A field guide to the future of media

Understanding how the tech giants are hijacking our minds, democracies, and societies – and finding the solutions that could shift power back to journalism

By Bjarke Calvin

Introduction:
We are stories

Humankind has a history of inventing amazing things and then using them in insane ways. From the first spear turned from a hunting tool into a weapon to the ability to splice the atom, using it to create a bomb that can destroy our entire world.

The history of storytelling, media, and journalism is no exception, and it started well before the Internet. As Ethan Zuckerman outlines in his book Digital Cosmopolitans, Ayatollah Khomeini seized power in Iran, not utilizing guns and bullets. He recorded his speeches onto audiotapes and smuggled them into the country. The Internet has merely amplified the tools of manipulation.

From pyramids to armies

Stories are the foundation of our species. It's through stories that Homo Sapiens rose to dominate the world. As historian Yuval Noah Harari points out in his book "Sapiens," by the power of storytelling, we could invent and shape common goals and motivate great masses of people to move in the same direction. Stories empowered us to build pyramids but also armies. They helped upend oppressive governments in Arab Spring at the beginning of the century and helped reinstate new oppressors a few years later.

Our stories reveal everything about that which we call the world. Near the French village of Montignac, the Lascaux cave conceals more than 600 wall paintings. The paintings represent primarily large animals and humans engaged in various social interactions. Estimated to be painted around 17,000 years ago, they are the combined efforts of many generations. The Lascaux paintings teach us about love, survival, and daily life at the dawn of what we call civilization.

They also teach us how technology and engineering always played a part in the way we tell stories. Whoever crafted the paintings knew about light and used it to create virtual reality effects. As the sun moves, the objects on the walls and ceilings appear to change position and shape in such a sophisticated way that it's hard to imagine this as coincidental.

A shared fiction

During my fellowship year, I followed a course in "Social Cognition," which is research into how our brains interpret the world. Why do we form tribes, create stereotypes and make assumptions and scenarios about people and events? This course confirmed that the stories we tell are central to being human.

The stories do not just inform us about the world of past cultures. They are our world. We perceive the world and ourselves through the stories we create. A large part of our so-called world is fiction created in our individual and collective minds. Money is an example of such a story. In physicality, there is no such thing as money – Only paper, round pieces of metal, plastic cards, and bits in computer networks. When we pass a piece of paper over the counter or swipe our plastic cards, it's only money because we agree it's money. It's turned from paper or plastic into a means of payment because we have a collective story calling it money.

Much of our world is collective stories. What we think is almost like a law of nature is nothing but a shared fiction. Natural laws like gravity are there whether we want it or not. Subjective feelings are individual to each of us. But the intersubjective reality is the stories we share. Like money, grades in school, or that you mean business when you wear a suit to work.

Who shapes the world

So how we shape our collective stories determines how we shape our world. Whoever shapes them shapes the world. In the recent past, the role famous journalists like Woodward and Bernstein owned this role and toppled US president Nixon in the watergate scandal. So did Sir Richard Attenborough, who taught millions about our natural heritage. Or photographers like Robert Capa and Philip Jones-Griffiths, who showed us how horrible war looked in Normandy and Vietnam. They were at the top of the storytelling food chain, and editors and the public alike would listen in awe when they reported.

Today this power to shape the world is embodied in a very different species of people. Like Facebook founder Mark Zuckerberg, Google masterminds Sergey Brin and Larry

Page, and Amazon billionaire Jeff Bezos. But it's actually about much more than these people. If single people could ever control and shape our stories, that era is long gone. The founders of the tech giants no longer control the systems and machinery they set in motion.

A few enormous companies harvest our collective and individual stories through millions of posts, photos, likes, shares, and other interactions. We are being tracked every time we touch, click, move, and speak. The machines and algorithms hold a deeper understanding of our minds and perceived reality than we ever had before in the history of humanity. They can make us see each other in new ways, experience new possibilities, and help our brains connect to build amazing new realities for the benefit of all living creatures. However, this is not what is happening at the moment.

Our collective brain
The original hope, promise, and vision of internet media were to be a tool of great enlightenment like none other had seen before. In 1998 when I started studying at the Danish School of Journalism, few newspapers had websites. Creating stories for the Internet was not even a tiny Flickr on my radar. My fellow students and I saw a future in writing for newspapers or reporting for broadcast media. At the end of 1999, I interned at the prominent Danish business daily, Børsen. I picked up a few interviews with some new companies called dot-com companies because none of the established staff reporters wanted that job.

