one case, data from Guidestar, a website that collates information on nonprofit organizations in the United States, have been compiled to provide a sense of the scale of support to the emerging nonprofit journalism sector. This collection complements a parallel, and more inclusive, set of data from the Foundation Center covering financial support from private foundations for the media sector.

I also apply Porter's five forces industry analysis approach in the chapter related to news distribution (Porter 1979). This model considers the competitive environment of firms operating in an industry and seeks to explain industry profitability as a function of the following: (1) Supplier power that arises when a small number of companies is able to provide a product, or if the product provided is unique. (2) Buyer power that arises if an industry has high fixed costs and the product being purchased is undifferentiated or is only marginally profitable or the buyers are able to threaten to integrate backward into the supply chain. (3) The threat of substitute products, which is simply the possibility that alternatives can replace a product. (4) Barriers to

entry, which can come from economies of scale in such aspects of business operations as production, research, or marketing; product differentiation that generates customer loyalty; capital requirements that limit competition to those who are able to invest up front; other cost advantages gained by virtue of industry knowledge; access to distribution channels; or government policy. Porter argues that these four elements all contribute to a fifth, partly independent, factor: the level of industry rivalry and, thus, an industry's profitability.

Finally, I draw on a number of completed case studies that have analyzed local media. The case study approach became a common approach in this period to identify concepts that might be more or less viable in the less commercially viable environment media was beginning to operate in. Some considered individual outlets or experiments but a number of these case studies considered local media in the context of ecosystems. The ecosystem approach to analyzing media was first advanced in the United States by Lew Friedland, in an effort to develop the ideas of Dewey and Habermas in a modern context and explain the public sphere at a local level. Friedland argues that for democracy to work, there has to be community. The modern community, he says, is forged by communicative action, not by the now very decayed binding ties of the traditional community (L. A. Friedland 2001). By considering first how the public solves problems and employs both social networks and a local media ecology, it is possible to show that, as people become more interconnected, these local networks and the local ecology will shape each other (L. A. Friedland et al. 2007).

Ball-Rokeach developed similar ideas in the Metamorphosis Project at the University of Southern California, which studied the relationship between community and the deployment of new communications technologies. This project has revealed the complex effect of the capacity to communicate on how communities develop (Villanueva et al. 2016).

Coming from the perspective of news practitioners, the Knight Foundation has developed similar ideas in a series of reports it sponsored, beginning in 2009 with the *Knight Information Needs of Communities Commission* report. In doing so, it sought to lay down markers for future conversations about media along the lines of previous national commissions such as the Carnegie Commission on Educational Television that set the scene for the passage of the Public Broadcasting Act and the Kerner Commission that included a significant critique of the media and their failure to report on the black community from the perspective of that community and prioritized issues of representation and diversity in media.[35] The Knight Commission, which considered informational needs from the perspective of the public, concluded that the decline in the news media could pose a crisis for democracy, and that innovation was required. It also highlighted the need for policies supportive of skill building and explained that public engagement could be built on top of emerging technologies. An appendix provided guiding questions for anyone who wished to understand whether his or her community was, according to its standards, a "healthy information community (Aspen Institute 2009)." Knight followed up this report with the creation of a toolkit to aid in analysis of local needs (Knight Foundation 2011). This appendix was used as the starting point for several local news ecosystem case studies described in this study.

---

[35] Previous reports have included the Hutchins Commission (issued in 1947), the Carnegie Commission on Educational Television (in 1967), and the Kerner Commission, more formally the National Advisory Commission on Civil Disorders (in 1968) (Commission on Freedom of The Press 1947; Carnegie Commission 1967; U.S. Kerner Commission 1968) Though focused more broadly, the Kerner Commission included a significant critique of the media and their failure to report on the African-American community from the perspective of that community.

Preliminary Assessment of the Methodology

The approach outlined above has allowed me to synthesize an analysis of the dynamics facing the modern digital public square. It is important to also recognize, however, that the systems analysis was undertaken in the context of a project of media reform that began with the assumption that our public square has weaknesses that can be addressed.

Furthermore, the analysis took a normative view that, by creating accountability and better informing the public, the practices and institutions of the news media would enable democratic processes to function more effectively. It was on this premise that the experts engaged were a subset of industry experts and scholars who were self-consciously invested in such a reform movement. This doesn't necessarily make the systems analysis or maps inherently suspect, but it does mean that, throughout the analysis, I note how in the chapters that follow how I supplement the systems maps with references to the research of others and I appeal to additional empirical research that explains the nature of the digital public square in our democracy using the maps as a jumping off point.

Chapter 3: Who Will Distribute News and Information?

Much has been written about the economics and declining state of news media organizations. Traditional media organizations, both newspapers and television news departments, have been decimated by rounds of layoffs and downsizing (Hutchins 2017; Lerman 2017). Many of the incumbent players in the industry have struggled to forge a path forward and have survived, as the data show, only through cost cutting and mergers. This has allowed online-only outlets and platforms to encroach on the public interest for news (S. Levy 2004; Lowrey 2006). Moreover, the opportunities presented by the technological changes in news provided on the Internet, whether through broadband, smart phones, or mobile Wi-Fi, are considerable, and they will likely continue to disrupt the industry (Libert, Beck, and Wind 2016; Grossman 2016).

This chapter seeks to explain the forces at play in these developments and to lay out opportunities and challenges for news media organizations in the United States as they seek financial sustainability. The chapter first reviews a series of conventional analyses of the decline in the newspaper industry and a parallel transition in the television news industry, as presented by the contemporary literature. Although the review provides a comprehensive picture of this long decline, it provides less insight into the underlying sources, the dynamics driving the changes, or opportunities in the future. To gain an understanding of these dynamics and reveal the opportunities that will be open to news organizations, the chapter then draws on insights from the systems analysis of local news organizations carried out between the spring and fall of 2015 and augments it with insights developed using Porter's five forces analysis, an approach used extensively in management literature (Porter 1979, 1998).

Following the review of the systems analysis is a discussion of a number of case studies of local media ecosystems carried out by academics, media researchers, and practitioners over the past few years. These studies apply an emerging set of approaches that seek to understand the

health of local media and how well they serve democratic ends by looking holistically at the range of institutions present in any ecosystem. This is crucial, given the increasing diversity of institutions that have developed to replace the newspaper and broadcast entities that played such a key role in distributing news in the twentieth century. The chapter concludes by arguing that the systems analysis is supported by evidence from the case studies, and that news media must look both to obtaining revenues from readers and defraying costs though partnership with other organizations if they are to be sustainable and thrive in the long term. Finally, it outlines examples where this is happening.

Historical Analysis

Newspapers

Commercial news media emerged in the early nineteenth century in the form of newspapers. Some were initially at least partially funded by parties or factions, although by the 1830s, a distinctly commercial motivation was core to most. Six-penny papers, which initially survived on revenue from yearly subscriptions alongside advertising revenue (Schudson 1981, 17), were joined by penny papers with bigger circulations in the mid 1830s. The economics of advertising and the emerging economy of mass production often gave the publishers incentive to pursue circulation above all else, a priority that was reflected by titles such as *Star* or *Herald* that included words suggestive of agency on the part of the editors (Schudson 1981, 17). By the early twentieth century, technological developments had led in many places to a thriving civic press that played an important role in the development of cities across the country (Guarneri 2017). Gone were most of the disorganized newspapers of the 1890s, largely replaced by papers with distinct sections catering to specific types of readers. By the 1920s such papers were sometimes parts of chains, in which a single owner would operate papers in multiple cities. The chains

allowed bigger budget features, yet also commercial efficiencies if they also came at the cost of a lesser focus on local news (Guarneri 2017, 218–24).

In America after 1945, newspapers became ever more lucrative, with large amounts of classified advertising and the ability to control costs via joint operating agreements sanctioned by Congress (Baughman 2015). Meanwhile, television news became a staple in many households (Baughman 2015).

Higher newspaper circulations permitted, in turn, higher expenditures on news gathering and editing and enabled the development of a professional journalistic career path, along which reporters progressed from small-market news operations to positions of increased responsibility in outlets serving ever larger markets. Such career paths were facilitated by the similarity of occupational roles across outlets, and the similarity increased as newspaper chains became the norm. In a world of mass production, mass market dailies were aligned with corporate advertising needs, as the papers provided significant reach (which they still do, partly because many markets are now served by a single paper) (Morton 1991).

By the end of the 1990s, newspapers were highly profitable. Profit margins vastly exceeded those in manufacturing, and the returns on stockholders' equity exceeded those in other industries (Ureneck 1999). Moreover, the cost of creating a competing outlet was considerable— starting a new paper in an urban area cost millions—which posed significant barriers to entry, and news outlets accepted that profitability might be a long time coming as they waited for the subscriber base and daily sales to grow (Picard 1997).

Newspaper Circulation

The newspaper industry statistics from the former Newspaper Association of America, now known as the News Media Alliance, tell a slightly more nuanced story about circulation and

profitability than the above summary and suggest the demand for newspapers changed

significantly over the course of the postwar period.[36] As figure 10 shows, at a gross level the

number of papers published held steady until 1980, and, as figure 11 illustrates, the total print

circulation that grew in the early period only started falling in the early 1990s.
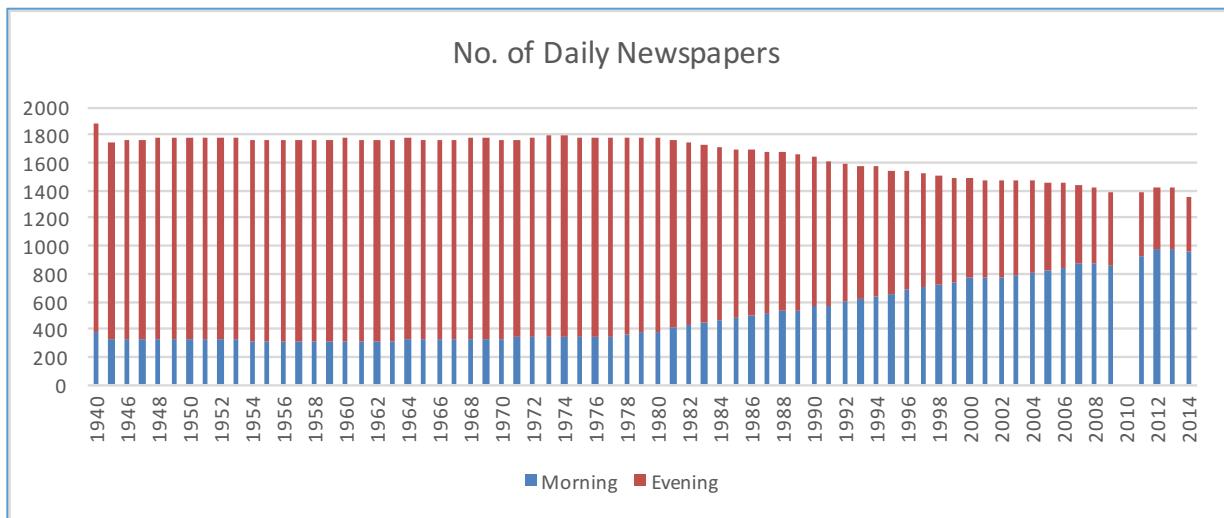
Figure 10: No. of Daily Newspapers

---

[36] These data were regularly published and updated on the Newspaper Association of
America's website until 2014. After the renaming of the organization as the News Media
Alliance in 2016 and the launch of a new website, the data were no longer publicly available.
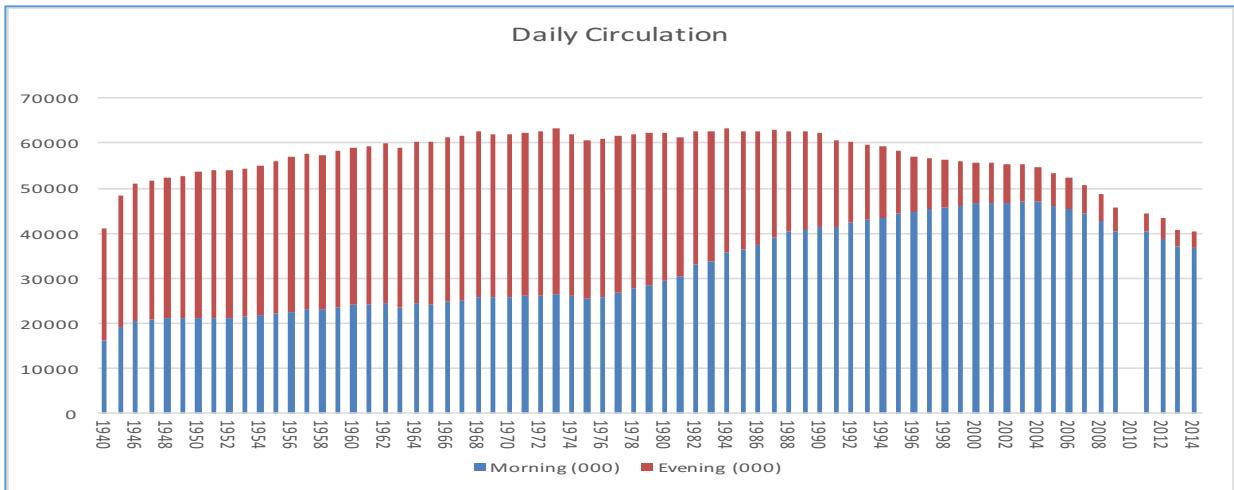
Figure 11: Daily Circulation

Figure 12 shows that in 2000, the number of morning papers was, for the first time, greater than that of evening papers. As the figure also indicates, however, the decline began much earlier for evening papers, in approximately 1977.[37] And, as figure 13 shows, the total circulation of morning papers nationally exceeded that of evening papers for the first time in 1983. The apparent lag in closing what were most likely less profitable papers was probably a result of owners' first converting evening papers to morning papers before finally succumbing to the reality that the tide could not be turned. Curiously, the slower falloff in overall circulation of papers, though it began in 1991 and has continued consistently, was likely underappreciated by owners of successful morning papers, as their overall circulation only began to fall in 2002.

---

[37] I don't analyze the reason for the earlier decline of evening papers over morning papers, however it is worth considering further given it seems the trend was almost universal. There are likely a number of reasons for the decline of the evening papers rather than the morning papers though chief among them is likely the shift to commuting by car rather than public transit and the rise of television which quickly sated the public's needs for news and information in the evening.
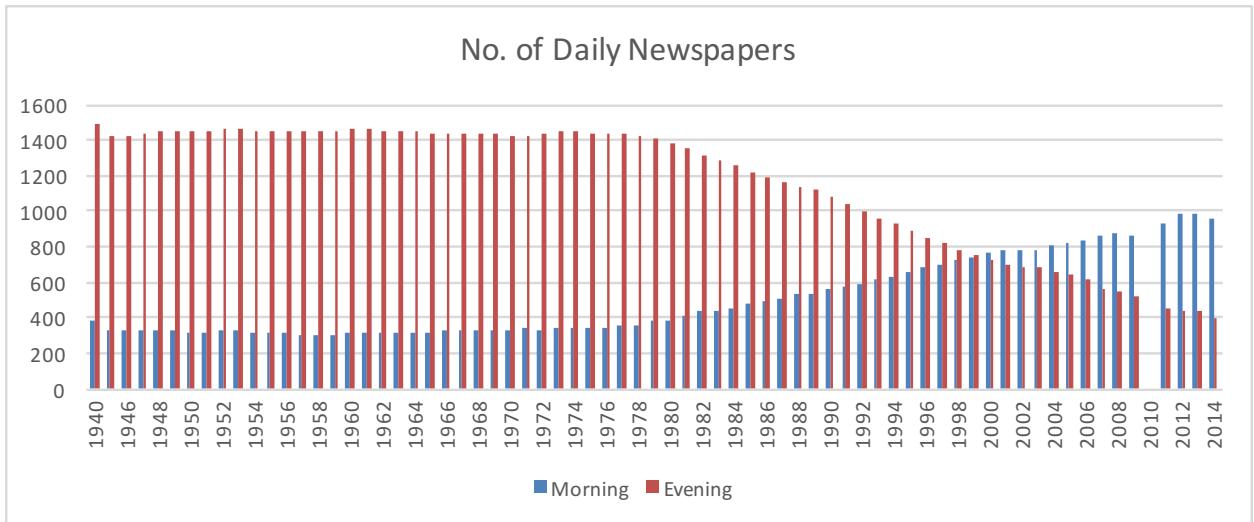
Figure 12: No. of Daily Newspapers (Morning / Evening)
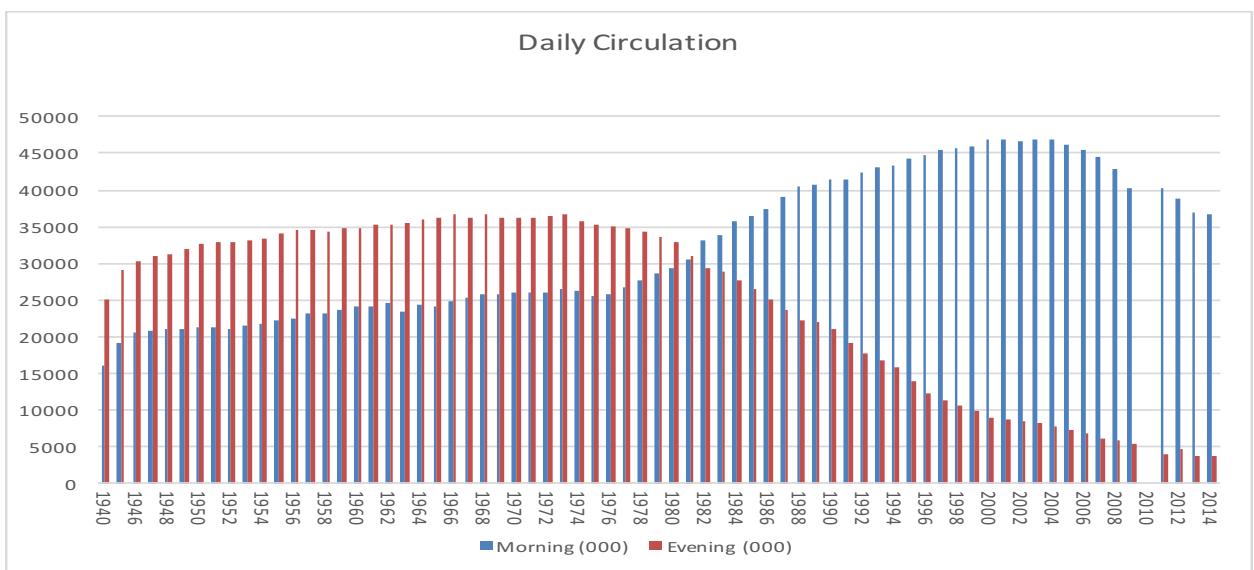
Figure 13: Daily Circulation Daily Newspapers (Morning / Evening)
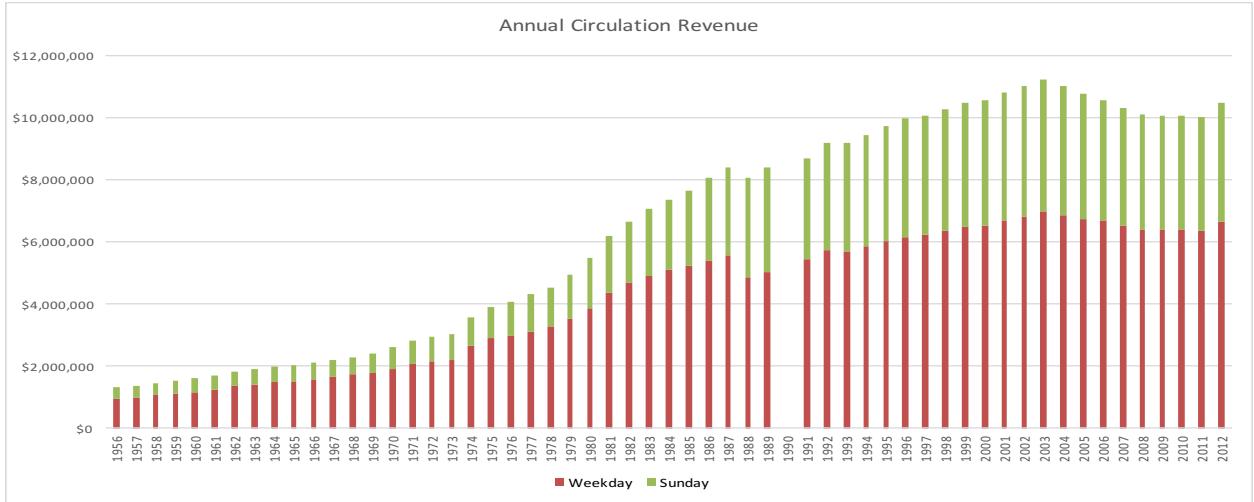
Figure 14: Annual Circulation Revenue

Importantly, figure 14 shows that circulation revenue has not fallen nearly so substantively. Although it peaked in 2003 and has generally declined since then, it rose slightly in 2012, as newspapers needed to raise prices so the revenue gains would outstrip the impact of advertising revenue losses. Given the ongoing decline in circulation, the ability of newspapers to raise subscription prices in this period has been a bright spot.

Newspaper Advertising

Advertising expenditure, which complements subscriber sales and has traditionally formed a substantial component of newspaper income, grew tenfold between 1970 and 2000. As figure 9 shows, however, print advertising has experienced a downturn since 2000. While that gap was partially filled in 2004 by advertising associated with newspapers' online and mobile presences, a dip in classified advertising since 2000 has followed a consistent trend downward, as indicated by figure 15.
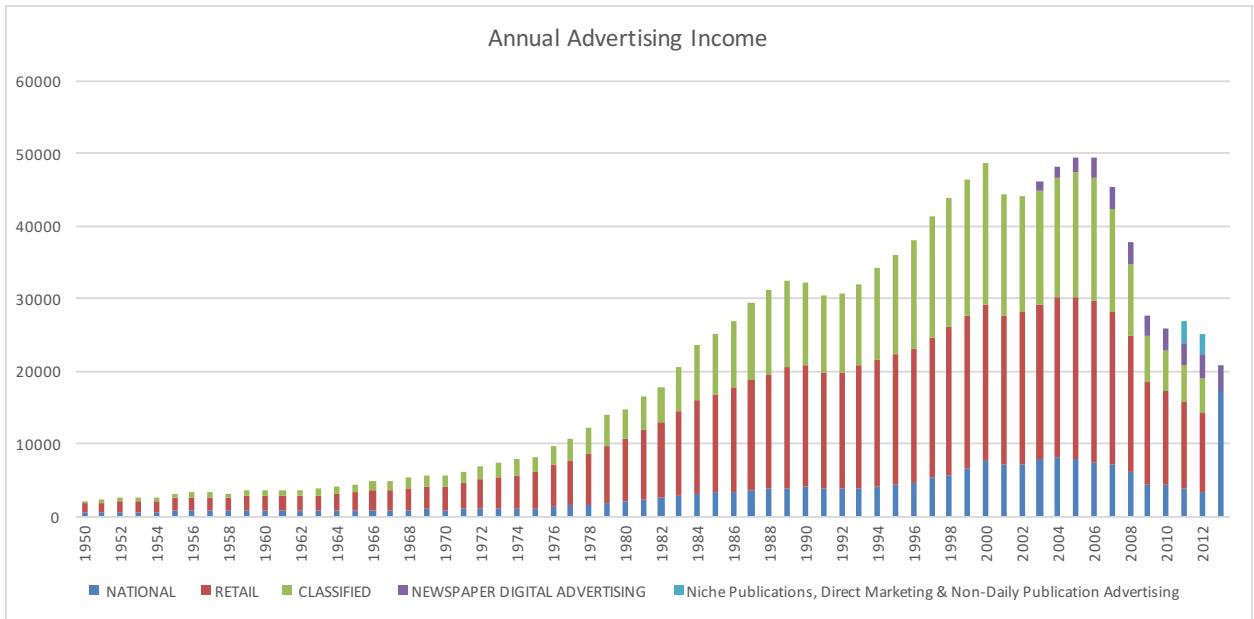
Figure 15: Annual Advertising Income

The NAA data is no longer available publicly though other studies confirm the downward trend is continuing in paper subscriptions and advertising revenue for all but the largest national papers (Pew Research Center 2018).

Television

Television news viewership presents a similar picture of decline, although the trend has been consistent over more than two decades. Viewership of evening network news programs fell to 8.1 percent of the population in 2007, having gone down 33 percent in the previous decade and 7 percent in the previous year (Project for Excellence in Journalism 2008). As figures 16 and 17 illustrate, viewership declined significantly between 1980, when the combined ratings for network news programs translated to 23 percent of the total population at the time, and 2015. Moreover, according to Nielsen's third quarter 2016 survey, the demographics of the viewers, with a median age of 61, suggest viewership is likely to continue to decline quickly over time, as the older viewers are replaced in the population by those less likely to watch traditional

television channels (Business Insider Intelligence 2017). Undoubtedly, some of the decline in the

1980s and 1990s was driven by viewers switching to cable news,

That said, the emergence of the Internet and the switching of viewers to online news

sources and social media have likely been the cause of the more recent decline. This is discussed

in the next section.
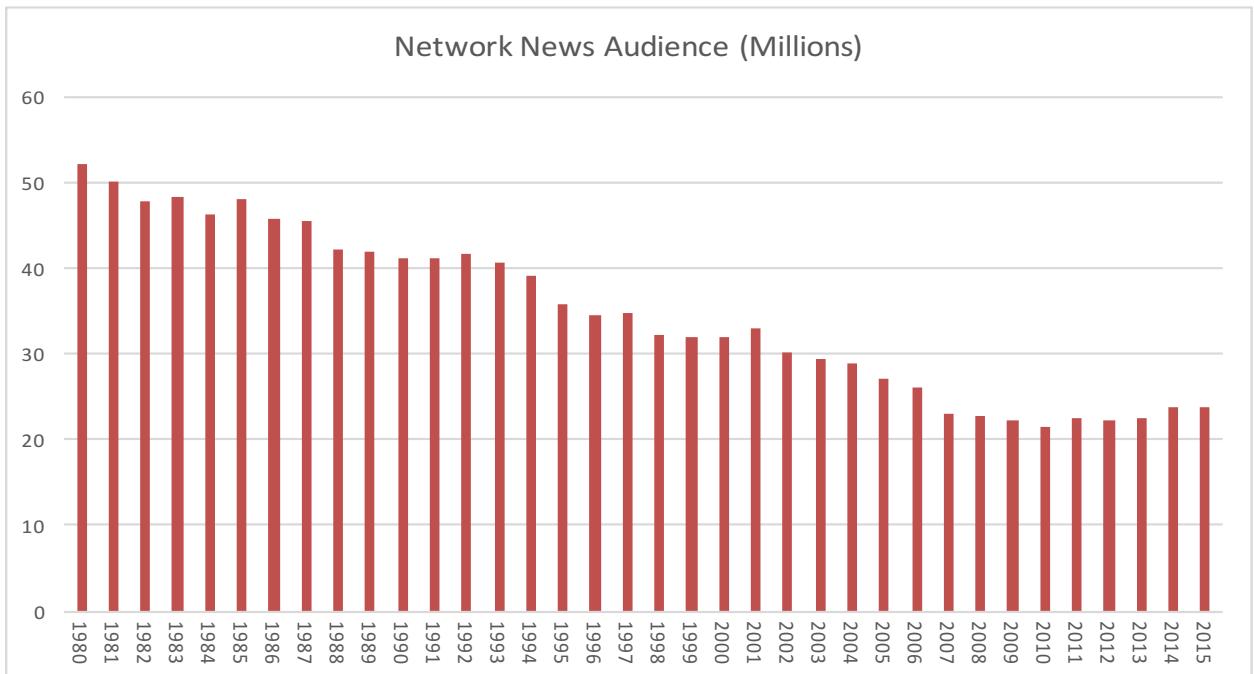
Figure 16: Network News Audience

From Pew State of the Media 2007, 2008, 2016 and US Census
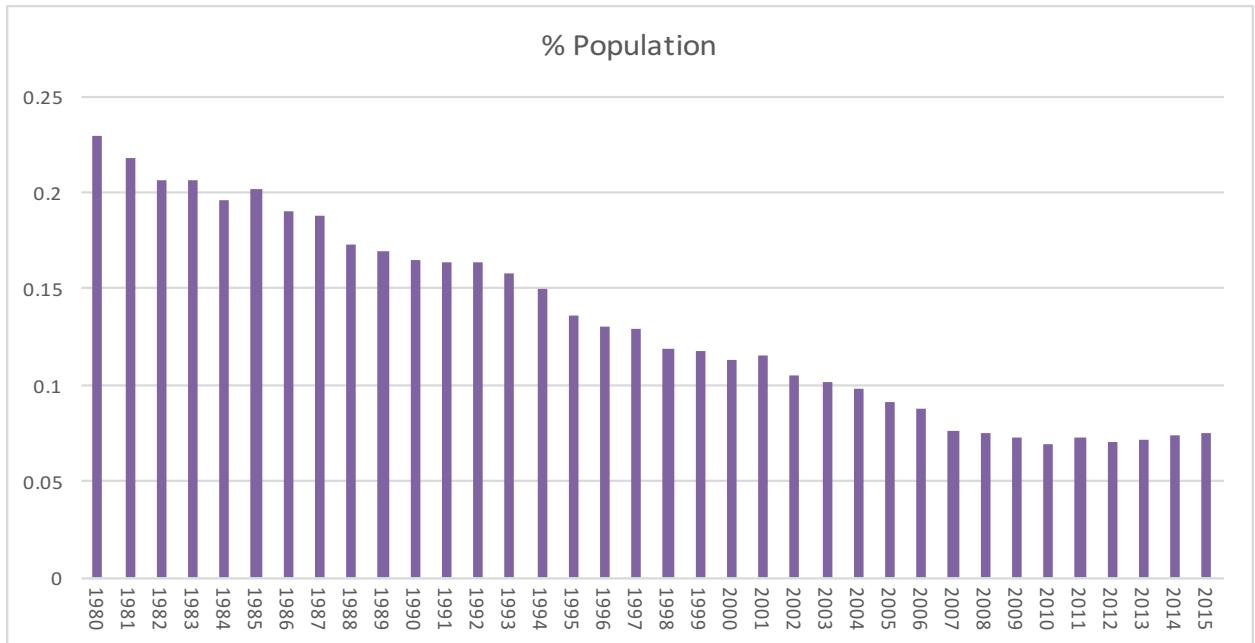
Figure 17 Network News Viewership % Population

Note: From Pew State of the Media 2007, 2008, 2016 and US Census estimates

Beyond Newspapers and Television

Journalists and media reform activists have undertaken their own efforts to understand

the media environment around the country. Now defunct, New American Media had a directory

of news outlets that serve ethnic news media across the country (New American Media 2017).

Rob McCausland developed a database of community media that includes all community access

television stations as well as nonprofit broadcast television and radio licensees ("Community

Media Database" 2011). Several others have also sought to understand the new news landscape

by compiling databases of news outlets. In 2010, the *Columbia Journalism Review* developed a

directory of online news startups ("CJR's Guide to Online News Startups" 2010). In parallel, the

Investigative Reporting Workshop at American University created a list entitled, "The New

Journalism Ecosystem," and J-Lab—also at American University—developed a directory of

news sites (J-Lab Knight Community News Network 2010; Lewis 2010) The only such source

that is regularly updated, however, is Michelle's List (McLellan 2017). All these sources cover

only subsets of the noncommercial or nonprofit news producers across the country, which makes it difficult to discern from them an understanding of any single news media environment.

Others have developed tools with the aim of understanding the structures of the links among media outlets online. MediaCloud, developed by the MIT Center for Civic Media, accumulates data from RSS feeds and by scraping a large number of sites (MediaCloud 2017). It was recently used to generate the data behind Media Globe, a project that has mapped the stories produced by the *Boston Globe* (D'Ignazio, Hashmi, and Zuckerman 2017). More recently, the Internet Archive sought to store a corpus of television news and advertisements collected from a number of news stations around the country (Political TV Ad Archive 2018).

Multiple media ownership studies have also been commissioned by the Federal Communications Commission (2007, 2010), but they are now dated, necessarily rely on the FCC database, and tend to focus on fairly narrow questions (Federal Communications Commission 2015, 2011). The FCC, in seeking to address the economic challenges of newspapers, undertook one major study that sought to characterize the state of the U.S. news media and make recommendations related to policies and practices (Waldman and Working Group on Information Needs of Communities 2011).

The Internet and the Wider Information Environment

Understanding the change in potential sources for news is difficult. Typically, 38 percent of Americans get some of their news on any given day from the Internet, according to the Pew Research Center's State of the Media Report (Pew Research Center 2016; Mitchell et al. 2016a), and the growth of online news undoubtedly has generated some of the falloff in network television news viewership over the past few years. Crucially, online news often originates from well-known outlets, with much of it received via links distributed by social platforms or on blogs or news sites whose writers pick and choose stories to fit their political agendas or the political

agendas of their readership. In particular, the emergence of social media sites that aggregate audiences has permitted a fragmentation of news consumption, stealing both viewers from network television, which is solely reliant on advertising, and readers from newspapers, which are partially reliant on advertising (Pew Research Center 2016).

To understand how these changes will affect the media structures of the future, the analysis that follows takes a new approach to examining how well news outlets are serving the public. The analysis focuses on the factors affecting news production in an effort to understand, respectively, the changes that are occurring and the nature of the media structures these dynamics privilege. Key to understanding the dynamics around news, economics, and distribution is considering the two-sided market in which news media operate and how they interact with the emerging news distribution structures.

Value Proposition of News Outlets from the Perspective of an Advertiser

In the past, the tight relationship between news production and advertising worked symbiotically: the limited number of distribution channels and the inability of the public to easily avoid commercials simultaneously delivered large cross-sections of the "eyeballs" of the population to wealthy advertisers who could afford to pay. The emergence of niche television channels, however, followed by the emergence of the Internet has resulted in a much smaller audience for each television channel. Moreover, the fact that television does not have the reach it had twenty years ago has had implications for advertisers whose campaigns were often premised on access to a considerable audience, for which they were willing to pay a premium (Lynch 2015). As for newspapers, print advertising income has fallen with circulation as news has become more easily available through other sources.

Even outside the context of news distribution, the existence of the Internet has had a profound effect on how the advertising market works. First, consumers can often acquire

information they need for a purchasing decision directly online, obviating one rationale for advertising. Second, as search tools have become more powerful, advertising expenditures have migrated directly to those search platforms (Townsend 2017). Both banner ads that sit alongside news items and search-based advertising represent, for the most part, a reallocation of spending that went in previous years to traditional broadcast and print newspaper channels (Goldfarb and Tucker 2011). Moreover, advertising on the Internet is harder to price as a result of poor-quality and inconsistent measurement metrics. Moreover, much of the income is not captured solely by the outlet that produces the news (Pidgeon 2016). Add to this that much of the classified advertising market has been undercut by lower-cost standalone services, such as cars.com, and free services, such as Craigslist (Seamans and Zhu 2013). In short, the market for public attention has changed in a number of fundamental.

These changes are represented in a simplified form by the systems map loop in figure 18. From the perspective of any news distributor, as the public increasingly favors the Internet to obtain information over other means to do so, there is a shift in monetizable audience attention. This shift results in lower income for news producers, which in turn reduces the quality, quantity, and relevance of the news produced. This decline further reduces attention for news offline and online, feeding the dynamic.
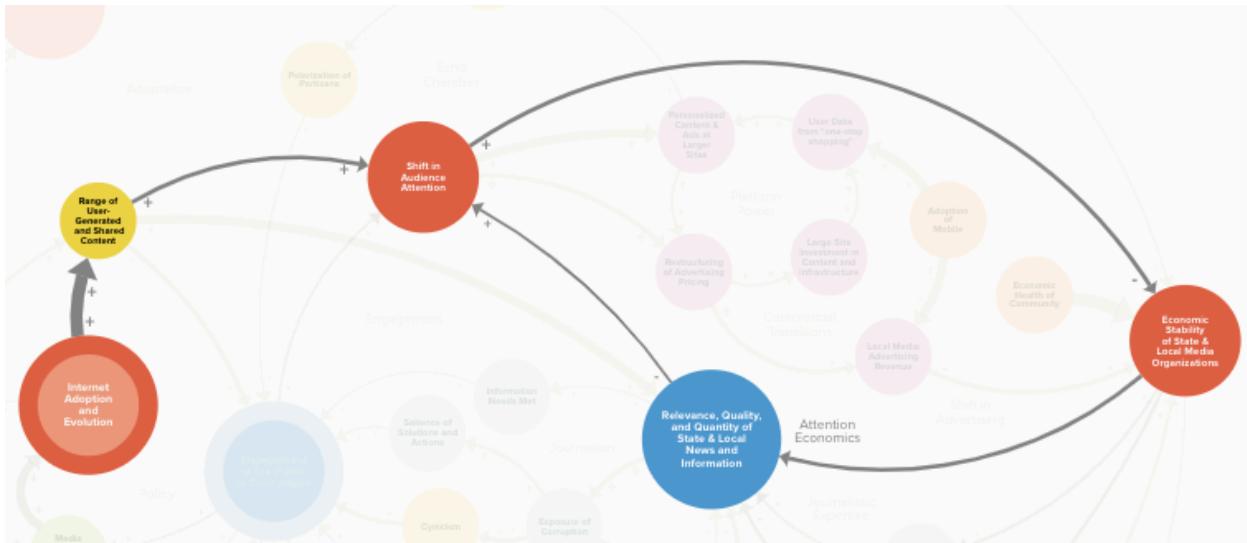
Figure 18: Attention Economics Loop

Another perspective from which to view this loop is Porter's five forces model (Porter 1979). This model considers the competitive micro-environment of firms operating in an industry and seeks to explain industry profitability as a function of: supplier power, buyer power, the threat of substitute products, barriers to entry and how they interact to influence the level of industry rivalry and thus profitability.

Taking one of Porter's elements, the threat of substitute products, and considering each news distribution channel (television, newspapers, and the Internet) as a competing product through which citizens can receive news and information, we can see that the Internet has transformed the news environment by becoming an alternative news source, much as television news became an alternative to radio and print news in the 1950s and cable news became an alternative to radio, print, and television news in the late 1970s and 1980s. According to Pew, 73 percent of Americans go online daily, with 21 percent online almost constantly (Perrin and Jiang 2015; American Press Institute 2014). With the increase in both broadband and mobile access to the web and the adoption of technology to use it where it is available, a user preference for online news is only going to become more pronounced, especially since the cost of switching to

receiving news via the Internet is zero, as consumers have already paid the access costs when purchasing cell phone or broadband plans for other reasons. In short, just as people in the 1990s chose to receive their news from cable and CNN, many in this decade are motivated to make the change to web sources.

Turning to the next force in Porter's model, until recently the entry of new competitors to the news business was difficult. The considerable economic and legal barriers to entry included licensing requirements for broadcast television stations. Cable, though lower cost, was limited by technology constraints and regulation at the city level. Newspaper printing costs had a high fixed cost element.

Nowadays, these barriers are quite different, and the result has been the entry to the news business of new competitors on a scale that could not previously be conceived. Digital cable has permitted the setting up of hundreds of channels with no need for licenses; more efficient printing has permitted "free" papers to acquire significant distribution surviving only on advertising. Most recently, the development of the "instant articles" functionality by Facebook and its availability to any publisher has leveled the playing field even further; even the smallest publisher can produce an article that will be presented to Facebook's audience as quickly as could be accomplished by only the largest publishers just a few years ago (Facebook 2018a).

Perhaps most important are the millions of micro-outlets now emerging on the web. Sometimes better understood as "studios," these micro-outlets sometimes focus on single issues or have a hyper-local focus. Sometimes the reporting is of low quality, and publishing is sporadic. Many use relatively basic web publishing content management systems. Because of these limitations, some critics have disparaged the possibility of these micro-outlets competing with bigger, more established outlets (McQuaid 2012). In some cases, these critics are correct, as some of the micro-outlets do little if any original reporting; they merely repackage already

published news excerpted from its original sources, with opinion added. Unfortunately for the original producer of the news, however, micro-sites that merely list key sections of articles published elsewhere reduce the audience on the originator's news site, even though they provide little added value, and such behavior cannot be restricted under current copyright law (Sanford, Brown, and Babinski 2009). The result is that such re-publishers can obtain a percentage of the advertising revenue that would have previously gone to the producer, whose distribution and publishing costs are significant. Nowadays, with the cost of setting up a basic presence online close to zero, there is little doubt that mastering the art of publishing to the world, already a technically easy proposition, will become an ever more common skill.

Fortunately for the originators of news, the brand equity in well-known outlets limits the value of republished material, as many readers go to the original source. That said, the rapid rise of new news sources suggests brand equity, at least in the online world, can be acquired in months rather than decades, and a reputation based solely on historic reporting successes does not provide the protection against competition that it used to.

In parallel, as the audience has shifted online, the way advertising prices are set has changed. Figure 19 shows the dynamics around advertising pricing.
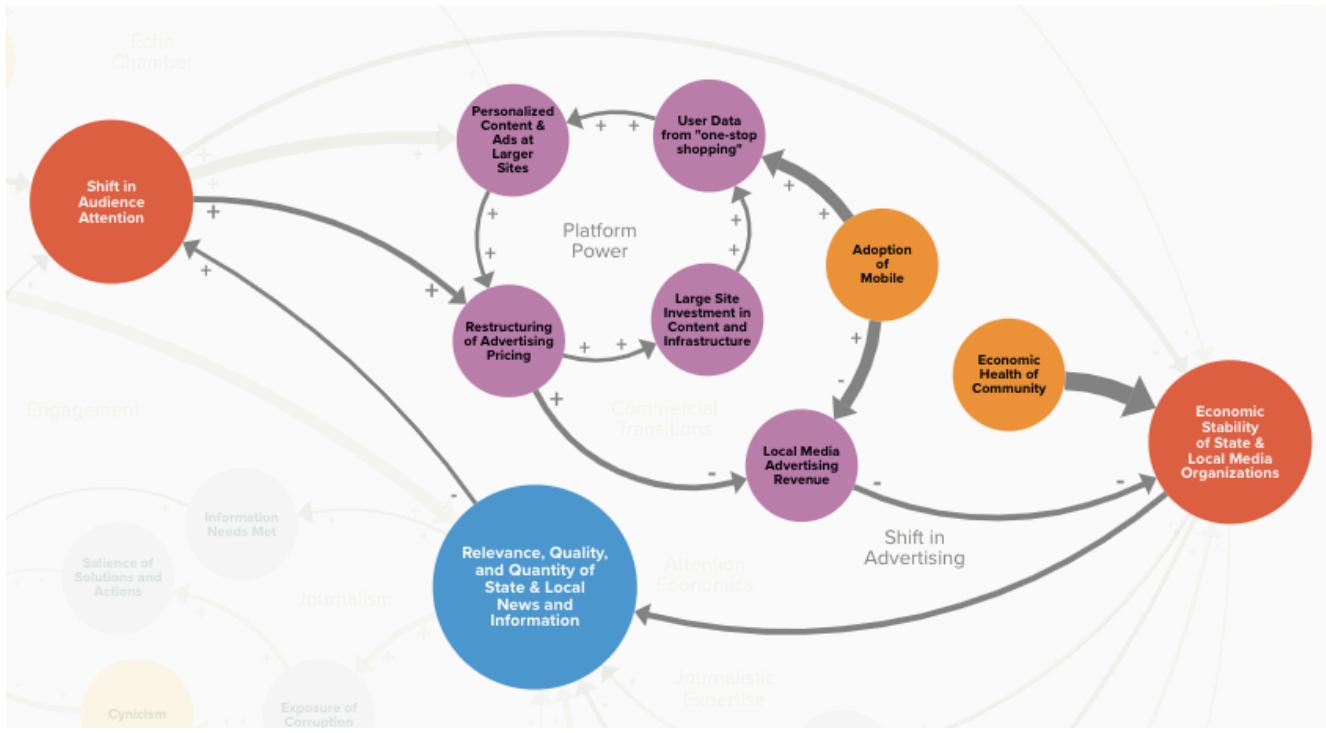
Figure 19: Platform Power and Shift in Advertising Loops

Crucially, as the news outlets have found themselves as just a few among multiple organizations online (rather than the oligopolistic resellers of the public's attention they once were), they no longer sell advertising directly but often acquire revenue from ad networks that can sometimes instantaneously sell ads targeted to readers on the websites of the news outlets (Ghosh and Scott 2018). No longer does the news outlet obtain 100 percent of the cost of the advertising as revenue (Pidgeon 2016; Moses 2016; Hof 2012). Beyond this, the economic returns to scale that large platforms gain by understanding the data of their users appear to be increasing. This trend appears to be exacerbated by the public's increasing consumption of news on mobile devices, where advertising revenue tends to be held by the platform companies that have more control over the market on mobile, as well as independent ad networks (Lu and Holcomb 2016; Lu 2015; Olmstead 2014). This dynamic results, as it is repeated, in an ever-larger slice of the revenue pie going to digital advertising platforms and to those few outlets which, by virtue of their audience size, can act as direct sellers of advertising.

More perniciously for news as a public good, the ability of advertisers to distinguish individual wealthy readers, and then sell and present specific advertisements to those readers, creates an incentive for news producers to target content to wealthy demographics or to demographics that are known to be likely purchasers of highly profitable items.

This change can be explained by considering another element in Porter's model: the bargaining power of buyers. Perhaps most significant is how this power has changed. In dual-sided markets, such as media of all types that have two types of buyers—consumers and advertisers—the shift has been profound. Consumers now have much more choice—almost infinite—in how to allocate their attention (Neuman and Gregorowicz 2010). As it becomes increasingly easy to "change the channel" by moving to the URL of a different outlet, or merely by consuming news article by article as presented individually on a social media platform, or aggregator platform such as Apple News the position of the journalistic outlet becomes ever weaker.[38]

The advertisers are also able, by purchasing advertising through intermediary ad networks, to allocate their online advertising spending in a way that positions news outlets alongside entertainment and other sites. Fundamentally, where the newspaper previously could set the price for advertising because it had almost a monopoly on the daily attention that might be directed toward ads, all news producers are now price takers in an extremely competitive

---

[38] I am considering here the implications for the news outlet. It is also important to consider the implications for the receiver of the news. From that perspective the overwhelming choice leaves the news receiver in need of mechanisms to short circuit the tsunami of news and information and in that the social media platform that non-transparently aggregates many signals to prioritize attention is an attractive solution that leaves the receiver no less disempowered than the news producer.

market. Vis-à-vis advertisers, their position is incredibly weak as a result of the increasing power of the Internet platforms that mediate much advertising spending.

As a result, the fifth force in Porter's model, the intensity of competitive rivalry, is now much greater than in the past, with the number of competitors higher and more diverse, the consumer switching costs lower, and little differentiation in news provided by incumbents, who face considerable exit costs should they leave the industry. These factors, alongside the sheer unsettled financial outlook of the business, result in aggressive competition within the news sector, as participants seek to maintain commercial sustainability much more often by deep cost cutting than by product innovation. Over the long run, though, it is highly likely that participants will seek to obtain economies of scale and lower the intensity of rivalry by sharing resources, merging with formerly competitive outlets to reduce competition or being rolled up by a private equity firm who sees a short-term opportunity to increase stability and reliability in revenue.[39]

Industry Restructuring Dynamic

Undoubtedly, the loss from the news media industry of advertising revenue will continue to drive economic pressures. Papers will continue to downsize, close, or merge, and the assignment of a dedicated reporter to cover standard media events will be replaced by increased use of newswire-like services for reporting outside each paper's core readership area.

---

[39] It is important to note the different implications the incentives create for commercial news organizations seeking short-term profit maximization and nonprofits seeking sustainability based on serving a community. For commercial news organizations with a profitmaking orientation focused on the short-term the appeal of mergers, joint operating agreements or management services agreements are clear. For non-profits the incentives are may seek advantages of collaboration or news sharing, but the financial savings must be ploughed back into the organization and further building its reputation and does not have to distributed to shareholders. This is borne out by the growing willingness to partner between nonprofits and for-profit commercial news organizations.

