#1 PAPER IN THE WORLD

Meddling Fantasy:
Social media, fake news and the disillusion of the masses

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00.
CONTENT

01.

INTRODUCTION

Society has only recently recognized social media's nascent power to host and amplify powerhouses' often deceptive agendas. This real conspiracy has drawn unprecedented attention because of the 2016 election, but has roots in the newly leveraged tactic of invading the formerly native territory of social media platforms with content designed to manipulate human behavior. The capacity of these websites to louden messages is being used in increasingly nefarious ways – trackers can use the behavioral insights gleaned from mass-monitoring voluntary users of social media to form sophisticated profiles of specific segments of the population. This method of understanding and categorizing humans on a large scale allows for hyper targeting advertisements and sponsored content so tailored that consumers often don't realize they are being manipulated. The implementation of social media to aggregate data and use that data collected to sway people's behavior – from spending to voting – is most problematic because of its ability to blend with truth. Fake news, branded articles, paid product integrations and more need to be taken with a grain of salt, but are often regarded as genuine. This paper briefly addresses the possibility of manipulation through the lens of fake news and politics.

"In 2006, the Federal Election Commission noted that only 18% of all American cited the internet as their leading source of news about the 2004 Presidential election; by contrast the Pew Research Center found that 65% of Americans identified an internet-based source as their leading source of information for the 2016 election (Congress H.R. 4077[1])." Despite all the technological advances in recent years, "the written word is one of the clearest historical continuities between early civilization and the latest innovations. Writing has roared back to the center of everyday communication practices. A total of 7.8 trillion text messages were sent in 2011, more than a thousand for every living human (Marvelous Clouds 2016[2])." In 2017, 75% of worldwide internet users are also social media users. Social networking has become one of the most popular online activities among young people. Unsurprisingly,

North America ranks first among regions where social media is highly popular, with a penetration rate of 66%. In 2016, U.S. users spend more than 3.5 weekly hours on social media via smartphone, 1 weekly hour via PC, and 47 minutes per week via tablet devices (Statista 2017[3]). "According to some sources, the average American spends twenty-three hours per week online (Marvelous Clouds 2016[2])." Once considered a passive and potentially benign source of entertainment, social media and the internet has swelled into a behemoth that has changed the trajectory of human history forever.
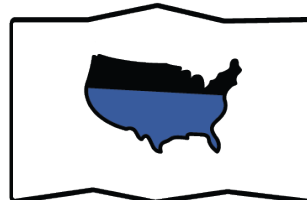
Social media in numbers

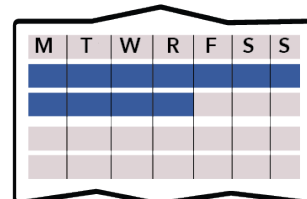75% of worldwide internet users are also **social media users**.

In the U.S. social media has a **penetration of 66%**

65% of U.S. citizens used an internet-based source as their **leading source of information for the 2016 election.**

The average weekly usage on social media is **6 hrs.**

Which means, a regular **social media user spends almost 11.5 days a year** reading and sharing content.

Figure 1

02.

APPROACHING TO A DEFINITION OF SOCIAL MEDIA

Social media is defined as the use of web-based and mobile technologies to turn communication into an interactive dialogue (Safko 2009[4]). In other words, the web network that makes up social media is a communication channel – varying in scale – among billions of people. The world has never been so interconnected. "Social media is a mechanism for capturing, manipulating and consuming attention unlike any other (The Economist[5])." The communication verticals that populate social media include everything classic media has produced and more, from text copy to pictures to video to audio, enabling users to create and share dynamic content, and react to others'. "With the volume of people increasing their use of the internet from in 2016,

active Facebook users per month reached 1.8 billion and Twitter's approached 400 million. The level of engagement is staggering compared to older media channels." It is essentially a content network. Platforms like Facebook, Twitter and Instagram, to name a few, have enjoyed massive success in recent years for programming custom, personalized virtual expression and consumption centers. On top of all of that, "according to comScore, 2 companies own 8 of the 10 most popular smartphone applications as of June 2017[6], including the most popular social media and email services–which delver information and news to users without requiring proactivity by the user. Those same 2 companies accounted for 99% of revenue growth from digital advertising in 2016, including 77% of gross spending. 79% of online American–representing 68% of all Americans–use the single largest social network, while 66% of these users are most likely to get their news from that site (Congress H.R. 4077[1])."

