### UC Berkeley UC Berkeley Previously Published Works

**Title** Reverse-Engineering the Echo Chamber

Permalink https://escholarship.org/uc/item/726623ns

**Author** Rossi, James

Publication Date 2017-05-07

# REVERSE-ENGINEERING THE ECHO CHAMBER MASTER'S THESIS

### **JIM ROSSI**

University of California, Berkeley May 2017

#### Contents:

Introduction/Methodology Prologue: 2 Meanings of Liberal History: From Village to Global Village The Pathology of Journalism: If It Bleeds, It Leads Internet, Ads & Big Data: Hyper-Rationalizing a Bad Business Model? Trust: How it is Lost | How is it Earned? Echo Chambers, Ads & Democracy - the real Facebook Effect? Psychology of Echo Chambers: Glossary Solutions, Part 1 | Traditional Solutions, Part 2 LinkedIn | Marketplace of Ideas Solutions, Part 3 | Creating Value by Going Against the Herd Epilogue: Ann-mageddon and Beyond List of Conversations/Interviews References

"In news media an **echo chamber** is a metaphorical description of a situation in which information, ideas or beliefs are amplified or reinforced by transmission and repetition inside an 'enclosed' system, where different or competing views are censored, disallowed, or otherwise underrepresented. The term is by analogy with an acoustic echo chamber (*Wikipedia*).<sup>1</sup>

**Echo chamber** – A room with sound-reflecting walls used for producing hollow or echoing sound effects (*Merriam-Webster*).<sup>2</sup> (1) a person who totally, obsequiously agrees with everything another person says. (2) An insular communication space where everyone agrees with the information and no outside input is allowed (*Urban Dictionary*).<sup>3</sup>

Numerous surveys indicate that a vast majority of the public in the US lacks trust and confidence in the news media. Based on my own professional experience, I share this distrust. And when I arrived at the Graduate School of Journalism, I was met with a scarcity of new ideas but an over-abundance of cynicism and pessimism. I resolved to re-think the entire practice from the ground up – the ground I was sleeping on. I'd have to - just the first year would cost as much as a

down payment on a sweet Vegas pad. Unless I succeeded, I might be sleeping in the back of an SUV for the rest of my life.<sup>4</sup>

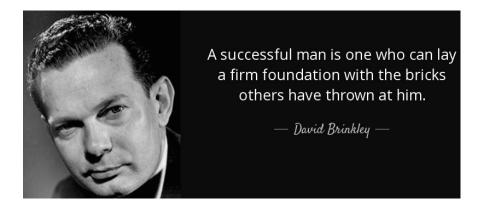
In the traditional news media's predominant business model over the past decade – a hybrid model based on advertisers and paying subscribers, imploded. In the vast majority of news media, readers (and viewers) are not the customers. Advertisers and donors are customers; readers are products delivered to advertisers. This creates a fundamental conflict of interest. **Time is a reader's valuable commodity**. While readers generally want concise, accurate, time-valued information in as little time as possible, without distractions, advertisers generally want people to spend more time watching/reading so they get exposed to more ads. To maximize clicks and views, **news media have a strong incentive to exaggerate and focus on fear, scandal, distortion, controversy, and violence to maximize views, clicks, and ad revenue – hence the maxim "If it bleeds, it leads."** Don't get me wrong: many fine people work in journalism – or at least, they did. But I believe that the vast majority are simply re-arranging deck chairs on the *Titanic*.

Donors to nonprofit journalism create their own incentives – often political ones. Hearst, Sheldon Adelson, "progressive" donors, Google and Facebook now endowing journalism – not only to push their agenda, but pay the watchdogs to be lapdogs. As my UNLV mentor, entrepreneur Dominic Marrocco warns his students, "There is no such thing as a nonprofit."<sup>\*</sup>

Technology, as we will read, has amplified these long-term trends.

**Thesis goal.** When books are the product, readers are customers. So I began experimenting with different ways to use 21<sup>st</sup> century technology to pioneer a zero percent ad revenue and donor business model: To make readers my customers – and create value. Given the cratering confidence in the news media, I see enormous opportunity to create value with innovating even a very partial solution.

On the flip side, however, I expected to generate opposition – and I sure did. The "Berkeley Bubble" and in particular the Journalism School epitomized the flesh-and-flood digital echo chamber that I explore in this thesis. But I wound up creating more value than I could have imagined – using a publishing platform that remains best-known for posting resumes.



But first, a successful man – or woman - has to dodge them. And as my mentor Dominic Marrocco told me after my first semester, "Learning how *not* to do something is often more valuable than the inverse."

<sup>\*</sup> Marrocco expands that this lesson is multifaceted: it relates to strategic philanthropy, the need to bring in more money than spent to remain viable over the long term, and the value the donor attaches to the act – which can be financial, strategic, even emotional (i.e., getting "paid" in the satisfaction of helping people).

"...I have just one wish for you – the good luck to be somewhere where you are free to maintain the kind of integrity I have described, and where you do not feel forced by a need to maintain your position in the organization or financial support, or so on, to lose your integrity. May you have that freedom."

- Richard Feynman, "Cargo Cult Science"

Sleeping in the back of my Nissan Xterra turned out to be the only place where I could find that freedom and integrity.

**Methodology.** I cover a lot of ground here and use hypotheses – essentially educated guesses or opinions – to identify areas for potential innovation, by myself and others. I'm trying to apply the scientific method and "hypothesis-driven entrepreneurship."<sup>5</sup>

**<u>Note</u>**: This thesis evolved from a proposal to Cambridge University Press for the inaugural Nine Dots Prize, sponsored by the Kadas Foundation. **Their question: Are digital technologies making politics impossible?** 

*My Answer:* No – but the ad revenue and donor-driven news media business model driving these technologies *is.* Hypothesis-driven entrepreneurship: I don't claim to know what the news media "should" do. But I see it as a critical problem – and customers generally don't pay for problems; they pay for solutions. In my final section, I provide an anthology of potential solutions underway around the world – and my own particular business model – to give readers a better option that better values their time.<sup>6</sup>

Value Proposition: to *whom*? The "free press" is a term that obscures more than it illuminates. It is no longer a press, and it is not free (TINSTAAFL). As Steve Jobs famously said, "It's not what it is, it's what it does." What is the value hidden in this term "free press"? How about access to accurate, concise, time-valued information on demand – as determined by readers? At the heart of this definition is who journalism really serves – the readers or the advertisers.

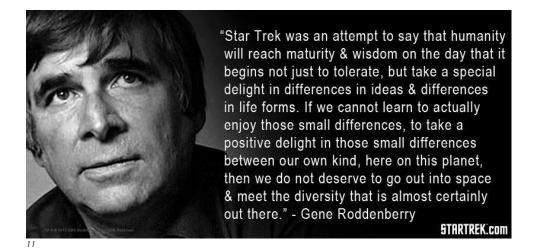
### **Prologue: The Two Meanings of Liberal**

I aspire to be a liberal in the classic sense: "open to new ideas" and sworn to defend individual freedoms – whether I agree with them or not.<sup>7</sup> That classical meaning, however, usually gets lost in its American political meaning of a liberal as a progressive who often favors expanded government – and often refer to a collective.

*Hypothesis:* What we have now in the news media is illiberal in the classic sense: the echo chamber has created closedminded-ness to new ideas. This closed-mindedness spreads out into society and creates incredible danger as global communications technology advances at breathtaking speed.

Dave Rubin is a YouTube interviewer with a huge and growing following. Rubin also defines himself as an aspiring classical liberal – a man whose work remains calm and conversational in a time of clickbait and confrontation. "The Left is no longer liberal," Rubin said in spring 2017. "I now believe that this regressive ideology – which values identity politics and the collective over individual liberty – is the biggest threat to freedom in Western civilization that exists today... Defending my liberal principles has become a conservative position... My positions basically haven't changed, but I've watched as my team went off the deep end." <sup>8 9</sup>

"The reason to listen to people you disagree with is not so you can learn to refute them," political scientist Anthony Codevilla writes. "The reason is, you may be wrong."<sup>10</sup>



### History: From Village to Global Village<sup>\*</sup>

When Johannes Gutenberg invented the printing press around 1440, he helped to make the modern world by making possible the mass dissemination of the written word. Not coincidentally, Gutenberg's press also enabled challenges to the Catholic Church's monopoly on "truth." Before the Industrial Revolution in Europe, journalism in many cases started out as mouthpieces for political parties – each published one, and it was about pushing ideology, not finding truth or even making money. These party presses would preview much of the donor-supported advocacy journalism that would grow more common in the late 20<sup>th</sup> and early 21<sup>st</sup> century – for reasons we'll explore later.<sup>12</sup>

As Thomas Jefferson put back in the early 1800s, "Advertisements contain the only truths to be relied upon in the newspaper."<sup>13</sup> Yet at the same time Jefferson got slandered by a press more similar to the one we have today than most realize, he also understood its importance as an educational tool and check on power.<sup>\*</sup> "And were it left to me to decide," Jefferson wrote, "whether we should have a government without newspapers, or newspapers without governments,

<sup>&</sup>lt;sup>\*</sup> Four key texts inform me here: Paul Starr's *The Creation of the* Media, Ryan Holiday's *Trust Me, I'm Lying: Confessions of a Media Manipulator,* Marshall McLuhan's and W. Terrence Gordon's *Understanding Media,* and Clay Shirky's *Here Comes Everybody: The Power of Organizing Without Organizations.* 

<sup>\*</sup> First paper printed in US was *Publick Ocurrences*, 1690 in Massachusetts which wasn't allied to any political group – and lasted precisely one issue. The Colonial government shut it down in less than a week.

I should not hesitate to prefer the latter." Jefferson was brilliant but highly imperfect, a man of his time who fought for freedom but also owned slaves. I see a similar contradiction in what we call a "free press:" its inherent unreliability as truth-seeker but necessity for democratic society.

In the 19<sup>th</sup> century, the newspapers that followed – selling papers to the public during the Industrial Age - became known as yellow presses for their sensational stories of murder, scandal, and warfare. "If it bleeds, it leads" – the reality, not simply the quote<sup>\*</sup> - dates back at least to the Civil War, when the bombing of Fort Sumter drove record sales of mass-produced newspapers. Newspaper publishers learned the lesson from this seminal event, and headlined war, lurid murders, and scandal. And when there wasn't any, the yellow presses made it up. Newspapers clamored for the Spanish-American War at the turn of the century. But it's not just about money – at least not directly. As far back as I look, publishing or suppressing the news also served political ends. Fake news?

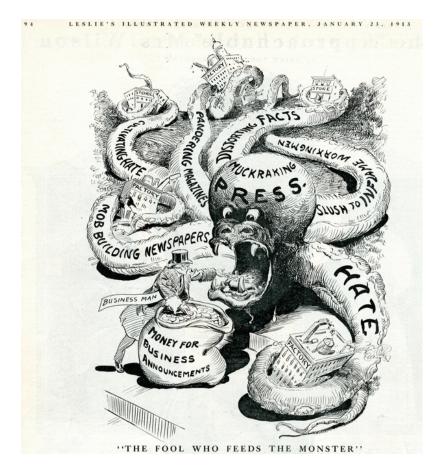
Until the mid-19th century, information only traveled as fast as a horse or a ship.<sup>\*</sup> Knowledge - and trust - spread like wildfire through a village or city, but slowly and haphazardly beyond. Starting in 1837, the telegraph, radio, and eventually television beamed information around the world almost instantaneously - but at high cost and limited frequencies (aka bandwidth). The costs and scarcity made advertising extremely valuable, and advertisers' money financed *The Creation of the Media*.<sup>14</sup> \*

The telegram wire services evolved directly into dominant news companies – the Reuters Telegram Company and the Associated Press, pooled to report back to their newspaper offices. Joseph Pulitzer became one of the first newspaper tycoons, then donated some of his wealth to help start two journalism schools - at Columbia University and the University of Missouri. Columbia began the Pulitzer Prizes to reward quality journalism. It's got a mixed record, like journalism, but it's an attempt.<sup>15</sup>

<sup>\*</sup> Some sites attribute the actual quote to journalist Eric Pooley in the 1980s: <u>http://evaluatingconversations.weebly.com/if-it-bleeds-it-leads.html</u>.

<sup>\*</sup> I found at least one fascinating exception: a couple optical semaphore systems in Europe.

<sup>\*</sup> Creation of the Media is the title of Paul Starr's authoritative history.



"The Fool Who Feeds the Monster" – ad revenue funding the production of fake news - got published in 1913.

In the 20<sup>th</sup> century, the *New York Times* pioneered a true hybrid subscription model, attracting readers as long-term customers along with advertisers. This created more accountability: a direct financial incentive to create value for readers so they keep subscribing. But we still got the Vietnam War, what the Museum of Broadcast Communications called "surely the biggest story television has ever covered."<sup>16</sup> But it led to arguably journalism's high-water moment: Major US newspapers showed solidarity in the face of legal threats from the Nixon administration and published the Pentagon Papers.<sup>17</sup> Publication helped bring an end to the Vietnam War – and Nixon employed "plumbers" to fix the leaks, which led to Watergate.<sup>18</sup>

Also during the 1960s and 1970s, many in the Vietnam generation of journalists believed that by deploying the new technologies of color TV and photography to document war, poverty, and crime - by bearing witness to tragedy - they could reduce it.<sup>\*</sup> However, as I learned at UNLV studying postwar US history, **one generation's solution often becomes the next generation's problem**.<sup>\*</sup>

*Hypothesis:* 1964's landmark Supreme Court decision on the 1<sup>st</sup> Amendment, *Sullivan v. NY Times,* may have contributed to making clickbait internet journalism. A greater risk of getting sued might have tipped the scales of

<sup>&</sup>lt;sup>7</sup> Photographer James Natchwey waxed eloquent on this.

<sup>&</sup>lt;sup>\*</sup> A classic example: the atomic bomb brought a swift end to World War II, but triggered a global existential crisis for the next 42 years.

the news media's business model in an entirely different direction. In the context of the Civil Rights era, I think it was probably a good decision – but with **unintended consequences**, made clearer in subsequent cases. This may be another case of one generation's solution becoming the next generation's problem.<sup>19</sup>

## The Pathology of Journalism: If It Bleeds, It Leads

"It is difficult to get a person to understand something," muckraking journalist Upton Sinclair wrote,<sup>20</sup> "when their job depends upon their not understanding it."

*Hypothesis*: Sinclair's famous quote holds true about the news media just like any other industry. The news media's fundamental business model, while sometimes serving the public interest by calling attention to problems and injustice, tends to maximize revenue by when it spreads fear, distortion, scandal, and violence. Journalists report on conflict of interests, but *journalism's fundamental business model <u>is</u> a conflict of interest.* 

24/7 news coverage motivates, not deters, the current generation of mass killers and terrorists. And increasingly, they are the same people. Killers-in-training – many or most of whom by definition mentally unbalanced, then influenced by extremist propaganda from racists, terrorists, etc. - study the news media's flashy maps, data visualization graphics, and social media streams. They strategize how to outdo each other in body counts, page views, and TV ratings. In the 21st century, we now have near-ubiquitous video, photos, and audio - enough to stream mayhem 24/7. It's a sick, twisted corollary of the entrepreneur's maxim: Luck is what happens when preparation meets opportunity.<sup>\*</sup>

Although I don't totally discount catharsis, my research found the evidence lacking. Instead, a vast majority of scientists hold a consensus that exposure to media violence is linked to actual violent behavior.<sup>21</sup> Endlessly-looped violence de-sensitizes some healthy people, traumatizes and depresses others, and drives unbalanced people over the edge.<sup>22</sup> Several research studies strongly suggest that our children are especially at risk – with the possible mechanism being the effect of repeated, emotionally traumatic imagery on their still-forming brain synapses.<sup>23</sup> One potential solution - covering violence without graphic photos and videos – would give terrorists and murderers less of what they want – but also less views and ad revenue.

*Hypothesis:* Instead of reducing violence, the way the news media covers violence likely fuels more violence in a positive feedback loop - a vicious cycle. That would help to explain why the atrocities tend to come in waves. Example: During the summer of 2016, police shootings of suspects, attacks on police, and terrorist attacks from Orlando to Nice to Dhaka came within days or weeks of each other. Some, like the Dallas police shootings at a protest march, were committed by people citing the earlier violence as justification. Social media televised much of the savagery across the world, sometimes in real time.<sup>24</sup> And with Facebook's \$2 billion investment in Oculus, we may soon experience the carnage in virtual reality.

Journalists get trained to follow the money, so here goes. News media make their money selling ads - based on views and clicks. Violent videos often go viral and command the most dollars. As ad-revenue drops while ad-blocking software spreads – potentially axing \$12 billion from already-squeezed media owners in the US alone by 2020 - violence is a reliable moneymaker for news media – arguably more than sex (which they can only allude to) and sports

<sup>\*</sup> What should journalism's responsibility be? That's beyond the scope of my thesis. I'm focused on other business models.

(which is its own category).<sup>25</sup> Every time the body count gets high enough, MSNBC, Fox News, CNN and others camp out in the stricken city and wrap "exclusives" and "news alerts" around footage of the carnage. We get looped into the basest aspects of our human nature. Like the proverbial car crash, it is horrible - yet often we can't look away.<sup>\* 26</sup>

The news media is the only industry I can think of that profits directly from the death and suffering of innocent people. Deaths and violence draw views, and ads sell by the view and click. Not the fossil fuels industry, not the diamond industry, not even the gun industry - even the nefarious tobacco industry wants their customers to stay alive so they can keep smoking.

This is a big part of what psychologist Steven Pinker describes as the "pathology of journalism" – in other words, seeing journalism as, in part, a disease.<sup>27</sup> Pinker wrote a 2011 book, *The Better Angels of Our Nature*, which argues that the world is getting better: Through the interrelated growth in education, trade, health, political, legal, and intellectual institutions, per capita violence and disease have *decreased* dramatically on a per capita basis. "As one becomes aware of the decline of violence, the world begins to look different," Pinker writes. "The past seems less innocent; the present less sinister… Instead of asking, "Why is there war?" we might ask, "Why is there peace?"

