FEEDBACK: AN EXAMINATION OF TECHNOLOGY, SIGNAL AND NOISE IN NEWS PRODUCTION

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Joshua Ira Altman, B.A.

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Joshua I. Altman, B.A.

Thesis Advisor: Diana Owen, Ph.D.

ABSTRACT

News is a central component of understanding a society; it connects people over great distances and can tie together diverse communities. To accomplish this however, requires advanced technologies particular to each era of news. This study focuses on three distinct time periods characterized by news and the technologies that produce the news. Those three periods are Early American printing, underground printing in the 1960s and the present, which encompasses the Internet and Web technologies. Much work has already been done examining news, and ample studies have been produced looking at technology. This study is different in that it focuses on the news producer-news consumer divide and how consumers provide their feedback to producers. I identify feedback as a combination of signal and noise, the desired and the clutter, to examine the content produced and the relationship between producers and consumers.

To examine this divide I look at six publications spanning the eighteenth to twenty first century to find examples of feedback and how technology influenced that interaction. In addition, where appropriate and feasible, I conducted interviews with consumers who produced their own publications designed to counter the mainstream press.

This resulted in finding that technology did drive the process and that each technology must be examined in the context of its time. Furthermore, I found that different technologies resulted
in different kinds of feedback and consequently direct comparisons between one time period and another are difficult to make. However, while the technologies changed over time, technology’s impact remained large and consistent.

This study connects two mostly separate areas, journalism and technology by examining how the two main participants, producers and consumers, utilize the technologies to interact with each other. Looking at this divide found that over time the existence of feedback remains constant and that the skills and costs required to participate are reduced allowing more ever-present noise to obscure the signal.
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INTRODUCTION

Feedback is best known to most people as the result of a sound's source being too close to the direct path of its output, the consequence being a loud squelching noise coming from a speaker when the microphone is too near. Embedded in this feedback are two things: signal and noise; in this case there is very little signal often limited to the cue to move the microphone, and the noise is the oft heard squeal of a speaker.

This phenomenon is not limited to audio equipment. Turn on any electronic device and two things happen, you get some of what you want and much of what you don't. Turn to any newspaper, website, blog or television station and the same thing happens, there is the information you want and the information you don't. This is the signal versus the noise, the desired versus the in-the-way.

News coverage is full of both signal and noise and the balance between the two is the fight between producers and consumers, a constant feedback mechanism where producers output information, some of which the consumers desire, and then through their own evolving mechanisms consumers tell the producers what it is they want. Much of what they say can be dismissed as noise, the rabble of the crowd, but part of it is its own signal and at times a strong one indicating that there are positions and issues that a portion of the public does not see being covered in their media diet, or that the public wants to see more or less of.

The relationship between news and technology is a continuum where each new development builds on all of those that came before. I will examine how over time, different technological advances have altered the relationship between the producer and consumer to
create dramatic changes in the news environment, and different roles for participants in the same structural framework. Using content analysis, interviews and existing literature I will examine a series of points on the continuum over five centuries of news technology. At the beginning of the period examined by this study, professional news producers generated a new issue on a weekly or twice-weekly basis using manual presses and consumers relied on directly on professional printers to produce their feedback. By the end of the study twice-weekly publication being seen as regular transformed into to near instantaneous content continuously delivered simultaneously producers and consumers independently of each other.

The story of news and the story of technology are the story of information, who makes that information and who receives it. When the cost of creating news is high, there is a higher amount of signal compared to noise. In his book about predictions, New York Times writer Nate Silver described how the changes in technology lowered the cost of producing content. In describing how the printing press lowered the cost of printing in 15th century Europe, Silver wrote that in the 15th century five pages cost the equivalent of approximately 200 dollars in today’s currency to copy by hand prior to the printing press. After the invention of printing press, the cost decreased so significantly that the 200 dollars per five pages decreased to less than a dollar for the same amount of content to less than a dollar, a decrease of more than 300 times.\(^1\)

The same concept of the decreasing cost of producing news is evident in 2012 with web technologies. Monday through Saturday, a copy of The New York Times costs $2.50 on the streets of New York, yet online it can be accessed either free within the confines of the publication’s pay-wall (up to twenty articles a month), included in any print delivery

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subscription, or as a standalone digital subscription, which in 2013 is fifteen, twenty or 35 dollars a month depending on what and how many devices a user wishes to consume the product.⁴ ⁵

The two sides, the signal and the noise constitute all the news that is produced, distributed and shared every day. IBM estimates that 2.5 quintillion bytes of data are produced daily. That’s 2,220.45 petabytes, or in a measure that most people use daily, approximately 2.3 trillion gigabytes. They estimate that 90 percent of the entire world’s information has been created in the last two years.⁴ As the amount of data and information increases, the quantity of useful information is not increasing at the same rate.⁵ Advances in technology are largely responsible for the large expansion of information created in recent years and that carries over into what becomes the news.

Technology is the driving force in the producer-consumer relationship, it decides even more than journalists what is news by controlling how the news is gathered and delivered. Without it, there is no means to deliver content to consumers and no mechanism for consumers to communicate back to the producers. As these technologies change so does the news experience, a broadsheet is different from a blog in more than name. Without technology, there is no news. Without the innovations that create opportunity, the final product we call “news” cannot exist.⁶

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⁵ Silver. 13.

INFORMATION

Information is facts transmitted about occurrences or people, it is the currency in the relationship between the producers and the consumers; without it, there is no signal and no noise, no news to be produced and no feedback from the consumer. According to one accepted definition, information pertaining to “semantic content” requires that three criteria be met: that it “consists of one or more data,” that the data are “well formed” and that the well formed data are “meaningful.”7 When information flows there is a predictable lifecycle that is outlined in Information: A Very Short Introduction that begins with creating the information and includes processing, distributing, consuming and using, and recycling that information.8 This is for just one piece of information, one headline or front-page photo of a newspaper. The critics, commentators, and letter-writers each go through the same process to generate a small part of the 2.5 quintillion bytes of new data produced daily. Each piece of information exists its own cycle creating an ever-growing number of professionally and independently produced parallel and overlapping information cycles.

More than the three initial criteria, a definition in Information focuses on semantic information being “truth-constituted.” Like knowledge, semantic information encapsulates truth.9 Truth is the first responsibility of news. The first article of the Society of Professional

9 Floridi, Luciano.50.
Journalist’s *Code of Ethics* is to “seek truth and report it.” News seeks to always be signal, if it is not signal it has no place as news, and would be describes as not-newsworthy.\(^{10}\)

**TECHNOLOGY**

One common refrain is that technology is everything invented after you were born.\(^{11}\) In that case, for me the Web is technology, but not the Internet; smart phones, fuel cells and robot-surgery are technology but not spaceflight, wireless communications, the fax machine and the global positioning systems (GPS). Obviously this is not a clear definition of technology, as paper (first century C.E.), the moveable-type printing press (15\(^{th}\) century) and written language (approximately 6,000 C.E.) all qualifies as earth-shattering technologies and none were invented in the lifetime of anybody living today. The idea that technology is anything invented after we were born comes from the idea that technology is “invisible, hidden and nameless.”\(^{12}\) If technology has these three attributes that often prevents individuals from seeing what it is, just as a fish does not think about water, it is just part of the environment. Then what is technology?

While many definitions of technology exist that include electronics and time as criteria the simplest definition of technology is also the vaguest as to encapsulate the most possible innovation. Simply that definition is that technology is any tool, innovation or invention that

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http://www.danah.org/papers/VodafoneReceiving.pdf. The exact origin of this idea can best be traced to Alan Kay during a press conference in Hong Kong in the 1980s.

\(^{12}\) Kelly, Kevin. 6.
creates or advances opportunity for those who use it.\textsuperscript{13} It is these innovations and inventions that create the possibility for news to exist.

All the technologies listed above from ancient to within my lifetime create some kind of opportunity for its initial users and those who come after. Even the oldest technologies above, the written word and paper have not reached their potential more than eight thousand and two thousand years respectively after their debut. What these same technologies all also have in common is power.\textsuperscript{14} Technology has power over us, our lives, news production, consumption, sharing and every step in the information cycle.

It is convenient to think of us as masters of the technologies in our lives but that is not the case. Professional news producers are limited in what kind of news they can produce by the technology available. As we will see in the next chapter, early American printers could not generate news from the other colonies, states and overseas without a great delay in time between the event and publications as the fastest technology available was ships and horses. Consumers are not independent of technology either, once technology dictates how the information is made consumers can only read it on the technologies available and the experience of doing so is dramatically different if reading physical paper, a computer screen or on a mobile device or any other choice available throughout the study period.

In his 2010 book, \textit{What Technology Wants}, Kevin Kelly gave technology an agenda, which is that it is a continuum and inseparable from the human environment, and most importantly as illustrated by the title it can \textit{want}. In his book, he coins the word \textit{technium} and defines it as "the greater, global, massively interconnected system of technology vibrating

\textsuperscript{13} Kelly, Kevin. 4.
\textsuperscript{14} Ibid. 6.
around us.\textsuperscript{15} The main focus of this system, he writes, is a “self-reinforcing system of creation” whereby at some point in the history of technology feedback ensued that it became independent and “began to exercise some autonomy.”\textsuperscript{16}

At the most fundamental level humans control the technium, executing the decisions of what to create. News exhibits this same concept, a human decides what to write and what to print and deliver. However the feedback loop can take on a life of its own, where one innovation (story) begets another, leading to discussion board comments and blog posts leading to a second story in the original publication addressing concerns either directly or indirectly.

At times technology is programmed to make some of these decisions independently. Kelly emphasizes a change in network organization from random paths generated by early telephone networks to a more self-organized autonomous path chosen by modern Internet architecture.\textsuperscript{17} Unlike the structure of phone systems, which at least in the early days relied on operators to switch and transfer calls from one subscriber to another, the Internet is a largely autonomous physical entity; it is a network of networks. Across these networks, packets of data, small portions of the information travel sometimes over different routes that the network itself deems the most efficient. “Each network acts independently...because TCP/IP [the network protocol or language] gives it the vocabulary to interact.”\textsuperscript{18}

Within the comparatively fewer limitations imposed by the Internet, information can flow freely, independent of human interaction. When machines take over the process of deciding what

\textsuperscript{15} Kelly, Kevin. 11.
\textsuperscript{16} Ibid. 12.
\textsuperscript{17} Ibid. 14.
communications get to their destinations, and continue operating until all the data has been delivered regardless of it being signal or noise everything gets delivered without any type of filter.\textsuperscript{19}

After machines control what information is delivered, they also take over the process of bringing the information to the consumer. Instead of a consumer walking to a newsstand or turning on television much of what is consumed is preordained and out of the control of the media consumer. Computers, at least as of this writing, cannot think. They are computational machines that follow instructions in the form of algorithms to complete tasks. Query information online and a search engine algorithm takes over and delivers a user’s specific results. A search for “Congress” by two different individuals can yield dramatically different results depending on the user’s location, history and perceived preference by the search engine.

Seeing online what these algorithms want you to see is being caught in the “filter bubble,” a self-reinforcing state of only being informed of new information that conforms to information previously received, and as a result, only receiving conforming information in the future. In his book \textit{The Filter Bubble}, Eli Pariser writes “there is no standard Google anymore,” in that results are personalized to bring each individual the most relevant answers.\textsuperscript{20}

Marshall McLuhan said that the medium is key to delivering the message, change the medium and the content itself changes. “All media work us over completely,” McLuhan wrote in 1967, “[media] leave no part of us untouched, unaffected, unaltered. The medium is the


McLuhan emphasized that the content being delivered is inseparable from the method of delivery. Each change up to the time that McLuhan wrote in 1967 made the message more portable. The quill, the primary writing instrument prior to movable type replaced oral/aura communication and ushered in civilization according to McLuhan. Centuries after the quill, television entered the scene, a technology which McLuhan writes, “completes the cycle of the human sensorium.” The first truly visual medium capable of bringing live pictures into peoples’ homes, McLuhan calls the medium “the omnipresent ear and the moving eye.”

A fundamental rule of technology is that over time everything gets smaller and cheaper, even technologies like television that have increased in physical size and total cost actually decreased in the size of its components and the price of those parts which is what allows them to become so big. The effect of this decrease in size and cost in publishing is that the tools that were first only accessible to the elite publishers found their way into the toolkit of the smaller and local organizations and then literally into the hands of every independent author and professional journalist who wants to create content. In the early 1990s the technology was large, it was expensive to buy and expensive to operate, requiring an expertise in the regulations of satellite communication. Writing in 2010, Steven Livingston and W. Lance Bennett emphasized the decreased cost of bringing technology to the story. "On average, transporting a mobile satellite

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22 Ibid. 48.
23 Ibid. 125.
24 Sometimes making technology smaller makes them bigger. Smaller chips and thinner screens allow for taller, wider and thinner televisions.
uplink unit from London to the Middle East or Africa cost tens of thousands of dollars in excess weight fees.”

“Dramatic” is an understatement, even in 2010. They use the example of CNN crews taking their satellite transmission equipment across the world to live broadcast international news. In 1999 they write CNN could transport “a camera, digital compression unit, and satellite telephone, all of which fits in an overhead luggage bin on a commercial aircraft.”

In August and September, 2012 I traveled to the Republican and Democratic National Conventions in Tampa, Florida and Charlotte, North Carolina. My itinerary took me on flights from D.C. to Tampa, Tampa to Charlotte and back to D.C. (with layovers in Atlanta each time), where I observed network and local camera crews boarding the airplane with some equipment, and as I did, checking a lot as well. Nevertheless, the costs to transport live-capable equipment between these locations did not cost tens of thousands of dollars in baggage fees, as it previously did. Even with the increase in the number and cost of airline fees the transporting all the equipment could all be done for a few hundred dollars, or, even zero excess fees if it could all fit in a carry-on for organizations streaming over a laptop or cell phone.

This is the result of both professional-level tools getting smaller and cheaper and consumer tools getting better. The iPhone and Android smart phones, ubiquitous in 2012, provide the same tools to professional producers and consumer-producers alike. A high-end camera and editing software can be purchased for less than ten thousand dollars, and while a

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26 Ibid.
27 Ibid. 372.
significant expense, it represents just a fraction of the transport costs a few decades ago. A professional-looking camera capable of photography and video along with editing equipment can be had for under $1000.00. On top of all this, web services can make publishing and distribution free, covering the two most important events in the information cycle: creating the message and spreading it.

