4

THE WISDOM OF CROWDS?
HOW ALGORITHMS RULE ONLINE

Myth: the many are smarter than the few

One common thread connecting enthusiasts for a new technological “commons” was the assumption that the audience, when freed from the distorting effects of big media and editors, would produce a more participative, liberal and enlightened media (Barlow, 1996; Jenkins, 2008; Leadbeater, 2008). The news media they imagined would be built around individuals, freed by the interactivity of the Internet, to remodel the top-down, elite model of news production. The aggregation of these individual voices would allow us all to benefit from the “wisdom of crowds” (Surowiecki, 2004). In his Declaration of the Independence of Cyberspace, John Perry Barlow (1996) declared: “We will create a civilisation of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before”.

This benign vision rested on the assumption that the structures embedded in the Internet are neutral and that whatever activity arises within those structures is merely a reflection of public sentiment, which is, by definition, a reflection of the people’s will. The titles of popular books in the first decade of this century pick up this sentiment: *We the People* (Gillmor, 2006), *The Wisdom of Crowds* (Surowiecki, 2004) and *We Think* (Leadbeater, 2008). Few clouds passed across this rosy sunlit view, although Dan Gillmor, author of *We the Media*, showed signs of prescient uneasiness as he watched the traditional news organisations in the USA struggle to maintain their place against a rising tide of what he referred to as “news anarchy”.

A world of news anarchy would be one in which the big, credible voices of today were undermined by a combination of forces... There would be no business model to support the institutional journalism that, for all its problems, does perform a public service. Instead of journalism organisations with the critical mass to fight the good fights, we may be left with the equivalent of
countless pamphleteers and people shouting from soapboxes. We need something better.

(Gillmor, 2006, p. xxviii)

But on the whole, those who adopted the utopian narrative saw the Internet as the natural outcome of an egalitarian “co-evolution” between designers and users: “a complex, adaptive system, characterized by interdependencies, non-linear developments, emergence, and decentralized structures… which allows innovations at every node of the network, in other words by any user” (Just & Latzer, 2016, p. 7).

This perspective assigns a form of unproblematic agency to algorithms: “Automated algorithmic selection applications shape realities in daily lives, increasingly affect the perception of the world, and influence behaviour” (Just & Latzer, 2016, p. 17). While it is important to recognise that automated applications can indeed shape realities, it is equally important to recognise that they don’t do so outside social systems and that they are subject to power differentials. Users, for example, have very little power in comparison with platform owners. On the whole, users conform to the pre-set list of possibilities that are embedded in the platform design. It requires technical knowledge beyond the possibilities of the vast majority of users to do anything other than passively accept the opportunities proffered by applications and platforms (Van Dijck, 2013, p. 33). These structures shape the “people’s will” and can be manipulated by those with greater knowledge. While the elites who own and control the mass media can be identified and challenged, the structures of the Internet are more opaque.

So to what extent is the Internet a platform that gives back power to its users? How much has this myth obscured the operation of power and distracted policy makers from addressing the very real problems inherent in the growing centrality of privately owned Internet platforms in the organisation of political life? Could it be a problem for democracy that a handful of private companies should be given so much potential control over private data as well as the means of production and circulation of news? Should we be alarmed that these, mainly American, organisations are able to claim rights that cross national boundaries and take little account of national norms or local democratic organisations?

How the Internet grew up

In order to understand the way in which the structures of the Internet impact on decision-making and participation, it is necessary to understand that they are a reflection of the culture and the institutions from which they are produced (Williams, 1974) and follow the “institutional logics” of their field (Benson & Neveu, 2005; Bourdieu & Wacquant, 1992; Powell & DiMaggio, 1991). Tim Berners-Lee invented the World Wide Web within the unique constraints of the scientific field in which personal autonomy and the free exchange of ideas is a central legitimising narrative. Berners-Lee refused to patent his invention because he wanted it to be available, free to all (Berners-Lee, 2000). The next generation of Internet
entrepreneurs also emerged from the field of science; indeed, the early years of both Google and Facebook were nurtured by universities with large endowments, giving these young inventors time, opportunities and encouragement. They too adopted the ideas of openness and sharing learned in that environment but this was a different time. Universities in the 1990s were under pressure to demonstrate that they were incubating technical innovation for industry, and the autonomy afforded by the university environment was inevitably contested by the requirements of commercial development.

These young software companies seemed to have little in common with the vast empires of computer technology such as IBM. Indeed, it could be argued that, in the early stages of development, software had more in common with the field of media and culture, which was itself contending with major technical change. Journalists and media reformers were early adopters of the Internet and were particularly delighted with what they saw as the democratising potential of these open, collaborative systems. Journalism Professor Jay Rosen (2006) described a world in which audiences would: “edit the news, and our choices [will] send items to our own front pages”. Journalist Dan Gillmor (2006) looked towards an “emergent, self-assembling journalism” (p. xxix), which would also be a major challenge to the power of the established media. Benkler (2006) spoke of a “practice of producing culture [that] makes us all more sophisticated readers, viewers and listeners as well as more engaged makers” (p. 275).

However, the people who produced the platforms that sit on top of the original architecture of the Internet did not come from the liberal, humanities-inflected tradition of journalism, with its concerns for democratic accountability. The industry, looking for people with aptitude for coding, used personality screening which selected for those who “dislike activities involving close personal interaction (and) prefer to work with things rather than people” (Ensmenger, 2010, p. 17). Thus, it is argued, the industry gathered a workforce that was “particularly ill-equipped for, or uninterested in, social interaction” (Ensmenger, 2010, p. 17). This may be partly responsible for the bias towards a particular sub-group of male employees described by Kendall (2011) as exhibiting “facets of hypermasculinity by valorizing intellect over social or emotional intelligence.”