It opened a new reality for me. I remember biking back from an interview with a couple of kids who had the idea of a film subscription service. The concept didn't take off because the technology was immature, but later someone called Reed Hastings founded a company called Netflix. His timing was better. The cold raindrops of the Copenhagen autumn skies hit my face, but something else also struck me.

The Internet was not just a tool to do old things in new ways. It was not a tool to distribute newspapers. It was the start of an entirely new way of telling stories that would upend how we connect. Since then, my mission has been figuring out this new storytelling language and how we can use it to benefit humans and the earth.

The general feeling back then was one of great optimism. We were convinced people would use the Internet to connect great spiritual and philosophical insights, the universal truths that lie beyond form and time, with science and thinking. It would be a tool for the crazy ones that change the world, like Einstein, Mother Teresa, and Pablo Picasso, as the famous Apple Commercial had stated a few years earlier in 1997.

The Internet did become our collective brain. It did enable the crazy ones to change the world. But unfortunately, not for the benefit of all humans. Maybe a few humans will benefit for a short while, but in the long run, even the people who captured and reshaped the Internet will suffer if we don't create a better version of our collective brain.

Chapter 2:
From regulation to innovation

When facing the consequences of social media and big tech, the default reaction from journalists is to call for regulation. While the proper legislation is undoubtedly beneficial, much more is needed to secure the future of journalism. Regulating big tech often leads to a less ideal internet for everyone without actually solving the problems of big tech. Cookie policies and GDPR have made browsing the Internet and sharing information cumbersome for all of us, but big tech is still thriving, and it isn't easy to see the actual benefits for consumers.

Instead, the journalistic media industry should focus more on innovation. The problem for journalism is not that tech companies like Google and Facebook stole the market, but rather that they created a new market that's much more attractive to new generations. At the same time, journalistic media stood passively and watched. Today newspapers and broadcasts are for the boomer generation. When traditional media celebrate that they have rising revenues from online subscriptions, it's not because they capture new viewers, listeners, and readers, but rather because they convert the old print generation to online services. The Reuters News Report confirms this picture and numerous other surveys as well. As Nic Newman, lead author of the Reuters Report, put it at a lounge talk during my fellowship: "It's improbable that anyone under 25 will ever get to a traditional newspaper".

I used a fair part of my fellowship dissecting where and how journalistic media should focus on change and innovation. I took classes with leading experts in teenagers' media habits, with experts in using data, and read papers on how we design media to manipulate our perception of the world. In addition, I had the opportunity to engage with numerous thought leaders and media practitioners in our weekly lounge meetings. This new food for thought was half of the equation. The other half was taking time to reflect and digest two decades of success and failures in my career.

Criticism and solutions

One of the classes that taught me much about media innovation was "Alternative Data Futures." Here we had the chance to dive deep into innovation frameworks and experience how difficult it is to make new technology behave as intended. But also how the positive impact of healthy innovation can empower humans.

Technology can lean two ways, a good one and a bad one, as investor and former MIT Medialab director Joi Ito once put it. Social media is making us more narrow-minded, greedy, and selfish, but the same networks that create this effect also have the ability to make us rise into a new human consciousness. We have seen the early tremors with Metoo, Black Lives Matter, The Arab Spring, and various other movements. Most media evolved from a dark place and ended up fueling significant advances in humanity. As Harari points out, one of the most popular books in the early days of the printing press was a guide to discovering, hunting, and burning witches. The early days of the book were not the enlightening writing of the great thinkers of the time.

Likewise, newspapers evolved from journalism that presented little or no legitimate, well-researched news. Two of the most celebrated people in modern journalism, Joseph Pulitzer and William Randolph Hearst, built their fortunes on newspapers that had more in common with social media propaganda and slander than serious journalism.

I am an optimist on behalf of journalism and the media industry. We can turn our shared stories and the means to tell them in the right direction. But building our bright future involves genuinely understanding the mechanics of internet media, being able to cover it critically, and also being able to identify and suggest solutions and alternatives.

You can boil innovation in journalism down to three areas: Data, content, and business models.

Not only can these three areas be evolved to secure the future of journalism. By better understanding these areas, journalists will be able to cover big tech and social media more constructively, and the industry will also be able to meet the demands of future media consumers in a way that can effectively counter social media.