When technology gets that small, and consumer technologies are advanced enough that professional news organizations and anonymous bloggers utilize the same tools, the lines of the technological divide blur and non-producer consumers, those who just receive the news, have new and different decisions to make about what to consume. In many ways, the consumer can become a news producer on the same level as the professionals. This ability began slowly in the twentieth century with cheap independent printing operations that accepted layouts from radical publications and eventually to websites that can look indistinguishable regardless of their news producing experience. Obviously content drives both sides of the producer-consumer divide and regardless of the size or price of the technology, without high quality content the best technologies will not make a difference. But inexpensive and ubiquitous technologies can tip the scale for producers and consumers.

PRODUCING THE NEWS

In the history of electronic media, no new information technology has completely replaced the final product of those that came before; newspapers are still printed, and television and radio coexist, but the key distinction is how the information is transmitted and the speed at which it moves. As riders on horseback turned into the telegraph and copper wire technologies,
and then to satellite and fiber optics, the speed of production increased the amount of content that can be circulated through the information ecosystem.

In 2000 Kerric Harvey predicted the outcome of the next great shift in the news-information ecosystem, when news would move online:

It is a bit radical to claim that television, in company with print, might become a redundant medium, but given the dynamics involved with technology adoption in an unfettered marketplace model, it is not out of bounds to wonder if it may become a supplementary and somewhat eccentric one.\(^{28}\)

In the intervening years, it is hard to completely disavow that prediction. News still breaks on television just as it still unfolds on radio and breaks in print. However, cable news, MSNBC, CNN and Fox News are homes to talking heads.

News is produced, it is not organic and before readers can consume news events, it needs to be packaged and delivered. In *Deciding What's News*, Herbert Gans outlines what it takes to bring the news to the consumer. One of the central tenets of this process is editorial review, that there is a reporter who works with an editor to identify the story and then who gathers the news and writes the story. The initial editor and others work with each other to identify what are the most newsworthy items for that edition (weekly, daily or television) and then produce the product.\(^{29}\)

Journalists are actors in a large organization and lack the ability to independently create stories and apply judgment as “both members of a profession and as individuals.”


Commentators, bloggers, and “citizen journalists” or “independent journalists” decide on their own what to create without the professional judgment or institutional processes of professional newsgathering. Inherently the two sides have an unequal relationship, where one is a professional and constrained by what in their professional opinion is “news,” the other can share haphazardly. “Citizen journalists” are free to recycle professional content and create their own in the form of blogs (pamphlets and newsletters) and potentially act irresponsibly without considering what news is. A professional’s news judgment might not necessarily align with what a potential independent writer might want to see in the news, thus opening an opportunity to provide feedback in the form of generating their own information in a parallel and overlapping information cycle.

One of the key distinctions between the information produced by professionals and that produced by independents is authority. The first group possesses the authority that comes with what Gans called “being members of a profession” and the second does not have the professional credibility that comes with being published in a major news outlet. Pariser suggests that professional credentials are a distinction without a difference. “For most of us now,” he writes in The Filter Bubble “The difference in authority between a blog post and an article in the New York Times is much smaller than one would think.” While that effect might be the result of being inside the bubble and only seeing as authority a conforming view, it is the effect of continuous and overlapping information cycles. Pariser quotes one Yahoo executive speaking of their news service saying that regarding clicks, users do not distinguish between top publications

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30 Gans, Hebert J. 79.
31 Pariser, Eli.56.
and a random blogger. Of course, those users are only interacting with content selected by Yahoo’s professional journalists.

The relationship between producers and consumers changes over time and the filter bubble is just one of the 21st century cases. However, the technologies accessible to producers are inherently different and unequal to the technologies available to consumers. Those with more robust technologies are available to those who can best afford the newest technology to best expand their reach. Over time, different technologies have served as intermediaries in the relationship between news producers and consumers. While many think each new technology revolutionizes the relationship technology can also be observed as a continuum, with each advancement building on the ones that came before.

METHODS

Over time, technological changes have shaped this relationship. This began with the manual printing press through the 1800s when mechanized printing took over the process for professionals and amateurs alike. At the height of this era professionals utilized the linotype and independents turned to the offset process sometimes in partnership with the mimeograph. All of this converged with the Internet where producers and consumers have equal access to communications technology.

This evolution can be broken down into three key periods: early professional printing, consumer printing and finally the Internet and the Web. I will break each of these into a chapter and examine through a combination of content analysis and interviews what impact the technology or collection of technologies had on the consumer-producer relationship. Each of
these three periods represents a key development in technology that shaped the relationship of
the divide between producers and consumers. The first represents a time where printing in the
British-American colonies was controlled as a near monopoly and anybody wanting to print a
bill of sale or a political pamphlet needed to go through one of these printers. While the
monopoly eventually broke down, the technologies for an individual or small group to print on
their own did not come about until the twentieth century during the second time period
(consumer printing) when economical mass printing became an option for anybody seeking to
produce their own feedback publications. The third time period is best represented by the small
and inexpensive technologies that largely blur the technological producer-consumer divide but
do not eliminate it completely.

This is a largely a study of historical change, study and as such relies on historical
evidence, because which appropriately shifts over time. Consequently, it is impossible to directly
compare the data from one chapter to the next since the data collected in each represents the use
of the technology at that time. While this is the study of feedback, it is largely the study of the
signal and the data collected represents that intent. The result of this goal, to cull the signal from
the noise is that one chapter can pull itemized feedback, another examines full publications and
the third focuses on self-policing communities.

Since this is a historical study not every technology I wanted to examine was available to
me. One such technology were the early days of radio. During this technological era individuals
using shortwave and HAM Radio communicated with one another. However, what these radio
pioneers communicated about is unknown to us. We can assume that they discussed the major
issues of the day including Prohibition and the aftermath of World War I. There is unfortunately
no way of knowing for sure what they discussed since these conversations were not recorded nor 
are they stored in any form of index or catalog since each individual user would have needed to 
record their conversations on wax cylinder or early record, store it properly, and then turn it over 
to a central listening location such as the Library of Congress. In this case the information 
needed to study this technology has not been lost, it was never kept at all making a study of this 
kind of the early days of radio impossible.

Chapter 1: Early-American Printing

Professional printing spans the longest time-period extending from colonial and 
revolutionary America to the Internet age and most likely beyond. This simple yet 
groundbreaking technology spans the entire continuum of news communication technologies and 
consequently has had the greatest impact. I will focus first on early American printing and the 
role of letter writers as contributors to established news publications, followed by consumer 
feedback to early printers through the turn of the twentieth century. This study includes three 
newspapers -- one from each of the major American regions of the time, New England, the 
central states, and the American south.

This chapter will look at who was writing and what they were writing about. Specifically I 
will examine the content of letters addressed to the printers and publishers of each paper in the 
study as these provide the most direct feedback and the highest amount of signal compared to 
oise.
Chapter 2: Consumer Printing and Newsletters

Consumer printing was the first time that non-professionals could produce mass copies of their work. Multiple technologies contributed to this shift, one was the offset printing process adopted by many independent printers whose services individuals and small publications could buy. Offset printing allowed for a professional look to the publication without the expense of the more professionally used linotype machine. Another tool available to consumer printers was the mimeograph machine that allowed any user to produce as many pages as he or she could turn the crank to create.

To study this technology I will look at an underground newspaper created by left-wing radicals in the 1960s. This includes looking at copies of the newspaper to see its form and content and also conducting interviews with the publication’s editor in chief and photo editor to study how they assembled the paper and understand their motivations for doing so.

Chapter 3: The Internet and the Web

Internet technologies were the first to combine print with sound and picture and expand their reach limitlessly through established and emerging communities. Internet pioneers take on the role of publishers, shaping the world where news exists and the relationship between producers and consumers. These new publishers span a range of personalities and finished content. Some of them are dynamic figures promoting their own online news empires and others are anonymous web commentators spreading their opinions. This new world is personalized and unique to each user who can provide instant and global public feedback to news producers and users can easily only see what they want to see.
This chapter focuses on two similar yet starkly different web communities. Both allow unsolicited contributions and both use their communities to hold each poster accountable. However, one has the marks of the mainstream media and the reach that being part of that group provides. The other does not struggle for traffic but is a hodgepodge of information; some news much of it not, that relies only on unpaid, unsolicited contributors for all of its content.

Epilogue

Despite dire warnings about the end of print, the end of radio and the end of television as each successive medium rose to prominence, none of those predictions have come true and that will continue into the future. If tomorrow a new startup announced the ability to select the best news as chosen by a team of professionals that would be delivered to your door every morning in a durable form, it would be heralded as a great advancement of technology. But we already have it and have had it for centuries in the form of a newspaper. Future technology will only increase the speed and depth at which consumers and producers can interact.

Expected contribution

Studies have been done about journalism, focusing on the news and how it is produced and what is considered news. Studies have also been done about technology but little has been done examining technology’s role on the news. Through a historical approach, this paper will provide a look at how people have used the best available technology of their day to shape their relationship with the news. By examining the relationship between those who make the news and those who consume the news through the idea of feedback, the fusion of signal and noise, I will
show that each technological advancement on the continuum altered that relationship and that technology dictates what becomes news.
CHAPTER 1: EARLY-AMERICAN PRINTING

Early-American newspapers are not the first instance of regular citizens communicating with and through the news media. They are, however, one of the earliest examples where there is a comprehensive record on both sides of the conversation. The period spanning the 1770s-1790s is especially fruitful for examining these conversations as it encompasses the Revolutionary War period, the Constitutional Convention and the ratification debate which took place from 1787-1789 when pamphleteers and letter writers publicly debated becoming a “more perfect union” in the press.

The technology at the time was simple, yet effective. Both sides of the producer-consumer divide had access to the same materials, but unequal availability to those materials. During this period, news communication was limited to the same technologies as in the 16th century, a manual printing press and movable type. The infrastructure required was large as were the costs.

AMERICA’S FIRST MEDIA EMPIRE

Those who entered the printing trade during this period often did more than operate the mechanics of the printing press; they formed the backbone of the entire industry. Among the most famous of these tradesmen was Benjamin Franklin who participated in every facet of the business: printing, publishing, writing, newspaperman and postmaster.32 Franklin exemplified how it was possible to straddle the divide between producer and consumer during this time, as he built one of the first American media conglomerates. By the time of the American Revolution

Franklin owned and franchised printing operations throughout the colonies allowing him to print multiple products and providing him the ability to distribute them through the entire colonial postal system.  

Franklin began his independent printing in Philadelphia with *The Pennsylvania Gazette* to compete with the already existing *American Weekly Mercury.* Producing the news in the 1730s required more than going out and gathering the news. When the *Gazette* a small publication totaling only four pages long, sometimes it involved filling pages with letters to the editor written by Franklin himself (a common practice at the time), which resulted in more page filling with replies in subsequent issues. 

Franklin began his printing apprenticeship working for his brother James Franklin’s *New England Courant* published in Boston. The paper existed for only five years and ceased publication before the *Gazette* even began. However, it was the first independent American newspaper -- a bold, anti-establishment journal that helped to create the nation’s tradition of an “irreverent press.” A press that broke with tradition by not being not being printed by authority thus could stand independent and critical of that established power. The *Courant* printed during a smallpox epidemic and as an independent newspaper provided an open space for debate on the issue of smallpox inoculation. This debate in the 1720s laid the groundwork for the robust printed debates later in the century.

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33 Isaacson, Walter. 60.
34 Ibid.
36 Isaacson, Walter. 22.
These debates could only function if the newspapers could be accessed from city-to-city, and more importantly from colony-to-colony to create a national identity. Printers governed an effective kingdom; they might have had one of the few means of printed communication available in a city, as learned men were part of the political class. As such, they garnered political appointments that best benefitted their business interests. For printers, this was attaining the job of postmaster, allowing them to distribute their own publications. Prior to attaining the position of postmaster for himself, Franklin bribed his way into the postal system, and when he did become postmaster, he allowed others access to the postal system on the same terms available to him. Eventually, Franklin was one of two “Deputy Postmaster for the Colonies” the senior-most postal job in the colonies due to the ability of the incumbent to control the flow of information through the majority of British North America. The position of postmaster served Franklin well as a printer. After launching the Gazette, Franklin began to expand out from Philadelphia and franchise his printing empire.

...over the next decade he would succeed by building a media conglomerate that included production capacity (printing operations, franchised printers in other cities), products (a newspaper, magazine, almanac), content (his own writings, his alter ego Poor Richard’s, and those of his Junto), and distribution (eventually the whole of the colonial postal system).

That Franklin was able to franchise a printing empire highlights a key difference between two roles in the printing world that of the “printer” and the “publisher,” which in the case of the Gazette were both filled by Franklin. Elsewhere in his empire, facilitated by his role as Postmaster Franklin served only as the proprietor of the paper, also known as the publisher.

38 Clark, Charles E. 109.
39 Isaacson, Walter. 157. Despite being two incumbents, the position is “Deputy Postmaster”
40 Ibid. 60.
Publishers could own multiple papers in different cities and would not necessarily be involved in the day-to-day production of the paper, as that responsibility fell to the printer. The “printer” alternatively is someone to operate the machine, the physical process of printing.\textsuperscript{41} Letters often appeared addressed to the “Printer” or the “Publisher” interchangeably since in many cases a publisher was also involved in the printing process, but not always. It was not necessarily the case that the printer and publisher were the same person. Benjamin Franklin’s brother James was contracted to print a New England paper, \textit{The Boston Gazette}, and it was when this contract ended he was no longer the printer, but the publisher remained the same. At this time James became a publisher and printer when he launched his own paper, the \textit{New England Courant}.\textsuperscript{42}

\textbf{THE FORMATIVE YEARS OF AMERICAN JOURNALISM}

Franklin, like all printers, had to make decisions about what technologies to use, determining what the \textit{Gazette} and other publications would look like. There was a simple framework for publishers to work within, and that was ink on paper, and there was only one means of assembling the final product; however, within the limitation of the manual press there was a narrow range of options from which a printer could choose including ink type, paper size, and fold. All of these options change how a user engages with the news. Examining papers from 1698, Charles E. Clark, in \textit{The Public Prints} emphasizes the similarities more than the differences between them. Publishers of the \textit{Post Man}, \textit{Post Boy} and \textit{Flying Post} all “displayed remarkable unanimity. The papers were similar in size, layout, typography, general method of

\textsuperscript{41} Clark, Charles E. 12.
\textsuperscript{42} Isaacson, Walter. 22.
collecting and presenting news, adherence to the newsletter tradition in the order and standard phraseology of news items and contents.\textsuperscript{43}

Producing the news was a highly technical process beginning with selecting the size of the paper and moving through laying the type, printing the pages and assembling the final product. Franklin, in his \textit{Gazette} changed the size of the paper throughout its existence, gradually making the pages larger, increasing the typeface and adding columns of text.\textsuperscript{44} Industry standards reined in the process, publishers filled standard molds with paper pulp to produce their own product specific to their needs. Once produced the paper would be folded in half in the English style creating four sides per sheet, two sides each with a fold.\textsuperscript{45}

\textbf{THE FEEDBACK}

Earlier I wrote about “feedback” being a combination of signal and noise. In the case of news I use “feedback” to refer to the information loop between news producers and their consumers. This loop manifests differently across technologies and publications but the key element is that there is a communication between the two major players in the news environment. Some of this feedback formed organically, with readers writing in to the publication on their own volition; and in other cases the feedback was manufactured and the news organization itself published feedback to create the look of an active, engaged readership.