To fund the innovations and aggregation of entities, technology platforms such as Facebook and Google will, more than likely, step in and take over ever more significant aspects of struggling media organizations.
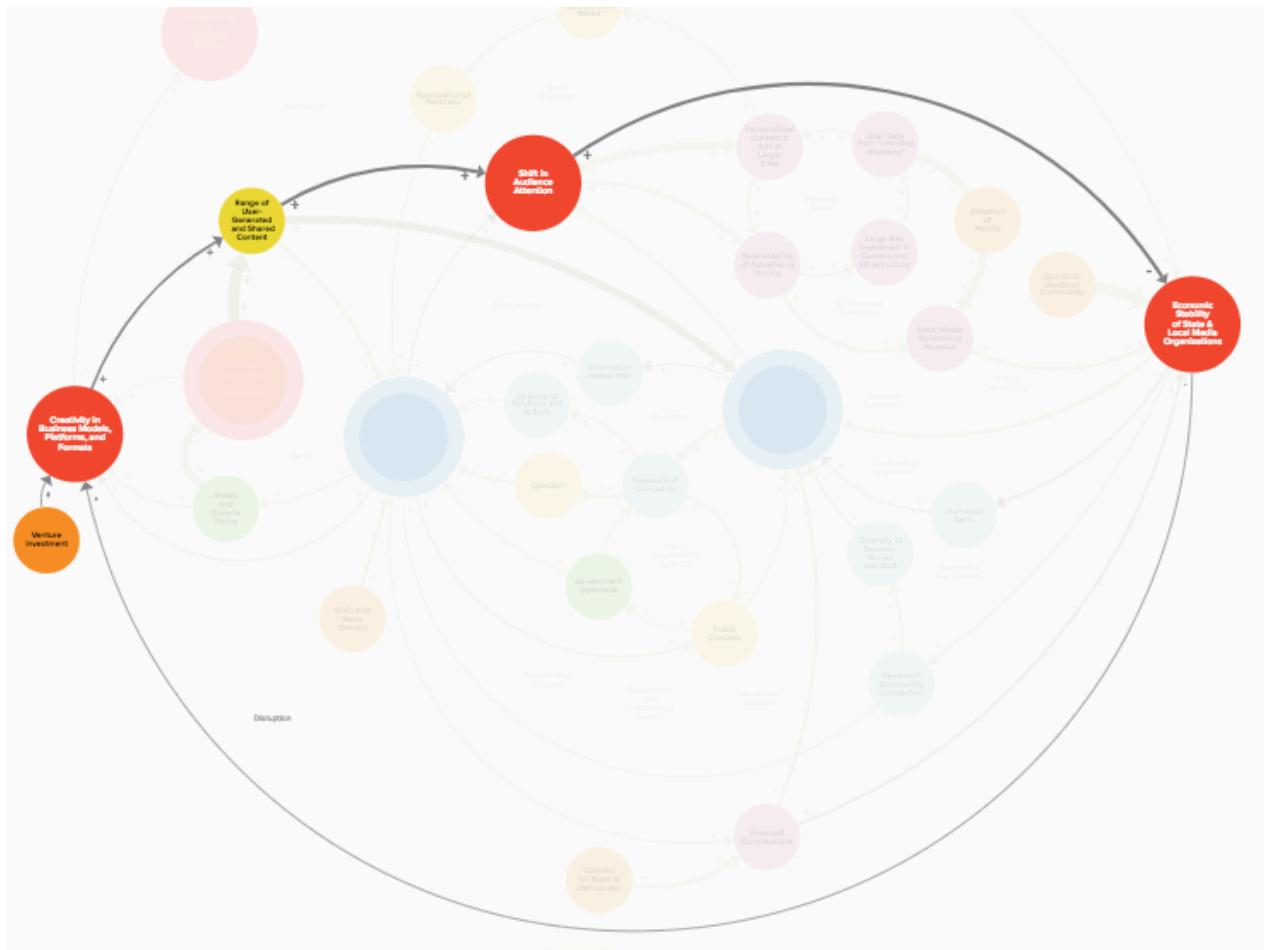
Figure 20: Disruption Loop

This dynamic is represented in figure 20, which shows the economic pressures on journalistic outlets creating in turn pressures for disruption.

Some of these pressures will generate the development of affordances in platforms (or new platforms) that attract public attention and serve as alternatives to news outlets for advertisers. In parallel to this consolidation of capabilities within platforms, some outlets will develop approaches that attract audiences back perhaps through micro-niche reporting to

leverage the deep sector or issue knowledge of individual journalists or ease of access to information. This dynamic is shown in figure 21.
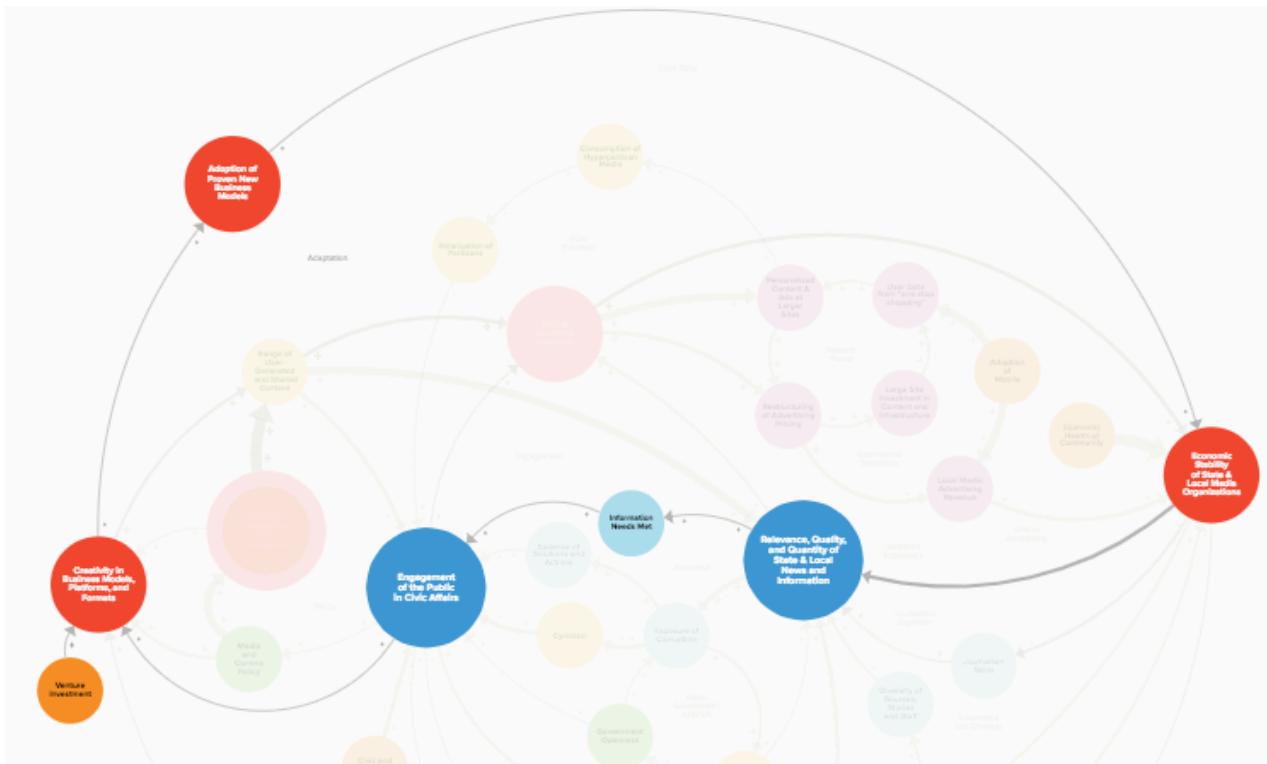
Figure 21: Adaption Loop

It is worth noting that the combination of these two different dynamics of innovation, the first of which is a story of adaptation and the second of which is a story of disruption, is what the outside observer sees and what introduces complexity into understanding the most likely outcome. Should the disruption dynamic overwhelm adaptation you can expect the media ecosystem to be centered around platform companies. However, should the adaptation loop be more powerful public attention would be directed more towards news outlets with new affordances. Intriguingly, as platforms build practices on their strengths and news outlets on theirs, in the short run both it is reasonable to expect that the platforms and the outlets will be able to work together, each seeing the other as playing a necessary, complementary role. In the short run, the news outlets obtain access to technology to target users they might not otherwise

get that allows them to optimize ad revenue. The platforms obtain legitimacy and are able to offer content to users for free. Of course, over the longer run, the news outlet has given up its ability to operate independently and is newly reliant on the platform, and the platform has built an expectation with users that it will serve up a certain type of content.[40]

One trend that is only beginning to emerge is the distribution and tailoring of journalism products by medium. It is occurring as papers pare back their print editions at the local level and publish fewer than seven days a week. That said, innovations in layout, size, and content that leverage the capabilities of each medium in an integrated way are only just beginning to be implemented. Just as the online medium privileges certain stories that have accompanying video, audio, or vast numbers of photographs, paper media also provide opportunities to display stories or other content more clearly on a single page than can easily fit on a screen. Moreover, we will see the papers providing coverage complementary to the coverage online rather than repeating the same story in both places. How this dynamic will play out in a context of fewer resources in newsrooms is uncertain.

Value Proposition of News Outlets

No less profound than the changes already discussed are four significant changes related to news distribution and consumption.

---

[40] Of course, the power dynamic is infused with the difference in size between and size and profitability of the two entities. The platforms are many, many times the size of the news outlet, and far more profitable and can more easily free themselves of the direct relationship with the outlet, whereas the news outlet is now tied into a relationship regarding ad revenue that is ever less attractive as the platform exploits its strength whilst seeking for additional income.

Infinite Distribution Bandwidth

The ability of newspapers and cable television news to provide content suitable for a mass market and to charge for that content was premised on the limited number of ways in which news could be acquired. With the age of digital cable and the emergence of the Internet, this restriction has fallen away. No longer is there a hard limitation on the number of channels of information (Neuman and Gregorowicz 2010). In fact, for some of the American population, two platforms used by many—Facebook and Twitter—consist of content that is continually being reformulated and recombined such that each person is receiving a different selection of content some of it professionally produced most not.[41]

Infinitesimal Cost for Marginal Distribution

The emergence of low-cost Internet publishing solutions permits even the least technologically savvy to set up a website quickly at very low cost and do so in such a way that the person can generate modest income by placing advertisements alongside news. This stands in stark contrast to what it cost in the past to set up a television station or a newspaper. Moreover, the difficulty of integrating low-cost video into news sites has also fallen, enabling even individuals or very small organizations to become video media outlets to a mass market, something that only fifteen years ago might have required millions of dollars in capital investment and sophisticated marketing expertise.

---

[41] Further complicating an understanding of the limits is that the content of each channel is created in part by taking signals from not only the individual consumers of that content but also their social circles among other data points.

The Network Opportunity

The previous two changes have resulted in a fundamental shift from a business model premised on extracting value from a channel under conditions of monopolistic competition to one where the distribution is mediated by a vast network of interconnections that are (from the perception of the news receiver) public goods after payment for access to the internet. Important economic modeling of this by Athey, Calvano, and Gans (2013) suggests value for media firms will be created by understanding and owning vast numbers of nodes rather than packing a single channel with the highest value material available.

New Ways to Segment News Media Consumers

Through a combination of user-centric audience metrics provided by Internet applications, TV cable boxes that report which channels are watched, and GPS-enabled telephones, it is possible to identify content that better engages news consumers wherever they are, and through their medium of choice. The result is that outlets will have incentive to produce content that responds to the preferences of ever smaller slices of possible readership.

The ultimate result of this restructuring has been the growth of news media distributors who will distribute content over multiple media. Such distribution will better serve the advertiser who seeks reach and is prepared to pay a premium for it. CNN is a great example of a company that does this. It is notable that such advertising reach can also be delivered by the digital advertising platforms that trade in data that permits tracking of a user as they skip across the web. Notably, the economic returns for achieving this reach will accrue to the advertising platforms and data brokers rather than the media outlets who are price takers in this context acquiring advertising copy through automated auction platforms (Ghosh and Scott 2018).

Just as these changes in distribution have had an impact the effect of the downsizing on the connection between a newsroom and the public has been tested.

Newsroom Isolation and Community Disengagement

Staffing reductions have a direct impact on the amount and quality of the journalism that can be produced, as fewer stories can be written and less research carried out. The downsizing of news outlets has a second-order effect, as well: as staffing is cut back, the level of contact possible with the community being covered is reduced. Over time, this results in a weaker connection between the newsroom and the community; less diversity in sources, stories, and staff; and, ultimately, as the news outlet fails to play the role it did in the past, a lowering of trust in it. This dynamic is reinforced as the community withdraws, seeing fewer possibilities for engagement with often overburdened newsrooms, thereby further undermining the ability of the newsroom to generate journalism that has relevance and quality. Figure 22 shows this dynamic.
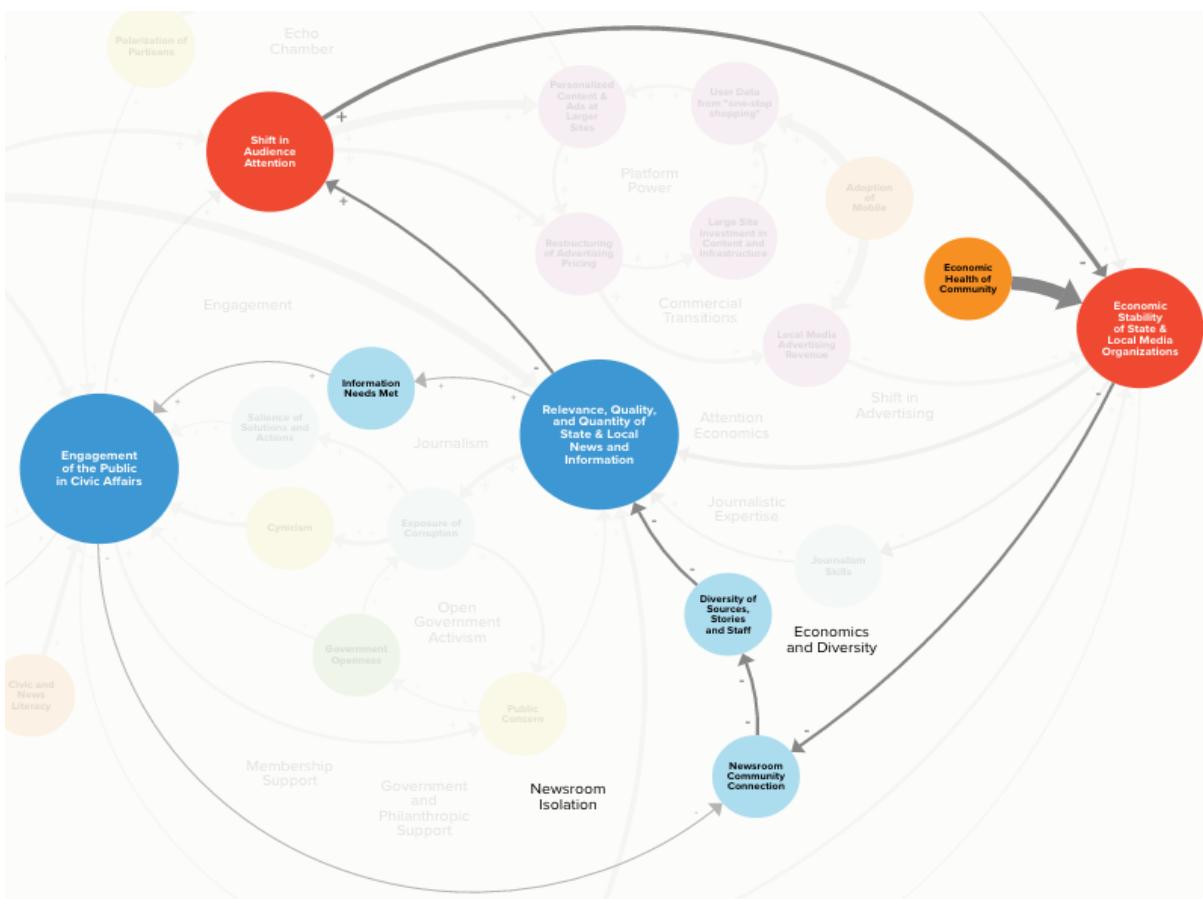
Figure 22: Newsroom Isolation and Economics and Diversity Loop

Journalism Practice in Transition

With respect to the practices instilled in journalists to carry out their work, the lower income of news outlets has resulted in less skilled journalists, whether because the more highly paid and experienced ones have been laid off (because they were more costly employees) or because formal training programs for younger journalists have been cut back. Figure 23 shows this dynamic
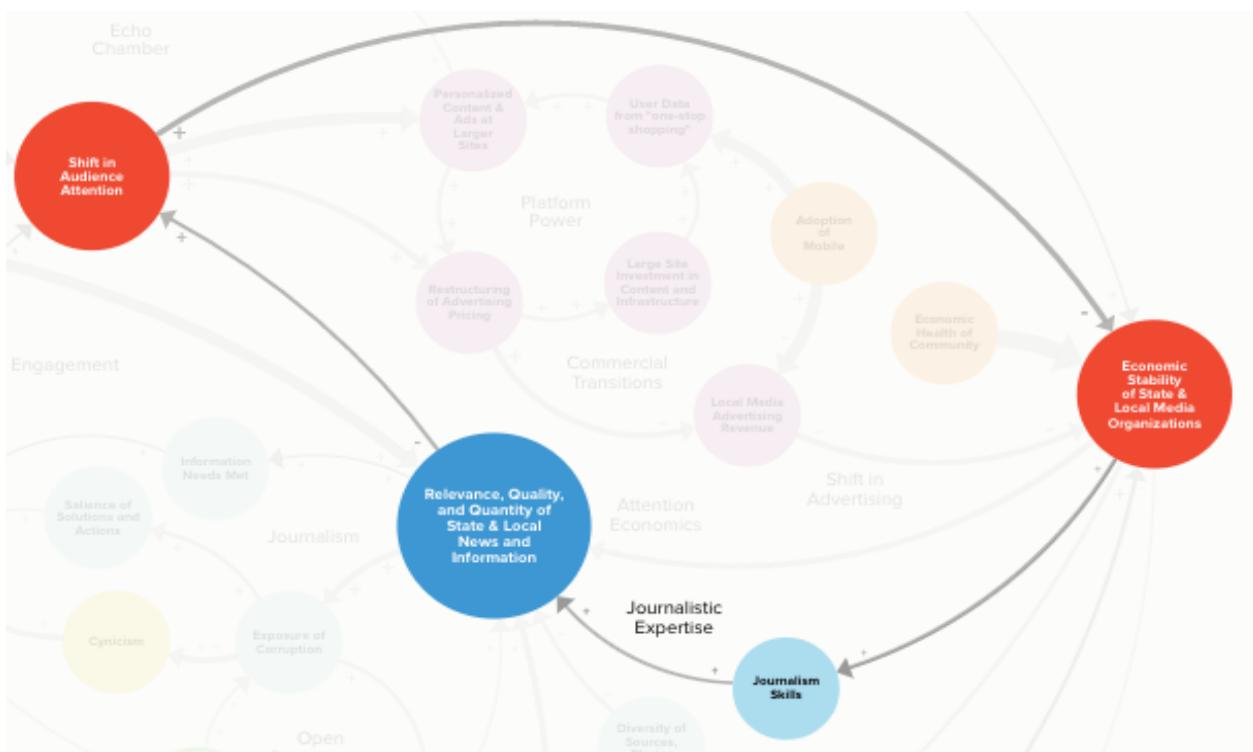
Figure 23: Journalistic Training

Public Support

To supplement the loss of advertising income, news outlets have needed to turn to public support. For commercial outlets, the loss has resulted in increasing prices for print editions and installing paywalls (leaky or otherwise) that block readers who repeatedly visit a site from reading articles once they have hit a certain limit. For the new online nonprofit news outlets, it has meant seeking philanthropic support from foundations and sponsorships from commercial

outlets and the development of new major philanthropic donors, as well as the adoption of new innovative ways to generate income.[42] Figure 24 shows describes how increases in subscriber or philanthropic revenue result in better journalism, as outlets are more connected to their audiences and can afford to employ more journalists. Those benefits, in turn, feed back to the subscribers and increase support in the future.

---

[42] Journalism expert, Josh Stearns, has documented fifty-two ways to generate income from news through advertising, events, newsletters, merchandise, memberships, services, side businesses, combining print and digital, offering premium content, paywalls, e-books as well as philanthropy (Stearns 2015).
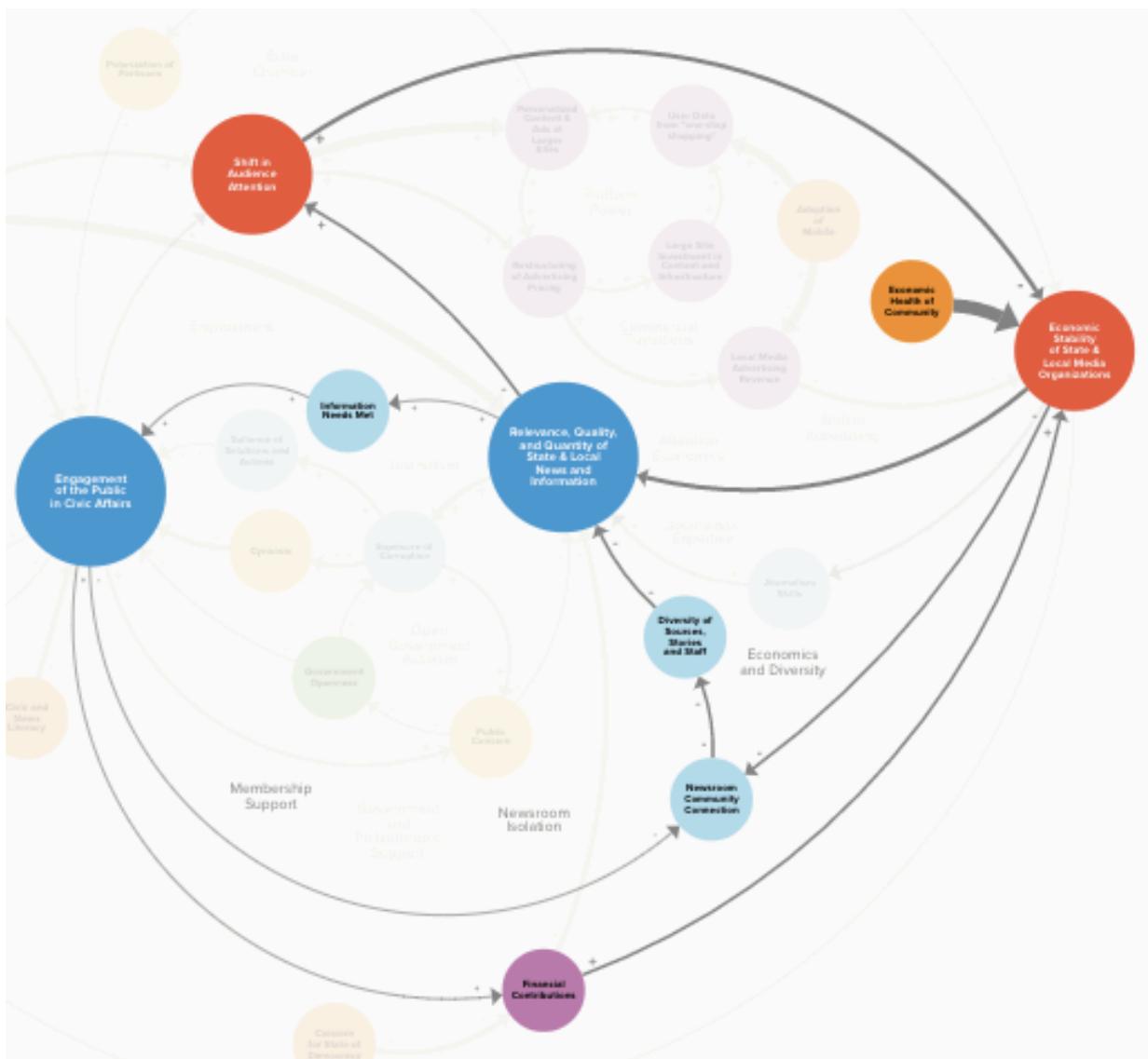
Figure 24: Membership Support Loop

Hypothesis from systems analysis

The systems analysis conducted for this study has generated the following hypothesis that, collectively, the dynamics outlined above will result in a media ecosystem populated by a set of institutions that will try to exploit the dynamics they are facing in the following ways:

(1) Technology platform companies such as Google and Facebook will continue to be in a position to exploit their oligopolistic position as suppliers of "eyeballs" to advertisers and command a vast amount of monetizable audience attention. Unlike in the recent past,

when media distributors who were also the producers of journalism necessarily had local ties, these organizations will not be locally based, since the aggregation of human attention in a digital age is most efficiently achieved by deploying tracking technologies across millions of people. The platforms are unlikely to be attuned to the specific needs of localities. Their institutional DNA will be focused on exploiting and maintaining the positional power they acquire by the accuracy of their targeting and the sophistication of the operations they can direct toward an advertiser.[43]

(2) As a result of (1) The economic challenges faced by the locally owned or managed advertising-supported newspaper will continue. Although these outlets may still command considerable attention for audiences, they will lack the scale, capacity, and technological sophistication of the platform companies. Where they do sell advertising, it will often be most efficient for them to sell advertising via intermediaries (often the larger platform organizations) who are able to obtain higher rates by virtue of their much greater knowledge about the nature of the audiences.

(3) The production of journalism that meets critical information needs, such as those associated with emergencies, health education, and transportation systems, or that serves

---

[43] It is crucial to recognize that in this systems analysis there are no countervailing loops related to advertising and platforms. The implications of this is that the dynamic may have a "runaway" nature – the income stream of the platforms reinforces their power and this in turn increases their income stream – this has profound implications and explains why so few putative competitors are able to grow successfully and independently. Reflecting on this the only countervailing dynamic that I can conceive is one generated should the platforms run out of content to index – there is so little news to link to the platforms lose the attention of the public – this is unlikely as it appears that the platforms can use their position to direct public attention to non-news sources of information and still maintain public attention and thus profitability. That said, it is an outcome worth considering as it would create an incentive for the platforms to cross-subsidize news production.

to create accountability for those who are powerful will, out of necessity, have to find

increasing amounts of financial support from approaches other than advertising and often

that will need to come directly from news audiences.

(4) As the inadequacy of commercial funding becomes more evident, philanthropic funding

for journalism from private foundations and the general public to non-profit organizations

will likely rise to fill the gap as: (a) the financial needs of journalistic organizations are

recognized (b) news outlets set up nonprofit entities that deliver tax advantages to the

donor, and (c) their lower costs relative to their for-profit counterparts. Because of their

mission-centric nature, they will likely find it easier to make use of lower-paid and

volunteer labor of all sorts.[44]

(5) As a result, much investigative and other coverage will likely be produced within

nonprofits in the future.[45] In some cases, the nonprofits will share that content generously

with for-profits in a trade of public attention for journalistic legitimacy and impact on the

public conversation around an issue. [46]

---

[44] By virtue of the nature of philanthropy, the capital provided is also comparatively tolerant of organizations that may need to move cautiously to develop their positions in an information ecosystem. Moreover, such support is not contingent on quarter -by quarter performance of the news outlet and thus tolerant of the uncertain and uneven nature of reporting in the public interest.

[45] Growing evidence that this is taking place can be seen in the now relatively straightforward approval of journalism nonprofits by the Internal Revenue Service and the move to place Philadelphia newspapers within a nonprofit ownership structure. Perhaps most telling is the setting up of nonprofit entities by large news outlets, including one by *The New York Times*.

[46] The inability to endorse an election candidate is a drawback to the production of journalism by a public charity under a 501(c)(3) status. Although the news context is distinct from the situation in which a public charity plays an advocacy role on issues, such an action has

(6) Due to the functionality of platforms, news outlets will engage in approaches to production that previously may have been considered beyond the bounds of traditional journalism. Good examples of this are events at which the journalist on a story plays a lead role in facilitating a dialogue on an issue in front of an invited audience and streams it online. More creatively, the Center for Investigative Reporting has turned its reporting on sexual violence against agricultural workers into a play and its reporting on toxic spills in New Jersey into a comedy show. This approach is not for all news organizations; in some cases, they may allow other organizations to play a role in the distribution of news and the audience's engagement with it rather than undertake such activities themselves.

To understand in more detail whether the systems analysis developed from insights of a set of experts is predictive, the following section reviews a number of reports, case studies, and studies of news and media ecosystems as well as original research to explore whether the structures that are emerging are in line with the dynamics identified above.

Case Studies from the Beginning of the Crisis in Journalism Sustainability

In 2008 when the financial crisis in journalism and the transition to digital distribution was becoming an important public issue the Berkman Center at Harvard University published case studies of several specific outlets in New York City, Chicago, and New Hampshire. Khadija Amjad, for instance, examined an outlet in Deerfield, Massachusetts, called the Forum as an

---

been considered electioneering by the IRS even with respect to news outlets ("The Nonprofit News Model | Reporters Committee for Freedom of the Press" 2016). In the case of the *Philadelphia Inquirer*, the outlet is still a for-profit corporation though owned by a nonprofit. It is still able to (and still does) endorse candidates. I expect other outlets will pursue solutions to this constraint over time, as well.

example of a hyper-locally-focused citizen media nonprofit startup sustained by small donations initially fiscally sponsored by the Friends of the Deerfield Library. (Amjad 2008). Matt Hampel examined the *Chi-Town Daily News*, a short-lived, grant-supported news site focused on public interest stories serving the Chicago area, which sought (ultimately unsuccessfully) to use a citizen-contributor model (Hampel 2008).[47] Dan Levy profiled the Gothamist network, which at the time of his study extended to fourteen cities, providing a wide variety of content interesting to young urban professionals (D. J. Levy 2008).[48]

All these studies added to our understanding of what might arise over time but to understand the bigger picture I turn now to an approach to analysis that covers not just the outlet but the context in which it is operating.

Media Ecosystem Analysis

In addition to these case studies, the Berkman Center issued a number of reports that sought to explain the role of different parts of the media ecosystem and how they serve community needs.

---

[47] The closure was sudden and attributed by its Editor-in-Chief to an inability to raise charitable dollars to support the mission. Like many early digital non-profit outlets it faced a philanthropic field unused to supporting journalism and delivering a journalistic product which (despite its aspirations) failed to engage the public in a manner that gained neither audience nor engagement that yielded financial support from readers (Huff 2009).

[48] Demonstrating the fragility of online outlets whose owners don't have the sensibility towards news that local newspaper owners once did, Gothamist was purchased by the owner of DNAInfo in 2017 and subsequently shut down in November 2017. The owner was unhappy with the financial returns he was getting and at a moment the staff unionized he decided to close the organization rather than continue it as a going concern. Fortunately, the network of sites was subsequently purchased by a consortium of three public radio stations who have sought to relaunch them as regional sites

Pat Aufderheide, Jessica Clark, and Jake Shapiro outlined the challenges for public media that emerged from the industry's switch to digital and online media and discussed how public media might deal with these challenges, given the inertia and complexity embedded in the public broadcasting system. Aufderheide and colleagues advocated growing local leadership at television stations, fostering collaboration public television stations, and creating a vehicle for investing resources to showcase participatory and digital innovations (Aufderheide and Clark 2008).

John Kelly analyzed links between websites, revealing a news ecosystem in which legacy media gain engagement from less formal media outlets and blogs, some of which actively subscribe to different ethics when they repost segments of news on sometimes polarized issues (Kelly 2008).

Ernest Wilson segmented the media into four silos: traditional print media, digital media, public broadcasting, and commercial broadcast media. Wilson identified cross-cutting issues related to cultural, ethnic, and global diversity (Wilson 2008).

Rob Faris and the late Persphone Miel concluded that the economics of news production were at risk. New outlets were not replacing legacy ones, and participation in the new online media space was uneven, with some populations and ideas underrepresented. Subsequently, they advocated for activities to support innovation in targeted realms and greater efforts to understand the emerging news environment (Miel and Faris 2008).

In 2010, the Quello Center studied city government reporting across print, television, and the web, finding that newspapers were much more likely than were other news media to cover government and that coverage of topics varied across mediums (Baldwin et al. 2010). Importantly, this analysis showed how the differing focuses of outlets on different mediums resulted in outlets complementing each other rather than duplicating.

In 2010 and 2011, a research team I led at the New America Foundation built on Knight's

Information Needs of Communities Report and on Friedland's ideas and published five case

studies examining the nature of local media ecosystems across the United States (Durkin and

Glaisyer 2010; Durkin, Glaisyer, and Hadge 2010; Amzallag and Deloney 2010; Morgan 2011;

Gloria and Hadge 2010). These all took as a starting point the Knight Information Needs of

Communities Report on local media health and used the elements of an ecosystem identified in

Appendix I of the report and sought to document and describe in as much detail as possible the

media assets in each community studied, based on web research and, in some cases, interviews

of key players (Aspen Institute 2009). The study of the Triangle region of North Carolina in

particular demonstrated the rich variety of newspapers serving different local communities and

people interested in particular issues, documenting how all of these outlets competed with others

online for the same public attention. The study of Seattle described the rich range of blogs that

had recently grown up in neighborhoods across the city. In contrast the study of Scranton

described a far less developed ecosystem with a shrinking local paper, a weakened public

television station and a sparse blogosphere. Crucially, these analyses of multiple communities

revealed the breadth of players important to news production, distribution, and engagement in

the newly digitized age.

Jan Schaffer of J-Lab examined the Philadelphia ecosystem in a study that sought to

provide insights for a prospective media collaboration (J. Schaffer 2010). An analysis in

response to this report that sought to seeking to catalogue outlets that were omitted made plain

the complexities of determining the appropriate scope of such a study, as well as the

complexities of defining what constitutes a media organization in today's world (Breitbart 2010).

Similarly, Gordon and Johnson analyzed the linkages among websites in Chicago,

revealing a densely connected ecosystem, while Friedland released a similar study of Seattle's

media ecosystem (Gordon and Johnson 2011; L. Friedland 2013). Friedland sought to understand the links between the civic communications ecosystem and civic life in an era when the daily newspaper plays a smaller role. He identified as essential the investments government has made in support of civic information and the strength in both legacy for-profit broadcasting outlets and nonprofit public broadcasting outlets. These outlets, combined with a rich set of hyper-local outlets and a willing partner in the *Seattle Times*, have sustained a rich and layered online ecosystem. Friedland concluded that the future ecosystem will continue to be networked, with local newspapers being "hubs of connection" rather than "the single authoritative fount of knowledge" (L. Friedland 2013, 119).[49] These two studies reinforce the conclusions from the systems analysis that future media ecosystems will be complex and will likely contain many small outlets.

In 2010, the Project for Excellence in Journalism examined the Baltimore news ecosystem to understand where news items are sourced from and how they flow across news outlets (Journalism and Media 2010). This report gained significant coverage for its finding that, of stories that contained new information, "95% came from old media—most of them

---

[49] Interestingly, Friedland was uncertain whether all aspects of the ecosystem he identified as represented in the Seattle analysis would be necessary to adequately serve a community or even if all aspects are replicable across other communities

newspapers" (Journalism and Media 2010).[50] Another report on Baltimore conducted by Fabrice

Florin of Newstrust in 2011 showed a growing independent set of news outlets (Florin 2011).[51]

At around the same time, several case studies also covered how news flows within

ecosystems. C.W. Anderson studied how the narrative of the "Francisville Four," Philadelphia

activists who were evicted from their home, unfolded in the Philadelphia news media (Anderson

2010). Anderson used the story as a case study of news diffusion across the ecosystem of news

outlets. While many other studies had suggested this story was broken by traditional media,

Anderson identified how it was actually broken by independent media and only then further

reported by traditional media before being recirculated by other independent blogs—a significant

finding, as it showed the important role of nontraditional media in the news flows of modern

media ecosystems. As the story flowed from channel to channel, it was all the while subtly and

not so subtly reframed by different authors.

Ramos and others performed a network analysis of news networks in the San Francisco

Bay area (Ramos et al. 2013). The study of links among websites further reinforced the

increasingly networked nature of modern local news ecosystems.

Pew's Excellence in Journalism Initiative took this form of analysis further in 2015, when

it comprehensively analyzed the reporting of news in three communities: Macon, Georgia;

Denver, Colorado; and Sioux City, Iowa. They identified a great many news sources in each city,

---

[50] The late Steve Buttry criticized the report, however, for failing—like the Schaffer study of Philadelphia discussed above—to consider nontraditional online news outlets (Buttry 2010a, 2010b).

[51] Florin's report, though it doesn't directly undercut the key finding of the Project for Excellence in Journalism Report does identify a range of other mainstream and independent outlets that were newly part of the ecosystem and suggesting they play an important role for news consumers likely broadening the range of reporting in some modest way and likely situating the news for a wider population.

with the most, by far, in Denver. They also found that residents comment on a significant percentage of stories in local media, although that commentary begins to peter out quite quickly. This supported the hypothesis from the systems analysis that we would see a large number of outlets.

In 2012, a group of practice-oriented academics developed for the Federal Communications Commission (FCC) a literature review and subsequently a methodology the FCC could use to look at how well the news media are serving the information needs of communities ("Review of the Literature Regarding Critical Information Needs of the American Public." 2012). Although the planned study was curtailed following blowback from right-of-center politicians, (Friedersdorf 2014; L. A. Friedland 2014), this effort was not for naught, as very robust analyses have emerged that build upon its literature review.

In 2012, a study by Napoli and others published with the New America Foundation produced a scalable approach to mapping the infrastructure, output, and performance of journalism. The report, entitled "Understanding Media Diversity Using Media Ecosystem Analysis," provided a critique of a previous period of media analysis, during which the FCC and others sought to boil down the health of local media to a single number in the form of a diversity index. Reviewing many of the above-noted efforts toward media ecosystem analysis at the FCC and Knight Foundation (P. Napoli et al. 2012), the report concluded that media ecosystem analyses that are comprehensive, have clear independent and dependent variables, and seek to compare different locations will be most useful to experts and practitioners seeking to understand the health of news ecosystems.

This work was refined further by Napoli and colleagues, using a methodology that included considering the extent to which the journalism is original to the outlet publishing it, is focused on the local community, and addresses critical information needs (P. M. Napoli et al.

2017). Napoli and his team applied this analysis to three localities in New Jersey: Newark, Morristown, and New Brunswick. It revealed significant disparities per capita between the number of stories and the amount of original coverage that served the communities' needs. Perhaps unsurprisingly, Morristown—a smaller and far wealthier community than its larger, less economically well-off, and ethnically more diverse neighbor Newark—was much better served, with Morristown having approximately ten times more stories per capita. This differential held or was exceeded in measures of journalistic output focused on community information needs. Newark also fared worse than Morristown in terms of the amount of original reporting distributed via social media (P. M. Napoli et al. 2017).

Given all the above analysis it is important to turn to a newly revitalized type of organization the field of journalism – the nonprofit – which is emerging nationwide as a new host for journalism.

Nonprofit investigative news sites

Importantly, as the decline in employment in journalism across the country has accelerated, often with the closure of investigative teams, individual reporters have exploited the opportunity to launch news sites, such as Pro Publica on the national scale, MinnPost at the state level, and the Tulsa Frontier at the city level (Houston 2015).[52] This dynamic has also extended internationally, with nonprofit investigative outlets now operating in forty-seven countries (Kaplan 2013b). This relatively rapid emergence has been accompanied by a level of uncertainty as a fragile nonprofit news sector has sought to develop long term donors. This has been widely documented in three reports by the Knight Foundation and an additional report from the Pew

---

[52] It is important to note that Beth Knobel in a recent study of the type of news on the front pages of papers suggests that despite the shrinking of the workforce is more frequently on the front page (Knobel 2018)

Research Center (Patel and McLellan 2011; Knight Foundation 2013, 2015; Mitchell et al. 2013).

The development of nonprofit news sites has emerged out of four interlocking dynamics. First is availability of journalistic expertise: Although the large daily newspapers that have closed to date have been relatively few, many trained journalists became available following the reductions in staffing at many.[53]

Second is journalistic motivation: Although many journalists have left the newsroom altogether, many have wanted to keep doing what they were trained for. In the words of the editor of Investigative Post, Jim Heaney someone who is typical of the field

"I'm talking about my job and [to my childhood friend] he says you know you've got the perfect job for you - you get paid money to give people a hard time. The other. I guess more professional reason…. I'm sixty-two I've been in this business for forty years plus and I have never lost my idealism about the power of journalism to make the world a better place … you can do one of [three] things you can become a revolutionary and take up arms, you can be a radical and take to the streets or you can be a journalist and pick up the pen and I think in our society in our day and age I think the most potent agents of social change are those who pick up the pen."[54]

Third is journalistic audience development: To gain an audience, the enterprising journalist no longer needs access to an expensive physical printing plant to publish. The wide availability and low cost of Internet publishing tools have reduced the economic barriers to entry.

---

[53] Newspaper Deathwatch and actively maintained blog counts fifteen newspapers having closed since March 2007("Newspaper Death Watch" 2018)

[54] Interview with Jim Heaney June 23, 2017

Fourth is journalistic partnering: Journalists who have online audiences yet lack investigative resources are increasingly ready to link to or publish content not produced by their own outlets for the advantage of not having to carry the ongoing cost of employing the reporters.

The rise of these small, narrowly focused, often nonprofit newsrooms across the country suggests they may represent a general solution to the collapse of the private sector model for funding investigative journalism. Many of these outlets are members of the Institute for Nonprofit News (INN) which serves as a fiscal sponsor for some nascent organizations as well as a trainer, advisor and provider of technology for many.

Tables 2 and 3 are an analysis of data collected by Jason Alcorn a consultant working in the field of nonprofit journalism shows the rapid growth of the number of organizations. His database of the members of INN as at April 2018 identifies two types of non-profit news organizations. As figure 25 shows the first type of organization (excluding a couple of exceptions) that emerged either out of public broadcasting or as a magazine. This category amount to twenty-five of INN's then one hundred and five members. The bulk of the membership (eighty organizations) were formed after 2007 as newer digital first organizations.

Figure 25: Breakdown of Membership of INN, by Year Created

Total By Year	No. of Orgs
Before 2007	25.0
2007	3.0
2008	1.0
2009	8.0
2010	11.0
2011	7.0
2012	5.0
2013	5.0
2014	16.0
2015	13.0
2016	7.0
2017	4.0
Total	105.0

Note: This table includes only stand only 501(c)(3) organizations that publish. It excludes INN members that are fiscally sponsored, or are journalism support organizations.

Figure 26 shows the growth in income of the younger organizations using data from their 990's filed annually with the IRS.[55] This shows clearly the income growth in these newer organizations.

Figure 26: Analysis of Members of Institutes for Nonprofit News

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total By Era	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
Before 2007	90.6	98.2	81.8	91.3	88.0	106.2	99.3	111.9	121.3	125.1
2007-2017	4.2	10.5	14.4	21.3	24.7	29.0	71.6	46.5	95.7	96.7
Total	94.8	108.7	96.2	112.6	112.7	135.2	170.9	158.4	217.0	221.8
Growth Rate, 2007+		150%	37%	48%	16%	17%	147%	-35%	106%	1%

A more recent analysis of INN members based on a voluntary census published in 2018 shows that 39% of the organizations have investigative journalism is their primary mission. Moreover, membership has grown to one hundred and eighty members and have in total an estimated staff of 3,000 across all members and combined annual revenue in 2017 estimated at three hundred and twenty-five million.[56]

Networks of Collaboration

The paradigm of investigative journalism in the past has been journalism executed by a small team acting independently within a large organization. In popular culture, this was highlighted by the film *All the President's Men*, which portrayed the partnership between Bob

---

[55] Note that this data excludes all income earned by members which are fiscally sponsored by another organization as that number cannot be obtained from the 990 form.

[56] This data comes from the INN Index available at https://inn.org/index. Some of the income difference between these two analyses in 2016 and 2017 is almost certainly due to membership growth in late 2018 coming from legacy public media organizations. That said a portion is also a result of growth of this sector following the election of President Donald Trump.

Woodward and Carl Bernstein as they pursued the Watergate story. More recently, this image was reinforced by the award-winning movie *Spotlight*, mentioned above, which highlighted a similar small-group collaboration (Mizner 2009). This kind of in-house small, separate team has not been without exception over the years; for example, in 1985, a team of reporters from multiple outlets coordinated by Investigative Reporters and Editors collaborated across organizations to report a story about the killing of a journalist by a bomb in Arizona (Investigative Reporters and Editors 2015). Until recently, however, collaboration and networks across institutions were very much disfavored.

The disfavoring of inter-organization collaboration was logical: why would one add management complexity to what is already a complicated task being executed under competitive conditions? Moreover, for profitable news outlets led by owner publishers who want to maintain their profitability it is far easier to explain to justify budget growth by arguing that it will allow a paper to out-compete a competitor than arguing it will allow a paper to collaborate more effectively – a suggestion that the owner might fear could have anti-trust implications too. Beyond this, the nature of the people drawn to reporting and the competitive culture they have been imbued is hardly fertile ground for building against collaboration. Nevertheless, a number of associations have emerged in the past eighteen years that have played important roles in spurring collaboration. Many small news organizations, for instance, affiliate with like-minded organizations through intermediary networks. The Media Consortium, now defunct, described itself as a "network of independent and community media outlets dedicated to values-driven journalism," much of which is investigative in nature (Media Consortium 2018). Most central to this field is a second organization, the Institute for Nonprofit News (which was until 2015 the Investigative News Network). The organization describes its mission as providing "education

and business support services to our nonprofit member organizations and promot[ing] the value

and benefit of public-service and investigative journalism" (Institute for Nonprofit News 2018).

For individuals working within small startups who wish to affiliate, a group known as

Local Independent Online News (LION) has emerged as a community of publishers and editors

that seeks to "foster the viability and excellence of locally focused independent online news

organizations and cultivate their connections to their communities through education and action"

(LION Publishers 2018). The Online News Association (ONA) serves digitally inclined

reporters, and Hacks and Hackers is an overlapping community of reporters and computer

programmers.

At the international level are the Global Investigative Journalism Network (GIJN), the

Organized Crime and Corruption Reporting Project (OCCRP), and the International Consortium

of Investigative Journals (ICIJ). Both the OCCRP and ICIJ support new approaches to doing

investigative journalism and have become (via their U.S. partners) very much part of the

journalistic landscape in the United States.

The emergence of the large number of network-strengthening organizations has aided the

development of investigative journalism in a number of ways. Some institutions, such as the

Pulitzer Center for Crisis Reporting, bring resources to journalists who report and then publish

often in commercial news outlets. Others, such as the ICIJ, execute the work in partnership with

reporters based at outlets across the world. Still others maximize the impact of results in a world

where audience attention is spread out; no longer can the impact of a story be ensured if it isn't

published by multiple outlets at the same time. Examples in this regard include the ICIJ again, as

well as opportunistic but often fleeting collaborations, such as Electionland, led by Pro Publica,

which reported on the 2106 election, and a less formal project in which multiple organizations

reported on homelessness in California, among others (Fuller 2016; Center for Cooperative

Media 2018). Finally, some of these new network organizations, such as ONA and professional development.

Many locations host entities designed to respond to this challenge by creating collaboration within geographic areas. These organizations are important if efficiency and collaboration are to exist in the production of journalism. In New Jersey, for example, the Center for Cooperative Media at Montclair State acts as a hub and host for collaboration among media outlets (Center for Cooperative Media 2017). In North Carolina, a new organization is emerging to support independent "storytellers . . . and nonfiction media" (North Carolina Newsroom Cooperative 2017). In Detroit, a journalism cooperative has been formed that includes "the Center for Michigan's Bridge Magazine, Detroit Public Television (DPTV), Michigan Radio, WDET, and New Michigan Media, a partnership of ethnic and minority newspapers." (Detroit Journalism Cooperative 2017). In other places, outlets formed at different times and for different reasons are exploring partnerships and mergers. These include the St. Louis Beacon, a relatively recently formed online nonprofit, and the more storied St. Louis Public Radio (Russell et al. 2014). The nature of many collaborations is idiosyncratic, but, the Center for Cooperative Media has categorized them into six types that differ in the level of integration and longevity (Stonbely 2017).

News environment has changed

The argument of this chapter is that news (and especially investigative reporting) is produced and distributed via a very different balance of institutions from just ten years ago. The way it is funded is different: the additional dollar of income comes from a subscriber or member rather than an advertiser. Moreover, advertisements now often not aimed at a mass market, but targeted to a narrow slice of the population defined by demographic or psychographic characteristics. This targeting creates an incentive to tailor content to attract profiles of people to

whom advertisers wish to communicate their messages. It has also engendered a rationale for the creation of outlets that seek not a broad audience, but a narrow but loyal one that commands premium advertising and that would, if possible, be prepared to pay for the content.

The way news circulates is also different, moving from push, whereby content is consumed by virtue of its arriving in front of the reader, watcher, or listener, to pull, where the consumer of news can play a more active role by seeking out the content and recirculating it via social media for others to consume. This change in circulation in turn drives different formats for news, with a corresponding change in immediacy.

Challenges for News Outlets

The combination of the changes described above in the value chains for both producers and consumers of the news have challenged some fundamental assumptions underlying current journalistic norms.

General-Purpose Objectivity

The economic incentives that made professional journalism rise in value were based on an ideal of "objectivity," as pursued from the standpoint of a detached observer. In the second half of the twentieth century, when media outlets served large, heterogeneous proportions of the population, a sort of general-purpose objectivity made sense. It satisfied most consumers and was defensible for that reason to others who felt alienated. In contrast, the micro-niches served by television, newspaper, and internet outlets today are better served by tailoring their coverage to focus on the issues, perspectives, and events that most interest their respective audiences. This is not to say all outlets will become partisan, but some will, while others will likely need to produce a different, more engaged kind of journalism that serves readers by providing multiple perspectives on stories.

Organizational Design

As journalism changes, traditional staffing models are likely to be modified considerably. Although most news organizations will continue to have a core of permanent paid staff, they will likely be supplemented by large numbers of issue specialists, regular informal contributors, and others who play a journalistic role, but only part-time. While stringers and freelancers have always been a part of the news industry, the possibility now exists to set up relationships with massive numbers of people who might only be paid once, should a story they write merit it, while constantly producing content for free as volunteer bloggers, none of whose stories will ever get published, as many used to aspire, on the front page of physical product.

Presentation

Moreover, the prerogative of editors to choose which stories to highlight will be supplemented by automated tools that prioritize stories based on readership and engagement as outlets try to compete with Facebook, Twitter, and Reddit in thus prioritizing the public's attention. More than likely, editors with fact-checking responsibilities will proliferate, as useful content is rewritten for publication after being sourced from experts who typically do not write for mass audiences.

Conclusion

This chapter has explained the status of the current news media environment, including the slow response of incumbents to tremendous changes in the economics of production and distribution of news. This slow response was likely a result of both the high profitability of newspapers for decades and the bureaucratic structure of the organizations. It has left the incumbents in the United States fighting for survival after giving up significant components of their advertising revenue.