These fledgling sites have evolved so rapidly since their inception because of their inherent programming to monitor human behavior on a mass level, and adjust their interfaces and capabilities accordingly. Not to mention the amount of venture capital being poured into web and mobile advertising. Individuals and groups choose to connect to social media because of advancements in web-based technology allowing them to breathe so much life into their personal avatars with the click of a button, providing an engaging and easy way to interact with others.

Figure 2

"Media" before the internet conjures images of technicolor television content, black and white newspapers, and flashy magazine advertisements. Media in this sense was a one-way street: content was produced by a relatively small pool of journalists and advertisers on one end and consumed by the masses on the other. The advent of high-speed internet in the early 2000's allowed for personal computers to evolve drastically in complexity from desktop machines to hand held-supercomputers allowing for instantaneous, constant content production and distribution. This development has led to an unprecedented paradigm of connection. It literally defines a crucial point in history, and the generations that follow it. Groups like: "Screenagers" or "Digital Natives" (Kaplan 2010[7]), recognized more commonly as Millennials and Generation Z, will never know – or barely remember – the lack of connectivity of years past. Their reality is an instantly connected present with enough content to fill the universe.

Although social media has existed from the birth of Generation Y (1981), widespread adoption did not occur until after 2003 (Bolton 2013[8]). User-generated content in its early days took form via chatrooms, blogs, social networking sites, online review/rating sites, virtual game worlds, video sharing sites and online communities, to name a few. The consumers' content control was limited to text development, basic design, publication and post-publication revision (Bolton 2013[8]). By today's standards, the Internet back then offered very narrow capabilities for the average user. However, this vast development was remarkably empowering for the contemporary internet browser, facilitating an interactivity and immediacy never before accessed. From there, usability and speed of connectivity continued to grow at an exponential pace.

The Pillars of Social Media

Social media requires the cohesion of four components to be engaging and successful (Safko 2009[4]):

1) It must foster communication. The Internet and its social media exist to communicate, from email to "tweeting."

2) It must enable collaboration. The Internet is a robust global tool for professionals, amateurs and everything in between who want to work together and become peers.

3) It must allow education. Organizations use social media to spread information about their products, services, causes or classes. The Web provides amazing versatility in this regard; for example, you can download lectures or videos on nearly any subject. It is every piece of content bundled into one – allowing for virtually unlimited information access.

4) It must entertain. Social media has opened up a galaxy of new entertainment options for users, and is a component of social networking they have come to expect. Social media is redefining how humanity spends time, shaping how we conduct work and how we enjoy leisure.
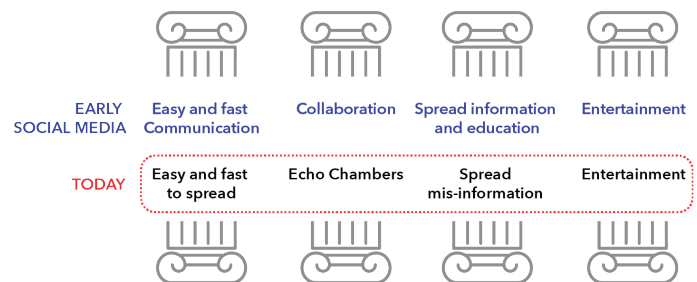
EARLY SOCIAL MEDIA	Easy and fast Communication	Collaboration	Spread information and education	Entertainment
TODAY	Easy and fast to spread	Echo Chambers	Spread mis-information	Entertainment

Figure 3

03.
THE SILVER LINNING

When successful, social networks help sustain relations as people move from one offline community to another. It may facilitate more comfortable transitions, preserving the postgraduate's college friendships that may have formerly fizzled, for example, via a mode of easy, instantaneous, universal connection: "Such connections could have strong payoffs in terms of jobs, internships, and other opportunities," (Ellison 2007[9]). Beyond maintaining relationships, social networks allow users to discover new people with shared interests, facilitating the

development of millions of digital communities. Today's social media interfaces allow precise, molecular control over our online identities. They increase overall social awareness, and in many cases, hyperawareness, of the marginal distinctions in the intimacy levels of our relationships, on and offline: "It is possible that this new dimension of visible creativity in both relationships and identity is making us more conscious, both of our relationships and of ourselves." (Miller 2016[10]) By conveying information from around the world instantaneously, social media flattens the world – it has eliminated the hindrances of former mediums, making everything immediately accessible. Through this influx of data, we are exposed to cultures from all parts of the globe, fostering global understanding and empathy. "We're sharing our lives – the ups and downs, the twists and turns – with people we think will care… our experiences, both good and bad, [contributes to a new way] to empathize with each other." (Lee 2012[11])Recently, we have seen many examples where social media was a primary philanthropic tool. They become grounds for social change, rally cries and platforms for disaster relief contributions. These types of initiatives, while directing aid to the needy, bring us closer to each other as a global society: "Social media quickly took a leading role in the immediate recovery efforts. Victims took to Twitter to ask for help, and volunteers tweeted their availability." (Barnett 2017[12])