Franklin wrote himself letters in the \textit{Gazette} so that he could respond to them later. While not feedback in the traditional sense of readers communicating with the publisher it highlights

\textsuperscript{43} Clark, Charles E. 51.
\textsuperscript{44} Oswald, John Clyde.101.
\textsuperscript{45} Clark, Charles E. 84.
that there was a need for a multi-way path of communications. The idea of a multi-way path of communication directs that news flow from the publisher and printer to the consumer, from consumer to consumer and from consumer(s) to publisher. When examining the relationship between the producers of news and those that consume it, it is necessary to look for this path because without it, the structure would disintegrate. The multi-way path serves two primary functions. First it serves to alert a publisher as to what news the user consumes by totaling the number of submissions on a particular topic or referencing a particular article. It also tells the publisher what the consumer wants to read more often in the form of counting the submissions on particular topics that do not appear in the publication’s original content or slips. By seeing what news flows from consumer to consumer as published letters between readers in different cities, printers could close the distance between colonies, states and continents that characterize the 18th century. At a time without the Internet, aircraft, electricity or even steam-power such consequences were essential in forging the bonds of the early United States.

Information that flows in this network can be broken down into three distinct phases. The first step, from publisher and printer to consumer occurs through the regular news process, gathering the news and publishing it. The second and third paths, from consumer to consumer and from consumers(s) to the printer and publisher also occur through the pages, and do so in an manner edited and curated by the printer and publisher. Letters authored by consumers appear in the pages of newspapers, some are to the printer and publisher and others are to other private individuals and appear in print.
METHODOLOGY

To discover which news best characterized the information flow of producer-consumer relations during this era I first looked toward history, and second toward availability. I looked for papers that printed either during the Revolutionary period, (1774-1781) or during the Constitutional ratification debates (1787-1789); however history and availability did not always merge. Knowing that the importance of Franklin and his printing empire included the success of Pennsylvania Gazette I looked first to that publication. Despite publishing from the early 1700s into the 19th century not all the issues of the newspaper are still available resulting in both absent individual editions and entire years of publication. Even without the desired dates, the importance of the newspaper and its publisher warranted its inclusion in the study.

As its name implies the Pennsylvania Gazette was published in the central colony and then state of Pennsylvania. To balance the study geographically I then sought papers from New England and the American South. I examined two additional Early American newspapers to achieve this balance. Looking through archives for newspapers published on available dates from appropriate locations two newspapers best fit the criteria. For the New England paper, I examined the Massachusetts Essex Journal published between 1788 and 1791. I specifically looked for a newspaper from Massachusetts due to its importance in Early American affairs, primarily the American Revolution. I then looked to find a paper from the culturally and economically different American South. I first looked for a paper from the large port city of Charleston, South Carolina. However, a paper published during the ideal years with sufficient copies for study proved unavailable. Instead, I looked to another major South Carolina city, Columbia, for a newspaper that could best meet the criteria. Ultimately, I found the best fit in
issues of South Carolina’s *Columbian Herald* between 1787 and 1792. All the papers chosen and rejected were examined on Readex, a database of early American newspapers, and read using their web interface.

Specifics differed for each publication due to dates available and readability of the pages, however a general template of study was observed. I looked at a random sample of newspapers following the pattern of beginning in January of each year and then reading the first two papers in each set of ten for their headlines as cues to the reader. Those headlines were then copied into a text document and then recopied into Excel to ensure that an additional examination occurred on headlines that often contained incorrect and challenging language by 2013 standards. I examined issues of the publications for letters to individuals named and described such as ambassadors in European capitals or clergy in the colonies and states. I also looked for articles that were directed to the editorial leader of the paper, in the case of early American papers that leader is the printer or the publisher and letters appeared addressed to both.

**THE PENNSYLVANIA GAZETTE**

I examined every first and second issue of the *Gazette*, starting in 1742 and then skipped the next eight available dates on Readex. If an issue was not available, it was noted as such and the process continued as if it had been examined. I begin with January 6, 1742, and repeated the process through each available calendar year through 1757. Employing this method allows the study to see both what people are writing about in an issue, as well as the next issue to see if there is either a direct response or comment to what appeared in the previous edition. A direct response would be a letter, article, or other writing directed at the author who wrote in for the
previous issue based on the headline, which in this case is used as a substantive cue to the reader about the contents of a letter.

Issues were coded for whether or not they contain feedback elements and the strength of those elements. Only headlines are used for this purpose since they offer a quick guide to the letter’s content to the reader. Anything that is a "letter" or an "extract of a letter" was counted, as it is feedback in the form of a "reader," "contributor" or other individual wanting to add content to the publication being examined or a publication where the letter originally appeared.

This method yielded a total of 293 data points spanning 140 publication dates. Of the 293 instances where evidence of feedback was found, 254 of those, or approximately 86.6 percent were extracts of letters or accounts and not the entire document. In each of these cases, the printer of the Gazette decided the signal and the noise component of the feedback. One reader’s signal is another’s noise, but presumably, none of what appears is noise since nearly all instances represented a part of the whole determined to be important by the printer.

During all the years of the Gazette’s availability the territory that would become the United States remained a colony of Great Britain, and the Gazette’s printers reflected that in their choice of content. The most popular locations for a letter to originate included The Hague at 45 instances, Paris at 15 instances and London at six instances. These often took the form of private letters that ultimately became public. One dated January 11, 1744 entitled “An extract of a Private Letter from a Foreign Minister at Berlin, to Another at The Hague” is in many ways representative of the letters that appeared across the years. This letter authored by a minister to another is official correspondence concerning international affairs. In this letter the author offers his opinion on what the King of Prussia should do regarding the Queen of Hungary that he “had
been certainly inform’d, and very lately has had the same Intelligence confirm’d to him that this Princess only waited the first favourable opportunity for casing an invasion of Silesia.  

To an American colonist in Philadelphia, Silesia is a long distance. This letter is dated September 6 (presumably) 1743 (the September 6 immediately preceding publishing) however as colonists, their fortunes, especially those of people able to buy and read a newspaper, were connected with European activities. This length of time is normal when the news would first need to travel over land on the European continent and then by ship across the Atlantic. Despite the delay in the news reaching the American colonies, its value is not diminished since this delay was normal and part of the news experience in the 18th century.

While “ministers” and “gentlemen” (no “woman” or “lady” appeared in the sample) wrote many of the letters appearing in the Gazette some appeared written by named individuals, either real or fictitious. While only men appear in the sample, that does not imply that only men participated in the news community during the colonial era. James Franklin’s The New England Courant is memorable for two reasons. First, it is the first paper not to say that it is “published by authority.” Secondly it is the first example of Benjamin Franklin’s published writings since as a teenager he wrote the letters as under the pseudonym “Silence Dogood” since he knew James would not publish anything he suspected being written by his younger brother.

The literary character Franklin invented was a triumph of imagination. Silence Dogood was a slightly prudish widowed woman from a rural area, created by a spunky unmarried Boston teenager who had never spent a night outside of the city.

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47 Isaacson, Walter. 22.
48 Ibid. 29.
Franklin obviously appreciated the use of pseudonyms and held no qualms about gender-swapping when it would get his letter in print. Of the three papers examined in this study, only one published a letter identified as written by a female author in a male-dominated society.

Where a letter from one minister to another in a European capital conveys authority, a letter by an identifiable person in the colonies carries weight, especially if he is a member of the same community as a reader. This community can be occupation-based such as the “Extract of a Letter from Captain Waggoner of the Virginian Regiment, Commanding on the South Branch of Portsmouth” that appeared on October 7, 1756 and connects those who serve in colonial militias regardless of the colony.49

Another letter, this one written by Rev. Mr. John Norton and appeared on September 26, 1746 from Fort Massachusetts, details an attack by French and Indian groups. “We are the French’s Prisoners, and have it under the General’s Hand that every Man, Woman, and child shall be exchang’d for French Prisoners”, Norton wrote on August 20.50 This letter continues the narrative of French and Indian attacks, clearly of interest to colonists, and in doing so puts a face to the issue. “We are the French’s Prisoners” includes the author, Rev. Mr. John Norton. Selecting this letter also serves to give a relatable author, a religious leader. The content published in the Gazette does not specify which denomination Norton leads, but colonists would be familiar with and relate to a religious leader from interactions in their own communities.

Early in the Gazette’s publication, printers established the practice of running complete letters to the editor. On March 17, 1742, printers published on page three a column-and-a-half of

a letter addressed to “Mr. Franklin;” however, this letter is printed in a language other than English. Regardless, the signed letter established that the printer was amenable to publishing content addressed directly to him.\textsuperscript{51} Years later, in 1756, the printers included another letter; this one addressed to “The Printers of the Pennsylvania Gazette” and began in the main spot, the upper left-hand corner of the front page (the beginning of the newspaper) and continuing through two columns.\textsuperscript{52}

The letter contains “useful observations on government” from the memoirs of a [then dead] early settler from Barbados. This letter is not an extract, and in the judgment of the printers contains only signal, therefore, they placed it in the “one” spot, as the first story in the publication. This decision adds additional credence that printers viewed this letter to be of high importance to the readers and a strong signal among the noise.

\textit{COLUMBIAN HERALD}

In the South during the late 18\textsuperscript{th} century, many of the same patterns emerged as was evident in Philadelphia simply due to there being no changes in the technological landscape. Between the 1750s and the 1780s, printers still relied on the same methods to produce their product because the technology did not change during those decades. The issues changed, especially as the colonies became states, but the means of production and distribution remained the same.


Copies of the *Columbian Herald* are available between 1784 and 1796. For this study I examined papers between 1787-1792, chosen due to constitutional debates ongoing during those years. Like the *Essex Journal* and the *Pennsylvania Gazette*, the first and second issues of every set of ten were read for headlines as cues to readers. Due to limited availability of papers in 1789, when only three papers are available, all three samples are examined. In 1790 only 15 issues are available and the first two of every five are examined. In 1791 six papers are available and the first and last two are examined. In 1792, two papers are available and both are examined. The *Herald* calls some of their articles "Anecdotes" and these are not counted unless a clear author is apparent and it is obviously a non-staff, “citizen” contributor.

Examining the *Columbian Herald* yielded 67 data points of which ten are from named individuals and one is addressed to “Mr. Printer” and none are addressed to the publisher. Like the *Gazette* all are presented as being written by men.

The one letter addressed to “Mr. Printer,” appeared on August 12, 1790 and signed by “T.D.” is not a letter addressing directly the matters in the paper, but retells anecdotes that may, or may not have happened in the way the author describes. The first such story is a setup in which the writer lobbies for the letter’s inclusion in the *Herald*. The second part of the letter is the content, the main message that T.D. seeks to deliver. This part of the letter tells the story of, “The sufferings of YAMBO, an African, in South Carolina.”53 Obviously both the first and second parts of T.D.’s letter succeeded in that the first part convinced the printer to include the letter and the second part, the story of Yambo proved compelling enough for inclusion.

53 T.D. “Mr. Printer.” *Columbian Herald*. Charleston, South Carolina, August 12, 1790.
The ten letters from named individuals include a pair of writings from the Governor of Vermont to the Governor of Massachusetts printed on April 5, 1787. At the time, Vermont was the Vermont Republic and would not become a state until 1791. The letter is in reply to concerns presented to Gov. Chittenden of Vermont by Gov. Bowdin on Massachusetts. Chittenden writes in the first letter dated March 3, 1787,

> It is with regret that we learn that a State, for whose interest and welfare, from a variety of concurring circumstances, we have, and ever had, the strongest attachment and highest regard, is torn by intestine faction, and its constitution and form of government struck at, and deeply wounded, by some of her wicked and ungrateful citizens.\(^{54}\)

The second letter concerns more tangible action taken on the part of the Governor of Vermont regarding the lawlessness mentioned in the March 3 letter. After receiving three more letters, Chittenden wrote to the Governor of Massachusetts on March 6 that his last letter "containing a requisition for liberty to pursue the insurgents of your State into this, I immediately laid before the Legislature; as soon as their determination is known, I shall lose no time in transmitting the same to your Excellency's information."\(^{55}\)

All of this is occurring thousands of miles away from South Carolina, but the publishers deemed the news valuable enough to occupy nearly half a column on the second page of an edition. At this time, April 1787, a national debate was occurring about what kind of government would exist between the states and consequently the relationship between the states. A bond existed between the States and newspapers fostered this connection by printing about renegades escaping from Massachusetts into the Vermont Republic in South Carolina papers.

\(^{54}\) Chittenden, Theo. "Copies of Two Letters from His Excellency Governor Chittenden to His Excellency Governor Bowdin." *Columbian Herald*, Charleston, South Carolina, April 5, 1787.

\(^{55}\) Ibid.
Two of the letters involving named individuals also involved letters between family members. One on June 18, 1791 was an “Extract of a Letter from General Chapen, in Genesee Country to His Son in Albany.” The other, longer letter, which appeared on September 16, 1790 was a “Extract of a Letter from Mr. John Green, Second Officer on Board the Nonsuch, Capt. John Canning to his Father in Colchester,” and both of these letters appeared on the third page on their respective dates. Neither letter relays any information that could be considered personal between fathers and sons. In both cases the letters, as printed, confine themselves to matters regarding the security of the States. The 1791 letter discuses Indian affairs and that there would be a treaty soon near the Tioga River. The 1790 letter concerns matters aboard a ship “on a voyage to China.”

Neither of these letters was printed in its entirety so there is no way of knowing what else the letters contained and if the printer saw the more personal contents of the letter, if they existed.

*THE ESSEX JOURNAL*

The *Pennsylvania Gazette* and the *Columbian Herald* shared many aspects with the South and the Central States and those trends continued into newspapers published in New England. For this study, I examined the *Essex Journal* printed in Massachusetts using the same method as for the *Pennsylvania Gazette* and the *Columbian Herald*, by focusing on the first and second

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56 “Extract of a Letter from General Chapen, in Genesee Country to His Son in Albany.” *Columbian Herald.* Charleston, South Carolina, June 18, 1791.

57 “Extract of a Letter from Mr. John Green, Second Officer on Board the Nonsuch, Capt. John Canning to His Father in Colchester.” *Columbian Herald.* Charleston, South Carolina, September 16, 1790.