Journalism's pathology, according to Pinker, is that what bleeds is what leads. "No matter how small the percentage of violent deaths may be, in absolute numbers there will always be enough of them to fill the evening news, so people's impressions of violence will be disconnected from the actual proportions." <sup>28–29</sup>

I told Pinker about my project. "I'm highly sympathetic to the constructive, solutions movement in journalism," Pinker said, "since I find newsreaders to be incredulous about the obvious facts of human improvement (of which the decline of violence is a part), which are no 'news' by journalists' definition."

Pinker worries that the trends he writes about in *Better Angels* may be starting to reverse, but he's not sure why. So I asked him. Could this runaway feedback loop between media and the violence be a factor?

"I actually don't think that media violence causes violence in real life," Pinker told me, "with the exception of two categories: terrorists and rampage killers, who clearly do it for the publicity, with the media complicit, just as you say."

*Hypothesis:* I also worry about an indirect effect: that chronic 24/7 exposure to violence via TV and mobile devices contribute to anxiety, depression, and things like distracted driving.

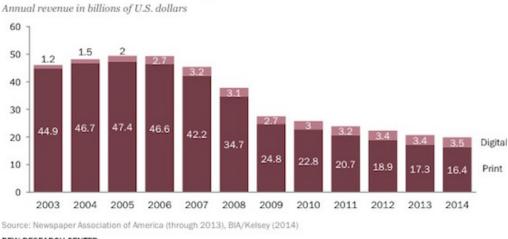
**Hypothesis:** I also worry that ubiquitous cameras, while increasing transparency and accountability, also trigger a predator-prey response, as Bruce Schneier writes in *Data and Coliath*.<sup>30</sup> Throughout our evolutionary history, being watched often served as prelude to being eaten. Schneier surveys evidence suggesting that the presence of cameras can agitate people.

*Note:* What about sex and salaciousness? I don't necessarily see this as a problem. Moreover, I don't really have a solution. A world with more sex and less violence suits me fine.

<sup>\*</sup> I have not owned a TV since childhood, and as a result cannot even watch network TV shows or news without having nightmares. I have not been de-sensitized.

# Internet, Ads & Big Data: Hyper-rationalizing a Bad Business Model?

#### Newspaper Ad Revenue from Digital and Print



PEW RESEARCH CENTER

*Hypothesis:* Over the past decade, the Internet, digital technology, and Big Data made a bad journalism business model into something much worse.

Beginning in the 1990s, the Internet began moving newspapers from print to digital, eroding the subscription model. By the mid-2000s, Big Data hyper-rationalized the advertising world - the specificity of advertising combined with the amplification of digital media instantaneous and with zero supply constraints. Print dwindled while publications multiplied. Then the Great Recession hit. Overall ad revenue began drying up - first on a per capita and then on an absolute basis.<sup>31</sup> Those who didn't receive pink slips got desperate - and desperation marks a sucker.

Advertisers pay by the click. "Scandal, conflict, triviality, titillation, and dogmatism," Ryan Holiday writes in Trust Me, I'm Lying: Confessions of a Media Manipulator - "The press is in the evil position of needing to go negative," Holiday writes, "and play tricks with your psyche in order to drive you to share their material online."<sup>32</sup>

Holiday got big as a digital PR mastermind, manufacturing scandals for wealthy clients to boost clicks, views, and word of mouth - until the game turned boomeranged on him. He writes about it in Trust Me, I'm Lying – part confessional, part media history, and part handbook for the dark arts. "Whether that content is accurate, important, or helpful," Holiday writes, "doesn't even register on their list of priorities."

Instead, what makes money is quantity, not quality: "To string the customer along as long as possible, to deliberately *not* be helpful," he writes, forcing readers to click through as many pages as possible full of ads.<sup>33</sup>

Wars and murder remain huge business. The elitist<sup>\*</sup> New York Times published phony stories about the Washington DC sniper, then Dick Cheney's people scammed the Times, New

 $<sup>^*</sup>$  I define elite by the owners, people working for them, & how one gets a job or gets published by them. For example, I cold-emailed the LA Times for several months and got an opportunity. I had no such luck with the New York Times. I also see a nepotistic line of succession at publisher, and an opaque process for choosing top editors. I also note a number of affluent people who work for them with independent means, a

*Yorker*, and Fox into selling the Iraq War, where I believe the *Times* served as a classic shill – an often unwitting accomplice pulled into complicity through greed. They got a sensational scoop that turned out to be phony, then a very real war that turned into one big story after another – an orgy of death that they covered in gory detail.

Digital media during this time reduced barriers of entry for a lot of players. They got in and spent a lot on scaling up and overseas reporting on the wars, before many went out of business due to competition, digitization, recession, etc. It was a classic boom-bust cycle.

All this should come as no surprise: Think back to Fort Sumter, the Spanish-American War, and the Vietnam War. In 2017, TV experts look to be nearly foaming at the mouth talking about Syria or Ukraine dragging the US into war with Russia. Many of my classmates flock to protests, telling me they hope to see and film riots. That's how you make a name and get valuable video to sell to the news media. If it bleeds, it leads.

Overall, violent crime rates have plummeted in recent decades.<sup>34</sup> But violent crime rates spiked 3.9% from 2014 to 2015 according to the FBI, along with racial tensions - and streaming reality TV infotainment bloodshed.<sup>35</sup> According to Manhattan Institute writer Heather MacDonald in her 2016 book *War on Cops*, homicide rates jumped nearly 17% in 2015 in the 50 largest cities, what she calls the "Ferguson Effect" after police shootings of suspects spurred the Black Lives Matter movement, protests, and less proactive policing. MacDonald calls this "delegitimization of order.". When MacDonald tried to speak at California's Claremont McKenna College in 2017, a riot ensued. Did that prover her point?<sup>36 37</sup>

Note how many catastrophic errors and falsifications in the news media involve war and violent crimes: from the Gulf of Tonkin incident and Iraq War evidence to the phone hacking scandal at Rupert Murdoch's News International and *Rolling Stone*. And note how much civil disorder comes when people debate the root causes of such violence. And with publications publishing more, faster, and with less fact checking than ever before, I expect this trend to accelerate. What disturbs me so much is how closely aligned<sup>\*</sup> the interests of terrorists, mass killers, and the news media have become. These are profound perverse incentives, they have ample historical precedent, and they do not require a conspiracy – merely a confluence of self-interest over time.

Back in the 1960s, Canadian media theorist Marshall McLuhan predicted that mass media technology would eventually create a "global village." Now in the 21st century, anyone with an internet connection can publish professional-quality content via a free platform like LinkedIn or Medium, and disseminate unlimited copies around the world instantaneously for no money. No more scarcity of information. Quality, however, is another matter.\*

Whole Earth Catalog founder Stewart Brand, the original hippie capitalist, "brought together personal enlightenment and the personal computer."<sup>38</sup> A Renaissance Man who reserves the right to change his mind based on new evidence, you might say Brand remains the quintessential classical liberal. Back in the 1970s, Brand saw that digital technology evolving exponentially at the rate of

relationship with various major institutions, and a feeling of condescension mixed with articles and ads detailing sophisticated living: <u>https://www.merriam-webster.com/dictionary/elitist</u>

<sup>\*</sup> Align (v) - https://www.merriam-webster.com/dictionary/align

<sup>\*</sup> I see the term "consumption" as part of the news media shell game. People don't consume news media like they consume an apple or gasoline. Particularly in the digital era, there are no supply constraints. They watch & read. That pattern maximizes ad revenue & advertisers seek like-minded people. Amplifies confirmation bias, cognitive dissonance avoidance, anchoring, priming, etc.

Moore's Law would soon create an evolving **paradox of information.** Brand explained this paradox:

"Information wants to be free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine – too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. The tension will not go away... because each round of new devices makes the tension worse, not better."<sup>39</sup>

A generation later in 2008, technology expert Clay Shirky writes in *Here Comes Everybody: The Power of Organizing Without Organizations* about "what happens when people are given the tools to do things together, without needing traditional structures. The short answer? More opportunity, less stability. In the decade since, we've gone **from filter-then-publish to publish-then-filter**.<sup>40</sup> Marketing expert and LinkedIn Influencer Don Peppers echoes this, forecasting that technology is already enabling radical decentralization in the 21<sup>st</sup> century – including of government, community, and media.

**Hypothesis:** The democratization of publishing, decentralization of organization, and desire to maintain community and culture in a globalized world: I see these as an adaptive and optimistic way of thinking about 2016's "populist" wave, including Brexit and the election of Donald Trump as US president.<sup>41</sup>

*Hypothesis: Value Proposition:* In the US at least, the term "free press" obscures more than illuminates. Media no longer relies on a printing press that a repressive government can shut down – nor even radio and TV stations. Instead, the "chokepoint" becomes internet access and filtering – governments, corporations, or a combination. On the other hand, any person can now essentially serve as his or her own vertically integrated media company via internet.<sup>\*</sup>

Just as Gutenberg's printing press loosened the Catholic Church's hold on "truth," so too has platform publishing and social media loosened the news media's hold on "truth." This is more than analogy – legacy media executives use religious jargon, like the separation of news and advertising as "church and state."

Yet at the same time, companies that host, distribute, and help readers find that content – including the largest, Facebook and Google, hold unprecedented power, as we will discuss later.

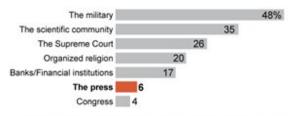
<sup>&</sup>lt;sup>\*</sup> In countries that have gone from having many or most of their population illiterate to mobile internet in less than a generation, or a country like China that has veered between autarky and anarchy, an argument could be made that governments are justified in such restrictions. That argument lay beyond the scope of this thesis.

## **TRUST: How it is Lost**

### Media mistrust

A new AP-NORC Center poll finds that Americans have little confidence in the news media, with inaccuracy and perceptions of bias driving a loss of trust.

Percentage saying they have "a great deal of confidence" in the following institutions:



Americans' Confidence in News Media, 1994-2014

Over the same time the Internet and then social media grew in importance and print's hybrid subscription model imploded, the public's confidence in the news media cratered to its lowest levels ever recorded, according to numerous polls by Gallup, Pew, Poynter, AP-NORC, Cision, and more. By 2016, between 70 percent and 94 percent **Americans - including me – did not possess confidence and trust in the news media**. A poll measured worldwide "trust" in the news media at 35% and falling.<sup>42</sup> Companies And a poll by Poynter voted newspaper reporter the nation's worst job three years running – due to low pay, shrinking job prospects, and low respect."<sup>43</sup> And all this got measured *before* 2016's election season – what many considered a new low for the profession.

#### % Who have a "great deal" or "quite a lot" of confidence Newspapers Television news News on the Internet 50 40 36 30 32 22 2119 20 18 10 2001 2003 2005 2007 2009 2011 2013 1993 1995 1997 1999 2015GALLUP'

At the same time, "Republicans and Democrats are more divided along ideological lines," according to Pew in 2014, "and partisan antipathy is deeper and more extensive – than at any point in the last two decades." Political polarization – within the news media as well as its

audience – has grown.<sup>44</sup> According to a 2014 Indiana University study, Democratic journalists outnumber Republicans at least 4 to 1 – and that does not include socialists, communists, anarchists, anarcho-syndicalists, and who knows what else, as numerous students and faculty at UC Berkeley's Journalism School describe themselves.<sup>45</sup> But it runs a lot deeper even than that. According to FiveThirtyEight's Nate Silver, not only do most journalists lean left, but they live along the coasts. Nearly 90% work in a county that Hillary Clinton won in 2016, 75% of them in a county she won by at least 30 points. This is partly a result of the shift from print regional newspapers to digital outlets with concentrated ownership in big, wealthy urban areas.<sup>46</sup>

America's universities, far from puncturing these echo chambers, tend to reinforce them. According to a 2012 UCLA study, nearly two-thirds of academics nationwide identified themselves as "liberal" or "far left." That number increased from about 56% just three years earlier, and in 2014 the Higher Education Research Institute found academia skewed even further left (below) – and the number in major humanities and social sciences closer to 5%. Five percent! I suspect all of these trends have grown significantly higher in the time since they were measured.<sup>47 48</sup> Not surprisingly, young and middle-aged people are becoming increasingly polarized along educational lines – with those having postgraduate education becoming increasingly liberal (aka "progressive").<sup>49</sup> Fewer and fewer young people trust the news media.<sup>50</sup> A Reuters study with focus groups found that people often reported the news "incomprehensible and demeaning of their experience."<sup>51</sup>

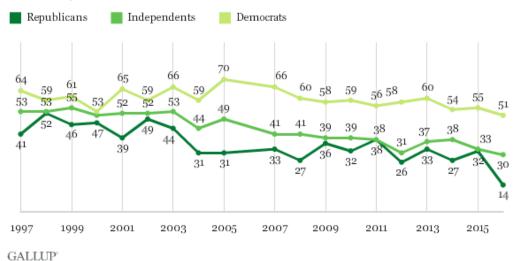
At UC Berkeley's Graduate School of Journalism, out of approximately 120 students and faculty, in two years I have heard precisely *zero* identify themselves as Republican/conservative or libertarian – at least in public.



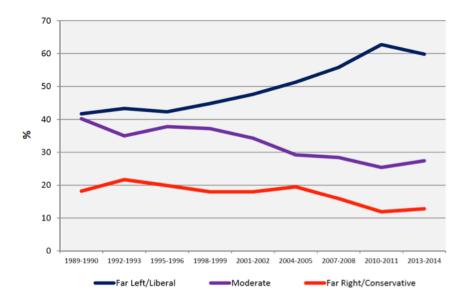
Not surprisingly, we see a dramatic and growing difference in how people with different political affiliations view the news media.

#### Trust in Mass Media, by Party

% Great deal/Fair amount of trust



According to Pew, about 42% of Americans identified or leaned Republican in 2014. In 2015, in a slightly different survey, over 23% as straight-up Republican and 40% identified as independent.<sup>52</sup>



Source: Higher Education Research Institute published on www.heterodoxacademy.org

It doesn't stop there. After the divisive 2016 presidential election, a survey by Cision found that 91% of journalists believe the public trusts them even less in 2017.<sup>53</sup> A 2017 poll found that 91% of Republicans distrust the news media - *all* news media, including Fox News, etc.. Polls by Quinnipiac and Emerson College asked people, do you trust the Trump administration or the news media more? Quinnipiac found the news media with a slight edge, while Emerson found Trump to be slightly more trusted.<sup>54 55</sup>

*Hypothesis: "Fake news"* a term that came into common usage during the 2016 presidential election season, is old news - and it's not the worst of journalism's existential problems. When the people reporting the news systematically exclude people, perspectives, and

evidence that don't fit their worldview – from honestly mistaken editorial decisions to inherent, unconscious bias to outright lies of omission - they sow the seeds of fake news. Mainstream media refer to "fake news" as manufactured stories, allegedly originating places like Eastern Europe and the Russian government. Many outside the mainstream media – including this writer - allege that the mainstream media's rampant political ideology, biases, and sins of omission often add up to fake news.

After the 2016 election, MSNBC's Mika Brzezinski got caught in what many critics of the mainstream media considered to be a Freudian slip while criticizing Donald Trump's anti-news media campaign. "And it could be that while unemployment and the economy worsens," Brzezinski said, "he [Trump] could have undermined the messaging so much that he could actually control exactly what people think – and that is our job."<sup>56</sup>

*Hypothesis*: When Trump administration official Kellyanne Conway spoke of "alternative facts," it sparked George Orwell memes across the internet. But a less ominous way of thinking about alternative facts are facts that journalists and editors leave out of their stories – facts that the subjects of those stories think are important.

So what *is* a journalist's job? I think many journalists want to be accurate, fair, and concise, but as I see it, in the 21<sup>st</sup> century news media model echo chamber generates revenue by doing the precise opposite. In business terms, a journalist's job is to sell ads. And as we will read, our technology is designed to addict us and help them do it.

"The media did exactly what it was designed to do, given the incentives that govern it," Bharat Anand writes in the *Harvard Business Review* in January 2017. "It's not that the media sets out to be sensationalist; its business model leads it in that direction."<sup>57</sup>

*Hypothesis:* Journalists often think their job is to *tell* the truth, but I suggest they first *listen and find out the truth before they tell it.* In the news media and at UC Berkeley Graduate School of Journalism, I see journalists and news media outlets too often start out thinking they know the truth. So they start with their conclusions – shaped by their own political ideology and cultural experiences – and then work their way back. It's unscientific, because science relies on falsifiability, as well as empiricism and parsimony. And it's also a lot cheaper for pundits to shoot their mouths off than it is to pay journalists to travel the globe actually searching for answers. Groupthink and dogma become editorial decisions – and eventually lies by omission.

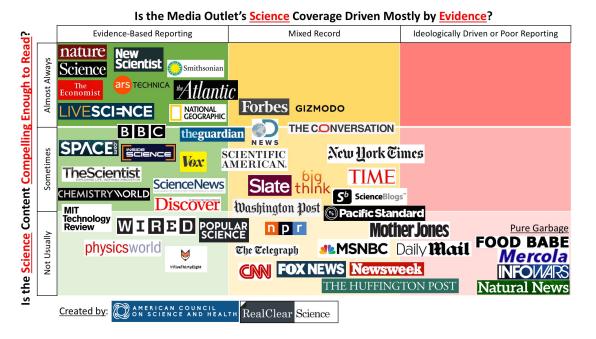
Occam's Razor: No more things should be presumed to exist than are absolutely necessary, i.e., the fewer assumptions an explanation of a phenomenon depends on, the better the explanation.

