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# The internet lets us hear the voices of society



# Julia Cagé

Julia Cagé, a professor in the Département d'Économie, is affiliated with the Laboratoire interdisciplinaire d'évaluation des politiques publiques (LIEPP) (Paris) and the Centre for Economic and Policy Research (London). She focuses on democracy and the media.

# Dominique Cardon

Dominique Cardon, a professor of sociology and researcher at the médialab, focuses on the analysis of web algorithms, big data, and transformations in media.



The carefree libertarianism of the early days of the internet is long gone. While digital technology has given a vast number of people access to a space for self expression previously restricted to the few, recent developments, particularly the rise of social networking platforms, have considerably altered the way in which information is produced and consumed. They have increased the trend towards concentration around a few well established media, amplified the voice of extremes and encouraged political polarisation to the detriment of open discussion and favouring a superficial and piecemeal reading of the news. Media specialists Dominique Cardon and Julia Cagé discuss these radical transformations and the challenges they pose for both research and regulators.

**You are both studying the impact of digital technology on the media. What was the starting point for this research?**

**DOMINIQUE CARDON** I became interested in digital technology as soon as it emerged in the public sphere in the mid-1990s. At the time I was a researcher at the France Télécom research centre, where we were working on telephone usage. Then came the internet, which took off very quickly and spurred some very innovative uses of communication tools. Strikingly, the first uses of the internet immediately had a major political dimension. Everything took place in a kind of carefree, laissez-faire environment that lasted until the early 2000s. The deployment of these technologies benefited from a very permissive legal regime. Nobody really imagined what would actually happen. The first political uses of the internet were linked to radical political alternatives, on the left, the far left and the far right too. The most militant groups, which were ignored by the media, quickly

latched onto the digital sphere. It was clear at the time that something new was happening and that the sudden expansion of the public arena was profoundly transformative. The internet was still in its infancy and barely used, but a different space for expression was opening up and attracting a lot of attention. My early work focused on Wikipedia and anti-globalisation activists. The anti-globalisation movement was born at that exact same time, and its activists became major users of early internet technologies. Incredible as it may seem, in 1994, members of the Mexican Zapatista National Liberation Army, deep in the Lacandon Jungle, created one of the first political websites!

**JULIA CAGÉ** My initial interests were democracy, elections and voting, and therefore information. I started working on the written press and then studied the consequences that the introduction of new digital technologies could have on the production of quality information – on its conditions and methods – before extending my work to television. I worked with researchers from the French National Audiovisual Institute (INA), in particular Nicolas Hervé and Marie-Luce Viaud,

Julia Cagé and Dominique Cardon in the Chapsal lecture theatre at Sciences Po, 27, rue Saint-Guillaume, Paris.



who had long been collecting content from mainstream online media. Together, we studied the way in which information spreads on the internet, noting the paucity of original news production. We also looked at how people react to the creation of original content. Then I moved on to social media and their influence, both in terms of disseminating information and producing it. X/Twitter, for example, has proved to be a major source of information for journalists. I'm not making this up: journalists interviewed on this subject said they found posts on X/Twitter as informative as press agency dispatches.

### **What does this imply from the point of view of the research that is needed??**

**J. C.** It provides an infinite source of questions, but we face a number of obstacles. First, the weakness of current regulations impacts research. We are constantly fighting to gain access to data that should be open to the research community and to regulators. Without this data, how can regulators do their job? How can researchers study the impact of social media, the spread of false information, and the way in which internet users wield it? This is a major issue that regulators should be addressing. Today, we have to be smarter than the

platforms to capture data, and we are not always successful. For example, when we worked with INA to retrieve all the tweets published daily in French, we created groups of keywords that are very rarely used together, then simultaneously launched a search for all these groups of words. This specific selection gave us access to almost all the tweets. However, we have virtually no data for TikTok. Another problem is timing. Everything moves very fast, yet researchers need time to retrieve the data, organise it and analyse it in detail. As a result, we're always behind, starting to work on Facebook as X/ Twitter overtakes it. My students are also two or three steps ahead of me. When I talk to them about Facebook, they think that I'm sending them back to the Stone Age. When I manage – finally! – to produce studies on Instagram, they'll tell me, 'Instagram is over'. To meet the challenge of producing cutting-edge research, it's crucial to draw on feedback from students.

