COLLAPSING THE PUBLIC AND PRIVATE IN THE AGE OF SOCIAL MEDIA

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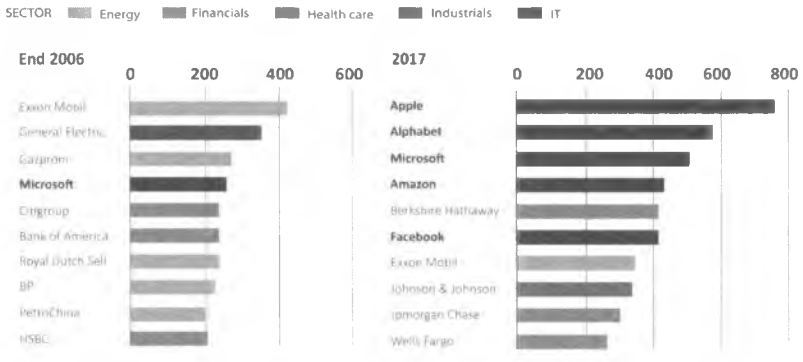
Langdon Winner (2018), at a seminar in Delhi, talked about how new technology always creates the hope of a democratic renewal, which is soon belied as capital responds by reconfiguring itself to absorb such new technologies. His example was the hand-held Super 8 Sony film camera, which young enthusiasts in 1978 thought would take the power of motion pictures away from studios and TV stations. I recalled the similar enthusiasm a number of us had about the birth of the Internet. John Barlow (1996), lyricist of the Grateful Dead and founder of Electronic Frontier Foundation, wrote on how this space was going to be independent of all governmental control. Naively, I wrote how the Internet, which was creating a new form of communication, would revolutionise communication, putting it back in the hands of the people (1995). Everybody could be a publisher, and you could set up a TV studio in your basement. Or so we thought. The reality has turned out otherwise. The Internet and social media have indeed decentralised content, but have given rise to new, even more powerful, monopolies as their new gatekeepers.

HOW THE INTERNET DIED AND LONG LIVE THE INTERNET

It is indeed true that anybody with access to the Internet and World Wide Web can set up a website and publish in any form. This promise was not misplaced. But what we did not anticipate was that for this content to reach the people, there would be intermediary platforms which, in turn, would emerge as the new monopolies. Google with its search engine, YouTube (later acquired by Google), Facebook and other such platforms would centralise communication

on a scale never before seen. The digital monopolies—Apple, Alphabet (Google), Facebook, Amazon, Microsoft—have replaced the oil monopolies of the 19th century, or the financial companies of the 20th.

World's Largest Listed Corporations by Market Capitalisation (In Billion Dollars)



How did the new Internet model differ from the old model of mass communication? The earlier model of mass communication was one of broadcast: it is a one-to-many, one-way communication, and therefore the term broadcast. In a broadcast model, communication entities, either government or private, own or control the capital-intensive infrastructure of communication, equipment such as printing presses, radio or TV stations, terrestrial towers or satellite transponders. They also own the necessary licenses. As radio waves are a scarce national resource, these licenses are issued by the state.

The communication monopolies of the 19th and 20th centuries, starting with newspapers and later radio and television, were all based on the broadcast model, and held their monopoly by owning the means of communication. Companies broadcast programmes, the ones who receive them can at best switch channels, or switch off or mute the device, but do not themselves have the ability to communicate to others.

The converse mode of broadcast is singlecast: one person speaking, writing or telephoning another person. It is a form of one-to-one communication, but two ways; both parties can communicate with each other. While it is true that we can communicate with a larger group by writing multiple letters, or creating copies of letters

and sending them through the mail, it is necessarily labour-intensive and costly, and therefore its ability to influence large numbers of people is limited.

The model of communication for what is now the Internet was neither singlecast nor broadcast. It is based on multicast—or the ability to form groups and communicate within the group in a two-way or interactive mode. It is this multicast model of communication that was birthed by the Internet (Purkayastha and Bailey, 2014).