The future for these organizations requires that they accept changed circumstances, which dictate significant and ongoing downsizing and restructuring. That said, although the sector may be radically smaller as these changes occur, they will likely leave the United States with a more diverse press, presenting a wider range of perspectives to the reader or watcher than previously existed.

In June 2006, Eli Noam wrote that

"when it comes to efficiency, electronic news gathering and dissemination is cheaper than the traditional ways. The newsroom can be better managed. Articles have a much longer shelf life. They can become amazingly interesting combinations of text, sound and pictures. Staff reporters can be supplemented by swarms of citizen-volunteers with news, photos and commentary, which is especially valuable on the local level. Readers can be involved through interactivity." (Noam 2006)

The systems analysis above, as well as the multitude of media ecosystems analyses cited, point to the likelihood that the opportunities Noam references will be exploited by a range of interconnected, mostly small, nonprofit institutions, all operating in the context of a few large platforms. This higher-quality civic-minded content will continue to compete with a broad array of less useful entertainment, opinion, and spurious clic-bait created by individuals and small for-profit outlets. This means the context for building trust and relationships with audiences will continue to be fraught and contested. It is up to the news outlets operators to find their place in this new ecosystem.

Chapter 4: The Paradox Facing Investigative Journalism

The Oxford English Dictionary defines news as the "report or account of recent (esp. important or interesting) events or occurrences, brought or coming to one as new information; new occurrences as a subject of report or talk; tidings" (OED Online 2017). In the twentieth century, it was produced in the United States almost exclusively as narrative by writers for mass circulation newspapers, smaller circulation magazines, as audio for the radio, or as video by broadcasters, all within conventional and now long-studied organizations (Starr 2005; Gitlin 2003; Gans 2005; Schudson 1981; Guarneri 2017). For the most part, the production of news also remained within for-profit entities who controlled the process, from the assignment of reporters to stories to the distribution of printed papers by truck or of broadcasts by an aerial they operated. Although much of the distribution of news no longer lies within the direct control of the news organization that produced it, most people carrying out the reporting and editing of news that serves a community's information needs have been and continue to be employed based on their facility for narrative above all else.

Much can be written about the changes wrought by business economics in the distribution of news; that will be discussed in chapter 4. This chapter is concerned with the discovery, reporting, and editorial processes of "accountability journalism" and, even more specifically, with the subcomponent known as "investigative journalism"—the sort of news that is often considered the most valuable, since it can, arguably, have the most meaningful impact on democracy (Hamilton 2016; Schiffrin 2014). This narrowing of focus allows the clearest examination of challenges confronting the changing field of journalism because, in its complexity, investigative journalism across the country will be most affected by those changes and is most essential to democracy.

To understand the current nature of investigative journalism, one needs to think in very different terms than one might have even as recently as the 1980s. Today we have an almost limitless volume of digital data on which to build news and, at the same time, almost perfect total surveillance of digital activity. This presents a paradox. In a world where nearly every action leaves a digital trail (or at least digital exhaust fumes), more information is knowable (or at least verifiable, if often unrevealed); yet revealing (or acquiring) that information to support a story may be difficult without being surveilled doing so. Will it be easier than in the past to perform acts of investigative journalism that reveal facts powerful institutions want to keep hidden because digital data will provide irrefutable evidence? Or, conversely, will it be impossible to acquire such data because whistleblowers and journalists will be unable to operate, as they themselves cannot do so without leaving a digital trail? Furthermore, in a world where such data are known to exist, will the audience believe news that may be accurate but fails to incorporate digital, audio, or video evidence when doing so might actually reveal a source (Madrigal 2017)?

Moreover, the world of investigative reporting is much more complex now than in the past. It was once populated by writers employed (or hired as freelancers) within mostly commercial organizations with large print circulations or major broadcast audiences. This is no longer the case. Investigative reporters now include those who can understand digital data and have quantitative analysis skills and who may never have aspired to be employed by a large newspaper or television station (nor would they have previously been considered by such organizations for employment). Moreover, unconventional organizations are now part of the chain of production.

This chapter seeks to reveal some of the dynamics at play around the production of investigative journalism, since its continued survival and likely transformation will provide a critical indication of the strength and robustness of the public sphere and how well it will support

democratic oversight in the future. First, it defines investigative journalism, describes its emergence as a form historically, and identifies the most recent inflection point—in 2008—in its development. This is followed by a review of what we know and what we don't know about the recent history of investigative journalism.

Finally, the chapter argues that investigative journalism is best produced via nonprofit institutions, and that the ability to handle large-scale digital data is essential in ways it previously was not. This argument is based on a review of a small number of case studies of investigative journalism and on interviews with journalists who write and edit stories on political corruption and its two subfields: money in politics and illegal influence and action. The important implication of this research is that, if we are to preserve investigative reporting across the United States, we must be concerned not about sustaining the capacity for it in large institutions in what have been to date often for-profit newspapers, but about overlapping—and in all likelihood unstable (or at least always in transition)—sets of networks of collaborators across multiple small news producing organizations. Securing for these networks and collaborators institutional support and safety from technological attack, and defending them from legal or financial attack, will be what preserves the essential "oversight" power of journalism in the twenty-first century.

What is investigative journalism?

Journalism has many variants, and the number of adjectives attached to the word is increasing daily. As Schudson argues, journalism can perform at least seven functions (Schudson 2008, 11–26). Three are relatively well accepted: journalism can "*inform*" the public; it can provide "*analysis*" and, through it, play an explanatory role; and it can "*investigate*" issues, serving as a watchdog who may, in Schudson's words, "foil tyranny" by dissuading people from committing improper or illegal acts or permitting an attentive public to reflect on what is uncovered. Other functions he identifies are providing "analysis" as well as generating "*social*

empathy" by using a human-interest angle to tell a larger story;[57] or providing a "*public forum*,"

which outlets have often achieved through op-eds or opinion pages; and playing a role in

"*mobilization*" of the public (in some sense, a role it held in the age of the partisan press and has

retreated from).[58] Finally, the function of "*publicizing representative democracy*" is a role seen

by Schudson as, for the most part unarticulated even if undertaken, and one that some journalists

might disavow if made explicit. [59] Distinguishing the types of journalism in terms of the nature

of what is covered in regular "beat reporting," whether of cops or courts or city hall or sports, is

important.

Much news fulfills the first two functions identified by Schudson—providing information

and analysis—and falls into this category of beat reporting, which, in turn, serves an important

purpose of meeting ongoing critical information needs of the public vis-a-vis their daily lives.

Regular beat reporting meets those needs as it recounts broadly known or knowable activities

---

[57] The stories on the Trump administration policies related to family separation did just this. They took the personal narratives and, in one case, the audio of vulnerable children and through storytelling brought to light a newly implemented policy that appalled nearly all who learned about it (Thompson 2018; "Defense Contractor Detained Migrant Kids in Vacant Phoenix Office Building" 2018).

[58] I will come back to this in a later chapter, but for now I will mention two examples from recent years in which the mobilization of audiences appears central to the news outlet's mission. The first is Fox News, which has blurred the line between its straight news reporting and opinion shows that seek to rally the audience around an agenda sometimes in contradiction to the facts. In a distinctly different case, news outlets and journalists working on issues in which a reform agenda predominates, such as gun violence and criminal justice reform, write factual stories that perform a similarly mobilizing role. Although the journalists working at such outlets, such as the Trace and The Marshall Project, might quite rightly hesitate to be compared to Fox News opinion hosts, the way in which they have scoped their beats means such mobilization by their journalism of the audiences they cultivate is inevitable.

[59] Schudson makes his case by arguing that "liberal democracy is not plebiscitarian and that representative government today operates through a large executive branch" (Schudson 2008, 25).

and mediates them through the voice of a reporter who can be trusted (based on previous performance) to assemble as comprehensive and as accurate an understanding as possible of an event or activity. This type of reporting does not primarily seek to uncover the unknown, however, but, rather, to shine a light and bring into focus what can be easily known. It is not expensive (in relative terms), nor does it require an expert level of judgment or experience (Coronel 2012). In contrast, investigative journalism performs the role of uncovering issues and often acting as an agent of social mobilization.

Investigative journalism represents journalism that can be said to serve a key purpose of democracy: to hold power accountable (Downie and Schudson 2009). That said, it has to be recognized that it is not a large percentage of the journalism produced. As Fink and Schudson have noted, investigative reports made up less than 4 percent of the front page stories of three major papers in all the sample years they examined between the 1950s and 2000s (Fink and Schudson 2014). Other types of news are important for the maintenance of a public sphere, but the absence of investigative journalism will likely leave democratic accountability significantly weakened given the role it plays in examining abuses of power and uncovering wrongs.

Investigative journalism isn't defined purely by its focus on a field—although expertise in the field may be needed—and it may be delivered in many formats; but at its core it is the sort of journalism always unwanted by its subject, whomever or whatever that subject might be. Per *The Dictionary of Media and Communication* (2009) investigative journalism "does not merely report an 'official' news agenda . . . but researches stories that become newsworthy when brought to the attention of the public" (Danesi 2009). As defined by Sheila Coronel, investigative journalism

> does not just report the information that has been given out by others—whether
> government, political parties, companies or advocacy groups. It is reporting that relies on

the journalist's own enterprise and initiative. Investigative reporting requires journalists to go beyond what they have seen and what has been said, to unearth more facts and to provide something new and previously unknown. (Coronel 2012, 14)

Investigative journalism is concerned with being a watchdog first and foremost, holding the powerful accountable, and exposing how laws and regulations are violated. In UNESCO's manual for investigative journalists, Mark Lee Hunter delineates it from conventional journalism, as it

involves exposing to the public matters that are concealed—either deliberately by someone in a position of power, or accidentally, behind a chaotic mass of facts and circumstances that obscure understanding. It requires using both secret and open sources and documents. (United Nations Educational, Scientific and Cultural Organization 2011, 8)

The Investigative Reporters and Editors, the organization inside the United States that seeks to serve the community of investigative journalism practitioners, describes the scope of the practice as debated but says it includes "the reporting, through one's own initiative and work product, of matters of importance to readers, viewers or listeners" and that the subjects of "the matters under scrutiny [must] remain undisclosed" (Houston and Investigative Reporters and Editors 2008).

Finally, the Global Investigative Journalism Network (GIJN) defines investigative journalism as "systematic, in-depth, and original research and reporting, often involving the unearthing of secrets." It further states that "the best investigative journalism employs a careful methodology, with heavy reliance on primary sources, forming and testing a hypothesis, and rigorous fact-checking" (Kaplan 2013a).

Journalism that starts from an investigative stance assumes, as Schudson accepts, that the world is complex and veiled (Schudson 2008). Moreover, its relevance to democracy results not only from news consumers finding it meets their critical information needs (as per beat reporting); it operates on the democratic processes in several additional ways. First, consumption of investigative journalism can inform a broad public and sway the public's opinion with respect to an issue, a candidate, or a policy. Second, it can inform a small activist subsection of the community whose actions indirectly do the same. Third, the latent ability to undertake such work of any news outlet with sufficient capacity can sometimes, merely through the threat of the production and distribution of such coverage, dissuade individuals from taking a particular course of action that might subsequently be a worthy subject for a journalistic investigation. The definitions above are important, as they identify a form of reporting that has substantial breadth and requires a multiplicity of skills and significant resources over a period of time.

Drawing from the systems mapping exercise it is useful to see how these dynamics were thought to operate by the news media experts consulted.
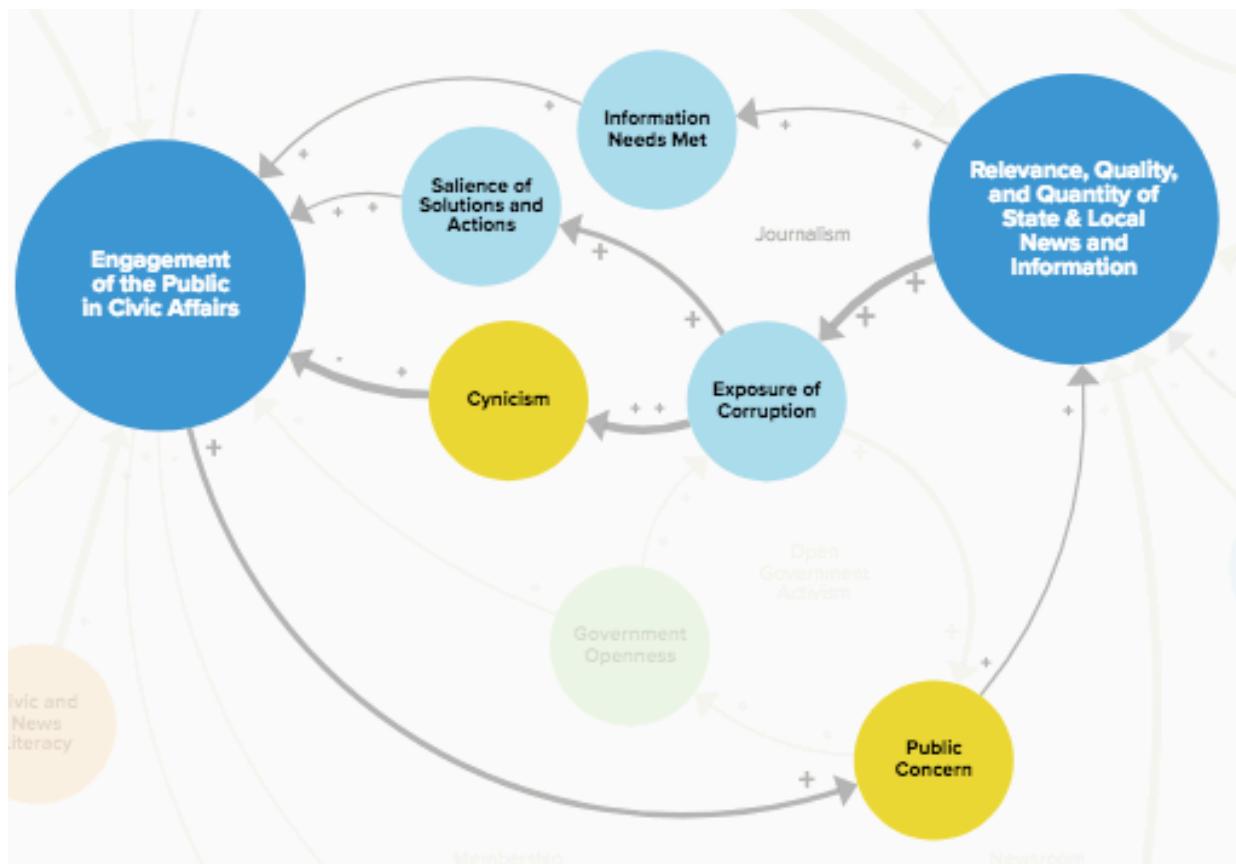
Figure 27: Journalism and Engagement Dynamics

News reporting was identified as playing two roles – informing the public and exposing corruption – crucially they recognized that a dynamic that is at play when you think about engagement of the public in civic affairs is cynicism. They were concerned that it undermines engagement by developing cynicism something that they argued was countered should the reporting report on solutions to the issues uncovered.

History of investigative journalism

Before reviewing modern-day examples of investigative journalism, it is worth examining its history and predecessors in the United States. Aucoin writes in *The Evolution of American Investigative Journalism,* that, as noted in chapter 1, even before the founding of the republic, an unlicensed printer named Benjamin Harris published "Publick Occurrences Both Foreign and Domestic" with seemingly little regard for how it might upset the subjects of his

accounts (Aucoin 2007, 19; Nerone 2015, 29–31). Few papers in subsequent decades covered similar ground, even as fewer papers were officially licensed. Though its importance is uncertain the Zenger case in New York in 1735, in which a printer imprisoned for publishing an article critical of the governor of New York was found not guilty of seditious libel even though the underlying facts were true was a later example of the publishing of a story containing criticism of government action (Daly 2012, 26–46; Nerone 2015, 37–40). In this period, some thrived by publishing exposés in the lead-up to the American Revolution and played an important role by spreading dissension (Aucoin 2007, 21).

After the revolution, that tradition continued for a time during which press outlets were aligned with political parties. This period included a story—possibly the first that relied on a leaked government document—based on a letter from the French government concerning peace negotiations; the story elicited charges of treason against President George Washington (Aucoin 2007, 22). In the 1830s, as the cost and efficiency of printing fell, the penny press emerged, accompanied by an increasing sophistication in reporting practices that included interviews with bystanders and actively sending reporters out to see firsthand what they were reporting on and gain the testimony of witnesses (Aucoin 2007, 24).[60]

Meanwhile, newspapers started by reform movements around the antislavery cause and in favor of Native American rights, sought to present information that challenged the status quo (Jon Marshall and Abrahamson 2011, 9). As the century advanced, readers came to expect papers to present reliable evidence to back up arguments, and the results were significant; in the 1870s, for example, well-supported claims in *Harpers Weekly* and *The New York Times* exposed

---

[60] It has to be recognized that such interviews may at the very least have on occasion been partial rather than seeking the honest truth and on some occasions entirely fabricated as Professor Tucher recounts in her study of *Who killed Helen Jewett?* (Tucher 1994)

Boss Tweed's behavior and corruption (Aucoin 2007, 27). Under Joseph Pulitzer, the *New York World* may have been sensationalistic, but it included important stories, as exemplified by the undercover reporting by Elizabeth Cochrane (nom de plume Nellie Bly) on Blackwell Island's Asylum for Women (Aucoin 2007, 29). Demarest Lloyd exposed railroad malfeasance in what might have been the earliest infographic in a two-page spread and subsequently expanded on it in an article in *The Atlantic* (Aucoin 2007, 31; Lloyd 1881).

While the subsequent generation of muckrakers, influenced by the progressive party, acquired broad popularity, they fell out of favor as the targets of the journalism purchased the outlets and the legal environment through libel suits made exposés more difficult. In the 1930s and 1940s, newspapers failed to investigate the 1929 stock market crash, the rise of fascism, and other vital topics (Aucoin 2007, 38). Reporters whose exposés were rejected by newspapers had to resort to a different medium—books—to report on scandals (Aucoin 2007, 38).

By the 1950s, investigative reporting was more the pursuit of a few determined reporters than an enduring motif of mainstream and large outlets. The Cold War and external threats to the country lessened the public's appetite for hard-hitting reporting on the weaknesses of the country. While some journalists dissented from this avoidance of investigative reporting, the McCarthy era brought the practice to television, a medium supported 100 percent by advertisers and regulated by the Federal Communications Commission (FCC) (Aucoin 2007, 47). And while Edward R. Murrow's *See It Now* program addressed Senator Joseph McCarthy's tactics during his investigations of over-hyped communist influence on American society and the live broadcast of the Army McCarthy hearings are often cited as evidence of robust television based investigative reporting, the reason for the increased focus on McCarthy is perhaps better attributed to reporting by *The New York Times*—a success owing, in part, to encouragement from the Eisenhower administration, which was hardly a disinterested party (Aucoin 2007, 51).

The general failure to engage in investigative journalism in the 1950s may have laid the seeds for reporting in the 1960s (Aucoin 2007, 48). Eisenhower's lies regarding the U2 plane shot down in Soviet airspace and the subsequent Kennedy administration's deceit surrounding the Bay of Pigs justified increasingly vigorous pursuit by the press of investigative work (Aucoin 2007, 55). The later years of the 1960s spawned countercultural movements, resulting in the emergence of alternative media enterprises enabled by new, lower-cost offset printing technology (Aucoin 2007, 57). Slowly, the outrage at mainstream society on which such outlets reported infected the reporting of the mainstream outlets, which gradually became more robust in their challenges to government, more adversarial toward government, and more skeptical of claims made by government-affiliated sources. The strengthening of libel law in favor of publishers following the Supreme Court's decision in *New York Times v. Sullivan* encouraged even more robust reporting.

Out of this cauldron and the much vaunted reporting of Bob Woodward and Carl Bernstein who covered Watergate and the downfall of President Nixon emerged much-vaunted investigative units at major newspapers and parallel investigative units on television, including *Frontline* on PBS and *60 Minutes* on CBS. The combination of investigative capacity with the reach of network television brought such reporting a certain mainstream credibility. Yet its success belied a decline in that capacity between 1980 and 1995, as many news outlets were consolidated and investigative stories were displaced in many major newspapers (Roberts 2000, 51–79). The investigative successes of the major metropolitan papers where investigative units became concentrated continued to be celebrated, however, most notably by the transformation into an Oscar-winning film, *Spotlight*, of a little-known journalistic case study about the *Boston Globe* investigative unit that uncovered the major scandal of child sexual abuse in the Catholic Church (Mizner 2009).

Investigative journalism after the Great Recession

The Great Recession of 2008 marked a major turning point in investigative journalism, as a cyclical downturn driven by macroeconomics combined with the economic implications of the transition to digital distribution resulted in a multiyear decline in profitability. Investigative units like the one highlighted in *Spotlight* continued the decline that had started in the 1990s, with the consolidation of locally owned outlets and a buying spree that generated a small number of chains that ultimately ended up owning many papers across the country (Ureneck 1999). The economic impact of the 2008 recession cannot be underestimated. The *Rocky Mountain News* and the *Seattle Post Intelligencer* both closed their doors in 2009. The workforce of the *Newark Star Ledger* was decimated when 45 percent of staffers in October 2008 took buyouts (Starr 2009). The *Los Angeles Times* newsroom more than halved in size over the past ten years.

Analysis by the Pew Research Center of employment in journalism covers more than just investigative reporters; however, it is telling that the total employment of journalists has fallen precipitously in the past two decades. Employment of reporters by newspapers declined from a high of 56,400 in 1999 to only 32,900 in 2015 (Barthel 2016; ASNE 2015). At the same time, the population of the United States overall increased from 279 million to more than 323 million people (U.S. Census Bureau 2017). The impact on investigative reporting more specifically was documented in "The Withering Watchdog," by Laura Frank, who reported layoffs of even prize-nominated journalists at key regional outlets, as well as the closure of previously thriving large regional newspapers ("The Withering Watchdog—Exposé: America's Investigative Reports" 2009). Mary Walton documented the same phenomenon in the *American Journalism Review* in 2010, relating similar stories of layoffs and restructurings purportedly aimed at increasing productivity, yet ultimately caught up in the financial decline of newspaper economics hastened by the recession (Walton 2010). More recently, news of buyouts and layoffs at the *Wall Street*

Journal and Gannett, and expectations of similar moves at *The New York Times*, suggest the changes are going to continue (Neibauer 2016). Furthermore, the Bureau of Labor Statistics forecasts a 9 percent decline in employment between 2014 and 2024 for the category of work it identifies as "reporters, correspondents, and broadcast news analysts" (U.S. Bureau of Labor Statistics 2017).

In sum, large, for-profit legacy mass market news institutions appear not to be nearly as conducive to supporting the hardest hitting and most critical journalism as they were in the past. We must, therefore, look for new types of institutions in which journalism is occurring.

What we know about investigative reporting in the early twenty-first century

Several people have written important analyses of the investigative news landscape. In 2009, a report by Leonard Downie and Professor Michael Schudson argued that the important independent journalism that historically had been provided by newspapers was increasingly coming from online, often nonprofit, news startups and recommended a number of policy innovations that could provide for their additional financial support (Downie and Schudson 2009). In 2010, in a parallel analysis, Brant Houston saw evidence nonprofits were becoming important homes for the employment of investigative journalists, computers and the analytical capacity they provide were increasingly important, and networks of organizations and people were also growing in importance (Houston 2010).

Subsequently, Anderson, Bell, and Shirky (2012) sought in their report, *Post-Industrial Journalism*, to illuminate the new opportunities provided by the restructuring of the industry. They identified new ways of information gathering, journalistic sense making, and distribution of news in an online ecosystem increasingly led by social media (Bell, Anderson, and Shirky 2012). They argued that journalists would have to specialize, new institutions would be required, and

collaboration would have to be the journalistic rule, not the exception (Bell, Anderson, and Shirky 2012).

More recently, Jay Hamilton, in a detailed analysis of Pulitzer Prize–winning public service reporting, showed the public value provided by journalism to be extensive (Hamilton 2016, 208–78). He also argued—based on an analysis of entries for journalism prizes from the Investigative Reporters and Editors (IRE) organization, tip sheets shared at its annual conference, and freedom of information act (FOIA) requests to a subset of federal agencies—that important investigative journalism is increasingly concentrated in outlets with a national focus.[61] Specifically, with respect to FOIA, the fall-off in requests from local outlets has been partially recouped by requests from nonprofits and universities (Hamilton 2016, 136–78). Hamilton called for an increased focus on computational journalism in a world where digital data are ever more prevalent, arguing that the digital transition that has had so deleterious an impact on news economics has also aided the production of stories that might take advantage of digital algorithms to automate story production (Hamilton 2016).

These studies are all illuminating, but it is important to examine whether the forecasts, which mirror some of the dynamics sketched in the system maps above outlined in *Post-Industrial Journalism* are coming true, how these changes are occurring, and what more we can learn from them. To date, the new models that have arisen with the decline of legacy models have been led by the same professionals who have left, voluntarily and not so voluntarily, the large legacy institutions. As a result, the organizations they have started and staffed have tended to have much in common with the legacy institutions from which they have migrated.

61

The elements of these models and the critical aspects that are emerging are the subject of the inquiry below. The discussion thus now turns from the history of investigative approaches to an interrogation of the emerging present. The rest of this chapter focuses on several aspects of news production through an examination of a few recent cases of investigative reporting illustrative of the changing nature of investigative journalism.

Areas of study

Digital data and "-leaks" websites

A third important aspect of investigative reporting has centered on leaks of digital documents. Where in the past shoe-leather reporting could generate enough confidence in a story for it to have impact, the seemingly definitive nature of digital data and their ubiquity have increasingly made them a crucial component of many stories. The apparent certainty provided by digital data to the reporter and the news consumer alike is alluring, especially when combined with the apparent transparency they provide when underlying documents are available.

Most famously, the Pentagon Papers in 1971 was seen as a high watermark for leaks. Until the emergence in 2006 of the Wikileaks website, with its focus on original documents, nothing came close. Since the launch of Wikileaks, however, reporting based on sometimes large dumps of digital information has become an increasingly important mechanism for reporters to develop stories. Wikileaks itself lists eighty-four partners, many of whom have published reports in conjunction with the site (Wikileaks 2017b). Undoubtedly, many of the stories resulting from the publication of raw material by Wikileaks have been among the most important in the year they were published. Such stories are also being produced based on original sources other than those provided by Wikileaks and its partners—for example, the recent reporting of Exxon's approach to climate science, which relied on a leak of Exxon records (Banerjee, Song, and Hasemyer 2015).

Perhaps the most telling indication of the value of raw data is evident in a comparison of Dana Priest's "Top Secret America," a major, multiyear research study for the *Washington Post* of the growth of national security institutions post-9/11, and the coverage of the Edward Snowden revelations, which focused on revealing specific pieces of National Security Agency practices (Priest and Arkin 2010; McCaskill and Dance 2013). Arguably, these different forms of journalism revealed different but no less important aspects of the surveillance infrastructure. The Snowden revelations got far more coverage than the more traditionally reported Priest articles, however, generating far more public discussion. Moreover, the way in which the information about Snowden emerged provoked far more concern within the government about how the publicizing of the surveillance might threaten national security (Capra 2014).

Key to the reporting of digital leaks are anonymous leaking platforms. SecureDrop has been widely adopted inside the United States, while GlobalLeaks has been adopted by news organizations in the rest of the world. See figure 28.

Tool	Journalistic organizations using the tool	
	Inside the United States	Across the rest of the world
SecureDrop	18	13
GlobalLeaks	0	40

Sources: (Hermes Center for Transparency and Digital Human Rights 2017; SecureDrop 2017)

Figure 28: Organizations using encrypted anonymous leaking platforms

As outlined by Pew, most investigative reporters are concerned about government surveillance (Holcomb, Mitchell, and Purcell 2015). As a result, a minority of them are changing their behavior in sharing documents and communicating with sources (Holcomb, Mitchell, and Purcell 2015). Despite these concerns, many believe their employers aren't doing enough to protect them against surveillance and hacking (Holcomb, Mitchell, and Purcell 2015). Important

to note is that many of the platforms for leaking are developed by software organizations funded by donations or through philanthropic support. Central to this ecosystem is the Freedom of the Press Foundation. Although their usage has increased dramatically over the last few years, these platforms are still relatively unused, with only a few newsrooms having installed them and, in many cases, only a few in the newsroom having the capability to utilize them.

This plethora of information and the nature of what is being exposed create new challenges. When stories are based on digitized information, including large amounts of data in need of processing and technical interpretation, the norms of reporting change. Previously, a reporter would have not prioritized certain forms of data or would have chosen to keep some items private. That much more information is now in (or can be placed in) the public square changes the dynamics for reporters.

Investigative Journalism in 2016

Some major investigative reporting projects illustrate the three trends outlined above—the emergence of nonprofit news websites, network collaborations, and digital data and "-leaks" websites—and the nature of investigative reporting in the future. These concern money in politics; ballot access; and international corruption. Political and financial corruption in general have long been a central topic of investigative reporting, but in 2015 and 2016 a new type of story became the norm, combining three previously independent threads in journalism: the reporting is done by a network of people, often working for nonprofit outlets; a core component is often a leak of data; and the reporters rely on the use of -leak platforms or at least the analysis of large volumes of digital data.

Reporting on Money in Politics

Two types of stories on political corruption that share this general set of reporting innovations have been prevalent: stories on money in politics, including campaign finance, and

stories on illegal influence in politics. In 2016, reporters on both beats had a rich vein to mine, and analyzing the infrastructure behind their reporting provides a useful lens through which to foresee the essential properties of investigative reporting in the future.

The field of campaign finance is rich in stories that editors see as worthy of resources. Contributions to the presidential campaigns of major and associated parties and associated political action committees totaled $2 billion in 2012 and topped $2.1 billion in 2016 (Ashkenas et al. 2012; Center for Responsive Politics 2016). Mainstream outlets devote considerable resources to the beat. Nicholas Confessore at *The New York Times* and Matea Gold at the *Washington Post*, for example, both regularly produce stories on the subject. That said, key reporting on the issue is pursued by nonprofit entities, such as the Center for Public Integrity, which has a small team led by an Associated Press veteran, John Dunbar. In fact, many reporters and others crucial to reporting on this subject are employed by nonprofit organizations.

It is important to recognize that organizations writing articles on campaign finance are only part of the nonprofit reporting infrastructure on these issues. Four reasonably large nonprofits provide critical raw data. The Center for Responsive Politics, also known as Open Secrets, plays an important role by acquiring federal campaign finance data, processing them, and making them available for use by journalists employed by other outlets and the broader public (Center for Responsive Politics 2017). They have set up a tool, Bailiwick Campaign Finance, to bring these data to light, at http://campaign-finance.org/. Similarly, the National Institute for Money in State Politics has made data available at the state level (National Institute of Money and Politics 2017). In parallel, the Sunlight Foundation (although it has recently scaled back its operations) set up a tool, now operated by the Center for Responsive Politics, to bring out additional data related to fundraisers for candidates that are periodically used in stories (Political Party Time 2018). The foundation also supported a tool (now defunct) called Political

113

Ad Sleuth, which took raw data from filings with the Federal Communication Commission on political advertisements and presented them to the public for further analysis. Maplight, with its eponymously named tool, links the campaign contributions from particular groups to legislators who have supported specific bills. Recently, this data infrastructure was augmented by a project of the Internet Archive. The Political TV Ad Archive provides a digitally searchable record of ads and news shows in a subset of markets, providing an opportunity for journalists to understand at a macro level which ads are being aired and which clips of candidates are getting used in news shows (Political TV Ad Archive 2017).

Proprietary sources of data from commercial suppliers such as Kantar also figure into the analysis, but these suppliers place limits on usage of the data. These data were used extensively in the 2016 election by the Center for Public Integrity, which had a contract directly with Kantar, and by the Wesleyan Media project, which provides analyses of campaign data that it releases to the news media to report further on (Wesleyan Media Project 2017). Perhaps the most granular of journalistic interventions in the area of campaign finance is a Google Chrome widget called Allaregreen, which highlights the name of any legislator mentioned in an article. If the user moves a cursor over the highlight, the site brings up a list of the largest contributors to that legislator. Allaregreen was developed by a young student named Nick Rubin ("Some Are Red, Some Are Blue, All Are Green" 2017).

The key conclusion from this review of reporting on money in politics is that nonprofit organizations, either conventional news outlets or data analysts, play an outsized role in the production of journalism on this topic.

Reporting on Elections

At a scale of collaboration complexity that would have been unimaginable in prior cycles, consider Electionland, led by Pro Publica. A case study of this project authored by Cassandra

114

Lord recounts its scale and complexity, as well as the integrated nature of the effort. Electionland sought to report on voter problems during the U.S. election in 2016, across the country and very much in real time. Scott Klein, a founder of Electionland, has explained that the basis for collaboration emerged "very late in the game when . . . [co-instigator] Simon [Rogers] and I happened to have breakfast in the late spring in which we kind of came up with a couple of ideas to work together on the election" (S. Klein 2017b). After this meeting in May 2016, the effort, in Klein's words, "cut out a lot of process, a lot of ceremony, a lot of bureaucracy and we made an early decision that we would leave the details of what people wanted to cover up to them and simply be a clearing house for data that without the project would otherwise be unavailable to get" (S. Klein 2017b). He recalled, "It was actually easy to scale up because it was about their own self-interest, because there wasn't a huge amount of bureaucracy to kind of get through, it was very easy to sign-up" (S. Klein 2017b).

Importantly, this project made use of a number of different kinds of resources. In Pro Publica, it had a large nonprofit newsroom to anchor the project. It also included technological architecture provided by Google, which developed a real-time map of voting problems across the country. The First Draft News coalition, a network of news outlets and Internet platform and tool companies that seek to provide "practical and ethical guidance in how to find, verify and publish content sourced from the social web," contributed to the design of verification processes (First Draft News 2017). The Lawyers Committee for Civil Rights under the Law, which provides a hotline for the public on Election Day to report election irregularities, also played an important role by making selected information available to the project. A few core partners committed to distributing stories from the project across their platforms: WNYC on radio, Univision for television, and the USA Today Network for print and online. CUNY's Graduate School of Journalism served as the physical hub for the project on Election Day and hosted not only the

115

core team but also election experts who could be called on to clarify questions as needed. In addition, students and staff from fourteen journalism schools across the country participated by monitoring social feeds from across the country. All told, Electionland engaged an unprecedented number of disparate and distributed outlets compared to other journalistic collaborations inside the United States, including 1,000 reporters and student reporters (S. Klein 2017a).

Reporting on International Corruption

Networks of organizations have also been vital to the process of reporting and the distribution and impact of stories at a global level. The case studies below illustrate how these networks are important in providing a multiplicity of skills, including creativity in the capture of data and their subsequent processing and presentation. The stories span both domestic U.S. concerns and corruption within foreign governments.

An emerging approach to reporting on large-scale financial corruption has been pioneered by the International Consortium of Investigative Journalists (ICIJ). Their first moment in the spotlight was the publication of a series of articles under the moniker of "Luxleaks," which reported on a trove of leaked confidential tax rulings by authorities in Luxembourg that appeared overly generous to the companies they favored. The series was completed in conjunction with a large number of partner organizations, many of which had collaborated with ICIJ in analyzing the leak (International Consortium of Investigative Journalists 2014). Not including articles of moderate similarity, a Lexis Nexis search yielded 374 newspaper articles generated by the story ("Luxleaks Articles - Lexis Nexus" 2017).

This series was quickly followed by "SwissLeaks," reporting based on a leak of client files from the Geneva subsidiary of the bank HSBC (International Consortium of Investigative Journalists 2015). The ICIJ's collaborative investigation included journalists from forty-nine

countries and was published across sixty outlets (Davet, Lhomme, and Michel 2015). It has since driven many investigative pieces across the world. It also resulted in the resignation of Iceland's prime minister, whose family had claims on the country's failed banks, for sheltering funds offshore at the time of the 2008 collapse (Henley 2016). Not including articles of moderate similarity, a Lexis Nexis search yielded 119 newspaper articles generated by the story ("Swissleaks - Lexis Nexus" 2017).

Most consequential was the more recent reporting by ICIJ of the so-called "Panama Papers," which consisted of privileged attorney-client materials from a law firm in Panama (International Consortium of Investigative Journalists 2017). This story had a geopolitical impact, given its identification of so many individuals having accounts in Panama. Not including articles of high similarity, a Lexis Nexis search yielded 902 articles generated by the story ("Panama Papers - LexisNexis" 2017).

Wikileaks and the 2016 U.S. Election Cycle

Wikileaks, the self-described "multi-national media organization and associated library" (Wikileaks 2017c), was the first of the "-leaks" platforms. Started in 2006, Wikileaks did not gain widespread fame until four years later in 2010, when it leaked U.S. government documents that included the so-called "Collateral Murder" video of an airstrike on a neighborhood in Baghdad and, more notably, the Afghan War Logs subsequently identified as having been leaked by Chelsea Manning (Wikileaks 2010).

More recently, activities by Wikileaks have been associated with the 2016 election cycle. One story concerned former secretary of state Hillary Clinton, whose emails hosted on a personal server contained a small number of classified pieces of information. The story was extensively reported in all its intricacies by U.S. media, with Wikileaks playing a key role by hosting a searchable database of the emails (Wikileaks 2017a). Wikileaks was also crucial to another

major story in 2016, the Podesta emails. Although it is not yet known exactly how they were extracted, Wikileaks was the website through which emails to and from John Podesta were made available to reporters in the U.S. media (Wikileaks 2017d).[62]

Implications of Case Studies

Crucially, these case studies provide pointers along three dimensions: nonprofit structures, networked collaboration, and the digital environment. As has been made clear by the cases above, the nature of investigative reporting and the nature of investigative news institutions is fundamentally different today than in 2008, when it was carried out largely within legacy for-profit organizations.

Increasing focus is needed on creating nonprofits for news production

Key to reporting and also the research and assembly of basic information are nonprofit organizations. They are, as described, relatively small compared to the commercial organizations that have until now housed much reporting capacity. Creating nonprofit news outlets requires identifying sustaining funds that will allow them to have the flexibility of commercial outlets. Often funded by foundations whose perspective is based on specific subjects, they obtain a small component of their revenue from earned income streams, and even within those streams, mass advertising is a small component; the rest comes from membership programs. This type of revenue structure is also necessary to ensure they continue to develop as organizations without the commercial incentives that drive for-profit organizations.

---

[62] It should be recognized here that the motivations of the Wikileaks organization may have had little to do with a journalistic motivation to inform the public, but rather was motivated to

Journalists must embrace new reporting practices

In a world where the data for reporting are distributed and increasingly out in the open, journalists will need to adopt practices more common within the open-source software community (Bauer and Latzer 2016, 91–120). The balance and breadth of skill sets investigative journalists need to cultivate have changed. Being proficient at surfacing scoops and crafting narratives is no longer enough. Today's investigative journalists require more skills that enable them to acquire and analyze data safely and securely. They also need to be able to collaborate with people outside the institutions that employ them. They need to build careers that enable them to update their skills, despite operating in mostly smaller newsrooms that likely provide less mentorship or fewer in-house training opportunities.

Collaboration is needed in an era of small newsrooms and complex technology where deep knowledge and specific skills are increasingly needed and cannot efficiently be maintained without a certain scale of operation. News networks will increasingly have to include a more heterogeneous range of organizations that play different roles in the production of journalism. This logic is especially present for nonprofit news outlets, where networks of collaboration, sometimes unsanctioned by editors, are essential. This system is not necessarily weaker than one based solely on the standalone news organizations of the past; moreover, it is difficult to see the legacy standalone organizations (outside of *The New York Times, Washington Post*, and *Wall Street Journal*) having the breadth or depth of skills and knowledge these relatively new networks have to address investigative stories. Nor are legacy organizations able to distribute the stories in a manner that has the impact a networked approach can achieve. Though it might seem counterintuitive, networks of nonprofit outlets, by virtue of their funding streams, can partner generously with both other nonprofit news outlets and for-profit outlets rather than be tied to a single news site for distribution. This is being demonstrated on a national scale by Pro Publica,

the large-scale investigative newsroom, and The Conversation, a website that seeks to leverage the capacity of academics to draft news articles. Both encourage other publishers to republish (or, in Pro Publica's words, to "steal") from them, as long as the republishing outlet is prepared to attribute the story to the original source. At the state level, NJ Spotlight, a New Jersey outlet focused on accountability reporting, has an arrangement with for-profit outlet NJ.com, whereby the latter will carry the former's stories periodically.

Beyond the necessity of collaboration, the need for inarguable evidence, always desired, is much more important than in the past. Contrary to the past, when a digital record rarely existed and so no one expected it, substantiating a fact in today's world, when the assumption in most cases is that such a record exists, requires presenting the data. Without the data, a story can be criticized as inadequate or unpersuasive.[63] Of course, reporting in a world where the acquisition and processing of digital data is crucial means the breadth of skills to which a news institution must have access is growing. The digital environment will continue to change both inside and outside the newsroom.

Digital Infrastructure

To protect sources, it will be important for journalists not only to use but also to encourage the use of tools that provide for privacy in communications. Private networks will

---

[63] This makes the reporting extremely difficult because many documents contain identifying information that may not be visible to the naked eye yet will identify where the document may have originated (Madrigal 2017). This is further complicated because targets of hacking may, as the Macron campaign did in 2017 create dummy data on the assumption that they targeted and pointing the hackers towards an easy target may deflect them (Nossiter, Sanger, and Perlroth 2017). Furthermore, as the Citizen Lab at the Munk School of Global Affairs has shown sources of journalists may in fact be seeking to deceive and include doctored information that seeks to hurt someone mentioned in the leak (Hulcoop et al. 2017)

need to be hardened against surveillance and have the capacity to analyze and publish digital data in a journalistically responsible manner. At this point, the fact that so few people use such tools means that any communication in an encrypted form might prompt those who surveil such communications to infer they should surveil even more intently. Ultimately, the solution lies in everyone's adopting the tools so the mere use of them provides no information to those who surveil. Similarly, monitoring tools must be widely deployed to reveal when such surveillance is occurring.

Digital whistleblowers will be more important

Building on the points above, as the data for digital—preferably video—substantiation of a finding become more important, so, too, does the need for whistleblowers, who will provide the digital raw material for reporting.

Journalistic capacity to utilize technology is important

As digitized information becomes more and more important in reporting, so, too, does the ability to acquire, manage, and analyze the evidence, increasingly central to many investigations, that comes from mounds of data. Interestingly, much of the capacity to acquire, store, and process these data comes from organizations that are not considered traditional news organizations, such as the Center for Responsive Politics or the Sunlight Foundation or even Wikileaks. They do not identify as producers of journalism, nor are they seen that way by the news industry.

Resilience to surveillance

Many of those who have access to the sort of sensitive information to which reporters may want access are now covered by insider threat programs that seek to minimize leaks from

within organizations by requiring employees to opt into surveillance of their communications. As Trevor Timm, Executive Director of the Freedom of the Press Foundation puts it

"Now that it's easier for journalists and sources to communicate via more secure methods the government has tried to implement more surveillance mechanisms within the government so they have all sorts of access controls on every single document that exists so they know digitally exactly who has access that document when they access that what they did with it - you know did they copy it did they remove it on a on a hard drive. They have surveillance footage they can capture people taking photographs of documents… a source can potentially use all of the technology perfectly to communicate with the journalist but the government may still know who gave that information via its other surveillance mechanisms and this is a big and potentially unsolved problem."[64]

Once solely focused on government employees, these programs have now been extended to government contractors and key employees in large private sector organizations. This expansion means reporters need to treat surveillance as the norm of the world in which they operate rather than seek to maintain privacy of particular communications with particular sources at particular times.

Furthermore, when all communications are surveilled, a lack of content in conventional digital communications or the idiosyncratic absence of communication with a likely source may raise questions about whether communications are occurring using unconventional means, rather than eliminate suspicion of leaking. This means interruptions in communications using known means might be seen as an indicator that prompts investigators to suppose a person needs to be

---

[64] From interview with Trevor Timm in Pittsburgh on June 21, 2018

investigated. To counter surveillance of their reporting, outlets need, therefore, to be extremely careful. Furthermore, the data, once acquired, cannot be leaked from within the investigative journalist's home base. Ironically, the new owners of acquired data face the same challenge as their sources did of keeping them secure while they work on the story. This is a critical need in a world where few organizations have been able to secure data.

Challenges for the future

Renewed focus on journalistic ethics

As the reporting and revealing of information becomes less the preserve of outlets that adhere to a set of ethics regarding their journalistic practices and as raw data are, instead, increasingly published by "-leak" platforms, it is important to distinguish between those who are acting in a manner supportive of a healthy public square and those who, through selectivity in their publishing or the publishing of blatant falsehoods, are contributing to a deterioration in the state of the public square by misleading or skewing the understanding of an issue.

Such ethics may well be codified in practices that ensure a level of transparency which allows consumers to distinguish ethical outlets from those that seek to misinform or advocate (while purporting to inform.) They also permit social media platforms which can use the signals to prioritize and deprioritize. Furthermore, as a later chapter will address, it is not that the old priorities and ethics of journalism are no longer important; they are. They are, however, simply insufficient in defining what we need for reporting to work in the future.

A bigger tent: News media in the twenty-first century

The institutions most appropriate and functional for the new news environment are not the large commercial outlets of the past. We need funding, design, leadership, and public policies that seek to sustain the news organizations of the future. Despite the appeal of preserving the norms and practices with which journalists and their home institutions are familiar, in the long

run this will result in a weaker investigative journalistic field. Where such legacy institutions continue to exist, they will continue to be important, but the investigative unit that lies within a large newsroom will be only part of the future of the field.

The field will continue to require access to independent and credible "-leaks" platforms. They should be understood as a feature, not a bug, in the system. Some may be integrated into the old institutions; some will remain independent organizations. Ensuring that those committed to an ethic of independent journalism can be distinguished from others who act as extensions of states or who seek some sort of influence in the public square will be vital.

When thinking about the health of a certain type of journalism or topic, it will be necessary to consider not just the capacity a single organization has within it, but the external relationships it operates within.

Chapter 5: Making News Matter: Credibility and Engagement

Chapters 3 and 4 focused on the challenges created by the digital contexts of, respectively, how the system of news distribution is changing and changes in news production. This chapter focuses on how news is used, how it is digested and the new rituals of its reception, engagement, and recirculation. It interrogates how the public has developed trust in news in the past and the opportunities open to journalists, editors, and publishers to develop trust today. Unlike the production and distribution of high-quality news, which are challenged as a viable commercial proposition by the lessening of economic incentives, considerable opportunity lies in taking advantage of the trust developed through public engagement to sustain news that serves the critical information needs of its audience. Moreover, because the current environment has resulted in economic pressure on news production, news professionals are now willing to support new practices such as deeper engagement with their public as a way to build trust, loyalty and ultimately sustainability.

In short, incentives are aligned so that as engagement makes news both more trustworthy and more trusted, it may become more democratically productive, as well as sustainable, in the digital public square. In other words, the news becomes more efficacious in terms of how it informs the public or holds the powerful to account, in addition to generating more financial support.

Strengthening the relationship between the outlet and the public, however, creates new ethical challenges for journalists and news outlets, in a world where many more can claim to be journalists or news outlets. The responsibilities news organizations take on by supporting such engagement at scale and the speed at which the new rituals of reception and engagement may occur may generate unwanted mob-like or anti-democratic outcomes, many of which are ill understood at present. Moreover, some self-described news outlets that do not, in fact, abide by

journalistic standards may seek to use the same approaches to engagement to undermine trust in the wider public square and democratic institutions writ large.

This chapter reviews drivers of news efficacy in the past. It then goes on to analyze the current environment the news media face and suggests that outlets in the new-media-infused world of today may have to pursue different strategies from those they have pursued before. How the press has maintained credibility has not only changed in recent times but will likely differ markedly in the future.

How News Has Worked

The best way to understand the role news plays is to consider how it has served, and will continue to serve, the monitorial citizen idea developed in chapter 3. News can serve the monitorial citizen in three ways:

1. *Directly.* Upon being consumed, the news can inform an action the citizen may take. Insights into a candidate's positions or a ballot measure, for instance, may inform voting, while news related to how a certain neighborhood school is functioning or the level of pollution in a particular place may inform life choices. In terms of accountability, revelations about the conduct of a legislator usefully inform voters in advance of any election.

2. *Indirectly.* The news can inform the actions of people, who change their behavior as a result. A local district attorney, for example, may learn from the news about an official's improper and possibly illegal public acts, prompting the start of an investigation.

3. *Via the threat of news.* The prospect of a news story's being written and distributed widely can change the behavior of institutional actors, who decide to act differently. The mere possibility of a news story being written can, for example, create incentives for

those charged with acting in the public interest not to overstep powers, commit fraud, or otherwise act inappropriately.

This chapter focuses mostly on the first mechanism. It argues that the direct efficacy, or influence, of news turns on three factors:

1. *Salience with the public.* The salience of news relies on timeliness as much as topic. Kovach and Rosenstiel identify it as a central element of journalism, and much journalistic energy is devoted to being in a position to write the most salient and important stories (Kovach and Rosenstiel 2007). The desire to generate significant interest and be perceived as relevant is fundamental to the practice of many journalists day to day, yet, at the same time, it poses problems in that the first draft is likely to have major errors. Even if the errors are only of omission, emphasis, or interpretation they can damage credibility if there are too many of them.

2. *Trust of the public, credibility, and social authority of the news story or news outlet.* Editors, publishers, and journalists suggest that public trust, credibility, and the authority of their work are embedded in the reputations of their organizations. Collectively they form an intangible property of news writ large that is coveted by news outlets. Each outlet feels this property is hard won and may use it to justify choices about coverage or storytelling—for example, supporting an expensive foreign bureau or, conversely, not undertaking certain stories, such as writing about the salacious act of a lawmaker.