The main purpose of social networking is to connect with other people, thereby extending our analog, face to face interactions into the digital abyss. One can only conclude that there was a tremendous societal gap – a need for such an unbounded network to exist – by observing the rate at which humans have adopted social media. The foundation of social networking is constructed on this very human necessity; at the heart of social media exist the relationships that inspire people to produce and share content. It certainly is a testament to the need for people to be connected. Most people use social networks to connect with others via personal profiles or in avatar form, in some cases and of course, you can do social networking for work or for pleasure, mirroring that social media is becoming an extension of what humans do in their daily lives. Social media makes available a mutual communication vehicle. However, the exponential growth of such technology does not occur without suspicion. Advancement, progress, or technological development, more neutrally, yields unforeseen consequences, reinforced by social criticisms and conspiracies, however valid: What are these new capabilities doing to us as an organism? How will they affect our future development? Is social media making us antisocial? Or, are we too fixated on a

classical understanding of social life, when in reality social dynamics are fluid and subject to constant change anyway? Anxieties from the early days of these technologies are not only being confirmed but further obfuscated by new applications.

04.
EARLY CONCERNS TO MODERN COMPLICATIONS

Thirty years ago, contemporaries' predictions of the internet's future looked like people's reactions to most radical developments; the spectrum of concern ranged from regarding it as a fad to fearing it might destroy the universe. Somewhere in the middle are the acknowledgements of its impartial morality – the internet has simultaneously revolutionized education and trafficked humans, weapons and drugs; it has created an untethered library of pornography and rallied activists for civil liberties. Within such a paradigm it is impossible to know what to expect from such a tremendous invention: "In the early 2000s, the growth of online news prompted a new set of concerns, among them that excess diversity of viewpoints would make it easier for like-minded citizens to form "echo chambers" or "filter bubbles" where they would be insulated from contrary perspectives (Sunstein 2001a, b, 2007; Pariser 2011[13])." Ironically, this information-sharing machine allowed people to auto-silo people into channels where inputs only matched their own. Further, at that time, online social activity was limited to the darker recesses of the interwebs, serving many kinds of niche risqué behavior via online chatrooms. However, they were niche – they ain't seen nothing yet.

As the internet developed the scaffolding required for it to exist did as well. One of these massive developments was the browser cookie. "Cookies

are just a fundamental part of how the Web works, about as essential as Wi-Fi, HTML, or electricity. They recognize your computer as it travels between Web pages – so you need them for critical things like logging into a website, or buying something from a store. Cookies are small text files that reside on your computer, and the information they contain is set and accessed by the servers of the websites that you visit. Cookies allow servers to identify you and remember things about you." To this day these still have the same function and necessity they did back when the internet began. As they developed, however, their memory got better, and they paved the way for a much richer internet. Since these files were left by the websites themselves for the site to remember the user and the internet was remembering information about users; companies soon realized they could find out information about those users and follow the proverbial trail of bread crumbs to see what the people were doing on the internet in a more expansive way. While the internet kept scaling up its abilities and availability; sophistication with targeted advertising grew as well.

In many ways targeted advertising developed the internet by doubling down on investments and is likely one of the biggest reasons the internet is what it is today. Brands could pin point their consumers and get ads directly to them but without advents like social media their abilities were rather limited. "Unfortunately, the original intent of the cookie has been subverted by some unscrupulous entities who have found a way to use this process to actually track your movements across the Web. They do this by surreptitiously planting their cookies and then retrieving them in such a way that allows them to build detailed profiles of your interests, spending habits, and lifestyle. On the surface, this practice may seem harmless and hardly worth fretting over since the worst thing most imagine is that corporate concerns will use this information to devise annoying, yet relatively innocuous advertising campaigns, targeted towards specific groups or individuals." In the beginning it didn't really matter much: the advertisements weren't that good; developers probably just wanted the money to see what they could do with the investment capital. However, with our contemporary necessity for using the internet, the volume of users and the amount of data being collected on everyone it is a frightening proposal to contemplate; how such an intimate knowledge of our personal preferences and private activities might eventually be used to brand each of us as members of a particular group.