58 “Extract of a Letter from General Chapen, in Genesee Country to His Son in Albany.”

59 “Extract of a Letter from Mr. John Green, Second Officer on Board the Nonsuch, Capt. John Canning to His Father in Colchester.”
papers in every set of ten between 1788 and 1791. Headlines written as “for the Essex Journal” are ignored as instances of reader feedback unless the article also contains a name to accompany the letter.

Examining the Essex Journal yielded a total of 80 data points including six addressed to the “printer,” “publisher,” and in a first for this study, a letter addressed to the “editor.” The July 8, 1789 edition included a pair of letters printed on the same page in the form of a letter to a committee and a response to that letter. All of these characteristics appeared in other publications also, but unlike in any other paper examined, the Essex Journal included a letter signed by a woman.

Filling nearly two columns on the fourth and final page of May 28, 1788 edition the printers of the Essex Journal included a letter addressed to Mr. Hoyt asking him to, “Pleafe to give the following a Place in Your Paper, and You Will Oblige, at Leaft, One of Your Female Readers.”60 The letter does not concern any political issue but instead tells the story “of a man of fo depraved tafle” and how despite being married and knew how good a wife he had he could not help himself but to consort with other ladies when he was separated from his wife.61

One letter cannot be considered representative of all examples of letters printed in the colonies and early states signed by women. However, this being the only example in the sample it would be dangerous to read too much into the fact that the solitary example of a letter from a woman does not concern pressing political matters, but instead focuses on a matter of concern to many women, the [in]fidelity of their husbands.

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60 Female Spect. “Mr. Hoyt, Please T Give the Following a Place in Your Paper, and You Will Oblige, at Least, One of Your Female Readers.” The Essex Journal. Newburyport, Massachusetts, May 28, 1788.
61 Ibid.
Other than this outlier and the number of letters addressed to the printer, publisher and editor the trends of earlier publications held true in the New England states. One such letter printed on March 25, 1789 under the headline “For the Essex Journal” and addressed to “Mr. Printer” concerns the local elections in Massachusetts for statewide offices. The author, who identifies himself as “A Countryman” does not establish at the top of the letter that he claims no stake in the outcome other than those as a citizen. “I write under no party influence. I neither profess nor expect a place in any governmental or civil department, nor am I biased by any political connexions.” A Countryman lists the four reasons that he can no longer support the first magistrate in this election in the same way he did one year ago. His reasons fill two columns on the second page of the edition and include that the officeholder is sick and that he lacks certain qualities to lead the state.  

The writer knows and expects that he will participate in a debate in the publication. While calling a sitting officeholder unfit for office, he writes. “If I have injured him, it has been without design; and I will thank the pen, that shall candidly correct me.” Including such a disclaimer is common practice, and part of the courtesy of writing at the time.

CONCLUSIONS

The Essex Journal, The Pennsylvania Gazette and the Columbian Herald do not share close geographical proximity in that they are, respectively, from New England, the central states, and the American South, with geographical distance at this time a far greater impediment than it will show to be in the next two chapters. However all these publications treat non-staff content

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63 Ibid.
similarly. Each of the three publications showed evidence of accepting a range of feedback including accounts from abroad and letters from clergy and American sailors. The three publications also showed a willingness to confront issues directly from the readers. Each of the *Journal*, *Gazette* and *Herald* published letters in the study addressed to the “printer” and/or the “publisher.”

These publications created the foundation for a multi-directional path of communication between publishers and their consumers. In the next chapters, we will see how technology shapes that path as innovations create new opportunities for non-professional printers to engage with the professional press closer to their level. The first step, as you will see in the next chapter, is mechanized printing by independent, underground radicals.
CHAPTER 2: UNDERGROUND PRINTING

After the advent of mass printing for professionals, the next major innovation in news technology was mass consumer printing. Mechanized printing developed in the 19th century; however, it was only available to large publishers and people with significant funds to pay for a printing or “run.” The only difference between the early-mechanized printing and its manual predecessors was speed -- speed to transmit the news over wires and speed to print the copies and deliver them to consumers.

Since the only significant change in printing during this time was that it grew faster, the relationship between producers and consumers could do nothing but remain stagnant within the mainstream press. Eventually though, like all things technological, printing became cheaper and individuals could open their own mechanized print shops enabling non-professionals to print their own views. By the time of the protest movements of the 1960s the technology evolved to the point that small groups of individuals could produce their own regular newsletter with a professional look and feel.

OFFSET PRINTING

Two main technologies existed through most of the twentieth century for mass-scale printing: linotype and offset printing, and while both could produce mass copies for distribution, offset could do it on a more limited budget and was thus employed by independent publishers to communicate their ideas.
First developed for paper in 1903 by Ira Rubel, the offset printing process involved spinning ink over three rollers to produce an image on paper. No production technology stands alone, and like the others, offset printing technologies fused with other methods of the time. This fusion is one Nicole Howard called in her book “a revolution in printing and book production as profound as Gutenberg’s in the fifteenth century.” The key steps in this technology are simple: a plate cylinder is prepared with chemicals; ink is continuously rolled onto the plate cylinder, which is then rolled with the image onto an intermediate cylinder known as the offset cylinder. Beneath this cylinder rests paper pressed between the offset cylinder above and an impression cylinder beneath.

**CONNECTIONS**

Although first used at the turn of the 20th century, offset printing emerged with a new life during the U.S. cultural upheaval of the 1960s. Sixty years after it became a viable printing method it was still considerably less expensive than other options, especially the higher quality, faster linotype developed in the intervening decades. A reasonable cost was the main driver in choosing this technology for the producers of *Connections*, an underground, independent publication.

I came to *Connections* somewhat indirectly. Familiar with the protest movements in Wisconsin during the Vietnam era, I began investigating Paul Soglin, a student and radical during the era and a once and current mayor of Madison, Wisconsin. His biography and books

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65 Ibid. 141.
66 Ibid.
including *They Marched Into Sunlight: War and Peace Vietnam and America October 1967* by David Maraniss indicated that he had been involved in the Dow Chemical riots and the *Connections* publication.

In his book *They Marched into Sunlight*, David Maraniss interviewed some of the *Connections* staff and wrote extensively about the paper. He called the newspaper an “intellectual forum”, saying it was an “alternative newspaper overflowing with avant-garde poetry, radical politics, provocative illustrations, and dense, difficult prose.”

**METHODOLOGY**

I took a two-pronged approach to studying *Connections*. The first was to examine the publication the same way as I did for every news source examined in this study. This approach allowed me to see the paper, images of its physical form and examine the articles and the artwork providing a view of the technological tools used by the publishers of *Connections*. It showed how the process of offset printing influenced *Connections* in a physical sense, and what the publication achieved in terms of layout and design, both of which were elements critical in this publication.

The second stage in this approach was to interview the people involved in the publication. Unlike early American printing in which all the actors are long dead, and Internet publishing [examined in the next chapter] where it is possibly too current for the participants to see their actions in a larger scheme, *Connections* existed in a middle place. Published during the 1960s, enough time has passed for those involved to distance them physically and mentally to be

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able to discuss it as an intellectual and activist pursuit. Also enough time has passed since printing *Connections* that speaking with me would not negatively impact anybody involved with the publication. The interviews granted great insight into how the *Connections* team utilized the technologies available and how they used them to create feedback.

Finding issues of *Connections* was not as easy as I had hoped, since it was published and distributed among a small group of “not hippies” but “highly radical” individuals.\(^6^8\) A full collection of the publication exists with the Wisconsin Historical Society at the University of Wisconsin-Madison and one of the curators of the collection connected me with the editor of the publication, Robert Gabriner. Gabriner now teaches at San Francisco State University and is the Program Director to the Educational Leadership Doctoral Program for Schools and Community Colleges.\(^6^9\)

**THE PAPER**

When I interviewed Gabriner in February, 2013 he said that when he started *Connections* in 1967 he knew that professional printing would be the method of choice. Before arriving in Madison he had edited the newspaper at Cornell University from 1959-63. This experience left him “rooted in a technology of newspaper” and he and others at *Connections* wanted to produce a newspaper that was “not something dinky.”\(^7^0\)

Gabriner was fast-talking and engaged about his radical days more than forty years after the fact. He vividly recalled details about the people involved and their motivations to produce a

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\(^7^0\) Gabriner, Robert. “Interview with Robert Gabriner”
newspaper. He said people were drawn to the publication because they wanted to raise consciousness. These individuals did not form the newspaper because one was “just a journalist,” or “just photographer” and they saw a way to fuse their skills into a publication. According to Gabriner, they desired to “critique and raise consciousness.” Maraniss characterized them as people who rejected politics and sought to “build a movement.”

As evidenced by their actions in their coverage and editorial decisions, the Connections staff did not act as unbiased journalists nor did they seek to adhere to that standard. He identified the staff as more than radicals, they were organizers who were committed to social justice and civil rights. They were activists, everything that a mainstream publication must not be but everything the consumer seeking to input their feedback and an idea into the media narrative needs to embody.

Just because these radicals sought to produce a newspaper and wanted to create something enduring did not mean that they eschewed all simpler technologies of the era, but found the proper place for each. The mimeograph dominated simple printing during the 1960s and the Connections team utilized it for what Gabriner referred to as “instantaneous communications,” calling the tabletop device that utilized a stencil and an ink roller, the tweet of its day.

While the mimeograph was never considered as a viable option for mass production of the newspaper, Gabriner said that it was used regularly to announce meetings, rallies and bring people up to date between newspaper printings that could be separated by months. Gabriner

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71 Gabriner, Robert. “Interview with Robert Gabriner”
72 Maraniss, David. Location. 1689.
73 Gabriner, Robert. “Interview with Robert Gabriner”
called the device “a mechanism to communicate with large groups of people where they gather” unlike the newspaper which could not be distributed en mass to passersby at the student union.  

At the end of my conversation with Gabriner, I asked who else worked on the newspaper, specifically who managed the technology of the publication. He directed me to Connections’ former photo editor Mike Oberdorfer who now lives in Maryland and worked for the National Institute of Health as a research scientist. Connections used “unorthodox ways of communicating on the page” according to Gabriner, and as photo editor, Oberdorfer executed this unorthodoxy. With pictures, Oberdorfer and his team would “play a lot of games” using paper, developing techniques, contrast and collage to provocatively tell a story and do something “outrageous.”

The paper followed the traditional method for offset printing described above; however with a single and significant kink that many other publications never have had to face: no printing house near the university would print Connections -- a paper produced by highly radical individuals.

Gabriner’s solution was at least an hour away from Madison in Janesville, Wisconsin where a printer who was far enough from the controversy and desirous for the business agreed to print the paper. Before it could be delivered, however, Oberdorfer and his team had to lay out the paper exactly as it would appear in print. They formatted their collages, graphics, photographs and text using an IBM Selectric accompanied with “scissors and a good eye.”

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74 Gabriner, Robert. “Interview with Robert Gabriner”
76 Gabriner, Robert. “Interview with Robert Gabriner”
Someone would then drive an hour between Madison and Janesville to make sure it was done properly and bring the entire print run back to campus.77

Unlike other publications examined in this study that contain feedback elements, Connections’ entire existence was to act as a feedback element to the mainstream press. As such, rather than looking only for headlines in a random sample of issues, every article within the random sample was examined. Using microfilm I digitally scanned every fifth issue of Connections in each volume for examination, as the entire paper was a communicative tool between producers and consumers. Headlines are still used as key elements to determine the content of an article in Connections as they remain the cues to the publication’s reader. As students produced the publication, volumes appear to coincide with academic and not calendar years. Only articles, literary works such as poetry, ads and cartoons were coded for this study although other elements appeared including the masthead and subscription card. Since these and other similar elements of the publication are not “editorial content” they were not included for statistical analysis although they do provide important insight into Connections.

The most striking thing about Connections is not the writing or the issues it tackles but the visual layout of the paper. Of the seven issues examined, none of them conformed strictly to any standard of layout. This of course, is in concert with Gabriner’s and Oberdorfer’s goals to be visually striking and different from the mainstream press. All of the seven issues began with full page, or nearly full-page cover art, sometimes a photograph, other times a sketch, always provocative. Three of the seven included obscured nude photos and another a woman in a superhero costume holding a sword.

77 Oberdorfer, Michael. February 18, 2013.
Unlike any of the early American papers where there were missing pages within the sample, *Connections* was available in its entirety and an explanatory statement in the first issue is enlightening to the scope and purpose of the publication. “But now there is and are CONNECTIONS; and this article is about the job of a widely-distributed radical newspaper as an organ for the composition of a new sense of reality.”78 While outlining several goals for the publication, the first article wrote:

So one of the reasons for this paper is to manipulate the metaphors and not, Marshall the McLuhan notwithstanding, merely the medium. A Connection, among other things is an association of meaning which have never been put together before; one word lifts another out of its old environment and gives it new power. The name alone means that this paper is ready to make journalism an art form.79

Through their layout and design the staff at *Connections* turned journalism into an art form, much more than those using other tools before or since.

Turning “journalism into an art form” is not necessarily dictated by the technologies employed by the producers, it is a combination of the technology, the purpose, and the sense of responsibility borne by the publishers. In the case of Connections, the producers are also consumers; their form of feedback, their mechanism to communicate with the mainstream producers was the newspaper they produced, a paper blog.

This first issue can best be seen as identifying the paper’s mission, and that focus is incorporated into many facets of the paper. For instance the subscription card reads,

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79 Ibid.
"AN UNDERGROUND NEWSPAPER, DEDICATED TO REMAINING UNDERGROUND, RATHER THAN BEING BURIED ABOVE THE GROUND."  

In an email to me, Gabriner wrote that their goal was to fuse "serious journalism with critical art displayed in a newspaper format." As to their success in achieving this goal, he demonstrated a perspective that only time can provide. He wrote that Connections "made a modest contribution to consciousness about certain key issues facing the university, the country and the world."  

They might have created the art form for themselves; however any individual with a printing press since before Gutenberg could have engraved plates and created the same eye-catching design as Connections, but Connections was the one to do it, Franklin did not do it with his Gazette nor did any of the other printers examined in the previous chapter. Like all early American printers Franklin remained in the structure of columns as I highlighted in that chapter. The most jarring layout technique that appears throughout the publication can be found in this first issue. In all of the early American papers we saw news begin at the top-left of the first page and continue through to the bottom right of the final page of the newspaper. News beginning at the front and continuing to the back is a common convention that appears throughout early and modern publications. Connections up-ends this convention giving new meaning to the phrase "after the jump."  