The Internet[1] had its origins in the 1960s as a US defence project—the ARPANET (Advanced Research Projects Agency Network). From the beginning it was conceived as a decentralised peer-to-peer communication network, meaning any node in the network could talk to another without going through any central node. These nodes were computers that were connected to each other: the ARPANET was a set of computers connected together in a network which, in turn, could connect with other sets of computers or terminals. The peer-to-peer communication network would make the network robust against a failure of any one node, and thus relatively invulnerable to attack.

The Internet grew out of the ARPANET, first by adding more nodes to the network, and finally adding long-haul, high-capacity links. But its fundamental character of not having a centralised node still remains.

Initially the Internet was used by the scientific community to exchange information as the precursor of e-mails, and store technical papers that could be downloaded by others. To this was added the specific form of addressing of such sites, hypertext web pages and web links, creating the now familiar World Wide Web. This allowed people to keep abreast of the latest research being conducted by their colleagues: they could go to such pages and download papers from the hyperlinks provided on them.

At first no one understood the commercial implications of the Internet. In 1971, AT&T was asked to take over the fledgeling Internet by the US Defence Department, but turned it down (Kopfstein, 2012). They did not see any commercial value to the Internet! The first attempt to spam,[2] i.e., use the Internet for commercial advertisement, was harshly treated by the then Netizens, who termed it a misuse.

It is this ability of the Internet to function without centralisation that led to the multicast model as a new form of communication, distinct from the broadcast or singlecast technologies we had known till then. We optimistically believed that the multicast model would usher in a new age of communications, and a more democratic form in place of the broadcast model of one-way communication. An example is an e-mail, where you can send your mail to a number of addressees. Or put up a web page that can be visited by people who are aware of it, to read your writings. If you have a high bandwidth connection to the Net and a powerful computer, you can host music and video content. Like-minded people can get together and run such websites, creating communities. It was hoped that the manufactured content of the mainstream media could be challenged by the power of people coming together and forming their own communication communities.

There were two challenges to this model of communication that we had not foreseen. The first was from the telecom companies which provided the communications network and connections to the Internet. This was the Net Neutrality battle, with telecom companies demanding their right to act as gatekeepers and tax those who were putting up content. In simple terms, if the content companies would not pay, their content would be slowed down or, quite simply, made unreachable. Historically, this was the equivalent of the toll roads, where feudal barons levied arbitrary tolls on any goods or vehicles passing through their fief.

What the telecom companies did not calculate was the extent of the numbers on the Internet creating content. There are approximately 1.8 billion websites, as against 3.6 billion users connected to the Internet today. This means roughly *one out of two persons* connected to the Internet not only consumes, but also produces content (Mahajan, 2014). The world is no longer divided into users of the Internet and generators of content: the users are also content providers. This meant that the pushback against telecom companies came not only from large content provider platforms, but also from a large number of people who saw the Internet as their avenue of self-expression.

The second threat from the democratisation of communications arose from the huge expansion in the number of content providers and websites: the strength of the Web was also

its weakness. There was simply too much content on the Web and very little information on how to reach it, apart from very few well-known or well-advertised sites. This is where search engines—sites that allow you to search for the information you need by using a few key words—came in. Search engines crawl through all the web pages on the Internet, index these pages, and can tell you, based on your search terms and algorithms, the pages of your interest as well as their relative 'rankings'. This makes finding content easy for the user. Initially there were a large number of search engines, but Google won the race and emerged as the frontrunner.

It is this dominance over the search engine market that has allowed Google to create other tools—Gmail, Google Docs—all of which are given 'free' to the user. Google then accesses the users' personal information and offers it to advertisers as a commodity (Symthe, 1977). The creation of users as audience commodity is the consequence of these companies enclosing user data and converting it to audience demographies, or audience as commodities. Google's virtual monopoly over search engines has made it the leader for garnering digital advertising revenues. It is this revenue stream that allowed it to raise capital in the financial market, and acquire companies such as YouTube, the premiere video hosting site; and Android, an operating system for mobiles.

Facebook, the other major monopoly in the digital platform market, chose a different route. It created a space where you could put up content about yourself and connect to friends and relatives. It was about connecting to your social network and creating a space for communication for those in your network. This allowed people an alternate route to content: you learnt what your friends were reading or buying, and that became a guide to what you ought to read or buy. This was not the original objective of Facebook, which was initially intended to be an online student directory for Harvard University. Today, Facebook has 2.27 billion active users, making it the biggest social media network. It has also acquired WhatsApp, the messaging platform; and Instagram, a picture and video-sharing social network.