Chapter 3
It's all about data:

Virtually all of the challenges we are facing, every thread that might wipe humans from the face of the earth, have to be tackled collectively. We cannot solve climate change on an individual level. We cannot solve nuclear weapons on an individual level. We cannot deal with artificial intelligence on an individual level. We need a profound realization of the way we are connected, the way everything is connected, and collective stories are a tool that can help us achieve this. They are also the primary tool for building the next world for humans. If we get there, chances are we enter a whole new realm of humanity, and if we don't, humans will become a mere parenthesis in earth's history.

Add social media to this reality, and it becomes toxic. Social media have become the servant of advertising, not of people. Consequently, we are becoming unconscious of each other, blocking or skewing the stories we use to evolve and survive as a species at a historical point where collaboration is more critical than ever.

Many of us are starting to realize this. Popular documentaries like "The Great Hack" and "The Social "Dilemma" explains how social media is destroying our democracy, society, and ultimately us. Academics, politicians, philosophers, and others are mapping and exposing the vast implications of the present media reality. The big question is if the age of social media is different than any other age, where we invented new things and had to use them properly. And the question is if social media is all bad or if there is just a need to shift the balance between gossip and enlightenment, as was the case with books, newspapers, television, and all other mediums of the past.

A unique point in history
I would argue that this is a unique and different situation in history. Few media platforms dominate unprecedentedly and direct an irrevocably flawed course for humanity. We complain about Facebook, populist politics, and the ugly side of humanity that Facebook fuels. Yet the next minute, we turn on our phones to check Instagram (which is Facebook in disguise). We lament how populist politics fueled by social media is destroying democracy, yet turn to message our friends on WhatsApp (Facebook in disguise). Colossal media outlets like The New York Times and The Guardian run editorial coverage and opinion pieces about the dangers of big tech companies yet share their content to Facebook and Google because they control much of the audience.

Each time we grab our devices and share our lives, we pave the road for more manipulation of our minds. We share our minds with the tech giants by carrying around our smartphones and tables and equipping our homes with smart devices. We are constantly adding small pieces of our brains that enable companies, politicians, and

others with egocentric interests to shape our collective stories, to move us to buy things and ideologies that are counterproductive to our evolution.

Hard to grasp
"Surely Facebook could have no interest in my little boring life," one of my co-fellows at Constructive Institute reacted when I suggested that we move our chat from Messenger to the privacy-oriented alternative called Signal. She is very bright and well-informed, but like most of us, she didn't immediately identify that it's not about her data. The problem lies in our collective data. When data from billions of people merge, artificial intelligence will know you better than you know yourself. Big tech companies can pinpoint which buttons to press to make you buy things, vote for people, and perform other actions.

When I use the term "they," it might sound like I refer to some dark lords somewhere in Silicon Valley, but actually, people play a secondary role in this. People created the code that enables the machines to learn who we are, to sketch our personality in the form of data. But no human fully grasps the inner mechanics of the artificial intelligence they created.

Storytelling in all its shapes and forms has an inherent element of manipulation. Sometimes for better, sometimes for worse. Sometimes the manipulation was done by brilliant statesmen in the interests of all humanity — other times by despots in the interests of the few. But never before has artificial intelligence powered the collective stories that shape our world. And never before has this power been in the hands of a handful of private corporations.

It's not just about giving us annoying targeted advertising. In 2010 Facebook experimented with 61 million adults during the US congressional elections, adding an "I voted" button to show how many of their friends voted. Two percent of the group would see nothing. The results were stunning. Facebook estimates that 20% more people voted because of social nudging. Arguably a good cause, but imagine what Facebook can do using this power in other ways.

As humans, it's difficult for us to grasp this almost invisible manipulation, and it's hard for us to react to a collective problem individually. It's like realizing that even though my one single plastic bag is not a problem, it becomes a problem when millions of people use plastic bags like me.

Inspiration from email

I've been arguing that regulation of the tech giants won't get us far. But there is one way politicians could make a huge impact and change the game completely. It's a solution that would fix the core of the problem instead of the current regulations like GDPR, which is just patching minor holes in a completely broken system.

Most countries have building regulations, ensuring that when architects and engineers design and construct buildings, they follow specific standards for security, environment, and aesthetics. We should approach data the same way. If you are designing and building anything with data, you should follow specific standards, which ensures that single entities can not own our collective data.