**You both raise the question of the freedom of expression that digital technology is supposed to allow. Does it really exist? What has digital technology changed in the information space?**

**D. C.** At its inception in the 2000s, digital technology was seen as very positive and promising. Now we realise that it raises many challenges, but I still think – sometimes a bit against the tide – that we have gained so much from it. The information space has opened up to a much greater diversity of channels and, above all, the public is no longer a group of silent spectators as it was with the press, radio or television. We can complain about the dangers, mediocrity, or vacuity of new forms of digital expression, but we're not going back. It is hard to dispute that this is a step forward in the still unfinished process of democratising democracy.

**J. C.** In my first lectures at Sciences Po in 2014, I underscored the positive aspects of digital technology. Much research in economics and political science had been conducted on the liberating role of social media, particularly Twitter during the Arab Spring. The impact in Egypt, for example, is very well documented. Existing research shows that when all channels of communication were controlled and access to the internet was blocked, social media continued functioning well. This very positive view is barely ten years old. Now we're

*We can complain about the dangers, mediocrity, or vacuity of new forms of digital expression, but we're not going back.*

asking the exact opposite question. We wonder what would happen if access to the networks was cut off. Would that make people feel better? Doesn't social media make us unhappy? It's all very paradoxical. On the one hand, social networks are a major source of information – a sounding board. They provide access to more information in general and to quality information free of charge. They also allow citizens to express themselves. Their potential is immense, but so are the limitations, because access to information does not guarantee its consumption. More information is available now than before, but there is also other content – and much more of it – that competes with this information. In a way, social media have damaged information consumption. In conjunction with other researchers and a major media company, I am conducting a controlled experiment with high school students to determine whether the barrier to media consumption is cost. Free media subscriptions were offered to a group to study whether this encouraged members to consume more information. Contrary to what we had imagined, we found that a significant share did not consume the media to which we had subscribed. However, when asked, they said that they had spent time reading it. When we questioned them further, we realised that they

# How to regulate a market that we no longer know how to define and, since it is globalised, has become so much more complex?

weren't lying. When they received the notifications, they read them, but never clicked on the article. So they had the impression that they were informed. This is a real effect, resulting from social media, on the way information is consumed. Most young people read the introductions to articles and look at bits of tweets and bits of Instagram. I believe this creates huge information inequalities between those who are just browsing versus big consumers, who have never been able to get so much information about the world so easily. Marcus Prior, professor of political science at Princeton University, has most thoroughly studied this phenomenon, even if his subject is not social media but television. In his 2007 book, *Post-Broadcast Democracy*, he shows the great paradox of cable television: when a host of different channels appeared, including all-news channels, a whole segment of the public lost interest in news altogether. While access to information became easier and more comprehensive, competition from entertainment enabled complete escape from this information. Such escape was impossible when there were only three channels broadcasting a short news programme at the same time every day.

**D. C.** Digital technology has profoundly reshaped the way people get information, but it has not fundamentally transformed the structure and hierarchy of information sources and media. We had imagined the opposite during the pivotal

2000–2010 era, when we thought that digital technology would change the information world. Some even spoke of the end of media, as everyone would become a medium. But today in France, for example, it is apparent that the hierarchy of the top media has not been overturned. The centre stage remains the same as before. In France, with the notable exception of Mediapart, today's leading news media were created way before the internet. Nor has digital technology given rise to a massive body of highly visible disinformation media. It has in no way curbed an older trend towards the concentration of information space. It has enriched the traditional media, at least for the media in good enough financial health to invest in creating original digital formats. I'm thinking in particular of *Le Monde* and *Ouest-France*. After a period of crisis, they made the most of the digital transition. This does not mean, however, that the traditional media have succeeded in attracting the vast audience of consumers of digital platforms. The main phenomenon, as Julia pointed out, is the piecemeal consumption of information. For us old-timers, a medium is also an institution. We read a newspaper or follow a channel. The new consumption patterns are unitary, meaning that we are interested in one piece of news on one medium, a different piece on another, and so on. The quality of the source remains important, but the idea that the source belongs to a collective – to an editorial team that upholds standards – is much less present in the minds of digital news consumers. The new generations no longer consume the large, somewhat centralising media that focus on the news of the day. They can follow very specific subjects, while remaining completely indifferent to the rest.