(William of Occam)

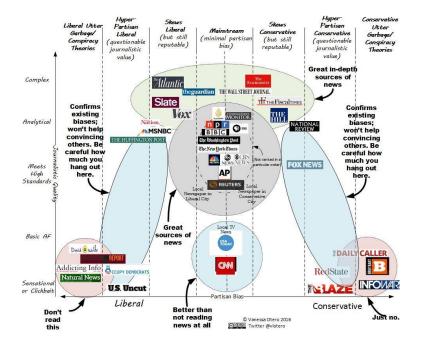
"A common question I hear again and again is, 'How do I know if a news story is fake?' writes Alex Berezow, who holds a PhD in microbiology from the University of Washington and

helped to found <u>www.RealClearScience.com</u>. "There is no easy answer," he says. "If journalism as a whole is bad (and it is), science journalism is even worse."<sup>58 59 60\*</sup>

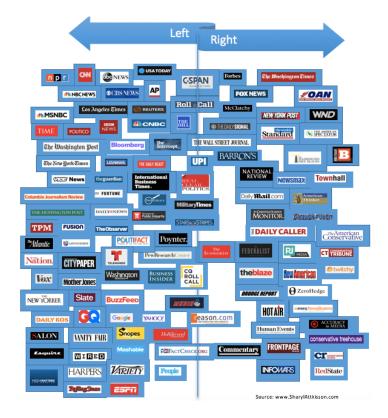
Berezow developed this chart.



Lawyer Vanessa Otero designed this one, based directly on the biases of media outlets.<sup>61</sup>

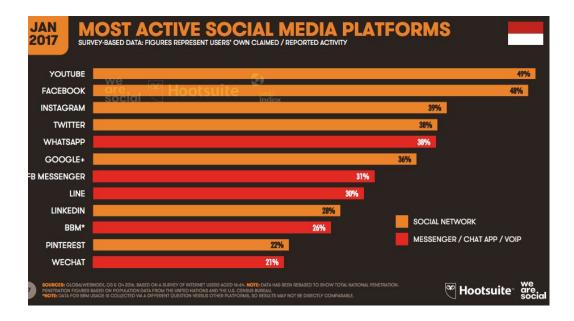


<sup>\*</sup> In all fairness, in 2017 science is facing its own serious crisis of reproducibility. See those Endnotes for sources.



Investigative journalist Sharyl Attkisson made this chart:

I spoke to Berezow and shared his graph widely via LinkedIn. He welcomed critiques, viewing it as a scientific, iterative attempt, subject to our own imperfect perceptions. I told him that I'd move a lot of these toward more ideological and less credible – but overall I thought his effort to be more systematic and a better job than I could have done.



In "The Platform Press," Poynter describes how this hyper-rationalized clickbait ad model has fueled a race to the bottom: "the near dominance of Silicon Valley ideology, the pernicious effect of ad-tech economics, and the opacity of automation."<sup>62</sup> Publishers want to reach a larger audience, but to do it they lose control of their brand, audience data, and ad revenue. To save money, most platforms favor algorithms over human editors.<sup>\*</sup> The report offers no real solution besides the usual boilerplate clichés: "vigorous reporting" of the companies controlling their ad revenue and, increasingly, making donations to them. Yeah, right. "Create more incentives," Poynter suggests – namely more government subsidies and new public policies. In other words, if people don't want to pay for journalism as consumers, force them to pay up as taxpayers. In most businesses, people in the industry try to figure out how to improve their product *before* charging more money – i.e., they create demand.<sup>63</sup>

This is not new. In 2005, Craigslist founder Craig Newmark and New York University media professor Jay Rosen, both political partisans, spearheaded a study with similar non-findings – as have many others.<sup>64</sup> In the United Kingdom, the Carnegie Foundation called for the usual: education, codes of conduct... all of which tend to fundamentally conflict with how the news media makes money – ads or donors.

Here is another old approach: Ask rich people to subsidize the news. In "What Facebook owes to journalism," op-ed in *New York Times*, Steve Waldron, who authored a Federal Communications Commission report on information in the 21<sup>st</sup> century, suggests that Facebook essentially own journalism, endowing it as a nonprofit.<sup>65</sup> Weeks later, Facebook and a bunch of rich funders led by "progressive" Craigslist's Newmark and partisan Jeff Jarvis – he of the Hillary Clinton cheerleading before the election, and sporting a "Resist" hat after on Twitter, announce a \$14 million "News Integrity Initiative."<sup>66</sup> The initiative consists of \$14 million to increase trust & integrity in journalism – relying solely on supporters on one side of the political spectrum, and funding from the same big companies and government that they're supposed to be keeping an eye on? Watchdogs or lapdogs?<sup>67 68</sup> Facebook soon deployed new software designed to detect "fake news" – but I worry that just means news that doesn't fit "progressive" orthodoxy (I'm not saying Fox News does it any better).

In my opinion, this epitomizes how detached from reality the mainstream media is. The average Facebook employee makes two to three times what the average journalist lucky enough to have a job makes. Meanwhile, journalists get laid off and the few who remain endure stagnant or declining wages and more work. Worst of all, they lose control of their work: edits, time it's published, when they get paid, and even rights to books or movies that come out of their work – often the most valuable property. The predominant contracts for freelance writers used to be first serial rights. Now, publications like *Wired*, owned by *Conde Nast*, reportedly want "all rights to everything in perpetuity." I say reportedly because two former *Wired* editors told me this, but two current editors – Jason Kehe and editor-in-chief Nicholas Thompson refused to confirm, deny, or even share a sample contract.

*Hypothesis:* Journalism's prevailing business model tends to de-fraud both readers – of their time and personal data – and writers – of their time and rights to their work. This hypocrisy has created a runaway feedback loop fueling distrust of the news media.<sup>69</sup>

President Trump has variously described the news media – much but not all of it - as a "failing pile of garbage," "fake news," the "opposition party in many ways," and the "enemy of the American people."<sup>70 71 72</sup> I think the evidence clearly supports him on this.

"The media bubble is the ultimate symbol of what's wrong with this country," said Trump adviser and former Breitbart editor Steve Bannon, the news media's "alt-right" bogeyman. "It's just

<sup>\*</sup> As you will read in Solutions, one major platform is very different.

a circle of people talking to themselves who have no fucking idea what's going on."73

### Trust: How is it Earned?

As an undergraduate at Rutgers University, I had a professor, evolutionary biologist Robert Trivers, who changed the course of my life by asking a simple question.<sup>74</sup> How, Trivers asked, does long-term cooperation evolve in unrelated individuals? What is the evolutionary logic - in terms of inclusive fitness? How does cooperation confer adaptive advantage?

Decades earlier, Trivers had developed the theory of **reciprocal altruism**. The short answer: In unrelated individuals, **tit-for-tat is generally the best strategy**. Trust gets built up over time.... Months, years, lifetimes. The slightly longer version:

"Regarding human reciprocal altruism, it is shown that the details of the psychological system that regulates this altruism can be explained by the model. Specifically, friendship, dislike, moralistic aggression, gratitude, sympathy, trust, suspicion, trustworthiness, aspects of guilt, and some forms of dishonesty and hypocrisy can be explained as important adaptations to regulate the altruistic system. Each individual human is seen as possessing altruistic and cheating tendencies, the expression of which is sensitive to developmental variables that were selected to set the tendencies at a balance appropriate to the local social and ecological environment."<sup>75</sup>

Trivers' paper has been incredibly influential. Evolutionary biologist Richard Dawkins freely admits that his bestseller *The Selfish Gene* essentially presents a summary of Trivers' ideas for the general reader. Steven Pinker calls Trivers "one of the great thinkers in the history of Western thought." *Time* voted Trivers one of the 100 greatest thinkers of the 20<sup>th</sup> century. Some scientists have told me they believe Trivers' wild lifestyle and lifelong battle with severe bipolar disorder are the only things that have kept him from a Nobel Prize and greater recognition.<sup>76</sup>

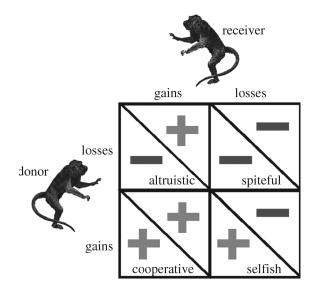


Diagram describing Trivers' theory of reciprocal altruism, showing different options for interaction. Two monkeys/people/organizations help each other (cooperation, win-win). One wins while the other loses (either competition, win-lose; or altruism/sacrifice, win-lose); spite is when both lose (lose-lose). I see the relationship between the news media in the public, and news media executives and their employees, predominantly in the lose-lose box. This fuels a runaway feedback loop.

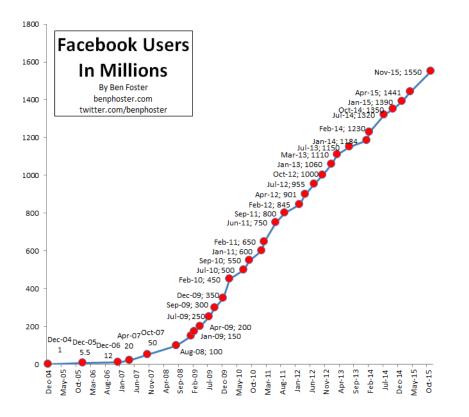
"It takes 20 years to build a reputation," Warren Buffett famously said, "but five minutes to destroy it." The news media, as the polls show, have been destroying their reputation for roughly the past twenty years. Sow the seeds, reap the whirlwind.<sup>77</sup> A big part of my quest for solutions consists in trying to get into the upper left box above - reciprocal altruism. Cooperation. Win-win..

**Hypothesis:** McLuhan's "global village" has arrived: people are people more trusted than institutions. Brand's information paradox is correct: information is now essentially free – but the right information is as valuable as ever. Shirky's right too: Everybody is now here. The media are fast evolving from gatekeepers to middlemen – but powerful ones. Let's now turn to the biggest middleman in 2017.

## Echo Chambers, Ads & Democracy - the real Facebook Effect?

"We shape our tools and then our tools shape us... The medium is the message... A medium's content is less significant than the medium itself. It is the medium, and not the content, that has a greater impact in shaping our perception."

– Marshall McLuhan with Father John Culkin<sup>78</sup>

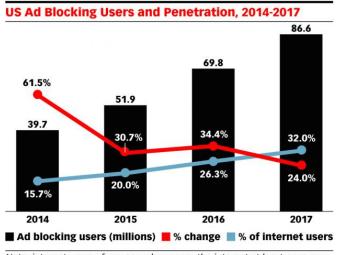


Until 2014, Facebook's motto was "Move fast and break things." Over the past decade, Facebook's social media platform grew from a hotornot.com rip-off using images of girls Mark Zuckerberg pilfered from Harvard into a \$368 billion global behemoth with 2 billion users whose news feed dominates access to the news media.<sup>79</sup> Over this time, net neutrality protected access to internet bandwidth, but may have fallen victim of regulatory capture.<sup>80</sup> By 2016, at least 65 cents of every advertising dollar spent on digital advertising – and over 85 cents of every new dollar - went to either Facebook or Google.<sup>81 82</sup>

# How does it work? What does the News Media's ad revenue business model have in common with dinosaurs?

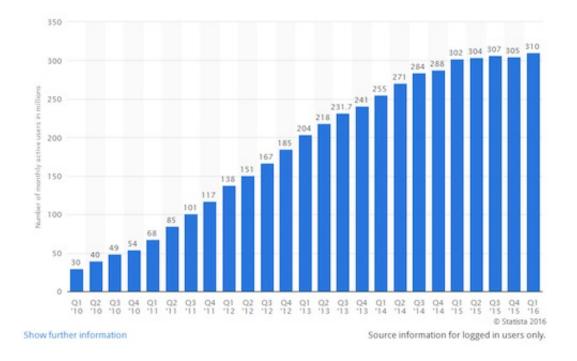
Facebook and Google's stranglehold has created a bottleneck, strengthening at the same time it may be facing irrelevance. Companies have suddenly grown wary of programmatic (bought and placed by computer) advertising on publications identified with strong political bias – which is increasingly most of them. Divisiveness stirred by the election campaign has made brands avoid publications that appear to be politically aligned, said Natalie Prout, a strategist at Phenomenon, a Los Angeles-based branding agency.<sup>83</sup> Advertisers also worry about personal scandals, from endorsement deals with Tiger Woods to advertising on Bill O'Reilly's talk show.

Meanwhile, the growth of bots and other digital tricks to boost views have increased ad fraud – reportedly to \$7.4 billion per year.<sup>84</sup> And the phenomenal growth of Adblock – growing at a rate of about 34% from 2016 to 2017 to about 87 million users in the US alone, removing billions of dollars in advertising per year - **may be making traditional advertising – including digital - obsolete**. Some think those estimates are conservative. As Facebook and Adblock competed in a coding arms race in 2016-17, researchers at Princeton and Stanford – believing that laws will ultimately favor consumer choice over advertisers – reportedly worked to make an adblocker using advanced computer vision to make ads obsolete.<sup>85 86</sup>



Note: internet users of any age who access the internet at least once per month via any device (including a mobile device) that has an ad blocker enabled Source: eMarketer, June 2016

While some brands eschew political advertising, others – often media companies – embrace it. Twitter, which has re-branded itself as a news platform, joins other companies like Airbnb and others in overtly embracing political views, often with hashtags, as part of "ethical" or "values-based" marketing based on "progressive" mass movements (#BlackLivesMatter, #DeleteUber, etc.).



Hypothesis: The so-called "Trump bump" in news media readership, viewership, and

subscriptions, particularly among "progressive" liberal publications, is not a new phenomenon. Conservative outlets got a big bump when Obama won. I think it's a combination of the "circle the wagons" effect, confirmation bias, and cognitive dissonance (as we'll discuss later). Additionally, paywalls have been going up because of Adblock at the same time over 2016 to 2017, requiring readers to subscribe for what they previous saw for free. Reports have also surfaced about a dramatic increase in bots to boost "views" and clicks to increase revenue.<sup>87</sup>

I asked Geoffrey Colon about all this. Currently a marketing guru-at-large with Microsoft and LinkedIn, Colon and I grew up nearby in northern New Jersey. He is also an electronic dance music DJ and author of the 2016 book *Disruptive Marketing*.<sup>88</sup>

**JIM ROSSI**: Many companies have recently become a lot more conscious about where their ads are going – at the same time AdBlock has been trying to help us get rid of them. You quote Kevin Kelly: "Species go extinct because there are historical constraints built into a given body or a given design." Is this the late Cretaceous for mainstream news media? Is that an asteroid I see streaking across the sky? Or am I being melodramatic?

**GEOFFREY COLON**: No, you're totally on target. I actually think the asteroid has hit. I was *in* the music industry when the asteroid hit - back in the 1990s with Napster... When the system is so rigid and defined and hierarchical, top-down? The news media really hasn't *looked* at other industries because they're so busy *reporting* on them...

**ROSSI**: At the Berkeley Journalism School, they tend to treat money like Catholics treat sex. [*Laughs*: We both grew up Catholic in New Jersey]. They don't want to talk about it, so it gets repressed.

**COLON**: Yes, the news media thinks, "Because we're based on an ad revenue model, how do we get more traffic?" So we wind up not getting the stories we need for a functioning democratic society." They focus on social data – metrics – but not qualitative data. That's part of what's missing in the media's business model. A lot of people - the people in charge, making the money - want things to be stagnant because it's easier. But if they don't re-create themselves, others will create it for them.

**ROSSI**: I think about the evolution from the typewriter to the word processor and computer – two completely different products that look a bit similar from the outside, and fulfill the same function... And the word-processing computer eventually did so much more. Smith-Corona didn't wind up building computers.

**COLON**: Companies don't generally disrupt themselves.

#### Engineering the Echo Chamber: Facebook Lookalike Audiences.

*Hypothesis:* Facebook has gone a long way toward perfecting targeted advertising – grouping like-minded users together - a great boon for its customers (advertisers).

Facebook's 700-Step binary machine learning program can micro-segment every single user on its platform, to give them what they want, not what they need.<sup>89 90</sup> How?

Facebook's website explains its "secret sauce" for advertising, "a way to reach new people who are likely to be interested in your business because they're similar to people who already are... We generally recommend a source audience with between 1,000 to 50,000 people."<sup>91</sup>

"Facebook lookalike audiences are an advanced targeting option that goes beyond the basic interest and demographic targeting functionality. They're currently the most effective Facebook targeting tool to find your ideal customer.

"At the core of all lookalike audiences is a source audience upon which you build a lookalike audience. Facebook takes all of the data points of your source audience and finds new, similar people... Unlike interest-based targeting, lookalike audiences allow you to **create the source audience**, giving you more control. As a result, you end up with better-quality audiences because you can **find new audiences that are almost identical to your existing ones.**"<sup>92</sup>

This is how Facebook has been working for years.

In 2006, technologist Jaron Lanier wrote an article for *Edge* called "Digital Maoism," where he warned that anonymity combined with algorithms might lead to tyranny. Here is a short excerpt.

"Here's the idea in a nutshell: Let's start with an observation about the whole of human history, predating computers. People have often been willing to give up personal identity and join into a collective. Historically, that propensity has usually been very bad news. Collectives tend to be mean, to designate official enemies, to be violent, and to discourage creative, rigorous thought. Fascists, communists, religious cults, criminal "families" — there has been no end to the varieties of human collectives, but it seems to me that these examples have quite a lot in common. I wonder if some aspect of human nature evolved in the context of competing packs. We might be genetically wired to be vulnerable to the lure of the mob?

"One of the most wonderful things about the rise of the Web and other Internetbased communication schemes is how anti-mob they have been... In the last few years, though, a new twist has appeared. Along with all the sites that encourage individual expression, we are seeing a flood of schemes that celebrate collective action by huge numbers of bland, anonymous people. A lot of folks love this stuff. My worry is that we're playing with fire..."<sup>93</sup>

Hypothesis: Facebook did not create the digital echo chamber, but they perfected it.