A narrative of personal freedom and anti-elitism was combined with a particularly robust view of freedom of expression (Barlow, 1996), backed up by individual anonymity, and built into the organisational DNA of social platforms such as Reddit and search engines such as Google (Christopherson, 2007). As Mitch Kapor, the founder of Lotus and a past chairman of the Electronic Frontier Foundation, is said to have observed: “architecture is politics”.1 Algorithms were built to express this “techno/cyberlibertarian ethos, valuing the notion of a rational, autonomous individual and meritocratic idealism” (Massanari, 2015, p. 332). A populist conception of democracy was inscribed in the structure, so that in every niche it is the most popular post that is promoted, encouraging domination in the competition for the top spot, rather than differentiation or dialogue (Hindman, 2009).
Where collaboration is encouraged it is on the basis of similarity rather than difference – people gather together online in order to be with people who are like them. This populist conception of democratic behaviour, as a contest between individuals with opposing ideologies, gives no place to the kinds of rational deliberation that are the foundation of a Habermassian public sphere (Habermas, 1989). Nor does it provide protection for minorities or space for nuanced debate and compromise – indeed, it appears to actively promote polarisation (see Chapter 2). These patterns were not inevitable. They are the outcome of decisions taken by programmers who are in turn subject to the pressures of the institutions in which they are embedded. As the need to bring in money for shareholders built up, the platform entrepreneurs were inevitably pushed from the autonomy of their original position in the university, and the cushion of start-up cash, to look for ways of commercialising their product.

The narrative of personal and market freedom was maintained but gradually adapted to a commercialising logic, with a focus on free access for users, which would in turn provide income to platforms, applications and publications via advertising. Freedom to consume creative goods without cost was promoted at the expense of the producers of those creative goods, whose rights were simply brushed aside. Those who advocated relaxing copyright believed that they were aiding digital creativity (Lessig, 2005) but their campaigns have largely aided the platform owners. Freedom to remix and ease of consumption became the key benefits and the rights of creative workers to fair remuneration have been largely ignored. Questions of accuracy, depth, balance or fairness don’t enter into the conceptual frame. As one researcher, basing her work on in-depth interviews with senior people in technology companies, found:

The schemas clearly in the ascendant – the dominant market schema and the science-technology schema – provide little scope to raise issues of public welfare, fairness, or bias. Instead, they emphasize profit, in the case of the market schema, or progress and efficiency, in the case of the science-technology schema, or defence, in the case of the war schema.

(Van Couvering, 2007, p. 884)

Soon the core value of privacy itself became a highly contested issue. The market required complete transparency and total access to private data, so that these “learning machines” were able to understand their audience and allow material to flow seamlessly between people who may not know one another. In order to manage these contradictions, a new ethos of personal transparency was developed. Foucault (1972, pp. 224–227) speaks of the way in which the institutional position of specific people gives them particular power to be heard. Mark Zuckerberg’s position, as CEO of Facebook, gave him a pre-eminent position from which to speak and the power to “normalise” the loss of privacy in order to profit from the fruits of the sharing economy:

People have really gotten comfortable not only sharing more information and different kinds, but more openly and with more people. That social norm is
just something that has evolved over time. We view it as our role in the system to constantly be innovating and be updating what our system is to reflect what the current social norms are.

(Zuckerberg, 2010)

His views were not uncontested so, on the one hand, the freedom to propagate hate speech anonymously is defended as integral to the freedom of the Internet (Massanari, 2015), while on the other, private data is routinely harvested through the use of cookies (more code), which are quietly dropped into computers where they monitor every keystroke and send information back to help the machines learn better what the customer wants. And it is via their data, not their much-vaunted creative endeavours, that the audience are feeding back, as platform owners slice and dice personal information and match it with the advertising that most closely fulfils our desires and most lucratively fills the coffers of these new media intermediaries.

**Network effects – how they work**

The mass harvesting of data works best allied to the creation of monopolies because data is most useful at scale. The best search engine is the one that is most perfectly tailored to use and has access to the largest bank of information. A small-scale search engine is a less efficient search engine. It was therefore almost inevitable that the search engine that provided the most efficient service would take over the market. As is often the case, that search engine was not the first to be invented, but the one that refined the original idea and won the inevitable competition to dominate the market.

Google was launched publically in 1998, after a couple of years as part of the Stanford University website, where its founders were students. It was developed using a more sophisticated algorithm than earlier ones, based on page ranking – a means of working out the relationship between websites. This, at least theoretically, means that searches are ranked according to their level of influence, not merely the number of times a specific word is used. The sophistication of the search engine immediately speeded up the job of finding useful information and meant that it very swiftly became a near-monopoly provider of search results. In Europe, Google provides 90 per cent of search and in the USA 72 per cent.

Facebook also started life on a university campus as a “hot or not” game allowing students to compare photographs of each other and rate them. It was closed down by the university but provided the basic idea for Facebook, which was launched in 2004 as a service for students at Harvard University. It was not the first social media site or, arguably, even the best but it quickly became the most influential because it traded on its exclusivity. In the initial stages it was open only to Ivy League students; it then expanded to include all universities. Within two years it had opened up to anyone with an email address. Indeed, its meteoric rise to become the most important social media site in the world is in itself an exercise in “virality”.

By
opening up exclusively to the most important group of young “influentials”, who used it as a means by which they could create social links with other people just like them. Facebook contained within it a means of creating social capital (Ellison, Lampe, Steinfield, & Vitak, 2011, p. 146). It embodied the aspirational and social factors that would propel it to global supremacy.

By 2014 almost two-thirds of Internet users in North America, Latin America, the Middle East and Africa had Facebook accounts. It had become an inextricable part of social life, visited multiple times a day by its users, who are therefore open to influence by anything that turns up on their page, mixed in with messages from friends and loved ones. A female student from our interviews in 2014 expressed it like this:

I do say I am going to have a massive exodus from my Facebook and call everybody but then I don’t because it’s more beneficial for me to not post anything, keep them as my friends, but have people that are informing me.