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## GATEKEEPERS

The concept of gatekeepers refers to companies that are so powerful in a given market that they make other players and consumers dependent on their services and hinder the entry of newcomers to the market. The European Digital Markets Act, in force since 2 May 2023, uses this concept to regulate the economic activities of digital platforms in the information market. It considers as gatekeepers platforms capitalised at more than EUR 75 billion on the stock market, and those with sales of more than EUR 7.5 billion in Europe. The five GAFAMs (Google, Apple, Facebook, Amazon and Microsoft) as well as Samsung and ByteDance are identified as gatekeepers.

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**J. C.** What you say about concentration is the essential point that the regulator has completely missed. The competition authority tends to say: 'We've never had so many media, so there is no

problem of concentration. In my economics course, I talk about the Herfindahl index. It does not measure the concentration of a market on the basis of the number of companies producing a specific good or providing a specific service. Rather, the index shows that a media landscape comprising just four media each with a 25 per cent market share is much less concentrated than a landscape with ten media, one of which has a 99 per cent market share with the other nine sharing the rest. What's more, percentages do not suffice to properly regulate a market that we no longer know how to define and, since it is globalised and deployed across a multiplicity of platforms, has become so much more complex. How do you define market share in this context? It requires taking into account digital, print, YouTube, and social media, among others. I believe the European regulator took the right approach in its Digital Services Act (DSA) and Digital Markets Act (DMA), which used the 'gatekeeper' concept to try to regulate the economic activities of the digital giants (see above). Rather than think in terms of market share, as competition authorities have been doing for decades, all the key players in the new information space should be listed according to the number of individuals they reach via their various channels, and then regulations should be imposed on all those who reach more than a given share of individuals. These regulations would apply to national media as well as to major platforms and global players, such as Netflix, that compete with national markets. In France, the planned merger between the television channels TF1 and M6 highlighted these new issues. Some people said, 'We're not going to prevent this merger, because even merged, they'll be tiny compared to Netflix'. These are fascinating subjects to deal with, but the challenges are significant. Compounding the technical pitfalls are the obstacles that stem from lobbying and the political clout of the players involved.

**D. C.** Rethinking regulation is necessary, but it seems almost impossible if we only reproduce what is done in broadcasting, where we try to measure and check the balance between broadcasters. This is possible when there are few broadcasters, but when there are many, it is very difficult without introducing a subtle weighting by audience. While it is difficult to impose audience-based rules on digital players – which is only done for television – there is nothing to stop them from respecting the rules that limit public discourse (insult, defamation, anti-Semitism, etc.) and that are very frequently violated.

## Aren't neighbouring rights a solution?

**J. C.** Yes, but the way in which the defence of neighbouring rights is typically organised (see below) shows just how difficult it is to regulate. Every time a major platform has been taken to court in a national context, it has won. Google won against all the German publishers. The same is true in Spain. So we set out to regulate at European level, but instead of creating directly applicable regulations, we simply passed a directive that had to be translated into the law of each country. The example of France, which was the first country to transpose the directive on neighbouring rights, shows the inefficiency of the system. In the end, it was very complicated for French publishers to obtain from Google the monetary compensation that was commensurate with their loss. What's more, only the biggest publishers were able to come out ahead. This is happening again with the agreement that *Le Monde* signed with OpenAI in March 2024. Here we see a major player in the sector negotiating an agreement that makes it a privileged reference for the answers provided by OpenAI, most likely leaving the rest of the industry out in the cold. Moreover, these agreements are secret, and the amounts involved remain unknown. This situation shows that increasing concentration can only work in favour of those who already have an advantage. Neighbouring rights should not simply be the subject of a directive, but of a regulation that applies equally to all countries and that benefits all publishers in the same way. Instead, we ended up with a few winners and a lot of losers. Worse still, journalists themselves do not always know how much they can claim from their employers with respect to neighbouring rights, and some media outlets have not made provisions for what they owe their editors. Journalists, who are already in a precarious position, are in a way becoming the butt of a joke.