Wael Ghonim, the Google Egypt employee whose anonymous Facebook page helped to trigger the 2011 Tahrir Square Revolution, gave a 2016 TED talk summarized by Thomas Friedman. "Does it turn out," Friedman asks, "that social media is better at breaking things than making things?"<sup>94</sup>

"I once said," Ghonim answers, "'If you want to liberate a society, all you need is the internet.' I was wrong... The same tool that united us to topple dictators eventually tore us apart."

"We failed to build consensus, and the political struggle led to intense polarization," Ghonim says. Social media - namely Facebook and Twitter - amplified the effect "by facilitating the spread of misinformation, rumors, echo chambers, and hate speech. The environment was purely toxic... People in the center like me started feeling helpless."

UC Berkeley visiting scholar Matt Beech and I both felt the same thing Ghonim did when we met experiencing the echo chamber in real life. Beech, visiting from the University of Hull in the United Kingdom, and I met while going face to face with Yvette Falarca, a Berkeley middle school teacher and Marxist leader of the group By Any Means Necessary (BAMN). BAMN opposes President Donald Trump and appears to overlap with various communist, anarchist, "anti-fascist" "Antifa," clinically mentally ill, and homeless folks that make Berkeley – often derided as Berzerkeley – what it is. Backed by one of her goons, Falarca tried to shout and threaten me right off my own campus outside the Free Speech Café in March. This happened a month after Falarca led a violent "Antifa" move that shut down a talk by libertarian and provocateur Milo Yiannopoulos on campus on February 1, causing numerous injuries, over \$100,000 in damage, and worldwide media attention. And it happened the week after violent protests marked a pro-Trump rally in Berkeley's downtown. From my view as a ticketholder and co-inviter of Yiannopoulos, I saw the flesh-and-blood embodiment of the online mob effect seen often on Facebook and Twitter. Violence, threats, and cancellations have followed Yiannopoulos around the country – but they have also followed the writer MacDonald, conservative social scientist Charles Murray, comedian Bill Maher, white nationalist Richard Spencer, and others.

Ghonim, Friedman, Beech, and I see the same phenomenon spreading across the world from Syria, Islamic State, and Sudan to the divisive 2016 elections around Brexit, Colombia's civil war, and Donald Trump. But how? What is the mechanism?

Scientists describe the **echo chamber effect** as a virally-spreading form of *confirmation bias*. "Information related to distinct narratives," write the authors in a 206 study in *Proceedings of the National Academy of Sciences (PNAS)*, "generates homogeneous and polarized communities (i.e., echo chambers)." The study's title: "The Spreading of Misinformation Online."<sup>95</sup>

Facebook calls this a **filter bubble** and claims it's a small effect.<sup>96</sup> But I'm not buying it - and neither do the *PNAS* authors and other scientists.<sup>97</sup>

"Our findings show that users mostly tend to select and share content related to a specific narrative and to ignore the rest," the *PNAS* scientists write. **Homogeneity and polarization, the authors conclude, are the main predictors of what goes viral on Facebook**.

*Hypothesis:* In plain English: All else being equal, crap – fear, distortion, scandal, and violence, amplified by confirmation bias and polarization - spreads faster than quality.

"Massive digital misinformation is becoming pervasive in online social media," the scientists conclude, "to the extent that it has been listed by the World Economic Forum as one of the main threats to our society."<sup>98</sup> As Mark Twain reportedly wrote, "A lie can travel halfway around the world while the truth is putting on its pants."<sup>99</sup> Again, false information and political propaganda – "fake news" are nothing new. What *is* new: the speed and amplification through the digital echo chamber.

Move fast and break things - like democratic society?

"I'm disappointed with the way the Internet has gone in the past ten years," Jaron Lanier told Journalism School faculty Jennifer Kahn, writing for *The New Yorker* back in 2011. He sees "intellectualized mob rule" led by Facebook and Twitter, with the internet giants as "privatized spy agencies" incentivized to sell any bit of personal data they can to advertisers. "I've always felt that the human-centered approach to computer science leads to more interesting, more exotic, more wild, and more heroic adventures than the machine-supremacy approach, where information is the highest goal."<sup>100</sup>

As Lanier wrote back in 2006:

"Compounding the problem is that new business models for people who think and write have not appeared as quickly as we all hoped. Newspapers, for instance, are on the whole facing a grim decline as the Internet takes over the feeding of the curious eyes... Google News is for the moment better funded and enjoys a more secure future than most of the rather small number of fine reporters around the world who ultimately create most of its content. The aggregator is richer than the aggregated... What I've seen is a loss of insight and subtlety, a disregard for the nuances of considered opinions, and an increased tendency to enshrine the official or normative beliefs of an organization. Why isn't everyone screaming about the recent epidemic of inappropriate uses of the collective? It seems to me the reason is that bad old ideas look confusingly fresh when they are packaged as technology."

Facebook executives say it's not their place to decide what people read, but Facebook does precisely that – with algorithms *and*, at least occasionally, human curators.<sup>101</sup> Former Facebook employees admitted to routinely suppressing conservative views. According to writer Michael Nunez, Facebook sounds a lot like a traditional newsroom, though an enormous one with at-times monopolistic power that aggregates rather than creates. And like the vast majority of traditional news rooms, it skews heavily toward the "progressive" left.<sup>102</sup>

Facebook's Chief Operating Officer Sheryl Sandberg admitted that accusations of left-wing bias "frankly rang true to many people, because there is concern that Silicon Valley companies have a liberal bias."<sup>103</sup>

It also becomes an issue when Facebook – through its vast user base, algorithm, and stranglehold over ad revenue – holds unprecedented power to shape information toward its own ends. What are those ends? Facebook cofounder Dustin Moskovitz donated \$20 million to Hillary Clinton's presidential campaign.<sup>104</sup> From my research on LinkedIn and reading, I conclude that senior staff at both Facebook and Twitter overwhelmingly come from Democratic ranks. For example, Facebook head of Global Public Policy Andy O'Connell worked in the Obama administration from 2009 to 2014. During a guest talk at the Haas Business School in November 2016, O'Connell described himself as a close confidant of Hillary Clinton, serving as her personal adviser at the State Department for over three years – the years Syria and the Middle East descended into civil war<sup>\*</sup> – then headed directly to Facebook.<sup>105</sup> To hear him tell it, his work at Facebook was a logical progression of pushing Mrs. Clinton. Nicole Wong and Alexander MacGillavray, who did legal for both Google and Twitter, also served as deputy technology officers in the Obama administration. Wong also graduated from the UC Berkeley Graduate School of Journalism.<sup>106</sup>

This list is not exhaustive. A large number of senior people at Google, Facebook, and Twitter, particularly those who handle news, journalism, public policy, and law, worked either directly for Hillary Clinton, the Obama administration, the Democratic Party, or the Center for American Progress.<sup>107</sup> These are the people in charge of the algorithms and curators.

*Hypothesis:* This is not fundamentally a partisan issue. When George W. Bush was president, Republicans dominated Fox News when it dominated cable TV (they still do, but more news has moved online, diluting their market share).

*Hypothesis*: I don't have an ethical problem with individuals moving from industry to the private sector and back, but to see so many senior people moving in short a period of time, belonging to one party, to a small number of companies that control so much access to information, disturbs profoundly from a basic democracy perspective.

In this same Human Rights in Business class, I did a case study on Intel-McAfee's "SmartFilter" deployed by certain Middle Eastern governments in an attempt to filter websites, including social media sites like Facebook and Twitter. Keep in mind that in many Muslim countries, majorities of people were becoming literate for the first time in their history at the same time they were being exposed to information 24/7, much of it slanted or false. This is what Ghonim spoke of.

Facebook's algorithm now serves as a de facto editor for roughly 2 billion people, including half of all Americans.<sup>108</sup> Facebook's attempt to bring "free" internet to the Third World has encountered stiff resistance.<sup>109</sup> That's because it's not free: users' data is the product, sold to advertisers. And it sounds like Facebook's new tweaks to favor friends over publishers could amplify the effect.

To wit, Farhad Manjoo in the *New York Times* magazine cites a study by the *Columbia Journalism Review* that "a right-wing media network anchored around Breitbart developed as a distinct and insulated media system, using social media as a backbone to transmit a hyper-partisan perspective to the world." There is also a left-wing version – it's called the vast majority of the mainstream news media.<sup>110</sup>

John Gable, a longtime tech executive, serves as CEO of Allsides.com – a website that offers an alternative to Facebook's algorithm, aggregating and featuring news stories from other sites – Left, Right, and Center. "We are less informed today than we were 10 years ago, even 200 years ago, on controversial topics," Gable explains. "I'd say we are more confidently ignorant, because we hear a small piece of the answer so many times that we're convinced that's correct."

Facebook skews liberal, according to Gable and Pew. Allsides features a patented system where users rate political leanings of publications. According to the bias ratings, only 1 out of 10 news sources used by Facebook skews right – the rest are center or left: BBC News, CNN, *The Guardian*, NBC News, *New York Times*, *USA Today*, *Wall Street Journal*, *Washington Post*, and BuzzFeed News. Only Fox News skews right.<sup>111\*</sup>

"A computer algorithm that averages those individual biased choices to deliver trending news does not remove bias," Gable says, "but amplifies it. And worse, it silences other perspectives in favor of the popular flavor of the moment... Important and substantial minority voices are routinely ignored in deference to the most popular or the desires of the majority (or to a biased editorial board with an agenda)."<sup>112</sup>

In February 2017, Zuckerberg published a long missive about Facebook's responsibilities after the election. Here are some excerpts of this much lampooned "Zuckerberg Manifesto," along with some punchy commentary from Kieren McCarthy writing in the UK's *The Register:*<sup>113</sup>

**Mark Zuckerberg:** Facebook stands for bringing us closer together and building a global community... Our job at Facebook is to help people make the greatest positive impact while mitigating areas where technology and social media can contribute to divisiveness and isolation.

**Kieren McCarthy:** No, it's not. It's to encourage people to post about their lives as frequently as possible so that can be monetized.

**Zuckerberg:** The two most-discussed concerns this past year were about diversity of viewpoints we see (filter bubbles) and accuracy of information (fake news). I worry about these and we have studied them extensively, but I also worry there are even more powerful effects we must mitigate around sensationalism and polarization leading to a loss of common understanding.

McCarthy: Like, for example, confusing making money from people's personal

<sup>&</sup>lt;sup>\*</sup> Is the *Wall Street Journal* conservative? According to Gable: "Some might consider The Wall Street Journal as right-leaning because of its commentary, but the news section is clearly center as established by AllSides bias ratings. It is also worth noting that the entire rating system may skew – due to their greater trust in the news media, and because one of AllSides' founders is also a founding member of the progressive social media website Moveon.org. In other words, these ratings might actually belong farther left than they are.

information with actually making the world a better or safer place?

**Zuckerberg:** Social media is a short-form medium where resonant messages get amplified many times. This rewards simplicity and discourages nuance.

As you will read in Solutions – not all the time, at least not on all social media platforms.

**Echo Chamber: contrary evidence?** Longtime progressive activist Ezra Klein writes about one in *Vox*, a working paper from the National Bureau of Economic Research.<sup>114</sup> It concludes people over 75 – the same people least likely to be using social media in 2017 – are the most polarized. Therefore, social media is not likely the problem. I don't fully discount the study, but it's a complex statistical analysis and it doesn't seem to pass the smell test. People older than 75... Yes, those people tend to be set in their ways. Experimental data.... Personal experience... It depends *which* social media. And cable TV/talk radio, more likely to be news of choice of older Americans, tends to add to the polarization.

Look back to World War I for an historical analogy with fundamental similarities: When new technology collided with rigid, obsolete ideas about how the world's power was organized, trench warfare resulted – an unprecedented and unnecessary slaughter.

### **Psychology of Echo Chambers: A Quick Glossary**

This digital echo chamber twists Brand's paradox of information. Ubiquitous publishing and recording often makes people afraid to express themselves freely – because others can distort or falsify their words and even actions via audio and video editing. The news media do this for a living. Conversations often devolve into a virtual mob.

In addition to digital technology and amplification by algorithm, it's the addictive nature of mobile digital technology that's increasing the echo chamber effect, according to Adam Alter in *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*. Companies spend billions of dollars to keep us clicking our screens so they can keep selling us ads.<sup>115</sup> And they realize that fear, distortion, scandal, and violence tend to keep people clicking, whether they like it or not. With more websites easier to access than ever, publishers, technology designers, and advertisers maximize revenue through creating a vicious cycle. I asked Geoffrey Colon about it.

**JIM ROSSI**: You recommended Adam Alter's new book, work *Irresistible* - even though it says some scary stuff about digital marketing, your line of work. What are some quick takeaways?

**GEOFFREY COLON**: People will create things to get the most rise out of people. There's such an emphasis on user experience. That can be manipulated for good, or manipulated for bad. One mistake I make in my book *Disruptive Marketing* is to focus on the world going one way, which I think is a great future, but we could still go toward dystopia. The bigger players - Google, Facebook, Twitter, Apple, Microsoft - pay to play; they can still manipulate things. Look, anybody can create anything now. That's what social media was always about. We need to strengthen that. Not just two sides to every story - like the mainstream news media makes it out to be – there can be *thousands* of different points of view.

Tristan Harris is an entrepreneur and former "product philosopher" for Google. Now he's working on better ergonomics for digital technology. "With design as it is today," Harris writes, "screens threaten our fundamental agency. Maybe we are 'choosing,' but we are choosing from persuasive menus driven by companies who have different goals than ours."

"So we have a fundamental misalignment," Harris continues, "between what the attention economy is competing to produce, the design of our phones, and the aspirations people have for their lives."

Jurist and scholar Cass Sunstein talks about this "architecture of serendipity" in his book #Republic: Divided Democracy in the Age of Social Media. Charles Duhigg in The Power of Habit and Nir Eyal in Hooked.<sup>116</sup> <sup>117</sup>

**GEOFFREY COLON**: Try taking those apps and put 'em in a folder on like the 4<sup>th</sup> page of your smartphone. I sleep with my phone downstairs, away from my bedroom. Try a blackout period, go detox out in the real world. I try to be out with people in downtown Seattle, on trips, in the gym.

**JIM ROSSI**: When I go biking – and I'll ride 100 or 200 miles per week if I get the chance – not only do I turn off my phone, but no odometer, Garmin, any of that. Totally analog. But I bring a small notebook and pen in my hip pocket. I find myself stopping a lot to write down awesome things I thought of. I "edit" a lot of my best work while riding fast. The J-School got me out of my game – out of shape, cynical people in front of a computer - but I'm trying to get it back. It's the animal vs. the machine. We're animals like "Endurance Predator" and *Born to Run*.

**COLON**: To save money, journalism's been stuck behind a desk. They stopped observing and that's a big reason why they get things wrong. A lot of tech's stopped observing.

### Glossary

Here are some of the psychological techniques at play in the digital echo chamber:

**George Lakoff,** a longtime linguist and "progressive" activist at UC Berkeley, is a foremost expert on linguistic **framing** – social construction of social phenomena using metaphors.

**Cognitive dissonance** – Leon Festinger's theory that humans seek to avoid information that conflicts with or disprove their beliefs.

**Confirmation bias** – Humans tend to seek out and weigh heavily information which supports their beliefs.

**Anchoring** – Humans tend to rely heavily on the first information they receive (the anchor), and cognitive dissonance and confirmation bias tend to be based off this early anchor. This may have an evolutionary basis, when quick decisions without a lot of information were often required for survival. In the 21<sup>st</sup> century, the problem tends to be too much, not too little information.

**Priming** – theorizes that media images stimulate related thoughts in the minds of the audience. The growing ubiquity of video has made priming a bigger factor in the news media.

**Mob psychology** – Hans Toch, Gustave Bon, and Sigmund Freud pioneered study of the mob, a new concept in the urban centers of the Industrial Revolution. They observed and theorized of impact by loss of responsibility of individual, and impression of universality of behavior, both of which increase with size of crowd.<sup>118</sup>

Echo chambers amplify **shaming and scapegoating**, where an individual or organization becomes a symbol upon which hatred, derision, or other emotions get projected - ritualistic and sometimes collective. Aristotle and Freud meet Thomas Hobbes, Rene Girard, and Marshall McLuhan.<sup>119</sup>

*Hypothesis:* Activists – even well-meaning ones – can masquerade ideology in the guise of science and do the most damage.<sup>120</sup>

**Deindividuation** – Online, people can be anonymous. In Berkeley, "anti-fascists" wear masks while using violence to suppress the free speech of those they disagree with.

**Convergence theory** – Crowd behavior is product of coming together of like-minded individuals, according to Floyd Allport. "An individual in a crowd behaves just as he would behave alone, only more so."

**Philip Zimbardo's infamous Stanford Prison Experiment**: In the space of three days, a basement prison simulation transformed Stanford undergraduates into submissive prisoners and sadistic guards, until Zimbardo called the experiment off. People sometimes do bad things in under certain conditions: abusive guards ("like being a puppeteer," "creative evil," "becoming the role," Situations can outweigh individual traits, abuse of power), submissive prisoners.<sup>121</sup>

Stanley Milgram demonstrated obedience and conformity to authority.<sup>122</sup>

**Reproducibility crisis in science**: Landmark study with 270 authors led by Brian Nosek of the Center for Open Science found only a 36% reproducibility rate of experiments published in prestigious journals. False positives, replication a false negative, methodology, and scientific fraud are rampant, as more and more graduate students and PhD compete for funding and tenure-track positions.<sup>123</sup> In 2012, Daniel Kahneman warned about a coming "train wreck" about replicability of social **priming** research.