None of these platforms generate content, unlike older media monopolies. The new digital monopolies provide a platform through which Netizens can either host—Facebook, YouTube, etc.—or receive content. These monopolies can even provide a share of revenues, while of course reserving the bulk of it for themselves.

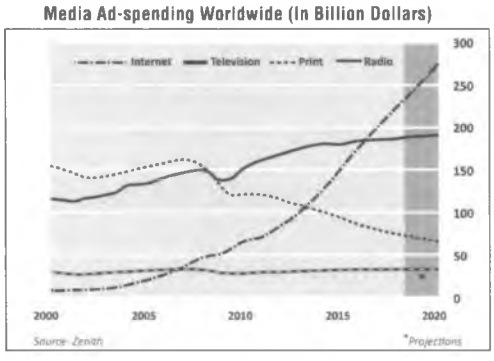
The mode of advertising for online platforms has been different from that of broadcast media. As broadcasting, by its very structure, reaches out as a one-to-many communication, content receivers remain unknown. The only information that such broadcast platforms have—via Nielson ratings—is the number of people watching a particular programme. The only choice that viewers have is to flip the channel, or hit the mute button, or not watch TV.

This approach to advertising is like a scattergun approach: spraying advertisements about products hoping it sticks to some. It could also convey the message that all bodily ills could be solved through a magic pill, or snake oil, or fair skin, or sell you a lifestyle—live free by smoking Marlboro cigarettes—and simply hope that you recalled the brand or product when shopping.

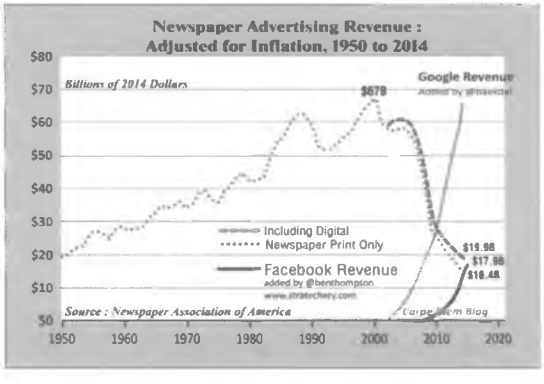
The Internet platforms chose a different approach. They knew their users very well; the common Internet refrain is Google and Facebook know you better than your mother. The Internet can deliver what are known as targeted advertisements. If you are looking for a video camera through a Google search, Google will show you ads for video cameras for weeks afterwards. Or your friend posts her new video camera, and you, as her friend on Facebook, get ads for video cameras. Google and Facebook have built up, through our interaction with their platforms, a far more detailed picture of us than we may have of ourselves. It can then use targeted ads to get an ad-to-conversion ratio that is much higher than that delivered by the broadcast media.

The consequence of this shift in advertisement revenue is visible today. Print newspapers are losing ads so fast that they are shutting down or converting to online 'papers'. Television's ad revenues are growing, but much slower than that of digital ad revenues. In 2017, digital ad revenues overtook the combined ad revenues of TV, both Broadcast and Cable.[3] And of that revenue, the top two—Google and Facebook—generate 70 per cent. The chart that follows (Molla, 2018) shows not only the sharp rise in advertising revenues of digital media companies, but visually establishes that the fall of newspaper ad revenue is strongly correlated to the rise of Google, and now Facebook.

Companies in the United States are leading the pack in digital ad revenue across markets, with the only exception being



the Chinese market. China has protected its internal digital market from global monopolies by virtue of its firewall—the Great Firewall of China—and created Baidu, WeChat and Weibo as home-grown platforms equivalent to those of Google, WhatsApp and Twitter. Today Baidu, Tencent and Alibaba are global players by virtue of their control of the Chinese market, and are leveraging it for their forays abroad.



The rise of these platforms has led to the reconfiguration of the Internet. We might think that the Internet is configured as it was earlier, with all of us connected to the Internet Service Providers (ISPs) along with host content sites, including Google. Today, Google, Facebook and Amazon, to name a few, *sit within the ISPs* and connect directly through their own networks across the globe, and then back to users through ISPs. Seventy per cent of Internet traffic today comes from Google and Facebook (Staltz, 2017).