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### NEIGHBOURING RIGHTS

Rights related to copyright are granted to individuals or legal entities involved in the creation of a work without being the principal authors. In France, they were established in 1985 for the benefit of performers, producers of phonograms and videograms, audiovisual communication companies and the press, who therefore have a (neighbouring) right in the exploitation of the work. At the European level, these rights were harmonised and adapted to technological developments by a directive in 2000, which allows newspapers, magazines and press agencies, for example, to be remunerated when their content is re-used on the internet.

# The vast majority of users pay no attention to the options provided.

**Digital technology is often said to be polarising. Is this really the case? There have always been media with an extreme political slant.**

**D. C.** The opening up of digital spaces for expression has increased the number of providers. These are not information professionals. Rather, they produce text, discourse, opinions, ideas, calls for demonstrations, or other forms of public discourse. They now let us hear the voices of society in all their diversity. The internet exposes us to difficult, sometimes rebellious and highly politicised discourse that we didn't hear in the traditional media, or at least not in the same way. Political opinions are becoming more visible through social media. This may start with very small circulations, from small, very ideological and very closed groups, but they grow in size and visibility. This is the downside of the great democratisation of the spoken word. It enables opinions to become radicalised or closed. The design of digital spaces is also an important issue, including for research, because some of them give much greater power and voice to the most extreme comments (see opposite). X/Twitter is a case in point. It increases the visibility of content according to the number of re-tweets received, which has the effect of encouraging radical, provocative and violent statements. Some very active accounts re-tweet 300 times a day, giving certain content artificial visibility. In short, power has been given to those who are the most committed, and they have radicalised these spaces. In French politics, the use of X/Twitter by journalists and political staff has created a kind of distorted, hyper-polarised mirror of public discussion. Today this phenomenon, particularly on the part

of journalists, has somewhat abated. What's more, not all social media organise discussion and the visibility of publications in the same way. Instagram, for example, has other problems, but does not lead to radicalisation. The way in which information is shared, circulated and given visibility can have very different consequences.

**J. C.** Filter bubbles (see below) also contribute to this polarisation and radicalisation. Design issues are important and they once again underscore the need for regulation. Take the example, which may seem purely technical but isn't, of the choice a user has between a personalised feed and a linear feed, between *opt in*, which requires the internet user's consent to be targeted by the content offered, and *opt out*, which assumes that the internet user agrees so long as they haven't said no. The reality is that the vast majority of users are not aware of this choice and pay no attention to the options provided. So if we were to force all the major platforms to practise *opt in*, in other words a personalised feed resulting from a user's consent and not a default choice, the impact could be enormous.

**D. C.** I'd like to agree with you, but I'm familiar enough with the vitality and inventiveness of digital players on the one hand, and the weight and slowness of public policy decisions on the other, to know that developers often move faster than anyone else and always find a way to short-circuit decisions and achieve their ends. That said, more restrictive rules are being introduced, notably at the European level thanks to the Digital Services Act.

## How do you analyse the filter bubbles and the personalisation of the content offered?

**J. C.** I like to give my students this little test. I ask them to do the same search on Google. To their great surprise, none of them gets back the same results. The reason is simple. I explain that they don't know how to browse in private mode, or how to manage their cookies.

**D. C.** These technologies, particularly the ones implemented by Google, have the immense advantage of being able to personalise the way data is processed and to put the user in a dilemma. Personalised results are more practical for them in their immediate daily lives. But when they become a little more thoughtful and ask themselves, 'Don't all these refinements also actually close off some opportunities and possibilities for me?' they realise that they are probably being alienated by the



correspondence between algorithmic offers and their own practices and desires, because they are losing out on possibilities. For all that, personalisation remains highly effective and is not always as discriminating as it is made out to be. I'm thinking again of Google, whose results in terms of political life I have studied a great deal. It is often criticised for creating political divides, for example by showing left-wing information to left-wing people and right-wing information to right-wing people for the same given keyword. However, on political issues, it has never been possible to show that the search engine produces this type of selection. Its personalisation system is subtler, and undoubtedly more pernicious. If I read quality newspapers and am interested in politics, Google will provide me with political information from *Le Monde* and *Le Figaro*. If I don't read quality media, when I carry out searches it will completely 'forget' to offer quality information which it could have been useful to access. The search engine's filter bubble is not

designed to lock me in on the left or the right, but to separate those who are interested in the news from those who are not, thereby reinforcing the disinterest in public life.