(Female student, UK)

Neither Google nor Facebook initially made any money. They were supported by vast quantities of investment cash on the simple assumption that something that was that big and that popular would eventually succeed. By 2016 both Facebook and Google were in the top five of the Fortune 500, among the most valuable US companies on the planet. In working out how to monetise their companies, Google and Facebook, gave birth to an Internet industry that swept away the old relationships between news companies, their advertisers, and their audiences.

**What does Google do?**

- It connects people to the information that they want. It does so by embedding code that registers everything you click on and uses this information to filter out most of the rubbish that doesn’t really interest you.
- It then sells all that knowledge about you as a service to advertisers, allowing them to place their wares in front of exactly the people who are most likely to buy.

This is how news organisations also operated but they did it blind. They guessed what you liked and presented it to you. If they guessed well, they could “sell” people to advertisers, who paid out large sums of money for the privilege of waving their wares in front of customers, hoping they would buy. The problem for news organisations lies in the fact that Google can do this better and far more cheaply because Google depends on accurately pairing millions of people with the things that they are already searching for online, via systems known as AdSense and DoubleClick. AdSense allows publishers to embed code in blogs and websites, which then links keywords in published copy to specific advertisements, which then appear on their sites. A small sum is then paid to the publisher when people
reading an article then click on an advert. DoubleClick harvests data from users to help companies target their advertisements.

The two things that Google does so well have in turn engendered unexpected repercussions. The first was that they undercut and fatally challenged the business model of every news organisation. Advertisers were unwilling to pay premium prices to advertise directly on news webpages when they could get a more accurate service at a fraction of the price via Google. This meant that the income from digital advertising crashed to about one hundredth of the price of an advertisement in a printed news product. Google saw this as a fairer system that would help advertisers. Head of Viacom, Mel Karmazin, saw it rather differently, as a major threat to the legacy business model and told Google’s founders: “You are fucking with the magic” (Auletta, 2009, p. 9). Legacy news organisations found that they were funding their newsrooms from the income generated by their failing print products rather than the increasing audiences online. The second thing was to encourage a new form of Internet business, aimed entirely at using the correct words to attract advertising. This was the first building block of the “fake news” boom.

**What does Facebook do?**

- Facebook allows people to pass on material that they find interesting to their friends.
- It also collects data from every “Like” and “Share” in order to pinpoint the particular preferences of its users. Using this information, it then serves more information and advertising to its users in the hope that they will themselves pass it on. For advertisers, sharing is the Holy Grail because it presumes a personal endorsement from a trusted source.

Facebook is not the only social media platform but it has become the dominant one outside China (where WeiBo, RenRen and WeChat are home-grown alternatives). Facebook’s particular contribution to the changing behaviour of news audiences arrived with the inclusion of a Share button in 2006. This allowed people to link to articles or videos that amused them and pass them on to friends with a single click. This was at first a means by which people could gather online with their friends but a social gathering does not create income. Facebook found a way of opening up this private space so that companies could have access to social sharing via the Fan or Brand page. This allowed organisations to take part in the social media space and encouraged the growth of Facebook pages that are entirely dedicated to boosting the profile of a linked product or service. Material that was shared on Facebook had the additional value of being recommended by a friend but, just in case it isn’t shared “organically”, publishers are also able to leapfrog into news feeds by the simple expedient of paying to boost posts.

That was followed, in 2012, by Facebook Apps and Facebook Instant Articles, which allow news organisations to share stories directly onto an individual Facebook newsfeed. Those stories would then also be automatically shared to Facebook
friends if they were clicked on. None of this was possible without changes to the original rigorous privacy settings. People who only want to share with a small group of friends were providing roadblocks to the vision of a totally viral system in which information (and the advertising that accompanies it) could be spread. Thus, with a series of adaptations, the affordances of the social media site were locked into place so that they forced the majority of people to interact and share material in very specific ways that would maximise profit for the company.

The sheer size and spread of Facebook meant that tying themselves to the Facebook juggernaut was irresistible to news publishers. They would get 70 per cent of any revenue from advertising served alongside their stories and they would find a whole new, and predominantly young, audience. The Guardian found that its referrals from Facebook rocketed from 2 per cent to 30 per cent in just four months of using the App (Cordrey, 2012). The downside was that Facebook would collect all the audience data and decide who would see which stories, based on that data (Phillips, 2012). They could also decide at any time to vary the terms of the deal – either cutting the advertising split or cutting the number of news stories fed to users. In 2015 for example, the Facebook traffic to its top 30 publishers dropped by 32 per cent (Moses, 2015).

A report for Digital Content Next, in 2017 (Moses, 2017a), found that premium publishers were making only 14 per cent of their advertising revenue from content displayed on platforms other than their own and most of that was from television. As media watcher Frederic Filloux said on the Monday Note, “Facebook is an unpredictable spigot, whose flow varies according to constantly changing and opaque criteria. A given news stream will see its conversion into clicks vary widely for no apparent reason” (Filloux, 2015). In 2017, The Guardian and The New York Times stopped using Facebook’s Instant Articles, focusing instead on drawing readers to their own sites and their own advertisers. Nevertheless, Google and Facebook have become intermediaries for both mainstream organisations and new entrants, who depend on them to provide access to a large part of their audience. But this also set the stage for the entry of a new group of technically savvy entrepreneurs capable of using the speed, distribution and opacity of the platforms and their algorithms to their advantage.

How programmatic advertising feeds the trolls

A system of communication that allows for horizontal connection between people, based on social affinity, provided a fragmented and impossibly difficult prospect for advertisers who were used to placing ads in a relatively small number of mass-market outlets or in the niche products that catered directly to their audiences. So when Google launched AdWords in 2000, holding out the prospect of serving advertisements automatically by matching the advert to the needs of customers, advertisers were interested.