3. *Engagement.* As the audience has acquired agency in validating or invalidating articles and increasingly plays an important role in how news is distributed and recirculated, engagement is increasingly valuable to the news outlet.

The following describes in more detail how news seeks to be salient, develops trust, and maximizes engagement. News outlets must care about all three if the news they produce is to play a role in the public square.

News Salience

Salience has been the subject of many a recent news article as outlets have sought to navigate a world where many organizations are prioritizing profit over gaining the public's attention. Where previously only a select few news broadcasters or national papers could quickly gain readers beyond a broadcast radius or a footprint based on print distribution, now many companies seek to compete for them. For news outlets, this competition has often turned into a fight to make news more salient.

Search engine and social media companies profit from the competition over salience by continually tweaking the algorithms that select or prioritize content produced by others. News distributors and producers vie for placement by tweaking not just the visible headlines but also the metadata of news stories to appeal to readers and the search engines that act as their proxies (Kuiken et al. 2017; Benton 2009). Some news outlets have specialized solely in optimizing just the headlines of stories they produce. Criticized as being a producer of clickbait, the outlet Upworthy has sought to be scientific in analyzing the performance of the often emotionally loaded and sensational headlines it adopts (Rose 2015). Of more interest to the present study, however, is how news outlets respond.

In a world where the number of channels is increasing and individual stories are often detached from the outlet's brand by virtue of often being viewed from within a third-party platform, pressure is rising to maximize salience. Beyond tweaking headlines, one response to the pressure is to publish as close in time as possible to whichever other outlet is covering a story with the intention of gaining the largest readership or viewership (Boczkowski 2010). Key to

understanding the importance of salience is that, according to the American Press Institute, many American news consumers are relatively omnivorous, and many typically view news stories from a range of outlets rather than being creatures of narrow silos of news (American Press Institute 2014, 2015; American Press Institute and Associated Press-NORC Center for Public Opinion Research 2017; American Press Institute 2017). The American Press Institute studies show this omnivorousness comes from an increasing reliance on social platforms as the first filter and on the feeds as a means of prioritizing which news and information to consume. In short, what matters in terms of viewership for hard news is speed, since an outlet is not competing for eyeballs within a news broadcast or for placement within a newspaper published once a day, but to be the outlet of choice for those inclined to consume its content after seeing an excerpt in a constantly moving news feed.

Speed is also important because the algorithms of social platforms will consider signals generated by a person's consumption of a given news item by prioritizing the item within the news feeds of others. Practically, this means the salience of a news item to individuals is far more important a driver of audience size than it was in the past, when audience size was driven by individuals' choices of news outlets—a decision that was much more a product of habit—and the results of choices of editors at that outlet were only reviewable the following day in broadcasts or periodically when audited circulation figures were available for print outlets.

Moreover, the tactic of news imitation, the practice of monitoring close competitors and seeking to report parallel stories where possible, can also have deleterious effects on the nature of headlines or the news itself, since it will privilege clickbait headlines or the strongest, most eye-catching construction of a news story for whatever narrow audience the publisher of that news is seeking (Boczkowski 2010).

In such a world, outlets are spurred to focus on obtaining trust through other means, and the maintenance of credibility and social authority are ways to raise the likelihood that a news consumer will prefer content from one outlet over arguably similar content from another. To understand the options news outlets have open to them in the future, I first review how news media have sought credibility throughout history.

Acquisition of Trust, Credibility, and Social Authority by Media

The news media have acquired social authority and maintained credibility in many ways: through anonymity, through their general independence, in their role of social critic, through the performances of memorable eccentric reporters, in just-the-facts approaches, through objectivity, as investigative adversaries, or when they just rise to the occasion. The following sections review these approaches.

Trust through Anonymity

Anonymity of authorship, a practice rarely used by the news media, was at some moments in history central to the ability of some writers to survive. Because of their Enlightenment ideals and, thus, implicit opposition to the king of France, the correspondents in the intellectual community of Enlightenment scholars known as the Republic of Letters, arguably a precursor to the press, required anonymity and had to use pseudonyms (Eisenstein 2005, 99). Moreover, a reader in those days might have had reason to distrust any signed document, since the author would might only have maintained the ability to publish under his own name with the consent of a sovereign—a sure indicator of possibly compromised credibility. Pamphlets, a closer precursor to newspapers were able to operate with anonymity (Pettegree 2014, 267). That said, the needs of publishers to be known in order to survive commercially required them to share their address to permit subscribers to send payments (Pettegree 2014, 267). on balance,

credibility through anonymity was not universally exploited, and in the early United States a different approach arose.

Trust through General Independence

The First Amendment to the U.S. Constitution placed the freedom of the press in a privileged position, marking its evolution from being subservient to the crown, as it was in Europe, to becoming independent. Some American news sheets in the 1820s emerged first under the patronage of benefactors, who often comprised a small circle of politicians or merchants (Schudson 1981, 16). Consequently, these papers appear to have held little general credibility. Others most which had names, which often included "critic" "herald" or "sun," all of which suggested a desire to challenge or illuminate the world reflected the stirrings of the public-spirited press called for by Joseph Pulitzer when he stated that "an able, disinterested, public-spirited press, with trained intelligence to know the right and courage to do it, can preserve that public virtue without which popular government is a sham and a mockery" (Milton 1936, 691).

Moreover, these stirrings were accompanied in many cases by reduced prices, a focus on daily rather than subscription purchases, and larger circulations and thus, by a desire to be relevant to as many people as possible. Perhaps the most successful paper was James Bennett's *New York Herald*, which presented itself as independent of powerful interests (Schudson 1981, 52). Attacks on Bennett by the "six-penny" papers of the elite, who in 1840 sought to put him out of business to protect their owners' interests, provided perhaps the most telling proof of that independence (Schudson 1981, 55).

Trust through Uniqueness

In the early 1800s, mere independence was enough to sustain credibility and authority of a paper, but it was soon augmented by other approaches. Bylines for reporters began to emerge during the 1830's as some reporters worked to build trust and make their reputations. During the

civil war the practice became more widespread and some consciously set themselves apart as a

new breed (Schudson 1981, 68).[65] Some began calling themselves the Bohemian Brigade after a

famous watering hole in New York owned by Charles Ignatius Pfaff and, as Tucher writes,

"assum[ed] the mantle of Pfaffs' apostles" (Tucher 2006, 139). Moreover, they acquired this

reputation for fearlessness and unconventionality at a time when few writers sustained

themselves on a writing income alone (Tucher 2006, 138). Although their reputations faded fast

in the Gilded Age journalism that followed, they emerged from the war with a "narrative of

themselves as an authoritative interpretative community" (Tucher 2006, 147). However, though

the byline wasn't commonplace until the twentieth century the correspondent of the civil war

birthed the notion of reporters' acquiring social authority in their own names through

independence of mind.

Appealing to Science and Realism

The 1890s saw an appeal to science and realism, in common with thinking in society at

the time, as a way to gain authority with the public (Schudson 1981, 71–76). This challenge was

made all the harder as the yellow press—a sensationalist and scandal-mongering set of papers

that operated in a few cities—tempted all reporters to overreach (Ettema and Glasser 1998, 65).

The challenge for the reporter was to stick to the facts while injecting enough—likely interesting

but possibly fabricated—color into every story (Schudson 1981, 78–79). Muckraking, a style of

journalism in line with the ethos of the time, emerged supportive of social progress (Weinberg

2002), while *The New York Times* began to acquire its reputation as a model of "journalism as

---

[65] It is worth noting however that this arose as a result of General Hooker of the Union
army issuing an order requiring signing of letters by correspondents. He did so such that any that
revealed critical military information could be punished.

information" (Schudson 1981, 106–20). The tools of both muckraking and science alongside "facts" served journalists well in this period in their quest to sustain credibility and authority in a newly complex world (Nerone 2015, 136–41).

Trust through Objectivity

Only after the turn of the century did the modern ideal of objectivity begin to emerge. This was, in part, a response to the perspective-shattering nature of World War I, in which U.S. propaganda had been so successful in enlisting the support of the nation; the rise of public relations specialists; and the economic crash that came only eleven years after the war. Objectivity became the primary vehicle for journalists to legitimize their craft. With a broader consensus splintered by the shock of the war and the other changes, reporters led a movement to "replace a simple faith in facts with an allegiance to rules and procedures" to ensure the legitimacy of the words they wrote (Schudson 1981, 7). The ideal of objectivity, still revered by many in the modern press corps, was easily understood by jounralists and the public alike, as both recognized that, although journalists might strive for objectivity in every report, some subjectivity would always be present. This change was also accompanied by the institutionalization of the byline as a marker of quality, in parallel with specialization and the acceptance of interpretive reporting.

By the 1960s, trust in the media based on "objectivity" was challenged by deferential reporting of high profile events. Several cases in which the government successfully persuaded the press not to publish stories related to events including, among others, the U-2 flights over the Soviet Union and the preparations for the Bay of Pigs, generated criticism from those who wished the press to be less deferential to government interests. Ultimately, this deference declined, and some of the press moved into the role of adversary toward those in powerful positions, particularly with respect to its dealings with the government. The next step was from

133

adversarial to large-scale investigative reporting, a modern incarnation of muckraking journalism. Although the step was in some ways small, the approach provided legitimacy. These efforts reached their zenith with the Pentagon Papers and Watergate, both of which continue to create an assumption that journalists will be fearless in their pursuit of facts, even today.

Independent of the overarching rationales for social authority laid out above, the effectiveness (or ineffectiveness) of the press in covering unexpected events has alternately built or squandered the previously acquired authority. Most notably, the assassination of President John F. Kennedy provided made-for-television images of the funeral. That and the fortuitous capturing on live TV of the death of Lee Harvey Oswald ushered in a period of television preeminence in news reporting. As Barbie Zelizer writes, the assassination legitimized journalists as the principal re-tellers of the story, despite their absence from the actual scene of the shooting (Zelizer 1993, 188–91). Later in the decade, Vietnam would make the names of journalists who are now retired, while CNN came of age in the first Gulf War. The happenstance of the "memorable journalist" reporting on a "historical event" cannot be discounted as a factor in maintaining the credibility of journalism writ large.

All the above has been reviewed to make the point that social authority in journalism and news reporting in general has come from many different sources. Credibility has been captured by different media over time and sometimes credited as much to the individual—what would Watergate have been without Woodward & Bernstein?—as to the outlet or medium (Schudson 1993, 115; Ettema and Glasser 1998, 63).

Gaining Trust Today

The modern context for credibility and social authority is substantively different from that of the past because of the transition to digital publishing, since many of the publications of the past now exist in a sea of content both online and offline, targeted to satisfy ever-more

134

atomized audiences. The question is how media might sustain their social authority in this new context. The answer to be put forth here is that, essentially, in a world that supports an infinite number of voices and publications, the foundations of journalistic authority will morph again. This argument is preceded by discussion of another rationale for changing journalistic norms: journalisms' recent failures.

Journalisms' Recent Failures

Consideration of journalism today is impossible without first acknowledging the failures in reporting that have periodically dented its credibility and reduced the trust of its audience. Some have involved the fabrication of stories. Janet Cooke was, arguably, the first in a series of high-profile cases.[66] Cooke won a Pulitzer prize for a 1981 story about a heroin addict in southeast Washington, DC, that was later found to be without basis (Sager 2016). A decade later, Stephen Glass at the *New Republic* fabricated multiple stories; his fiction was outed by Forbes in 1998 (Penenberg 1998). This was followed in 2003 by Jayson Blair at *The New York Times*, whose fabrication and plagiarizing of stories put the newspaper in a bad light (Hassan 2003, 19). In 2012, Jonah Lehrer was found to have fabricated quotes in his reporting for *The New Yorker* (Moynihan 2012) These stories of reporters misrepresenting their reporting or manufacturing fiction reduced readers' trust in journalists.

---

[66] I don't address it here, but others have also explored the ethics of "new journalism" exemplified by Hunter S. Thompson, Tom Wolfe, and Truman Capote as well as Nik Cohn (Pauly 2014). A particularly interesting example is Cohn's portrait of a Bay Ridge night club that served as the inspiration for the film, *Saturday Night Fever*, could be said to be no less fake than Cooke's piece but as it was not revealed to be fake until many years after and then only by its author it serves not as an example of a story that resulted in a loss of trust by the public but rather that the news media is not always trustworthy (N. Cohn 1976; Sternbergh 2006).

These failures may have had just as profound an effect inside the newsroom, resulting in a culture where the bonds of trust between editors and their reporters are placed on a different, more cautious footing. In 2003, the Judith Miller debacle, for instance, in which *The New York Times* was shown to have been hoodwinked by the George W. Bush administration over weapons of mass destruction in Iraq, left even those most likely to defend the venerable paper— Miller's fellow journalists—acknowledging its failures (MacArthur 2003, 62; Massing 2004).

Separate from this the subsequent failure by the *Times* to publish evidence of the existence of a United States government wiretapping program for a year brought further into question the reputation of the press as a fearless defender of the individual against the state and raised questions for reporters regarding whether their editors were prepared to stand behind them (Risen and Lichtblau 2005; Risen 2018).

Another failure on the part of the press that has been documented extensively was the failure to cover the financial services industry and forecast the financial collapse that led to the Great Recession in 2008. The press's seeming preference for access to sources and institutions within the field of financial reporting meant the crisis came as a surprise to the public. Firms had operated without journalistic oversight that might have exposed their weaknesses or the weaknesses of the complex web of transactions that proved so unstable (Starkman 2015, 253– 83). Ultimately, the market collapsed, likely later than it would have done had journalists been more attentive and the public was unprepared since few news outlets had surfaced fragility of the market.[67]

---

[67] Out of the crisis emerged a more self-conscious and transparent form of exemplified by Planet Money, a blog and podcast in which reporters expose their own ignorance and mistakes

Finally, the press is perceived to have failed in its coverage of the 2016 election, both in accurately assessing the mood of the country and reliably projecting the outcome—a performance that only reinforced how hard it is for news outlets to maintain credibility (Gallup Inc. 2015; Mitchell et al. 2016b; Dutton et al. 2016). This failure, along with those cited above, collectively have cut against the public's maintaining their trust in journalists and the outlets they write for. President Trump has seized on this, building on the critique he reformulated during the campaign to attack media who have raised questions about his policies and actions.[68] His ability to do so is the direct result of the low esteem in which the public hold the news media. Regaining the public's trust by seeking strong justifications for it is now vital.

The Limits of the View from Nowhere.

As journalists in general, and *The New York Times* in particular, have reeled from the criticisms stemming from their failures, their preferred sanctuary—the abstract idea of a detached journalistic objectivity or, as Jay Rosen coined it, "the view from nowhere"—has proved increasingly uncomfortable (Rosen 2010). Objectivity was dropped from the ethics code of the Society of Professional Journalists in 1996 (Cuningham 2003). Moreover, whatever one thinks about the particular incidents recounted above, relying on a notion of objectivity that was adopted in the 1930s raises the question, are there alternatives (Schudson 2001, 161)? While adopting a tone of detached objectivity may in itself have been adequate in a period when

---

and go in search of better answers about what happened. The being to make journalism covering economic topics more broadly accessible.

[68] This critique is of mainstream news reporters is not new and has been a staple of conservative advocacy for decades though President Trump has focused on it, and used it as a staple of large public campaign events in a manner that has shaken reporters (Victor 2017).

deference reigned, it is far from adequate in today's media environment, where the audience is part of the distribution mechanism and has the ability to talk back or even report for themselves.

The Audience Can Now Talk Back.

Critical to the changed environment journalists face are the new practices audiences have at their disposal and the new institutions of journalistic critique.

<u>In-House Critics.</u>

In the past, professional critique was supplied by the occasional column from an ombudsperson or public editor. *The Washington Post* eliminated its ombudsperson in 2013, however, and *The New York Times* which only instituted its public editor in 2003 eliminated the position in 2017 (Farhi 2013; Spayd 2017). The result of this is that the small number of media columnists and news media affiliated experts located at industry organizations are now the only ones positioned to level critique.

<u>The Public as Critic.</u>

It is now difficult to imagine how audience critique wasn't part of the news cycle, but the scale of it is relatively new. An example from the internet era where blogs were ascendant was a much-heralded news story before the 2004 elections that alleged then–presidential candidate George W. Bush had received special treatment in the Texas Air National Guard ("New Questions On Bush Guard Duty" 2004). This is an example where conservative leaning bloggers played a role in quickly raising questions on the authenticity of documents on which rested the novelty of the story and the ethics of CBS in particular (Pein 2005).[69] Although even more than

---

[69] It is worth noting that much of this story had already been reported, by the *Washington Post* in 1999 and the *Boston Globe* in 2000 (Lardner and Romano 1999; Robinson 2000). Moreover, the

a decade later the accuracy of the larger story remained unclear, the rapid reaction to this story provided an early example of a moment when writers, newly empowered by the Internet as bloggers, could push back on reporting that they questioned.

A similar dynamic played out on November 28, 2007, when *Time* magazine published a piece by Joe Klein entitled "Tone Deaf Democrats," in which the columnist made a claim about the controversial Foreign Intelligence Surveillance Act (FISA), then a bill under consideration by the U.S. House of Representatives (J. Klein 2007). Klein interpreted the bill's provisions as preventing warrantless wiretapping even of known foreign terrorist suspects. Progressive-leaning readers felt this interpretation was incorrect, based on a sentence in the bill that stated,

> A court order is not required for electronic surveillance directed at the acquisition of the contents of any communication between persons that are not known to be United States persons and are reasonably believed to be located outside the United States.

Although *Time* issued a correction, it did not quote the sentence from the bill nor provide an interpretation of it, leaving the reader to decide whether or not Klein was right. The disputed assertion about the bill in a story by a senior writer at *Time* resulted in much investigation and communication, not only with the columnist, but also with his editor (Hamsher 2007), led by readers who wished to correct an interpretation they saw as unfavorable to their cause.

In short, so-called mainstream media, who have until now relied on their expertise, a certain deference from their readership, and the ability to limit their critics to a few letters and their responses to short corrections in subsequent issues, are now faced by an empowered public who, when they choose to, treat the fourth estate as an adversary, not unlike the way in which the media treat the subjects of their stories when questioning them. As Jay Rosen has put it, news consumers are now better understood as "the people formerly known as the audience" (Rosen

2006b). This point was made eloquently, in his announcement of the dismissal of the then public

editor of *The New York Times* in May 2017 when the publisher Arthur Sulzberger stated:

> "our followers on social media and our readers across the internet have come together to
>
> collectively serve as a modern watchdog, more vigilant and forceful than one person
>
> could ever be. Our responsibility is to empower all of those watchdogs, and to listen to
>
> them, rather than to channel their voice through a single office"[70]

Partisan Institutions as Critic.

Audience critique has been strengthened by new institutions holding the media to

account. Media Matters for America (MMFA), an organization that describes itself as a

"progressive research and information center dedicated to comprehensively monitoring,

analyzing, and correcting conservative misinformation in the U.S. media," often criticizes outlets

it identifies as guilty of sharing misinformation (Media Matters for America 2018). MMFA has a

parallel on the right in the form of the Media Research Council, which says its "sole mission is to

expose and neutralize the propaganda arm of the Left: the national news media" (Media

Research Center 2015). Both seek to provide critique to audiences inclined to agree with their

perspectives.

Practically speaking, with ever more critics (or should they be called monitorial readers)

coming online, the bar for knowledge keeps climbing higher for general assignment reporters

who will be faced, as they always were, with readers who might know more than they do on

---

[70] Despite the claim that an in-house critic can be supplanted by the public it is worth
noting though that one of her columns addressed a timidity she saw in reporting by *The New
York Times* with respect to coverage of a connection between the Russian government and the
Trump campaign. This attracted critique from the executive editor, Dean Baquet, who perhaps
might have been sensitive to criticism since as another media columnist stated the conclusion the
reporting drew "looks risible in retrospect (Wemple 2017)."

various subjects but who are now far more able to critique their reporting publicly and instantaneously. Moreover, to be perceived as "objective" when readership or viewership is so heterogeneous will require reporters to include views across so wide a range of perspectives that it begs credulity to think those using the traditional approach resting on detached objectivity can be as successful in achieving credibility as they were in the past. Journalists and news outlets are, however, adopting other approaches to build trust.

Trust-Building Responses

The journalistic approaches being used to build trust between producers and consumers of news include the following.

Brands and Anonymity.

Although anonymity—a vehicle of credibility in the Republic of Letters—is rarely used to build trust in journalism today, it has found favor in a few cases. Some outlets, for example, use anonymity to protect journalists reporting from locations where use of their real names might expose them to danger (Sharman 2017).

Another reason for anonymity is to take advantage of an outlet's reputation by emphasizing its brand over the identities of the individuals who work for it. *The Economist*, though arguably atypical, a longstanding magazine that covers a cross section of stories related to world affairs, business, and finance and targets highly educated consumers, is one of a few outlets that does this, omitting bylines on its news stories and using historical pseudonyms on reported opinion columns. The magazine's editors assert (characteristically without providing a byline) that their writing and editing process is a shared endeavor; they also declare that "what is written is more important than who writes it" (Economist 2017). This anonymity, they argue, is core to their brand, and by allowing them to focus critique of individual articles on that brand, they are in a much better position to prevent or weather criticism. That said, *The Economist* has

found anonymity difficult to maintain where journalists have social media profiles or news is produced on blogs written from single-author perspectives (Economist 2017).

In another instance, anonymity (of the individual authors) is available is to those operating noncommercial websites. In this context the operation of these sites with anonymity could build trust of the readership as it arguably allows those operating the site to do so without fear of being swayed by those who might lobby them or prosecution by governments unhappy with what they publish.

This has typically been a tool of those publishing for environments that have limitations on press freedom. This approach has been adopted in different ways by some of the "-leaks" websites. Notwithstanding publicity sought and gained by its founder who has squandered any trust placed in the site it used the absence of a known staff to build trust that the site would be fearless in publishing (Wikileaks 2018).

A similar, more restricted use of anonymity has been pursued by Publeaks (Publeaks 2017). This site's limited mission is merely to provide a platform for transmission of information to multiple outlets in the two countries where it operates, Mexico and the Netherlands. It does not itself claim anonymity, but rather introduces anonymity into the process of reporting, seeking to provide technologies that are resistant to counter-surveillance of whistleblowers. It does this by providing a platform that acts as a broker for leaks from whisteblowers ensuring their information is passed to multiple credible news outlets.

Transparency and Signaling.

Systematically, the Trust Project at the Markkula Center for Applied Ethics is identifying indicators news outlets can adopt for all their journalism site-wide or attach to specific stories to signal their credibility to their readerships. This effort, which began in 2014, developed in partnership with a number of news media outlets from across the world a small number of

indicators that if included in news stories would serve as a basis for users to rely on the reporting of a news outlet (Owen 2017b). In a sense this serves as a nutrition label for a news article or news outlet (Lehrman 2017). By virtue of a developing a syntax for these indicators in XML it allows platforms to incorporate which is encoded into their ranking algorithms. In a sense, this is a modern-day re-articulation of editorial policy that provides transparency to the news consumer as well as to any search engine or social platform that wants to adopt those signals as a basis for ranking or weighting organic sharing. Given that much of the distribution of less than trustworthy content is via such platforms this approach which is yet to be fully deployed appears to have significant promise.

Audience and Topic Specialization.

Another way for a news outlet to build trust is to specialize in terms of audience and audience perspective. This seems instinctively appealing, since the "trust" bar is lower for any given audience that comes to read, listen, or watch the news coverage within a limited range of frames, thus making credibility easier to gain. Such an approach might permit papers to adopt definitions of "objectivity" they can more easily sustain. In short, rather than seeking broad legitimacy with mass audiences, they would seek deep legitimacy with narrow ones. From the perspective of the reporter, a move to increase subject specialization with multimedia functionality raises the likelihood that the reporter will not only provide richer coverage but will have greater subject-matter expertise than the reader. Where this selection is related to a consistent set of policy preferences, however, this may result in a move to a style of journalism more like that in the UK, where a newspaper may have not only editorials of a certain bias but also a selection of news presented for a partisan subset of the population.

The move to increase subject specialization has been paralleled in several areas of reporting where an outlet will seek to cover a single topic. The Marshall Project, for example,

has taken on criminal justice reporting, while Inside Climate News focuses on climate change, energy, and the environment. The Food and Environment Reporting Network covers food, agriculture, and environmental health. These sites seek to build trust with their audiences by claiming a deep expertise in the field on which they report.

Another alternative is hyper-specialization in terms of the geographical remit of reporters—in other words, very local news. Many attempts have been made in this area. Large metro papers have attempted to build online portals. The *Washington Post's* now defunct Loudon Extra was one such portal, specializing on a geographical basis. The Loudon Extra neatly illustrated several strategies common to hyper-local reporting. It sought to provide vibrant local reporting by synthesizing local stories from its mother paper, producing its own, calling on local citizens to comment, and, where possible, using multi-skilled reporters to make stories available as podcasts. Allbritton Communications pursued a parallel strategy in the DC market called TBD.com. It was short-lived, having been announced in fall 2009, launched in August 2010, scaled back in February 2011, and closed in August 2012 (Kurtz 2009; M. Schaffer 2011; Wemple 2012).

Several online-only efforts centered on mass replication of a cookie-cutter local approach that sought to develop scale quickly. Backfence.com was a short-lived experiment that raised $3 million in 2005. It aimed to provide narrowly tailored coverage and engage the communities it covered (Potts 2005). It closed its thirteen sites in 2007, however (Farhi 2007). A similar effort was made by what was first an independent media company, Patch Media, that was subsequently purchased by AOL, which took a similar approach. This effort foundered after overly ambitious growth. That said, it survived after a downsizing and is reportedly profitable with a smaller number of sites (Jack Marshall 2016). More modest efforts are Baristanet, which was started in 2004 and has grown to cover three town in New Jersey, and Spirited Media, a company that now

144

owns and operates three sites across the country (Denverite in Denver CO, Billy Penn in Philadelphia PA, and The Incline in Pittsburgh, PA). These ventures are showing that a model is emerging for locally focused sites that seek to be quickly responsive and engaged with their audiences (D. Cohn 2007; Eldridge 2017).

Furthermore, it is possible that journalism will include a much larger number of voices, that exist on the margins of what would have been considered a news outlet. In many places local political blogs where opinion pieces lead discussion on topical issues and the reader receives the news filtered by trusted local opinionated conversational voices. Orange Politics, in Orange County North Carolina is a good example of this, as is Blue Virginia.[71]

Evaluative Approaches.

Now, fact-checking as a separate and distinct journalistic practice is another answer to the challenges to journalistic credibility in a context where the ability to communicate to a mass audience is afforded to many. Within the United States the approach is exemplified by Factcheck.org and Politifact both of which identify factual claims (often made by politicians) and subject them to a forensic analysis to understand whether the claim is accurate or not. Ultimately, they publish the analysis and indicate their assessment of the claims of truthfulness. Politifact goes further giving it a rating on a six point scale. Assignment of this journalistic task has the virtue of standardizing a process and results in the responsibility of assessing truthfulness by a set of journalists specialized in such work. It is both ambitious in its aims and is only modestly distinct from standard news reporting, however, if the news media can no longer limit the voices

---

[71] See https://orangepolitics.org/ and https://bluevirginia.us/

heard in the public square, they can using factchecking, at a minimum, evaluate their truthfulness and share their assessment (Graves 2016).

Hybrid Reporting and Opinion.

An alternative to outlets' fact-checking themselves is an emerging model from the blogosphere best exemplified by Josh Marshall's hybrid blogging and reporting outlet. His editorializing front page, "Talking Points Memo," has traditional experts ready to weigh in on specific topics of the moment (TPM Café) and a more traditional beat-reporting entity (TPM Muckraker) that innovatively uses its readership as researchers on occasion. This approach was exemplified by the Talking Points Memo investigation into the U.S. Attorneys Scandal in 2005, in which collaboration with the online audience yielded tips that accelerated and broadened the reporting. This approach to bolstering credibility also ties into engagement of the audience—the third factor in journalism's influence, after salience and credibility—which is discussed in depth below, following a brief discussion of engaged journalism as one more approach to credibility.

Engaged Journalism.

Jay Rosen a key voice behind a more robust sort of journalism that wears its perspective on its sleeve. He has advocated that journalists abandon any aspiration to impartiality but recognize that in doing journalistic work they develop views that allow them to ground-truth the claims and verifiable facts they report (Rosen 2010). An examplar of this approach is the Voice of San Diego, a local online nonprofit outlet that has explicitly rejected the idea that it should be an impartial observer and instead articulated a set of shared values that lie behind its reporting that the site's editor believe allow them to be transparent with their audience about their perspective on issues important to the community (Owen 2017a).

Crowdsourcing information from audience members is another way to actively engage them and demonstrate transparency in reporting. Investigative outlet ProPublica pursued an

approach that opened up the reporting process to the public when it enlisted its readers in its reporting of the prescribing behavior of doctors (Hickman 2013). Even better known is the experience of David Fahrenthold at the *Washington Post*. Fahrenthold's sharing of images of his notebook on the web to provide a sort of low-tech transparency might, in the past, have been seen as inconsistent with the practice of investigative journalism. Now, however, it is seen as a practice to be emulated following Farenthold's Pulitzer Prize for the reporting (Pulitzer Prize Board 2017). Fahrenthold's success with this unconventional means of engaging his audience has required both journalists and the news institutions that employ them to think through how to capture the enthusiasms and motivations of their own audiences. His approach is in a sense systematized by Hearken, which has developed a product called "Open Notebook" that provides a technological platform to share reporting in the midst of a reporting project (Hearken 2017a).

All of the above approaches are contributing to a set of journalistic practices that are better suited to the news media context of today but the latter approach concerning engagement of the audience deserves more attention.

Engagement of the Audience

Not only is the production and distribution of news media being transformed; the possibility of audience engagement with the news or issues in the news is also changing. This is occurring through the online comments sections provided by news media with their stories as well as social media accounts and streams operated by news outlets. The public are also able to engage in issue discussions via direct contact with local governments or candidates or the use of standalone mechanisms such as digital platfroms such as PopVox or Countable that record feedback.

In the past, journalists, who were the key element in a chain of those involved in producing the news, did not need to listen to their audiences. Old world economics meant they

couldn't be removed, and they developed a set of norms and practices that took advantage of the strength they drew from their isolation while at the same time reifying it. The economics of media privileged simultaneous reach to a broad audience, with little value attached to the concerns of the marginal reader.

As outlined above, we are in a situation in which trust in journalists, the journalism they produce, and the outlets through which they produce it needs to be rebuilt. This necessity is occurring in a media environment where, as a result of disintermediation by social distribution platforms, audiences who previously were channelized and loyal to particular programs or news outlets are no longer as tethered to preferences developed over decades. Furthermore, outlets can be founded and acquire credibility quickly, as demonstrated by Axios, a news outlet recently launched by Mike Allen and colleagues, formerly of *Politico*, as well as the various politicized news sites, such as US Uncut, which served those sympathetic to the policies of Bernie Sanders rather than any fidelity to journalistic ethics, and the Daily Signal, a site operated by the Heritage Foundation, a conservative think tank which writes that its mission "is to build and promote conservative public policies."

Such an environment provides many rationales to support a logic of engagement and the imperative of journalism as an independent voice. Audiences can be assembled quickly, and engagement is possible and can be used to direct public attention. After decades of outlets seeking at their most granular a broad demographic, they are now able to sell to advertisers ads that target very narrowly targeted demographics or even individual consumers, providing incentives to engage people more deeply. Moreover, the ability to engage with readers privileges and creates incentives for empathy in the reporting, lest the reporting alienate them. The result is that the audience can increasingly be engaged in priority-setting around reporting and news

organization strategies, in the reporting process, in the stories themselves, as well as in discussions that arise from the journalism.

Engagement in setting news priorities.

Historically, news outlets have consulted the public about community needs. Before deregulation, the FCC required those who applied for broadcast licenses to undertake with the public a process to ascertain those needs (DeLuca 1976). Similar processes, though not mandated by statute, have often been part of local cable franchise agreements. More recently, such ascertainment processes been reconceived as an effort to understand the information needs of communities (Waldman and Working Group on Information Needs of Communities 2011; "The Knight Commission on Information Needs of Communities in a Democracy" 2009; "Review of the Literature Regarding Critical Information Needs of the American Public." 2012).

In the past few years. three practical approaches to understanding needs have been conceived. The first is a toolkit developed by the Knight Foundation. This toolkit designed to support a community organization (led by a local foundation, a public media organization, or a local non-profit) in a process that aims to "harness the power of information to advance your goals for a better community" (Knight Foundation 2011). It documented five steps to identify and assess the supply of information, the media literacy skills and capacities of institutions to engage as well as the infrastructure that deliver information to a local community. The second is a focus group approach that has been tested in three New Jersey towns. It was used to supplement academic analysis and develop reports that organizations in communities could use to open up conversations about local news media (P. M. Napoli 2015). The most significant is a project called "News Voices," developed by Free Press ("News Voices" 2017). This project has documented ways communities can engage reporters, and in parallel ways that reporters can design ways to engage communities. This approach has been deployed across New Jersey and

North Carolina. Importantly in New Jersey it supported the development of a coalition that got behind a bill in the New Jersey State legislature that created a new organization, partially funded by the state, that will make grants to organizations that seek to support community information needs ("News Voices" 2017).

Engaging the Public in Reporting

An opportunity provided by the web to sustain a dialogue and make room for an infinite number of comments also permits a change in an outlet's relationship with a subset of its readership. The rationale for embracing a more conversational style in reporting is twofold. First, it builds loyalty and perhaps dissuades regular readers from attacking the outlet destructively. Second, it enables the readership to provide input regarding story choices, expertise, and sources.[72]

An early evangelist for this kind of reporting in the online age was the BBC, which launched a model in 2008 that invites input from readers, taps readers as resources, and seeks reader coverage of numerous events under the brand of Your News (BBC News 2008). A case has many times been made for real-time collaboration on news, independent of outlets; one example is the comprehensive synthesis of conflicting stories on the "Virginia Tech Massacre" that appears on Wikipedia (Cohen 2007). Another is Civil Beat in Hawaii. In its early years, this news outlet went as far as to identify its reporters as "reporter-hosts" as a way to signal explicitly

---

[72] It is not unfair to suggest that the motivation behind this approach to journalism is little changed from the idea of civic or public journalism of the 1990's (Voakes 2004). It is also important to recognize that despite the virtues of this earlier incarnation of the approach it gradually declined in importance (L. A. Friedland 2004). The case for seeing how it can be renewed rests on a changed set of circumstances that have been elaborated by Geneva Overholser which suggest it is far more likely that it will be sustained in the online age given a new willingness to innovate and the nature and business models of the non-profit institutions in which journalism is increasingly occurring (Overholser 2017).

both to the employee and the audience that the person's role involved more than merely reporting.

Another means to engage audiences is a set of technologies that seeks to use the Internet, the mobile web, and, in some cases, short message service (SMS) tools to gather information from the audiences of the platforms that use them. Groundsource is a relatively simple platform that permits outlets or individual journalists to communicate with news sources via SMS (Groundsource 2017). Importantly, it is designed to serve journalistic practices by helping the outlet gain demographic details of its audience and to bring out community experts. A small team of people in New Orleans that adopted Groundsource has added active roving recording devices to its SMS capabilities. The combination has allowed the team to create a weekly segment on their local public radio station, WWNO, called "Listening Post" (Wolfman-Avent 2014).

A more sophisticated platform that supports the engagement of the audience from the start to the completion of the reporting process is the Engagement Management System developed by Hearken (Hearken 2017c) . EMS was developed through a grant program led by the Association for Independents in Radio via its Localore initiative and funded by the Corporation for Public Broadcasting, the NEA and the Wyncote Foundation. Hearken began as a project called "Curious City" within Chicago's WBEZ public radio station. When newsrooms use EMS, they use the answers to questions posed by the newsroom to its audience to set news priorities. Audiences are also called upon to vote on the most pressing questions, adding in another layer of engagement. They call the results "public-powered stories," in contrast to stories that are reactive to the events or to press-initiated stories based on ideas generated by reporters and editors (Hearken 2017b). This platform is relatively new and rigorous academic studies are still underway, but partners have won awards for the stories developed using the platform

(Martinez 2018). Hearken also claims that partners have grown email supporter lists, attracted

sponsorships, gained additional revenue and received disproportional audience attention from

stories developed using the tool (Hearken 2018). The EMS model has been taken further by

outlets that have sought to use citizen-collected data, an approach that has been most powerful

(as described below) in environmental reporting about climate.

Strengthening and Changing the Format and Impact of News

Another element of readers' feedback that outlets can incorporate into their presentation

of the news concerns layout and story preference. Little prevents a modern paper from producing

an online edition that is laid out algorithmically, based on the preferences of individual readers.

In fact, many components of a news outlet's page are subtly adjusted for the user's location (*The*

New York Times displays the local weather and a column of articles "recommended for you"), as

are ads that may have been sold against a profile of a generic person with the user's demographic

attributes. In doing this, the outlets are replicating elements of the social feeds of news that

Facebook and Twitter have kept central to their platforms.

Structured Data, Newsbots, and Annotation

Beyond the implications of using data to tailor news presentation, the use of algorithmic

analysis of data in the construction stories gives journalists and outlets new opportunities. This

approach was popularized in 2014 with earthquake bots and more recently bots that write (or

more accurately) often only summarize stories about the financial reports of companies, or

election results (Keohane 2017; Lee 2014; Miller 2015). The bots use the fact that certain

sources of information can be analyzed using software with a high degree of confidence and

often a summary or commentary on a story can be generated. At this point the efforts are used in

simple, relatively limited ways, but it is telling that they include some of the largest media and

innovative companies (Lokot and Diakopoulos 2016).[73] Another example of structuring of stories is in the creation of stories that are presented both as narrative and using standardized computer readable formats. This practice is not yet in wide use, but an initial example is the move to create a standard data structure for fact checks of political claims. This permits both Facebook and Google to identify the factcheck and algorithmically rank it. This permits the platforms to present it adjacent to stories that include the claim so interested readers will more readily find them on Google (Mantzarlis 2016). The same structure gives outlets opportunities to deploy the fact checks via different modes, such as in response to verbal requests to Amazon Echo (Jon Fingas 2016). Fundamentally, this meta-tagging of journalism allows it to be treated as data rather than narrative and empowers those with computing power, the platforms, and the distributors to be more effective in disseminating journalism. This is happening by allowing the public to request news stories via messaging services by sending questions to the "bot," (Lokot and Diakopoulos 2016). In the 2016 election cycle, however, a number of bots emerged within communication services. A good example was the "Purple" bot, which let its audience ask for details on specific stories in the run up to the election by using Facebook messenger as a Q&A platform (Lichterman 2016). These efforts are under continuous development. The Getnewsbot Google Chrome extension allows the reader to request articles similar to the one being read and subsequently be sent updates on the topic being covered (NewsBot 2017). Forbes has created a newsbot for the Telegram messaging platform (Upbin 2016). A state centric news site, Texas

---

[73] The implications of newsbots are profound and journalism scholars Lokot and Diakopoulos ask the profound question about whether the accountability role of journalism will be as effective if the author of a story is a bot rather than a journalist (Lokot and Diakopoulos 2016).

Tribune, has also gotten into the business of pushing news straight to a private messaging platform, in this case Facebook Messenger (Zamora 2017).

The structuring of journalism gives the audience agency in other ways, too. This has been demonstrated in a minor way by the Medium platform, which reveals to the ordinary reader those segments of a story that have been excerpted and shared via social platforms (Medium Help Center 2017). Other apps function solely to highlight words (Courter 2016).

Two other platforms have been seeking to exploit more ambitiously the possibility of adding structured metadata to news to engage audiences. Genius's proprietary platform has been adopted by a few media entities, including the *Washington Post*, which has used it to annotate transcripts of speeches, press conferences, and interviews (Mullin 2016). The website Politifact has similarly used it as a way to present fact checks in-line (Politifact 2017). A similar platform, Hypothes.is, is being explored as a way to annotate stories collaboratively on the web and share those annotations broadly (Froomkin 2017). Though not yet extensively adopted in news and journalism, Hypothes.is has been used by climate scientists intensely interested in ensuring unreliable or inaccurate science is quashed and not repeated and, conversely, that stories that are scientifically accurate are more widely distributed (Farley 2014). A web plugin in the same vein that aims not to buttress or undermine a particular viewpoint but rather to help people come across articles that provide counterpoints is RBUTR. The platform indicates within a user's web browser whether an article has been disputed (Farley 2015). More powerful still is the development by Facebook of functionality that permits users to flag articles as disputed and share them with journalistic partners accredited by Facebook as members of the International Fact-Checking Network. IFCN members can review each story. Initially, if the story or claim was assessed as inaccurate, a "disputed" flag was added to it wherever it is reposted on the platform (Newitz 2016). This has recently been adjusted such that the flag is no longer applied

154

but rather the factcheck is placed in close proximity and the ranking of the story itself is adjusted (Facebook 2018b).

Exploratory or Discovery Journalism

The digital world, by virtue of the ability of digital platforms to capture feedback from audiences, allows journalists to produce work that goes far beyond written narratives with still photographs or linear audio or video. These new capabilities broadly fit under the rubric of "playable models." Fundamentally, they represent an effort to use data within stories to create simulacra of events or places with which the public can engage. An alternative term is "data toys," coined by a team of journalist-researchers at the Parsons School of Design ("Data Toys | Playing with Complexity" 2014). David Rejeski at the Wilson Center, the creator of Budget Hero in 2012 and a similarly focused game called FiscalShip in 2016, provides two more examples of the approach. These efforts demonstrate the possibilities of presenting journalistic content as an experience to be engaged with rather than a narrative to be read or watched.

<u>Augmented and Virtual Reality</u>

Similar efforts are being pursued by innovators who seek to use augmented or virtual reality to present stories to the public. Nonny De La Pena undertook a project called Immersive Journalism that she has since parlayed into a private company (De La Pena 2017). Similarly, Joel Beeson and Dana Coester at West Virginia University developed "*Fractured Tour*" an immersive app to explore the economic, racial, and ideological divides in Selma, Alabama (West Virginia University and Morgan State University 2016). *The New York Times* and others are also exploring the creation of video experiences that allow an audience to experience a new story in a 360-degree video environment. Some of the most cutting-edge development in this field has been the creation by Empathetic Media of experiences that bring the news consumer into the environment of Freddie Gray's and Eric Garner's murders, as well as an app, Ferguson First

Hand, that allows the user to experience what a person would see and hear by placing him- or herself at different points in time and space during the shooting of Michael Brown (Archer 2015). All of these efforts though nascent and attracting readership by a news addicted elite seem likely to migrate to mass audience as technology costs and complexity declines and in so doing will generate incredibly powerful news experiences.

Dialogic Journalism, commenting, and annotation

Already well studied are commenting platforms which, though ubiquitous, have often been left untended by newsroom staff and have, as a result, become digital swamps of often distasteful and hateful rhetoric. NPR has even decided to eliminate comments from its site. In the past few years, however, journalistic outlets have become interested in making the commenting experience a more pleasant one. The Engaging News Project has studied how commenting platforms can better serve the public and the news outlet. The implications of commenting on news is a rich topic of discussion. *The New York Times* has spent considerable sums tailoring the experience, while many other outlets have outsourced the functionality to a third party, often Facebook. Questions have been raised about its implications for female journalists who are disproportionately targets of abuse online. Beyond this, multiple organizations, including most notably the Coral Project, have sought to redesign commenting to address the many challenges of engaging the public.

Outlier Media in Michigan has used the tool to create bot-led journalism focused on property in Detroit. Using the Ground Source, Sarah Alvarez offers users the opportunity to text "Detroit" to a short code and replies with a series of questions that permit the respondent to gain both specific answers about local property but also stories she has written on the topic (Outlier Media 2018). Ultimately if a user has specific questions she intervenes manually and answers them.

Spaceship Media that describes itself as "Journalism to Bridge Divides" has pursued a different mission and seeks, after identifying two communities in conflict or who aren't talking to each other, to create an event where they can engage constructively and from which journalists can draw stories that support the continuation of conversation that may be published. In some sense this effort seeks to build a positive loop around journalism by using deep engagement to identify topics prior to writing or filming a piece and then following up afterwards to use what was learned to drive subsequent stories.

Events and Journalism

Another site that has prioritized news as conversation is Zocalo Public Square, whose stated mission is "connecting people and ideas to each other." The site, which identifies itself as an "Arizona State University Enterprise Magazine of Ideas," seeks to make these connections via events they hold, through the production of journalism they distribute on their site, and through partnerships with news outlets (Zocalo Public Square 2018). Moreover, they state they frequently partner with other educational, cultural, philanthropic, and public institutions. A less conventional approach has been taken by the Center for Investigative Reporting, in its efforts to present journalism in the format of comedy shows or plays (De Aguiar 2015; Goins 2017). The aim here has been to provide stories in a form that larger audiences might be attentive to. In California this involved converting reporting on the implications on pickers of pesticide use in strawberry production into plays that were performed in English and Spanish for workers in the

fields in Oxnard and Salinas. New Jersey this involved taking reporting on toxic waste and developing a comedy show around the topic (Simpson 2016).[74]

It is important to note that all of these of changes to the journalism product reviewed above in this section on exploratory and discovery journalism represent changes to the rituals of news receivers. They bring the news digester (as I termed the news receiver earlier) closer to the story in a manner that doesn't privilege the performative, momentary emotional response.

Case Studies in Trust Building

Short case studies of two topics that have been and will continue to be subject of much news reporting suggest how audience engagement and the agency it provides audiences might play out.

Criminal Justice Reporting

Large outlets such as the *Washington Post* have recently reinvigorated reporting on criminal justice in the United States by developing a continuously updated database called Fatal Force that "seeks to keep a tally of fatal shootings by officers in the line of duty" (Washington Post 2016). Another project, conducted by *The Guardian*, has counted the "people killed by police" in 2015 and 2016 (Swaine et al. 2017). Both efforts mirror, on a different scale, a project called Homicide Watch that was started by two reporters to catalogue homicides at the city level in Washington, DC. The site expanded to Chicago and is still operating there as a part of the *Sun Times*; its DC forbearer ceased operations in 2014 (Shin 2014).

---

[74] It is not unreasonable to suggest that journalism has often been converted into theater, movies or even used in comedy, however, it is important to note here it is the news outlet that in this case it is the news outlet that is actively part of the process and seeing it the theater or comedy show as an act of journalism.

The Marshall Project, launched in 2014, has succeeded in setting a standard for reporting on criminal justice. It has done so in partnership with large outlets that are willing to publish the reporting as their own, as they trust it is credible. By August 2015, eight months after launch, the nonprofit organization had collaborated with twenty-one different outlets in publishing their work (Wang 2015). It has also launched Politics of Criminal Justice, a curated collection of links, in an ambitious attempt to be the definitive library for its own reporting and what it regards as high-quality reporting conducted by others on the topic (Hare 2016). Injustice Watch, a member of the Institute for Nonprofit News, performs a similar role on a smaller scale, as does the Juvenile Justice Information Exchange. These outlets all show the vital role nonprofit outlets can play, open as they are to promiscuous collaboration with both readers and other outlets and funded in a manner that allows them flexibility to pursue different approaches from the straightforward production of daily news stories.

More controversial from a journalistic ethics perspective is The Trace. This outlet identifies itself as an independent, nonprofit journalism startup that reports about guns in the United States. Given that its seed funding came from the Everytown for Gun Safety Support Fund, however, its journalism has been characterized by opponents of the Everytown campaign as a propaganda outlet (National Rifle Association 2015). Of its own coverage, The Trace says,

> "We believe that when an issue is shrouded by a knowledge gap, journalism can be a big part of the solution. As a nonprofit newsroom, The Trace is able to dedicate itself to in-depth reporting that doesn't let up after the latest high-profile shooting leaves the front pages. (The Trace 2017 emphasis in the original)

The Trace has actively partnered with multiple outlets, both to distribute the stories it writes and to increase coverage of the gun issue in the larger outlets (Owen 2015). The Trace likely also wishes to build credibility for its reporting. All this content exists in the wider context

of movements that have sought to thwart police violence, such as the cop watch movement and

Black Lives Matter. For those sympathetic to a law enforcement perspective, the website

Bluelivesmatter seeks to aggregate news (Blue Lives Matter 2017).

Climate Reporting

Climate change is another issue on which the public is polarized, and another area of

reporting that benefits from deep knowledge. As in criminal justice reporting, a large percentage

of expertise resides in nonprofit organizations. Preeminent among them is *Inside Climate News*,

which received a Pulitzer Prize in 2013 for its extensive reporting on the rupture of an oil

pipeline in Marshall, Michigan (McGwan and Song 2012). More recently, it has worked with

Frontline, the *Los Angeles Times*, and the Stabile Center for Investigative Reporting at Columbia

University to publish a similarly large story related to Exxon and its history of climate science

research (Banerjee, Song, and Hasemyer 2015). In this case, like others mentioned below,

collaboration among news media outlets was key to obtaining resources to report the story and to

ensuring it gained wide circulation.