The rise of user-generated content, a step that was to empower the people and break the power of mass media monopolies, has, instead, created new platform monopolies such as Google and Facebook. The Internet as a multicast platform—where we can get together as groups—still remains, but now functions through platforms such as Google and Facebook. These platforms have effectively enclosed the Internet in a way that its physical architecture did not foresee. We now use the Internet for connecting

to Google and Facebook, and through these platforms to connect to others. This has happened as a result of the ability of these platforms to enclose our data, including the content we create. This is the genesis of digital behemoths today.

COLLAPSE OF THE PUBLIC IN MASS COMMUNICATIONS

In the age of social media, the distinction between the two spaces—public and private—appears to have collapsed. Are discussions in the social media private space akin to discussions in our homes or cafes? Or are they similar to public discussions, carried out primarily for those who observe, but, at best, participate vicariously through clapping, standing ovations or booing? Why are there rules for public discourse while we are expected to regulate ourselves in private discourse?

The invention of the printing press was the first instrument of mass communication. It led to the rise of literacy, the democratisation of knowledge, and transformed society. It also gave rise to newspapers, which were printed, and therefore could have mass readership. Forms of mass communication, such as rock edicts, town criers, etc.—which, by virtue of the limited literacy of people or the innate inability to inform large numbers simultaneously—can be considered at best *proto* mass communications, and are not listed here.

The expansion of mass communications was, however, not an unmixed blessing. The 'standardisation' of witch trials and the huge number of such trials in 16th–17th century Europe was the consequence of a 'primer', *The Malleus Maleficarum*,[5] usually translated as *The Hammer of the Witches*. For 200 years, this was second only to the Bible in its popularity.

Advertising as a means of sustaining newspapers was a late 19th-century phenomenon. Tim Wu (2003: 141), who coined the term Net Neutrality, writes about newspaper advertising: 'From the 1890s through the 1920s, there arose the first means for harvesting attention on a mass scale and directing it for commercial effect...' The new business of advertisements did not distinguish between products; it promoted all products with equal fervour—from snake oil and magic remedies to real ones.

As long as the human voice was the primary mode of communication, the need to regulate public spaces did not arise. It

was only when technology amplified this voice—not just as voice, but as mass communications—that public space or public sphere, in the sense discussed here, was created (Habermas, 1989). The recognition that we can be manipulated for private gain or public harm in such public spaces gave rise to the pushback by society to regulate public space. It is the recognition that mass communications amplify the message and can cause significant damage to either society or individuals which causes almost all societies today to regulate speech in the public sphere in some way or another.

The technology of mass communication has continuously expanded the sphere of the public. It began with the printing press, then expanded to billboards on the roadside, to radio, television and computers invading our homes, and now the mobile becoming virtually an extension of our bodies. The distinction between the physicality of public and private space has slowly disappeared.

As a consequence, we are almost always exposed to mass communications, be it when we are travelling, in office or at home. It is no longer our decision when we engage with mass communications, as we could do, for example, with the newspaper. Today we are engaged in every waking moment with some form of mass communication.

This continuous sensory overload, which seeks to engage our attention every waking instant, also manipulates us in various ways. It engages our attention in order to manipulate us to behave in a certain way: either to buy goods, or to condition us socially or politically. Sadly, we are discovering that the tools of advertising for selling products are the same as those used to condition us politically. If mass communications can sell fair skin successfully, it can sell presidents or prime ministers too: differentiate your 'product', give a simple message, appeal to basic instincts. Or, shall we say, base instincts? The example of Cambridge Analytica[6] and Trump's election may yet be the most egregious example of the manipulation of elections using targeted advertisements and fake news, but this is very much a part of the mainstream 'selling' of candidates today.

With the Internet, computers, and now smartphones, we are entering an age of communications where the distinction between public and private communication is also disappearing. Social media and the creation of platforms, such as YouTube and Facebook, have

erased the distinction between private and public communication.