Pretty soon other data companies were getting in on the act, designing programmatic systems that analyse personal information from Web users and save it in
data banks. They then began to sell their services to companies promising to create and then match relevant advertisements with prospective buyers. While the matching is taking place, an online auction is set up, so that advertisers bid against each other for the most advantageous positions right across the Web. Anywhere that an individual browser may go, they are trailing their data in their wake, like bait to catch fish. Only in this case what they are catching is adverts that will then be placed on the browser, smartphone or tablet in front of them. When it works well, the ads are tailored to fit the requirements of the browser and the targeting ensures that a reasonably high proportion of people click on them.

Critically the advertisements only appear on the websites or social media pages when the user visits the site. This means that, if a liberal-minded customer decides to visit a right-wing hate site in order to see what it is publishing, he or she may be surprised to find advertisements from well-known brands, NGOs and government departments appearing alongside extremely unpleasant content. This is because the advertisements are tethered to the customer, not the website. As long as the site in question is using the necessary embedded code to attract advertising, then whoever visits the site will see the advertisements that are meant for their eyes only. Publishers are roughly organised into categories, based on number of browsers and subjects covered, so that advertisers have some very general idea of where their products are displayed.

For advertisers who are only concerned with attracting people interested in their products, this matching is a boon. They pay for the privilege of using publishers’ sites via a number of different metrics including the number of people who see their ads; more will be paid for a click through to the advertiser’s site and the highest payments are for sales completed. This system allows advertisers to contact huge numbers of people at very modest costs per click. For traditional news organisations, even those with a big online and social media presence, the money earned is not enough to cover the cost of the operation. The income is really only viable for organisations or individuals who manage to attract very high visitor numbers with very low staff costs.

Content farms, as they were soon dubbed, such as Demand Media, exist only to provide material that will attract clicks. The information is gathered together using Google trending lists, and bespoke algorithms, to identify key words and subjects and find exactly which key words advertisers are likely to bid most on. This information is then followed by hasty Internet searches so that material can be written to answer the most likely questions, with long headlines and repeated use of key terms that push the material high up in any Google search; then it is “served” via apparently specialist websites (Bakker, 2012). A journalist in Wired Magazine highlighted how this works:

To find out what terms users are searching for, it parses bulk data purchased from search engines, ISPs, and Internet marketing firms (as well as Demand’s own traffic logs). Then the algorithm crunches keyword rates to calculate how much advertisers will pay to appear on pages that include those terms... Third,
the formula checks to see how many Web pages already include those terms… Armed with those key words, another algorithm, called the Knowledge Engine, dives back into the data to figure out exactly what people want to know about the term. 

(Roth, 2009)

It is hard indeed to find the power of the audience in these transactions. As Adorno (1975 [2010]) said of mass media: “The masses are not primary but secondary, they are an object of its calculation; an appendage of the machinery” (p. 16).

Other market entrants, like BuzzFeed, also capitalised on these new methods, attracting millions of views with stories about cats and celebrities. They did well because they were using social media platforms to expand audiences, spending very little money on trained journalists and none on printing presses. However, as both companies have found to their cost, depending on a third-party intermediary can be very unreliable. Demand Media went public in January 2011, closing up 33 per cent on the first day of trading. Then, according to a report in Variety, in April Google changed its algorithm and traffic to the Demand sites was reduced by 40 per cent overnight (Wallenstein & Spangler, 2013). BuzzFeed did so well that it was able to establish a serious investigative news team, paid for by the money collected through programmatic advertising and via social media, but in early 2017 the Financial Times reported a similar change in fortunes as customers moved their attention from their computers to mobile phones and tablets, where it is harder to insert adverts (Garrahan, 2017).

For individual operators who game the system, there is still enough money to be earned and it was through gaming and fraud (such as clickbots that generate clicks automatically and therefore appear to increase the audience size) that advertisers found themselves inadvertently providing financial support to fake news sites. In 2016, a BuzzFeed investigation traced 140 fake news sites to a town in Macedonia called Veles. Although it is impossible to verify the amounts that were being earned, it is clear that the people pushing the most improbable and sensational pro-Trump stories in the run-up to the 2016 US elections were doing so simply in order to generate advertising cash.

Several teens and young men who run these sites told BuzzFeed News that they learned the best way to generate traffic is to get their politics stories to spread on Facebook – and the best way to generate shares on Facebook is to publish sensationalist and often false content that caters to Trump supporters. (Silverman & Alexander, BuzzFeed, 2016)

These sites, entirely invented to catch a political wave, were making use of the rising tide of populism and in so doing helped to spread it. The US election brought the fake news phenomenon rather forcefully to the attention of journalists, news audiences, policy makers and the advertisers themselves. In the wake of the election, according to industry publisher, Digiday, a number of advertisers became
aware for the first time that their advertisements were appearing alongside fake stories on dubious news sites but they didn’t at that time have the necessary tools to prevent it happening.

Brands that control all their ads through one demand-side platform can easily whitelist or blacklist entire publishers – often, many agencies recommend a list of “whitelisted” sites that are the only destinations ads can appear. But some exchanges do allow publishers to include blind inventory. So instead of seeing “Breitbart,” you may just see “news site.” There are also companies like Integral Ad Science that have a sliding scale of “risk tolerance” for brands. But while it’s easy to filter out, say, curse words, it’s harder to make subjective decisions like in the case of otherwise legitimate news sites.

(Pathak, 2016)

The opaque nature of these transactions, added to the highly technical nature of programmatic advertising, has ensured that, just like the algorithms that power the search engines, the aspect of programmatic advertising that is emphasised is its phenomenal power and exponential growth. Executives with a background in rather more conventional advertising have no expertise in computing (Caffyn, 2017) but there is an additional problem too. Most people who do have the knowledge are soaked in the developer’s ethos and concerned only with minimising friction and maximising profit (Van Couvering, 2007, p. 884).