In contrast to Inside Climate News, ISeeChange, seeks to serve its audience by producing

news stories via a collaborative network that includes non-journalistic organizations such as the

National Oceanic and Atmospheric Administration (NOAA) and NASA's Jet Propulsion

Laboratory, the latter of which provides measurements of carbon dioxide based on satellite

data.[75] ISeeChange combines such data with observations in a project that seeks to be a "citizen

---

[75] The ISeeChange website on its landing page explicitly invites its readers to "investigate how weather and climate change are impacting our communities and environment." This invitation to participate in the construction of a local story documenting how climate change is changing a locality places engagement at the center and also explicitly calls out how a community might find value in the effort and "better participate in community adaptation decisions" as a result (ISeeChange 2017).

science story platform." It has also established relationships with CoCoRaHS: The Community Collaborative Rain Hail and Snow Network, a community-based network of volunteers who map precipitation (ISeeChange 2017). In terms of academic partners, ISeeChange works with Yale's Climate Connections project and AdaptNY, a partnership whose mission is to foster conversation about climate change and adaptation and which includes CUNY's Graduate School of Journalism. Finally, ISeeChange's collaborative network includes public radio stations and radio production funding partners across the country.

A smaller effort to address the subject of climate change is Eyes on the Rise, which is based out of Florida International University's School of Journalism and Mass Communication (Eyes on the Rise 2014). This project has offered courses on the topic that have engaged journalism students, as well as high school students and the wider community, through citizen science experiments and explorations into the environmental impacts of sea level change on the local community. One approach it has utilized is to produce a play on climate change, which the project leaders hope will be presented at schools throughout the region (Church and Gutsche 2016).

Engagement, Empathy, Public Forums, and Mobilization

All these reform efforts within journalism to make it more engaging have three impacts by virtue of the agency they give the reader.

First, they affect what the reader consumes. Engagement allows audience members to indicate far more fine-grained preferences to news outlets and news distributors than was previously possible. News outlets will, as a result, be able to modify what reaches the news consumers who indicate such preferences, as well as how they present news in response to these "demand signals."

Second, these reforms add variety among members of the public to the experience of news. No longer do people have a common news experience. When stories were presented consistently because they were available solely in one medium and often simultaneously broadcast or dropped on front lawns, both the context and the content for the readers or watchers were consistent. Where differences then in news consumption—like reading entire articles or only parts of them—were few, experiences among consumers now differ markedly and in many ways. This is not only because consumption differs in a multi-channel world, where the public can easily be presented with the same piece of news in many different ways, but because format of a story when delivered often permits the reader to jump off to different links, comments, or annotations.

Finally, the efforts to strengthen the relationship between news media and their audiences increase the impact on individual readers of experiencing the news, as outlets feel driven to tailor their content to be more addictive and emotionally powerful. At the extreme, the empathy created via the emotional impact of immersive journalism on its consumers raises questions of ethics when the level of emotional involvement provoked might be substantial and its effects long lasting (Reis and Coelho 2018). That said, likely more important will be the impact that may come at the societal level as a result of subtle changes made by outlets and distributors to news presentation, formatting, or word choice as they strive to match the demographics, psychographics, and interests of individuals.

How these changes play out—and will play out—for outlets that seek to subscribe to commonly understood journalistic ethics has been reviewed above. What must be considered is how the changes may be deployed by those purporting to be journalists yet adopting a propagandistic perspective toward their audiences. This is the concern of section below.

The Weaponization of So-Called Journalism

The foregoing discussion of the ongoing adoption of variations to the production of news and information relies on the assumption that the producers subscribe to a core set of values and a well-understood set of ethics, squarely motivated by an impulse to inform the public and hold the powerful to account. They adhere to these values and ethics by reporting facts and letting the public judge for itself.

The idea that hucksters and purveyors of obscure or antidemocratic ideas could and did publish is nothing new. The yellow journalism of the late nineteenth century that was spawned by unbridled competition for an increasingly large audience for news was a key part of the history of U.S. journalism.[76] Yet this sort of fantastical news coverage was, in more, recent decades confined to the—admittedly large—circulation of supermarket tabloids and not taken terribly seriously. This is no longer the case, however. With the newfound ability of online publishers to distribute similarly dubious "news," the lack of these ethics on the part of some actors in the public square or, more troublingly, their inclination to operate in a manner antithetical to such values bears analysis.

Platforms

Crucially, the social media platforms and the feeds they operate—which algorithmically present information based on data about their users and their users' actions—subscribe to a set of ethics different from those traditionally held by the journalism profession. It is too harsh to suggest they are all amoral actors, as some have recently made great efforts to convey that their

---

[76] Famously, an editorial column in Hearst's *New York Journal* prophesized the assassination of then president William McKinley (Morris 1999, 236–37).

missions go beyond merely presenting news. Facebook, for example, has demonstrated a

commitment toward building community (Zuckerberg 2017) and Twitter to civic engagement

and the protection of free expression (Twitter 2017).[77] The result has been the circulation of all

the information posted by a platform's users sometimes with a pride in their agnosticism toward

its content or accuracy, an ethical stance somewhat more akin to that of a telephone company

than a news outlet.

Furthermore, the scale of the platforms and their audiences has exceeded that of any other

single publisher. As of 2017, Facebook had a monthly average of 240 million users, whereas the

Washington Post had only 88.9 million readers online. According to its own count, the *Post* was

outranked by only two online media properties, *The New York Times* and CNN, neither of which

exceeded 115 million monthly users (WashPostPR 2017). All three exceed the audience reach of

the broadcast networks, which are estimated to command in together only 23 million viewers

nightly (Matsa 2017).

Commercially Motivated "Misinformers"

A proliferation of businesses chasing after human attention is the entirely logical outcome

of having platforms that are agnostic toward the information they communicate yet operate with

a business model that seeks to maximize attention toward the advertisements shown alongside

their content. Some creators of content are motivated to profit offline by producing or

highlighting stories that might manipulate financial markets. This is of most concern in fields

where unaffiliated bloggers are paid directly to write favorable or, sometimes, unfavorable

---

[77] That said, the orientation of the platforms toward an ethic of free expression rather than freedom of the press puts them in a distinctly different position than the new media who have acted as gatekeepers for news in the past.

reviews of products or stocks, which then influence the way in which the products are perceived by a public that believes the stories to be independent reviews (Chittum 2013).

Some outlets have sought to develop audiences through clickbait. Platforms initially embraced this sort of content but then began to push back on it, as it was understood to disappoint users.[78] More troubling has been some post-election analysis of pre-election news consumption in 2016, which has focused on purveyors of clickbait who sought to maximize their appeal by writing entirely fabricated news stories. Whether or not this had an effect on the election outcomes is disputed, but it has renewed concern about the impact of such actors and how much they are influencing public opinion.

Ideologically Motivated "Disinformers"

Beyond such commercially motivated "misinformers" are "disinformers"—organizations or outlets that purport to conduct investigative journalism, such as Project Veritas, or provide compelling (if conspiracy minded) political analysis, such as InfoWars, led by Alex Jones. These are modern-day variations of what has existed on the radio for decades. Charles Coughlin pursued such an approach in his 1930s radio broadcasts, which expressed support for anti-Semitism, and it has since been repeated on the radio by Rush Limbaugh and Sean Hannity. Alongside them have grown contemporary movements around issues propagated by purported news outlets. This sort of content, after being discounted for decades, gained notoriety after polling in December 2016 revealed that nearly 50 percent of the voters who supported candidate Donald Trump in the general election believed in the so-called Pizzagate conspiracy, which

---

[78] Facebook has made multiple efforts to purge its site of emotionally tempting headlines that once clicked on revealed content (which was sometimes news) that users found unsatisfying (Statt 2017). This effort is necessarily iterative on platforms where users to respond emotionally.

claimed many in the Hillary Clinton campaign were involved in a child sex ring operating out of a pizza parlor in northwest Washington, DC (Kafka 2016).

The latest manifestation of this approach to undermining truth in the public square are leak sites. DC Leaks featured prominently in the 2016 U.S. election cycle as a source for information, despite its being understood as a means to influence the outcome of the presidential election. Was US-Uncut, a short-lived Facebook native news page that distributed information strongly supportive of Bernie Sanders' primary, or Occupy Democrats, a still active page, part of the news media or part of a campaign? By virtue of the creation by Facebook and Twitter of spaces that are neither purely news media or purely organizing, they were both.

While some of the outlets like those mentioned above have sought to build engagement on top of such ethics, the journalistic firmament also includes malevolent actors, such as InfoWars that see audience engagement as a way to stir up their audiences. Though not seen as trustworthy by many and roundly debunked as a site that traffics in falsehoods, it has served as an authenticator of facts for its audience, with little regard for the truth (Funke 2018). The appeal of this is clear: InfoWars feeds its audience what it wants to hear and in return receives loyalty from that audience. The lack of ethics of such sites are easily dismissed, but the same pressures for partisanship toward their audiences are felt by all news outlets

How Journalism Must Respond to the Digital News Environment

With the media's citadel under assault, a robust and updated conception of journalistic objectivity will not be enough to sustain journalism as we know it now. Undoubtedly, certain prestigious outlets will rely on it for continued salvation. Objectivity will continue to be the basis for the Associated Press's existence, for example, as its reputation for terse yet timely reports of essential facts from across the globe continues to fill a niche. Certain elite newspapers, such as *The New York Times* and the *Wall Street Journal*, will also be able to maintain their positions as

papers of record, as their large and wealthy readerships will draw high-paying advertisers. It is the contention of this chapter, however, that much of the rest of the news reporting media will seek salvation elsewhere.

Engagement and segmentation of audiences will place pressure on outlets to build ever closer and more responsive relationships with their audiences. In some sense, live coverage by many networks of candidate Donald Trump's freewheeling and unpredictable press conferences were a response in real time to the audience's addiction to such material when, in fact, a journalistic response would have been to report on the press conferences. Beyond the appeal of clickbait, the desire to provide content that generates empathy for the outlet on the part of the audience will drive outlets to serve up stories that may not challenge their perspectives or opinions. The audience's increased capability to control consumption choices and find content they feel is relevant will likely only result in a further hardening of the public's views on various topics, and the need to seek income for the news production directly from audiences will intensify such pressure. Of course, this may not necessarily compromise journalism. Examples of reader-funded content, such as at TalkingPointsMemo, where member benefits confer on the subscriber the ability to engage online with the journalists, shows it can be done in a manner where ethically produced journalism is still the norm.

In sum, the world today may be very different from that of the 1800s, but, clearly, publishers can more than likely recruit a few modern equivalents of "men who live by literary labor" (Tucher 2006, 134) to write for free, edit for free, and pick stories for free. Moreover, the press can make a shift from maintaining reputation on the basis of a generalized, aloof authority (often combined with objectivity in all but the modern sensationalist press) to one of mutual trust (Rosen 2003). The breadth of explanations regarding how social authority is achieved provides an appreciation that an outlet's reputation at a moment in time is neither durable, nor is its mode

of acquisition necessarily repeatable. The contemporary media environment challenges the traditional mode of gaining credibility through acquisition of a generalized reputation and provides significant opportunity to set up relationships that rely on a particularized mutual trust between an outlet and its readers.

In this environment, the continued development and enforcement of journalistic ethics will be essential. Ethics that provide for transparency of a news outlet's practices will be important and will need to encompass not only the production of journalism, but how it is presented and how the outlet goes about generating engagement with it. New practices will be required to insulate news production from incentives that will encourage the promotion of misleading content and outlets, and platforms will be required to develop practices around ethics. The new powerful rituals of consumption of media via "the scroll" where receivers of news all act independently though indirectly feeding algorithms that silently tune content (in ways that lack transparency) based on signals from others will be a significant challenge.

Whether the contemporary media will be a cynical, mercenary demagogic press or a press that operates with "trained intelligence to know the right and courage to do it" that can preserve that public virtue prized by Joseph Pulitzer is uncertain. Whichever it is, the mode of achieving and maintaining credibility will likely be different, very different. As Michael Schudson writes in his book *The Power of News,* "Neither is there a journalism worth more than a radio headline service that is not also an act of play and imagination" (Schudson 1996, 245). Let us hope that media and journalists can imagine an era of two-way trust, in which the press plays a role in bringing a diverse community together around important questions, a la Dewey, rather than

building walls of incomplete understanding that tear it apart. In so doing, I have no doubt they

will change the rituals around news.[79]

---

[79] Whilst this study does not interrogate issues of diversity, equity and inclusion within newsrooms in the United States it has to be recognized that despite the aspirations of *ASNE* (recently renamed to be the *News Leaders Association*) in its diligent reporting of diversity in newsrooms little positive change has occurred ("ASNE" 2018). Much work will be required to address this important issue and exploit the moment of change to recruit more people from non-white communities.

Chapter 6: Power, Politics, and the Twenty-First Century Digital Public Square

Previous chapters of this study have focused on the production of investigative journalism, news distribution, and public engagement with the news. This focus on news and engagement of the public with it has provided insight into specific elements of the public square and established that the emerging dynamics have introduced instability into the news environment. Some of the instability is due to several conditions already elaborated on.[80] Beyond those changes in the production and distribution of news there has been a change in the choice facing the public in what they pay attention to. How much more is available, however, is a frequently debated question. Particularly pertinent is Pool's work of 1983 and Neuman's continuation of it, which documented in great detail the profusion of available information (Neuman 2016, 127; Neuman, Park, and Panek 2012) This profusion has generated a fundamentally different dynamic for media consumers and producers alike. No longer does the audience accept the choices of newspaper editors and network executives. The public can choose when to consume what they choose to consume. As Neuman argues, trying to estimate the amount of information available is now a meaningless endeavor.

The change extends far beyond news institutions, however. It includes others in the public square, such as political entrepreneurs, demagogues, trolls and propogandists who seek or fail to take advantage of the new environment, as well as the selective amplifier of voices in the public square: the digital platforms.

---

[80] In addition there is instability in generated by the lags that occur as established organizations (in this case, news producers and distributors) seek to address the changed conditions in which they find themselves and media entrepreneurs who are strongly motivated to take advantage of openings presented.

This chapter examines the changes to this modern digital public square beyond news production and distribution and provides an overarching analysis of the dynamics and the uses of the modern public square with respect to democratic practice. It begins with a review of the modern Internet-enabled digital public square and considers how tightly it conforms to Habermas's idealized bourgeois public square, the nature of public engagement, and the increased ability of issue publics to organize around the priorities of the "great community," as Dewey might call it. This review is followed by an analysis centered on how the environment appears to news producers, advertisers, propagandists, and political actors—groups that are increasingly difficult to distinguish from each other. It continues with an analysis focused on the crucial role of the small number of major Internet platforms and communications networks, whose enviable success in recruiting users (and monetizing their attention) has placed them in the less enviable position (inasmuch as they are primarily profitmaking entities) of being the crucial gatekeepers of democratic action. It seeks to reveal the challenge faced by the platforms as they (presumably) seek not to undermine democratic practices.[81] It concludes with a set of recommendations for these platforms.

Theorists of the Internet-Enabled Public Square

Previous chapters on the subject of news set out to determine whether Schudson's idealized monitorial citizen can execute her or his democratic responsibility to engage in the public sphere. In focusing on the affordances of the current news media to produce journalism, distribute it to the public, and permit the public to be engaged with it, these chapters neglected to consider the

---

[81] This is a considerable challenge for the platforms when they in fact they provide affordances any totalitarian might seek. The ability to efficiently and covertly propagandize to members of the public individually on an unheard-of global scale alongside mutual surveillance of users by each other are both useful to a totalitarian state.

overarching digital environment in which these changes are occurring. This omission is important, as the digital environment provides ways for the public to powerfully engage. However, I see the opportunity as distinct from Schudson's expectations—suing the government or obtaining information via Freedom of Information Act requests (FOIA)—and rather expect it to take place through collective action and as parts of movements of motivated citizens.[82] To understand this we need to consider the emergence of the internet enabled digital public square.

Early Literature about the Internet

Much of the early literature that discussed the impact of the Internet on civil society, referenced Habermas' model of the public sphere and democratic practice. It tended toward the descriptive or the fantastical, with the possibility of two-way communication on so vast a scale providing the basis for an often utopian perspective (Rheingold 1993, 2003). John Barlow captured this idea in 1996 in his *Declaration of the Independence of Cyberspace* when he described the Internet as an entirely separate space where "we will create a civilization of the Mind in Cyberspace" and declared, "May it be more humane and fair than the world your governments have made before" (Barlow 1999).

Howard Rheingold popularized in his mostly optimistic writings the possibilities the early web created. He wrote his book, *The Virtual Community: Homesteading the Electronic Frontier*, originally published in 1993, at least partly in response to his firsthand experience as a member of the Whole Earth 'Lectronic Link (WELL), one of the earliest online communities of

---

[82] I note that this isn't an either/or, but rather that some citizens may pursue sophisticated and specific actions many others (not nearly as civically expert) will be able to engage using (as Tilly and Tarrow might describe) the repertoires of contention available to them. In a hyper-connected world I expect these to be less elite engagement and more the practices of social movements.

its kind. In it, he described how he participated in the primitive fantasy worlds of the Multi User

Dungeons (MUD) and used Internet relay chat (IRC), a cruder version of what is now known as

SMS (short message service), instant messaging (IM), or, simply, messaging. Crucially, he

concluded that "users themselves, given sufficient tools and freedom, will create their own

culture" (Rheingold 1993, 201). He also shared anecdotal case studies of libertarian-type online

agitators and discussed the possibility that these spaces are a diversion from democracy in the

real world, especially as they exist within infrastructure owned by the private sector where free

speech is not protected in the same way (Rheingold 1993, 297).

Rheingold's later book, *Smart Mobs: The Next Social Revolution*, continued the

assessment of the impact of technology he had started in *The Virtual Community*, but he now

centered his discussion on the technology he was seeing in the year 2000—for example, the

mobile smart phone and the always-on, geo-sensitive web service (Rheingold 2003, xv–xviii).

His hypothesis was that processes of association and assembly might change significantly when

everyone is able to know who is in his or her vicinity and as online events are woven into the

day-to-day texture of a person's physical world. He saw the banding together of people into

"smart mobs," as happened in the overthrow of President Estrada in the Philippines, as an early

example of what is possible when acts of association are mediated by these technologies. He

tempered this utopianism, however, with the corollary that this new world brings with it a loss of

privacy and the possibility that users will cooperate to attain less laudable and, arguably,

antisocial goals (Rheingold 2003, xxi).

Understanding the Implications of the Internet at a Practical Level

The early implications of the Internet for the public sphere were also studied on a small

scale in the 1990s. Blacksburg Electronic Village, for example, was an experiment in which

everyone in a small town was given access to the Internet, building upon what would now be

considered primitive digital architecture. As David Silver recounts, the result was far from the Habermasian ideal: discussion was limited by moderation—or what some might call censorship—and flame wars were common. The most popular use of the electronic access was to look up movie theatre schedules on an electronic bulletin board (Kolko 2003).

Other early literature was also equivocal. Peter Muhlenberger believed the Internet was unlikely ever to have any substantive impact on the public sphere (Muhlberger 2005). He argued that citizens lack the time and attention they would need to participate, given the vastness of the information available online. He also cited the habits of the Internet user, who cares more for its instrumental value for work and education, as well as a general lack of interest in using the Internet for critical, rational debate. He attributed this disinterest, which, he said, was at the root of an apparently un-invigorated public sphere, to a failure to acquire moral reasoning abilities (Muhlberger 2005). In contrast, Scammell, in a piece addressing the citizen-consumer, used the example of several successful anticorporate campaigns as evidence that the Internet is a powerful tool that may yet transform politics in ways we have not yet seen (Scammell 2000).

An especially promising lens through which to consider how civil society will change is Dahlgren's analysis of the literature of civic culture, which sees the citizen as an agent more or less empowered by cultural factors, including values, affinity, knowledge, and identity, and democratic practices (Dahlgren 2005, 2000a). Dahlgren considers the Internet in terms of its structure, its representational impact, and how it changes citizen interactions (Dahlgren 2005). Its structure, he suggests, should be analyzed from legal, economic, social, cultural, and technical perspectives. The representational aspect he regards as important as a study of how the media output created by the Internet is structured. The third aspect, interaction, is concerned with how the participants interact with the content and with each other within the online structures.

Having built this analytical model, Dahlgren considered it in the light of empirical literature. He concluded that the Internet offers some possibilities for civic interaction but is no quick fix for democracy. Moreover, he suggested that, given the increasingly significant commercialization of the Internet, prospects for a full-scale revitalization of the public sphere are remote. This is partly so, he said, because the Internet can be used by governments to control their populations. Dahlgren also suggested that the desired structure should not be a single public sphere but, rather, multisector online spaces. He believed that, although such an atomization may increase the risk of disconnection between the online and offline spheres and between institutional structures and the centers of decision making, these spaces can facilitate a greater communicative heterogeneity (Dahlgren 2005, 153). The overarching analyses by Dahlgren and his predecessors are, however, far from adequate to explain the implications of the digitally enabled public sphere in which our democracy operates. For this I turn to Habermas and his analysis of the bourgeois public sphere and apply it to the modern digital public square.

Examining the Nature of the Digital Public Square

Taking Habermas' criteria one by one, the following compares the public sphere of the late twentieth century and the emerging digital public square of the twenty-first. It argues that the twenty-first century public sphere is a qualitatively different and more Habermasian sphere than that of the twentieth century.[83] I draw on these in the next section: inclusivity, disregard for status, ability to hold rational critical debate.

---

[83] Lincoln Dahlberg also attempted in 2001 to evaluate whether the Internet more fully meets the criteria for an Habermasian idealized public sphere than the analog public sphere that preceded it by considering six conditions he draws from Habermas's work (Dahlberg 2006).

The digital public square of the United States in the late twentieth century tended to include ever broader swaths of the public. This increase in democratic participation occurred partly as a result of political reform that succeeded in enfranchising groups through the civil rights movement, the women's movement, the disability rights movement, and the gay rights movement (Keyssar 2009). In parallel, the economics of media distribution drove the creation of economic models that served ever smaller segments. Cable television in particular sought to develop loyal viewership by focusing channels on narrower and narrower segments of the population (Chadwick 2013, 118). More recently, the Internet has supported servicing ever smaller segments of the public definitely moving away from the heterogenous audiences of the network broadcasters post World War II (Brynjolfsson, Hu, and Smith 2006). All of these changes though served to better permit a broader range of people to be made aware of news, but challenged the conception that there is a unified public.

However, to understand the democratic possibilities provided by the modern web, we need to consider the rapidly changing technological landscape for the population at large. The cost and availability of communications technology has changed significantly since the middle of the twentieth century. In the 1960s, to publish widely without being the owner of a newspaper or the holder of a broadcast license required, at minimum, access to mimeograph, with all the concomitant limitations in quality, financial challenges of scaling up, and logistical complexities of distribution. In contrast, since the advent of Facebook contemporary distribution challenges amount merely to remembering a password and attaining the limited skills required to operate a self-publishing platform, for which the would-be distributor does not need to pay.

Of course there are still barriers to participation in a digital world. The first to consider is equity, or what has more commonly come to be known as "the digital divide" between those who

have Internet access and those who don't. Second, there are possible undesirable changes in social bonds the emergence of the Internet can cause, with regard both to the deterioration of offline relationships and their replacement with "thinner" online ones. Third, it should be understood that users' have a limited capacity to recognize that the choices presented by the Internet might be illusory and the users' own privacy encroached upon (Gehring 2004).

Even if we accept that ease of access to the Internet and access speeds affect a minority, most people now operate in an environment where it is possible to publish instantaneously at zero financial cost and with a minimal level of technological literacy. The limitations on who can publish written narratives are reversed, and suddenly those who cannot publish are in the minority rather than the other way around (Perrin and Duggan 2015). Statistics bear this conclusion out: 84 percent of the U.S. population confirm they use the Internet, with 67 percent indicating they have access at home. Moreover, as cell phones have become capable of accessing the web and performing many of the tasks of the computer, it is fair to say the Internet is more nearly a fulfillment of the inclusivity requirement than any earlier incarnation of the media system, which used to permit only a very few voices to be heard.[84]

Not only is the digital public square closer to Habermas' idealized bourgeois public sphere and more inclusive, but it is also capable of supporting the exchange and aggregation of information far more quickly than ever before, because of the dramatic change in

---

[84] Of course, the "inclusivity" or openness to publishing extends to (perhaps unexpected) actors from abroad who may seek to use this newly available and relatively low cost pathway to communicating or influencing communications such as the Russian Internet Agency who spent a lot of time publishing and promoting stories and issues to the American public in 2016.

communications bandwidth—that is, the capacity of spectrum and cables to transmit data—in the past twenty years. We are, as John Keane writes, entering an era of communicative abundance, where the limits on communication are artificial (Keane 1999).[85]

That said, the impact of this infinite bandwidth is unclear. The problem of communication, Keane's analysis demonstrates, is transformed from one of scarcity to one of filtering. Moreover, the expansion of bandwidth and related reduction in the cost of storing data potentially blur the boundary between the public sphere and what Habermas identified as the private sphere—the sphere of family and work—as little can be definitively hidden. Much more information can now be recorded for eternity and also retrieved in milliseconds (Keane 1999, 13).

Crucially, in contrast to the twentieth century public sphere, where only a few elite actors controlled access to massive audiences in a fashion that allowed them to set agendas and validate who were legitimate voices, the move to digital has enabled nearly all connected voices to both speak as well as hear, to the extent that their connection speed and digital skills allow. For the modern-day digital public square to operate as openly as Habermas's conception of the eighteenth-century bourgeois public sphere, however, we need to consider another criterion: whether today's digital public square permits rational critical debate to occur about topics of common concern. For this to happen, people need to bring information into the public sphere in a manner that provokes such debate.

---

[85] Notwithstanding the implications of differences in access to download as well as upload bandwidth (that is, the speed of data to be transferred from and to others and thus a person's capacity to communicate) may have for participation in modern-day democratic practices.

Disregard for Status

The truth of the famous New Yorker cartoon, "Nobody knows you're a dog on the Internet," is seemingly borne out by discussions in comment streams online (Cavna 2013). Streams where users with fantastical user names that completely obscure identity and obliterate (for other users) traditional markers of accreditation. Other digital spaces such as 4Chan, and 8Chan take this to the logical end point with ephemeral user names.

Anonymity, or pseudonymity has the benefit of making possible in online spaces a bracketing or tolerating of differences in identity, such that inequalities of status can be set aside, making possible inclusion of a range of identities that physical spaces do not provide. Even here, though, Dahlberg concludes this often isn't the case, as offline behavior can leach into cyberspace, partly because of offline inequalities—for instance, those with more education are more easily able to participate.

Traditional news media organizations still use traditional markers, such as institutional affiliation, to accredit voices they highlight as legitimate. Moreover, platforms increasingly see themselves as serving the public in the capacity of raters of relevance and consumer value. In many forums traditional markers have been replaced by non-traditional markers of expertise or contribution such as Stack Overflow, or Reddit's Karma or less transparent approaches that identify top commenters based on ranking performed by algorithms that are treated as trade secrets. All in all, our emerging digital public sphere without a doubt has nothing like the same regard for status as the previous non-digital public sphere and is far more accommodating of voices that would not have been certified as legitimate in the past.

Rational critical debate about topics of common concern

This, the last of the three criteria, encapsulates where the challenges lie for the construction of a healthy public sphere. After all, the modern public is radically more inclusive

than previous generations, and, although status may still be important to participation, previously insurmountable boundaries are no longer so impermeable. Yet rational critical debate is often lacking online. Discussions are sometimes overpowered by voices uninterested in rational debate, and those debates that do occur may be no more (and indeed may often be less) related to issues of vital common concern than in the past. That said, Dahlberg argues that the ubiquitous hyperlinks, which so often supply ready-to-check references, supporting any claim made by an author as a reason why this could occur. It is often not attained, however, as online exchanges tend to feature pithy retorts that descend quickly into ad-hominem attacks, more along the lines of Godwin's law (which states that as an online argument extends, somebody is increasingly likely to bring up Adolf Hitler) than a considered exchange (Usenet 2003). The studies of Usenet discussions Dahlberg quotes provide good examples of these shortcomings, and he reinforces his point with a comment on the limited way in which particular individuals often fail to take "ideal roles" in such discussions.[86]

Given that the analysis above suggests three Habermasian criteria can be met. Yet the daily reality seems far from an idealized public square. So we have to consider additional factors including the literature that sprang up around online communication and community building.

Implicit in the writings of Stephen Coleman and Peter Dahlgren, who seek to explicate the Internet-enabled public sphere, is the argument that the Internet is no longer only a medium of transmission but is also a place. (Dahlgren 2000b, 33–55; Coleman 2004) "Online" as a place, they argue, has its own culture that is most interesting. Perhaps as a result of seemingly unlimited

---

[86] Additionally, Anthony Wilhelm in his book *Democracy in the Digital Age* came to the discouraging conclusion that Usenet discussions were not very deliberative, as they comprised only a very few message interactions (Latham and Sassen 2005).

bandwidth, familiarity, or some other factor, the Internet as an alternate place with digital architecture where one is present (as signified through indicators embedded in messaging programs) seems to yield the most significant possibilities for digital spaces to play a transformative role in the twenty-first century public sphere. Coleman and Dahlgren show (as noted above) such possibilities initially came to prominence in almost utopian, over-enthusiastic accounts, most presciently and notably in descriptions by Howard Rheingold. Even so, the recent global transformation in communications technology has begun to provide significant possibilities for enhancing the digital public square and, along with it, civic and democratic engagement.

Already, dynamics within the digital sphere have generated advocacy groups who gain their initial legitimacy from publics assembled online. That said, such digital architectures involve only an engaged and participatory subset of the population, are imperfectly integrated with formal institutions, and are, still for the most part, the online equivalent of rooms where everyone speaks at the same pitch and a similar volume, simultaneously.

Considering the institutions and processes of democracy

No less important is to understand the specific changes wrought on the legacy practices and institutions. In this vein, Coleman, who has worked on extensively on e-democracy initiatives in the UK and holds the assumption that political and civic engagement are increased when the citizen feels connected to the political process, explores the possibilities provided by digital information and communication technologies (Coleman 2005). Coleman's argument that the internet can play a positive role rests on the idea that citizens are more than a bundle of interests; they are also people affected by how governance is executed. He believes technology can support engagement, saying it can reduce distance, create at least the illusion of mutuality in any connection, and help the elected official provide some coherence in representing many

people, as well as provide a space where empathy can be expressed. It is this kind of connection that Coleman sees as increasing civic engagement.

Political Engagement

Politicians today speak directly to the public, avoiding what was a necessary gate kept by the media. Then-candidate Obama pursued this course with success in 2008, and President Trump has repeated it, both in his 2016 election campaign and in office. Crucially, political actors who previously were easily distinguishable and demonstrably separate from the news media are no longer so.

The above demonstrates the intermixing of media, the public, and political actors suggests that the public square of the future will be very different from that of today. To shed light on how it may be different I next consider arguments by Benkler, Shirky, and Tufekci who all suggest the emergence of social movement-esque structures will be more likely in today's Internet-connected age.

The Phenomenon of Peer Production

Benkler doesn't use the syntax of social movements, as he isn't interested in them directly; but his argument holds with reference to them. Like Olson's argument in *The Logic of Collective Action*, it is very straightforward, and the implications are profound.

According to Benkler's *Wealth of Networks*, because the Internet permits networks of people to form more easily nowadays without respect to participants being in synchronous time, similar cultural contexts, or the same physical geography, such loosely connected groups have an opportunity to be productive (Benkler 2002, 383). The diversity of motivations, Benkler says, allows large-scale collaborations to convert the motivation problem into a collaboration problem. In other words, the motivation problem is simple to resolve if the efforts of enough people can be pooled (Benkler 2002).

Benkler explores this phenomenon, which he calls "peer production," in terms of economics and suggests it provides a new method of social organization (Benkler 2002, 375). Peer production can occur when the size of the contribution is small, the project is modular, and the cost of collaboration is low (Benkler 2002, 378–80). Moreover, individuals can participate in more such efforts without undertaking any significant investment. Benkler calls these groups networks, though he could as easily call them social movements.

The essential point is that, when considered in terms of the social movement, the notion of peer production implies, first, that viable movements (those with adequate breadth of skills, knowledge, and capacity) can form around narrower interests, often as the base from which they can recruit is unconstrained by geography in the way it was in the past; and, second, that an existing movement likely has more labor available to it than in the past, assuming one can integrate the results of the work and reward the diverse motivations of the providers.

Shirky, who is interested in social movements, adds to Benkler's argument by suggesting that Robert Axelrod's research into game theory further supports the likelihood social movements can succeed. According to Shirky, we should consider social movements as repeated games, with each potential future game casting a shadow of the future over any current game. This assumption is crucial, as Axelrod has found that where a subsequent game is expected, the most successful strategy in any current game is "tit for tat," which begins with an offer to cooperate and is followed by the playing of each subsequent game according to the strategy the person's opponent played previously. In tit for tat, it is rational to act in someone else's interest even at one's own cost in the here and now, on the basis that one will benefit from a reciprocal action at some point in the future. The implications of this is that inasmuch as the Internet supports communications and more frequent social contacts that might have previously fallen away it aids in supporting movement-like cooperation. By virtue of allowing likeminded people

to find each other and in game theoretic terms, cooperate. Whereas in those prior periods a narrow confluence of extreme circumstances was required to generate social movements, the Internet greatly facilitates the possibility that similar situations will arise.

What Tufekci has added from her studies of revolutions and Benkler and others revealed in their study of the online media sphere, all published in 2016, is that, contrary to Benkler's perhaps more optimistic earlier take is the unlikelihood that, in any context, movement-esque activist groups will be more powerful than those with access to incumbent (often governing) power (Tufekci 2017).

Twenty-First Century Social Movements, Media Production, and Usage

One model for political movements and media in the future is based on the 1999 protests in Seattle against the World Trade Organization, which were perhaps the first that took advantage of the internet connectivity Benkler describes and the first in which the results of peer production could be seen.[87] In Seattle, a large number of diverse groups congregated, and, despite having varied, sometimes conflicting, motivations, they found a short-term confluence of purpose in disrupting the official conference. As small, narrowly focused groups that could be said to be acting in line with their rational self-interest, they conformed to Olsonian principles; yet they were able to coordinate efforts through communication platforms, such as email and the cell phone, only recently adopted. The choice of the anti-trade campaigners, the pro-development campaigners, and other groups to act in parallel perhaps was prompted by the opportunity they saw to build credibility with other campaigns in the shadow of potential future events, as suggested by Shirky (Levi and Murphy 2006). Implicit in this analysis is an acceptance that

---

87

trusted relationships—undoubtedly ones participants wanted to continue into the future—were significant in sustaining coalitions during these protests. More recently, groups interested in particular issues or policy outcomes have emerged at the nexus of the news media and social media platforms. Advocacy organizations such as MoveOn, or members of the Open Network such as Get up in Australia, or 38 Degrees in the UK, are examples of these from the progressive political perspective. Of course groups can form around conspiracies or racist and exclusionary ideas such as the QAnon meme.

Meme-Centric Media.

One way of thinking about a campaign produced on the Internet is to say it has a meme at its core; an example is the "Yes We Can" slogan of Barack Obama's campaign for president in 2008, which was paired with a Shephard Fairey poster.

On a smaller scale is Andrew Slack's project. Slack, an avid Harry Potter fan with the performance presence of a twenty-four-year-old aspiring standup comic, has formed the Harry Potter Alliance, a loosely affiliated set of 11,871 "friends" on MySpace, with a sophisticated sister website that aims to bring "together Harry Potter fans from everywhere to spread love and fight the Dark Arts in the real world," specifically around the issues of genocide, poverty, AIDS, and torture (Harry Potter Alliance 2017). This diverse collection of people has had a disproportionate advocacy impact on these disparate issues, resulting, for example, in Warner Bros. changing the sourcing of its Harry Potter Chocolate. While the Harry Potter Alliance hardly looks like a government-overthrowing social movement, it demonstrates what can be achieved using modest resources when communications technology is deployed within a highly computer-literate community, like teenagers in the United States. It also suggests possibilities for other movements and the affective power of deploying pop culture for organizing in the future.

On the conservative side of the political spectrum, candidate Trump's use of the "Make America Great Again" (MAGA) theme was similarly powerful. Likewise, within a small alt-right circle, the poorly rendered cartoon image of a green frog played a role in creating coherence within communities of interest.

All of these movements have their associated media. Interestingly, Seattle was associated with the birth of now almost defunct Indymedia. MoveOn is closely associated with the birth of a progressively aligned set of blogs. The Obama campaign spurred the building of a volunteer infrastructure that both informed its volunteers and directed their energies. Trump's campaign was difficult to distinguish from his media presence on Twitter, his freewheeling campaign press conferences and a range of media properties built for viral distribution such as Breitbart. Inasmuch as the campaigns relate to traditional media entities, they are, variously, entities to be lobbied for favorable coverage or to be ignored and disrupted when they don't provide it. In short, although we have elite media centered on written narrative, many people are involved in a medium that is much more simply understood through visual semiotic codes.

As noted above, the earlier chapters considered the implications for the news media of the emerging digital infrastructure. Earlier chapters addressed the distribution, production and engagement with journalism that might inform a citizen concerned with an issue (that is, Schudson's idealized monitorial citizen). This chapter has argued that despite many hopes, and an analysis that it could support a vibrant public square it is not – and that what is emerging is a public square movement-infused and unstable. In short, news is now more tightly bound to how it is used than to how it is produced.

Of course, movement news has always existed, but it was distinguishable from mainstream journalism by virtue of the latter having heterogeneity of its audience, its public nature, and its distance from its subjects. Moreover, the political motivation often spurred by

consumption of journalism is now complemented by peer-produced exchanges on social media—in other words, news production now exists that is much closer to social movements that can be created at a greater frequency and scale than in the past. The implication of news being distributed alongside advocacy efforts, inside platforms is the generation of a entirely different set of issues for those who are concerned with an efficacious, robust, and resilient public square.

Who Controls the Public Square?

In the past, broadcast news media were supported by the interests of firms whose means to succeed was to sell human attention (of which they had a lot of control over) in a manner that, to the extent it was targeted, was targeted to relatively broad segments of the population. This review of research has established how digital media will be (a) tightly bound with movements, (b) dictated by a need for discernment on the part of the reader in the face of an incomprehensible amount of choice, and (c) populated by many people and organizations who appear to try to solve the "pull problem" by developing technical solutions that they will own and operate.

The solutions to the "pull problem" have, to date, fallen to large-scale commercial ventures. Facebook and Google have built respectively feed and search infrastructure to solve it, which they finance through advertising. Given that politics is now intricately bound up with the nature of these solutions, we have to consider the fundamental nature of the structures in which these media are being created. Due to their incredible reach, the new audience-aggregating digital platforms find themselves described as arbiters of truth—modern-day town criers—when, in fact, they never consciously set out to acquire that influence. Nor are they comfortable or well staffed to play an active role in adjudicating what should be deemed journalism or even facts. They are finding, however, that the product decisions they make, driven by an explicit, articulated mission they defend as pro-social and often in civic terms and must judge, are also in

187

the long-term commercial interests of their firms; thus, shareholders have major implications for democratic processes and outcomes. To date, these organizations have prioritized seeking profit as large information intermediaries, and, although, they have undertaken significant redesigns, all such redesigns have been accommodations they have undertaken to maintain or perhaps even increase the long-term profitability of their surveillance-driven advertisement businesses, rather than adopt a different model.

First, we need to consider that media hosting and distribution are occurring in association with these platforms that rely on surveillance economics, whereby they sell the data of their users to advertisers who seek to target potential customers. Success is no longer based on advertising to segments of mass audiences, but rather of individuals assembled into large enough groups to be viable.[88] Second, a small number of very large companies are involved in connecting the public to the Internet in the United States. These new gatekeepers (Comcast, AT&T, and Verizon) are seeking to maximize already significant profits and far less concerned about the democratic implications of their approaches. Finally, it is very possible that, unconstrained by content and ownership regulation, the telephony-based network connection companies will set up business arrangements such that they can generate a share of the profits the advertising platforms earn from user data.[89] We now turn to examining the challenges created by these conditions.

---

[88] Ironically, the platform's economic salvation – monetizing readership – relies on the very surveillance that is often problematic in countries less inclined to democratic governance.

[89] They are able to do this as they each provide access to the internet to a meaningful percentage of the public. An example of this is the purchase by Verizon of Yahoo and its ad platform.

The Implications of Personalized Platform Centric Media

Given that the solution to the "pull problem" is being resolved almost entirely by Facebook and Google, two large-scale organizations that have grown quickly into two of the world's largest and most profitable publicly traded companies, it is worth considering the economic incentives bound to the exploitation of personal data. These data are demographical, interest-based, geographical, and psychographic. This data has been very easily exploited within companies as a competition for attention and the simple maximization of platform usage, permitting them to maximize, in turn, exposure to advertisements that can be targeted very precisely in terms of intended impact.

Platforms that determine through their algorithms whether a particular piece of information at scale and whether that consumption is narrowly targeted or widely spread evinced an agnosticism toward the impact of their processes on democratic practices and outcomes until late 2016.

Because the economics of social platforms is aligned with free expression between users and with search-based consumption that rewards stories that have "virality," the new institutions of news distribution have been not agenda-setters but, rather, communicators of the agendas of others. The platforms also seem to be easing the ability of any actor to seek to influence public opinion via marginalization of minority voices, sowing dissent, and inaccurately showcasing public opinion (Deb, Donohue, and Glaisyer 2017). Moreover, if the technology that lies behind this public square appears to be (unintentionally) aiding anti-democratic actors, facilitates hate speech alongside racial lines as well as harassment(Tufekci 2018). To the extent that the platforms have adopted ethics, they have been the ethics of free expression and not those of journalism. The implications of this are shown in figure 29 below which is a component of the Trust in Journalism systems map.
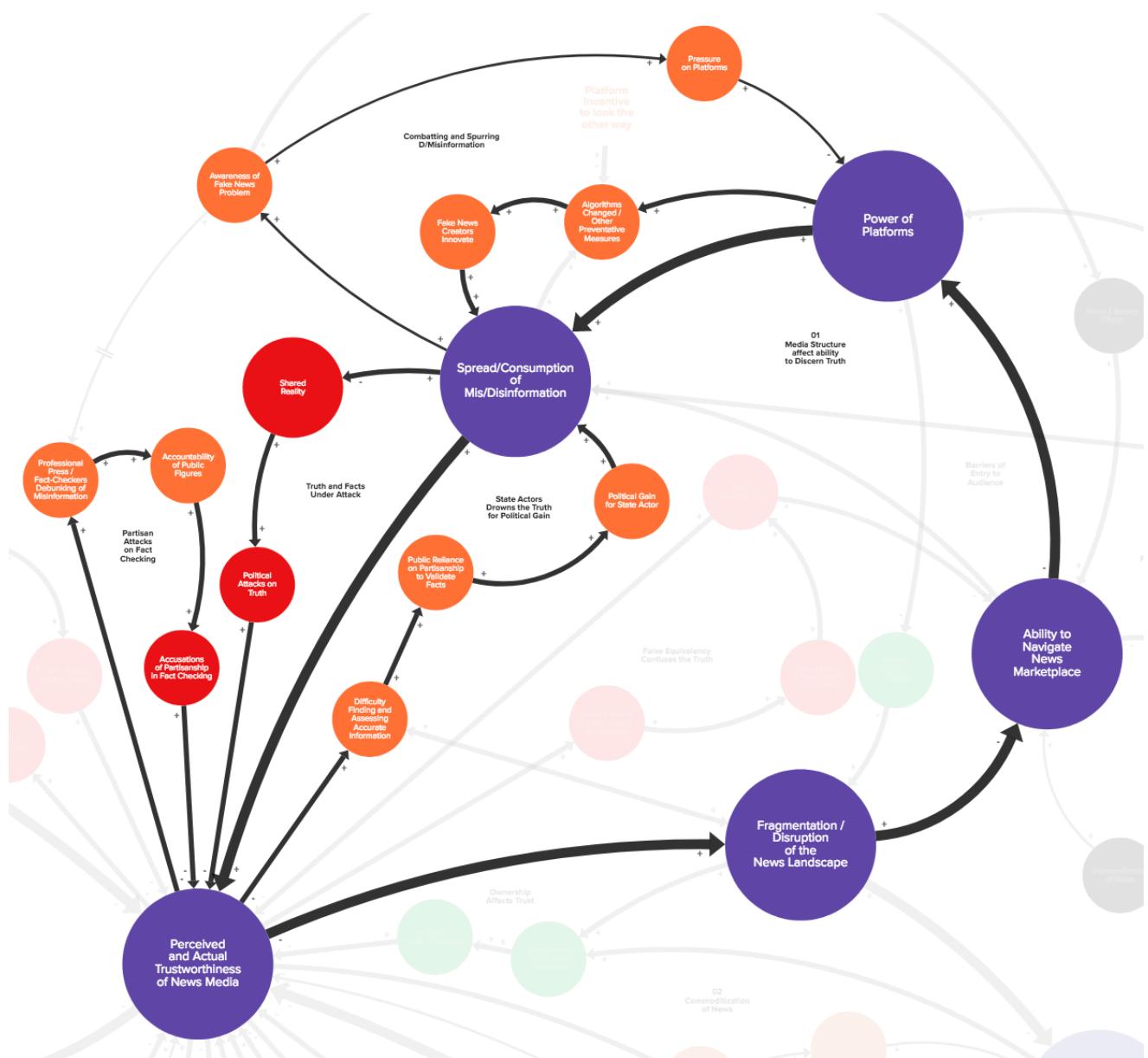
Figure 29: Misinformation Loops

The spreading of false and misleading information can be (a) highly effective, (b) designed to be distributed at a pace where those who practice journalism cannot factcheck and (c) profitable. The result is that the news feeds of many people are tailored with the editorial sensibilities of a supermarket tabloid. Meanwhile, the purveyors of the mis- and disinformation are wrestling with squaring their business model of using an addictive, persuasive platform with

the reality that their efforts to do so will (via advertising targeting individuals) ultimately create a new equilibrium whereby untargeted news and journalism will be less influential.

Figure 29 above shows the dynamics related to mis- and dis-information. Crucially, it shows how the fragmentation and disruption of the news landscape leaves users needing assistance in navigating the news marketplace. This has the effect of increasing the power of the platforms by virtue of the reliance the public places on them. Their focus on free expression and agnosticism with respect to mis and disinformation is said to result in in great spreading of mis and disinformation which in turn results in lower perceived and actual trustworthiness in the news media. Beyond issues related to mis and disinformation there is a need to consider the implications of the platforms on affective polarization.

Outrage and Polarization

Cass Sunstein proposes we are increasingly in thrall to echo chambers of our own creation. He captured well the fears of people who feel the Internet will be bad for democracy in his description of a world where everyone can read the "Daily Me," an electronic news sheet that reduces news to common experiences and permits people to live within self-designed, self-referential media environments.[90] Very recent cognitive science research is suggestive that it may not be that echo chambers that are creating homogenous polarized publics as a result of consumption of news which a receiver determines supports their political preferences, but that the consumption of media online via social media feeds is privileging news that provokes moral

---

[90] Although Sunstein subsequently and explicitly rejected the hypothesis that the Internet is bad for democracy, his analysis nonetheless suggests we are still on very new ground when it comes to talking about the Internet and the public sphere (Sunstein 2002, 206).

outrage and in so doing increasingly polarizes and reifies a person's political views (Crockett

2017).[91] This could be considered less an echo chamber effect but rather an effect that an

uncongenial news item that generates an emotional trigger – a rebound effect – which in turn

reinforces and reifies filter bubbles.[92] It is possible the effects of this are heightened given that

the nature of social media platforms result in fewer sanctions for the receiver who expresses

outrage (or moral disapproval) (Crockett 2017). This is the case since the user often exercises

their outrage in front of their (often politically homogeneous) sets of friends and acquaintances

who provide a congenial environment for expressions of outrage.

Considering the earlier mentioned attention map (figure 30) it is easy to understand the

implications of a high choice media environment where the interaction between the social

feedback loop and the ideological hardening loop permit the user to choose content that they

value and the social platform to present content that best meets the receivers preferences.

---

[91] This research is at an early stage and has not been replicated beyond the Crockett Lab at Yale as far as I am aware. Others have examined the counter-case where people are asked to step back and cognitively think through an issue and the implications of generating a reflective moment that serves to create a moment when the receiver of a message was asked to reflect on the logic of a set of policy preferences and found that it results in less polarized viewpoints (Fernbach et al. 2013).