Steven Pinker reviewed Lakoff's book *Whose Freedom?* where Lakoff applies the social science of anchoring and framing to his "progressive" political goals.<sup>124</sup> Pinker writes:

"There is much to admire in Lakoff's work in linguistics, but *Whose Freedom*? and more generally his thinking about politics, is a train wreck. Though it contains messianic claims about everything from epistemology to political tactics, the book has no footnotes or references... Its use of cognitive neuroscience goes way beyond any consensus within that field, and its analysis of political ideologies is skewed by the author's own politics and limited by his disregard of centuries of prior thinking on the subject. And Lakoff's cartoonish depiction of progressives as saintly sophisticates and conservatives as evil morons fails on both intellectual and tactical grounds...many of Lakoff's "freedoms" are demands that society conform to his personal vision of the good (right down to the ingredients of food), and thus are barely distinguishable from totalitarianism.<sup>125</sup>

This is exactly what Jaron Lanier warned about a decade earlier in "Digital Maoism:"

"...Part of the larger pattern of the appeal of a new online collectivism that is nothing less than a resurgence of the idea that the collective is all-wise, that it is desirable to have influence concentrated in a bottleneck that can channel the collective with the most verity and force. This is different from representative democracy, or meritocracy. This idea has had dreadful consequences when thrust upon us from the extreme Right or the extreme Left in various historical periods. The fact that it's now being re-introduced today by prominent technologists and futurists, people who in many cases I know and like, doesn't make it any less dangerous... ...What's to stop an online mass of anonymous but connected people from suddenly turning into a mean mob, just like masses of people have time and time again in the history of every human culture?"<sup>126</sup>

### Solutions, Part 1 | Traditional

**Hybrid subscription business model.** The model the *New York Times, Washington Post*, and others popularized in the 20<sup>th</sup> century.

*Hypothesis:* The subscription based-model is superior for exposing readers to different perspectives.

**Conclusion:** mixed. From what I see, subscription-based financial publications – like the *Financial Times, Wall Street Journal*, and *Economist* - tend to produce quality with a hybrid subscription model. However, it is biased toward news that can be turned into financial value – and it's produced from the perspective of people living and working in New York, London, and the other financial centers of the world. Bloomberg Terminals are an extreme case – a more or less total subscription model.

On the other hand, publications where readers subscribe based on political affinity, like *Mother Jones, The Nation* and *Weekly Standard*, seem to reinforce echo chambers.

*Hypothesis:* Will a return to subscription – digital paywalls – make up for lost revenue from disappearing print and ad revenue?

**Evidence:** No certain conclusion, but the evidence suggests no – not even close. The pattern looks like an initial surge of loyal subscribers when a paywall is first activated – like at the *New York Times* and elsewhere after the 2016 election - but then growth quickly stalls. It suggests the market size is far smaller than publishers hope.<sup>127</sup>

**Companies cutting out the middleman, like Starbucks**. Instead of buying ad space on the news, some companies have begun to produce their own, independent of direct advertising. They would rather have their logo next to solutions journalism rather than scandal and mayhem. This too is nothing new. John Deere pioneered this starting a century ago with their magazine *The Furrow*, which I first read about in Joe Pulizzi's *Epic Content Marketing*.

*Hypothesis:* Key question to evaluate quality: How closely aligned are the company's goals with their customers? In the case of John Deere and Starbucks – quite close.

**Evidence**: Mixed. Starbucks has produced some quality, inspiring work but from what I can tell, it's not really generating buzz or revenue outside of good publicity for Starbucks. This approach cuts out the middleman, and makes it more transparent, but John Deere probably won't do a good job holding itself to account. Of course, the news media fails to hold itself to account. That being said, I don't see how this business model differs from news organizations like NBC News, owned by General Electric; *Washington Post*, owned by Amazon; or the *New York Times*, majority-owned with minimal transparency by several generations of wealthy family along with a Mexican billionaire named Carlos Slim.

**Nonprofit: Crowdsourcing:** Writers and interviewers on YouTube and other platforms sometimes use Patreon and Kickstarter – essentially donations. Otherwise they rely on ad revenue. So despite the grassroots nature, these YouTube entrepreneurs face the similar revenue challenges to the legacy media they lampoon. I'd rather create a transaction - buying proposition based on value proposition.

**Blockchain: technology of the future? But will it always be?** Walter Isaacson, former *Time* editor, CNN chairman, *Jobs* author and Aspen Institute CEO wrote on LinkedIn to propose a two-way circuit-switched network architecture that would better allow micropayments, security, and "return addresses" on data. Blockchain would be part of that.<sup>128</sup>

My big idea is that we have to fix the internet. After forty years, it has begun to corrode, both itself and us... With a circuit-switched network, you can track or trace back the origins of the information, but that's not true with the packet-switched design of the internet" – hardwired the potential for anonymity. The lack of secure identification and authentication inherent in the internet's genetic code has also prevented easy transactions, thwarted financial inclusion, destroyed the business models of content creators, unleashed deluges of spam, and forced us to use passwords and two-factor authentication schemes that would have baffled Houdini."

"The 'killer app' for the early internet was email," Joichi Ito et al from the MIT Media Lab write in *Harvard Business Review*. "It's what drove adoption and strengthened the network. Bitcoin is the killer app for the blockchain."<sup>129</sup>

**Micropayments enabled by Blockchains?** Instead of a "free internet" choked with ads and clickbait, marketing expert and LinkedIn Influencer Don Peppers writes of a path not taken – and a billion-dollar opportunity to take it now. "Blockchain will Revolutionize Publishing," Peppers writes.<sup>130</sup> *Harvard Business Review* writes of its disruptive potential in banking and law industries.<sup>131 132</sup>

Will Blockchain disrupt banking and other industries?<sup>133</sup> Others are more dubious. I'm no expert, but it makes me think of a saying in clean energy circles about hydrogen fuel cells. "They are the energy platform of the future – and they always will be."<sup>134</sup> Time will tell – and in any case, I lack the technical sophistication to take advantage right now.

**Medium:** "Medium needs a business model," by Adam Hodgkin<sup>135</sup> - so they're trying a "freemium model." Medium, not making much money from ads, launched a \$5/month curated service of "premium" content. According to founder and CEO Ev Williams of Twitter, the curated service will feature "a limited set of carefully curated stories, chosen by experts among topics we care about. Something that is completeable, satisfying, and puts you in control."<sup>136</sup>

**NetFlix-style a la carte?** Right now, we have corporate media consolidation. What if we saw more of a guild or co-op evolution in a basket of publications? A subscription to one newspaper would provide access to an entire network of publications. Rival networks might compete on quality and price. My former mentor from the *Sacramento Bee* Matt Weiser told me of just such a plan floated before the Great Recession, as print came under existential threat from digital. It never happened – and independent newspapers went under or were bought up by big companies like Gannett and the New York Times Company, usually at a steep discount. So readers as customers - but the ship may have sailed.

# Solutions, Part 2: LinkedIn | Marketplace of Ideas



### Jim Rossi

LinkedIn Top Voice | author "Cleantech Con Artist" 2017 Writer | Entrepreneur | LinkedIn Campus Editor for UC Berkeley • University of California, Berkeley

"The ultimate good desired is better reached by free trade in ideas — that the best test of truth is the power of the thought to get itself accepted in the competition of the market."

- Supreme Court Justice Oliver Wendell Holmes<sup>137</sup>

Business model innovation can often be as valuable or more valuable than the underlying technological innovation, which often makes that innovation possible.

- Marketing Lessons from the Grateful Dead<sup>138</sup>

"Business model innovation can often be as valuable or more valuable than the underlying technological innovation, which often makes that innovation possible."

> - David Meerman Scott and Brian Halligan, Marketing Lessons from the Grateful Dead:

"Perhaps by definition an employable person is the one that you will never find in a history book because these people are designed to never leave their mark on the course of events. They are, by design, uninteresting to historians."

- Nassim Nicholas Taleb, summarizing economist Ronald Coase<sup>139</sup>

"Happiness is when what you think, what you say, and what you do are in harmony."

– Gandhi via Qi Lu

"Find ways to earn money that do not depend on advertising."

- Marc Tarpenning, Tesla Motors co-founder

I came to the University of California, Berkeley to innovate a business model where readers are my customers. That requires creating value for readers – and I define that value as trying to be entertaining, fair, accurate, and concise to the best of my ability. I need (1) a product

readers want to buy & (2) the ability to find those readers. Generally speaking, people don't pay for problems; they pay for solutions.

**GEOFFREY COLON**: I think hierarchical models are in a lot of trouble. I always ask everybody, 'How do you get paid?' Often they don't understand or they don't know – or they say they get a paycheck every two weeks. No, the question is, 'Who do you create value for? And how do they pay you for it?'

**My innovation:** using a content marketing model to "free my content" in a 0% ad revenue, 0% donor business model where I can directly reach a big, specific audience interested in books – specifically my first one, a true crime comedy caper titled *Cleantech Con Artist: A True Vegas Tale*. Getting paid for articles? No. I'd get paid by selling books, speaking, consulting, and other business. In this way I would resolve Stewart Brand's paradox of information. Make the information in my work both free *and* valuable – simultaneously.

Soon after arriving in Berkeley, I took a position as the Cal campus editor for LinkedIn. LinkedIn, founded in 2002 in Silicon Valley, started out as a resume sharing website to serve its users' "professional aspirations." LinkedIn has retained that core mission, but expanded in unexpected ways. **LinkedIn's revenue model relies** on selling users' information to recruiters and sales professionals,<sup>\*</sup> premium user memberships with added features and analytics (like being able to message anyone on the network without an introduction), learning tools including Lynda.com, and some targeted advertising.

In 2011, LinkedIn filed its IPO. In 2013, LinkedIn added the Pulse newsreader and a publishing platform that has grown rapidly since. In 2014 and 2015, UC Berkeley undergrad Tai Tran became one of the first young writers to build a huge audience on the platform, writing about social media marketing and millennials. He set an example I could follow. In the summer of 2016, Microsoft acquired LinkedIn for \$26.1 billion – a big premium on the stock price – at the same time Twitter floundered in an unsuccessful attempt to find a buyer. Microsoft kept LinkedIn's leadership intact – and the platform now had the scale to compete with Facebook, Google, and Apple in the rapidly evolving 21<sup>st</sup> century media-technology world. Available around the world in nearly 30 languages, LinkedIn's longtime CEO Jeff Weiner articulates LinkedIn's ultimate goal as a global "economic graph" – a marketplace of capital, skilled labor, ideas, and aspirations. Fifteen years after its founding, in May 2017, LinkedIn announced reaching 500 million global users – or about four times more than all the *Conde Nast* publications – including *Wired, The New Yorker*, and *Vanity Fair* - put together.

**Hypothesis:** LinkedIn, partly because founder Reid Hoffman studied evolutionary biology and philosophy in college, is designed in the same tit-for-tat, win-win manner Robert Trivers described in his theory. That is why I find it so intuitive.

### LinkedIn: Core Value Propositions

**Immediacy of social media** – for insight/analysis of subjects with some professional angle, more than breaking news per se. Conversations unfold in real time – or days, weeks, even months later.

**Crowdsourcing for accuracy and different perspectives – and not anonymous**. Since the website originated as a resume sharing site, LinkedIn essentially crowd-sources for accuracy, with users

<sup>\*</sup> A subtle but big difference from Facebook and Twitter. This is *professional* information, not personal – the kind that people on LinkedIn generally *want to share* to increase their professional prospects.

self-identifying based on the honor system. Essentially every reader and commenter "staples" their headshot, resume, and references to everything they do on LinkedIn, just a click away from verification. And on popular posts and articles, readers with an interest and expertise have a professional incentive to weigh in – in a concise, professional, and helpful way, to attract clients, jobs, investors, employees, readers, etc. to them.

	Private Nice an Philip	Puskala Investor rticle of a person who I respect and admire, thank you. Just have to mention that it was 1 Fisher, not Irving. Reply   Wou +2 D 1		1y
	۲	Jim Rossi LinkedIn Top Voice   author "Cleantech Con Artist" 2017		ly
		Thanks, <b>Rami Puskala</b> - and nice catch. I got the economist Irving Fisher mixed up with Philip Fisher, author of "Common Stocks, Uncommon Profits." I made the correction ;) Like Reply		

LinkedIn users possess an incentive to promote accuracy and fix mistakes – in civil fashion.

**Pleasant reading experience** – Although a blog platform, LinkedIn provides what many users report to be a far superior reading experience to the news media. That is because LinkedIn does not have pop-up, video, or banner ads. Any sponsored content and advertising gets integrated directly into the marketplace (although before new users follow a lot of writers/channels, their feed tends to be filled with this sponsored content, which they often report as annoying). Articles become ads for the writers.

**Network Effects: Strength and Diversity in Weak Ties**. Don Peppers writes on LinkedIn about Strong/Weak Ties, specifically on LinkedIn's strengths vs. Facebook and Twitter:<sup>140</sup> He cites Mark Granovetter's seminal paper, "The Strength of Weak Ties:" Strong ties are the people you know well. But it's people you don't know as well who tend to expose you to other new people – and new ideas and markets. As Peppers writes:

".... Having a mix of strong and weak connections is crucial when it comes to spreading an idea or a piece of information through a network, because the information must be able to "jump" from one social cluster to another. So, for instance, if you're using LinkedIn to make connections with potential customers for whatever product or service you're selling, you'll soon find that the most profitable connections on your network aren't the people who themselves have the largest number of connections, but the ones that have the most *diverse* connections – that is, the ones who are connected to the largest number of different clusters... These are the people most likely to be connected to clusters you aren't familiar with and don't have access to by yourself.

"And of course, the power of weak ties can hardly be overstated when it comes to generating creative or innovative ideas. All new ideas come from combining previous ideas and concepts... So the surest way NOT to have a creative breakthrough is to rely on all the experts you already know, and all the disciplines you're already familiar with. Again, your best new ideas will come when you tap

into disciplines you know less about, or consider the opinions of experts you have rarely consulted before, or simply talk to people you associate with less frequently." <sup>141</sup> <sup>142</sup> <sup>143</sup>

In seeing the strength of weak ties on a professional platform, we begin to see how LinkedIn fundamentally differs from both Facebook and Twitter when it comes to the echo chamber effect. We also see very little violence on LinkedIn We *do* sees stories about solving violence – like how to better protect university students during active shooter incidence.

Closely tied to the value of weak ties and the de-centralization of power, Pepper writes, is the value of **respectful disagreement**. "Good decisions require respectful disagreement," Pepper writes. Peppers cites a study found the decision-making process six times more significant than extensive data, sophisticated analytical tools, and consensus. Facebook and Twitter are terrible at this. "Set up a good decision-making process, not by striving for consensus, but by probing for conflict and counter-examples...the process of *making* that decision in the first place will benefit greatly from being influenced by a wide range of diverse views."<sup>144</sup> <sup>145</sup> <sup>146</sup> <sup>147</sup>

Peppers, Geoffrey Colon and I discussed this on LinkedIn, then Colon and I picked it up in a phone call.

**JIM ROSSI:** Speaking of innovation and the news media, I've been innovating from the ground up at Berkeley – including the ground I'm sleeping on. I think of myself as vertically integrated mini-media empire, controlled from the back of my Nissan Xterra where I sleep every night before going to the gym every morning, showering, and going to class.

**GEOFFREY COLON**: I love it! In the media industry ten years ago, people selling records out of their cars got laughed at. Ten years later... It's the fringe artists who start mass movements... We have citizen journalism because we can cut out the middleman.

**JIM ROSSI:** I used to write for the *Los Angeles Times, Bike,* and many others until the news media imploded during the Great Recession. I couldn't sell a story for over five years, but I still thought I was better than most of the people I was reading in *Wired, New Yorker,* etc. Now I've got an enormous audience on LinkedIn – and get this, I like reading most of them, the people who think and comment, a lot more than *Wired* or the *New Yorker*. Speaking of, last spring as I got started as LinkedIn editor I would post the same thing on LinkedIn and Facebook simultaneously, then crack open a beer and watch what happened next on a dual-screen computer. It was night and day. Let me put it this way: I try not to log onto Facebook more than once a month now. Just the thought of it turns my stomach. But I cannot wait to check LinkedIn every morning. It's like plugging into a river of knowledge and new perspectives that's sometimes overwhelming. Why?

**COLON**: It's tied into LinkedIn's economic graph. The way I interact on Facebook is completely different than the way I interact on LinkedIn. On LinkedIn, you want to build trust, so you are more civil and these are people who want to truly understand things – because they have an economic incentive to really understand. It's really the opposite of the echo chamber. The most valuable people I talk to are usually the five or six people I talk to who say, "I don't agree with you – and here's why."

**ROSSI**: LinkedIn's mission statement is about people's "professional aspirations." That seems to be where the rubber hits the road on welcoming different opinions.

**COLON**: The Jim you are on LinkedIn is probably the Jim you are in real life.

**ROSSI**: It's the Jim I *try* to be, let me put it that way. Aspirations sell on LinkedIn, not fear. I like to think of LinkedIn conversations as a mosaic – as in, this is what I learned so far. What perspectives are we missing that we could benefit from? Like *Star Trek*. Writing on LinkedIn has changed the power relationship. I can reach people all around the world with great specificity, almost like a targeted ad, but I don't have the power to tell people how it is. I have the power to spread ideas and start conversations. The writer and publication used to lord over the subject and readers. Not anymore. Now we're equals.

**COLON**: It's much more conversational – very different from the read-only culture the mainstream media thrived in. We can debate anytime. I recall we got into it on LinkedIn a couple times...

**ROSSI**: Laughing. I was worried about that – until I saw you're from New Jersey too.

**Marketing.** I basically studied the definition of echo chamber and the business model of traditional journalism and, as a general rule of thumb, tried to do the exact opposite. First, I inferred that users on LinkedIn, as a text-based professional platform, would likely be more interested in professionally-focused books than the average web surfer. Instead of chasing quantity of clicks, I focused on quality. Instead of specializing in one subject, I wrote about many different things on many different channels, and asked readers to share their own perspectives. Instead of trying to make nice with a failed journalism industry and counter "fake news," I criticized it and asked my readers to help me with accuracy and fairness.