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80 Wagner, Dave. "Where We're At...",  
82 Ibid.  
83 The "letter-number" convention is a way of distinguishing between sections of a paper, the letter referring to the section and the number referring to the page in the section. Publications like Connections consisting on only one section would not use a letter preceding the page number,
In news, stories commonly begin on one page, such as A1 or A2 and then at a natural break end and take the reader to another page within the section. In this first issue of Connections underneath a spacing line on page three is the headline “Feeding the Badgers” and beneath that, the words “continued from page 8.”84 In this instance, a reader first encounters the end of an article before the beginning. Furthermore, this is not a one-time occurrence, this layout element reappears throughout, reversing the “before the jump, after the jump” convention.

It is easy to read deeply into this break from journalistic convention as a feedback mechanism - the young, inexperienced radicals thumbing their nose at the polished mainstream, professional press; however, that would be wrong. In a follow-up conversation with Oberdorfer in March, I asked him why Connections would begin articles on a later page and then finish it on an earlier one and he attributed it to a rushed layout and inexperience. Oberdorfer said, "probably because we were putting the thing out so quickly, and you do the length of the article, trying to get it to fit it, it was probably just careless layout." They were learning as they worked.85 In an email to me, Gabriner explained that, “We shared a view that content was more important than the author and consequently, we wanted to emphasize that point."86

Connections’ leaders were amateur printers and publishers, more concerned with the content than with the perfecting layout. In the same follow-up conversation with Oberdorfer, he said that these kinds of quirks in Connections became a criticism from people who were looking for reasons to complain. He told me that critics of Connections’ content latched onto the strange

page jumps. They would attack the content and then add that they don’t “know how to layout a newspaper either.”

In his email to me, Gabriner wrote that there was no style guide and as a result, “you will find a bit of chaos reflected in the logic of how the newspaper was organized,” adding “We meant well, but conventions of normal newspaper design was not high on our list.”

Further examining this first issue for the trends of the run provides additional insight into how the publication viewed itself. Looking at other 20th century publications, when a byline appeared, it was included at the top of the article. In Connections, bylines were included at the end of each article. My first impression is that this makes the publication appear less formal and gives the illusion that the articles were letters written by the author to the Connections readership. This idea is similar to the letter writers in the previous chapter who signed letters to the editor and to each other in their papers.

Formality was not the primary reason for placing the byline at the end of the paper. In my conversations with Oberdorfer, he said that there was no singular reason for making that decision. First among the reasons for this convention he said was Connections lacked a stylebook, it did not have its own and it did not utilize the Associated Press stylebook or the stylebooks of any other major media outlet including The New York Times or The Washington Post. Secondly, he said it was a deliberate decision to focus first on the content that Connections published, and then on the person, “the story was more important than the person writing it.”

89 Bylines, the credit to the author(s) was not a standard practice until later in the 20th century, they first referred to a staff writer, or attributed the work to a wire service and only later did they identify the author(s) by name.
The remainder of the first volume of *Connections* continued on much in the same fashion as that first issue. One year after the paper began, in Volume Two, Issue One the editors ran a similarly explanatory article on page two (the first page with non-image content) to what they ran a year prior on the front page. The article entitled "The Real Threat" begins, "*Connections* has attempted to be 'total media’” and describes events regarding a leaflet distributed (not by *Connections*) over the weekend claiming *Connections* uncovered a plot by a "paramilitary right wing group."91

In a follow-up email with Gabriner he said that the idea of “total media” comes from Herbert Marcuse’s critique of 20th century capitalism that he discussed at length in his book *One Dimensional Man*. The Marcuse wing of the group focused more on the mass media as the problem and *Connections* existed to be “alternative media—a complete media to explain reality.”92 He added in the email that he is not sure that he was in concert with this thinking but he was the editor.93

*Connections* was “total media” and occasionally editors directly commented on what they saw in the news rather than reporting their observations and musings from their radical perch. Robert Gabriner, the editor in chief whom I interviewed for this study wrote one such piece in the September 9-21, 1968 issue. Gabriner’s article “Back to you Walter…” appears underneath a boxed headline featuring the words in a handwritten bubble font over the CBS eye logo.94

The article is a detailed retelling of CBS anchor Walter Cronkite’s mood and reporting during the 1968 Democratic National Convention in Chicago. Like so many articles in

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93 Ibid.


*Connections,* it began on page ten and finished on page nine. Gabriner writes that Cronkite “was the model of experience, sagacity and poise. Never would he blow his cool. Never did you see him slip. The perfect papa for C.B.S. viewers.” What surprised Gabriner was how the “perfect papa” and the CBS team lost their composure one night of the convention, “Disbelief, anger and grief engulfed my father figure”. Cronkite and the team, in Gabriner’s view, were forced to “fill in the gap between illusion and reality” as it related to the protesters inside and outside the convention hall.

The most significant aspect to this study of Gabriner’s detailed analysis of Cronkite’s coverage of the Chicago convention is that *Connections* provided the forum for a direct message to a leading organization in the mainstream press. This function is the central reason I included *Connections* in this study. It is why I chose to examine entire issues of the paper rather than only feedback elements in every first and second issue of ten as I did with newspapers in the previous chapter and why I did not simply examine every tenth article like I do with websites in the next chapter. In the case of *Connections*, the paper itself was the feedback from the consumers consisting of signal, noise and raunchy artwork.

Filling pages is the hardest task for a newspaper; it requires gathering news, editing news and finally printing the news. Printing nonsense is easy, it only requires access to a press, but printing news is the challenge. Since the early days of newspapers printers solved the problem of newsgathering by “slipping,” lifting articles from another publication and including it in their own. In this same issue, where the editors called themselves “total media,” *Connections* printed

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96 Ibid.
a series of poems on page six, one of which came from another paper published across the country.

“the [sic] intensity in the eye” is a short poem reprinted from *The East Village Other* from New York City printed during the same time as *Connections*. The poem made its way across the country from the East Village to Madison, Wisconsin.

In a conversation, Gabriner mentioned that the paper published following the Dow Chemical Riot at University of Wisconsin Madison was their most controversial issue. This issue fell outside the sample of this study, as it did not fall as a fifth issue of each volume. However, Gabriner summarized the issue in a single image, the back-cover art featuring a photo from the riot and a quote from President Lyndon Johnson. The idea behind this layout was “communication and raise consciousness.”

In many ways *Connections* achieved the goal of getting individuals who did not see how the Vietnam War, race issue and the other causes of the new left impacted themselves to think about the role those issues played in their own lives. Gabriner recalls that every copy from this edition was collected and destroyed by those seeking to suppress the images and editors produced a total of three print runs and ultimately produced the back cover image as a full size poster.

In my interview with Oberdorfer, he elaborated on the process for producing the iconic back cover of the issue. Recalling the protests, he said that the university police caused the riot, and that they were at the site to “lay-waste” to the demonstrators and “teach them a lesson not to be political.” Along with other photographers and members of the staff, Oberdorfer went to the

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97 Gabriner, Robert. “Interview with Robert Gabriner”
98 Ibid.
riot with a camera to document the events. Oberdorfer told his story of the Dow riots to David Maraniss.

Oberdorfer went to the riot as a photographer to document the event, but Maraniss documents a turn in Oberdorfer’s intent. He explains that Oberdorfer placed his camera in a jacket pocket, and “sat down right outside the interview room. The time had come for resistance, he believed.”

While Oberdorfer’s camera was in his pocket and he refrained from shooting pictures as a protester, he believes he might have been the one to take picture, which appeared in the publication. The picture features police in riot gear with a baton raised ready to come down on protesters blocking the force of the blow. In the lower right corner a quote from then-President Lyndon B. Johnson appears.

Our foreign policy must always be an extension of this nation’s domestic policy. Our safest guide to what we do abroad is a good look at what we are doing at home.

To the Connections staff, the Dow story was one that needed to be told and the press was not telling it. The idea, he said, was to connect individuals to the story locally and globally. Oberdorfer told me the protest “could become a noble point, a synapse if you were, a connection.”

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99 Maraniss, David. Location 6449.
CONCLUSIONS

Despite being the mid point technology explored in this study, offset printing is not just an intermediate technology between manual presses and web publishing. Offset printing is best seen in the context of its time, a relatively fast, inexpensive method for producing a professional looking product. *Connections* demonstrates how the technology available could be employed by relatively unskilled workers for maximum impact.

Gabriner and the rest of the *Connections* staff became “total media,” as they confronted race and economic issues. They challenged the mainstream press, such as with the article directed at Walter Cronkite. Through the Dow issue, Oberdorfer and his photography team produced lasting visuals representative of an era that might not have been otherwise produced by the mainstream press. Their goal was to form associations among ideas where they did not previously exist and turn journalism into an art form. Their art is their “total media.” The *Connections* staff produced poetry alongside cartoons next to social critique. This is the lasting impact of *Connections* and other publications produced with the same mindset.

I wrote earlier that *Connections* produced a “paper blog” and produced news that would not, or could not have been reported in the mainstream press. They provided images and stories that nobody else would tell and this is one of the last technological eras where a physical alternative press filled that role. Going forward web blogs and social media would fill that space.
CHAPTER 3: THE INTERNET AND THE WEB

We have already seen how colonial printers used the available technologies to communicate with their readers by including their accounts of news and letters to the publication. Next came offset printing and other forms of consumer printing as the first technologies that allowed unskilled printers (albeit with some help) to produce their own professional-looking newspapers to last as part of the historical record alongside the mainstream, professional press. Each of these technologies benefited both sides of the producer-consumer divide; anybody could write to a newspaper and hope that the letter was printed. When mechanized printing overtook manual presses, large-scale printers including leading newspapers naturally adopted the faster, cheaper technology. But the same benefits it afforded to professionals also extended to amateurs, namely the speed, ability to hire an independent print shop, and relative inexperience required to prepare a publication for print.

Like previous evolutions in technology, the third stage in this study also benefited both sides of the consumer-producer divide. Internet and Web technologies continue this trend of benefiting both sides, however in many ways these technologies are different in that they do not produce a physical product, the factor of previous technological landscapes that consumed the most skill and most costs.

Typesetting printers needed an expertise in laying type and printing by hand, alternative newsletters could suffice with small printing operations in the back of a storefront but in order to compete publishers needed printing operations with the ability to technology comparable to that of major newspapers. But the Internet is different. Any user with minimal skill can setup a website, each of these sites is a technological equal in that the underlying technologies to operate
the websites for *The New York Times* and *The Washington Post* are the same as those behind the simplest blog. The skills required to master producing an independent blog are the same as those required to produce and manage the online space for any of the major news organizations. By creating online connections and by utilizing existing web platforms such as social networks and community sites a user can talk to anybody else on the Web to distribute content. He or she could join existing networks of users and leverage those numbers to expand the reach for their views and engage with others professing similar and diverging opinions easily and as technological peers.

This is different from individuals using 18th century newspapers to publish their letters. In those cases, the only option available was printing through professional printing houses, whereas in the 1950s and throughout the mid-to-late twentieth century anybody could print their own newsletters on primitive consumer technologies or send it to a professional house. These voices could also literally be heard through available audio technologies including shortwave.

**HISTORY**

The Internet, and Web services specifically, allowed any user the opportunity to join a previously exclusive club available only to those with a specific set of technical skills. Printers needed to know how to operate manual presses and broadcasters needed the skills to record and transmit their views. More recently, printers needed to update their skills to produce in a 20th century environment as their predecessor’s manual tools were no longer competitive. Some small and independent publishers favored professional printing operations over backroom copying. The skills and basic tools to prepare the product for small printers and national news
organizations remained specialized and consistent throughout the mid-20th century for all printers.

While the Internet was the first technology to open discussion to many, it was not until the World Wide Web launched in 1992 and its subsequent broad adoption that publishing truly became available to the masses. For the first time, individuals could publish their own content in the form of blogs and forums and they could provide direct feedback outside the editorial process to professional publications. In all other technological eras, anybody who wished to comment on editorial content relied on the same publishers, or network of publishers, to produce the comment [i.e. in the form of letters to the editors] as those who produced the original work.

The most basic form of user-generated content outside the editorial process is user comments on websites. This simple approach requires little to no additional knowledge on the part of the users since they already possess the skills to log on and use the web and web services. Comment sections provide a sanctioned space by a news organization for its consumers to engage with and comment on its product. It is both easy to implement and easy to ignore on the part of producers who want a simple means of allowing consumers to engage with content under their guise.

The other great change in the Web-news era is that consumers can choose what they read. In the past consumers always could choose between one publication or another, but once committed to a publication a reader had to see the front page and then flip through to the desired content. Radio listeners had the option to change the channel, however could only listen to whatever the producers chose to broadcast. Second only to its ability to allow web users to freely post on their own, the Web's most powerful difference is the Filter Bubble, a self-reinforcing
phenomenon of open-web and web-service search results not showing people what they need to see or want to see but using predictive algorithms to display “relevant” results effectively but blocking everything else.

“There is no standard Google anymore,” Eli Pariser wrote in his book The Filter Bubble: What the Internet Is Hiding from You.102 The book details how users stumble into a largely invisible, self-reinforcing mechanism where each user engages with their own Internet, oftentimes without their knowledge. Inevitably, by clicking on hyperlinks a user is deciding how he or she will view the web. “It’s an active process” Pariser wrote about engaging with news online and offline.103 While clicking is an active process it is still invisible in that every click dictates the bubble and it happens out of the user’s sight. Clicking is also self-reinforcing, as visiting a news site constitutes a “vote” for that site. This logic is the underpinning of Google and its algorithm PageRank.

The Bubble gradually evolved and expanded over time but its formalization can be traced to two dates: January 9, 1998 and September 4, 2001. The first is the date that Larry Page applied to patent a method for node ranking in a linked database and the second is the day that the U.S. Patent and Trademark Office granted the patent. The patent describes the forerunner of what is now the top-secret Google algorithm as a method to rank “nodes” or webpages based on the number and rank of the pages citing, or linking to the original page.104

103 Ibid.17.
The patent treats an inbound link as a vote supporting the content, despite that it might also be a link criticizing the webpage. Referring to links as “citations” Larry Page wrote in the patent:

Thus, the importance of a page, and hence the rank assigned to it, should depend not just on the number of citations it has, but on the importance of the citing documents as well. This implies a recursive definition of rank: the rank of a document is a function of the ranks of the documents which cite it.\textsuperscript{105}

A ranking system is not inherently bad; it is the only way that any search entity can function given the perpetually expanding nature of the Web. However, when the technology of a ranking system transforms into an invisible personalized ranking system it forever and irrevocably changes the relationship between news producers and consumers. When Google launched personal search as an adjustment to the simple ranking algorithm in 2005, a Google executive described knowing a user’s web history as a need.