[92] Diana Mutz's work on In-Your-Face politics which considers the effects of different approaches to television coverage on the receiver which identifies that uncivil, close-ups is detrimental to appreciating viewpoints to which you are opposed (Mutz 2015).
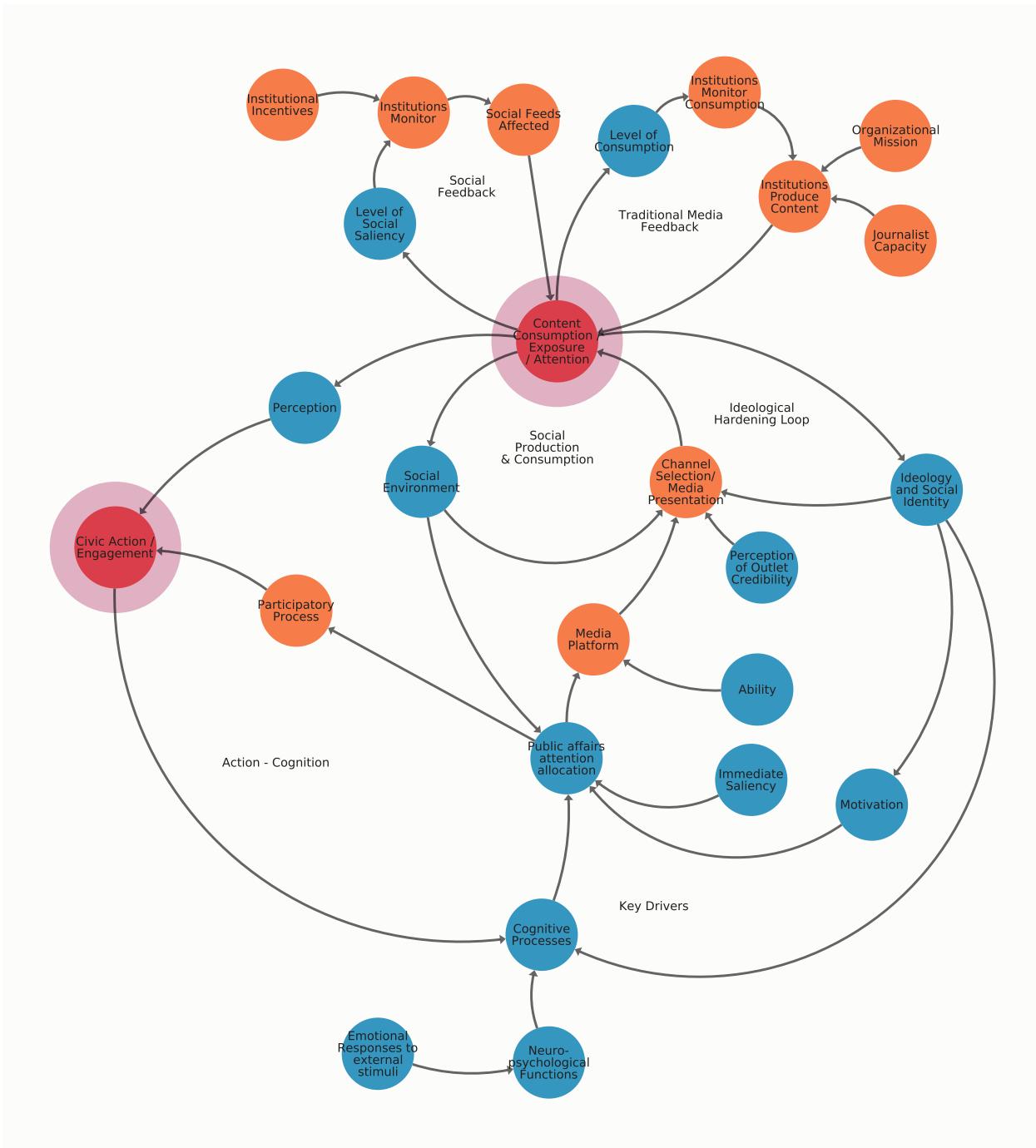
Figure 30: Attention Map

In a very tangible way this new ritual of "search" or the "scroll" which many of us instinctively

perform has implications for our politics and for affective polarization of the public. The ritual of

reading a newspaper reflectively or watching television news with others is now replaced by a

ritual of scrolling or search performed alone.[93] Such habits could according to Daniel Kahnemann author of *Thinking Fast and Slow* trigger different thinking systems (Kahneman 2013).

Subjects of news have agenda setting influence

Social platforms can catapult a story into the public consciousness on a global scale before someone has even finished speaking or tweeting and well before a journalist can place the event in context and an editor can sign off on publication (Carey 1989, 157). Fundamentally, this moves power to the actors in news event who best understand how news flows occur, and away from a publisher of reported and edited news, who may not be invested in or best positioned to influence how the news flows after publication and may be constrained by ethical norms, newsroom practices, or skills and capabilities. These new actors are thus able to use this agenda-setting ability (nowadays often described as "weaponizing,") as a tool in an effort to move an agenda).

The Interweaving of Free Expression, News, and Propaganda

While the interweaving of free expression, news, and propaganda should not necessarily be a problem, the three have traditionally been considered separately. Telephony, as a technology of expression between two people, has been regulated in different ways with different priorities than media. Commercial speech, though subject to the First Amendment, has also been subject to different standards, with news and opinion traditionally tightly distinguished and placed in

---

[93] Moreover, if the causal story is as Crockett's research suggests then the platforms challenge is less that they have created echo chambers but rather by creating a performative space conducive to moral outrage and few sanctions they have created a place that polarizes the public. At first glance this seems a harder problem to solve than merely disrupting echo chambers.

separate parts of print news. Their blending creates new challenges for a public unaccustomed to having to find new markers to help them distinguish between trustworthy sources of reliable information and less trustworthy sources that may seek to misinform, distract, or, worse still, disinform. Organizations that rely on the public's engagement and discernment to distinguish efficaciously among different types and quality of information also face new challenges. To date, even the platforms most attentive to the indiscriminate blending of information have not articulated ideas for addressing the problem beyond the relatively simplistic notion of "supporting community (Facebook 2018c)."

The Democratic Implications

The challenge presented by the earlier chapters is that the news media, inasmuch as they responded to the financial downturn, were especially poorly positioned: addicted to high profit levels; loaded with debt; and no longer owned by mission-driven local owners but rather by financially focused parent companies and staffed by professionals unused, unsuited, and uninspired to change their work routines. Moreover, news outlets (by virtue of the way news is consumed and of no longer having the resources to stay ahead of political actors) were forced into responding to the agendas of others.

Unsurprisingly, their response to this change in context was halting, uneven, and unenthusiastic. For the most part, where they successfully adapted, their success was incremental. Where there was radical innovation, it occurred outside the institutional firmament of the newsroom.

Considerations for Twenty-First Century Democracy

The interplay of the Internet and social movements may have considerable impact on societal structure, stability, and governance processes and institutions, just as it is having on markets and firms that trade in information-based products. The newspaper, music, and film

industries have all been shaken up, and we have every reason to believe that contentious politics, as Tilly and Tarrow might call it, will radically change, too. The rise in the relative efficiency of voluntaristic cooperative behavior as a solution to both individual and democratic choices is complex when it interacts with longstanding political processes and institutions and occurs on the same media platforms that distribute journalism.

Role of Information Intermediaries

As has been made clear, institutions that amass information can obtain an immense amount of influence by deploying it either through markets for that attention, where they are able to profit, or more indirectly, by influencing broader policy. In short, access to data defines one's role in the modern-day, emerging-information democracy. Just as steel was important to the industrial revolution, data and information is important to politics. Citizens have to care about where it is, where it isn't, and whether they have access to it. Given that much information about the public and its preferences is now aggregated in a few platform companies, how they those companies are permitted to act is incredibly important. If the public square is not to fall prey to oligopolistic corporate entities who seek profit over democratic engagement, functionality for legitimate public engagement is critical. Platforms do not have to be publicly owned, but their operations must be aligned with the interests of democratic rather than authoritarian leadership or anti-democratic engagement.

Avoiding this problem calls for exploring a different track, going in one of two directions: advocacy that addresses privacy concerns or advocacy that addresses antitrust concerns. Both will lead to the same outcome. Addressing privacy concerns (and making it more difficult for those who have these data to use them for counterproductive purposes) would lower risks, as would the development of competitive markets that spread the data across multiple parties. Either undertaking would be large and complicated given the power and influence of the

platforms and their sources, unless an ethic of institutional openness is adopted by those in the platforms.

To achieve this, the platforms must change. The aggregation of huge amounts of personal data and their ability to utilize it, without friction creates a strategic risk to democracy because those data will inevitably be misused, potentially to undermine democratic practices.

Platforms have three choices

The first is to improve their functionality and adjust the affordances they provide and make it more fit for purpose. This "reform" response is a natural response and one easily understood and executed by executives at technology companies. Very clearly Facebook, Google and Twitter are all – if somewhat haltingly – embarked on such reform efforts. Their efforts are for the most part around improving product functionality to minimize known bad actors in the platforms.[94]

Platforms might also take a proactive role and leadership in the media environment, where the public is an actor in supporting monitorial citizenship (Schudson 1998). They will need to think creatively, not only about how they support accountability journalism, but also about how they support self-directed, democratically motivated citizens, along the lines Ethan Zuckerman has developed (Zuckerman 2017). Platforms will need to embrace the role they play and the implications of the choices they make. Facebook's aggregation of an online audience, for

---

[94] The platforms appear to see the problems in terms of functionality that spurs different behaviors on platform whilst the issues being addressed are about issues created off-platform. It is telling that the report Facebook released identifying for the first time the activity of fake Russian accounts defined the problem in terms of a security problem for Facebook that they articulated they needed to deal with because the actions of the Russian Internet Research Agency fell afoul of real id Facebook policies. This was of course true but the motivation for the action were the effects of the activity of these accounts on US politics.

example, has effectively been an end run around the regulation to which broadcasters were subjected, but it and the other large platforms should not be abrogating the responsibilities that were enshrined in such legacy regulation. Moreover, the irony of Facebook designing functionality that makes it harder to influence user preferences when in fact its business model has been making such influence over its users as frictionless and invisible as possible suggests that there are considerable commercial incentives to proceed carefully lest they inadvertently reduce profitability.[95]

The second option they have is cross subsidization of the public square. This can be thought of as a calculated effort to buy off critics in the short run and undoubtedly such subsidization of the public square can serve this purpose. That said, it is also possible to see this as the beginning of a negotiation around a social contract or public interest bargain akin to the bargain struck by broadcast television companies who have maintained their licenses on the basis of programming in the public interest and often spending considerable sums on news broadcasts or the bargain struck by the cable industry to permit public access channels and support C-SPAN.

The third option, very likely most difficult to undertake is strategic retreat which will serve to offload risk. For young companies only a few years away from fighting for their existence it is unlikely they will actively decide to step back from providing product functionality in a particular area though this is something they likely need to consider.

That said, platforms cannot be asked to shoulder this task alone. Local communities should actively build out local media ecosystems and support institutions that not only produce

---

[95] Facebook has created a partnership with the International Fact-Checking Network, but it is just a first step (Newitz 2016).

news, but build bridges among communities, reduce conflict arising from misunderstandings, and filter and make meaning from news. Solutions such as Wikipedia have had success in generating accurate information, though they require (whether they like it or not) the large-scale commercial search engines in order to be discovered (and thus survive). Other solutions have been much more transitory (Indymedia and the independent partisan blogosphere) or nascent (the nonprofit news space).

Wikipedia as a model

The purest examples of social movements or networks today that play a democratic role while being facilitated and sustained by the Internet are online communities such as Wikipedia, a social movement that exists around the creation of a common body of knowledge. Referring to Wikipedia as a social movement may at first seem odd, since it is known for what it produces: copyright-free general knowledge on diverse subjects. Nevertheless, it cannot be characterized as a knowledge market, since it is not an online space where people trade one piece of knowledge for another, nor does it seek to make a profit for shareholders. Neither is it a Weberian bureaucracy with a tight hierarchy; it has more than 7.1 million contributors but only 1,500 administrators and far fewer employees, most of whom have only marginally more authority than the average user.

Wikipedia perhaps can't be seen as a traditional social movement, as it isn't directly counter-posed to a government, nor is it composed of people who are necessarily disenfranchised from political processes. Upon stepping back from the content itself, however, it can very clearly be seen as a movement that sustains an alternative to commercially produced content and thus is operating in opposition to corporate interests. Moreover, Wikipedia's characteristics have much more in common with a social movement than anything else; it is, indirectly, a set of people who cooperate without financial incentives to generate through their combined efforts a huge volume

199

of copyright-free information—in the English version, more than 2.3 million short encyclopedic articles.

Professional Standards

The new media will have to think of itself and its affordances differently than it has in the past, and, as it seeks to ensure the journalism it produces engages the public, it must draw appropriate boundaries with respect to far it goes in enabling advocacy based on it.

One additional possibility that has only recently emerged is that news media actors, with few scruples and arguably so few journalistic ethics that in their publishing they betray the public interest, can and do operate at scale, with the aim not to inform the public but to influence it in a way that either seeks to bolster one political party or destabilize its confidence in government action. Added to this is the ability to do so in the dark—that is, without anyone's realizing they are acting at the direction of others unknown who may, in fact, be uninterested in democracy but seek to use this new environment anti-democratic manipulation (Gunitsky 2015).

The emergence of media that care about and assert positive rather than just negative freedoms seems reasonable as an outcome, but it is unclear if they care about such freedoms or if they will be at all effective in asserting them. Also unclear are whether there will be a bigger role for individuals who practice direct engagement in democracy, and whether the news media will support such practices equitably and, in so doing, usefully rebind people to each other.

Role of the State in Media structures

The transition to digital communication has also meant that certain longstanding tools of media policy are no longer as relevant as they were. Media regulations that limited ownership of television stations and the cross ownership of newspapers in the same market as television stations are unable to play the role they did given we are in a world where one social media company can now direct the attention of a majority of the public. That said, the terms under

which these companies gain access to customers and the competition they face in gaining access for advertising are far from out of the control of government regulators should they be inclined to seek to remake regulations for this new digitally concentrated world.

Crucially, Eben Moglen and Pam Karlan in their paper on electronic democracy proposed the dynamic that non-geographically associated groups will affiliate more than they have in the past and thus have proportionately more power and influence than others. Perhaps even more dangerous for those holding minority viewpoints will be the preference, on balance, for more direct forms of democracy, which in all likelihood will reflect majoritarian viewpoints (Moglen and Karlan 2001).

Conclusion

Just as the social platforms have brought community into focus, per John Dewey, it has become apparent that these "technologies of freedom," as Ithiel De Sola Pool might have termed them, are far from being such liberators of their users. The apparent paradox is that while it has become so very difficult to argue that people shouldn't have the democratic voice that only a decade ago was available to only a few, it is now far easier to manipulate or restrict that access, and the continuum along which access exists has more distance between the extremes.

The current configuration has upended news production, destroyed the advertising economics that ensured the news was distributed after paying for its production, and bound the news to public engagement in ways that are ill understood. We must overcome many challenges if we are to develop a truly public square in which monitorially inclined citizens can hold power accountable. The policy questions that must be considered if we are to find a digital new deal for our democracy and best shape the public square such that we resolve the challenges identified are the concern of the next chapter.

Chapter 7: Addressing Instability in the Digital Public Square

The previous six chapters have outlined the dynamics that lie behind an ongoing transformation of the production of the news, the economics of its distribution, and how it is digested in the modern digital public square in the United States.

Events in 2016 and 2017 were bracing for those who believe news outlets play an important role in informing the public and as actors in the public square. Viral deceptions have spread wildly across digital platforms. Alongside the instant awareness of audience preferences by media, such deceptions have been said to have changed the framing of political debate in a tightly contested presidential election in ways that those on the losing side feel would never have happened in a different era.[96] Many news producing institutions continue to struggle, both financially and in terms of maintaining the trust of the public (Ember 2016). Down from 54 percent in 2003, only 32 percent say they have "a great deal" or "fair amount" of trust in the news media, according to the Gallup Poll in September 2016 (Gallup Inc. 2016). Crucially, the current president of the United States, Donald Trump, has evidently concluded it is politically advantageous to besmirch the news media and use his bully pulpit to criticize both particular journalists and large and credible news outlets (Cochrane 2018; Nelson 2017). America's famously lively and contentious public square stands to become a shadow of its former self if the public takes the president's admonitions at face value (Nelson 2017).

---

[96] This happened to the point where 9 percent of the U.S. public believed a child sex ring was being run out of a pizza parlor frequented by Hillary Clinton (Jensen 2016). I have used this example of a misperception, as it is a transparent falsehood that, unlike the run of the mill misperceptions that are legion among the public, could not so quickly have gained currency without the affordances of platforms and media actors spreading it.

As described in chapter 6 a digital public square in which a weakened journalism meets newly empowered political actors is emerging. Internet protocol–enabled and commercially surveilled, it will change how our news media will produce and distribute information, as well as how the public will digest it. This future will be shaped by as yet unmade choices with respect to a range of professional practices, institutional choices, and public policy decisions, all of which are gaining renewed attention (McCabe 2018). Such changes may accelerate the collapse of the public square or ameliorate it. The previous chapters have argued that, individually, the dynamics emerging in the digital public square may create challenges, while the chapter immediately before this one sought to describe how, without interventions, our public square may fail to support our democracy adequately. The chapters have also described changes that are being or could be made to avoid that outcome.

This chapter lays out the rationales for policy priorities, as well as specific policy priorities that would align the actions of the many players who influence the structure, norms, and practices of the public square for the better. I begin with an analysis of the policy landscape. Then I argue for a set of principles that should drive policy and institutional priorities and can be applied to the design of protocols, technologies, practices, organizational structures, and policies. In summation, I hope these principles can aid in remaking our digital public square so it can continue to support meaningful democratic engagement, healthy democratic processes, and vibrant democratic institutions.

Starting Point

Today we need to accept, first, that the institutions that support monitorial citizenship will be fundamentally different in the future, given the nature of the twenty-first century public square. The United States in the twentieth century inherited the institutional form of the commercial newspaper, which provided much of the accountability reporting that was done.

Alongside it grew up broadcast organizations that often acted as repeaters and reinforcers of public-interest news priorities as well as performing some original reporting of their own. The organizations now making transitions from being standalone newspapers or broadcast channels are ill-suited to report, copy edit, and filter information in a timely enough manner for the digital age; moreover, their business model is failing to provide the financial cushion that previously allowed publishers and their owners the independence to ignore censorship pressures.[97] Many are also ill staffed to play a lead role in developing the technologies needed in the future. This is, then, a moment at which we may very reasonably assume that policies must be rethought to respond to the need to build or support different organizational forms.

These organizations, refined over the twentieth century, have also since struggled to adapt their practices for an age in which large-scale data are increasingly key and the pressures imposed on the news collecting process by digital surveillance are ever increasing. The new economics of surveillance advertising and the new media structures have created dynamics that challenge the capabilities of even small teams of reporters. Reporters need a wider range of skills to handle the vast amount of information tied up in digital data structures. Moreover, surveillance is likely going to increase the challenges to their performing an accountability role as independent actors. News will be difficult to produce without the objects of unwelcome attention being notified that they are, indeed, the subjects of the news.

Surveillance capacity (coupled with the ease of sharing information with a global audience near-instantaneously) will likely lead to new sorts of media institutions, such as "-leaks" organizations. These will undoubtedly be controversial and support technological

---

[97] The removal of layers of copy editing carried out recently by *The New York Times* was met by institutional resistance, showing just how fragile the old standards are (Ember 2017).

producers who will engage in an arms race with developers of surveillance technology and those who deploy the surveillance. The legitimacy of these organizations and the practices that surround them will likely be contested especially as some will operate in ways that purport to be journalistic when in fact they are not. In short, the policies need to address these newly salient issues. Traditional conceptions of press freedom as negative freedom from governmental intrusion will be found to be inadequate as well.

Chapter 3 argued that the economics of the new digital public square are very different from the economics of the past. No longer is advertising aligned as it was with the financing of news production. Formerly, when democratic needs aligned with a very few economic models, we could be sure strong, independently owned, and competitive media maintained a powerful voice, independent of the government, that was synchronously heard by a majority of the public. The logic on which the media relied for their economics and the practices embedded within that logic are no longer the driving dynamics. The legacy news institutions are much weakened, in decline, and overpowered by other, newer dynamics. Insofar as for-profit investors continue to commit resources to organizations maintaining traditional broadcast approaches, they are working with a medium that is no longer as dominant, and they appear increasingly motivated merely to extract cash flow in the short term from these institutions. They also seem willing to see them hollowed out over time so they will fail to play the meaningful democratic role they have in the past. [98] The media have moved from advertising-funded news, delivered by

[98] Penny Muse Abernathy has documented a more than tripling of ownership by investment groups between 2004 and 2017, such that 43 percent of the papers in her sample were owned by such firms (Abernathy 2017). The implications of this ownership have played out most publicly in Denver. Alden Capitol, the owner of the *Denver Post*, has cut back staffing and instituted controls on publishing to the point where key staff have decided to resign; meanwhile the company is seemingly making healthy profits (Doctor 2018).

organizations heavily reliant on the substantial profit yielded by broadcast-audience reach, to media that increasingly reward the pinpointing of individuals. This move has reduced the role the traditional media play in convening heterogeneous publics, partly because it has resulted in a "channelizing" of content consumption, whereby consumers pick news topics and outlets aligned with their political preferences. Furthermore, unstable income streams from advertising have driven the adoption of subscriber-funded news.

Moreover, the economic transition has destroyed much journalistic capacity, and there is little likelihood the supply of news will return to the same level without a change in how journalism is supported. Paul Starr has pleaded with many about the fate of the institution with which he is most familiar, commercial newspapers, which, he says, have weathered a beating, both cyclical and structural, that has limited their public support and, hence, their role as a facilitator of the public square and of democracy (Starr 2009). A report by Philip Napoli analyzing news in a hundred cities selected randomly over a period of seven days during 2017 revealed that, across the hundred communities studied eight had no local news stories, and twenty-five had no original local news stories that were original and met a critical information need (P. M. Napoli et al. 2018).

Beyond producing news, the institutions of journalism in the past (for better or worse) filtered and prioritized it. They limited what news saw the light of day and the breadth of acceptable topics and viewpoints on issues, and they did so consciously and reflexively. Although the brands of news outlets still maintain a certain sensibility or character that is reflected in the aggregate through the news they choose to present and how they choose to

present it, the institutions themselves have undergone much transformation.[99] The public

discovers a great deal via search and social media. Often consumers see news stories as

standalone items they encounter as they graze for news and seek it from multiple sources

(American Press Institute 2014). The entities that have the technologies to succeed commercially

by filtering and targeting advertising are (for the most part) entirely separate institutions from

those that produce the journalism.[100] The result is that much of the cross subsidization of

unprofitable but important reporting by profitable content has been removed, and, with this, the

ethics of journalism that used to influence not only the production of stories but their distribution

have fallen away.

Crucially, the distributors of information—the social media and search platforms—have

been little concerned with what they circulate. In fact, regulation has given them incentive to

self-consciously and proudly abrogate their responsibility: a clause in Title V of the

Telecommunications Act of 1996), commonly referred to as section 230 of the Communications

---

[99] The book *Overload: Finding the Truth in Today's Deluge of News*, by the well-known retired television journalist Bob Schieffer, makes the case that the institutions of news with which Schieffer is familiar have had to adapt to a world which, he willingly admits, he couldn't understand without the help of a coauthor (Schieffer and Schwartz 2017).

[100] This is partly through a twist of fate, since news was a key part of electronic content distribution from its earliest days, and news outlets were well positioned to be leaders even back in 1980, when newspapers were experimenting with electronic access (Shedden 2014). That few did and those who were successful sold the sites they developed rather than saw them as part of their media businesses is an important choice point for these media companies. (Little known is that Cars.com began as a joint venture between Gannett, McClatchy, Tribune, Graham Holdings and A.H. Belo.)

Decency Act), provides qualified immunity for any "interactive computer service" from a number of legal risks incurred by publishers of information.[101]

As a result of this immunity, the information distributors have, until recently, unabashedly celebrated their disinterest and appealed to an ethic of free expression arguing that they cannot filter and to justify the design choices they have made.[102] Although the move away from producing content based on expectations of broadcast consumption to content based on expectations of narrowcast consumption may occur relatively quickly, the habits of consumers are changing just as quickly.

Finally, before we look at principles for policies and policies themselves, it is important to recognize the immensely increased agency of the audience in the presentation and consumption of news. "Media capture"—a term most often associated with the influence exerted by powerful corporate or governmental institutions, either directly through explicit editorial control or more insidiously through less visible influence from owners or advertisers—now needs to be reconsidered (Schiffrin 2017). As related in chapter 5, the influence news outlets

---

[101] This section had previously been negotiated as part of a standalone bill in 1995 that was incorporated in the 1996 act during conference negotiations. It was written to address a legal uncertainty introduced by two court cases that raised the possibility that Internet hosts might be liable for all the user content hosted on their sites. Judge Leisure held in *Cubby, Inc. v. CompuServe Inc.*, 776 F. Supp. 135 (S.D.N.Y. 1991) that Compuserve did not have responsibility. In a similar case, however—*Stratton Oakmont, Inc. v. Prodigy Services Co.*, 1995 WL 323710 (N.Y. Sup. Ct. 1995)—Judge Ain held that Prodigy could be held liable.

[102] In April 2018, Senator Ted Cruz, while questioning Mark Zuckerberg in a public hearing, inaccurately seemed to suggest a platform has a choice between claiming the protections of s230 or (if the company chooses to moderate content) leaving itself open to the liability of a publisher (C-SPAN 2018; Lapowsky 2018). This is a common misconception.

have over the recirculation of news stories is not complete since social media platforms use

popularity signals from users to prioritize content. Today accurate stories from news outlets must

compete for attention with the conspiracy addled blogpost.   News audiences have a huge

indirect influence on which stories are seen.[103] Importantly, much of the innovation in this realm

is occurring outside newsrooms or, at best, in partnership with the few national news outlets with

sufficient scale to drive such innovation. Other outlets can only expect to adopt variations of

what the larger ones develop.

Furthermore, as chapter 6 noted, direct communication among the members of the public

and between political leaders and other advocates competes for public attention with journalistic

content in the public square. Importantly, this content can be designed for narrowcast

consumption and shared only with those whom it is meant to influence, with its production

unconstrained by the niceties of journalistic ethics.

In sum, this confluence of the economics of surveillance media and media structures and

the incentives it has created, as well as the assertive independence of the news media, has

resulted—arguably inadvertently—in a set of circumstances that privileges the production,

distribution, and digestion of content in a manner that is testing norms of truth and fact that have

sustained democratic culture within the United States.

---

[103] This can come from audience tracking on the news site itself, but, increasingly, services are available to news outlets that provide analytical data showing audience interest in stories produced by other publishers. A leading tool, NewsWhip, even markets this service with the tagline, "One-up your competition by putting a spin on their best hits" (NewsWhip 2017). Crowdtangle, a comparable service owned by Facebook, does the same for content on social media platforms (CrowdTangle 2018).

Media historians may hear in this echoes suggesting a return to the media culture of the late eighteenth and early nineteenth centuries, when a number of papers were aligned with political parties even as others sought to stay out of the political spotlight (Starr 2005, 77–78).

Previous portions of this study have focused on innovations around production, distribution, and engagement that assume as fixed the media and communication policy environment in which news is produced. The innovations being explored are many, and the efforts to reinvigorate public interest media with additional funding and new actors are all appropriate and worthy of pursuit (Knight Foundation 2015). Encouragingly the combination of much lower barriers to entry for publication privilege community-centric approaches to media, which especially if such efforts embrace a network logic, can exploit shared resources such as common platforms or open source software, and build on top of the efforts of others (O'Donovan 2013). These approaches will enable people to publish on issues that matter to small numbers of individuals on a day-to-day basis.[104]

That the institutions seeking a viable long-term path will generate a media ecosystem different in many ways from that of the late twentieth century is increasingly obvious. Within it, the media will approach stories in a different manner and likely employ people in different ways (possibly part-time and temporarily as part of a career arc that is assumed to include sojourns in non-journalistic organizations).[105] For the most part, the conclusions from this study suggest we

---

[104] One example of this is the network of local news sites now owned by Hale Global that became famously consumed large amounts of investment whilst owned by AOL has continued as a somewhat scaled down operation and operates profitably (Moses 2017).

[105] An example of this is *CityBureau*, an innovative nonprofit in Chicago, that defines its mission as "bring journalists and community members together in a collaborative spirit to produce equitable media coverage, encourage civic participation and hold powerful forces to

should expect investigative capacity to reside in nonprofit media institutions except with regard to issues that can command the largest national audiences. Crucially, the institutions within which publishing takes place will be increasingly heterogeneous, reflecting less a generic commercial model and more the particular circumstances—the human and institutional geography—of the producers, distributors, and consumers of the news and information. Practically this moment of transition may provide a tremendous opportunity to ensure the newsrooms of the future better reflect the diversity of America and as a result better serve the public writ large and particularly those historically marginalized such as the African American community, the Hispanic community and other marginalized groups.

Beyond those changes in practices and institutional innovations, however, is the reality that distribution currently relies on large platforms whose fickleness when it comes to how they prioritize news content is now well known (Katz 2018; Oremus 2018).[106] Additionally, there is the possibility that the digestion of journalism produced by people with a fidelity to widely understood norms will be supplanted in some communities of interest by media produced by entirely non-journalistic organizations, informally, or by malevolent journalistic actors, and spread by peer-to-peer communication. Infowars, Breitbart, and similar outlets on the right are examples of websites that claim to provide news but often spread misinformation. In a similar

---

account ("City Bureau - Our Mission" 201AD)." One example of this is their *Documenters* program which "recruits, trains and pays this group of highly engaged citizens to participate in the newsgathering process and contribute to a communal pool of knowledge" with an aim to democratize news and information locally ("City Bureau - Documenters" 2019).

[106] Without announcing in advance, in late 2017 Facebook decided to experiment with new functionality in six countries. They split news from personal posts into two different feeds. The implications for publishers were deeply problematic as it dramatically reduced readership of journalistically produced stories and may have increased the spread of misinformation (Frenkel 2018)

manner, campaign-related pseudo-news sites and pseudo-media campaign sites, such as

HealthNewsNJ.com, purport to provide news but do so for the purposes of supporting candidates

running for office (Friedman 2018). In this we may have news media cleaved to mobs or,

perhaps more accurately, to their micro-publics. The opportunity opened to us by the resulting

democratizing of participation in our public square is considerable, as are the concomitant risks.

It is, therefore, important to look to priorities for policies given that technical adjustments made

by the platforms themselves will only ameliorate the issues and not remove them.

The rest of this chapter seeks to describe a rationale for a comprehensive reevaluation of

U.S. media policy for the twenty-first century that responds to the above context by outlining

principles across a broader canvas to imagine a digital public square that adequately supports

democratic engagement, empowers the supervising intelligence of the press, and provides

Schudson's monitorial citizens with information on which they can act.

Law and Policy and the Digital Public Square in the United States

In the past, government incentives and funding for news in the public interest have

centered on ensuring universal access, whether through newspapers or broadcast. Among them

have been the de facto subsidization of newspaper distribution in the early republic, government

advertising, which, for many outlets, has been an important source of revenue, and tax incentives

at the state level.[107] The issuance of broadcast licenses ensured robust access to news on

television and radio, either through government-subsidized public broadcasting or through

---

[107] In the Federal Communications Commission report on the information needs of
communities, Waldman noted that the federal government spent more than $1 billion a year on
advertising (Waldman and Working Group on Information Needs of Communities 2011, 334–
36). Similarly, Cowan and Westphal noted in a 2010 report that newspapers and magazines
received $900 million dollars annually (Cowan and Westphal 2010).

regulation that asked commercial broadcasters, according to the act, to serve the "public interest, convenience, and necessity."

Conceptions of Press Freedom in the Twenty-First Century

The nature of the American press was initially shaped, and its privileged role defined, by the Post Office Act of 1792, which ensured newspapers were distributed quickly and at low cost and, in some sense, that they played the role they have done to date.[108] More recently, a robust interpretation of the First Amendment has ensured news outlets could publish without fear of prior restraint or of liability for libel or defamation, except in very rare circumstances. To date, this freedom has been conceived as a negative one—that is, a freedom from interference by the government (Ammori 2012).

Broadcast Regulation

Stemming from the Communications Act of 1934, broadcasters were granted licenses on the basis they would broadcast in the "public interest, convenience, and necessity." Whether broadcasters did this has never been rigorously assessed, however, and today it is knowable only because the stations themselves document it in the public file they are required to furnish for public examination. That said, broadcast networks have seemingly felt some responsibility to serve the public interest, and, whatever their weaknesses they have taken pride in the

---

[108] Richard John has written extensively about policy choices made at the time of the nation's founding (John 1995). Crucially, the Post Office Act of 1792, provided for low rates for carriage of newspapers in the mail and prohibited officials from violating the privacy of letters. Perhaps most importantly, however, it put into place procedures for Congress to approve new post roads. Given such authority, Congress could use the postal surplus to pay for new routes, virtually guaranteeing massive expansion of the postal system and, thus, the distribution of newspapers (John 1995, 45–63). These changes together permitted printers to learn quickly of newsworthy items to include from other locales and provided a distribution system for their subscribers (John 1995, 37).

responsibility they have had. Network news programs have been well funded and for many years though the idea that they operate at a loss is contested (Socolow 2010).

Media Ownership

Media consolidation of news outlets has been a long-held concern, and, historically, clear limits have applied to the number of broadcast licenses that can be owned within a single locality, as well as to the cross ownership of newspapers by those with broadcast licenses (Bagdikian 1997, 2004). While the regulation of broadcast entities and the limitations on the merger of those entities with newspapers can still preserve a diversity of voices, the regulations appear increasingly likely to be ineffective and may ultimately be removed entirely. The recent relaxation of rules at this point has limited the basis for any objections the FCC might raise (Federal Communications Commission 2014). Moreover, owners of multiple licenses have found ways to skirt the intent, if not the letter, of the law via local management agreements (LMAs) or management services agreements (MSAs), so that often a single owner can have effective control of two or more stations, and operations can be consolidated so the stations operate at lower cost. Although anti-trust law applies to media firms, and mergers in the media industry are subject to review, the FCC has been prepared to oppose mergers only in extremis.[109] The result is that

---

[109] Ajit Pai, chair of the Federal Communications Commission, recently referred a merger between Sinclair Broadcast Group and Tribune Media for a hearing, effectively killing the deal and suggesting a level of skepticism exists toward future mergers. The approval of other mergers, however, suggests the stalling of the Sinclair deal may be due to the actions of Sinclair Broadcasting in particular rather than a skepticism of mergers in general.

mergers for news might still be slowed, but they are unlikely to stop in the short run, despite new enthusiasm for anti-trust regulation.[110]

Paralleling policy discussions around net neutrality are disagreements over the necessity of continued funding for public broadcasting and public access television. Public broadcasting has served for decades as an invaluable source of reporting, analysis, and community engagement, especially in communities from which local newspapers have withdrawn. The emergence of public access television, funded by fees levied on cable subscribers, has resulted in the development of significant capacity for community voices to be heard and the creation of channels that rebroadcast hearings of federal, state, and local governments. Neither institution, however, is important in the same way it was. In the past, these efforts were justified because they permitted voices to be heard that would otherwise have been prevented, by prohibitively high fixed costs, from reaching the public. That rationale no longer holds, given the low cost of connecting to the Internet both to produce and consume content. So far, the public broadcasting system has weathered various challenges to federal funding of the Corporation for Public Broadcasting, but new defunding efforts are sure to crop up (Garron 2017). Public access channels, for their part, are facing an unsympathetic landscape where the fees used to fund them are often lowered in new cable franchise agreements, now often negotiated statewide (National Conference of State Legislatures 2014).

---

[110] The work of Lina Khan, notably her article, "Amazon's Anti-Trust Paradox," which explores this area, is important and may presage the beginning of legal and policy change in the long run (Khan 2017). Khan and her colleagues are, however, facing powerful adversaries, an unenlightened public and an only mixed interest from policy entrepreneurs.

As articulated in chapter 4, the more transparent powerful institutions are required to be, the more easily they can be held to account. The Federal Freedom of Information Act has played an important role in ensuring a level of openness. In recent years, data journalism has played an increasingly powerful role in reporting and public debate. Government data are a crucial building block for many stories. While President Obama rarely lived up to his promise to have the most open administration in history, notable advances took place in opening up government data and increasing transparency (U.S. Government 2016). It is increasingly clear, however, that the Trump administration is taking a very different path with respect to access to government information (Sunlight Foundation 2017).

All of these laws and regulations are important, but none is focused on addressing a simple fact about digital platforms: if they had acquired the scale of audience they reach via acquisition in the broadcast realm, they, too, would have been the targets of the longstanding regulations outlined above.[111] For this reason, we need to consider the specific challenges raised by the presence of these platforms because they are too important not be a policy priority of those concerned with the digital public square.

The Role of Large Internet and Social Platforms

Talk of viral deceptions and bogus information make clear that the big platforms are only belatedly realizing the central role they play in democracy and are beginning to take actions in response (Kang, Fandos, and Isaac 2017). Inevitably, the relationship among the platforms, the

---

[111] The presence of these platforms introduces instability into the media ecosystem, where 61 percent of the advertising revenue is earned by two large platforms and much consumption of news across the country is mediated by just one (Shaban 2017).

massive audiences they assemble, and the news outlets that produce the journalism they distribute will evolve; the question is, how? Outbursts of violent speech will encourage platforms to chill freedom of expression; issues of disinformation and propaganda will challenge them to develop technical solutions; subjects of particular stories (which may include members of government) may, in turn, be tempted to encourage the public to withdraw support from journalists or outlets to foreclose future reporting; and the collapse of the commercial business model supporting journalism will challenge the platforms to examine their relationship with news outlets. Crucially, all these issues revolve around questions of surveillance, privacy, and open communication.

Challenges for Modern Communications Policy

Open communication

The creation of content openly visible to those not directly part of the conversation and its provision at no cost to the participants can build mutual trust and permit significant collaboration, sharing, and synthesis outside of a bureaucratic organization, firm, or market. Value will be found by those who can marshal information. For the press, more information clearly will exist, in that the digital detritus we leave behind can itself be a component of a story or be assembled with other pieces to form a narrative. For the individual, filtering the relevant from the irrelevant is the issue. No longer do individuals need to be trained to discover data hidden away; rather, they need to learn to filter and prioritize what they should pay attention to in an economy where the scarce factor is attention.

These changes indicate we might be on a trajectory to a point where open communication occurs; transparent processes are the norm; trust is built between actors; and (eventually) new types of institutions arise, built on the ability to collaborate on a voluntary basis rather than to merge for economies of scale and profit. Conversely, those institutions with incumbent power

over the public's attention may seek to maintain their power, either by preventing future development of such processes outside of their respective platforms or by deciding to take advantage of their privileged positions to appropriate the new architecture for private gain.

Surveillance and Privacy

The paradox is that the open communication that is now possible is that that our digital communications and the trails we create as individuals and as a society are extensively surveilled. Moreover, the scale on which surveillance can occur moves the issue of privacy from one related to the individual, or even to transactions among individuals, to the level of communications operating across society. Questions around privacy revolve not around a person nor around their acts of communication with others but, rather, extend around the nature of the ecosystem in which we communicate. In short, the nature of the modern public sphere is one in which comprehensive surveillance is now technically possible and baked into the economics of the institutions that provide the communications. This has profound implications for the production of journalism as outlined in chapter 4.[112] The increasing perfection of the surveillance of readers, though advantageous to those organizations that can profit by targeting advertising to specific segments or even individual customers, paradoxically also limits the privacy a reporter requires to perform an act of journalism. In parallel, the capture of transactional data, such as emails, often yields large amounts of information that, when leaked to outside organizations, forms the pay dirt of modern investigative reporting. Of course, this change is a double-edged

_____

[112] It is worth noting that, in the age of telephony, when AT&T provided effectively all connectivity, it would have been impossible to surveil everyone and keep the history of all the communications; moreover, doing so was not part of AT&T's business model. While the company did need to acquire meta-data to generate monthly bills, understanding the contents of the conversations was not key to its profitability.

sword, since such mining of digital data may be deployed against the journalist to frustrate his or her reporting.

Moreover, surveillance without any privacy safeguards permits the use of business models based on approaches that focus not on attracting a broad spectrum of readers on a topic but on serving a narrow segment with a tailored product. This approach, by virtue of the segmentation of audiences, also provides a lower likelihood of cross subsidies between those who purchase high-value goods and those who may represent less valuable eyeballs to advertisers. The result may be the movement of advertising dollars from, for example, a news outlet that serves a general audience to one that may serve only a wealthy demographic and that might not provide journalism that meets the critical information needs of other readers. A local newspaper may, for instance, lose advertising revenue from providers of luxury goods to an outlet that serves only a wealthy elite with lifestyle coverage.

In addition, and in parallel to the above changes, a state or pseudo-state actor can use the surveillance of the public to identify cleavages that can be exploited to generate affective polarization in a society, thus fostering divisions that reduce the ability of political actors to develop policy solutions to problems. Creating a market for such data allows political actors of all types to purchase not large heterogenous audiences but small, largely homogeneous communities.

Finally, the temptation is strong to design platforms that provide these data, often to third parties, for maximum usage without regard to the societal implications of the rituals of news digestion they are creating. Though not sought directly by the platforms, such rituals, often performative and reifying of political stances, are the inevitable consequence.

Securing a democratic digital public square in this paradoxical context is the challenge.

Few Prior Assumptions Hold

Until recently, the amount of content available was the limiting factor for media producers, distributors, and consumers. We are now at a moment where the key constraint isn't limited information but limited attention. We have also moved from a system with synchronicity and consistent consumption of a basket of news to largely asynchronous and idiosyncratic digestion of news (American Press Institute 2015).

These changes have been enabled by high-speed Internet access. The old filtering mechanisms of editors, who made decisions that prioritized reporting and publication once a day, fail in the face of such large amounts of information and the need for much faster decision making. These old mechanisms are now complemented by algorithmic editing and prioritization that responds to signals from users or their priorities. It's not that choices made by newspaper editors no longer influence what people see; it's just that, in many cases, they are no longer the sole factor driving what people can see, read or hear. Not only will stories be prioritized in a different way by social media platforms using private algorithms it is likely that a person may see a story interspersed in a feed containing content provided by friends or others and much may not have been published by journalists at reputable outlets. Digestion of news is also personalized at a level never before possible. News outlets can amend how they present stories to readers or viewers based on individuals' prior news reading choices or the choices of their friends and acquaintances.

Vulnerabilities of the current moment

Instability in any context creates opportunities. The sheer scale of the platform businesses makes them attractive targets for other business entrepreneurs; the influence they wield over our public square make them attractive targets of politicians who wish to sway public opinion on a topic, or merely use them as a foil. They are also a target of policymakers, who may see an opportunity to achieve a priority long sought. The results may well be hurriedly implemented,

poor regulation that serves neither to address the issues created by the platforms nor maximize the democratic potential of public participation in the digital public square.[113] It is also possible that changes could make the commercial economics of news production is even worse should platforms de-prioritize news content and replace it with peer-to-peer content that for the platform user base might find just as preferable but would be less efficacious from a democratic participation perspective.

From the perspective of the platforms, the threat of poor regulation or political attacks is exacerbated by the near constant tests of their performance that they face in the form of elections. Although countries only periodically hold elections, the fact that the platforms operate in every country that does means efforts to utilize the ability to influence public opinion with electoral consequences occur on an almost weekly basis. Furthermore, the processes of affective polarization are ongoing, with implications for the radicalization of individuals rising every day. Perhaps under appreciated is that, despite their business success, these are relatively young companies staffed by individuals who don't always have the depth of experience found in companies of comparative size. This means they are ill-equipped to calibrate mortal threats to their businesses, and they lack a grasp of the full suite of responses with which they could address problems. Their fear of the possibility that they could as easily vanish as grow also must be recognized.

---

[113] The German NetzDG law that threatens to levy massive fines against the platforms if they do not remove problematic content speedily enough is just such an outcome that should be avoided. Even if such a law in Germany is applied in a manner that serves democratic ends the possibility of illiberal regimes taking it as a model are considerable. That said, the idea that statutary provisions such as s230-

New Priorities

What challenges does this environment of open communication, surveillance, newly powerful platforms, information ubiquity, electronic filters, and high-velocity communication bring? Undoubtedly, the preservation of traditional liberties and the independence of the news media from government censorship are still vital. When media can immediately reach and motivate people to respond, however, what must be kept front and center are policies that support democratic deliberation. Specifically, the public needs to be informed accurately and to understand (and be confident of and accept) the balance of the preferences expressed through voting and public opinion, so that governance based on factual deliberation can occur. With careful policy choices, we can sustain media infused with the democratic possibilities inherent in the networks that have flourished in parts of the Internet (Gitlin 2003).

We have, however, gone from a world where a few producers sourced, edited, and prioritized the news for many, primarily because of the affordances of digital technology, to one where anyone can comment on or annotate a story, making it more or less relevant for others. The result of this is that we have to keep networked forms of organization in mind, as they are being found to be most efficacious in such a context; and, as in all contexts where we look at networks, we need to care especially about the edges (or connections), which are more numerous in a network than in other structures. One way of considering how in this moment we defend democratic autonomy (as Annany recently described it) or liberty as I will consider it (Ananny 2018, 13–14).

Liberty of Production

As argued earlier, one focus must be on resourcing and protecting structures for producing investigative journalism—fundamentally, journalism that produces news whose subject doesn't want it to see the light of day. Investigative journalism is expensive, risky for the

producer (in that stories may not pan out), and not nearly as necessary to a commercial

organization that profits from advertising as to a distributor with a reputational need to acquire

such content. Eyeballs that generate advertising revenue can be easily acquired by cheaper,

perhaps salacious, celebrity coverage or merely by being able to point the users directly toward

answers they want by means of ever more responsive search engines.

With respect to local news in particular, the economics are tough not just because the

content is necessarily expensive; but, rather, because as advertisers become increasingly able to

distinguish people who are likely customers from those who are not, they will direct their

expenditures to outlets, or possibly even beats or stories within those outlets, that are especially

valuable. Some innovators are seeking to re-secure the privacy of Internet users through "vendor

relationship management (VRM)," a catch-all term for an approach that enables users to manage

relationships with organizations and recover control over the aggregation of data about

themselves, permitting them control over how those data are used.[114] As long as user data reside

with large Internet companies, however, the ability of those users to change how advertising

operates is extremely limited. This inevitably leaves the production of valuable local

accountability content under-supported, which drives its producers to marshal readers' civic

obligation in an effort to obtain funds directly from the readership.

Moreover, privacy in news production should also be considered, and reinstituting as

much privacy as possible for all involved in the reporting process through technical means—

---

[114] The VRM approach has been cultivated since 2008 but as yet failed to make headway in the consumer market. That said, with data breaches happening frequently and entrepreneurs building new organizations it may only be a year or two before a model that puts users in control of their data finds a critical mass. One example of this is the project led by Bill Densmore who is seeking to set up an Information Trust Exchange Governing Association (ITEGA) to manage identity for users centered around creating sustainability for news outlets (Densmore 2016)

sources as well as reporters—will be important. News institutions will need to emerge whose rise will likely be idiosyncratic, with many having only subsets of the functionality of legacy news producers, resulting in a fragmentation that will require the institutions to be deeply interconnected if they are to function effectively.

Historically, much of the legal firepower that supported legal efforts on behalf of the press came from inside news organizations. We have to accept that, given many of these news producing organizations will be small institutions, such capacity will need to exist outside of them, in a manner that serves the community of news organizations. Priorities should include passing state-level anti-SLAPP laws that push back on strategic lawsuits against public participation (SLAPPs) and advocacy toward strengthening federal- and state-level Freedom of Information Acts and how they are implemented in a digital age. A journalistic shield law should be sought at the federal level. Crucially, legal resources should be deployed to prevent slippage as a result of cases that seek to overturn existing libel and defamation precedents. Beyond that, it is important for small outlets to have insurance and risk management practices thoroughly built into their approaches.

Liberty of Distribution

Where in the past the ability to distribute news and information was spread among a modest number of mostly commercial organizations, digitization has led to a small number of companies controlling much of it using algorithms and signals from their knowledge of human attention. Moreover, where distribution was once about control of a limited amount of content, it is now about the filtering of more content than could possibly be consumed toward people whose attention is limited. In an advertising-driven newspaper and broadcast market, whether a piece of information was widely or narrowly consumed was well known by the public; nowadays, this is not necessarily so. Where markets for advertising are made only through private social platforms

within a closed architecture, little is understood in the public square about people's priorities. Transparency of at least the outcomes of the algorithms being used and, likely, the ability for users to adjust them are going to be required if users are going to have meaningful democratic autonomy in this news environment.

Liberty of Access and Engagement

Beyond production and distribution, fairness in terms of access to the news is a concern; without it, citizens cannot play a fully democratic role. Equality of access has never been complete, but public policies ensured some fairness, with the broadcast spectrum placing certain requirements on licensees to reach consumers within a geographic region and even car manufacturers required to install radios. Basic literacy allowed the vast majority to read newspapers.

Since modern media can be two-way, however, the public square needs to encompass the ability to digest and, perhaps more meaningfully, engage, respond to, and recirculate news content. To date, this response has been conceived of as collating comments or emotional responses such as "likes." That said, the possibilities for engagement need to be realized in a manner that privileges civic and democratic outcomes. In a world where political protagonists focus on advocacy and platforms focus first on commercial implications, however, the design of platforms for democratic and civic engagement outcomes is often overwhelmed by commercial priorities. Moreover, such environments are resulting in trolling of women and exclusion of voices from marginalized communities.

Given all of the above, the question that remains is whether we will have a rich and vibrant public square or a thin and unengaging one in which only a few favored perspectives meaningfully prosper.

Recently, statutes and regulations concerning the digital distribution of information have come to the fore. What is known as net neutrality—the regulation of Internet providers to prevent them from prioritizing one piece of content for delivery over another—has been a highly contentious issue. Media reform advocates who succeeded in having enacted federal regulations that enshrine net neutrality have failed to persuade the Trump administration not to rescind them (Federal Communications Commission 2017). As a result, Internet service providers will have more latitude to shape what we see and read online and, crucially, will have an additional incentive to use this ability to prioritize content to extract revenue from news producers. Such policies may result in a chilling of free expression for those (news producers or news digesters) unable to pay tolls levied by the providers of connectivity for certain types of content.

Beyond net neutrality, which should be seen as one policy among many, a no less important priority is to ensure universal and equitable access to ultra-high-speed broadband across the country. Such access is crucial to a healthy democracy where the mere unavailability of access prevents full participation . A desire for high-speed connectivity is not at this point controversial if the purpose is to secure economic development however it is now the equivalent to the twentieth century parallel—radio broadcast availability — was deployed to be broadly accessible to many very quickly. The policies thought best to support the broader deployment of Internet access are, however, contested, and its rollout under market-driven conditions is leaving part of the country bare in contrast to earlier policy provisions supporting universal access and localized public media. This unevenness of access will result in uneven democratic participation.