4.2 Then Facebook, iPhone and the Smart Web

With its prep school origins, humble roots in a game that sorted unaware users into two categories 'hot or not' and friendly prompts, Facebook appeared on the scene a docile newcomer with a bright future. After only a few years of its launch it amassed tremendous investment capital. During this arc, the iPhone blazed into a world filled with Razors and Blackberry's. High-speed internet's glitches and gaffs became a thing of the past. The chatrooms from the early days of AOL were cannibalized and sold out, Napster dissolved, but the channels of attention domination had been constructed. The cookies trail from years past allowed for the development of complex algorithms that allowed for even more sophisticated tracking of users. The simplicity behind them is brilliant both from both a producer and consumers perspective: a virtual machine that aids in not only customizing content for consumers but generating radar specific profiles of ever more granular categories people. "At the outset, the Internet was expected to be an open, democratic source of information. But algorithms, like the kind used by Facebook, instead often steer us toward articles that reflect our own ideological preferences, and search results usually echo what we already know and like. As a result, we aren't exposed to other ideas and viewpoints… as websites get to know our interests better, they also get better at serving up the content that reinforces those interests, while also filtering out those things we generally don't like." In addition to the predictions cited earlier, the advent of fake news compounded onto the elaborate formations of cyber surveillance channels developed through targeted advertising that can reduce individuals to sharply defined segments, virtual echo chambers and a flourishing competition for the attention of phone and computer users everywhere has created an increasingly difficult and confusing phenomenon.

Fake news as defined in the paper Social Media and Fake News in the 2016 Election (Alcott and Matthew Gentzkow 2017[14]) is, "news articles that are intentionally and verifiably false, and could mislead readers." With a floundering definition, understanding and ability of how to regulate such an entity, the world struggles with issues that range from cyber bullying to cyber warfare. As fake news is concerned, in the sense that it is designed so that it is deceptive, it follows that it is a form of violence both through simply undermining the freedom

of the press to a nasty form of psychological manipulation that leads to inciting violence or even recruitment programs for terrorist organizations. "Psychological manipulation can be defined as the exercise of undue influence through mental distortion and emotional exploitation, with the intention to seize power, control, benefits, and privileges at the victim's expense (Ni, 2014[15])."

Consequences of manipulation include a difficulty in passing judgment about the validity of information and impaired decision making. If this proliferates even further it could unravel the fabric that keeps people informed about vital information. For years tech companies lauded social media as an emancipating power, freeing the masses from bureaucratic information channels. As an example of the seriousness of fake news' evolution, David Streitfeld of the New York Times reports states, "at the top of the list is Russian interference in last year's presidential election. Social media might have originally promised liberation, but

it proved an even more useful tool for stoking anger. (Streitfield 2016[16]) The manipulation was so efficient and so lacking in transparency that the companies themselves barely noticed it was happening." Not only has the capability for this kind of influence grown exponentially, along with many technological advancements the infrastructure for targeted advertisements laid the framework for such deceptive conditions many years ago.
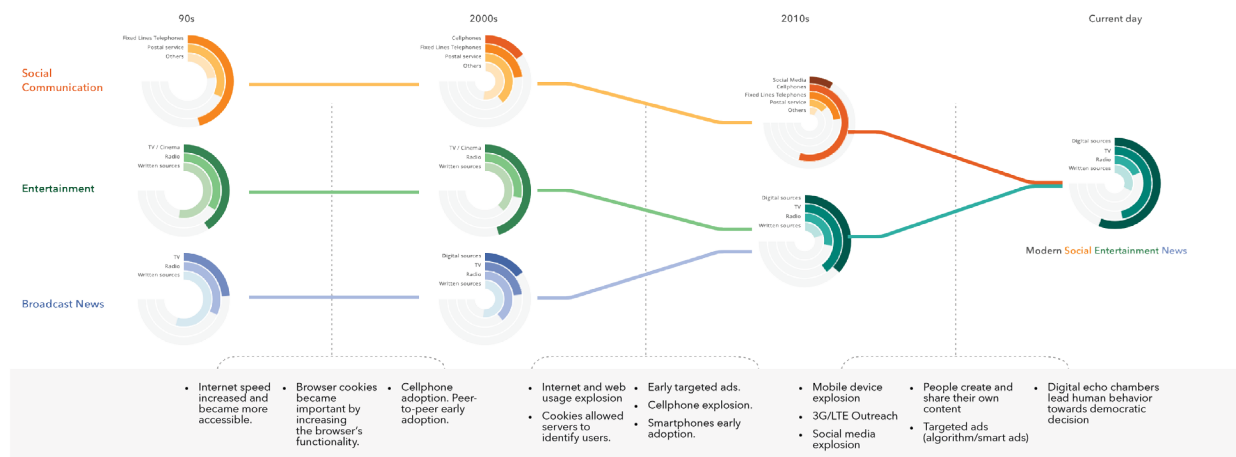
EVOLUTION OF MEDIA