At the 2005 launch event Googler Marissa Mayer said, "We need to have a history of the user" to provide accurate search results. At the time, only users with a Google account would see personalized results, but that did not last.\textsuperscript{106} In discussing ads, Pariser wrote that web services like Google can install tracking files known as “cookies” to create a profile to display relevant ads.\textsuperscript{107} That same technology can, and is, used to create “shadow profiles” to deliver personalized search results for non-users.

Users actively enter the bubble and choose to stay in some ways. Users decide to get their news through Facebook and its propriety EdgeRank algorithm, which dictates what content a

\textsuperscript{105} Page, Lawrence.
\textsuperscript{107} Pariser, Eli. 39.
user sees in his or her newsfeed. Facebook, like all social networks, relies on users to select whom they want to hear from by adding another user as a connection. However, by continuously clicking on the posts of one user that user continues to show up in the feed providing more opportunities to click on their posts. The feed itself is a self-reinforcing bubble of what Facebook founder and CEO Mark Zuckerberg calls the largest news producing organization in the history of media.

News Feed “functioned like a newspaper” wrote former Facebook employee Katherine Losse in her book *The Boy Kings: A Journey Into The Heart of the Social Network*. The News Feed system decided what news a user would see as decided by a computer. “An algorithm was now surfacing content that it believed, based on your activity on the site (what you looked at), you would find interesting.” When Losse worked at Facebook and the News Feed program first launched it created stories about people, or in Facebook parlance friends. But today, as news organizations increase their presence on the social site and incorporate social sharing onto their websites they can be increasing buried by non-news content. A user’s single click on a friend’s vacation pictures and not the news story that same friend shared can decide that a user will not see journalism in their feed for months.

When searching for” the moment” that Facebook became the largest news organization in media, September 5, 2006 is an easily identifiable date. On this date, which neatly coincides with the beginning of the Fall semester for Facebook’s then-core demographic of college students, the

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109 Pariser, Eli. 36-7.


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company launched Newsfeed. Losse wrote, “Your friends’ activities on Facebook were now news, and your homepage was a kind of social newspaper.”¹¹¹ The newspaper was one that each user without thinking, could control by their actions and inactions.

Outside the control of news organizations themselves are independent blogs, which are sites managed by an individual or group of individuals outside the traditional confines of publishing. A “blog” is defined by the editors of the Huffington Post as “a regularly updated account of events or ideas posted on the web.”¹¹² But it is more than that according to the editors, for while it is a “web log” of ideas, the editors see blogs as “more interactive, more democratic, and just more fun than what has come before.”¹¹³

In their 2004 paper Blogging by the Rest of Us Diane J. Schiano et. al. expand on the Huffington Post Editor’s definition of blogging. The authors describe four key traits common to many blogs, they are: reverse chronological order, primarily textual, interconnected, and interactive.¹¹⁴ They elaborate on who is a blogger. They found that these people are usually the sole contributor to a blog that he or she edits although some are part of group blogs.¹¹⁵

These users comprise the “one percent” and in some case the “nine percent” of the Web under the 90-9-1 principle advocated by Jakob Nielsen, principle of the Nielsen Norman Group, which specializes in user-experience research. Nielsen studied web communities like those I will examine later in this chapter, but the principle holds equally to the Web as a whole as a large user community. Under this theory, one percent are “heavy contributors” the next nine percent

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¹¹¹ Losse, Katherine. 90-1.
¹¹³ The Editors of the Huffington Post, and Arianna Huffington. 211.
¹¹⁵ Ibid.
are “intermittent contributors” and the final 90 percent are what Nielson called “lurkers” those who read but do not contribute. It is the one, and the nine that provide the only feedback and the most interesting information about how users and publications interact. Non-interaction cannot be discounted as not valuable, however it is outside the scope of this study.

Most importantly, to the individual, blogging provides reach, posting an account of your ideas for billions of people to see provides pride and satisfaction.

Blogs can bring down a Senate majority leader. They can show what a presidential candidate talks about in unguarded moments…They cut out the gatekeepers of information and shorten the news cycle…Blogging gives you a feeling of satisfaction that writing a letter to the editor…cannot match.\(^\text{117}\)

The journalists as a gatekeeper is a common theme in journalism and political literature. In their 2010 article Steven Livingston and W. Lance Bennett describe journalists’ roles as gatekeepers and the gatekeeping function. They write that journalists as gatekeepers “officiate” the news, journalists “manage” the news and “cue” events.\(^\text{118}\)

David Manning White conducted one of the first studies of gatekeeping published in 1950. In this study, White emphasizes that each journalist in the chain from reporters to mid-level editors to senior editors serves as a gatekeeper, able to frame, write, and rewrite the story based on his or her experiences.\(^\text{119}\) The study found that many of the reasons given by a wire


\(^{117}\) The Editors of the Huffington Post, and Arianna Huffington. 211-2.


editor for not including news in his publication were “highly subjective value-judgments” including such reasons as “Don’t care for suicides.”

The idea of gatekeeping generally is that through the journalistic process, news professionals include some stories, eliminate others and decide what the public gets to consume. Gatekeeping is an essential function of journalism since not everything can fit into the news hole, the space in a publication where the information that professionals decide as newsworthy goes. “News coverage in traditional news media is always limited by the technical and commercial limitations of broadcast and print news channels” writes Axel Burns about how news gets from the producer to the consumer.

One definition of gatekeepers offered by Pamela J. Shoemaker et. al. emphasized the processes of winnowing all the news into what was published.

...gatekeeping is the process by which the vast array of potential news messages are winnowed, shaped, and prodded into those few that are actually transmitted by the news media. It is often defined as a series of decision points at which news items are either continued or halted as they pass along news channels from source to reporter to a series of editors.

In Social News, Citizen Journalism and Democracy, Luke Goode also focuses on the layers that constitute the process of making the news and the process by which news professionals become gatekeepers.

The production of news routinely implies a complex and multilayered chain of communication and sense-making: events, issues and ideas will be subject to the

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120 White, David Manning. 386.
influence of various ‘filters’ or ‘gatekeepers’ (sources, journalists, sub-editors) before reaching their public destination.\textsuperscript{123}

When the filters, the “sources, journalists, sub-editors” vanish there is an unfiltered line between the source/newsmaker. When this happens, gatekeeper role breaks down. When the news hole online is infinite and the need to not publish something newsworthy is eliminated, anything can be posted online.

In this environment a new term for gatekeeper developed, that of a “gatewatcher,” someone who execrates the filter bubble by publishing what they think their audience wants to see. A gatewatcher “evaluates and publicizes news, but does not create news reports itself.”\textsuperscript{124} The readers engage and become users and by reposting and re-sharing can, in turn, become their own gatewatcher.\textsuperscript{125} Axel Bruns proposed the idea of gatewatching as opposed to gatekeeping in 2003. Each gatewatcher is by extension a gatekeeper, since through web publishing he or she can decide what their users engage. The same hyperlinks that the gatewatcher relies upon to publicize news also turn him or her into a gatekeeper who cannot be relied upon to seek out different news sources.

Bruns outlines six different types of gatewatching sites. Two gatewatcher models are blog-type sites, communal blogs and personal blogs. In the communal blog model, sites can operate like forums where “blog authors do watch the gates of news sources which interest them,


\textsuperscript{124} Bruns, Axel. 10.

\textsuperscript{125} Ibid.
and publicise and comment on the material they find.”126 Personal blogs are just as the name implies, sites where an individual can be a gatewatcher and engage with their community.

Then there is the point where the worlds of blogging and news networks merge in a third type of gatewatcher site, called, the “open news site.” News sites like these engage “their users as contributors to the gatewatching process,” the process of submitting links and evaluating the news.127 Sites like the Huffington Post utilize this model.

The remaining three models are closed collaborative sites, resource center sites and automated gatewatching.128 While these are important in the overall blogging ecosystem as critical parts of the news environment, they are less critical to this study.

IT’S ALL ARIANNA
Arianna Stassinopoulos was born in Greece and then moved to England as a teenager. Her story in politics and media began later, after moving to the United States and marrying Texas oil millionaire Michael Huffington. When Huffington ran for Congress as a Republican, Arianna Huffington’s interest in politics grew. Eventually her political affiliations diverged from his after their 1998 divorce and she became a political force of her own.129

Huffington involved herself in politics, running in the 2003 California recall election for governor as an Independent and garnering the support of largely liberal voters.130 Although she

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126 Bruns, Axel. 17.
127 Ibid. 13.
128 Ibid. 10.

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began as a Republican and then ran as an independent for Governor, as of 2008, three years after she launched The Huffington Post, Arianna identified as a Democrat in a Time interview.\textsuperscript{131}

In 2005 Arianna Huffington launched The Huffington Post as a mixture of news and blogger networks, a place where anybody could sign up and post. The commentators, invited at first, were given a promise that they could post whatever they want unedited.\textsuperscript{132} Her goal is not to just let people write and write unfettered, but that The Huffington Post bloggers “have a huge responsibility to be 1,000 percent accurate in the blogosphere” because when they are not, that is when the flaws in their system are exposed.\textsuperscript{133}

In 2011, Huffington sold a large part of The Huffington Post to AOL, and the site that was built as a liberal destination became part of the mainstream media. The Huffington Post maintains a liberal bend; however, the mainstream media when viewed as the established, credentialed, professional press clearly includes the publication.\textsuperscript{134} In 2012, the publication received an official stamp of approval from the mainstream press when it received the Pulitzer Prize for national reporting.\textsuperscript{135} Huffington faced criticism for a decision to literally “sell out her fellow progressives” and in the announcement after the sale Huffington that the site, “would emphasize things other than the liberal politics on which the brand was built.”\textsuperscript{136}

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\textsuperscript{132} Huffington, Arianna. Arianna Huffington: The Playboy Interview. 50 Years of the Playboy Interview. . Playboy Enterprises Inc., 2012.
\textsuperscript{133} Huffington, Arianna. Arianna Huffington: The Playboy Interview.
\textsuperscript{134} Non-mainstream press can have some or all of these characteristics; one section of an organization being mainstream does not necessarily mean that the entire organization or everybody in it adopts that label.
\end{flushleft}
Some websites can survive as an ideological bastion; the *Daily Kos* adheres to the liberal view, *Red State* to the conservative. But to thrive as a leader in both news and open news *The Huffington Post* had to “move beyond left and right” politics and embrace everybody on the Web. 137

**WHO IS TALKING**

One of the key attributes of blogs, mainstream and not, is that people are communicating. Blogs are sites where people go to post links, share stories, recall experiences and engage with others online. The next step for me was to look for popular gatewatching sites with an engaged user base and enough content to provide sufficient data for a comprehensive study. Finally I settled on two sites, both established like a large part of the user-generated web liberal-leaning.

I looked at two communities of gatewatchers, one that met Bruns’s criteria for a communal blog, and another that met the criteria for an open news site. In doing this, I was looking for an older community from the birth of web technologies, ideally from the mid 1990s. However due to limitations of web archiving and preservation many of these communities could no longer be accessed in manner conducive to research. Next, I examined earlier internet communities including Yahoo groups and Compuserve dating from the mid-aughts, however neither of these communities offered adequate organization for research. In Compuserve posts of topics that could not possibly exist in 2004 were listed under those dates including one in the

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137 Milbank, Dana.
folder/category "Obama Administration" entitled “doing all we can” and one with the title “lies, lies and more lies.”

REDDIT

I finally settled on Reddit, an Internet community and communal blog as identified by Bruns. Reddit is an open site, anybody can join without an email address and those users can then post comments and links on which other users can “upvote” if they approve or “downvote” if they disapprove. Each “subreddit” or forum has its own rules, moderators (or “mods”) who set and enforce these rules. In the case of Reddit Politics (reddit.com/r/politics) it is a place for U.S. politics, users who want to post about non-U.S. politics are directed elsewhere. Users are advised that the rules include not posting with “Breaking” in their titles, not using all capital letters, and most importantly from the standpoint of a communal blog, not to “Report a submission just because you don't like it.” Reporting is different from downvoting, in that downvoting only impacts a post's ranking and reporting could impact the existence of the post and the status of the contributor.

I imported the Reddit.com/r/politics RSS feed into my Google reader and loaded all posts from November 7, 2012 through December 31, 2012 after the entire study period concluded. These dates were chosen to correspond with the height of the "Fiscal Cliff" debate in Congress between President Barack Obama's reelection and the deadline at the end of calendar year 2012. Every first post in each set of ten was examined for the following criteria: is the user-chosen title

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This is a dynamically updated page and the contents of it change regularly and might not reflect the same results if replication is attempted.
a headline or something else, how many comments are on the post, and what news organization is the source of the user's link. These criteria were chosen based on the open-site characteristics where each user may contribute, but is not breaking news themselves. Since "upvotes" and "downvotes" are dynamic they were not included in this study.

For the post's title to be considered a "headline" it must be a word-for-word copy of the headline of the article included, otherwise it is a summary. A third category is “self” posts. These posts are commentaries posted directly to Reddit without a link to an external news site. These posts create a paradox in the communal blog model which is described as a place where participants share news but do not create it.

Between November 7, 2012 and December 31, 2012 I collected a total of 237 data points, of which 96 were headlines, 130 were summaries of news stories, two were self posts and seven were unknown for various reasons, most commonly however is that the link provided by the original poster is no longer available.

The date range selected was intended to provide insight into how the communal blog engaged with the Fiscal Cliff fight in Washington. Surprisingly the term “fiscal cliff” appeared only four times in the study, or .017 percent of the time.\textsuperscript{139} Related terms appeared less frequently, “debt” appeared three times, and “deficit” appeared twice, combined these terms appear .038 percent of the time.\textsuperscript{140} This issue, which defined the debate for months and appeared regularly in established media sources often sourced by the community garnered a negligible amount of traction in the community blog.

\textsuperscript{139} Calculated by searching for the term “fiscal cliff” in Excel. Result rounded to the nearest hundredth from .0168776371308.

\textsuperscript{140} Calculated by searching for the term “fiscal cliff” “debt” and “deficit” in Microsoft Excel. Result rounded to the nearest hundredth from .0379746835443.
One of the posts featuring the term “fiscal cliff” directed readers to engage with government. A post on December 23, 2012, nine days before the cliff deadline, by redditor PharmerRob entitled “In light of the fiscal cliff issue... How to contact the Speaker John Boehner” contained no news but only a link to a contact form on John Boehner’s website, www.Speaker.gov. This post had relatively low engagement compared to others in the study with only three comments including one from the original poster PharmerRob.

Redditor firesidechat posted a more popular submission with significantly higher than average engagement than average in the study with 1720 comments when examined. Where PharmerRob linked to a contact form for the Speaker, firesidechat posted a long summary title and linked to a news story in The Daily Beast. The story sourced by firesidechat is Daniel Gross’s “On the Fiscal Cliff, Republicans Got Nothin.” The fiscal cliff, which appeared rarely by name still provided vigorous discussion in the community.