The way to do this is quite simple, and we have a great example: Email. Engineers build email so it would be accessible and stable for the benefit of everyone, rather than making it addictive and competitive to the benefit of a few shareholders. It was at a time when the Internet was not yet commercialized.

The central principle of email is that the email storage and the way you access the email are kept separate. Email is data stored in a specific format on a specialized computer called a "server." This server is owned and run by a hosting company. In the case of Gmail, the company is Google, and in the case of Exchange Mail, it's Microsoft, but thousands of companies are hosting email servers. You can even set up your own server if you have a few tech skills. When you want to read your email, you need a software client like Microsoft Outlook, Apple Mail, or Gmail. You either install it on your computer or mobile device or use it in your browser.

Here is the central point: You can use any software client with any email host. So if Google hosts your email data, you can use an email client from Apple or Microsoft to access your email. And if you want to move your email to another server or change the software you use to read it, it's relatively simple. So you are in control of your email and the services you use to read it.

Compare this to chat, which engineers designed when the Internet was becoming heavily commercialized. There is no way to access your WhatsApp messages in Messenger or Apple Messages – and there is no way to move all your chats from one service provider to another. The same goes for social media. It is not possible to view all your Instagram Photos on Snapchat.

Imagine that politicians decided to make it a requirement, to build all data storage on the Internet similar to email. This approach could change the power dynamics and move

it in favor of people and journalism. Imagine if you would have complete ownership and control of all your social media, including posts, likes, friends, photos, and more. If you wanted to move from Instagram to another service, it would be as simple as signing up for this new service, and everything would automatically follow.

It is not just a thought experiment. Tim Berners-Lee, the inventor of the World Wide Web, has launched a project that gives people a personal data vault. Service providers will have to ask for access to this vault. The project is called Solid, and it's currently building momentum worldwide. And there are numerous other projects with similar or aligned purposes.

Treat it like the climate crisis
So why don't a governing body like The European Union move in an obvious direction like this? When they can require all companies operating in the EU to abide by the rules of data storage outlined in the GDPR legislation, surely they could advance this to a much better framework for data?

This sort of regulation would have a tremendous impact on some of the world's largest tech corporations and the companies relying on the ecosystems they run. It would destroy the ability to make money on data and hence obliterate the revenue of Facebook and Google. It would shake the world's major stock exchanges and rattle shareholders, so politicians are up against enormous counter interests.

Nonetheless, it would only be a short-term collapse for the few but a tremendous long-term benefit for all of us. It should be the role of critical journalists to unveil and describe this again and again until the demand of the public moves politicians. If we need inspiration, we should look at the way the coverage of the climate crisis has evolved.

A look into the recipe
When Elon Mush announced his bid to buy Twitter, he also announced that his first action would be to open source the Twitter algorithm (at this time of writing this, Musk is in a legal battle, trying to back out of the deal). It makes all the sense in the world that Elon Musk went straight for the algorithm of Twitter, as the algorithms are central to our experiences of the world around us in the age of social media.

An algorithm is specific steps you follow to reach a particular result. Compare it to the steps in a cooking recipe. If you want to cook a dish, you start with some ingredients (the input), follow the steps in the recipe (the algorithm), and end up with a dish (the

output). In the case of social media, the algorithm looks at your behavioral and personal data (what you like, where you are located, your age, gender, etc.) and shows you a selection of content based on this.

So if data is the secret sauce, the algorithm is the recipe. If Twitter made its recipe open source, anyone with a bit of programming knowledge could decipher how Twitter is forming our worldview. And people across the globe would be able to manipulate the algorithm to give different results, potentially turning Twitter into a giant experiment of perception and giving us a new understanding of social media.

Google and Meta (the company behind Facebook) are time and again arguing that they are just platforms for people to share content, and they want to create a space for people to roam freely. But as long as they operate with opaque algorithms that the public has no way of examining, this is far from the truth. Nowadays, the algorithm has the role that the editor had in the old days of journalism. Only the algorithm is in some ways more potent because it relies on data from billions of people. While we could not effectively open source the brains of newspaper editors, we can open source the inner workings of social media algorithms. But again, it would endanger big tech companies' business models, so immense forces are working against this.

However, journalists could do much more to explain algorithms to the public, investigate what they do, and demand more openness in this field. Secondly, journalistic organizations could start experimenting with their algorithms and make them open to the public.