As connectivity is deployed, the broadband pipes need to be regulated to be generative of more connectivity and broader access. Such regulation will tilt the infrastructure to be increasingly democratic by being more inclusive and less discriminatory. This may require

radical changes in how policies provide incentive to deploy digital connectivity and the basis on which the right to use it is granted. Distribution priorities are crucial, and they must be centered on universal digital access.

What Does It Mean When the Digital Network Underpins Our Life?

Everyone knows how important digital information is. Mail deliveries no longer contain the excitement they once did, and while one-way broadcasting still has a place and is culturally comfortable for many, even those working in broadcast media now need to explore how to create two-way digitally enabled engagement. However recent reports have provided evidence that digital platforms have been providing space for violent rhetoric, and all of the spaces where speech matters at scale are owned by private actors and thus little secured by a conception of the First Amendment that centers on keeping government from interfering. As Ammori argues, however, the interpretation of the First Amendment as freedom from interference is inadequate; we need, rather, to conceive of it as including positive freedoms for communication (Ammori 2012).

Public Infrastructure of Engagement and Binding Discernment

Without the active construction of a public infrastructure of engagement, the opportunities for public influence will be stunted by commercial imperatives, resulting in an infrastructure whose design favors financial returns to its owners. In eighteenth century terms, this would be as if the halls of Congress were operated, and their opening hours controlled, by private entities. An open digital infrastructure and set of standards supporting meaningful democratic engagement needs to be developed to which any private company or association of people can connect.

Since the algorithms used by commercial organizations may be private (if only because they are functions of machine-learning algorithms that are ever changing and thus unknowable),

227

we need to consider what has to be built into such a public infrastructure. Advocates will wish to favor political imperatives; those who desire certain outcomes will, out of conviction, develop technological affordances and capacities that prioritize their perspectives. These are natural motivations and completely reasonable, but as the engagement infrastructure loses its publicness it becomes brittle and generates fragility in our democratic processes. Hence, this infrastructure with need to be imbued with functionality that allows and ensures the binding of the public and permits evaluation of policy choices in a manner seen to be legitimate.

A concerted effort is needed to design actively the affordances of a new public sphere, with policies that renew the democratic imperative for media not seen since the beginning of the Republic. These include a focus on two elements of infrastructure.

Reimagining the Infrastructure for Media Production and Engagement

In practical terms, building a new infrastructure for media production and engagement means focusing priorities for our public square on building an open infrastructure and a commons of shared resources on which news outlets can draw. This is in contrast to present public policy priorities, which are based on supporting freestanding entities that perform specific functions and have concentrated production (in television) in a relatively small number of organizations.

Not only that, but in caring about the network, we need to care about the institutions that tie the journalistic field together and to build and maintain their ethical norms and their ability to work together. One way to do this is to strengthen organizations that advance ethics and standards appropriate for the twenty-first century public square. The Democracy Fund has dubbed institutions that provide infrastructure that both informs and engages the public in democratic practice "community knowledge organizations" (or CoKnos). Such institutions can

228

do more than publish news; they can create engagement with it and aid deliberative engagement with elected officials around the topics on which they report.[115]

This study has taken as its starting point the preeminent logic of information ubiquity, surveillance of the individual, and always-on digital communication. Trying to respond in terms of optimizing single institutions will fall short, since the dominant logic in a world of data is the logic of the network. Success is likely to occur by acting locally. It will be easier to build out in a particular locality (that is, an edge of a network) where commercial imperatives can be balanced with a focus on imperatives that directly serve an efficacious public square.

Nowadays, the gradations of engagement are many. This was not the case when the institutional spaces we inhabit today were designed. Businesses, with the profit motive that drives them, have been quick to embrace the possibilities, outsourcing support to user groups or chat rooms, embracing customer feedback, and adopting other new practices to engage. Those designing our public square have to be similarly open to innovation, and public policies need to be adjusted to support them. This will require the full range of public subsidies, tax breaks, and government expenditures to be oriented toward providing incentive for the development of locally oriented infrastructure of engagement that serves a diverse America and especially the most marginalized. In the past, the nearest parallel was the library, and the example of The Forum in Deerfield, Massachusetts, which, in 2005, used the affordances of the library and early web technology to start a site that carries on to this day. Creating such spaces that marry possibilities for offline and online engagement outside of a market for audience attention will be

---

[115] The recently passed Civic Information Bill in the New Jersey Legislature is an example of an institution that may via both public and private funding support the development of such infrastructure in New Jersey (Stelter 2018).

key. Seeking innovation at the municipal level in both institutional design and policy may seem counter-intuitive, but is likely an efficacious way forward allows innovators to draw on the rich American history — the local newspaper. City Bureau in Chicago, Outlier Media in Detroit, and The Listening Post in New Orleans are all promising examples of organizations that could serve the civic purpose for municipalities in ways that papers did.[116] We have to hope that as models are proven out that the successful ones are shared and civically motivated individuals take on the hard work of modifying the models for specific localities.

Public Square Studies

Understanding such a context requires a focus on what could be called "public square studies." Though journalism and media may survive, the public square may not; hence, those whose mission is researching and educating people about these questions must think ambitiously. The information needs of individuals and the public must be better understood. How can a wider range of experts contribute to ensuring accountability of elected leaders? How can we ensure that the students of such a field synthesize perspectives from a necessarily large number of disciplines? How can we ensure that the insights address the harms that are disproportionately affected such as women who are often the subject of attacks online as well as marginalized groups and in particular the African American community? How can we use this moment to create an interdisciplinary community of scholars that reflects the diversity of the public? How can we ensure we understand how to maximize production of information that meets critical

---

[116] The Listening Post in New Orleans uses cell phones, public signs and recording devices to capture and share voices and opinions from the city. Outlier Media in Detroit uses SMS messaging and messaging bots to answer questions the public has about property ownership in the city.

needs of the public and the design of engagement infrastructure that serves democratic ends? All of these are questions that will require extensive study.

A Caution

This moment has uncertainties, and no particular outcome is preordained. The communicative premise that until very recently underpinned the design of our public square organizations evolved at a time when human attention was far less overwhelmed by information than it is today. The political dynamics are, as a result, less predictable and stable than in the past. New laws, institutions, and norms that are needed to address questions of privacy and surveillance are not in place. Individuals place information inside proprietary computer platforms after signing unread, complex terms of service, resulting in the production of data that serve commercial ends and may be shared with a state wittingly, as a result of a court order, or unwittingly, as a result of ill-understood surveillance.

In a world of globalized cities and always on digital infrastructure, we may fail to navigate the future—a future where digital geography may be increasingly important. We need to be more aware of the fragility of democratic processes long celebrated lest they be overcome by political passions that are newly powerful, enabled by a public square liable to bubble over. Platforms must have incentive to exercise their agency with an eye to the broadest conception of the public good.

Ithiel de Sola Pool wrote, looking only at technology "The easy access, low cost, and distributed intelligence of modern means of communication are a prime reason for hope." (Pool 1984, 251). Ensuring that the digital public square of the future remains a reason for hope is going to be a significant challenge. It is extremely likely that governments will be tempted to use social media to influence and control the inevitable instability of this moment (Gunitsky 2015). It will be up to the public, advocates for democracy, and the academy to advance a path that

privileges democratic norms by building and sustaining policies and institutions that robustly increase the strength of the emerging digitally networked public square in a manner that is inclusive. This moment provides a tremendous opportunity to build a public square far more equitable and inclusive than the past. If we fail, we will be asking a question posed by Morse when he demonstrated the telegraph between Washington D.C. and Baltimore: "What hath God wrought?"

References

Abernathy, Penelope Muse. 2017. "Thwarting the Emergence of News Deserts." Update. North Carolina: UNC School of Media and Journalism. http://newspaperownership.com/wp-content/uploads/2017/03/Symposium-Leave-Behind-Web-Final.pdf.

Albright, Madeleine. 2018. *Fascism: A Warning*. First Edition edition. New York: Harper.

American Press Institute. 2014. "How Americans Get Their News." American Press Institute. March 17, 2014. https://www.americanpressinstitute.org/publications/reports/survey-research/how-americans-get-news/.

———. 2015. "How Millennials Get News: Inside the Habits of America's First Digital Generation." American Press Institute. March 16, 2015. https://www.americanpressinstitute.org/publications/reports/survey-research/millennials-news/.

———. 2017. "'Who Shared It?' How Americans Decide What News to Trust on Social Media." American Press Institute. March 20, 2017. https://www.americanpressinstitute.org/publications/reports/survey-research/trust-social-media/.

American Press Institute and Associated Press-NORC Center for Public Opinion Research. 2017. "Partisanship and the Media: How Personal Politics Affect Where People Go, What They Trust, and Whether They Pay." American Press Institute. July 13, 2017. https://www.americanpressinstitute.org/publications/reports/survey-research/partisanship-and-media/.

Amjad, Khadija. 2008. "The Forum, Deerfield, NH: Seeking Sustainability in Hypberlocal Journalism." Case Study. Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/The%20Forum_MR.pdf.

Ammori, Marvin. 2012. "First Amendment Architecture." *Wisconsin Law Review* 2012 (1): 1–83.

Amzallag, Daniel, and Amalia Deloney. 2010. "An Information Community Case Study: Minneapolis-St Paul, MN: Adapting Business Models to Digitalized Information Demand." Case Study. Media Policy Initiative, New America Foundation. https://drive.google.com/file/d/0BzAlEpRfsi15R3NMdTEyZnBzT2c/view.

Ananny, Mike. 2018. *Networked Press Freedom: Creating Infrastructures for a Public Right to Hear*. Cambridge, MA: The MIT Press.

Anderson, C. W. 2010. "Journalistic Networks and the Diffusion of Local News: The Brief, Happy News Life of the 'Francisville Four.'" *Political Communication* 27 (3): 289–309. https://doi.org/10.1080/10584609.2010.496710.

Archer, Dan. 2015. "When Journalism, Virtual Reality, and Unclear App Store Guidelines Collide." *Ars Technica* (blog). September 20, 2015. https://arstechnica.com/apple/2015/09/when-journalism-virtual-reality-and-unclear-app-store-guidelines-collide/.

Arrieta-Kenna, Ruairí. 2016. "These Are the Only 6 Newspapers in the Country to Endorse Donald Trump." *POLITICO Magazine*, October 25, 2016. https://www.politico.com/magazine/story/2016/10/donald-trump-newspaper-endorsements-214390.

Ashkenas, Jeremy, Matthew Ericson, Alicia Parlapiano, and Derek Willis. 2012. "The 2012 Money Race: Compare the Candidates." *New York Times*, 2012. https://www.nytimes.com/elections/2012/campaign-finance.html.

ASNE. 2015. "ASNE 2015 Census." July 28, 2015. http://asne.org/content.asp?contentid=415.

———. "ASNE." 2018. 2018. https://www.asne.org/diversity-survey-2018.

Aspen Institute. 2009. "The Knight Commission on Information Needs of Communities in a Democracy." Knight Foundation. https://www.aspeninstitute.org/programs/communications-and-society-program/the-knight-commission-on-information-needs-of-communities-in-a-democracy/.

Aucoin, James L. 2007. *The Evolution of American Investigative Journalism*. Columbia, Mo.: University of Missouri.

Aufderheide, Pat, and Jessica Clark. 2008. "Public Broadcasting & Public Affairs: Opportunities and Challenges for Public Broadcasting's Role in Provisioning the Public with News and Public Affairs." Report. Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Public%20Broadcasting%20and%20Public%20Affairs_MR.pdf.

Bagdikian, Ben H. 1997. *The Media Monopoly*. 5th ed. Boston: Beacon Press.

———. 2004. *The New Media Monopoly*. Boston: Beacon Press.

Baldwin, Thomas, Daniel Bergan, Fred Fico, Stephen Lacy, and Steven S. Wildman. 2010. "News Media Coverage of City Governments in 2009." Michigan: The College of Communication Arts & Sciences | Michigan State University.

Banerjee, Neela, Lisa Song, and David Hasemyer. 2015. "Exxon: The Road Not Taken." *Inside Climate News*, September 16, 2015. http://insideclimatenews.org/content/exxon-the-road-not-taken.

Barlow, John Perry. 1999. "A Declaration of the Independence of Cyberspace." Electronic Frontier Foundation. February 8, 1999. https://www.eff.org/cyberspace-independence.

Barthel, Michael. 2016. "Newspapers: Fact Sheet." In State of the News Media 2016. Pew Research Center. http://www.journalism.org/2016/06/15/newspapers-fact-sheet/.

Barthel, Michael, Elisa Shearer, Jeffrey Gottfried, and Amy Mitchell. 2015. "The Evolving Role of News on Twitter and Facebook." Report. Washington, D.C.: Pew Research Center. http://www.journalism.org/2015/07/14/the-evolving-role-of-news-on-twitter-and-facebook/.

Bauer, Johannes M., and Michael Latzer. 2016. *Handbook on the Economics of the Internet*. Cheltenham: Edward Elgar Publishing.

Baughman, James L. 2015. "The Decline of Journalism since 1945." In *Making News: The Political Economy of Journalism in Britain and America from the Glorious Revolution to the Internet*, edited by Richard R. John and Jonathan Silberstein-Loeb, 1st Ed., 165–84. Oxford: Oxford University Press.

Bay, Mia. 2010. *To Tell the Truth Freely: The Life of Ida B. Wells*. First edition. New York: Hill and Wang.

BBC News. 2008. "Have You Got a Good Story?" *BBC News*, January 9, 2008. http://news.bbc.co.uk/2/hi/talking_point/your_news/6719867.stm.

Bell, Emily, C.W. Anderson, and Clay Shirky. 2012. "Post Industrial Journalism: Adapting to the Present." Report. New York: Tow Center for Digital Journalism. http://www.cjr.org/behind_the_news/post_industrial_journalism_ada.php.

Benkler, Yochai. 2002. "Coase's Penguin, or, Linux and 'The Nature of the Firm.'" *Yale Law Journal* 112 (3): 369–446. https://doi.org/10.2307/1562247.

———. 2003. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT: Yale University Press.

Bennett, Daniel. 2013. *Digital Media and Reporting Conflict: Blogging and the BBC's Coverage of War and Terrorism*. Abingdon: Routledge.

Benton, Joshua. 2009. "SEO Lessons from Google News: How to Promote Your Stories, Straight from the Bot's Mouth." *NiemanLab* (blog). September 3, 2009. http://www.niemanlab.org/2009/09/how-to-push-stories-high-in-google-news-straight-from-the-bots-mouth/.

Blue Lives Matter. 2017. "About Blue Lives Matter." November 26, 2017. https://www.themaven.net/bluelivesmatter/pages/about-blue-lives-matter-rF54b2VNMUOrl7wfh8vRXQ.

Boczkowski, Pablo J. 2010. *News at Work : Imitation in an Age of Information Abundance*. Chicago: University of Chicago Press.

Borchers, Callum. 2017. "Twitter Executive on Fake News: 'We Are Not the Arbiters of Truth.'" *Washington Post*, February 8, 2017. https://www.washingtonpost.com/news/the-fix/wp/2018/02/08/twitter-executive-on-fake-news-we-are-not-the-arbiters-of-truth/.

Breitbart, Joshua. 2010. "Toward a Healthy Media Ecosystem for Philadelphia." Prometheus Radio Project. May 25, 2010. http://www.prometheusradio.org/node/2319.

Brynjolfsson, Erik, Yu "Jeffrey" Hu, and Michael D. Smith. 2006. "From Niches to Riches: Anatomy of the Long Tail." *Sloan Management Review* 47 (4): 67–71.

Business Insider Intelligence. 2017. "Traditional TV's Demographic Woes Get Worse." *Business Insider*, January 4, 2017. http://www.businessinsider.com/traditional-tvs-demographic-woes-get-worse-2017-1.

Buttry, Steve. 2010a. "Old Media Find Comfort in Study of Baltimore Media (They Didn't Look Very Close)." *The Buttry Diary* (blog). January 11, 2010. https://stevebuttry.wordpress.com/2010/01/11/old-media-find-comfort-in-study-of-baltimore-media-they-didnt-look-very-close/.

———. 2010b. "Pew Doesn't Understand News Ecosystem Well Enough to Study It." *The Buttry Diary* (blog). January 16, 2010. https://stevebuttry.wordpress.com/2010/01/16/pew-doesnt-understand-news-ecosystem-well-enough-to-study-it/.

Calhoun, Craig, ed. 1993. *Habermas and the Public Sphere*. First Edition edition. Cambridge, Mass.: The MIT Press.

Capra, Tony. 2014. "Snowden Leaks Could Cost Military Billions: Pentagon." *NBC News*, March 6, 2014. https://www.nbcnews.com/news/investigations/snowden-leaks-could-cost-military-billions-pentagon-n46426.

Carey, James W. 1989. *Communication as Culture Essays on Media and Society*. New York: Routledge.

Carnegie Commission. 1967. "Carnegie I: Carnegie Commission on Educational Television." Available at https://current.org/1967/01/carnegie-i/.

Cavna, Michael. 2013. "'Nobody Knows You're a Dog': At 20, Web Cartoon as True as Ever." Washington Post. July 31, 2013. https://www.washingtonpost.com/blogs/comic-riffs/post/nobody-knows-youre-a-dog-as-iconic-internet-cartoon-turns-20-creator-peter-steiner-knows-the-joke-rings-as-relevant-as-ever/2013/07/31/73372600-f98d-11e2-8e84-c56731a202fb_blog.html.

Center for Cooperative Media. 2017. "About Us." "About Us" Center for Cooperative Media. April 23, 2017. https://centerforcooperativemedia.org/about-us/.

———. 2018. "Database: Search, Sort and Learn about Collaborative Journalism Projects from around the World—Collaborative Journalism." 2018. https://collaborativejournalism.org/database-search-sort-learn-collaborative-projects-around-world/.

Center for Responsive Politics. 2016. "2016 Presidential Race." OpenSecrets.Org. 2016. https://www.opensecrets.org/pres16.

———. 2017. "OpenSecrets." OpenSecrets. 2017. http://www.opensecrets.org/.

———. 2018. "2018 Election Overview." Opensecrets.Org. 2018.
https://www.opensecrets.org/overview/index.php.

Chadwick, Andrew. 2013. *The Hybrid Media System: Politics and Power*. 1st Ed. Oxford:
Oxford University Press.

Chittum, Ryan. 2013. "Bloggers for Hire on a Penny-Stock Pump and Dump." *Columbia
Journalism Review*, May 22, 2013.
http://www.cjr.org/the_audit/bloggers_for_hire_on_a_penny-s.php.

Church, Phillip, and Ted Gutsche. 2016. "A Sea Change." Eyesontherise.Org. November 13,
2016. http://www.eyesontherise.org/aseachange/.

"City Bureau - Documenters." 2019. City Bureau. January 21, 2019.
https://www.citybureau.org/documenters/.

"City Bureau - Our Mission." 201AD. City Bureau. 2019 201AD.
https://www.citybureau.org/our-mission/.

"CJR's Guide to Online News Startups." 2010. Columbia Journalism Review. January 2010.
http://www.cjr.org/news_startups_guide/2010/01/welcome-to-the-news-frontier-
database.php.

Clark, Charles. 2006. "The Press the Founders Knew." In *Freeing the Presses: The First
Amendment in Action*, edited by Timothy E. Cook, 1 edition. Baton Rouge: LSU Press.

Cochrane, Emily. 2018. "Trump Bashes 'Fake News': 'They Can Make Anything Bad' - The
New York Times." *New York Times*, August 2, 2018.
https://www.nytimes.com/2018/08/02/us/politics/trump-rally-pennsylvania.html.

Cohen, Noam. 2007. "The Latest on Virginia Tech, From Wikipedia." *New York Times*, April
23, 2007. http://www.nytimes.com/2007/04/23/technology/23link.html.

Cohn, David. 2007. "Debbie Galant—Baristanet | News Innovation." *New Business Models for
News* (blog). September 13, 2007.
http://www.newsinnovation.com/2007/09/13/baristanet/.

Cohn, Nik. 1976. "Inside the Tribal Rites of the New Saturday Night -- New York Magazine."
New York Magazine, June 7, 1976. http://nymag.com/nightlife/features/45933/.

Coleman, Stephen. 2004. "FROM SERVICE TO COMMONS: Re-Inventing a Space for Public
Communication." In *From Public Service Broadcasting to Public Service
Communications*, edited by Damian Tambini and Jamie Cowling. London, UK: Institute
for Public Policy Research.

———. 2005. "The Lonely Citizen: Indirect Representation in an Age of Networks." *Political
Communication* 22 (2): 197–214. https://doi.org/10.1080/10584600590933197.

Commission on Freedom of The Press. 1947. "A Free and Responsible Press." Chicago:
University of Chicago Press. http://archive.org/details/freeandresponsib029216mbp.

"Community Media Database." 2011. Database. http://communitymediadatabase.org/.

Confessore, Nicholas, and Karen Yourish. 2016. "$2 Billion Worth of Free Media for Donald Trump." *New York Times*, March 15, 2016. http://www.nytimes.com/2016/03/16/upshot/measuring-donald-trumps-mammoth-advantage-in-free-media.html.

Constine, Josh. 2016. "How Facebook News Feed Works." *TechCrunch*, September 6, 2016. http://social.techcrunch.com/2016/09/06/ultimate-guide-to-the-news-feed/.

Cook Political Report. 2016. "2016 House: Race Ratings." November 2, 2016. https://www.cookpolitical.com/ratings/house-race-ratings/139359.

Coronel, Sheila. 2012. *Digging Deeper: A Guide for Investigative Journalists in the Balkans*. 2nd ed. BIRN: Balkan Investigative Reporting Network.

Courter, Andrew. 2016. "How to Highlight the Internet." *Happy Highlighting* (blog). July 13, 2016. https://medium.com/highlight-to-share/how-to-highlight-the-internet-4f11e80de895.

Cowan, Geoffrey, and David Westphal. 2010. "Public Policy and Funding the News | USC." USC Annenberg, School for Communication and Journalism. https://fundingthenews.usc.edu/report/.

Crockett, M. J. 2017. "Moral Outrage in the Digital Age." *Nature Human Behaviour* 1 (11): 769–71. https://doi.org/10.1038/s41562-017-0213-3.

CrowdTangle. 2018. "CrowdTangle Platform." CrowdTangle. 2018. https://www.crowdtangle.com/features/.

C-SPAN. 2018. *Ted Cruz Questions Mark Zuckerberg*. https://www.c-span.org/video/?c4722670/ted-cruz-questions-mark-zuckerberg.

Cuningham, Brent. 2003. "Re-Thinking Objectivity." *Columbia Journalism Review*, August 2003. http://www.cjr.org/feature/rethinking_objectivity.php.

Dahlberg, Lincoln. 2004. "The Habermasian Public Sphere: A Specification of the Idealized Conditions of Democratic Communication." *Studies in Soical and Political Thought* 10 (10): 2–18.

———. 2006. "Computer-Mediated Communication and the Public Sphere: A Critical Analysis." *Journal of Computer-Mediated Communication* 7 (1): 0–0. https://doi.org/10.1111/j.1083-6101.2001.tb00137.x.

Dahlgren, Peter. 2000a. "The Internet and the Democratization of Civic Culture." *Political Communication* 17 (4): 335–40. https://doi.org/10.1080/10584600050178933.

———. 2000b. "The Public Sphere and the Net: Structure, Space, and Communication." In *Mediated Politics: Communication in the Future of Democracy*, edited by W. Lance Bennett and Robert M. Entman, 33–55. Cambridge, UK: Cambridge University Press.

———. 2005. "The Internet, Public Spheres, and Political Communication: Dispersion and Deliberation." *Political Communication* 22 (2): 147–62. https://doi.org/10.1080/10584600590933160.

Daly, Christopher B. 2012. *Covering America: A Narrative History of a Nation's Journalism*. Amherst, MA: University of Massachusetts Press. https://www.amazon.com/Covering-America-Narrative-History-Journalism/dp/1625342985/ref=sr_1_1?ie=UTF8&qid=1535047023&sr=8-1&keywords=covering+america+daly&dpID=51BdicC73sL&preST=_SY344_BO1,204,203,200_QL70_&dpSrc=srch.

Danesi, Marcel. 2009. *Dictionary of Media and Communications*. Armonk, N.Y.: Pentagon Press.

Darnton, Robert. 1982. "What Is the History of Books?" *Daedalus* 111 (3): 65–83.

"Data Toys | Playing with Complexity." 2014. Summer 2014. http://petlab.parsons.edu/datatoys/.

Davet, Gérard, Fabrice Lhomme, and Serge Michel. 2015. "SwissLeaks: The Backstory of a Worldwide Investigation." *Le Monde.fr*, February 8, 2015. http://www.lemonde.fr/evasion-fiscale/article/2015/02/08/swissleaks-the-backstory-of-a-worldwide-investigation_4572334_4862750.html.

De Aguiar, Molly. 2015. "Journalism That Connects Us." *The Local News Lab* (blog). July 23, 2015. https://medium.com/the-local-news-lab/journalism-that-connects-us-298e866e93ec.

De La Pena, Nonny. 2017. "Emblematic." Immersive Virtual, Augmented and Mixed Reality. March 18, 2017. http://emblematicgroup.com/.

Deb, Anamitra, Stacy Donohue, and Tom Glaisyer. 2017. "Is Social Media a Threat to Democracy?" Omidyar Group. https://www.omidyargroup.com/pov/2017/10/09/social_media_and_democracy/.

"Defense Contractor Detained Migrant Kids in Vacant Phoenix Office Building." 2018. *Reveal* (blog). July 6, 2018. https://www.revealnews.org/article/defense-contractor-detained-migrant-kids-in-vacant-phoenix-office-building/.

DeLuca, Arthur P. 1976. "FCC Broadcast Standards for Ascertaining Community Needs Comment." *Fordham Urban Law Journal* 5: 55–82.

Democracy Fund. 2018. "Our Healthy Democracy Framework." 2018. https://www.democracyfund.org/vision/entry/framework/.

Densmore, Bill. 2016. "History." Information Trust Exchange Governing Association. September 25, 2016. https://infotrust.org/about/history/.

Detroit Journalism Cooperative. 2017. Detroit Journalism Cooperative. April 23, 2017. http://www.detroitjournalism.org/.

Dewey, John. 1927. *The Public and Its Problems*. New York: Henry Holt.

D'Ignazio, Catherine, Ali Hashmi, and Ethan Zuckerman. 2017. "Mapping the (Boston) Globe: A Project from the MIT Center for Civic Media." April 2017. http://globe.mediameter.org (Defunct).

Doctor, Ken. 2018. "Newsonomics: Alden Global Capital Is Making so Much Money Wrecking Local Journalism It Might Not Want to Stop Anytime Soon." *Nieman Lab*, May 1, 2018. http://www.niemanlab.org/2018/05/newsonomics-alden-global-capital-is-making-so-much-money-wrecking-local-journalism-it-might-not-want-to-stop-anytime-soon/.

Downie, Leonard Jr., and Michael Schudson. 2009. "The Reconstruction of American Journalism." Report. Graduate School of Journalism, Columbia University. http://www.cjr.org/reconstruction/the_reconstruction_of_american.php.

Durkin, Jessica, and Tom Glaisyer. 2010. "Scranton: An Industrial City with a Media Ecosystem Yet to Take Advantage of Digital Opportunities." Case Study. Media Policy Initiative, New America Foundation. https://drive.google.com/file/d/0BzAlEpRfsi15N2ptdlI3NThtVnc/view.

Durkin, Jessica, Tom Glaisyer, and Kara Hadge. 2010. "Seattle: A Digital Community Still in Transition." Case Study. Media Policy Initiative, New America Foundation. https://drive.google.com/file/d/0BzAlEpRfsi15UnNqQU1SNDNNbzA/view.

Dutton, Sarah, Jennifer De Pinto, Fred Backus, Kabir Khanna, and Anthony Salvanto. 2016. "Poll: More Americans Believe Popular Vote Should Decide the President." *CBS News*, December 15, 2016. https://www.cbsnews.com/news/poll-more-americans-believe-popular-vote-should-decide-the-president/.

Economist. 2017. "Why Are The Economist's Writers Anonymous?" *The Economist*, March 27, 2017. https://medium.economist.com/why-are-the-economists-writers-anonymous-8f573745631d.

Eisenstein, Elizabeth L. 2005. *The Printing Revolution in Early Modern Europe*. Cambridge, UK: Cambridge University Press.

Eldridge, Dan. 2017. "Denverite, Billy Penn Get Acquainted after Spirited Media Merger." *Columbia Journalism Review*, March 10, 2017. http://www.cjr.org/united_states_project/denverite-billy-penn-spirited-media-merger.php.

Ember, Sydney. 2016. "More Wretched News for Newspapers as Advertising Woes Drive Anxiety." *New York Times*, October 27, 2016. https://www.nytimes.com/2016/10/28/business/media/buyouts-wall-street-journal-bad-news-for-newspapers.html.

———. 2017. "Times Staff Members Protest Cuts and Changes to News Operation." *New York Times*, December 22, 2017. https://www.nytimes.com/2017/06/29/business/media/new-york-times-staff-members-protest-cuts.html.

Ettema, James S., and Theodore L. Glasser. 1998. *Custodians of Conscience*. New York: Columbia University Press.

Eyes on the Rise. 2014. "About Eyes on the Rise." June 12, 2014. http://www.eyesontherise.org/about/.

Facebook. 2018a. "Instant Articles on Facebook." January 2018. https://instantarticles.fb.com/.

———. 2018b. "Hard Questions: How Is Facebook's Fact-Checking Program Working? | Facebook Newsroom." June 14, 2018. https://newsroom.fb.com/news/2018/06/hard-questions-fact-checking/.

———. 2018c. "Facebook Community – You're Building a Community. We're Here to Help." Social Media Platform. September 9, 2018. https://www.facebook.com/community/.

Facebook Help Center. 2018. "What Kinds of Posts Will I See in News Feed?" 2018. https://www.facebook.com/help/166738576721085.

Farhi, Paul. 2007. "Rolling the Dice." *American Journalism Review*, July 2007. http://ajrarchive.org/Article.asp?id=4343.

———. 2013. "Post Ombudsman Will Be Replaced by Reader Representative." Washington Post. March 1, 2013. https://www.washingtonpost.com/lifestyle/style/post-ombudsman-will-be-replaced-by-reader-representative/2013/03/01/c50c86d2-82c3-11e2-b99e-6baf4ebe42df_story.html.

Farley, Tim. 2014. "Crowdsourced Climate Feedback via the Newly Launched Hypothes.Is." *Skeptical Software Tools* (blog). December 15, 2014. https://skeptools.wordpress.com/2014/12/15/crowdsourced-climate-feedback-hypothes-is/.

———. 2015. "Newsrooms Building Online Tools Skeptics Can Use » Skeptic." *Insight at Skeptic.Com* (blog). February 9, 2015. http://www.skeptic.com/insight/newsrooms-building-online-tools-skeptics-can-use/.

Federal Communications Commission. 2011. "2010 Media Ownership Studies." Federal Communications Commission. June 3, 2011. https://www.fcc.gov/general/2010-media-ownership-studies.

———. 2014. *PROCESSING OF BROADCAST TELEVISION APPLICATIONS PROPOSING SHARING ARRANGEMENTS AND CONTINGENT INTERESTS. FCC Regulations*.

———. 2015. "Media Ownership 2006 Research Studies Archive." Federal Communications Commission. https://www.fcc.gov/media/media-ownership-2006-research-studies-archive.

———. 2017. *Restoring Internet Freedom*. https://www.fcc.gov/restoring-internet-freedom.

Feldman, Carole. 2016. "Poll: Getting Facts Right Key to Americans' Trust in Media." Associated Press. April 17, 2016.

http://bigstory.ap.org/article/35c595900e0a4ffd99fbdc48a336a6d8/poll-vast-majority-americans-dont-trust-news-media.

Fernbach, Philip M., Todd Rogers, Craig R. Fox, and Steven A. Sloman. 2013. "Political Extremism Is Supported by an Illusion of Understanding." *Psychological Science* 24 (6): 939–46. https://doi.org/10.1177/0956797612464058.

Fink, Katherine, and Michael Schudson. 2014. "The Rise of Contextual Journalism, 1950s–2000s." *Journalism* 15 (1): 3–20. https://doi.org/10.1177/1464884913479015.

First Draft News. 2017. "About." First Draft News. 2017. https://firstdraftnews.org/about/.

Florin, Fabrice. 2011. "NewsTrust Baltimore: Project Report." NewsTrust Communications. https://drive.google.com/file/d/1N1gU6suuXACboc4ZecMuSS7e0T5Dxs7I/view.

Forrester, Jay W. 1958. "Industrial Dynamics." *Harvard Business Review* 36 (4): 37–66.

———. 1968. "Industrial Dynamics—After the First Decade." *Management Science* 14 (7): 398–415.

Frenkel, Sheera. 2018. "Facebook to End News Feed Experiment in 6 Countries That Magnified Fake News." *New York Times*, March 2, 2018. https://www.nytimes.com/2018/03/01/technology/facebook-end-news-feed-experiment-six-countries-that-magnified-fake-news.html.

Friedersdorf, Conor. 2014. "The FCC's Dubious Study of American Media." *Atlantic*, February 21, 2014. https://www.theatlantic.com/politics/archive/2014/02/the-fccs-dubious-study-of-american-media/283993/.

Friedland, Lewis. 2013. "Civic Communication in a Networked Society: Seattle's Emergent Ecology." In *Varieties of Civic Innovation: Deliberative, Collaborative, Network and Narrative Approaches*, edited by Jennifer Girouard and Carmen Sirianni, 92–127. Nashville, TN: Vanderbilt Unviersity Press.

Friedland, Lewis A. 2001. "Communication, Community, and Democracy: Toward a Theory of the Communicatively Integrated Community." *Communication Research* 28 (4): 358–91. https://doi.org/10.1177/009365001028004002.

———. 2004. "Public Journalism and Communities." *Excerpt from Public Journalism: Past and Present* 93 (3): 36–42. https://doi.org/10.1002/ncr.59.

———. 2014. "The Real Story behind the FCC's Study of Newsrooms." *Washington Post*, February 28, 2014. https://www.washingtonpost.com/news/monkey-cage/wp/2014/02/28/the-real-story-behind-the-fccs-study-of-newsrooms/.

Friedland, Lewis A., Christopher C. Long, Yong Jun Shin, and Nakho Kim. 2007. "The Local Public Sphere as a Networked Space." In *Media and Public Spheres*, edited by Richard Butsch, 43–57. London, UK: Palgrave Macmillan. https://doi.org/10.1057/9780230206359_4.

Friedman, Matt. 2018. "Menendez's Anti-Hugin Website Comes under Fire for Its News-like Format." *Politico PRO*, July 17, 2018. https://politi.co/2JwWGHr.

Froomkin, Dan. 2017. "Dan Froomkin's Annotation Site—Testing a Hypothes.Is." *Dannotation* (blog). July 11, 2017. http://dannotation.com/ (No longer working).

Fuller, Thomas. 2016. "A Plan to Flood San Francisco With News on Homelessness." *New York Times*, May 15, 2016. https://www.nytimes.com/2016/05/16/us/san-francisco-homelessness.html.

Fung, Archon, Hollie Russon Gilman, and Jennifer Shkabatur. 2013. "Six Models for the Internet + Politics." *International Studies Review* 15 (1): 30–47. https://doi.org/10.1111/misr.12028.

Fung, Brian. 2017. "The FCC Just Repealed a 42-Year-Old Rule Blocking Broadcast Media Mergers." *Washington Post*, November 16, 2017. https://www.washingtonpost.com/news/the-switch/wp/2017/11/16/the-fcc-just-repealed-decades-old-rules-blocking-broadcast-media-mergers/.

Funke, Daniel. 2018. "Fact-Checkers Have Debunked This Fake News Site 80 Times. It's Still Publishing on Facebook." *Poynter*, July 20, 2018. https://www.poynter.org/fact-checking/2018/fact-checkers-have-debunked-this-fake-news-site-80-times-its-still-publishing-on-facebook/.

Gallup Inc. 2015. "Americans' Trust in Media Remains at Historical Low." Gallup.Com. September 28, 2015. http://www.gallup.com/poll/185927/americans-trust-media-remains-historical-low.aspx.

———. 2016. "Americans' Trust in Mass Media Sinks to New Low." http://www.gallup.com/poll/195542/americans-trust-mass-media-sinks-new-low.aspx.

———. 2018. "Confidence in Institutions." Gallup.Com. 2018. https://news.gallup.com/poll/1597/Confidence-Institutions.aspx.

Gans, Herbert J. 2005. *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. 2 edition. Evanston, Ill: Northwestern University Press.

Garron, Barry. 2017. "PBS's Kerger Warns of Station Shutdowns If CPB Goes Dark." Current. July 31, 2017. https://current.org/2017/07/pbss-kerger-warns-of-station-shutdowns-if-cpb-goes-dark/.

Gehring, Verna V., ed. 2004. *The Internet in Public Life*. Institute for Philosophy and Public Policy Studies. Lanham, MD: Rowman & Littlefield.

Gessen, Masha. 2017. *The Future Is History: How Totalitarianism Reclaimed Russia*. New York, NY: Riverhead Books.

Ghosh, Dipyan, and Ben Scott. 2018. "Digital Deceit: The Technologies Behind Precision Propaganda on the Internet." New America. January 2018. https://www.newamerica.org/public-interest-technology/policy-papers/digitaldeceit/.

Gitlin, Todd. 2003. *The Whole World Is Watching: Mass Media in the Making and Unmaking of the New Left, With a New Preface*. 2nd ed. Berkeley, CA: University of California Press.

Glaisyer, Tom. 2005. "Writings/Social Computing Technology and Genocide Prevention." http://virtualthirdside.org/wiki/index.php?title=Writings/Social_Computing_Technology_and_Genocide_Prevention.

———. 2010. "Political Factors: Digital Activism in Closed and Open Societies." In *Digital Activism Decoded: The New Mechanics of Change*, edited by Mary Joyce, 85–98. New York: International Debate Education Association.

Gloria, Kristine, and Kara Hadge. 2010. "An Information Commuity Case Study: Washington, DC: Addressing Information Divides with Diverse Approaches." Case Study. Media Policy Initiative, New America Foundation. https://drive.google.com/file/d/0BzAlEpRfsi15aE9BdzRlN0cwOVk/view?usp=sharing&usp=embed_facebook.

Goins, Cole. 2017. "Journalists Explore Mississippi's Civil Rights Legacy through Theater." *Reveal (Center for Investigative Reporting)* (blog). July 26, 2017. https://www.revealnews.org/article/journalists-explore-mississippis-civil-rights-legacy-through-theater/.

Goldfarb, Avi, and Catherine Tucker. 2011. "Substitution between Offline and Online Advertising Markets." *Journal of Competition Law & Economics* 7: 37–44.

Gordon, Rich, and Zachary Johnson. 2011. "Linking Audiences to News: A Network Analysis of Chicago Websites." IssueLab, Foundation Center. http://www.issuelab.org/resource/linking_audiences_to_news_a_network_analysis_of_chicago_websites.

Graves, Lucas. 2016. *Deciding What's True: The Rise of Political Fact-Checking in American Journalism*. New York: Columbia University Press.

Grossman, Rhys. 2016. "The Industries That Are Being Disrupted the Most by Digital." *Harvard Business Review*, March. https://hbr.org/2016/03/the-industries-that-are-being-disrupted-the-most-by-digital.

Groundsource. 2017. "Groundsource Will Help You Find What the World Wants." GroundSource. March 26, 2017. http://groundsourcing.co/ (Now defunct).

Grynbaum, Michael M. 2017. "Trump Calls the News Media the 'Enemy of the American People.'" *New York Times*, December 22, 2017. https://www.nytimes.com/2017/02/17/business/trump-calls-the-news-media-the-enemy-of-the-people.html.

Guarneri, Julia. 2017. *Newsprint Metropolis: City Papers and the Making of Modern Americans*. 1st Ed. Chicago ; London: University of Chicago Press.

Gunitsky, Seva. 2015. "Corrupting the Cyber-Commons: Social Media as a Tool of Autocratic Stability." *Perspectives on Politics* 13 (1): 42–54. https://doi.org/10.1017/S1537592714003120.

Habermas, Jürgen. 1991. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. The MIT Press.

Hamilton, James T. 2016. *Democracy's Detectives: The Economics of Investigative Journalism*. Cambridge, MA: Harvard University Press.

Hampel, Matt. 2008. "Chi-Town Daily News: Creating a New Supply of Local News." Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Chi-Town%20Daily%20News_MR.pdf.

Hamsher, Jane. 2007. "Time Magazine Circles The Wagons Around Joe Klein." *FDL Main Blog Shadowproof* (blog). November 27, 2007. https://shadowproof.com/2007/11/27/time-magazine-circles-the-wagons-around-joe-klein/.

Hare, Kristin. 2016. "How the Marshall Project Built a Searchable Encyclopedia for Criminal Justice Journalism." *Poynter*, April 8, 2016. http://www.poynter.org/2016/how-the-marshall-project-built-a-searchable-encyclopedia-for-criminal-justice/405802/.

Harry Potter Alliance. 2017. "The Harry Potter Alliance." The Harry Potter Alliance. 2017. http://www.thehpalliance.org/.

Hassan, Adeel. 2003. "Blair's Victims: That Helpless Feeling." *Columbia Journalism Review*, August 2003.

Hearken. 2017a. "The Hearken Notebook." 2017. https://notebook.wearehearken.com/.

———. 2017b. "Editorial Framework." Hearken. March 18, 2017. https://www.wearehearken.com/framework/.

———. 2017c. "EMS Platform." Hearken. March 26, 2017. https://www.wearehearken.com/platform/.

———. 2018. "Case Studies." Hearken. September 2018. https://www.wearehearken.com/case-studies-results/.

Henley, Jon. 2016. "Iceland PM Steps Aside after Protests over Panama Papers Revelations." *Guardian*, April 5, 2016. https://www.theguardian.com/world/2016/apr/05/iceland-prime-minister-resigns-over-panama-papers-revelations.

Hermes Center for Transparency and Digital Human Rights. 2017. "Who Uses It | GlobaLeaks | The OpenSource Whistleblowing Software." GlobaLeaks. June 3, 2017. https://www.globaleaks.org/who-uses-it/.

Hickman, Blair. 2013. "Is Your Doctor in Prescriber Checkup?" *ProPublica*, May 11, 2013. https://www.propublica.org/getinvolved/item/is-your-doc-in-prescriber-checkup-tell-us-what-you-think.

Hochfelder, David. 2012. *The Telegraph in America, 1832–1920*. Baltimore: Johns Hopkins University Press.

Hof, Robert. 2012. "How Tech Firms Steal All the Ad Dollars from News Media." *Forbes*, March 19, 2012. http://www.forbes.com/sites/roberthof/2012/03/19/how-tech-companies-steal-all-the-ad-revenues-from-news-media/.

Holcomb, Jesse, Amy Mitchell, and Kristen Purcell. 2015. "Investigative Journalists and Digital Security: Perceptions of Vulnerability and Changes in Behavior." Washington, DC: Pew Research Center. http://www.journalism.org/2015/02/05/investigative-journalists-and-digital-security/.

Houston, Brant. 2010. "The Future of Investigative Journalism." *Daedalus* 139 (2): 45–56.

———. 2015. "21st Century Muckraking: Investigative Reporting Unleashed." Global Investigative Journalism Network. February 20, 2015. http://gijn.org/2015/02/20/investigative-reporting-unleashed-from-withering-watchdogs-to-global-muckrakers/.

Houston, Brant, and Inc Investigative Reporters and Editors. 2008. *Investigative Reporter's Handbook: A Guide to Documents, Databases, and Techniques*. 5th ed. Boston: Bedford/St. Martin's.

Howard, Philip N., and Muzammil M. Hussain. 2013. *Democracy's Fourth Wave?: Digital Media and the Arab Spring*. Oxford University Press.

Huff, Andrew. 2009. "Chi-Town Daily News Dies, New Venture Rises from the Ashes." *Gapers Block*, September 11, 2009. http://gapersblock.com/ac/2009/09/11/chi-town-daily-news-folds/.

Hughes, Agatha C., and Thomas P. Hughes, eds. 2000. *Systems, Experts, and Computers | The MIT Press*. https://mitpress.mit.edu/books/systems-experts-and-computers.

Hulcoop, Adam, John Scott-Railton, Peter Tanchak, Matt Brooks, and Ron Deibert. 2017. "Tainted Leaks: Disinformation and Phishing With a Russian Nexus." Citizen Lab, Munk School of Global Affairs. https://citizenlab.ca/2017/05/tainted-leaks-disinformation-phish/.

Hutchins, Corey. 2017. "Warren Buffett's Newspapers Deploy Familiar Playbook as Fortunes Dim." *Columbia Journalism Review*, April 13, 2017. https://www.cjr.org/united_states_project/berkshire-hathaway-newspapers-layoffs.php.

Inglehart, Ronald F., and Pippa Norris. 2016. "Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash." SSRN Scholarly Paper ID 2818659.

Rochester, NY: Social Science Research Network.
https://papers.ssrn.com/abstract=2818659.

Institute for Nonprofit News. 2018. "About INN." Institute for Nonprofit News. 2018.
https://inn.org/about/.

International Consortium of Investigative Journalists. 2014. "About This Project: Luxembourg
Leaks." November 4, 2014. https://www.icij.org/project/luxembourg-leaks/about-project-
luxembourg-leaks.

———. 2015. "About This Project: Swiss Leaks." International Consortium of Investigative
Journalists. 2015. https://www.icij.org/project/swiss-leaks/about-project-swiss-leaks.

———. 2017. "The Panama Papers: Exposing the Rogue Offshore Finance Industry." July 1,
2017. https://panamapapers.icij.org/.

Investigative Reporters and Editors, Inc. 2015. "Desert Rates in The History of IRE, Chapter 1."
Desert Rats. 2015. https://www.ire.org/about/history/#chapter1.

ISeeChange. 2017. "About: Mission." 2017. https://www.iseechange.org/about/partners.

Jensen, Tom. 2016. "Trump Remains Unpopular; Voters Prefer Obama on SCOTUS Pick."
Public Policy Polling. December 9, 2016.
https://www.publicpolicypolling.com/polls/trump-remains-unpopular-voters-prefer-
obama-on-scotus-pick/.

J-Lab Knight Community News Network. 2010. "Citizen Media Sites." 2010.
http://kcnn.org/citi-media-site/.

John, Richard R. 1995. *Spreading the News: The American Postal System from Franklin to
Morse*. Cambridge: Harvard.

———. 2015. *Network Nation: Inventing American Telecommunications*. Reprint edition.
Cambridge, MA: Belknap Press: An Imprint of Harvard University Press.

Johnson, Jenna, and Matea Gold. 2017. "Trump Calls the Media 'the Enemy of the American
People.'" *Washington Post*, February 17, 2017.
https://www.washingtonpost.com/news/post-politics/wp/2017/02/17/trump-calls-the-
media-the-enemy-of-the-american-people/.

Jon Fingas. 2016. "Amazon Echo Now Fact-Checks Politicians." *Engadget* (blog). October 23,
2016. https://www.engadget.com/2016/10/23/amazon-echo-fact-checks-politicians/.

Journalism and Media, Staff. 2010. "How News Happens." Pew Research Center.
http://www.journalism.org/2010/01/11/how-news-happens/.

Kafka, Peter. 2016. "An Astonishing Number of People Believe Pizzagate, the Facebook-Fueled
Clinton Sex Ring Conspiracy Story, Could Be True." Recode. December 9, 2016.
https://www.recode.net/2016/12/9/13898328/pizzagate-poll-trump-voters-clinton-
facebook-fake-news.

Kaghan, William N., and Geoffrey C. Bowker. 2001. "Out of Machine Age?: Complexity, Sociotechnical Systems and Actor Network Theory." *Journal of Engineering and Technology Management*, SPECIAL ISSUE ON BEYOND SOCIO-TECHNICAL SYSTEMS, 18 (3): 253–69. https://doi.org/10.1016/S0923-4748(01)00037-6.

Kahneman, Daniel. 2013. *Thinking, Fast and Slow*. New York, NY: Farrar, Strauss and Giroux.

Kang, Cecilia, Nicholas Fandos, and Mike Isaac. 2017. "Tech Executives Are Contrite about Election Meddling, but Make Few Promises on Capitol Hill." *New York Times*, October 31, 2017. https://www.nytimes.com/2017/10/31/us/politics/facebook-twitter-google-hearings-congress.html.

Kaplan, David E. 2013a. "Investigative Journalism: Defining the Craft." Report. http://gijn.org/resources/investigative-journalism-defining-the-craft/.

———. 2013b. "Global Investigative Journalism: Strategies for Support." GLobal. http://www.cima.ned.org/publication/global-investigative-journalism-strategies-for-support/.

Katz, A.J. 2018. "Here's How Facebook's Algorithm Shift Is Hurting Digital Publishers, and the Steps They Can Take to Survive." *Adweek*, March 1, 2018. https://www.adweek.com/digital/heres-how-facebooks-algorithm-shift-is-hurting-digital-publishers-and-the-steps-they-can-take-to-survive/.

Keane, John. 1999. "Public Life in the Era of Communicative Abundance." *Canadian Journal of Communication* 24 (2). http://www.cjc-online.ca/index.php/journal/article/view/1094.

Kelly, John. 2008. "Pride of Place: Mainstream Media and the Networked Public Sphere." Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Pride%20of%20Place_MR.pdf.

Keohane, Joe. 2017. "A Robot May Have Written This Story." *Wired*, February 16, 2017. https://www.wired.com/2017/02/robots-wrote-this-story/.