Figure 4

05.

UNDERSTANDING FAKE NEWS

To further clarify, a major challenge of understanding fake news is how to define it. James Ticomb and James Carson outline several categories that outline what constitutes fake news outlined below (Ticomb & Carson 2017[17]):

- **Commercially-driven sensational content:** Stories that are not ideologically driven, but very often have absolutely no grounding in fact. Their key goal is to drive web traffic and, as a result, generate advertising income. Pop-up websites run by Macedonian teenagers fall into this category.

- **Nation state-sponsored misinformation:** The goal here isn't revenue, but influence. Outlets in Russia or elsewhere might produce content to swing public opinion, sow division or give the illusion of support for a particular candidate or idea, either domestically or abroad. Fabricated stories can often be mixed with true or sensationalized ones.

- **Highly-partisan news sites:** These can conflate fact and opinion, are nakedly supportive of one political viewpoint or party, and often position themselves as alternatives to the mainstream media.

- **Social media itself:** Swarms of Twitter bots posting doctored or misleading photos, adverts on Facebook paid for by Russian intelligence outfits, videos on YouTube claiming terrorist incidents are hoaxes. These are not links outside of social media but are part of the social networks themselves.

- **Satire or parody:** Light-hearted publications such as The Onion and Daily Mash have existed well before fake news was seen as a problem.

This list exemplifies why it is challenging to reject this as a figment of our imagination, something completely non-threatening or that it has truly dangerous potential.

06.

FURTHER UNDERSTANDING THE CAPACITY FOR MANIPULATION

The tides of information movement have shifted forever. The algorithms have evolved. More and more information is being recorded every moment. "Recent evidence shows that the most popular fake news stories were more widely shared on Facebook than the most popular mainstream news stories and many people who see fake news stories report that they believe them (Silverman and Singer-Vine 2016[18])."

What's more, Hunt and Gentzkow's database contains 115 pro-Trump fake stories that were shared on Facebook a total of 30 million times, and 41 pro-Clinton fake stories shared a total of 7.6 million times (Allcott & Gentzkow 2017[14]) The upper end of previously reported statistics for the ratio of page visits to shares of stories on social media would suggest that the 38 million shares of fake news in our database translates into 760 million instances of a user clicking through and reading a fake news story, or about three stories read per American adult." Looking at the motivations of such behavior allows for an even more detailed picture of why this is happening.

Alcott and Gentzkow assert, "there are two main motivations for providing fake news. The first is pecuniary: news articles that go viral on social media can draw significant advertising revenue when users click to the original site…The second motivation is ideological. Some fake news providers seek to advance candidates they favor." Simply put, the drivers of this kind of behavior are both power and profit. Information tampering is as old as the wind. A healthy society cannot exist without a truthfully biased information channel and now there are clear paths to profiting or gaining power. "First, barriers to entry in the media industry have dropped precipitously, both because it is now easy to set up websites and because it is easy to monetize web