A series of stories appeared in the press, early in 2017, written by journalists who visited hate sites and found a range of branded products from companies such as L’Oreal, Transport for London, The Guardian newspaper and Sainsbury’s Magazine, The Grocer (Mourous, 2017). The organisations and the advertising agencies involved immediately pulled their advertising off YouTube, the Google-owned video platform. According to Media Radar, advertising on the right-wing site, Breitbart, dropped 90 per cent over three months as marketing departments insisted on tighter “brand-safety” (Moses, 2017b). The response by Google has been to start de-listing websites that are considered problematic for advertisers. As Google tightens its grip on sites that can attract advertising, the diversity of the Internet will be reduced. It won’t just be hate sites that lose money. Sites that represent minorities and minority issues, and individual bloggers writing on controversial subjects, will feel the impact as their source of funding is cut off (Allcott & Gentzkow, 2017) so options available for minority audiences will also be diminished.

**Going viral**

Every post is not equal. Only the most popular stories will rise to the top of the search page, appear on the trending column on Facebook, find themselves at the top of the Twitter feed or get upvoted on Reddit. The fact that a story is considered popular means that it will be more prominent and the greater visibility will ensure that even more people click on it or share it. This “winner-takes-all” pattern
described by Matthew Hindman (2009) is what drives this exponential distribution effect in which one post is capable of being seen by millions of people in a very short space of time. The owners of such content don’t just get noticed; they also get a share of the advertising revenue generated alongside their post. The Internet giants would like us to see this as a natural and unmanipulated outcome of individual choice.

Google likes to claim that it is simply an algorithms-powered neutral intermediary that stands between a given user and the collective mind of the Internet. On its corporate website, Google compares the presentation of its search results to democratic elections, with the most-linked sites emerging on top. If the top results lead to sites that are politically incorrect or racist or homophobic, the fault is not Google’s but the Internet’s. (Morozov, 2011)

Far from being neutral, virality is supercharged by both the desire to make money and the desire to obtain influence. So working out what will “go viral” is now a very lucrative business. Jonah Berger and Katherine L. Milkman studied three months of content on The New York Times website to see what stories went viral. They found that the key factor was emotion. Positive stories were more likely to be shared than negative ones, but they also found material that evoked “high-arousal” was most likely to go viral. That is, people were more likely to share stories that made them angry, anxious or amazed. Stories that made people feel helpless were far less likely to be passed on (Berger & Milkman, 2012). This information can now be algorithmically verified but it doesn’t vary a great deal from the assumptions made by editors and journalists on the most popular commercial newspapers who understand which stories sell. In 2003, Guardian columnist Nick Cohen quoted a memo to staff from the editor of the struggling tabloid newspaper, the Daily Express. He said:

We are aiming to have six sex stories a week. In an ideal world we should have a ‘Cabinet Minister affair’ story… sex and scandal at the highest level of society always sells well, but these stories are notoriously difficult to get. We need to be constantly stirring things up… We must make the readers cross… the appalling state of the railways, the neglect of the health service, the problem of teenage pregnancies, the inability of bureaucrats to get enough done properly, etc. etc. (Cohen, 2003)

A group of Australian publishers analysed the stories from their own site that were shared the most and came up with a more precise formulation, which they refer to as the NIT model. They discovered that the most shared stories were either: News-breaking, Inspiring or what they refer to as “Teaming” (Crawford, Hunter, & Filipovic, 2015, p. 122). This overlaps with Berger’s model but provides a clearer steer to those who want to write news in order to have it shared.
The news-breaking category is exactly as it appears, and researchers in Sweden have also found that this was a highly shared category (Wadbring & Ödmark, 2016). People tend to share news as it breaks but the Australians found that they also shared stories that are explanatory of breaking news and they share stories that commemorate or demonstrate fellow feeling. This would cover transmission of news about a natural disaster, explanatory materials about how it occurred and also the likes, hearts and expressions of sympathy that now accompany big breaking stories of this kind.

The authors describe an inspiring story as one that evokes awe or leaves the reader “spooked” or “heart-warmed”. These are stories about cute kids, amazing floods, car crashes, or feats of human endeavour and they overlap with the emotional stories found by Berger and Milkman (2012). These are the stories that powered BuzzFeed’s growth.

The third category however is perhaps the most important. “Teaming” is what might be called an act of recognition and a call to action to the people who you regard as members of your team. Very often these are also stories that make people feel angry and indignant. The Australian authors found that this category provided almost two-thirds of the stories that shared well. This category overlaps both with the emotional stories noted by Berger and Milkman (2012), and the controversial stories that were identified by the Swedish research (Wadbring & Ödmark, 2016). But it more accurately identifies the reason why they are so often shared.

When people share stories, they are not behaving simply as editors would. They are not interested in ensuring that their friends have a good mix of stories to read that cover a wide range of subject matter. The role of personal communication is different. And it is that personal recommendation system that makes Facebook so very valuable to marketers but also to populist politicians. As John Herrman (2016) explained in The New York Times:

This strange new class of media organization slots seamlessly into the news feed and is especially notable in what it asks, or doesn’t ask, of its readers. The point is not to get them to click on more stories or to engage further with a brand. The point is to get them to share the post that’s right in front of them. Everything else is secondary.