I try to **micro-target my audience** for each story, using keywords, channels, and more, and then invite them into my larger, highly diverse meta-audience. On a fundamental level, then, I am reverse-engineering the echo chamber. I started out with genres relating to my book: history, business, true crime, and sub-genres: Las Vegas and Southwest history, fraud and cybercrime, sustainability, solar energy, academia, and more. I use Google Trends to try and write when things are topical. And I pay attention to what readers respond to.

#### Case studies of several of my successful LinkedIn articles.

- 1. *"Free Speech is an Endangered Species at UC Berkeley."*<sup>148</sup> When my story about political correctness and the erosion of free speech at Berkeley's Journalism School reached nearly 50,000 views, with hundreds of comments, I listened to my readers, and kept researching and writing about it.
- 2. "I Decided to be Homeless to Reduce Student Debt."<sup>149</sup> I wanted to write about this, but waited until LinkedIn editor Maya Pope-Chappell solicited calls for a series on student debt: My approach: Literally define myself by my outside-of-the-box thinking. The story reached over 25,000 views with outstanding engagement. It also accomplished my goal of cutting across socioeconomic status and geographic lines, judging by readership from CEOs & investors to homeless college students around the world (from the Bay Area to Latvia to Wisconsin). I was interviewed by MBA students (lean startup) & French TF1 evening news for crazy/smart Bay Area people & college.\* My audience growth skyrocketed after this story.

<sup>&</sup>lt;sup>\*</sup> The French TV reporter lamented same state of news media I describe in the US: cynical, pessimist, being forced to do negative stories instead of positive ones.

3. "Jutland 100: A Lesson in Leadership with Battleships"<sup>150</sup> I always wanted to write about this World War I naval battle, and researched a story to publish when it would draw interest: on its centennial May 31, 2016. Genres: history, topical with business lesson. I write about how British Admiral Sir John Jellicoe had to go against accepted naval thinking and choose caution over Nelsonic risk-taking. What results is a cautionary tale contrary to the risk-taking entrepreneurial narrative dominant in Silicon Valley and often on LinkedIn. The story, referencing several classic books on Jutland, reached over 5000 views and about 50 comments with strong engagement from people who love to read history books.



Protesters exploded a police generator. Several later danced around it while beating innocent people (photo by Joseph Bush).

# At UC Berkeley in 2017, "Social Justice" Means Mob Rule.

Published on February 2, 2017 | Featured in: Editor's Picks, Education, US Politics



Jim Rossi LinkedIn Top Voice | author "Cleantech Con A... 1,837

4. "At UC Berkeley in 2017, 'Social Justice' is Mob Rule."<sup>151</sup> My experiment in reverseengineering the echo chamber led me to experience a mob riot in real life – as a ticketholder for provocateur Milo Yiannopoulos on February 1 at UC Berkeley. The ugly scene would repeat itself over the next three months, drawing worldwide attention – most of it very negative – to UC Berkeley. At the same time, President Trump's criticism of the mainstream news media, which echoed my own, where I call it a "dumpster fire," appeared to increase my audience growth. It roughly doubled after Trump's inauguration, but I cannot tell how much is a direct result. This article reached about 19,000 views with 366 different comment threads – more than any other article of mine.

à

166

~

367

5. How I used Social Media to Catch a Con Artist.<sup>152</sup> Again part of a LinkedIn series, this time called "I was the First..." this story, my first overt book preview, reached close to 7000 readers with outstanding engagement.

**LinkedIn demographics**. I don't have any data on gender, ethnicity, age, religion, or politics, but the platform by nature is global and professional – and so skews a bit older and educated. And as a text-based platform, it likely skews toward book readers – ideal for me.

**Reach/Engagement metrics** – As my UNLV mentor Dominic Marrocco taught me, "Better to be generally correct than precisely wrong." I study these metrics – views, likes, comments, and shares, but – as Geoffrey Colon warned earlier - keep reminding myself they don't tell the whole story. First, they don't precisely measure emotional connection or the value gained from the story. Second: I have no way to precisely determine how accurate these numbers really are.

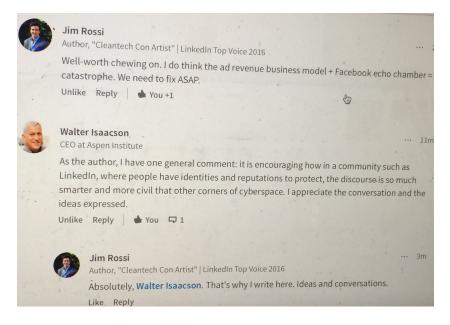
*Key shortcomings of LinkedIn*. (1) They are a partner so I rely on their solvency, stability, and to a certain degree for promotion (although as my network grows, the "bump" from promotion by editors becomes relatively less. (2) LinkedIn appears to be no more immune to editorial bias as anyone else (although as I explain, their business model may be). (3) As they evolve their platform

quickly, a relatively minor change for them might directly impact my business model. (4) Although I can reach readers with unprecedented specificity, I am still only reaching a fraction of my potential readers through LinkedIn.

*Hypothesis*: In McLuhan's global village, people tend to subscribe to other people – writers and interviewers - not publications. Given the historical, technological, social, psychological, and economic logic behind this, I see this as probably inexorable – and welcome. People generally distrust institutions. They are more likely to trust individuals once they have developed a relationship

**JIM ROSSI:** *What if* – a one of your techniques to get creatively disruptive – *what if* we're approaching a tipping point where people en masse decide that that mass media wastes their valuable time and tune out?

**GEOFFREY COLON**: *What if*... It looks like a surfeit of subculture. I just don't think "mass" anything anymore. You have a lot of different viewpoints... I'm looking beyond aggregators [that publish opinions and links to other work]. I do think we're moving beyond this because of citizen journalism, with mobile phones and publishing platforms. Think of economist Ronald Coase, journalism used to be costly [cameras, broadcasting, flying people around, printing]. It's not costly anymore. There are no barriers anymore.

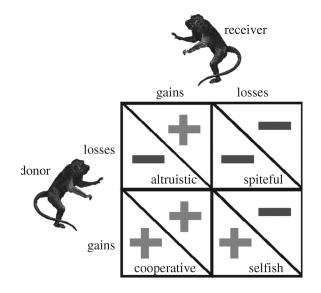


**In December 2016, LinkedIn named me a Top Voice**. Out of 450 million users at that time, about 3 million posted at least one article in 2016. LinkedIn Top Voices like myself and Ryan Holiday, author of *Trust Me, I'm Lying*, are systematically evaluated on our ability to spread ideas and start conversations, based on user nominations, engagement metrics like comments and shares, audience growth, and diversity of subjects. We are the 188 Top Voices out of that 3 million. LinkedIn's Top Voices represents a systematic attempt to evaluate work independent of clicks-for-ad revenue or donor advocacy – reverse-engineering the echo chamber.

Fifteen months, 28 stories, and 133,000 followers<sup>\*</sup> later (as of May 3, 2017; I am adding over 4000 per week). As I wrote about the issues discussed in this thesis, I began asking my readers about solutions. How do we reverse-engineer the echo chamber?

<sup>\*</sup> Some of my followers may in fact be bots. However, some of everyone with a big audience likely has bots – so I proceed on the basis that audience size is a somewhat accurate measure in *relative* terms.

## Solutions, Part 3 | Creating Value by Going Against the Herd



I have been evolving my ideas, crowdsourcing my questions, and learning fast. There is no such thing as a free lunch, however. Along the way, the lines between news, analysis, opinion, and advertising tend to blur and disappear. At the same time, I am moving from **debate** and **argument** (win-lose in Trivers' model) to **dialogue** and **conversation** (win-win).

LinkedIn's **Trending Storylines** started in spring 2017 with 25 human editors. LinkedIn will feature current events stories based around professional subjects – technology, healthcare, and more. The idea here: incentive experts to weigh in accurately and concisely. Users essentially help to peer review, fact-check, and add perspective while advertising their expertise.<sup>153</sup>

I asked Geoffrey Colon, now a marketer-at-large with Microsoft, about it.

JIM ROSSI: What do you think about LinkedIn's Trending Storylines?

**GEOFFREY COLON**: The best thing is you see what trends people are talking about, and you can provide your professional point of view. Here's where you can provide value by going against the herd. The disadvantage is it's focused on an existing trend, rather than spotting or creating a new one. LinkedIn got interesting when it moved from just "Top 5" lists and "jobs" to deeper insights.

**ROSSI**: MSM wants us to write in narrow "verticals" to sell targeted ads – like solar for me, or whatever, but I just don't think that way. I'm not selling ads; I'm spreading ideas – and ultimately selling books. I follow something that interests me and I don't know what vertical it will wind up in. I was working on my first book *Cleantech Con Artist* for almost two years before I realized it was going to be a true crime comedy caper. I thought it was a history book about solar energy!

**COLON**: When you get stuck in a vertical, that's when you get boring. I hope LinkedIn becomes to writers what YouTube is to video producers. Power is no longer about mass, it's about niche.

**ROSSI**: LinkedIn at its best is a marketplace of ideas. *We* are the ads. We're ads for Jim and Geoffrey. You told me that you believe going against the "herd" – sometimes a virtual mob - offering diverse ideas that puncture people's echo chambers – can create value (mindshare and

ultimately marketshare) on a platform like LinkedIn. Don Peppers has written about it, and I've found it to be true in building my LinkedIn audience – but I'm not sure how.

**COLON**: Here's one reason why you want **to go against the herd. The value you create is an opposing point of view in the echo chamber**. You make people go, "Wait a second," and ask critical questions.

#### Advocacy/ Grassroots/Entrepreneurial:

Note: By January 2017, as I worked on this thesis, trying to puncture the echo chamber became the trendy, most urgent problem facing the news media. Every organization has begun to trot out their "solution." Here are a few distinct ones, ranging from mainstream to disruptive.

**Mainstream media** – for profit: Axios: <u>www.axios.com</u> attempts to distill news stories into a short, value-neutral summary, delivered via email newsletter and available on their website. Their articles link to others, and other than its new brand, does not seem much different than other attempts being rolled out by the *New York Times, Washington Post*, and others to present other views from other places.

*Hypothesis*: Not only is the news media's business model imploding under new historical and technological conditions, but the distinctions between left and right, "progressive" liberal and conservative, are growing blurrier, less informative, and more contradictory in 2017. I see the distinctions as partly the result of technological artifact and partly the result of a wealthy Establishment that profits from "milking" both sides to maximum effect – a time-tested process described by Peter Schweizer.<sup>154</sup> Algorithms don't seem like an effective solution to a qualitative change.

<u>Mainstream media – nonprofit</u>: <u>www.Allsides.com</u> - led by John Gable, who warned us earlier about Facebook's Trending News algorithm. "Unlike regular news services, AllSides exposes bias and provides multiple angles on the same story so you can quickly get the full picture, not just one slant," according to the website. "Polarization is destroying us. Let's fix this... News, social media and even search results have dramatically changed in the last several years, becoming so narrowly filtered, biased and personalized **that** we are becoming less informed and less tolerant of different people and ideas."

Allsides uses a patented bias rating system [that] reflects the judgment of the American people." Readers can vote on where a publication or story belongs on a five- point continuum from left to right: (LL L C R RR).<sup>155</sup> "The headlines are so radically different," Gable writes, "that even reading [them together] tells you more about that topic than reading one story all the way through."<sup>156</sup>

*Hypothesis*: I like the approach, but it seems skewed – left. Perhaps not surprisingly, one of the founders is also co-founder of the progressive activist group Moveon.org.

**Wikitribune** is Wikipedia founder Jimmy Wales' new attempt at combining professional journalism with crowdsourcing readers to verify news. An earlier attempt called WikiNews didn't really go anywhere. "Wikitribune is news by the people and for the people," according to Wales. "This will be the first time that professional journalists and citizen journalists will work side by side as equals, writing stories as they happen, editing them live as they develop, and at all times backed by a community checking and re-checking facts."<sup>157</sup>

*Hypothesis:* The problem I see is that they're not equals: journalists get paid and belong overwhelmingly to one political party. And Wales publicly campaigned against Trump in the 2016 election – a perfectly reasonable activity, but one that identifies him as a partisan.

#### <u>Academic</u>

**Heterodox Academy**: <u>www.heterodoxacademy.org</u>, founded by Jon Haidt, Lee Jussim, and Chris Martin in 2015. Heterodox Academy grew out of an academic paper that concluded the social sciences had lost most or all of their political diversity over the past 50 years.<sup>158</sup> approaches the problem in the academic context:

"American universities have leaned left for a long time. That is not a serious problem; as long as there are some people with a different perspective in every field and every department, we can assume that eventually, someone will challenge claims that reflect ideology more than evidence. But things began changing in the 1990s [as Baby Boomers began retiring]... Sometimes, ideas become accepted because there is so much evidence in support of them that it would be perverse to believe otherwise (e.g., the Earth is round; modern living species are descended from earlier ones). Other times, however, ideas become widely accepted, even entrenched, *without any real evidence*. Such entrenched beliefs often arise because they support particular political or moral agendas; if the beliefs are falsified, the moral agenda will be threatened."

This orthodoxy, according to Heterodox, prevents critical thinking, tends to promote solutions that don't work, and creates an environment that punishes diversity of ideas. That is exactly what I experienced at UC Berkeley's Graduate School of Journalism for two years.

As a solution, Heterodox asks its members to endorse the statement: "I believe that university life requires that people with diverse viewpoints and perspectives encounter each other in an environment where they feel free to speak up and challenge each other."

They quote John Stuart Mill's *On Liberty*: "He who knows only his own side of the case knows little of that. His reasons may be good, and no one may have been able to refute them. But if he is equally unable to refute the reasons on the opposite side, if he does not so much as know what they are, he has no ground for preferring either opinion... Nor is it enough that he should hear the opinions of adversaries from his own teachers, presented as they state them, and accompanied by what they offer as refutations. He must be able to hear them from persons who actually believe them...he must know them in their most plausible and persuasive form."<sup>159</sup>

I asked Don Peppers, "What's the top thing we can do to puncture the echo chamber?" and he pointed back to school – much earlier than college. "If I had just one wish above all else to do away with the echo chamber," Peppers said, "it would be that our education system could be reformed so as to teach critical thinking, as opposed to just memorization of facts and learning of things. Children are wonderfully curious, until we teach them in school not to be."

**The Foundation for Individual Rights in Education (theFIRE.org)**<sup>\*</sup> is a Philadelphia-based nonpartisan nonprofit that (1) provides a transparent rating system on each university's commitment to free speech via policies and actions (green, yellow, red). They also write letters, do publicity, and engage in strategic litigation on behalf of faculty and students regarding free speech, due process, and academic freedom. TheFIRE.org's public profile has grown tremendously since I first heard about them in 2014, and I attended their West Coast conference at UCLA on April 29,

<sup>&</sup>lt;sup>\*</sup> I have a relationship with theFIRE.org going back to UNLV and the origin of my first book, *Cleantech Con Artist: A True Vegas Tale*.

2017. Their keynote speakers included FIRE's head Greg Lukianoff and UCLA law professor Eugene Volokh.<sup>160</sup>

**Student initiatives that mirror mainstream media**. Haas Business School graduate student Jeffrey Webb, a former Google employee and libertarian, has started "**Devil's Advocate**" as a newsletter. He asks readers to answer a series of questions on free speech, the role of government in regulating business and providing healthcare, etc. – then sends articles to challenge those views. In 2017, *The New York Times, Washington Post*, and others have begun experimenting with this.

#### **Entrepreneurial**

**Parlio**, acquired by Quora, is a site designed by Egyptian democracy activist Wael Ghonim to foster dialogue, not debate. No word on its progress.

**#CanWeAgree** by Jay Martin on LinkedIn is a grassroots attempt at a logical proof on policy issues like a federal minimum wage, solving illegal immigration, and more. Martin numbers empirical, falsifiable statements and asks readers if they agree with their accuracy. Agreed-upon facts remain at the top, while disputed facts go to the bottom for re-formulation.<sup>161</sup>

SecurityCollective.org by Mike Boz is an entrepreneurial attempt at a "mosaic" approach to building stories, where each contributor is encouraged to add another perspective, not tell others they are wrong.

**Cicero**: a structured debate format I worked on with my friend, colleague, and funder Dave Hales of UNLV and University of California, Santa Barbara's PhD program in economics. Hales wanted an ultra-structured debate format online to divine fact from fiction; being the divergent thinker I am, I began obsessing over the exact opposite – a win-win conversation in order to relax the psychology and pride of those involved. Rarely if ever, as I told Dave, have I ever heard people in a heated debate admit they are wrong. This was a key early insight for me.

**Nolabels.org**, a bipartisan/nonpartisan advocacy website led by former Utah Gov. Jon Huntsman (R) and former Connecticut Sen. Joe Lieberman (D). They are republishing my LinkedIn articles for their one million-plus subscribers in order to seed conversations around policy compromises and solutions.

**Ideas from LinkedIn readers.** In "Doing Your Part to Cultivate Civil Dialogue," Terry Paulson (courtesy of Mike Jacquart) explains structured techniques – in writing or speaking - to steer arguments toward conversations.<sup>162</sup> Judy Rees, a UK-based facilitator, does this too, from debate to dialogue – in terms reminiscent of Trivers' theory of reciprocal altruism: "How can we Promote Dialogue on Social Media?" she asks – from win-lose to win-win.<sup>163</sup> Portland-based writer Laura Irwin uses literary flair to write about science. In "Position Open for Devil's Advocate," she lays out competitive advantages for puncturing the echo chamber, similar and parallel to what we all learned from Peppers and Colon.<sup>164</sup>

**Preferred Solution: Just tune out a percentage/ stop following news.** YouTube interviewer Dave Rubin, the classical liberal from earlier, tried ignoring the news for 10 days. "I felt calmer, more present, and generally happier," he reported back to his viewers. "I don't think that our brains are wired to be taking in endless amounts of information all the time... Our connectivity is evolving faster than our consciousness."<sup>165</sup>

I have reduced by news intake and feel a lot smarter for it. In fact, here's the consensus that has come from the FIRE, LinkedIn readers, and many more: Lay off the news: turn off the TV news and check your computer or phone less often. Read books, talk to a new person with a different perspective. Find smart people who hold opinions different than you, and *listen to them*. This approach provides a dual benefit – to you directly, and the reduced clicks/views ("consumption") will starve the beast of revenue.