content through advertising platforms. Because reputational concerns discourage mass media outlets from knowingly reporting false stories, higher entry barriers limit false reporting (Allcott & Gentzkow 2017[14])." "Second, social media are well-suited for fake news dissemination, and social media use has risen sharply: in 2016, active Facebook users per month reached 1.8 billion and Twitter's approached 400 million. The level of engagement is staggering compared to older media channels." "Third, Gallup polls reveal a continuing decline of 'trust and confidence' in the mass media 'when it comes to reporting the news fully, accurately, and fairly.' This decline is more marked among Republicans than Democrats, and there is a particularly sharp drop among Republicans in 2016. The declining trust in mainstream media could be both a cause and a consequence of fake news gaining more traction." "Fourth, *Figure 5* shows one measure of the rise of political polarization: the increasingly negative feelings each side of the political spectrum holds toward the other. As we discuss below, this could affect how likely each side is to believe negative fake news stories about the other."
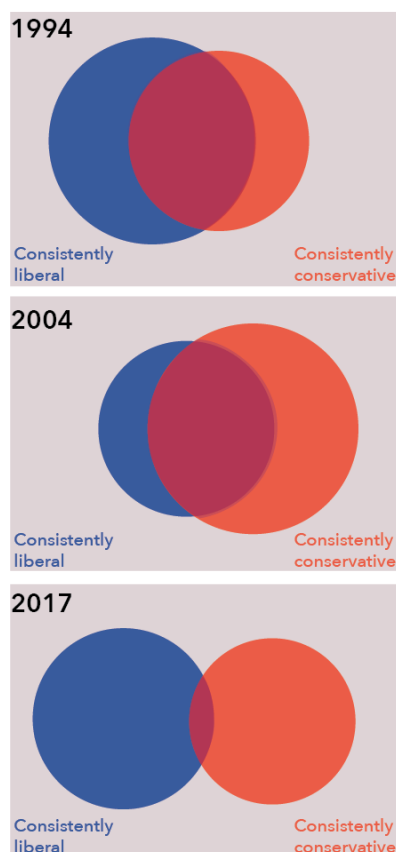
Political attitudes,
by party leaning

Figure 5 Source: The Economist

6.2 Why fake news?

  Simply put, the drivers of this kind of behavior are both power and profit. Information tampering is as old as the wind. A healthy society cannot exist without a truthfully biased information channel and now there are clear paths to profiting or gaining power from subverting those spaces. Alcott and Gentzkow assert, there are two main motivations for providing fake news. The first is pecuniary: news articles that go viral on social media can draw significant advertising revenue when users click to the original site. The second motivation is ideological. Some fake news providers seek to advance candidates they favor. The reason this hasn't happened before is an issue of scale and timing outlined by the following conditions:

1. Barriers to entry in the media industry have dropped precipitously because it is now easy to set up websites and to monetize web content through advertising platforms. Because reputational concerns discourage mass media outlets from knowingly reporting false stories, higher entry barriers limit false reporting;

2. Social media are well-suited for fake news dissemination, and social media use has risen sharply;

3. Gallup polls reveal a continuing decline of 'trust and confidence' in the mass media 'when it comes to reporting the news fully, accurately, and fairly.' The declining trust in mainstream media could be both a cause and a consequence of fake news gaining more traction;

4. The rise of political polarization: the increasingly negative feelings each side of the political spectrum holds toward the other is one example of how this kind of content can influence the development of societal phenomenon.

It sounds like science fiction that a foreign military power would be interfering with an election through an advertisement tracking channel that uses a sophisticated algorithm to influence content generated specifically targeted to users' preferences to leverage their information to direct targeted content advertisements for a political candidate, so they can influence an election on a large scale. "To work at the level of the population as a whole, such social-media operations cannot stand alone. They need mechanisms which can amplify messages developed online, provide the illusion of objectivity,

and validate people's beliefs (Economist 2017[5])." The same model used to target advertising for users by following their web behavior has mutated into the political realm into a complex form of manipulation that undermines the foundations of democracy because "when enough of us peddle fantasy as fact, society loses its grounding in reality."

6.3 Consequences

Humans have never seen such a complex system of communication that works so efficiently and at such a large scale. People depend on social media more than ever. Social media has become one of the main sources of news for many people as the use of mainstream media has decreased. Since there are a plethora of fake news websites, and people have the power to choose where they get their information from, propagation of misinformation becomes more dangerous outlined by the following principles:

1. Consumers who mistake a fake outlet for a legitimate one has less-accurate beliefs;

2. Less-accurate beliefs may reduce positive social externalities which could undermine the ability of the democratic process to select high-quality candidates, for example;

3. Consumers may also become more skeptical of legitimate news producers, to the extent that they become hard to distinguish from fake news producers;

4. These effects may be reinforced in equilibrium by supply-side responses: a reduced demand for high-precision, low-bias reporting will reduce the incentives to invest in accurate reporting and truthfully report signals.

07.