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### **DIGITAL DESIGN**

In 2022, the European Commission estimated that 97 per cent of the most popular websites and applications in the European Union use what is known as a dark design pattern. Drawing on knowledge of human behaviour, platforms design their site interfaces so that users make choices that are not the most rational for themselves but the most profitable for the platform: playing on scarcity to encourage bookings, speeding up decisions by offering one-click purchasing, increasing the length of time users spend on a site with enriched content, increasing the level of user engagement by offering them the chance to add likes, comments and so on.

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**So the production of information, rather than its consumption, is the problem.**

**D. C.** Yes, as Julia pointed out, the main effects of digital structures are less on consumption than on the supply of information. In the debate on disinformation, I've always defended the idea that fact checking has little or no effect, particularly on users who are likely to be influenced by misleading statements. On the other hand, its effect on the production of information is very important, because it reminds journalists of the existence of a system of control by the profession, which could expose them to symbolic sanctions if they are the source of misinformation. Regrettably, when it comes to disinformation, much attention has been paid to the factuality of statements, but little to the real issue: ideology. Ideological bias is not a matter of truth or falsehood, but of feeding narratives, locking them up in systems of interpretation, asserting and repeating them. A prime example is the CNews opinion channel, which is much more fuelled by ideology than disinformation. This brings us back to the issue of regulation, which does not work through the channels of factual control of statements, but through the speaking time given to political opinions, which implies categorising the speakers. Bear in mind, however, at least in France, that highly politicised individuals represent a small share of the population and that their opinions are stable and unlikely to change due to exposure to misleading information. But on the internet – on Facebook, for example – the vast majority of users are not at all interested in information, do not share it and do not consider this service to be useful to discussing current affairs.

**J. C.** It would nevertheless be interesting to know the causal effect of TikTok use on the vote for Jordan Bardella in the European elections in June 2024. In the absence of scientific research, sorting algorithms in interviews provide us with some information. The people interviewed replied, 'We like Bardella, he makes videos.' In other words, you don't go to TikTok to find out about politics, but once you're there, you come across Bardella's videos and find him to be a likeable character. And since these internet users are generally insufficiently informed, this influences their vote.

**D. C.** Social networks do have effects on people who have very little interest in politics but can get caught up in it. Does this change the way they vote? That's uncertain, given that the mobilisation of non-voters can make a difference in election results.

**Digital technology also held out the promise of interaction by giving internet users the opportunity to react and express themselves.**

**D. C.** In this respect, we are retreating from the over-optimistic promises of the 2000s. For a high-profile digital medium, it is extremely difficult and very costly to manage genuine participation by internet users in open discussions. It needs to involve editorial journalists in interactions with web users and not delegate this activity to subcontractors who only exercise largely automated censorship. Such a policy of organised discussion with the public has become increasingly rare. In France, Mediapart is pretty much the only major media outlet to maintain such spaces, but it is very expensive. Its team of moderators is much larger than average. Most public interaction spaces on the web have closed down as a result of problems caused by certain commentators and by hate speech, and because they require a real commitment that editorial departments are not always prepared to make.

**J. C.** I believe these promises were a bit dangerous. If you give people what they want and only that, you run the risk of missing out on a lot of subjects. This is one of the reasons why the quality of information is better on radio than on television. Television assesses the audiences for its various programmes minute by minute to find out how the public responds to them, particularly in relation to advertising. Radio doesn't do this, precisely in order to avoid reacting too strongly to small variations in audience metrics.

**What is the impact of digital technology on the media business model?**

**J. C.** For years, the media's economic model was based on advertising and sales and subscriptions. The written press developed on this basis. The audiovisual sector relied mainly on advertising revenue, with some very marginal forays into producing and selling films, series and programmes. Digital technology has turned everything on its head, with a very small number of players capturing most of the advertising revenue and sometimes more than 100 per cent of the growth in the digital advertising market.