This use of “teaming” and sharing on social media varies according to the news ecology in which it takes place. In the USA, stories that were entirely fabricated, and produced by people who have no journalism background, dominated social media in the months before the 2016 elections (Silverman, 2016). The top five shared fake stories were all pro-Trump or anti-Clinton: one suggested that the Pope endorsed Trump and the second most shared suggested that Clinton had sold weapons to ISIS. The top five mainstream stories that were shared were opinion pieces that supported Clinton or opposed Trump. The top headline was: “Trump’s History of Corruption is Mind-Boggling. So why is Clinton supposedly the corrupt one?”
In the UK, data research for BuzzFeed found that the most shared stories in the period before the 2016 European Union referendum came from the populist pro-Brexit mass media. In the UK these stories were not entirely made up; they tended to contain a shred of truth, which was then manipulated to create a sensational and misleading impression (Waterson, 2017). This is not a new development in the UK. The propensity of the British press to produce misleading stories was flagged up by the European Commission as far back as 1992 when a special website was established to correct “Euromyths”.

What characterises both the fake news sites and the UK mainstream popular media is the understanding of what kind of material will be shared. In the UK, the most shared headline in the run-up to the European Union referendum came from the Daily Express and read: “Major leak from Brussels reveals that the NHS will be ‘KILLED OFF’ if Britain remains in the EU”. This story aimed at “teaming” people in defence of a socialised health service had 464,000 interactions on Facebook and was, according to BuzzFeed data research, shared by far-right websites (Waterson, 2017). Teaming is a form of behaviour that fits in with other insights about how social media works. Zizi Papacharissi (2012) wrote of the way in which people use tweets as “Performances of the Self”. In other words, they are not just using social media as a form of communication; they are using it as a way of presenting themselves to the world.

Those who feel that their identity is in some way threatened are most likely to focus on attitude-reinforcing material and avoid anything that contradicts their strongly held beliefs. So these performances become part of what Slater (2015) describes as “reinforcing spirals”. This behaviour can then be manipulated, by political campaigners and by those seeking merely to make money from advertising, but also by the platforms, which optimise algorithms to encourage sharing. Thus, posts containing cute images or those featuring very strong language are identified and passed on more readily than more neutral posts containing reasoned discussion. It is this understanding of teaming behaviour and reinforcing spirals that animated the fake news sites and has allowed people to cash in on the manipulation of political sympathies.

**Influencing the influentials**

Viral posts are far more likely to be noticed if they are produced or shared by someone who is themselves influential. The key value of the influentials was graphically illustrated when Bin Laden was shot by US forces in May 2011. Social Flow (2011) analysed 14.8 million Tweets and bitly links posted in the time between the first announcement of a Presidential address and the address itself, just under two hours later. At 10.24 Keith Urbahn, the chief of staff of Donald Rumsfeld (retired defence chief to George W Bush) tweeted: “So I’m told by a reputable person that they have killed Osama Bin Laden”. Urbahn had a following of only 1,016 people but they tended to be people who knew that he was very close to power. Within one minute of Urbahn’s tweet it had been re-posted by
Brian Stelter at *The New York Times*. Stelter had 50,000 followers so the message was re-tweeted hundreds of times and spread exponentially. By the time Obama stepped up to the microphone most people already knew what he was going to say.

This cycle mimics the pattern that Stuart Hall observed in which “primary definers” are able to set “the initial definition or primary interpretation of the topic in question” (Hall, 1978, p. 58). Stelter recognised immediately that Urbahn was an authoritative source. He had no need to check that the information was bona fide. His existing knowledge of the power structure made it clear to him that this particular source would have access to believable sources of information. Then his own power as an intermediary ensured that the information was circulated as widely as possible.

This story is a useful demonstration of how a trusted source, added to an influential node in the network, can produce very powerful network effects that spread like wildfire. This is an effect that can happen organically, as in the case of the Bin Laden tweet, but it is increasingly subject to manipulation by intermediaries who have studied the way in which social media information travels. A source will gain credibility if he or she is attached to a trusted organisation or is a person who audiences feel they have come to know through celebrity, through fandom or simply through social affinity.

Advertisers have long understood the power of celebrity endorsement (Bergkvist, Hjalmarson, & Mägi, 2016) but the Internet and social media have provided an interactive model of celebrity endorsement which allows brands to match specific audiences with influencers to whom they have already demonstrated an affinity by liking, following or sharing. The circulation of influence has thus become a form of social capital, which is used to the economic advantage of both the influencer and the source. Where the source is a product, like women’s clothing, trainers or technical gadgets, the value of personal recommendation is so high that companies are prepared to pay for it, sometimes in direct fees for tweets and mentions, sometimes with free products. Celebrities have their own reputations to consider and brands have learned that they can maintain more control over bloggers by selecting those who already have a following in the right demographic, with tastes that match their product range. They then promote those they favour by re-tweeting to their own brand followers and feeding them with material, which they can then pass on to their followers.

It is not just commercial organisations that use the power of intermediaries. The charity Save the Children took three influential “mummy bloggers” to Bangladesh to raise awareness about child poverty. All three already had a big online following and they were experienced in the use of influential intermediaries:

The mummybloggers targeted well-known celebrities who tweet, asking them to mention #blogladesh. They included actor Stephen Fry (1.7 million followers), DJ Richard Bacon (1.3 million followers), TV host Davina McCall (375,000) and pop star Boy George (13,000). This inspired journalists such as India Knight to start tweeting, and interest from publications such as *PR Week*.  

*(Cooper, 2011, p. 33)*
Ten million people had been reached on social media by the end of the trip and the bloggers had been interviewed on major mainstream news networks. The success of the campaign depended on the interactivity of social platforms but it required the power of the influentials to create the initial momentum and to push the posts so that they “trended” and were then taken up in mainstream media, thus leaping across the barriers of friendship to appear at the top of news feeds where they would be seen by those who had no connection at all to the initial blog posts.

It is this interconnection between the bubbles of social connection and the mainstream that truly allows information to move from the desk of a person reading Facebook in their pyjamas into public consciousness. In this case the audience is rarely the instigator of the news. Its job in the news cycle is to spread what is already trending. Once again, it is the ability to make a post appear popular that will allow it to travel. And in the increasingly organised world of social media, popularity is produced by careful organisation and manipulation.