TAKING ACTION

There are many things happening now and many opportunities being excavated for addressing the issue of fake news. The development of sophisticated media channels that allow users to produce their own content while also consuming media from traditional sources has confounded the ways we have dealt with censorship in the past. "Social media are hardly the first communication revolution to first threaten, then rewire the body politic. The printing press did it. So did television and radio, allowing conformity to be imposed in authoritarian countries at the same time as, in more open ones, promoting the norms of discourse which enabled the first mass democracies (Economist 2017)." There is no clear singular avenue for change. It must be a dynamic response that stems from individuals to the companies that produce algorithms that drive content all the way up to government regulations and beyond. We are being challenged about the meaning of freedom in a digital world from an ideological level. "In those [mass democracies that evolved out communication revolutions] broadcasters were often strictly regulated on the basis that the airwaves they used were a public good of limited capacity. One strong argument for not regulating the internet, heard a lot in the 1990s, was that this scarcity of spectrum no longer applied—the internet's capacity was limitless…But there is a raft of problems with justifying greater regulation on these grounds. One is ignorance, and the risk of perverse outcomes that flows from it. As Rasmus Nielsen of Oxford and Roskilde universities argues, not enough is known about the inner workings of social media to come up with effective regulations (Economist 2017[5])." However, to combat these new threats a dynamic response from the public begins with each individual user.

7.1 Individual efforts

Everyone needs to realize that they do ultimately have control over the material they consume and the nature of that consumption. Yes, mobile devices and social media lead to compulsive, even blind

consumption of media to the point that it truly feels information accesses us instead of us accessing it. In many ways modern media does access us: it is where we already are, on our phones or computers, more so than it could have ever been in former iterations. However, this does not have to be a signal for complaints and virulent epithets about how the times have changed; they always change. It is our challenge to adapt to these changes. Finding avenues or developing personal methods of fact checking are a must these days. People must take control of the media they consume lest it be their problem if consequences ensue. It has always been a challenge to discriminate in the face of conflicting information. We are confronted with the age-old question: is it the wind in the grass or a tiger? We need to collectively develop strategies that allow us to understand the patterns that arise from false information or tampering with the integrity our information systems lest we allow democracy to perish.

7.2 Collective efforts

Starting with individual agency and determination from that charge large scale changes can be achieved. If everyone sees the value in practicing discretion in their own media consumption, then that same value can then be applied on a communal level. The same way we evolved to develop family systems to protect the individual and governments to protect our values we must continue to develop systems that address potential threats in a digital world. This simple lesson must be applied whenever there is a new threat on the scene in a collective sense. There are tremendous advantages to things like social media and, obviously, the internet; but if there are not individual efforts strong enough the scene will become overwhelmed with government regulation and will either become a flimsy channel for information or simply become a farce of itself. That said, it is not as simple as just having people make sure people are doing their due diligence on news, there is simply too much information for people to process and realistically fact check personally. On top of that, everyone's feed is unique. Facebook has billions of users with a unique news feed, none of which are an identical copy of one or the other. Every person has different consumption patterns. Groups of civilians should form to call attention to fake news sources, but what would be even more effective is requiring the companies that govern this information, like Facebook, to have boards of people who are privy to the data they so effectively tuck away from everyone who are not

related to the company. There needs to be more transparency from these companies, even if it's to a small group of advisors, so the public is allowed more understanding of how information is being parsed and passed along to us. So, it isn't realistic to think that the individual or community can have total control over what comes in and out of their awareness. There are obviously practical limitations. Companies like Facebook must control their part of the deal too.

7.3 Providers responsibility

If an algorithm can be programmed to associate something a user likes with content that other people who liked the same thing based on a simple correlation, it can probably be programmed to mix up media as well. Instead of fostering echo chambers, social media can act as an agent that provides people with a more holistic point of view by simply adjusting the algorithms they use. Now, before we speculate as to whether this is even feasible it must be noted that at the very least there must be internal regulation of these machines from the side of the company. Based on the enormous amount of profit these companies are seeing, it would follow that it is their duty to monitor a system as best they could. For example, if Facebook continually fails to address issues like echo chambers and targeted advertising, that we have identified as both causes and effects of their system, eventually the people who rely on their platform for information will have to turn away. For Facebook, being the leader in advertisement sales, this alone has mutated the experience of the platform itself; allowing it to become a never-ending reel of content whose sole purpose is to be a vehicle for advertisements. If they don't innovate in the right places they will become the NFL of sports. American football has shown tremendous ability to be taken over by advertisements to the point now that it is difficult to even watch a game because it feels more like the user is tuning in for commercials. If Facebook doesn't regulate itself and stop pandering to advertisers, it will become a farce: a market place with pest like salesman desperately trying to grab the attention of the audience. In that world social media becomes other than itself and veers towards purposeless commodity.