*Hypothesis*: Turning off the mainstream media – and turning on to more books and different people from around the world – would make people *better informed* than the news media in 2017. It would also lead to further mass layoffs in the news media.

## Epilogue: Ann-mageddon & Beyond

As part of my attempts to reverse-engineer the echo chamber, I began promoting free speech events sponsored by campus groups on campus after the February 1 Milo Yiannopoulos riot. I soon crossed paths with Pranav Jhandyala, a freshman who grew up in nearby Cupertino and leads the nonpartisan group BridgeCal. When I heard about the ingenious speaker series on immigration freshman Jhandyala hatched with classmates – "progressive" liberal law professor Maria Echaveste, libertarian scholar Bryan Caplan, and conservative bestselling author Ann Coulter - 1 immediately volunteered to help promote it. I soon learned that Jhandyala had suffered a concussion at the hands of "Antifa" protesters during the February 1 Milo Yiannopoulos riot.<sup>166</sup>

**ROSSI:** I suspect a lot of people in Berkeley spat out their kombucha when they found out Ann Coulter is coming to speak at Berkeley. Why are you spearheading this?

**JHANDYALA:** To actually embody the spirit of discourse, we need to bring people of all perspectives. BCR [Berkeley College Republicans] said, "We should bring Ann Coulter. She's very vocal and has a large following."

**ROSSI:** Twelve bestselling books, including *Adios America* and *In Trump We Trust: E Pluribus Awesome!* So you're saying the fact that she's so controversial makes her an ideal speaker, not only on the fringe but also not easily intimidated? A lot of people in Berkeley need to learn how to listen to someone with a different opinion - without demonizing them or resorting to violence.

**JHANDYALA:** I think it's important to bring somebody who's on the fringe to talk to the farthest-left city in the country. We think this can be a model.

**ROSSI:** Love it. Tell me a little about Bridge Cal and the Speaker series.

**JHANDYALA:** We saw a lack of nonpartisan discourse – talking to the other side. There's a gap in people's thinking. "I can't even understand the other side. I can't even get inside the other person's head."

**ROSSI:** Speaking of the echo chamber... The Journalism School here is about 120 students and faculty – with zero who hold a Republican/conservative/libertarian perspective – or at least willing to say so publicly and challenge faculty, funders, and potential employers. We've not had a single guest lecture or employer from a conservative/Republican/libertarian perspective either.

**JHANDYALA:** I think a lot of faculty are committed to free speech, but the professors I have see there's a problem on campus. Maybe I've been lucky. ASUC [student union] leaders will support us privately, but not publicly.



**ROSSI**: What would you consider a success for the speaker series?

**JHANDYALA**: The best way to challenge bad ideas is with better ideas. I want to challenge this "ideological exceptionalism."

After threats of violence from groups aligned with Falarca's BAMN – the same kinds of threats posted on flyers and social media - that had forced the cancellation of previous speakers, UC Berkeley tried to re-scheduled Coulter for dead week, after classes, at the Lawrence Hall of Science 2.6 miles from the main campus in a secluded canyon. A public standoff ensued where Coulter said she wanted to speak on Sproul Plaza, home of the 1960s Free Speech movement and site of the Yiannopoulos riot, informally, on the original date of April 27. But the Berkeley College Republicans and related student groups, fearing liability if violence resulted, withdrew their support. The Berkeley College Republicans filed a 1<sup>st</sup> Amendment lawsuit against UC Berkeley – alleging a long-running pattern of discrimination against the free speech rights of non-"progressive" students - as Coulter reluctantly cancelled.<sup>167</sup>

On April 27, approximately 200 police officers ringed Sproul Plaza as other speakers gathered in Coulter's place to support free speech, President Trump, and other causes. The police formed a wall between them and "Antifa." For the first time, police enforced an ordinance against wearing masks at protests. There was no violence but no Ann Coulter either.

Over the past year, the digital echo chamber has increasingly manifested itself in flesh-andblood, on college campuses and public streets from California to Vermont and New York. Sproul Plaza at UC Berkeley, global symbol of the Free Speech Movement, had become the global center of the digital echo chamber.

### **Conversations & Interviews**

Key folks in **bold** (based on their expertise/level of conversation and insight)

Julie Marie Norvaisas, head of user experience research at LinkedIn Mike Stern, marketing specialist at LinkedIn Maya Pope-Chappell, millennials/education editor and head of campus editor program Erwen Zhu, Kunal Kerai, Cornelius McGrath, Frederick Daso, Ajay Kurian, Justin Chormicle, Tai Tran, Michael Spencer, LinkedIn student campus editors and Top Voices Guest lecture with Julian Gamboa's student-run Digital Marketing class at UC Berkeley. Bill Shelander, my Cleantech to Market Haas instructor and brilliant engineer/investor. Matt Beech, visiting scholar from University of Hull, UK Dan McDunn, Berkeley local and member of informal libertarian group. Andrew Sullivan, Hudson Pacific – public relations professional who worked with NoLabels.org and writes on LinkedIn Tyson Falk, renewable energy and marijuana lobbyist in Nevada. Geoffrey Colon, author of Disruptive Marketing and marketing guru with Microsoft/LinkedIn David Meerman Scott, co-author of Marketing Lessons from the Grateful Dead Don Peppers, LinkedIn Influencer, marketing expert and bestselling author Steven Pinker, psychologist at Harvard and bestselling author. Alex Berezow, science writer, co-founder of RealClearScience.com and PhD in microbiology from Univ. of Washington Jeffrey Webb, Haas graduate student and former Google employee, with project "Devil's

Advocate" Philip Stark Michael Pollan Tim McGirk – thesis conversations.

Laura Irwin, writer in Portland, Oregon. Judy Rees, facilitation expert in the United Kingdom Jenette Clay, Jay Martin, Brian Smith, Michael Gerard-Rousseau, Peter Ireland, and many more.

### References

<sup>1</sup> https://www.nytimes.com/2016/02/03/opinion/social-media-destroyer-or-

creator.html?action=click&contentCollection=opinion&module=NextInCollection&region=Footer &pgtype=article&version=column&rref=collection%2Fcolumn%2Fthomas-l-friedman& r=1

<sup>2</sup> https://www.merriam-webster.com/dictionary/echo%20chamber

<sup>3</sup> http://www.urbandictionary.com/define.php?term=echo%20chamber

<sup>4</sup> https://www.linkedin.com/pulse/i-decided-homeless-reduce-student-debt-jim-rossi

<sup>5</sup> Thomas R. Eisenmann, "Hypothesis-Driven Entrepreneurship: the Lean Startup," Harvard Business Review, 2011: https://hbr.org/product/hypothesis-driven-entrepreneurship-the-leanstartup/812095-PDF-ENG.

<sup>6</sup> Thomas Eisenmann, et al. "Hypothesis-driven Entrepreneurship: The Lean Startup," Harvard Business School, 2013.

<sup>7</sup> definition of liberal in *Merriam-Webster: https://www.merriam-webster.com/dictionary/liberal.* <sup>8</sup> https://www.youtube.com/user/RubinReport

<sup>9</sup> https://www.youtube.com/watch?v=v9HmvgZb9rY

<sup>10</sup> https://theamericanscholar.org/on-political-correctness/#.WMMJZHvfNrh.twitter

<sup>11</sup> https://www.linkedin.com/pulse/star-treks-legacy-50-urgent-lessons-2016-jim-rossi?trk=mpauthor-card

<sup>12</sup> Paul Starr, The Creation of the Media: Political Origins of Modern Communications (Basic Books, 2005), 496 p.

<sup>13</sup> Starr, The Creation of the Media; Ryan Holiday, Trust Me, I'm Lying: Confessions of a Media Manipulator (Portfolio, 2013), 320 p. Thomas Jefferson quote from letter to Nathaniel Macon, 1819: http://www.guotationspage.com/guote/976.html.

<sup>14</sup> Paul Starr, Creation of the Media: The Political Origins of Modern Communications (Basic Books, 2005), 496 p.

<sup>15</sup> Creation of the Media – PAGE NUMBERS

<sup>16</sup> http://www.museum.tv/eotv/vietnamonte.htm

<sup>17</sup> Daniel Ellsberg, Secrets: A Memoir of Vietnam and the Pentagon Papers (Penguin, 2003), 528 p. <sup>18</sup> http://www.history.com/topics/vietnam-war/pentagon-papers.

<sup>19</sup> Anthony Lewis, Make No Law: The Sullivan Case and the First Amendment (Vintage, 1992), 368 p.) <sup>20</sup> Upton Sinclair quote:

<sup>21</sup> http://www.nytimes.com/2013/08/25/opinion/sunday/does-media-violence-lead-to-the-realthing.html? r=0

<sup>22</sup> https://www.psychologytoday.com/blog/reading-between-the-headlines/201309/violence-themedia-and-your-brain

<sup>23</sup> https://www.psychologytoday.com/blog/reading-between-the-headlines/201309/violence-themedia-and-your-brain

<sup>24</sup> http://www.tennessean.com/story/opinion/contributors/2016/07/12/perfect-storm-summer-2016violence-death/86956944/

<sup>25</sup> http://optimal.com/download-the-ad-block-survey-forecast/ I'd like to find if someone can estimate how much the news media makes from violent news events.

<sup>26</sup> https://www.linkedin.com/pulse/reduce-gun-violence-news-media-must-look-mirror-jim-rossi

<sup>27</sup> http://www.npr.org/2016/07/16/486311030/despite-the-headlines-steven-pinker-says-the-worldis-becoming-less-violent

<sup>28</sup> Steven Pinker, *The Better Angels of Our Nature* (New York: Penguin Books, 2012), 832 p. See 2016 NPR interview for recent summary: <u>http://www.npr.org/2016/07/16/486311030/despite-the-headlines-steven-pinker-says-the-world-is-becoming-less-violent</u>

<sup>29</sup> I don't totally discount the theory of catharsis – Aristotle and then Freud, but empirical scientific analysis seems to conclude the inverse. Links to peer-reviewed work here:

http://www.encyclopedia.com/media/encyclopedias-almanacs-transcripts-and-maps/catharsistheory-and-media-effects. Brad Bushman, Ohio State University: http://u.osu.edu/bushman.20/. Bushman, Brad J., and Huesmann, L. Rowell. (2000). "Effects of Televised Violence on Aggression." In *Handbook of Children and the Media*, eds. Dorothy G. Singer and Jerome L. Singer. Newbury Park, CA: Sage.

Geen, Russell G., and Bushman, Brad J. (1997). "Behavioral Effects of Observing Violence." In *Encyclopedia of Human Biology*, Vol. 1, ed. Renato Dulbecco. New York: Academic Press. Smith, S. L., and Donnerstein, Edward. (1998). "Harmful Effects of Exposure to Media Violence: Learning of Aggression, Emotional Desensitization, and Fear." In *Human Aggression: Theories, Research, and Implications for Policy*, eds. Russell G. Green and Edward Donnerstein. New York: Academic Press.

Tavris, Carol. (1988). "Beyond Cartoon Killings: Comments on Two Overlooked Effects of Television." In *Television as a Social Issue*, ed. Stuart Oskamp. Newbury Park, CA: Sage Publications.

<sup>30</sup> <u>https://iapp.org/news/a/if-you-cant-protect-the-data-burn-it-to-the-ground/</u>, Bruce Schneier, *Data and Goliath: The Hidden Battles to Control Your World* (New York: WW Norton, 2015).
<sup>31</sup> http://www.niemanlab.org/images/NewspaperAdRevenue.jpg

<sup>32</sup> Holiday, Trust Me, I'm Lying.

<sup>33</sup> Holiday, *Trust Me, I'm Lying* 64, 60, 73.

<sup>34</sup> <u>https://www.fbi.gov/news/stories/latest-crime-statistics-released</u>; Data tables from FBI UCS Annual Crime Reports: <u>http://www.disastercenter.com/crime/uscrime.htm</u>

<sup>35</sup> <u>https://www.fbi.gov/news/stories/latest-crime-statistics-released</u>,

<sup>36</sup> Heather MacDonald, *The War On Cops* (Encounter Books, 2016). Stats cited from the Amazon page. UC Berkeley Library does not have this book, which in itself is very suspicious.

<sup>37</sup> <u>http://www.nationalreview.com/article/437548/ferguson-effect-real-heather-mac-donald-crime-stats-prove-it</u>.

<sup>38</sup> <u>http://www.mensjournal.com/magazine/stewart-brand-the-last-prankster-</u> 20130308.

<sup>39</sup> Stewart Brand's Paradox of Information: <u>http://stewartmader.com/stewart-brand-information-wants-to-be-free-it-also-wants-to-be-expensive/.</u>

Andrew Kirk, Counterculture Green: The Whole Earth Catalog and American Environmentalism (University Press of Kansas, 2007), 320 p.

<sup>40</sup> Clay Shirky, *Here Comes Everybody* (New York, Penguin Books, 2009), 344 p.

<sup>41</sup> <u>https://www.linkedin.com/pulse/my-25-year-prediction-radical-decentralization-don-peppers?trk=mp-reader-card.</u>

<sup>42</sup> <u>http://www.reuters.com/article/us-newspapers-trump-campaigns-analysis-idUSKBN15V0GI</u>

<sup>43</sup> <u>http://bigstory.ap.org/article/35c595900e0a4ffd99fbdc48a336a6d8/poll-vast-majority-americans-dont-trust-news-media; http://www.poynter.org/2016/newspaper-reporter-is-the-worst-job-study-says-do-you-agree/406440/.</u>

<sup>44</sup> <u>http://www.people-press.org/2014/06/12/political-polarization-in-the-american-public/</u>

<sup>45</sup> <u>http://archive.news.indiana.edu/releases/iu/2014/05/2013-american-journalist-key-findings.pdf</u>

<sup>46</sup> <u>http://www.politico.com/magazine/story/2017/04/25/media-bubble-real-journalism-jobs-east-coast-215048</u>

<sup>47</sup> <u>https://www.insidehighered.com/news/2012/10/24/survey-finds-professors-already-liberal-have-moved-further-left</u>

<sup>48</sup> <u>http://heterodoxacademy.org/problems/</u> - links to studies by Gross & Simmons, 2007; Inbar & Lammers, 2012; Langbert et al, 2016, and more.

<sup>49</sup> <u>http://www.people-press.org/2016/04/26/a-wider-ideological-gap-between-more-and-less-educated-adults/</u>

<sup>50</sup> Trend of young people trusting individuals > institutions... McLuhan's "global village" & a big reason why I like being on LinkedIn for chance to earn trust as an independent writer: http://college.usatoday.com/2017/03/21/surprise-young-people-dont-trust-the-media/

http://reutersinstitute.politics.ox.ac.uk/sites/default/files/Public%20Trust%20in%20the%20News %20A%20Constructivist%20Study%20of%20the%20Social%20Life%20of%20the%20News\_0.pd f

<sup>52</sup> <u>https://www.quora.com/Are-there-more-Republicans-or-Democrats-in-the-United-States</u> - links to Gallup chart; http://www.pewresearch.org/data-trend/political-attitudes/party-identification/

to Gallup chart; <u>http://www.pewresearch.org/data-trend/political-attitudes/party-identification/</u>

<sup>53</sup> Cision State of the Media Report 2017.

<sup>54</sup> <u>http://thehill.com/homenews/media/318514-trump-admin-seen-as-more-truthful-than-news-media-poll</u>

<sup>55</sup> Trump more trusted than news media (narrowly) [Emerson College]

http://thehill.com/homenews/media/318514-trump-admin-seen-as-more-truthful-than-news-media-poll

News media more trusted than Trump? (narrowly) [Quinnipiac]

http://www.usatoday.com/story/news/politics/onpolitics/2017/02/23/president-trump-mediaquinnipiac-poll/98283962/

<sup>56</sup> <u>http://www.theblaze.com/news/2017/02/22/msnbc-host-says-its-the-medias-job-</u>to-control-exactly-what-people-think-not-trumps/

<sup>57</sup> Bharat Anand: <u>https://hbr.org/2017/01/the-u-s-medias-problems-are-much-bigger-than-fake-news-and-filter-bubbles?curator=MediaREDEF</u>

<sup>58</sup> Alex Berezow: <u>http://acsh.org/news/2017/03/05/infographic-best-and-worst-science-news-sites-10948</u>

<sup>59</sup> See Saltelli, et al *The Rightful Place of Science: Science on the Verge* (Consortium for Science, Policy and Outcomes, 232 p.), 2016; and *Nature's* coverage of the crisis in scientific reproducibility: <u>http://www.nature.com/news/1-500-scientists-lift-the-lid-on-reproducibility-</u>1.19970

<sup>60</sup> John P.A. Ioannides in his famous 2005 paper, "Why Most Published Research Findings are False," *PLoS Med*, v.2(8); 2005 Aug PMC1182327:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1182327/ "...a research finding is less likely to be true when the studies conducted in a field are smaller; when effect sizes are smaller; when there is a greater number and lesser preselection of tested relationships; where there is greater flexibility in designs, definitions, outcomes, and analytical modes; when there is greater financial and other interest and prejudice; and when more teams are involved in a scientific field in chase of statistical significance. Simulations show that for most study designs and settings, it is more likely for a research claim to be false than true." In a later paper, lonnaidis estimated that as much as 85% of science funding may be wasted as a result of shoddy science.