This incongruence is essential feedback. Engaged users, the “one” in 90-9-1 are sharing, commenting on, and otherwise engaging with a key and divisive issue but avoiding its name. Extracting this signal from the noise of Reddit is challenging. In this limited study of the politics, subedit yielded 237 data points over approximately 2,370 posts. Reddit itself tries to pull the

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142 PharmerRob.

143 firesidechat. “The Reality Should Be Seeping in... Republicans Don’t Have a Game Plan. They Don’t Have a Specific Proposal to Avoid the Fiscal cliff... They Keep Expecting Obama to Come Back with Something More to Their Liking. Which They’d Also Reject. Many Republicans Literally Don’t Understand What Is Happening.: Politics.” Accessed February 16, 2013. http://www.reddit.com/r/politics/comments/146kgd/the_reality_should_be_seeping_in_republicans_dont/

most relevant posts by highlighting recent posts with the most “upvotes” on the front page of the site and on each subreddit, but it takes a human hand to find meaning in the computer’s choices.

In his post’s title, firesidechat wrote:

The reality should be seeping in... Republicans don’t have a game plan. They don’t have a specific proposal to avoid the fiscal cliff...They keep expecting Obama to come back with something more to their liking, which they’d also reject. Many Republicans literally don’t understand what is happening.145

The above extended, opinionated title is typical of the communal blog, however it is longer than many others. The comments, exhaustive in this case, are where communal blogs can flourish. Reddit ranks comments the same way that it ranks posts, users “upvote” and “downvote” on individual comments, and like posts, comments can become long discussion threads. Comments can be, and often are, snarky, cynical and degrading. In the case of firesidechat’s post, the highest ranking comment is by LynxFX who wrote, “Their main goal is to make sure Obama is only a two term President.”146

At the time LynxFX posted President Obama won reelection and prepared to be sworn in for a second time. On October 23, 2010 Senate Minority Leader Mitch McConnell (R-Ky.) famously said, “The single most important thing we want to achieve is for President Obama to be a one-term president.”147 To understand and fully appreciate LynxFX’s 2012 comment a user

145 firesidechat.  
146 LynxFX. “LynxFX Comments on The Reality Should Be Seeping in... Republicans Don’t Have a Game Plan. They Don’t Have a Specific Proposal to Avoid the Fiscal cliff...They Keep Expecting Obama to Come Back with Something More to Their Liking, Which They’d Also Reject. Many Republicans Literally Don’t Understand What Is Happening.” Accessed February 15, 2013. http://www.reddit.com/r/politics/comments/146kgd/the_reality_should_be_seeping_in_republicans_dont/c7adovd.

needed a full understanding of McConnell’s 2010 quote and the subsequent reaction attacking the leader for lacking a proactive legislative agenda and only focusing on defeating President Obama.

LynxFX’s comment is nuanced and wonky. This user’s ability to receive enough votes to become the top comment on a well-trafficked post on one of the top subreddits highlights the awareness, if not the savvy of blog members.

Here again, one must distinguish the signal from the noise in the feedback especially in a comment where the noise of Reddit is able to flourish. Regardless of if news organizations are reading LynxFX’s Reddit feed, he or she is communicating that the one-term President quote remained a significant news story, and those user who upvoted the story affirmed that fact.

Redditor bigger_than_jesus posted the one of the two self-posts I encountered on December 8, 2012. The post, “After the election, gas prices have dropped by about 50¢, housing prices are up, and unemployment is down to its lowest level since 2008. What would the Republicans being saying right now if Mitt had won the election?” has a long title, albeit shorter than firesidechat’s and poses a question to the subreddit’s community. User bigger_than_jesus follows up the headline with the following statement:

I don’t think any of these things are a result of the reelection. But I’d bet all the karma in the world that the Republicans would spin this as a result of Romney’s election. Heck, even Romney forecasted this by predicting an immediate economic shift just by being reelected.148

The post received less engagement than average, 73 comments compared to an average of 263.

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Bruns wrote that communal blogs “publicise and comment on the material they find” and bigger_than_jesus commented and encouraged others to comment as well. The sixth response on the third most popular comment as of this writing is the first to link to and source a news publication. Redditor ZombieDog linked to a National Review article on gas prices, both publicizing and commenting on key news issues. ZombieDog’s effectiveness however can be questioned, no user responded in any way to his or her comment that included the link.

The other self post by redditor Spyder_J concerned the language of politics and received a much more active response from the blog community. This post, submitted on November 24, 2012 did better compared to the average post that received 263 comments; Spyder_J’s post received 1,838 comments, or nearly seven times the average. The post, “Maybe the Left should start hurling the term "plutocrat" at its Republican rivals the way the Right hurls "socialist" or "communist" at Democrats” adheres to the generalized left-lean ing trend and criticizes the Democratic Party for using ineffective language in politics and offers a solution.

In the body of the post the original poster discloses their leftward political leaning, expresses reservations about "lowering ourselves to their level," but concedes the effectiveness of the Republican use of the term “socialist” and sees benefits for his side.

And just look at the way the Right has made "socialist" such a dirty word and taught their most suggestible adherents to parrot it endlessly. Why should they always win the war of the branding? I think it may be time to introduce

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149 Bruns, Axel. 31–44.
"plutocrat" more prominently into public dialogue and the lexicon of punditry. It'd be nice to see the Right as the ones getting bludgeoned by a label for once.¹⁵²

Like LynxFX’s comment that exhibited a high level of awareness, the reaction to Spyder_J showed that at least some users demonstrate understanding of the topic covered by the subreddit and those are the ones chosen (upvoted) by the community, but also that the community possesses a sense of humor.

The first comment as of this writing is by redditor HarveyBalls who wrote, that people already have a perception about the terms “communist” and “socialist” and already formed negative opinions.¹⁵³

Demonstrating a common trait of savvy and comedy, HarveyBalls continued:

I suspect that hurling around “plutocrat” would lose 50% of Americans right off, 30% (all politically obsessed and active) would understand you, and the remaining 20% would wonder if Republicans had come out in favor of Pluto keeping its status as a planet.

Communal blogs provide a place where people can share the news as they find it and direct their feedback, and in the study ten of those users directed their signal to *The Huffington Post.*

¹⁵² Spyder_J.
HUFFPO

Reddit is a communal blog, allowing anyone to post without even an email address. The Huffington Post alternatively is an “open news” site as defined by Bruns, where users become contributors to the gatewatching process, evaluating the news but not reporting it. This section of HuffPo, as the site is often called, is not to be confused with its news pages where journalism that is more traditional occurs.

I examined one of the gatewatching sections of The Huffington Post to compare it with Reddit’s communal blog structure and the other platforms I wrote about earlier. As with Reddit, I examined the first post in every set of ten published between November 7, 2012 and January 31, 2012. I imported the Politics blog into an RSS reader and loaded all posts within the date range for the study. In both the case of Reddit and The Huffington Post as well as elsewhere in this study I limited the scope of the research to political news, political communication and political discussion.

Examining the politics blog during this period yielded 252 articles. Remembering that this date range was chosen because it was the height of the “fiscal cliff” debate in Washington a search for the term “fiscal cliff” yielded in eight articles, or .031 percent of the total. If the related terms “debt” and “deficit” are included in the count the singular appearance of each increases the rate of appearance of these fiscal terms to .040 percent. In both cases this number is only slightly higher than the rate at which those terms appeared on the Reddit communal blog. The structures of the two blogs contain many similarities, anybody can sign up and post, and in

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154 Different sections of the publication are divided into the news pages and the blog. The news pages can be found at huffingtonpost.com/politics and the blog can be found at huffingtonpost.com/politics/the-blog/
155 .031 is rounded from .03174603174603, .040 is rounded from .03968253968254
both cases, the communities are expected to police themselves. In the case of Reddit, the
communities will downvote users who submit content of which the community disapproves. On
The Huffington Post however, Arriana Huffington herself said that the bloggers are responsible
for accuracy and are expected to be accurate and correct when necessary to ensure the
respectability of the system.

Also lending respectability to the system are the credentials of who is doing the posting.
The sample included five Ph.D.s and a D.Minn, additionally since it is a politics blog its greatest
vote of confidence or “upvote” in Reddit parlance is that six elected officials bloggers in the
sample. In order, Sen. Barbara Boxer (D-Calif.), the now retired Rep. Barney Frank (D-Mass.),
Rep. Keith Ellison (D-Minn.) with Rep. Raúl M. Grijalva (D-Ariz), Gov. Martin O’Malley (D-
Md.) and Rep. Jim Moran (D-Va.).156

Of the six elected leaders, only one wrote about the fiscal cliff, and that was the one who
does not have a vote in Congress, Gov. O’Malley of Maryland. O’Malley’s post argues that
Speaker John Boehner’s “Plan B” to avert the fiscal cliff is not a viable solution. O’Malley
writes that the plan “would harm America’s ability to compete and create jobs while threatening
the important achievements that our private sector employers have made to help us recover from
the Great Recession.”157 As expected in a post from a sitting governor, the submission focuses on
the impact of the plan on Maryland residents and how it would set back economic recovery in
Maryland.

156 Ellison, Keith, and Raúl M. Grijalva. “We Must Take Action to End Gun Violence.” The Huffington Post,
discovered after clicking on the link to further examine the blog post.
157 O’Malley, Martin. “Gov. Martin O’Malley: ‘Plan B’ Isn’t a Plan at All.” The Huffington Post, December 19,
Two of the other posts concern gun control legislation in the aftermath of the Newtown, Connecticut shooting. Reps. Ellison and Grijalva and Rep. Moran all wrote blog posts concerning gun violence and gun safety. In most publications, opinion pieces by lawmakers appear on op-ed pages with other contributing opinion writers. These would be culled by editors and consist of both solicited and unsolicited opinion writings. However on a network that embraces the open news model like *The Huffington Post* all opinion writers in politics appear in the blog section and that is where these elected leaders appear.

Like nearly all communal web services including Reddit, there is a blogger profile on *The Huffington Post* for each blogger, which includes a short biography and a list of all their posts. These three representatives all wrote in response to an event of national importance and it would be understandable that they would take to an open network of writers with a large platform to pursue their agenda in the midst of a national debate. However, this is not the case since Moran, Ellison and Grijalva all had existing profiles prior to the Newtown shooting and had been blogging, at least infrequently, for years. Moran posted first in 2006 on issues as insider as supporting Jack Murtha for House Majority Leader to that of closing the prison facility at Guantanamo Bay, Cuba.  

Ellison began blogging in 2010 and is the most frequent contributor of the three with 21 posts on issues including the debt ceiling and voter access. Grijalva also

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joined in 2010 and submitted 16 posts on topics including immigration (a major issue in Arizona), and oil drilling. 

Six elected officials writing for a blog network within a nearly two month span when the network contains thousands of authors is not noteworthy on its own, however, what is significant is that the members continue to return and thus see it as a valuable means to publicize their views.

How valuable it is varies amongst the lawmakers, but for each it is a way to get their message out without relying on the mainstream press or any other entity to edit their views. A lawmaker’s success in bypassing the media is loud feedback saying the lawmakers can and will communicate directly with the people who decide elections, but will not throw off the reins of the press entirely. The Huffington Post is part of the mainstream media in its reporting, and as such, enjoys the reach of a major publication but at the same time gives its bloggers the freedom to post openly within its loose guidelines.

As gatewatchers these lawmakers conform to the mold, they are not breaking news (although their post might be covered by the press) and they are discussing key issues facing their legislative bodies and voters. These lawmakers evaluate news, they comment on the news but as lawmakers they are not reporting the news in the same way a journalist would.

The basic technology behind The Huffington Post’s blogger system is no different than that of any other website, but the difference between a traditional news site with a comment section and The Huffington Post is the level of openness. HuffPo news pages are open to

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comments like the news pages of many other outlets all of whom adopt varying levels of moderation but Arriana Huffington envisioned an open platform where governors and senators could post equally alongside college kids and bored celebrities. And it worked.

**FEEDBACK ONLINE**

These two sites, Reddit and *The Huffington Post* provide key insights into feedback online. The underlying technologies are open and as such two divergent gatewatching communities flourished. On Reddit unnamed and unknown commenters post mostly news articles for other members of the community to comment on and discuss. Despite not using the keywords of the mainstream press the issues discussed remain the same.

Reddit’s politics discussion board is populated by astute political news consumers who cloak their savvy in humor and snark, that is what makes the site popular and engaging. *The Huffington Post* alternatively requires that contributors be accountable and hold them to that standard. That policy and the site’s reach make it a destination for high-profile contributors like congressmen and governors who in using it transmit that they will not be restrained in their commentary.

One technology, two platforms, two vastly different results -- such is the nature of the Web. However the Web is the present and the future of journalism, and news feedback is the next frontier and the technologies that will shape that frontier are still to be invented.
CONCLUSIONS

Technology changes, but the ideas that drive that technology stay largely the same over time. The overarching trend from manual presses to the Internet and the Web is that feedback always exists; the combination of signal and noise transcends each technological era and is a central part of the news environment. What shifts, however is the balance, since as it becomes easier to publish, the amount of noise increases compared to the amount of signal.

This change reflects the greatest challenge to overcome, that of filtering through the noise to find the appropriate signal. When the costs to create noise were high and could easily be removed by the printer, I examined individual examples of feedback, all of which constituted signal since only signal made the final product. At the time Robert Gabriner and Mike Oberdorfer printed Connections the amount of noise increased as others printed their own newspapers and newsletters. To filter through the noise, I only studied that one publication in depth and rather than examining for feedback in articles in one or more publications. This is because I recognized the entire publication as signal, identifying Connections was isolating the signal from the noise of other, less valuable publications from the same time period. The final filter was finding the signal amongst the greatest noise of any technology, the Internet and the Web. For this, I turned to Reddit, which through comments and voting tries to filter out the noise, and The Huffington Post, one of the largest blogging networks whose signed authors allow for easy discernment of signal from noise.

This study neither is the study of news nor is it the study of technology; much work has been done on both of those fronts. This is the story of how technology impacted news. Throughout this largely historical account each technological change, each new innovation that
created opportunity shifted the landscape for journalism by increasing the amount of noise embedded in the feedback thus obscuring the signal.

Because this is largely a historical story, the evidence shifts over time. Over the three case studies: manual printing, consumer-available offset printing, and the Internet and the Web, the evidence to tell the narrative of opportunity shifts. It is as if comparing red apples to green apples, not entirely different and in many ways very similar, but just as you cannot compare the color between red and green apples, no direct comparison can be made between The Pennsylvania Gazette, Connections, and Reddit.