BuzzFeed’s investigative team provided an insight into the way this manipulation is being fine-tuned by those who wish to influence political decision-making. Reporter Ryan Broderick (2017) managed to infiltrate the operation of an US right-wing group which had set itself the task of influencing the French elections of 2017. Their method was based on creating fake Facebook accounts and using them to add comments to the Facebook pages of the popular French press in areas that they felt were likely to be sympathetic to a right-wing message. By infiltrating large numbers of concocted messages that appear to come from a variety of different people, they hoped to create antipathy towards the centre right candidate and boost support for the National Front candidate, Marine Le Pen.

In this case, the social media organisers were piggy-backing off the popularity of the mainstream press where they knew they would have access to large numbers of what they chillingly refer to as “norms”. In other words, people who are not involved in right-wing circles and who they are targeting in order to influence them. The organisers set down clear rules of engagement in which they concealed their far-right identity. The fake Facebook pages were to appear to belong to people who are: “ideally young, cute girl, gay, Jew, basically anyone who isn’t supposed to be pro-[FN]” (Broderick, 2017).

The rules of engagement explained in the post pretty much mimic the tried and tested methods of commercial public relations, in creating the appearance of popularity and in so doing changing the nature of the debate. When a company uses these methods to promote a make of shoe, they are able to profit economically from the organisation of the Internet. When a political organisation does so, they are attempting to create new “social norms”; in the case mentioned above, they were attempting to normalise anti-immigrant attitudes. This effect is of far greater concern because, as Foucault has observed, power in contemporary society is exercised “not by law but by normalisation” (Foucault, 1980, p. 89). By this he means that the way to change the status quo is by encouraging people to believe that things they once thought abnormal are the new normal. If you change people’s attitudes, the law will change to follow them.
Feedback effects

For the Internet utopians, the assumption has been that news organisations pay insufficient attention to audience preferences, and, by giving audiences more control, there would be different choices made and the power would tilt away from the editors and the elite. This difference between what journalists think and what audiences actually choose was the subject of research by Boczkowski and Mitchelstein (2013) who looked at 20 news sites in seven different countries. In every country, irrespective of the organisation or political leanings of the news media, there were big differences between what the editors believed to be important and what the audiences preferred to read. Journalists in all these countries were considerably more interested than their audiences in public affairs journalism (Boczkowski & Mitchelstein, 2013, pp. 17–18). The gap decreased at times of political activity, such as elections or crises, and then grew to nearly 20 percentage points between elections or when political crises were defused.

Some scholars, such as Schudson (1998), would see this as the reasonable behaviour of the monitoryl citizen, who is happy to leave the governance of the country to experts in between elections. Boczkowski and Mitchelstein were concerned however about the impact of these changes on journalism as a profession, and on “the role of the media as a liaison between elite decision makers and consumers” (2013, p. 5). They feared that news organisations would be tempted to follow the lead of their audiences and abandon the role that they play in the public sphere as providers of information and space for public deliberation.

Pierre Bourdieu, commenting on the impact of commercial television on the news landscape in France, observed that: “One of the paradoxes is that competition has the effect… in fields of cultural production under commercial control, of producing uniformity, censorship and even conservatism” (2005, p. 44). As the Internet has lowered the cost of entry to almost zero, competition for audiences and advertising has increased. Just as Bourdieu (and Boczkowski & Mitchelstein) would have predicted, the legacy news providers, desperate to maximise the number of visitors and clicks, in order to bring in the now much reduced advertising cash, started to follow the organisational logic of the content farmers (Cherubini & Nielsen, 2016).

*Private Eye*, the British satirical magazine, described how this works:

> News hacks are now sent a memo three or four times a day from the website boffins listing the top subjects being searched in the last few hours on Google. They are then expected to write stories accordingly and/or get as many of those key words into the first paragraph of their story. Hence, if the top stories being Googled are ‘Britney Spears’ and ‘breast cancer’, hey presto, the hack is duly expected to file a piece about young women ‘such as Britney Spears’ being at risk from breast cancer.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

News hacks are now sent a memo three or four times a day from the website boffins listing the top subjects being searched in the last few hours on Google. They are then expected to write stories accordingly and/or get as many of those key words into the first paragraph of their story. Hence, if the top stories being Googled are ‘Britney Spears’ and ‘breast cancer’, hey presto, the hack is duly expected to file a piece about young women ‘such as Britney Spears’ being at risk from breast cancer.


Journalists in Taiwan and in mainland China have a similar experience. Editors ‘“watch where the opinions of internet users go’… Our high-ranking managers
rly on readers for survival, so readers’ click rates will even influence the arrangement of news in the print version of the newspaper” (Tong & Lo, 2017, p. 40). Just as Bourdieu would have predicted, the impact of increased competition for audiences has produced a narrowing of choice as news organisations, trying to cater to the now clearly expressed preferences of audiences, compete to produce coverage of trending topics as quickly as possible. Studies into the impact of this heightened competition found rising levels of duplication as reporters, working under pressure, cannibalised copy from rivals and posted it, slightly altered, online (Phillips, 2010). But audience pressure is having other effects too.

In a Swedish study of viral news, researchers looked at the kind of stories that are shared, and compared the audience decisions to those made by editors. They found that sharers were significantly more likely than editors to be drawn to material that is humorous, highly emotional, opinionated or designed to move the reader. However, over a one-year period, the percentage of positive to negative stories changed significantly. This was the period between 2014 and 2015 when digital native news sites started in Sweden, majoring on stories that are uplifting and inspirational (Wadbring & Ödmark, 2016). The researchers found that the success of the new viral news sites had in turn changed the kind of stories that were produced by the traditional tabloid news organisations. There had been a significant increase in positive news stories of the kind favoured by sharers. In this very short period of time, the legacy news organisations had learned the lessons of virality and were producing similar “heartwarming” content (Wadbring & Ödmark, 2016, p. 141).