This two-fold transformation of public space, in terms of both physical space and public versus private communication, has been accompanied by the rise of advertising as the main 'business model' of mass communications. At first it may appear that we, as the users of communications, are also its consumers. This is an illusion. Getting us to watch, listen or read content—getting our attention—is merely to sell us as commodities to advertisers. Getting our attention is important, but only in order to sell us. The major revenue of mass media companies is from advertising, paid for by the content we receive. Not surprisingly, those who pay for advertisements also influence what the media shows. The manufacturing of consent by the state and private capital is only one part of this exercise. The other is to make people with money feel good, so that they buy more goods, drawing them into giant shopping malls, where, hopefully, they will loosen their purse strings.

Earlier, with mass media, the advertisements came interspersed with what we were reading, hearing or watching. With the Internet we have a new way of being sold as an audience commodity. The Internet platforms, such as Google and Facebook, provide us with a variety of functions: search, e-mail, the ability to post content. In doing so, they also capture our attention and the ability to serve us to advertisers. It appears to be an even trade: we get free services, they get revenue by selling our attention—or us—to the advertisers. The consequence has been the rise of platforms, which, even without creating any content, have captured audiences or attention on a scale never before seen. That is why they are the biggest monopolies of the 21st century.

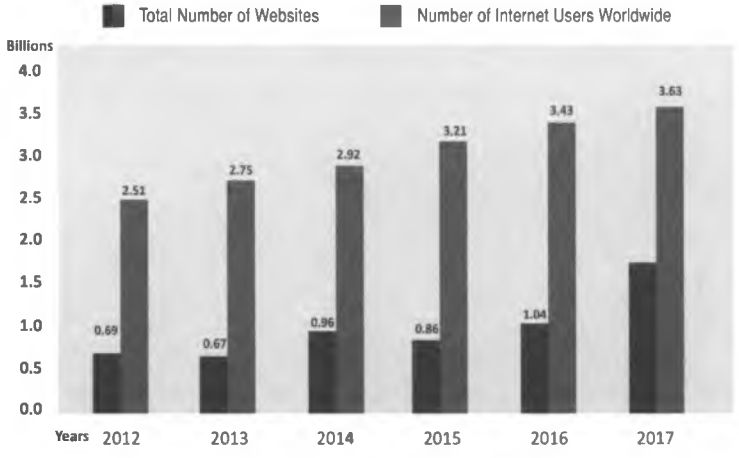
PUBLIC COMMUNICATIONS, PRIVATE PLATFORMS AND GATEKEEPERS

The key transformation of the 21st century—the enclosure of the Internet by a few companies—has collapsed the distinction between private and public communication spaces. If the printing press, radio and television helped create the public communication space, its collapse today is the consequence of this transformation.

Earlier, business or government entities owned printing presses for newspapers, broadcasting stations for radio and television—these entities controlled the channels of mass communication. People wrote or talked to each other; these private

communications did not use the tools of mass communication. With the Internet and the rise of new digital platforms, this has changed dramatically.

Total Number of Websites Compared to Number of Internet Users (In Billions)



Source: Internet live stats and emarker

Today the bulk of the content on the Internet is created not by the platforms, but by those who use them. As far as web pages are concerned, Google's index indicates that the number of web pages is about half that of the total number of people connected to the Internet. Moreover, if the pages of 2.27 billion users of Facebook are treated as space for content creation, a little more than half those connected to the Internet are also on Facebook. If the Chinese social media platforms are added to that, practically everybody connected to the Internet is a producer of content as well as its recipient.

The numbers become even more skewed in favour of user-generated content if videos are considered. About 300 hours of video content are added[7] on YouTube every minute—far higher than all the content created by film or television companies. To that if we add Facebook videos, Twitter and various other sites that allow video uploads, that number gets even more skewed towards user-generated content. With mainstream television too switching to mobile phones for camera, and with editing shifting to laptops,

content generation has shifted heavily towards people being able to generate content far more easily than with even the Super 8, the revolutionary new camera that Langdon's friends were so excited about in 1978.

Such user-generated content—Facebook posts, YouTube videos, Tweets—have created spaces that appear to be private to their users. People on social media are not aware that once they write or post opinions on various platforms, they are governed by the rules of public communication. The second issue is while content is created by the user, these platforms make money; but they are not obligated to curate or moderate the content. In fact, the more viral the content the more money these platforms make. Unfortunately, it appears that fake news has greater potential for virality than real news (Vosoughi, et al., 2018). The business model of such platforms thus goes against any serious attempt to reign in fake news.