In efforts to mitigate the current struggles outlined, "Facebook has volunteered to show the source of any ads that appear in subscribers' news feeds and develop tools, so people can see all the ads that the social media companies serve to their customers (Economist 2017)." Transparency is a small step

in the right direction. With the volume of content being so high, however, many speculate as to whether that is enough. The former Egyptian activist Wael Ghonim proposes that, "Facebook and other big social-media platforms be required to maintain a public feed that provides a detailed overview of the information distributed on their networks, such as how far a piece of content has spread and which sorts of users have seen it (Economist 2017)." Accountability on the companies' side is imperative now that we are beginning to see the level of manipulation that is possible by leveraging these channels. We are likely only seeing the beginning of these problems. Measures like the ones described above could aid in forming stronger trust bonds between the big social-media companies and the public. Also, Facebook has made an effort to outline how to spot fake news (See Appendix A). Agency on their part could also mitigate the imperative the government will feel to implement more strict regulations on these organizations as well.

7.4 Government and law enforcement

Since these companies are by nature private entities, the conversation surrounding government regulation via the Federal Trade Commission (FTC) and other institutions becomes a wicked polemic quickly. As we have discussed, former media channels historically moved in one direction from the producers of content to the public or there were large barriers of entry into the publication of most kinds of information media that reached large enough populations to be generally disruptive. Ultimately, in these cases the governments purpose in situations like this is to protect the people from threats. Immediately, the conversation could become about hindering free speech or the private sectors ability to operate freely. In past cases, since the content was going through large companies the regulations were simple. When it's coming from a billion people at any given time of day, the ability to regulate it from a government position with our rules about free speech becomes difficult to impossible. It becomes more about what the public wants: is it worth regulating social media to the point that everything being uploaded must go through check before its deposited? That is most likely unfeasible and unlikely. The government can already regulate these platforms through more classic forms of surveillance via local law enforcement and respond accordingly as in the case of direct threats hurled over the internet. However,

the bandwidth of surveillance capacity is still limited regarding this and since the beginning social media platforms have initiated programs to combat these types of issues. The big problem with all of this is what the government's intentions are when making claims against fake news and censorship on social media platforms. "It would be too long to mention all the enemies of press freedom because the concept of 'fake news' as a censorship tool has gone viral. What is certain is that many of them have taken recent statements by President Donald Trump on fake news as a means of justifying their repressive policies."

So, government measures regarding these platforms should be taken with a grain of salt. The free press is separate from the government (at least in theory) so that the government doesn't have dictatorial control over the movement of information because those who control the forces of information control the components of what constitutes truth. Facebook continues to defend its stance that it is not a media company. On that basis, government regulation in this arena would mean censorship of the people. That is why it is so important for individuals, communities and the free providers of these services to remain savvy in how to control the content that passes through these mediums. If the public can't trust places like Facebook they will move elsewhere for their news and online social life eventually, but the flux of that movement should not be directed by the government. Society has survived prior shifts in media development. The future will be challenged but like the past transformed by the developments that arise when those challenges are faced with bold actions.

08.
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09.
APPENDIX

Facebook's tips for spotting fake news:

1. **Be skeptical of headlines.** The headlines of fake news stories are often catchy, and contain lots of capital letters and exclamation marks. If claims in the headline sound unbelievable, they may well be.
2. **Look closely at the URL.** Many false news stories mimic authentic news sources by making small changes to the URL. You can go to the site to compare the URL to established sources.
3. **Check the source.** Ensure the story comes from a source with a reputation for accuracy. If the story comes from a site you have not heard of, check their "About" section to learn more.
4. **Watch for unusual formatting.** Many false news stories often contain spelling and grammar errors, as well as an awkward looking layout.
5. Check the photos. False news stories often contain manipulated images or videos. Sometimes the photo may be authentic, but taken out of context. You can do an internet search of the image to find out where it came from.
6. **Check the dates.** Fake news stories may contain timelines that make no sense, or event dates which are wrong or have been altered.
7. **Check the evidence.** Check the author's sources to confirm they are accurate. Lack of evidence, or a reliance on unnamed experts may indicate false news.
8. Look at other reports. If no other news source is reporting the same story, it could indicate that it is false.
9. **Is the story a joke?** Sometimes false news stories can be hard to distinguish from humourous articles. Check whether the source is known for parody, and whether the story's details and tone suggest it may be just for fun.
10. **Some stories are intentionally false.** Think critically about the stories that you read, and only share articles which you know to be credible.