It is not just the viral news sites themselves that have had an impact. News organisations also feed off social media as a news source. Every news organisation follows trending subjects on social media sites. If a subject is trending online, journalists are set to work to provide stories that will be picked up in the passing stream. Editors know that, with their very large social media following, they will then become part of the rising tide and bring people back to their sites in order to verify information and update themselves. If the newspaper can use the material to create a controversy, the story may then spill over onto the broadcast news networks and back again into social media. Feedback loops of this kind can massively enlarge the reach of a story that, in the days of analogue media, would probably not have gone beyond the pages of a single newspaper. When applied to the social media use of a Presidential candidate, the impact can be very significant indeed.

In the early stage of the 2016 US primaries, Trump was not expected to win the Republican nomination. His campaign had far less money than his rivals. He depended on social media and in particular on the ability of social media to bring in mainstream media. His Twitter feed depended largely on making outrageous and often unverified statements about his rivals, which were gleefully repeated on the mainstream media. Leslie Moonves, CEO of American news network CBS, summed up the mainstream media’s interest in the synergistic effect of social media when he declared in February 2016 that Trump’s candidacy: “may not be good for America, but it’s damn good for CBS”. He said: “The money’s rolling in and this is fun… I’ve never seen anything like this, and this [is] going to be a very good
year for us. Sorry. It’s a terrible thing to say. But, bring it on, Donald. Keep going” (Gertz, 2016).

In responding to the Trump Twitter statements, the news programmes helped to create a climate of disapproval around Clinton. In media analysis around the primaries, Trump was quoted more often about Hillary Clinton’s policies than she was: “Trump’s claim that Clinton ‘created ISIS’, for example, got more news attention than her announcement of how she would handle Islamic State” (Patterson, 2016). A similar pattern seems to be emerging in India. Here, only 12 per cent of the population are active users of social media and yet Prime Minister Modi has 26 million Twitter followers, and, according to an article in the Financial Times (Kazmin, 2017), holds no press conferences. He communicates via Twitter and his communiqués are then disseminated via mainstream media. There is concern that his followers are also using social media to launch online attacks on journalists who oppose Modi’s policies (Chaturvedi, 2016). Derek O’Brian, a member of India’s upper house from West Bengal, has accused Modi and his party of “mainstreaming hate” and suggested that Party officials should stop following abusive Twitter accounts (Kazmin, 2017).

Researchers at Stanford University (Allcott & Gentzkow, 2017) analysed the impact of false news in the 2016 American election and found little evidence that it was sightings of the fake news sites that swung the election because, as noted in earlier chapters, mainstream television is still the dominant source of news for the majority of people, particularly in the older age groups. However, when stories generated on social media, or indeed on fake news sites, draw attention from the mainstream, this feedback effect is instrumental in increasing audiences, who will often share stories disconnected from their context, thus emphasising precisely the points that the mainstream media had been attempting to de-bunk. The interconnection between the bubbles of social media and the mainstream therefore succeeds in amplifying the sensational and the angry over the calm and the dispassionate, thus deepening polarisation across all platforms.

Crowds and the journalism field

In conditions of extreme competition, within the particular institutional conditions of the Web, the wisdom of the crowd has turned out to be mainly the promotion of the popular, the cute and the angry. As Hindman (2009) observed, the “democracy” of the Internet has tended to reduce the number of mainstream news organisations because the particular logic of search algorithms and the push to promote only the most popular posts has ensured that, in every subfield of the news media, only the most popular survive. Some new brands have emerged online but most struggle to be financially self-supporting. Where innovation has taken place, it has mainly been through the manipulation of Search Engine Optimisation, which further popularises the news agenda and forces genuine news organisations to compete by popularising their own news offering.

The social media platforms have always maintained that they are not publishers and have no responsibility for the activities of people who use their platforms.
However, they do have responsibility for their own systems, which have allowed hate sites and fake news to be inadvertently funded by third parties. The only way that the platforms can prevent this happening is to de-list sites. This means that, rather than remaining neutral about which sites get funded by advertising, they are being forced to make decisions about which organisations are acceptable but that means, arguably, that they are becoming publishers, not merely pipes, and should be subject to the same regulatory and legal systems that govern the behaviour of publishers. This could have very far-reaching consequences for Net freedom as the means of monetising content would then be controlled by a very small number of very large, global companies. The advertisers would be happy about such a change because it protects their brand image. For those who dream of Net democracy it will be a further step backwards.

If one considers the World Wide Web as an institution, created by social forces and manipulated by different interests and power blocks, then it makes little sense to speak in terms of the interests of the crowd, or the interests of the people. The Internet, with its promise to provide a multitude of different sources of news, has in fact created a commercial platform in which the fierce competition for sources of income is reducing resources for basic news-gathering. Audiences can certainly share news more easily and they can do so in ways that challenge the power of editors to set the agenda, but the information they share will still come from a decreasing number of large (often global) companies; from political entities with the financial muscle to maintain a presence on the Web or companies that simply want to attract attention for the sake of making advertising cash.

In the past, technological developments in communication have very quickly become subject to state intervention and regulation. The means of regulation has differed according to political systems. In authoritarian regimes (discussed in more detail in the next chapter) this has implied censorship and state control but in democracies technologies have been judged on their impact on democracy. Where they have encouraged the development of monopolies (as was the case for the telegraph and television), governments have brought in controls or public ownership, to ensure that they are held in public trust, separate from the apparatus of the state. There has been no such debate about the role of the Internet platforms in Western democracies. The assumptions about the supremacy of free-market global economics have driven out all but the most timid discussions about the role of national governments in regulating these businesses, even as they threaten the existence of the news organisations that are critical to upholding democratic governance.

Notes
2 Mark Zuckerberg was speaking at the Talking at the Crunchie awards in San Francisco January 9, 2010.
References