To solve this I turned to finding the best available evidence to represent each time period. In Chapter 2: Manual Printing, the evidence is best represented by a content analysis. This analysis involved culling articles that are clearly “accounts” or “letters” written by individuals not part of the publication’s staff. For these publications this proved easy, articles began in the upper left of the first page of the publication and then continued all the way to the bottom right of the final page. Articles were clearly headlined and organized in a database for study. This chapter found that despite varying widely in geography the publications maintained similar trends in the type of content published, and that despite holding all effective control over publishing, the publishers maintained a multi-way path between themselves and their readers. This allowed for a relatively free-flow of ideas into their publication including prominently displaying the letters addressed to the printer and the publisher.

The next chapter focused on how non-professional journalists used printing tools once they became available and affordable for underground publications. In this case, the evidence manifested through a representative single publication. Connections consisted solely of signal
just as a good mainstream newspaper consists of only the news. Unique to this chapter was the ability to interview the editorial team of the publication under examination, who, having been separated from the events by more than forty years could now speak with objectivity and perspective about their publication and its impact. This examination found that Connections served as “total media” it tried to engage readers to a new level and through the technologies available, that anybody with minimal experience could produce a physically high quality product.

The final chapter focused on the present by examining Internet and Web technologies. This of course provided the most data, and especially the most noise since as publishing becomes easier noise increases compared with the signal. In this chapter, the best evidence came from two divergent web communities and their role as gate-watchers, those who comment on news and journalism but do not create the news. The two sites, one an open blog and the other a community, provided a structured means of examining a new journalism environment and found that when discerning the feedback’s signal a vibrant and informed (albeit snarky at times) online community evolved. These communities share topical news even if they do not use the same language as the mainstream media.

This study began with the relatively tame world of manual printing presses distributed on horseback and finished with the comparatively lawless environment of community blogs where information is transmitted near the speed of light. Regardless of the technology, there will always be feedback, as consumers will always find a way to spread their opinion. The key difference is the strength of the barrier to entry, only the most motivated consumers could participate when
technology was slow and costly, but as that changes access opens up to the less motivated and less informed.

Every generation of technology in this study showed that the amount of noise in the feedback increased relative to the signal compared with the technologies that came before. With manual presses there was insignificant noise, everything was valuable to somebody and everything filtered through the costly and time-consuming process of laying type and producing each page, one at a time by hand. In the next stage of technology, anybody could publish if they could find a printer willing to do the work but there were still significant costs in terms of time and money, however less compared to manual presses. Finally, online there is a high amount of signal compared to noise, so much that community sites like Reddit need a voting system to begin filtering through all that noise.

The greatest threat in the future is the automation of newsgathering and production, especially since it relies upon user-generated content and can be published without editorial oversight. Through this automated process, misinformation is easily reported, shared and amplified pushing even more noise into the news environment. However, these technologies come with the seal of approval of the mainstream press. With the same technologies as their consumer brethren, these press organizations and individual journalists will produce the next generation of news.
EPILOGUE

There are few more iconic images so far in the 21st century than those from the morning of September 11, 2001; the second plane hitting the South Tower, Secretary of Defense Donald Rumsfeld helping victims out of the Pentagon, smoke rising from Downtown Manhattan.

However, for all those images there is one set in short supply: there are very few images from inside buildings. There are audio recordings of victims calling their families but scant visual record of what they saw. The catalyst news event of a century whose news coverage is defined by instantaneous over-sharing has few pictures recording the event.

Many of the images that do exist from inside the Towers from that morning were taken by amateur photographer John Labriola, who recounted his story to David Friend for his book focusing on images from September 11. Labriola carried a camera regularly to photograph his workday on the 71st floor of Tower One and that that Tuesday was no different, his camera was in his bag.161 In a statement to the Smithsonian Institution, he said that he did not begin taking pictures right away, but about half way down the stairs on the 35th floor.

Around the 35th floor we started meeting a steady stream of firefighters walking up and had to press into single file again. None of them said a word as they went up and past us carrying unbelievable loads of equipment. They were already exhausted by the time we started seeing them. I can't stop thinking about the look in their eyes and how heroic they were. I remembered then that my camera was in my bag and began taking pictures of the men as they went up. I pray some of them made it out.162

http://books.google.fr/books?id=0ZeW0Hs7dOgC&pg=PA199&lpg=PA199&dq=john+labriola+Associated+Press&source=bl&ots=71F1E8k9Nr&sig=7q4svuRclhiv8QejlkUGArVS8al&hl=en&ei=qVuyTq_UJo_HswaXhPCkBA&sa=X&oi=book_result&ct=result&resnum=3&ved=0CCUQ6AEwAjgU#v=onepage&q=john%20labriola%20false.195.

Labriola took the pictures on the morning of September 11th, however he told Friend that he did not upload the images until much later that evening with the help of his brother-in-law, a “computer specialist.” It took hours and two people’s work before the most comprehensive set of images from inside the towers even made it off a memory card. At the time of the attacks, there were no iPhone or Android smart phones or cameras in everybody’s pocket. Even if everybody had a camera in 2001 there was no high-speed mobile network to upload the pictures as there was no popularized cellular Internet access at all.

Imagine for a moment the morning of September 11, 2001, but more than a decade later with 2013 news technology. Many of those trapped in the Towers would have had iPhones and uploaded pictures from inside the buildings. Like many experiencing news events in 2013 they would have uploaded videos using free apps like Tout for fifteen-second video clips and Vine for short edited pieces. If the cellular network could have handled the burden there would have been video recordings from Skype and Apple’s Facetime of people’s goodbyes with their families.

As it stands, none of these exists for the single event that triggered the wars, politics and economy of the new millennium.

THE FUTURE

Technology columnist David Pogue might be best known for his series of colorful instruction manuals for technology products and his humorous yet detailed technology reviews,
but he is also a serious technology columnist. In a 2012 article for *Scientific American*, Pogue counts four rules for predicting the future of technology, which can be summarized as follows:

1. “Make predictions about things that will come to pass, not about things that won’t.”
2. “History is going to repeat itself”
3. “Analog formats always go digital”
4. “Stick to extrapolating from obvious trends”

A similar way of making predictions is to extend the current trends into the future. This is slightly different from history repeating and extrapolating the obvious in that those imply being repetitive and sticking to what can be currently seen. Extending current trends relies on predicting what might not be inherently obvious. Color television is the natural evolution from black and white television, but approximately fifty years after widespread color television news came twitter, which is not the obvious outgrowth of color black-and-white broadcasting.

Within current technological constraints, the future is comparatively easy to predict. “The broad outline of the future of the computer and its offshoots, like the Internet, is relatively easy to foresee on a ten- to twenty-year scale.” John Brockman wrote, we could look at trends and patterns like Moore’s Law that computer processing will double approximately every two years and that software’s capability doubles every one to two decades and see what likely future predictions will become reality. Brockman predicts that under current trends a 3-D recorder and projector could be included in a wristwatch style device that could also serve as a global positioning system.

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166 Holland, John H. 173.
167 Ibid.
168 Ibid. 175.
Yet Google’s Executive Chairman Eric Schmidt and Director of Google Ideas Jared Cohen offer a third view of the future in their forthcoming book *The New Digital Age: Reshaping the Future of People, Nations, and Business.* Expanding on existing trends of increased global connectivity, Schmidt and Cohen write that everybody in the world will be more connected in the future and that will create an increased *feeling* of equality (emphasis added). Online, people possess “access to the same basic platforms, information and online resources.”

In earlier chapters, we saw that technology made it possible for small news organizations to cheaply broadcast live from anywhere and we examined how access to the same core web technologies created two divergent online communities in Reddit and *The Huffington Post.* Technologically they feel equal and serve the same gatewatching functions. These are two sites to which anybody can contribute but one has the seal of approval of the mainstream press, while the other is an open platform where anybody can anonymously make the front page.

Schmidt and Cohen examine one future news platform specifically, the open leaking sites like WikiLeaks that collect and publicize secret corporate and government documents. In their future, these sites continue to need the legitimacy of a constant media cycle lead by mainstream media organizations. Schmidt and Cohen observe that leaking sites require the established press to spread their findings but too many leaking sites results in excessive noise effectively drowning each other out so no leaks turn into news.

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169 Schmidt and Cohen’s book is scheduled for publication on April 23, 2013. For this study I am examining an uncorrected proof sent to me by the publisher Alfred A. Knopf in New York.
171 Ibid. 43.
This future assumes that news is generated by people. An alternative future exists, one where journalists do not report and computers take on the task of “writing” the news. Computers already “write” news stories from raw data they then fill in literally flourish to the article as to make it appear as though a person wrote the article. In a 2012 Wired magazine article, Steven Levy details how a simple report about a baseball game can be generated in this way.

The article on a baseball game compiled the full statistics pitch-by-pitch and resulted in phrases such as “Friona piled up the steals, swiping eight bags in all.”¹⁷² To write this, the computer needs information as to what a steal is in baseball, and that a “base” can also be referred to as a “bag” it then needs to take all this information and compile it into a readable format nearly instantaneously after the game concluded.

Levy reported (himself, not machine-generated) that a cofounder of the company that produces what he calls “robonews” sees this as a compliment to human-reported journalism, “the universe of newswriting will expand dramatically, as computers mine vast troves of data to produce ultra cheap, totally readable accounts of events, trends, and developments that no journalist is currently covering.”¹⁷³

Writing about the “Reporting Crisis” Schmidt and Cohen describe how news organizations move faster than the latest technologies.¹⁷⁴ They write that “luck and chance” will determine who breaks news in the future and they will break it on websites like Twitter, a

¹⁷³ Levy, Steven.
¹⁷⁴ Schmidt, Eric, and Jared Cohen. 47.
microblogging service where anybody can write posts up to 140 characters.\textsuperscript{175} What \textit{can} fill the lag time before reporters can be at the scene are computers, in the same way computers are crawling pitch-by-pitch data from a baseball game, computers can crawl public microblogging sites like Twitter to scan for news events, find the facts and then craft news stories based on that public information.

The result, Schmidt and Cohen write, is news sites competing with the fortunate onsite observers and an audience that turns to the established press because they trust it, the established news organizations provide context and loyalty.\textsuperscript{176} However, there is loyalty to news organizations and there is trust in people you know. The next big change will occur when a filter bubble controlled algorithm dictates which of those known individual’s news a user sees.

In an earlier chapter, I wrote that Facebook’s founder and CEO Mark Zuckerberg called his company the largest news producing organization in the history of media.\textsuperscript{177} The social network’s managing editor Dan Fletcher came to the company from Bloomberg News. In a March 2013 speech where he announced he was leaving Facebook, Fletcher commented on the speculation that the company was going to move into news. He said that Facebook “doesn’t need reporters” because “you guys are the reporters.”\textsuperscript{178}

Facebook would not move into news, it already is a news service in the modern sense. Just as it can be a place to excessively share pictures of your children, it can also be used as a

\begin{flushleft}
\textsuperscript{175} Schmidt, Eric, and Jared Cohen. 48.
\textsuperscript{176} ibid. 51.
\textsuperscript{177} Pariser, Eli. 36-7.
\end{flushleft}
gatewatching site where people post on their own pages, community pages and the pages of
elected officials.

Earlier I wrote that without technology, there is no news, that without the innovations and
inventions that create opportunity, news cannot exist. That statement and that is even truer as
technological advancements diffused through the population so now every person with a
smartphone can become a reporter. Even without technology news events would still happen.
When I say that news could not exist without technology I am referring to produced news, the
final product that comes out of newsrooms with professional news judgment. The news is an
assembled product. Without that process, there are only events, occurrences and people talking.

This epilogue began by thinking about what is missing from the narrative of the
September 11, 2001 attacks that we would have if the events occurred in 2013 instead of 2001.
Now having examined how to make predictions, what does the future hold for produced and
assembled news? As we have seen throughout this study, technology has become smaller,
cheaper and more accessible. It is a safe assumption that those three trends will continue.

What then is smaller and faster than a cellphone with a camera and observers live-
tweeting breaking news events? Google, where Schmidt and Cohen work began answering that
question already with their product Google Glass. Glass is a product worn in front of the eye on a
glasses frame and users can take a picture directly with the device without removing something
from your pocket and turning it on. It allows a user to share what they are seeing live with others,
and since it rests in front of a user’s eyes it is the same as their live perspective.179

Google Glass is a consumer product available to any user with the resources to afford it (which we have seen becomes easier over time) and professional journalists alike. It allows unedited and unfiltered sharing of any person, thing or event encountered by the user regardless of the news value. Whether Glass and other technologies like it will be used by both sides of the producer-consumer divide, it is likely that future protests such as the Occupy Wall Street movement will see journalists using Glass to record the event for their notes. At the same time protesters and radicals who publish like Robert Gabriner would not need to send a future Mike Oberdorfer with a camera to create the next Dow-protest style image, they would just be there with Google Glass broadcasting live in real time. I began this project by highlighting that everything needed to broadcast live can fit in a carry-on bag, soon it will all fit in an eyeglass case.

News events of the future will be oversaturated with images, many indistinguishable from each other. Images from 9/11 would have been taken inside the Towers and the Pentagon; there would be pictures of people being broadcast live from above the impact site, of the line on the roofs before people jumped. These would have been user-generated images and no professional organization could have filtered them, but no professional organization could have ignored them either.

Google Glass is the near future, and moving even further into the future, products like Google Glass will worn by more people and replace smartphones. These devices will be networked together so that when one device is turned on during a major news event all the similar products in the area will also begin broadcasting live providing a near infinite number of
perspectives being simultaneously broadcast. These devices would pick up conversations and
directions from law enforcement, record the audio and broadcast that as well.

In this future, the final stage will be a series of computer generated news accounts
compiled by interpreting the pictures, sounds and human-written text updates and then posting
the final computer-generated news story on the website of a major news organization.

This is one future as it stands now, and it is not as distant as one might think - possibly
ten years, maybe twenty. Nevertheless, this future of an entirely automated journalism is not too
far off and will likely occur within my lifetime. Humans will still have to write the programs that
automate newsgathering, and professional journalists will write the one-hour-later story, fill in
details overnight for the morning edition of the website, and, as Schmidt and Cohen said, humans
must provide context that a computer cannot scan for and cannot see. Where authority figures
censored Connection’s photo from the Dow riots by collecting the copies of the edition and
destroying them, an action like that will not be possible in the future. In the future, once the
feedback image is uploaded live, downloaded by others, copied and saved there will be no way
to prevent the spread of an unpopular or controversial image. There is no way to silence the
noise, however it will be more important than every to filter through and find the signal.
INTRODUCTION


CHAPTER 1: EARLY-AMERICAN PRINTING


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CONCLUSIONS

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