<sup>61</sup> <u>http://www.patheos.com/blogs/religionprof/2016/12/whats-your-source.html</u>

<sup>62</sup> <u>http://www.poynter.org/2017/how-facebook-and-other-platform-companies-promote-bad-journalism-and-what-to-do-about-it/453936/</u>′

<sup>63</sup> <u>http://www.poynter.org/2017/how-facebook-and-other-platform-companies-promote-bad-journalism-and-what-to-do-about-it/453936/</u>

<sup>64</sup> <u>http://restoringthetrust.org</u>

<sup>65</sup> <u>https://www.nytimes.com/2017/02/21/opinion/what-facebook-owes-to-journalism.html?ref=opinion&\_r=0</u>

<sup>66</sup> <u>http://www.adweek.com/digital/news-integrity-initiative/</u>

http://www.adweek.com/digital/facebook-journalism-project/

<sup>67</sup> http://www.adweek.com/digital/news-integrity-initiative/

<sup>68</sup> <u>https://www.linkedin.com/in/jeffjarvis2/</u>

<sup>69</sup> <u>http://www.carnegieuktrust.org.uk/carnegieuktrust/wp-</u> content/uploads/sites/64/2016/02/pub1455011665.pdf

<sup>70</sup> <u>http://www.foxnews.com/politics/2017/01/30/trump-bannon-call-media-opposition-party-</u> <u>does-that-go-too-far.html</u>

<sup>71</sup> <u>http://www.politico.com/story/2017/01/donald-trump-steve-bannon-media-opposition-party-234280</u>

http://variety.com/2017/biz/news/trump-cnn-buzzfeed-pile-of-garbage-press-conference-1201958139/

<sup>72</sup> <u>https://www.usatoday.com/story/news/politics/2017/02/24/donald-trump-cpac-media-</u>enemy-of-the-people/98347970/

<sup>73</sup> <u>http://www.politico.com/magazine/story/2017/04/25/media-bubble-real-journalism-jobs-east-coast-215048</u>

<sup>74</sup> I took 4 classes with Trivers – including 2 graduate courses – and we remain in touch to this day. Maximizing **inclusive fitness** – means how individual genes – rather than individual members of a species – become more numerous over time.

<sup>75</sup> Robert L. Trivers, "The Theory of Reciprocal Altruism, 1971. *Quarterly Review of Biology*, Vol. 46, No. 1, March 1971, pp. 35-57: <u>http://greatergood.berkeley.edu/images/uploads/Trivers-EvolutionReciprocalAltruism.pdf</u>

<sup>76</sup> My review of Trivers' memoir *Wild Life*: <u>https://www.linkedin.com/pulse/famed-biologists-new-memoir-beautiful-mind-meets-bob-marley-jim-rossi</u>

<sup>77</sup> "Sow the seeds, reap the whirlwind" originates in the Bible Hosea 8:7 and Galatians 6:8.

<sup>78</sup> Marshall McLuhan and W. Terrence Gordon, *Understanding Media: The Extensions of Man: Critical Edition* (Gingko Press, 2003), 500 p.

<sup>79</sup> <u>http://fortune.com/2016/06/15/the-news-landscape/</u>

<sup>80</sup> George Stigler earned the 1982 Nobel Prize in Economics for regulatory capture, with several other scientists doing significant work.

<sup>81</sup> <u>https://digitalcontentnext.org/blog/2016/06/16/google-and-facebook-devour-the-ad-and-data-pie-scraps-for-everyone-else/</u>

<sup>82</sup> <u>http://www.theatlantic.com/technology/archive/2016/06/facebook-ate-the-universe-bye-universe/486944/</u>

84

https://www.forrester.com/report/Forrester+Data+Report+Ad+Fraud+And+Viewability+Forecast+2 016+To+2021+US/-/E-RES137685#figure3

http://www.alistdaily.com/strategy/bad-ads-wasted-7-billion-

dollars/?utm\_source=[a]listdaily\_subscribers&utm\_medium=email&utm\_campaign=newsletter\_20 170407&bt\_ee=SF8uOp3/xcwG8pdI3AIgHE1wnUq0YHeyGnmH7XGZpKVICRdEJB5NLMnABaBg asPL&bt\_ts=1491606044363&utm\_source=[a]listdaily\_subscribers&utm\_medium=email&utm\_ca mpaign=newsletter\_20170408&bt\_ee=AFY9AcaV9rbE5d4GtsqBtsicJNDzPg/mDsSxphrYDLPjjQgY qezDsWCBienuqelP&bt\_ts=1491609768711

<sup>85</sup> <u>http://www.cjr.org/business\_of\_news/will\_ad\_blockers\_kill\_the\_digital\_media\_industry.php</u> <u>https://pagefair.com/blog/2016/mobile-adblocking-report/</u>

http://blockadblock.com/adblocking/is-ad-blocking-growing-faster-than-we-think/ http://fortune.com/2015/09/21/apple-adblock-stats/

http://adage.com/article/digital/ad-blocking-growth-emarketer-forecast-70-million/304615/

<sup>86</sup> <u>https://motherboard.vice.com/en\_us/article/princetons-ad-blocking-superweapon-may-put-an-end-to-the-ad-blocking-arms-race</u>

<sup>87</sup> <u>http://nypost.com/2017/03/04/trumps-media-enemies-are-getting-rich-off-his-presidency/</u>

<sup>88</sup> Geoffrey Colon, Disruptive Marketing: What Growth Hackers, Data Punks, and Other Hybrid Thinkers Can Teach Us About Navigating the New Normal (AMACOM, 2016), 256 p. <sup>89</sup> https://research.fb.com/category/facebook-ai-research-fair/

<sup>90</sup> Bernard Marr, "How Facebook uses data analytics to understand your posts."

https://www.linkedin.com/pulse/how-facebook-uses-data-analytics-understand-your-posts-bernardmarr

<sup>91</sup> Facebook Lookalike Audiences: <u>https://www.facebook.com/business/help/164749007013531</u>.

<sup>92</sup> <u>http://www.socialmediaexaminer.com/4-ways-to-build-facebook-lookalike-audiences-to-expand-</u>

targeting/?awt\_l=V2g9Yg&awt\_m=3ffuqN6nSwr.ILT&utm\_source=Newsletter&utm\_medium=New\_sletterlssue&utm\_campaign=New&omhide=true

<sup>93</sup> Jaron Lanier, "Digital Maoism Revisited:"

http://content.time.com/time/magazine/article/0,9171,1570745,00.html

<sup>94</sup> https://www.nytimes.com/2016/02/03/opinion/social-media-destroyer-or-

creator.html?action=click&contentCollection=opinion&module=NextInCollection&region=Footer &pgtype=article&version=column&rref=collection%2Fcolumn%2Fthomas-I-friedman&\_r=1

<sup>95</sup> http://www.pnas.org/content/113/3/554.abstract

<sup>96</sup> "Exposure-to-diverse-information-on-Facebook," no author listed, on Facebook website: <u>https://research.fb.com/exposure-to-diverse-information-on-facebook-2/exposure-to-diverse-information-on-facebook/</u>.

<sup>97</sup> Walter Quattrociocchi, Antonio Scala, and Cass R. Sunstein. "Echo Chambers on Facebook." <u>https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2795110</u>

<sup>98</sup> Michaela Del Vicario, et al. "The Spreading of Misinformation Online." *PNAS* January 19, 2016, vol. 113, no. 3, 554-559.

<sup>99</sup> Dispute whether Mark Twain actually said this: <u>http://quoteinvestigator.com/2014/07/13/truth/</u>
<sup>100</sup> <u>http://www.newyorker.com/magazine/2011/07/11/the-visionary</u>

<sup>101</sup> Brian Stelter, "Is Facebook an echo chamber? If so, they're OK with that." http://money.cnn.com/2016/06/30/media/facebook-echo-chamber-news-feed-interview/

<sup>102</sup> <u>http://gizmodo.com/former-facebook-workers-we-routinely-suppressed-conser-1775461006</u> http://thefederalist.com/2016/05/09/former-facebook-workers-confess-we-routinely-suppressedconservative-news/

<sup>103</sup> <u>http://opportunitylives.com/facebook-coo-sheryl-sandberg-admits-liberal-bias-on-social-media-platform-rang-true-for-many/</u>

<sup>104</sup> <u>http://www.latimes.com/nation/politics/trailguide/la-na-trailguide-updates-co-founder-of-facebook-gives-20-1473424508-htmlstory.html</u>

<sup>105</sup> <u>https://www.linkedin.com/in/andyoconnell/</u>; Andy O'Connell visited Haas' Managing Human Rights in Business in November 2016.

<sup>106</sup> <u>http://nicolesbio.tumblr.com</u>

 <sup>107</sup> Michael Nunez, "Former Facebook Workers: We Routinely Suppressed Conservative News," <u>http://gizmodo.com/former-facebook-workers-we-routinely-suppressed-conser-1775461006</u>
<sup>108</sup> <u>https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-</u>

worldwide/

<sup>109</sup> India rejects Facebook's internet proposal: <u>https://www.cnet.com/news/why-india-doesnt-want-free-basics/</u>. Andy O'Connell, head of public policy at Facebook and a longtime Hillary Clinton aide, rued this development during a visit to our Human Rights in Business class at Haas School of Business, UC Berkeley, in fall 2016.

<sup>110</sup> <u>https://www.cjr.org/analysis/breitbart-media-trump-harvard-study.php</u>

<sup>111</sup> <u>http://www.pewresearch.org/fact-stank/2016/05/12/liberal-democrats-most-likely-to-have-learned-about-election-from-facebook/</u>

<sup>112</sup> <u>http://www.csmonitor.com/USA/Politics/Politics-Voices/2016/0517/Behind-Facebook-s-trending-news-feed-a-deeper-flaw</u>

https://www.theregister.co.uk/2017/02/17/zuckerberg\_publishes\_worldsaving\_manifesto/
NBER Working Paper: <a href="http://www.nber.org/papers/w23258">http://www.nber.org/papers/w23258</a>

<sup>115</sup> Adam Alter, Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked (New York, Penguin 2017), 368 p.

<sup>116</sup> <u>http://www.chicagotribune.com/news/opinion/commentary/ct-facebook-confirmation-bias-</u> misinformation-paranoia-20160108-story.html

<sup>117</sup> <u>http://news.harvard.edu/gazette/story/2017/03/cass-sunsteins-republic-explores-dangers-of-social-media-</u>

curation/?utm\_source=SilverpopMailing&utm\_medium=email&utm\_campaign=03.22.2017%20(1)

<sup>118</sup> Hans Toch, "Psychology of Crowds Revisited." Concept of "The Crowd" in European cities in late 19<sup>th</sup> century (electricity, scale). Can reflect or challenge. Chants... control.

Gustave Bon: submergence (of individual), contagion, suggestion.

S. Freud: crowd unlocks unconscious mind.

<sup>119</sup> Keith Doubt, "Social Order Without Scapegoating."

http://www.academia.edu/2703684/Social\_Order\_Without\_Scapegoating

<sup>120</sup> Alice Dreger, *Galileo's Middle Finger: Heretics, Activists, and One Scholar's Search for Justice* (New York: Penguin, reprinted in 2016), 368 p. Alice Dreger website: <u>http://alicedreger.com/GMF</u>. <sup>121</sup> Philip Zimbardo discusses his Stanford Prison Experiment:

https://www.youtube.com/watch?v=oAX9b7agT9o

<sup>122</sup> Stanley Milgram's obedience experiments: <u>https://www.youtube.com/watch?v=W147ybOdgpE</u>
<sup>123</sup> <u>http://science.sciencemag.org/content/349/6251/aac4716</u>

<sup>124</sup> George Lakoff, Whose Freedom? The Battle Over America's Most Important Idea (Picador, 2007), 288 p. George Lakoff, *The ALL NEW Don't Think Like an Elephant: Know Your Values and Frame the Debate* (Chelsea Green Publishing, 2014), 192 p.

<sup>125</sup> <u>https://newrepublic.com/article/77730/block-metaphor-steven-pinker-whose-freedom-george-lakoff</u>

<sup>126</sup> https://www.edge.org/conversation/beware-the-online-collective

<sup>127</sup> https://mumbrella.com.au/data-finally-newspapers-arent-going-get-enough-digital-subscribers-206839

https://www.linkedin.com/pulse/internet-broken-starting-from-scratch-heres-how-id-fix-isaacson
https://hbr.org/2017/03/the-blockchain-will-do-to-banks-and-law-firms-what-the-internet-did-to-media

<sup>130</sup> https://www.linkedin.com/pulse/blockchain-revolutionize-publishing-don-peppers

<sup>131</sup> https://hbr.org/2017/03/the-blockchain-will-do-to-banks-and-law-firms-what-theinternet-did-to-media?curator=MediaREDEF

<sup>132</sup> Blockchain addendum: https://www.youtube.com/watch?v=wglAl4O4k\_8

<sup>133</sup> https://hbr.org/2017/03/the-blockchain-will-do-to-banks-and-law-firms-what-theinternet-did-to-media?curator=MediaREDEF

<sup>134</sup> https://hbr.org/2017/03/the-blockchain-will-do-to-banks-and-law-firms-what-theinternet-did-to-media?curator=MediaREDEF

<sup>135</sup> https://medium.com/@adamhodgkin/medium-needs-a-business-model-550d3e2ff2ab#.dpge7o37z

<sup>136</sup> http://www.niemanlab.org/2017/03/media-is-broken-so-mediums-launching-a-5monthmember-program-that-offers-small-upgrades/

<sup>137</sup> http://www.firstamendmentcenter.org/holmes'-idea-marketplace---its-origins-legacy/

<sup>138</sup> David Meerman Scott and

<sup>139</sup> Nassim Nicholas Taleb, https://medium.com/incerto/how-to-legally-own-another-person-4145a1802bf6

<sup>140</sup> https://www.linkedin.com/pulse/how-get-most-out-linkedin-facebook-twitter-other-networksdon-peppers

<sup>141</sup> http://smg.media.mit.edu/library/Granovetter.WeakTies.pdf

<sup>142</sup> https://academic.oup.com/icc/article-abstract/11/3/427/1044096/Strong-ties-weak-ties-andislands-structural-and

<sup>143</sup> https://www.cs.kent.ac.uk/people/staff/saf/share/great-missenden/reference-

papers/Weak%20Ties.pdf <sup>144</sup> https://www.linkedin.com/pulse/consensus-good-decisions-require-respectful-don-peppers

<sup>145</sup> https://www.linkedin.com/pulse/my-25-year-prediction-radical-decentralization-don-peppers

<sup>146</sup> https://hbr.org/1995/03/do-you-want-to-keep-your-customers-forever

<sup>147</sup> https://www.linkedin.com/pulse/3-qualities-truly-deep-customer-centric-culture-don-peppers

<sup>148</sup> https://www.linkedin.com/pulse/free-speech-endangered-species-uc-berkeley-jim-rossi

<sup>149</sup> https://www.linkedin.com/pulse/i-decided-homeless-reduce-student-debt-jim-rossi

<sup>150</sup> https://www.linkedin.com/pulse/iutland-100th-armageddon-sea-case-study-leadership-iim-rossi

<sup>151</sup> https://www.linkedin.com/pulse/uc-berkeley-2017-social-justice-means-mob-rule-jim-rossi

<sup>152</sup> https://www.linkedin.com/pulse/how-i-became-first-use-social-media-catch-con-artist-act-jimrossi

<sup>153</sup> Video introduction to LinkedIn Trending Storylines:

https://www.youtube.com/watch?v=snYkgz7CA-Y

<sup>154</sup> http://thefederalist.com/2014/11/19/the-keystone-pipeline-is-not-about-oil-its-about-milk/

<sup>155</sup> https://www.allsides.com/bias/bias-

ratings?field\_news\_source\_type\_tid=2&field\_news\_bias\_nid=2&field\_featured\_bias\_rating\_value= 1&title=

<sup>156</sup> Interview with John Gable of Allsides.com: <u>https://onlinejournalismblog.com/2017/02/20/fake-</u> news-allsides-filter-bubbles-john-gable/

<sup>157</sup> http://www.niemanlab.org/2017/04/wikipedia-founder-jimmy-wales-launches-wikitribunenews-by-the-people-and-for-the-people/

<sup>158</sup> https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/politicaldiversity-will-improve-social-psychological-science1/A54AD4878AED1AFC8BA6AF54A890149F

<sup>159</sup> http://www.goodreads.com/guotes/66643-he-who-knows-only-his-own-side-of-the-case <sup>160</sup> www.theFIRE.org

<sup>165</sup> https://www.youtube.com/watch?v=v9HmygZb9rY

<sup>&</sup>lt;sup>161</sup> Jay Martin, <u>https://www.linkedin.com/pulse/globalization-benefits-everyone-someone-always-winds-up-jay-martin</u>

Jay has a Dallas businessman, and this is his experiment on trying to find consensus.

<sup>&</sup>lt;sup>162</sup> <u>https://www.linkedin.com/pulse/doing-your-part-cultivate-civil-dialogue-mike-jacquart</u>

<sup>&</sup>lt;sup>163</sup> <u>https://www.linkedin.com/pulse/how-can-we-promote-dialogue-social-media-judy-rees</u>

<sup>&</sup>lt;sup>164</sup> <u>https://www.linkedin.com/pulse/position-open-devils-advocate-laura-irwin?trk=mp-reader-card</u>

<sup>&</sup>lt;sup>166</sup> https://www.linkedin.com/pulse/qa-students-bringing-free-speech-back-uc-berkeley-jim-rossi

<sup>&</sup>lt;sup>167</sup> Lawyer Harmeet Dhillon representing the Berkeley College Republicans: https://www.youtube.com/watch?v=xJJZrx1OmyU