Keyssar, Alexander. 2009. *The Right to Vote: The Contested History of Democracy in the United States*. Revised ed. New York: Basic Books.

Khan, Lina M. 2017. "Amazon's Antitrust Paradox." *Yale Law Journal* 126 (3): 564–907.

Kim, Young Mie, Jordan Hsu, David Neiman, Colin Kou, Levi Bankston, Soo Yun Kim, Richard Heinrich, Robyn Baragwanath, and Garvesh Raskutti. 2018. "The Stealth Media? Groups and Targets behind Divisive Issue Campaigns on Facebook." *Political Communication*, July, 1–27. https://doi.org/10.1080/10584609.2018.1476425.

Klein, Joe. 2007. "The Tone-Deaf Democrats." *Time*, November 21, 2007. http://content.time.com/time/magazine/article/0,9171,1686813,00.html.

Klein, Scott. 2017a. "Electionland: The Inside Story." ProPublica. https://www.propublica.org/article/electionland-the-inside-story.

———. 2017b.

Knight Foundation. 2011. "Knight Community Information Toolkit." Toolkit. Knight Foundation. http://infotoolkit.org/.

———. 2013. "Finding a Foothold: How NonProfit News Ventures Seek Sustainability." https://www.knightfoundation.org/features/nonprofitnews.

———. 2015. "Gaining Ground: How Nonprofit News Ventures Seek Sustainability." https://www.knightfoundation.org/features/nonprofitnews-2015/.

Knobel, Beth. 2018. *The Watchdog Still Barks: How Accountability Reporting Evolved for the Digital Age*. 1 edition. New York: Fordham University Press.

Kolko, Beth E., ed. 2003. *Virtual Publics*. New York: Columbia University Press.

Kovach, Bill, and Tom Rosenstiel. 2007. *The Elements of Journalism: What Newspeople Should Know and the Public Should Expect, Completely Updated and Revised*. Revised ed. New York: Three Rivers Press.

Kuiken, Jeffrey, Anne Schuth, Martijn Spitters, and Maarten Marx. 2017. "Effective Headlines of Newspaper Articles in a Digital Environment." *Digital Journalism* 5 (10): 1300–1314. https://doi.org/10.1080/21670811.2017.1279978.

Kurtz, Howard. 2009. "Allbritton Communications Will Debut This Spring a New Web Site on Local News in D.C." *Washington Post*, October 29, 2009. http://www.washingtonpost.com/wp-dyn/content/article/2009/10/28/AR2009102804473.html.

Lane, David C. 2007. "The Power of the Bond between Cause and Effect: Jay Wright Forrester and the Field of System Dynamics." *System Dynamics Review (Wiley)* 23 (2/3): 95–118. https://doi.org/10.1002/sdr.370.

Lapowsky, Issie. 2018. "Lawmakers Don't Grasp the Sacred Tech Law They Want to Gut." *Wired*, July 17, 2018. https://www.wired.com/story/lawmakers-dont-grasp-section-230/.

Lardner, George Jr., and Lois Romano. 1999. "At Height of Vietnam, Bush Picks Guard." *Washington Post*, July 28, 1999. http://www.washingtonpost.com/wp-srv/politics/campaigns/wh2000/stories/bush072899.htm.

Latham, Robert, and Saskia Sassen, eds. 2005. *Digital Formations: IT and New Architectures in the Global Realm*. Princeton, NJ: Princeton University Press.

Lee, Dave. 2014. "Robot Writes LA Times Breaking News." *BBC News*, March 18, 2014, sec. Technology. https://www.bbc.com/news/technology-26614051.

Lehrman, Sally. 2017. "What People Really Want From News Organizations." *Atlantic*, May 25, 2017. https://www.theatlantic.com/technology/archive/2017/05/what-people-really-want-from-news-organizations/526902/.

Lerman, Rachel. 2017. "KOMO Cuts Positions in Newsroom." *Seattle Times*, January 5, 2017. http://www.seattletimes.com/business/technology/komo-cuts-positions-in-newsroom/.

Levi, Margaret, and Gillian H. Murphy. 2006. "Coalitions of Contention: The Case of the WTO Protests in Seattle." *Political Studies* 54 (4): 651–70. https://doi.org/10.1111/j.1467-9248.2006.00629.x.

Levy, Dan J. 2008. "Gothamist Network: Gateway to Local News." Case Study. Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Gothamist_MR.pdf.

Levy, Steven. 2004. "The Alpha Bloggers; Meet the Highly Evolved Community of 'A-Listers' with Growing Influence over the Tech Agenda. They Show How Radically Power Can Shift in the Age of the Internet." *Newsweek*, December 20, 2004. https://www.highbeam.com/doc/1G1-126128209.html.

Lewis, Charles. 2010. "New Journalism Ecosystem Thrives." Investigative Reporting Workshop, American University School of Communication. October 29, 2010. http://investigativereportingworkshop.org/ilab/story/ecosystem/.

Libert, Barry, Megan Beck, and Jerry Wind. 2016. "How Platforms Will Disrupt the Future of Media and Entertainment." *Knowledge@Wharton* (blog). November 18, 2016. http://knowledge.wharton.upenn.edu/article/platforms-will-disrupt-future-media-entertainment/.

Lichterman, Joseph. 2016. "With Purple, You Can Get Election Updates and Political Info via Text." *NiemanLab* (blog). March 2, 2016. http://www.niemanlab.org/2016/03/with-purple-you-can-get-election-updates-and-political-info-via-text/.

LION Publishers. 2018. "Mission & Values: Building the Future of Local News." January 2018. http://www.lionpublishers.com/about/mission/.

Lloyd, H. D. 1881. "The Story of a Great Monopoly." *The Atlantic*, March 1, 1881. https://www.theatlantic.com/magazine/archive/1881/03/the-story-of-a-great-monopoly/306019/.

Lokot, Tetyana, and Nicholas Diakopoulos. 2016. "News Bots." *Digital Journalism* 4 (6): 682–99. https://doi.org/10.1080/21670811.2015.1081822.

Lowrey, Wilson. 2006. "Mapping the Journalism–Blogging Relationship." *Journalism* 7 (4): 477–500. https://doi.org/10.1177/1464884906068363.

Lu, Kristine. 2015. "Facebook's Deal with Publishers a Stark Reminder of Digital Ad Gulf." Pew Research Center. *Fact Tank: News in the Numbers* (blog). June 3, 2015. http://www.pewresearch.org/fact-tank/2015/06/03/facebooks-deal-with-publishers-a-stark-reminder-of-digital-ad-gulf/.

Lu, Kristine, and Jesse Holcomb. 2016. "Digital News Revenue: Fact Sheet." State of the News Media. Pew Research Center. http://www.journalism.org/2016/06/15/digital-news-revenue-fact-sheet/.

"Luxleaks Articles - Lexis Nexus." 2017. April 8, 2017. http://www.lexisnexis.com.ezproxy.cul.columbia.edu/hottopics/lnacademic/.

Lynch, Jason. 2015. "Why TV Is Still the Most Effective Advertising Medium." *Adweek*, June 9, 2015. http://www.adweek.com/tv-video/why-tv-still-most-effective-advertising-medium-165247/.

MacArthur, John. 2003. "The Lies We Bought." *Columbia Journalism Review*, June 2003.

Madrigal, Alexis C. 2017. "The Mysterious Printer Code That Could Have Led the FBI to Reality Winner." The Atlantic. June 6, 2017. https://www.theatlantic.com/technology/archive/2017/06/the-mysterious-printer-code-that-could-have-led-the-fbi-to-reality-winner/529350/.

Mantzarlis, Alexios. 2016. "Google News Now Has a 'Fact Check' Tag." *Poynter*, October 13, 2016. https://www.poynter.org/2016/google-news-now-has-a-fact-check-tag/434039/.

Marshall, Jack. 2016. "Patch Rebounds after Split from AOL." *Wall Street Journal*, February 2, 2016. http://www.wsj.com/articles/patch-rebounds-after-split-from-aol-1454445340.

Marshall, Jon, and David Abrahamson, eds. 2011. *Watergate's Legacy and the Press: The Investigative Impulse*. Evanston, IL: Northwestern University Press.

Martinez, Krystina. 2018. "Congrats To Our Award-Winning Hearken Partners!" *We Are Hearken* (blog). July 3, 2018. https://medium.com/we-are-hearken/congrats-to-our-award-winning-hearken-partners-e5035fedda97.

Massing, Michael. 2004. "Now They Tell Us." *New York Review of Books*, February 26, 2004. http://www.nybooks.com/articles/2004/02/26/now-they-tell-us/.

Master, Cyra. 2016. "Final Newspaper Endorsement Count: Clinton 57, Trump 2." *The Hill*, November 6, 2016. http://thehill.com/blogs/ballot-box/presidential-races/304606-final-newspaper-endorsement-count-clinton-57-trump-2.

Matsa, Katerina Eva. 2017. "Network News Fact Sheet." In State of the News Media. Pew Research Center. http://www.journalism.org/fact-sheet/network-news/.

Matsa, Katerina Eva, and Amy Mitchell. 2014. "8 Key Takeaways about Social Media and News." *Pew Research Center's Journalism Project* (blog). March 26, 2014. http://www.journalism.org/2014/03/26/8-key-takeaways-about-social-media-and-news/.

McCabe, David. 2018. "Scoop: 20 Ways Democrats Could Crack down on Big Tech." *Axios*, July 30, 2018. https://www.axios.com/mark-warner-google-facebook-regulation-policy-paper-023d4a52-2b25-4e44-a87c-945e73c637fa.html.

McCaskill, Ewen, and Gabriel Dance. 2013. "The NSA Files." Guardian. November 1, 2013. http://www.theguardian.com/us-news/the-nsa-files.

McGwan, Elizabeth, and Lisa Song. 2012. "The Dilbit Disaster: Inside The Biggest Oil Spill You've Never Heard Of, Part 1," June 22, 2012. http://insideclimatenews.org/news/20120626/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa.

McLellan, Michele. 2017. "Michele's List." April 2017. http://www.micheleslist.org/.

McLuhan Ortved, Stephanie, and David Staines, eds. 2003. *Marshall McLuhan: Understanding Me: Lectures and Interviews*. Cambridge, Mass.: The MIT Press.

McQuaid, John. 2012. "Why a Weak Website Can't Replace a Daily Newspaper in New Orleans." *The Atlantic*, June 12, 2012. https://www.theatlantic.com/national/archive/2012/06/why-a-weak-website-cant-replace-a-daily-newspaper-in-new-orleans/258393/.

Meadows, Donella H. 2008. *Thinking in Systems: A Primer*. Edited by Diana Wright. White River Junction, VT: Chelsea Green Publishing.

Meadows, Donella H., Dennis L. Meadows, Jørgen Randers, and William W. Behrens III. 1972. *The Limits to Growth*. Washington DC: Signet.

Media Consortium. 2018. "The Media Consortium: Mission." 2018. https://www.themediaconsortium.org/page/mission.

Media Matters for America. 2018. "About Us." Media Matters for America. 2018. https://www.mediamatters.org/about.

Media Research Center. 2015. "About the MRC." Media Research Center. 2015. https://www.mrc.org/about.

MediaCloud. 2017. "MediaCloud Is an Open-Source Platform for Media Analysis." Media Cloud. April 2017. https://mediacloud.org/.

Medium Help Center. 2017. "Medium Support: Reading Stories: Highlighting." Medium Support. March 19, 2017. http://help.medium.com/hc/en-us/articles/214406358-Highlighting.

Miel, Persephone, and Robert Faris. 2008. "News and Information as Digital Media Come of Age." Report. Cambridge, MA: Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Overview_MR.pdf.

Miller, Ross. 2015. "AP's 'robot Journalists' Are Writing Their Own Stories Now." The Verge. January 29, 2015. https://www.theverge.com/2015/1/29/7939067/ap-journalism-automation-robots-financial-reporting.

Milton, George Fort. 1936. "The Responsibility of the Press in a Democracy." *American Political Science Review* 30 (4): 681–91. https://doi.org/10.2307/1947945.

Mitchell, Amy, Jeffrey Gottfried, Michael Barthel, and Elisa Shearer. 2016a. "Pathways to News." *Pew Research Center's Journalism Project* (blog). July 7, 2016. http://www.journalism.org/2016/07/07/pathways-to-news/.

———. 2016b. "Trust and Accuracy." Pew Research Center. http://www.journalism.org/2016/07/07/trust-and-accuracy/.

Mitchell, Amy, Mark Jurkowitz, Jesse Holcomb, Jodi Enda, and Monica Anderson. 2013. "Nonprofit Journalism: A Growing but Fragile Part of the U.S. News System." Report. Pew Research Center. http://www.journalism.org/2013/06/10/landscape/.

Mizner, David. 2009. "Reporting an Explosive Truth: The Boston Globe and Sexual Abuse in the Catholic Church." Knight Case Studies Initiative. Graduate School of Journalism, Columbia University. http://ccnmtl.columbia.edu/projects/caseconsortium/casestudies/14/casestudy/www/layout/case_id_14.html.

Moglen, Eben, and Pamela S. Karlan. 2001. "The Soul of a New Political Machine: The Online, the Color Line and Electronic Democracy Symposium: Internet Voting and Democracy." *Loyola of Los Angeles Law Review* 34 (3): 1089–1114.

Morgan, Fiona. 2011. "Triangle NC: A Digitally Connnected Region in Need of Greater Capacity to Gather News and Information." Case Study. Media Policy Initiative, New America Foundation. https://drive.google.com/file/d/0BzAlEpRfsi15cFA1ekZGdE1zWlU/view?usp=sharing&usp=embed_facebook.

Morris, Roy. 1999. *Ambrose Bierce: Alone in Bad Company*. New York: Oxford University Press.

Morton, John. 1991. "40 Years of Death In The Afternoon." *American Journalism Review*, November 1991. http://ajrarchive.org/Article.asp?id=73.

Moses, Lucia. 2016. "Apple News Is Sending Publishers Traffic, but Not Revenue." *Digiday* (blog). October 17, 2016. https://digiday.com/media/apple-news-sending-publishers-traffic-not-revenue/.

———. 2017. "Now Profitable, Patch Wants to Be a Platform for Other Local News Outlets." *Digiday*, May 9, 2017. https://digiday.com/media/now-profitable-patch-wants-platform-local-news-outlets/.

Moynihan, Michael. 2012. "Jonah Lehrer's Deceptions: The Celebrated Journalist Fabricated Bob Dylan Quotes in His New Book, Imagine: How Creativity Works." *Tablet Magazine*, July 30, 2012. http://www.tabletmag.com/jewish-news-and-politics/107779/jonah-lehrers-deceptions.

Muhlberger, Peter. 2005. "Human Agency and the Revitalization of the Public Sphere." *Political Communication* 22 (2): 163–78. https://doi.org/10.1080/10584600590933179.

Mullin, Benjamin. 2016. "How The Washington Post Is Using Genius to Explain the Twists and Turns of a Crazy Election." *Poynter*, July 13, 2016. https://www.poynter.org/news/how-washington-post-using-genius-explain-twists-and-turns-crazy-election.

Munson, Eve Stryker, and Catherine A. Warren. 1997. *James Carey: A Critical Reader*. 1st Ed. Minneapolis: Univ Of Minnesota Press.

Mutz, Diana C. 2015. *In-Your-Face Politics: The Consequences of Uncivil Media*. Princeton: Princeton University Press. https://www.jstor.org/stable/j.ctt1djmhbx.

Napoli, Philip M. 2015. "Understanding What Audiences Want from Local News." *Columbia Journalism Review*, September 22, 2015. http://www.cjr.org/united_states_project/understanding_the_local_news_audience.php.

Napoli, Philip M., Sarah Stonbely, Kathleen McCollough, and Bryce Renninger. 2017. "Local Journalism and the Information Needs of Local Communities." *Journalism Practice* 11 (4): 373–95. https://doi.org/10.1080/17512786.2016.1146625.

Napoli, Philip M., Matthew Weber, Kathleen McCollough, and Qun Wang. 2018. "Assessing Local Journalism: News Deserts, Journalism Divides, and the Determinants of the Robustness of Local News." North Carolina: Sanford School, Duke University.

Napoli, Philip, Sarah Stonbely, Lew Friedland, Tom Glaisyer, and Joshua Breitbart. 2012. "Understanding Media Diversity Using Media Ecosystem Analysis." Report. Media Policy Initiative, New America Foundation. https://www.academia.edu/7375012/Understanding_Media_Diversity_Using_Media_Ecosystem_Analysis.

National Conference of State Legislatures. 2014. "Statewide Video Franchising Statutes." National Conference of State Legislatures. November 2014. http://www.ncsl.org/research/telecommunications-and-information-technology/statewide-video-franchising-statutes.aspx.

National Institute of Money and Politics. 2017. "Mission & History." 2017. https://www.followthemoney.org/about-us/mission-and-history/.

National Rifle Association. 2015. "Bloomberg to Launch Proprietary Anti-Gun Media Arm." NRA-Institute for Legislative Action. May 15, 2015. https://www.nraila.org/articles/20150515/bloomberg-to-launch-proprietary-anti-gun-media-arm.

Neibauer, Michael. 2016. "Gannett Announces Layoffs That Will Reach Its McLean HQ." *Washington Business Journal*, October 24, 2016. http://www.bizjournals.com/washington/news/2016/10/24/gannett-announces-layoffs-that-will-reach-its.html.

Nelson, Louis. 2017. "Trump Continues Attack on 'Fake News' NBC." *POLITICO*, October 13, 2017. https://www.politico.com/story/2017/10/13/trump-attack-nbc-fake-news-243744.

Nerone, John. 2015. *The Media and Public Life: A History*. 1 edition. Cambridge, UK; Malden, MA: Polity.

Neuman, W. Russell. 2016. *The Digital Difference: Media Technology and the Theory of Communication Effects*. Cambridge, MA: Harvard University Press.

Neuman, W. Russell, and Krysha Gregorowicz. 2010. "A Critical Transition in Political Communication: From Push Media to Pull Media." APSA 2010 Annual Meeting Paper. https://papers.ssrn.com/abstract=1644474.

Neuman, W. Russell, Yong Jin Park, and Elliot Panek. 2012. "Tracking the Flow of Information into the Home: An Empirical Assessment of the Digital Revolution in the United States, 1960—2005." *International Journal of Communication* 6 (January): 1022–41.

New American Media. 2017. "New America Media." New American Media. April 23, 2017. http://newamericamedia.org/network/association/.

"New Questions On Bush Guard Duty." 2004. *60 Minutes*. CBS. https://www.cbsnews.com/news/new-questions-on-bush-guard-duty-08-09-2004/.

Newitz, Annalee. 2016. "Facebook Will Outsource Fact-Checking to Fight Fake News." *Ars Technica* (blog). December 16, 2016. https://arstechnica.com/business/2016/12/facebook-will-outsource-fact-checking-to-fight-fake-news/.

"News Voices." 2017. Free Press. March 12, 2017. https://www.newsvoices.org/news-voices.

NewsBot. 2017. "NewsBot - Related News at the Click of a Button." 2017. http://getnewsbot.com.

Newspaper Association of America. 2014. "Trends and Numbers - Newspaper Revenue." http://www.naa.org/Trends-and-Numbers/Newspaper-Revenue.aspx (Defunct).

"Newspaper Death Watch." 2018. September 2018. http://newspaperdeathwatch.com/.

NewsWhip. 2017. "One-up Your Competition by Putting a Spin on Their Best Hits." NewsWhip. April 12, 2017. https://www.newswhip.com/2017/04/competitive-analysis-social-media/.

Nielsen, Rasmus Kleis. 2012. *Ground Wars: Personalized Communication in Political Campaigns*. Princeton: Princeton University Press.

Noam, Eli. 2006. "Good News for News." *Financial Times*, June 22, 2006.

North Carolina Newsroom Cooperative. 2017. "A Community of Nonfiction Storytellers Committed to Quality, Ethics & Collaboration." April 23, 2017. https://ncnewsroom.org/.

Nossiter, Adam, David E. Sanger, and Nicole Perlroth. 2017. "Hackers Came, but the French Were Prepared." *New York Times*, December 22, 2017.

https://www.nytimes.com/2017/05/09/world/europe/hackers-came-but-the-french-were-prepared.html.

O'Donovan, Caroline. 2013. "Journalists of the Jersey Shore: How a Novice Reporter Built a News Network from Scratch." *NiemanLab* (blog). October 8, 2013. http://www.niemanlab.org/2013/10/journalists-of-the-jersey-shore-how-a-novice-reporter-built-a-news-network-from-scratch/.

OED Online. 2017. "News, N." In *OED Online*. Oxford University Press. http://www.oed.com/view/Entry/126615?rskey=4aX0Kz&result=3 (accessed August 25, 2018).

Olmstead, Kenneth. 2014. "As Digital Ad Sales Grow, News Outlets Get a Smaller Share." Pew Research Center. *Fact Tank: News in the Numbers* (blog). April 25, 2014. http://www.pewresearch.org/fact-tank/2014/04/25/as-digital-ad-sales-grow-news-outlets-get-a-smaller-share/.

Oremus, Will. 2018. "A Close Look at How Facebook's Retreat From the News Has Hurt One Particular Website—Ours." Slate Magazine. June 27, 2018. https://slate.com/technology/2018/06/facebooks-retreat-from-the-news-has-painful-for-publishers-including-slate.html.

Outlier Media. 2018. "FAQs." *OUTLIER MEDIA* (blog). July 11, 2018. https://outliermedia.org/faqs/.

Overholser, Geneva. 2017. "How to Best Serve Communities: Reflections on Civic Journalism: Democracy Fund." https://www.democracyfund.org/publications/how-to-best-serve-communities-reflections-on-civic-journalism/.

Owen, Laura Hazard. 2015. "In a Year of Horrific Gun Violence, The Trace Tries to Balance Fast Sharing and Slower Reporting." *NiemanLab* (blog). October 13, 2015. http://www.niemanlab.org/2015/10/in-a-year-of-horrific-gun-violence-the-trace-tries-to-balance-fast-sharing-and-slower-reporting/.

———. 2017a. "Voice of San Diego's 'What We Stand For' Is Straightforward — and a Bold Stance against 'Objectivity.'" *NiemanLab*, March 9, 2017. http://www.niemanlab.org/2017/03/voice-of-san-diegos-what-we-stand-for-is-straightforward-and-a-bold-stance-against-objectivity/.

———. 2017b. "The Trust Project Brings News Orgs and Tech Giants Together to Tag and Surface High-Quality News." *Nieman Lab*, November 16, 2017. http://www.niemanlab.org/2017/11/the-trust-project-brings-news-orgs-and-tech-giants-together-to-tag-and-surface-high-quality-news/.

Pai, Ajit. 2017. "Chairman Pai on Economic Analysis in Communications Policy." Washington, DC: Federal Communications Commission. https://www.fcc.gov/document/chairman-pai-economic-analysis-communications-policy.

"Panama Papers - LexisNexis." 2017. April 8, 2017.
        http://www.lexisnexis.com.ezproxy.cul.columbia.edu/hottopics/lnacademic/.

Parnes, Amie, and Kevin Cirilli. 2015. "The $5 Billion Presidential Campaign?" *The Hill*,
        January 21, 2015. http://thehill.com/blogs/ballot-box/presidential-races/230318-the-5-
        billion-campaign.

Pasquale, Frank. 2016. *The Black Box Society: The Secret Algorithms That Control Money and
        Information*. Reprint edition. Cambridge, MA: Harvard University Press.

Patel, Mayur, and Michelle McLellan. 2011. "Getting Local: How Nonprofit News Ventures
        Seek Sustainability." Knight Foundation. https://knightfoundation.org/reports/getting-
        local-how-nonprofit-news-ventures-seek-sus.

Pauly, John J. 2014. "The New Journalism and the Struggle for Interpretation." *Journalism* 15
        (5): 589–604. https://doi.org/10.1177/1464884914529208.

Pein, Corey. 2005. "Blog-Gate." *Alternet* (blog). January 7, 2005.
        http://www.alternet.org/story/20923/blog-gate.

Penenberg, Adam L. 1998. "Lies, Damn Lies and Fiction." *Forbes*, May 11, 1998.

Perrin, Andrew, and Maeve Duggan. 2015. "Americans' Internet Access: 2000-2015." Pew
        Research Center. http://www.pewinternet.org/2015/06/26/americans-internet-access-
        2000-2015/.

Perrin, Andrew, and JingJing Jiang. 2015. "One-Fifth of Americans Report Going Online
        'Almost Constantly.'" Pew Research Center. *Fact Tank: News in the Numbers* (blog).
        December 8, 2015. http://www.pewresearch.org/fact-tank/2015/12/08/one-fifth-of-
        americans-report-going-online-almost-constantly/.

Pettegree, Andrew. 2014. *The Invention of News: How the World Came to Know About Itself*. F
        First Edition edition. New Haven ; London, England: Yale University Press.

Pettitt, Thomas. 2010. "The Gutenberg Parenthesis: Oral Tradition and Digital Technologies." In
        Media in Transition 5: Creativity, Ownership and Collaboration in the Digital Age.
        Cambridge, MA. http://web.mit.edu/comm-
        forum/mit5/papers/pettitt_plenary_gutenberg.pdf.

Pew Research Center. 2016. "Many Americans Often Get News from Digital Media Platforms."
        Factsheet. Pew Research Center. http://www.journalism.org/2016/06/15/digital-news-
        audience-fact-sheet/pj_2016-06-15_state-of-the-news-media_digital-audience-01/.

———. 2018. "Trends and Facts on Newspapers." http://www.journalism.org/fact-
        sheet/newspapers/.

Picard, Robert G. 1997. "Modeling the Problem: De Novo Entry into Daily Newspaper
        Markets." *Newspaper Research Journal* 18 (3–4): 94.

———. 2015. "Protecting News Today." In *Making News: The Political Economy of Journalism in Britain and America from the Glorious Revolution to the Internet*, edited by Richard R. John and Jonathan Silberstein-Loeb, 1st Ed., 223–33. Oxford: Oxford University Press.

Pidgeon, David. 2016. "Where Did the Money Go? Guardian Buys Its Own Ad Inventory." *Mediatel Newsline*, October 4, 2016. http://mediatel.co.uk/newsline/2016/10/04/where-did-the-money-go-guardian-buys-its-own-ad-inventory.

Political Party Time. 2018. "It's About the Money." Political Party Time. 2018. http://politicalpartytime.org/about/.

Political TV Ad Archive. 2017. "Press: Explore News That Is Using Our Data." Internet Archive. 2017. https://politicaladarchive.org/press/.

———. 2018. "TV News Archive." Internet Archive. 2018. https://archive.org/details/tv.

Politifact. 2017. "PolitiFact: Genius." December 2, 2017. https://genius.com/artists/Politifact.

Pool, Ithiel de Sola. 1984. *Technologies of Freedom*. Cambridge, MA: Belknap Press.

Pooley, Jefferson D. 2016. *James W. Carey and Communication Research: Reputation at the University's Margins*. New York: Peter Lang.

Porter, Michael E. 1979. "How Competitive Forces Shape Strategy." *Harvard Business Review* 57 (2): 137–45.

———. 1998. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press.

Potts, Mark. 2005. "Journalism: Its Intersection With Hyperlocal Web Sites." *Nieman Reports*, December 15, 2005. http://niemanreports.org/articles/journalism-its-intersection-with-hyperlocal-web-sites/.

Priest, Dana, and William M. Arkin. 2010. "Top Secret America." *The Washington Post*, 2010. http://projects.washingtonpost.com/top-secret-america/.

Project for Excellence in Journalism. 2008. "Network Television Audience (Archived 2008 - 2017)." State of the Media. Project for Excellence in Journalism: Pew Research Center. http://www.stateofthemedia.org/2008/network-tv-intro/audience/.

Publeaks. 2017. "Initiatives." November 26, 2017. https://www.publeaks.org/#initiatives.

Pulitzer Prize Board. 2017. "David A. Fahrenthold of The Washington Post." April 7, 2017. http://www.pulitzer.org/winners/david-fahrenthold.

Putnam, Robert D. 2001. *Bowling Alone: The Collapse and Revival of American Community*. New York: Touchstone Books.

Ramos, Daniel, Mehmet Hadi Gunes, Donica Mensing, and David M. Ryfe. 2013. "Mapping Emerging News Networks: A Case Study of the San Francisco Bay Area." In *Complex

Networks: Studies in Computational Intelligence, edited by Ronaldo Menezes, Alexandre Evsukoff, and Marta C. González, 237–44. Berlin: Springer.

Reis, António Baía, and António Fernando Vasconcelos Cunha Castro Coelho. 2018. "Virtual Reality and Journalism." *Digital Journalism* 6 (8): 1090–1100. https://doi.org/10.1080/21670811.2018.1502046.

"Review of the Literature Regarding Critical Information Needs of the American Public." 2012. Washington, DC: Federal Communications Commission. https://www.fcc.gov/news-events/blog/2012/07/25/review-literature-regarding-critical-information-needs-american-public.

Rheingold, Howard. 1993. *The Virtual Community: Homesteading on the Electronic Frontier*. Revised edition edition. Cambridge, MA: MIT Press.

———. 2003. *Smart Mobs: The Next Social Revolution*. Cambridge, MA: Basic Books.

Ricigliano, Robert. 2012. *Making Peace Last: A Toolbox for Sustainable Peacebuilding*. Boulder, CO: Routledge.

Ricigliano, Robert, and Diana Chigas. 2011. "Systems Thinking in Conflict Assessment: Concepts and Application." Report. USAID. http://dev.usaidlearninglab.org.623elmp01.blackmesh.com/library/systems-thinking-conflict-assessment-concepts-and-application-0.

Risen, James. 2018. "The Biggest Secret: My Life as a New York Times Reporter in the Shadow of the War on Terror." *The Intercept* (blog). January 3, 2018. https://theintercept.com/2018/01/03/my-life-as-a-new-york-times-reporter-in-the-shadow-of-the-war-on-terror/.

Risen, James, and Eric Lichtblau. 2005. "Bush Lets U.S. Spy on Callers without Courts." *New York Times*, December 16, 2005. http://www.nytimes.com/2005/12/16/politics/bush-lets-us-spy-on-callers-without-courts.html.

Roberts, Gene. 2000. *The Big Chill: Investigative Reporting in the Current Media Environment*. Edited by Marilyn Greenwald and Joseph Bernt. Ames, IA: Wiley-Blackwell.

Robinson, Walter V. 2000. "One-Year Gap in Bush's National Guard Duty." *Boston.Com*, May 23, 2000. https://web.archive.org/web/20000619121358/www.boston.com/news/politics/campaign2000/news/One_year_gap_in_Bush_s_Guard_duty+.shtml.

Rose, Frank. 2015. "3.0 the Attention Economy." *Miliken Institute Review: A Journal of Economic Policy*, July 2015. http://www.milkenreview.org/articles/the-attention-economy-3-0?IssueID=9.

Rosen, Jay. 2003. "PressThink: The Terms of Authority Are Shifting." *Columbia Journalism Review*, 2003.

———. 2006a. "PressThink: The People Formerly Known as the Audience." *PressThink* (blog). June 27, 2006. http://archive.pressthink.org/2006/06/27/ppl_frmr.html.

———. 2006b. "PressThink: The People Formerly Known as the Audience." *PressThink* (blog). June 27, 2006. http://archive.pressthink.org/2006/06/27/ppl_frmr.html.

———. 2010. "The View from Nowhere: Questions and Answers." *PressThink* (blog). November 10, 2010. http://pressthink.org/2010/11/the-view-from-nowhere-questions-and-answers/.

Russell, Frank Michael, Esther Thorson, Margaret Duffy, and Heesook Choi. 2014. "Converging on Quality: Integrating the St. Louis Beacon and St. Louis Public Radio Newsrooms." In . 2014 Annual Conference of Association for Education in Journalism and Mass Communication in Montreal, Canada. http://citation.allacademic.com/meta/p_mla_apa_research_citation/7/4/4/1/3/p744137_index.html.

Sager, Mike. 2016. "The Fabulist Who Changed Journalism." *Columbia Journalism Review*, 2016. https://www.cjr.org/the_feature/the_fabulist_who_changed_journalism.php.

Sanford, Bruce W., Bruce D. Brown, and Laurie A. Babinski. 2009. "Saving Journalism with Copyright Reform and the Doctrine of Hot News." *Communications Lawyer* 26 (4): 8–11.

Scammell, Margaret. 2000. "The Internet and Civic Engagement: The Age of the Citizen-Consumer." *Political Communication* 17 (4): 351–55. https://doi.org/10.1080/10584600050178951.

Schaffer, Jan. 2010. "Exploring a Networked Journalism Collaborative in Philadelphia." J-Lab: The Institute for Interactive Journalism. http://www.j-lab.org/publications/exploring-a-networked-journalism-collaborative-in-philadelphia/.

Schaffer, Michael. 2011. "TBD's Night of the Long Knives." *Washington City Paper*, February 23, 2011. http://www.washingtoncitypaper.com/news/city-desk/blog/13063085/tbds-night-of-the-long-knives.

Schieffer, Bob, and H. Andrew Schwartz. 2017. *Overload: Finding the Truth in Today's Deluge of News*. Lanham, Maryland: Rowman & Littlefield Publishers.

Schiffrin, Anya, ed. 2014. *Global Muckraking: 100 Years of Investigative Journalism from Around the World*. New York: New Press.

———. 2017. "Government and Corporations Hinder Journalists with 'Media Capture.'" *Columbia Journalism Review*, August 29, 2017. https://www.cjr.org/watchdog/media-capture.php.

Schudson, Michael. 1981. *Discovering The News: A Social History of American Newspapers*. New York: Basic Books.

———. 1993. *Watergate In American Memory: How We Remember, Forget, and Reconstruct The Past*. New York: Basic Books.

———. 1996. *The Power of News*. Cambridge MA: Harvard University Press.

———. 1998. *The Good Citizen: A History of American Civic Life*. New York: Free Press.

———. 2001. "The Objectivity Norm in American Journalism." *Journalism* 2 (2): 149–70. https://doi.org/10.1177/146488490100200201.

———. 2008. *Why Democracies Need an Unlovable Press*. Cambridge, UK: Polity.

Seamans, Robert, and Feng Zhu. 2013. "Responses to Entry in Multi-Sided Markets: The Impact of Craigslist on Local Newspapers." *Management Science* 60 (2): 476–93. https://doi.org/10.1287/mnsc.2013.1785.

SecureDrop. 2017. "The Official SecureDrop Directory." June 18, 2017. https://securedrop.org/directory.

Segal, Howard. 1985. *Technological Utopianism in American Culture*. Chicago: University Of Chicago Press.

Serrin, Judith, and William Serrin, eds. 2002. *Muckraking!: The Journalism That Changed America*. New York: The New Press.

Shaban, Hamza. 2017. "Quarterly Earnings for Google, Facebook Reflect Growing Dominance in Digital Ad Market." *Washington Post*, July 27, 2017. https://www.washingtonpost.com/business/economy/quarterly-earnings-for-google-facebook-reflect-growing-dominance-in-digital-ad-market/2017/07/27/938360e4-731a-11e7-8f39-eeb7d3a2d304_story.html.

Sharman, Jon. 2017. "New York Times Uses Anonymous Byline in Turkey." *Independent*, January 3, 2017. http://www.independent.co.uk/news/world/americas/new-york-times-anonymous-byline-turkey-news-reporters-journalists-protect-istanbul-attack-nightclub-a7506981.html.

Shedden, David. 2014. "Today in Media History: CompuServe and the First Online Newspapers." *Poynter*, September 24, 2014. https://www.poynter.org/news/today-media-history-compuserve-and-first-online-newspapers.

Shernstein, Aliya, and Joe Yerardi. 2018. "The Basis for Killing Network Neutrality Rules Is Bogus, Studies Say." Center for Public Integrity. June 12, 2018. https://www.publicintegrity.org/2018/06/12/21849/basis-killing-network-neutrality-rules-bogus-studies-say.

Shin, Annys. 2014. "The Death of Homicide Watch D.C.: Bloggers Take Their Last Case." *Washington Post*, December 28, 2014. https://www.washingtonpost.com/local/the-death-of-homicide-watch-dc-bloggers-take-their-last-case/2014/12/28/dce867fa-86f2-11e4-9534-f79a23c40e6c_story.html.

Simpson, April. 2016. "At CIR–WFMU Show, Comedians Mine Environmental Reporting for Laughs." Current. September 19, 2016. https://current.org/2016/09/at-cir-wfmu-show-comedians-mine-environmental-reporting-for-laughs/.

Skocpol, Theda. 1997. "The Tocqueville Problem: Civic Engagement in American Democracy." *Social Science History* 21 (4): 455–79. https://doi.org/10.2307/1171662.

Snyder, Timothy. 2017. *On Tyranny: Twenty Lessons from the Twentieth Century*. New York: Tim Duggan Books.

Socolow, Michael J. 2010. "'We Should Make Money on Our News': The Problem of Profitability in Network Broadcast Journalism History." *Journalism* 11 (6): 675–91. https://doi.org/10.1177/1464884910379707.

"Some Are Red, Some Are Blue, All Are Green." 2017. Downloadable Browser Extension. Greenhouse. 2017. http://allaregreen.us.

Spayd, Liz. 2017. "The Public Editor Signs Off." *The New York Times*, June 2, 2017. https://www.nytimes.com/2017/06/02/public-editor/liz-spayd-final-public-editor-column.html.

Starkman, Dean. 2015. *The Watchdog That Didn't Bark: The Financial Crisis and the Disappearance of Investigative Journalism*. Reprint ed. New York: Columbia University Press.

Starr, Paul. 2005. *The Creation of the Media: Political Origins of Modern Communications*. New York: Basic Books.

———. 2009. "Goodbye to the Age of Newspapers (Hello to a New Era of Corruption)." *New Republic*, March 4, 2009. https://newrepublic.com/article/64252/goodbye-the-age-newspapers-hello-new-era-corruption.

Statt, Nick. 2017. "Facebook Is Determined to Completely Kill Clickbait." *The Verge*, May 17, 2017. https://www.theverge.com/2017/5/17/15654730/facebook-news-feed-update-kill-off-clickbait.

Stearns, Josh. 2015. "New Revenue for News: 52 Ideas to Support Local Journalism." *Medium* (blog). June 24, 2015. https://medium.com/the-engaged-journalism-lab/new-revenue-for-news-52-ideas-to-support-local-journalism-1ee3720a7897.

Stelter, Brian. 2018. "New Jersey Poised to Invest $5 Million into Local Journalism." *CNNMoney* (blog). July 3, 2018. https://money.cnn.com/2018/07/03/media/new-jersey-civic-info-bill/index.html.

Sternbergh, Adam. 2006. "Inside the Disco Inferno." *New York Magazine*, July 10, 2006. http://nymag.com/arts/all/process/17386/.

Stonbely, Sarah. 2017. "Comparing Models of Collaborative Journalism." Center for Cooperative Media. https://collaborativejournalism.org/research/.

Stroud, Natalie Jomini. 2017. "Attention as a Valuable Resource." *Political Communication* 34 (3): 479–89. https://doi.org/10.1080/10584609.2017.1330077.

Sunlight Foundation. 2017. "Tracking the Trump Administration's Record on Transparency." Sunlight Foundation. July 20, 2017. https://sunlightfoundation.com/tracking-trumps-attacks-on-transparency/.

Sunstein, Cass R. 2002. *Republic.Com*. Princeton, NJ: Princeton University Press.

Swaine, Jon, Oliver Laughland, Jamiles Lartey, Kenan Davis, Rich Harris, Nadja Popovich, Kenton Powell, and Guardian US Interactive Team. 2017. "The Counted: People Killed by Police in the United States–Interactive." *The Guardian*, 2017. http://www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-police-killings-us-database.

"Swissleaks - Lexis Nexus." 2017. April 8, 2017. http://www.lexisnexis.com.ezproxy.cul.columbia.edu/hottopics/lnacademic/.

Tenore, Mallary Jean. 2011. "10 Ways Journalists Can Use Twitter Before, During and After Reporting a Story." *Poynter* (blog). September 20, 2011. http://www.poynter.org/2011/10-ways-journalists-can-use-twitter-before-during-and-after-reporting-a-story/146345/.

"The Knight Commission on Information Needs of Communities in a Democracy." 2009. Aspen Institute. https://www.aspeninstitute.org/programs/communications-and-society-program/the-knight-commission-on-information-needs-of-communities-in-a-democracy/.

"The Nonprofit News Model | Reporters Committee for Freedom of the Press." 2016. May 9, 2016. https://www.rcfp.org/nonprofit-news-guide/nonprofit-news-model.

The Trace. 2017. "About The Trace." March 19, 2017. https://www.thetrace.org/about-the-trace/.

"The Withering Watchdog—Exposé: America's Investigative Reports." 2009. *Exposé: America's Investigative Reports*. WNET. http://www.pbs.org/wnet/expose/2009/06/the-withering-watchdog.html.

Thompson, Ginger. 2018. "Listen to Children Who've Just Been Separated From Their Parents at the Border." *ProPublica*, June 18, 2018. https://www.propublica.org/article/children-separated-from-parents-border-patrol-cbp-trump-immigration-policy.

Tocqueville, Alexis de. 1835. *Democracy in America*. Edited by Bruce Frohnen. New York: Saunders and Otley.

Townsend, Tess. 2017. "Google's Share of the Search Ad Market Is Expected to Grow." Recode. March 14, 2017. https://www.recode.net/2017/3/14/14890122/google-search-ad-market-share-growth.

Tucher, Andie. 1994. *Froth and Scum: Truth, Beauty, Goodness, and the Ax Murder in America's First Mass Medium*. Chapel Hill: The University of North Carolina Press.

———. 2006. "Reporting for Duty: The Bohemian Brigade, the Civil War, and the Social Construction of the Reporter." *Book History* 9 (1): 131–57. https://doi.org/10.1353/bh.2006.0013.

Tufekci, Zeynep. 2017. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. New Haven ; London: Yale University Press.

———. 2018. "How Social Media Took Us from Tahrir Square to Donald Trump." *MIT Technology Review*, August 14, 2018. https://www.technologyreview.com/s/611806/how-social-media-took-us-from-tahrir-square-to-donald-trump/.

Twitter. 2017. "Twitter Civic Engagement." December 16, 2017. https://about.twitter.com/en_us/values/civic-engagement.html.

United Nations Educational, Scientific and Cultural Organization. 2011. "Story-Based Inquiry: A Manual for Investigative Journalists." 2011. http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/story-based-inquiry-a-manual-for-investigative-journalists/.

Upbin, Bruce. 2016. "Introducing the Forbes Newsbot on Telegram." *Forbes*, February 23, 2016. http://www.forbes.com/sites/bruceupbin/2016/02/23/introducing-the-forbes-newsbot-on-telegram/.

Ureneck, Lou. 1999. "Newspapers Arrive at Economic Crossroads." *Nieman Reports*, June 15, 1999. http://niemanreports.org/articles/newspapers-arrive-at-economic-crossroads/.

U.S. Bureau of Labor Statistics. 2017. "Reporters, Correspondents, and Broadcast News Analysts." Occupational Outlook Handbook. https://www.bls.gov/ooh/media-and-communication/reporters-correspondents-and-broadcast-news-analysts.htm#tab-1.

U.S. Census Bureau. 2017. "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016 More Information 2016 Population Estimates." August 26, 2017. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk.

U.S. Government. 2016. "About Open Government." The White House. 2016. https://obamawhitehouse.archives.gov/node/8635.

U.S. Kerner Commission. 1968. "Report of the National Advisory Commission on Civil Disorders." Washington, DC: U.S. Government Printing Office.

Usenet. 2003. "Urban Dictionary: Godwin's Law." Urban Dictionary. September 3, 2003. https://www.urbandictionary.com/define.php?term=Godwin%27s%20Law.

Victor, Daniel. 2017. "Trump, Calling Journalists 'Sick People,' Puts Media on Edge." *New York Times*, December 22, 2017. https://www.nytimes.com/2017/08/23/business/media/trump-rally-media-attack.html.

Villanueva, George, Garrett M. Broad, Carmen Gonzalez, Sandra Ball-Rokeach, and Sheila Murphy. 2016. "Communication Asset Mapping: An Ecological Field Application toward Building Healthy Communities." *International Journal of Communication* 10 (May): 2704–24.

Vis, Farida. 2013. "Twitter as a Reporting Tool for Breaking News." *Digital Journalism* 1 (1): 27–47. https://doi.org/10.1080/21670811.2012.741316.

Voakes, Paul S. 2004. "A Brief History of Public Journalism." *National Civic Review* 93 (3): 25–35. https://doi.org/10.1002/ncr.58.

Waldman, Steven, and Working Group on Information Needs of Communities. 2011. "Information Needs of Communities." Federal Communications Commission. https://www.fcc.gov/general/information-needs-communities.

Walton, Mary. 2010. "Investigative Shortfall." Magazine. American Journalism Review. September 2010. http://ajrarchive.org/article.asp?id=4904.

Wang, Shan. 2015. "As It Grows, the Marshall Project Finds Plenty of Partners, but Fundraising Is Still Not Easy." *NiemanLab* (blog). August 10, 2015. http://www.niemanlab.org/2015/08/as-it-grows-the-marshall-project-finds-plenty-of-partners-but-fundraising-is-still-not-easy/.

Washington Post. 2016. "Fatal Force: More than 250 People Have Been Shot by Police Officers in the First Three Months of 2016." Database. Washington Post. http://www.washingtonpost.com/policeshootings/.

WashPostPR. 2017. "The Post Records 88.9 Million Unique Visitors in October 2017." *Washington Post*, November 17, 2017. https://www.washingtonpost.com/pr/wp/2017/11/17/the-post-records-more-than-88-million-unique-visitors-in-october-2017/.

Webster, James. 2016. *The Marketplace of Attention: How Audiences Take Shape in a Digital Age*. Reprint ed. Cambridge, MA: MIT Press.

Weinberg, Arthur. 2002. *The Muckrakers*. 1st Ed. Urbana, IL: University of Illinois Press.

Wemple, Erik. 2012. "No More TBD.Com." *Washington Post*, August 15, 2012. https://www.washingtonpost.com/blogs/erik-wemple/post/no-more-tbdcom/2012/08/15/51846356-e705-11e1-936a-b801f1abab19_blog.html.

———. 2017. "NYT's Dean Baquet Rips 'Fairly Ridiculous Conclusion' in Public Editor's Column on Russia Coverage." *Washington Post*, January 21, 2017. https://www.washingtonpost.com/blogs/erik-wemple/wp/2017/01/21/nyts-dean-baquet-rips-fairly-ridiculous-conclusion-in-public-editors-column-on-russia-coverage/.

Wesleyan Media Project. 2017. "About." Wesleyan Media Project. 2017. http://mediaproject.wesleyan.edu/about/.

West Virginia University, and Morgan State University. 2016. "Bridging Selma." Bridging Selma. 2016. http://bridgingselma.com/.

Wikileaks. 2010. "Collateral Murder." April 5, 2010. https://collateralmurder.wikileaks.org/.

———. 2017a. "WikiLeaks - Hillary Clinton Email Archive." 30 2017. https://wikileaks.org/clinton-emails/.

———. 2017b. "Co-Publishers. Research Partners and Funders." April 1, 2017. https://wikileaks.org/-Partners-.html.

———. 2017c. "What Is WikiLeaks." April 1, 2017. https://wikileaks.org/What-is-Wikileaks.html.

———. 2017d. "WikiLeaks - The Podesta Emails." April 1, 2017. https://www.wikileaks.org/podesta-emails/.

———. 2018. "Portal:Volunteers - WikiLeaks." September 22, 2018. https://wikileaks.org/wiki/Portal:Volunteers.

Willnat, Lars, and David H. Weaver. 2014. "The American Journalist in the Digital Age." School of Journalism, Indiana University. http://news.indiana.edu/releases/iu/2014/05/2013-american-journalist-key-findings.pdf.

Wilson, Ernest. 2008. "Digital Media, Democracy, and Diversity: An Imperfect Discourse." Berkman Center for Internet and Society at Harvard University. https://cyber.harvard.edu/sites/cyber.law.harvard.edu/files/Digital%20Media_MR.pdf.

Wolfman-Avent, Avi. 2014. "A Public Radio Station Tunes In to a City's Innermost Thoughts." *Chronicle of Philanthropy* (blog). September 8, 2014. https://www.philanthropy.com/article/A-Public-Radio-Station-Tunes/152675/.

Zamora, Amanda. 2017. "T-Squared: Meet Paige, Our New Facebook Messenger Bot." *The Texas Tribune*, March 20, 2017. https://www.texastribune.org/2017/03/20/meet-paige-our-new-facebook-messenger-bot/.

Zelizer, Barbie. 1993. *Covering the Body: The Kennedy Assassination, the Media, and the Shaping of Collective Memory*. 1st Ed. Chicago: University Of Chicago Press.

Zocalo Public Square. 2018. "Mission | Zócalo Public Square | Ideas Journalism With a Head and a Heart." Zócalo Public Square. September 2018. http://www.zocalopublicsquare.org/mission/.

Zuckerberg, Mark. 2016. "I Want to Share Some Thoughts on Facebook and the Election." Social Media. Facebook. November 12, 2016. https://www.facebook.com/zuck/posts/10103253901916271.

———. 2017. "Building Global Community." *Facebook* (blog). February 16, 2017. https://www.facebook.com/notes/mark-zuckerberg/building-global-community/10154544292806634/.

Zuckerman, Ethan. 2017. "It's Journalism's Job to Save Civics." *My Heart's in Accra* (blog). January 18, 2017. http://www.ethanzuckerman.com/blog/2017/01/18/its-journalisms-job-to-save-civics/.