Today, this is the key conflict. If those who create content also own the means of communication, we can place the burden of regulating public space on them, according to the rules of public communication space. They would bear the responsibility of seeing that the laws of the country—laws regarding false advertising, fake news, community standards—are upheld by them. The broadcaster—or for print, the publisher—is responsible for conforming to laws or regulatory standards. If it is social media, the platforms own the means of communication, but do not generate content. So, the question then arises: Who 'polices' these platforms?

While the users are responsible for policing themselves, to see that they conform to the law, the problem is: Whose laws? The laws of the United States, which most platforms claim as their legal jurisdiction? How does one enforce the law when the benefit from fake news can help achieve an election victory?

Increasingly, governments and lawmakers are asking platforms to police themselves. This is the argument in most mainstream media: that Facebook and Google should have 'mechanisms' for filtering out fake news. In other words, it is the platforms that should regulate themselves, using the same tools that they use for selling advertising: algorithms.

I am not going to examine the problems of having algorithms decide what to censor and what not to. Cathy O'Neil (2016) has dealt with the problems of using algorithms to take human decisions. The

problem cannot be solved with better maths (Purkayastha, 2017). The fundamental problem of an algorithmically driven future is that algorithms predict the future only by extrapolating the past. Algorithms cannot predict something for which there is no data.

The problem is not who should police the content. It is the task of the creators of content—the users of such platforms—that they conform to the law. If they don't, the state and content platforms ought to work together to see that such content is removed. The problem is that these platforms have the power not only to sell goods, but also to 'sell' candidates in elections, and even to 'sell' legislation and laws to legislators. Asking them to be gatekeepers is like asking wolves to guard sheep.

These platforms today wield far more power than that wielded by the oil and financial oligarchies of earlier centuries. Their net worth, or market capitalisation, is higher than the GDP of most countries.

We need an alternative approach. Tim Wu (2018) advocates the breakup of these monopolies to create a number of smaller entities, the same approach taken with Big Oil and Ma Bell/AT&T. The Just Net Coalition[8] has proposed that since these platforms qualify as essential infrastructure today, they should be regulated as public utilities or be publicly owned.

While the driver of this collapse is technology, it does not mean that the manner in which we communicate, or even the content of our communication, is driven by technology. Technology creates possibilities; society actualises these possibilities, including social and economic structures. None of this could have happened if the technology of mass communication had not changed dramatically, leading to the rise of search engines, social media and the platform economy. We did not foresee such changes. But having arisen, we need to see how these changes can be brought in line with the larger goals of a human and a humane society. This is the challenge before us today.

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NOTES

1. There are other histories of the Internet as well. ARPANET pioneered packet-switching (telephone network worked on circuit switching), the key element of

digital communications networks. So did the French, pioneering the Cyclades network. It was led by Louis Pouzin; the ARPANET team under Vinton Cerf borrowed some of the concepts of packet-switching from the Cyclades team.

2. 'At 30, Spam Going Nowhere Soon', *NPR*, 3 May 2008. https://www.npr.org/templates/story/story.php?storyId=90160617?storyId=90160617.
3. 'YouTube Highlights Problems with Digital Advertising', *Economist*, 30 March 2017. https://www.economist.com/business/2017/03/30/youtube-highlights-problems-with-digital-advertising.
4. 'Why Blogging is the Best Business in the World.' https://www.financialsamurai.com/why-blogging-is-the-best-business-in-the-world/.
5. See J. Jones. https://www.thoughtco.com/malleus-maleficarum-witch-document-3530785, accessed on 23 November 2018.
6. See 'Exposed: Undercover Secrets of Trump's Data Firm', 20 March 2018. https://www.channel4.com/news/exposed-undercover-secrets-of-donald-trump-data-firm-cambridge-analytica.
7. See https://www.omnicoreagency.com/youtube-statistics/.
8. See *The Delhi Declaration for a Just and Equitable Internet*, February 2014. https://justnetcoalition.org/delhi-declaration.

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