**D. C.** And the effectiveness of advertising is completely overestimated. Advertisers are aware of this, but they continue to buy advertising space because they see it as part of an influence strategy. The development of digital media has brought a cruel reality to light: brands have realised that they are paying too much for advertising and that they don't have to use the media to get their message across because a much more effective space has appeared: search engine results. The shift in advertising investment from the media to search engines has at least one positive effect: it has shown the media that the digital advertising business model is fragile and that it is important to combine quality information with a financial commitment from the consumer.

**J. C.** Digital technology very negatively impacted the print media, which, when the internet took off, made its content available free of charge, thinking that with advertising it could monetise what it was going to lose from subscriptions and sales. When *The New York Times* first switched to paid access before returning to the free model, people said, 'That just goes to show that the only solution is free', and so on. If I had written about these issues in the early 2000s, I might have made the same error of judgement. Today, however, the vast majority of traditional media, including *The New York Times*, have finally adopted the pay model. Only *The Guardian* remains free. This not-for-profit medium lives off substantial donations from readers. But, generally speaking, the written press is not recovering well from the move online, particularly among younger readers. When, for twenty years, you tell your readers that access to your site is free and then, from one day to the next, you tell them that they have to pay for it, things fall apart. Readers are not prepared to pay. Either they find ways of getting around paid access, or they stop consuming news. In the long term, another problem is funding television, whose advertising market will continue to shrink over time. Audiences are shrinking, including on digital terrestrial television, and there is no alternative funding model. Pay-TV channels will continue to exist, but on an ad hoc basis. This is a real problem. For example, when people ask whether, for environmental reasons, advertising for large cars should be banned, I'm spontaneously in favour. But then, what about the survival of channels and newsrooms that depend heavily on advertising revenue for their funding? We need to ask ourselves, collectively, how much money we are prepared to spend beyond public broadcasting, which receives very little advertising and that is all to the good. We already accept the idea of spending public money to fund quality public information. Are we prepared to accept the

*When it comes to disinformation, much attention has been paid to the factuality of statements, but little to the real issue: ideology.*

idea that we need more public money if we want a healthier overall model that is less dependent on advertising revenue? And what would we ask of the private media in return? Even models like *Le Monde* and *The New York Times*, which have more or less found their balance despite lower advertising revenues, remain quite fragile and are hit hard by every shock: the financial crisis, COVID-19, the exploding price of paper, etc. The reality is that there is no such thing as a healthy model. There is no actual economic equilibrium. That's why I defend the idea, as *The Guardian* does, that information is a public good. The readership is now too small to be able to sustain media production on its own. This is what happened in the United States, which became an information desert when the local press collapsed. It was only able to survive thanks to advertising. Subscriptions and sales of issues were never enough to keep local newspapers going.

**Turning to the most recent development, what is the impact of artificial intelligence (AI) on the media?**

**D. C.** Rather than being afraid of the impact of AI on the media, it is better to adopt a critical perspective on its uses. Some of them can be very interesting, such as the processing of documents and

# *Are we prepared to accept the idea that we need more public money if we want a healthier model that is less dependent on advertising revenue?*

information that cannot be processed by journalists because of a lack of time. Others can be dangerous, such as automating the writing of articles for commercial purposes or producing forgeries that are increasingly difficult to detect. Faced with the challenges of AI, as with all technological innovations, the question is not about being for or against it, but about drawing up a framework and rules to ensure that its use is ethical.

**J. C.** This is a potentially brilliant tool, but as with digital technology, the difficulty lies in knowing how best to use it. Once again, this raises the crucial question of regulation. What is powering the AI? Are the producers of the content it uses compensated? How is this content reused? Is it sourced? Another problem is that jobs are bound to disappear because of AI. Who will claim the resources that are freed up? How can we ensure that they produce quality information? How can we protect those who will lose their jobs? Finally, how can the benefits generated by AI be redistributed? This kind of tool favours those who are already digitally equipped and know how to use it, whereas if we don't train people or ensure that they have access to other jobs that match their skills, then a large number are bound to suffer.

**D. C.** AI raises classic issues of substitution of activities, as happened during industrialisation and after every technological innovation. What's new is that automation, which previously affected mechanical activities or very simple information processing, will increasingly involve complex cognitive activities.