Imagine if you could trace your media consumption across newspapers and streaming and have a way to adjust what you would like to see. Or if the algorithm would poke you to expand your worldview instead of feeding you things that confirm your perception? We would get messages like: "Hello John, I know you think the boomer generation is taking too little responsibility for the planet. Here is an article explaining that this is not the case". "Hey Jane, I know you hate football, but here are ten ways of looking behind the surface of sports that might change your view of the game."

Visualizing data
As data have become a central part of everything in our society, the field of data visualization has expanded rapidly, and as virtual and augmented reality turns our world into immersive 3D experiences, the possibilities expand quickly. Presenting and exploring large amounts of data in graphical user interfaces is a vast area vastly under-explored by journalists and media. Media organizations should start

collaborating with designers to visualize massive amounts of media to give people a better understanding of context and connections. It would provide journalism with new tools for storytelling and diversify the press from social media.

Coupling algorithms with machine learning allows you to do amazing and scary things with content. Today I can download an app, find a speech by Barack Obama, and quickly swap my head with the former US president in a way that's almost impossible to decipher. It's called "deep fakes," and most of us have come across them. But the technology that creates deep fakes can be used to reveal and expose deep fakes much more effectively.

Soon, machine learning technology will also convert content so effectively that a journalist could produce a podcast, which the end user experience as a text article or the reverse. So we will approach a media world where formats are fluid.

Chapter 4:
Compassionate content

Too often, the debate about social media and data becomes about protecting the individual without bringing in the collective perspective. When journalists cover big tech, they must understand and explain the combined, exponential effects of data and algorithms, just like we have learned to do with climate crisis coverage.

However, even if we realize that using social media is a huge problem for democracy and society, most of us still don't quit Facebook and other social platforms. Why is it so difficult to leave? Ironically part of it is due to our collective stories. It's next to impossible for individuals to leave places like Facebook and Google. It's due to what scholars call the "network effect."

One of the first virtual social networks, if not the first, was the phone. But the phone had very little value for the first user or even the first thousand users. But slowly, when your entire network was on the phone, this new invention started to have tremendous value. Imagine that the phone had been a proprietary platform, owned and controlled by one company, and constructed in such a way, that if you bought a phone from another company, you wouldn't be able to call anyone. It would be challenging for you to leave your original phone provider. You would have to convince friends and colleagues to join you at the new phone company, and even if you did that, you would constantly run into people you couldn't reach.

Add to this the role of data. The more data a company has on its customers, the better equipped it is to release new products and market existing ones. Facebook has a terrifying amount of information about its users, so it can keep updating the social network to make it more addictive. Newer or less popular, social networks are working with less data and cannot compete for attention.

The network effect leads to a positive loop for the top competitor. Facebook has a lot of data and can use that data to make the site more appealing. In turn, this more attractive Facebook leads people to spend more time clicking and generates even more data. The same goes for companies like Google, Amazon, and LinkedIn. It says a lot that even a giant like Apple has struggled to create a convincing alternative to Google Maps on the iPhone. Apples Maps has a reputation for a better visual design but for serving less precise directions because Google has beaten Apple on data.

By now, a few big corporations own all the world's data. They have penetrated all corners of the Internet and siloed the data, leaving no room for competition. In their quest for higher earnings, they are hurting democracy and civic society. So how do we change this picture?

Legislation wont save journalism
The response from journalists and the media industry is one of two. Either to try and compete by creating an ever-increasing volume of clickbait. Or by asking politicians for regulation in favor of traditional media.

Social media dominate speed and clickbait content because they are engineered precisely for this, and for any traditional media outlet to select this strategy seems seriously desperate. While fundamental regulation can tilt internet media mechanics in favor of those who believe in enlightenment and unity, it's improbable that legislation alone will save journalism.

A high volume of content produced at high speeds with sensational headlines is not the future of journalism. Neither is political regulation of big tech. This picture became clearer during my year at Constructive Institute, mainly when interfacing with people outside the media industry. I had the chance to ask people like former Maersk chairman Jim Hagemann Snabe or startup founder Christian Erfurt from Be My Eyes about their take. Their answer to the future of media is diversifying strongly from social media.

People invented Social Media, so people can also invent the next step for media and tilt it in a way that serves society and democracy. In the early days of media, visionary leaders and public demand moved journalism from yellow paper gossip to the serious investigative reporting we have relied on for decades. It was not a coincidence. It was a conscious choice.

Go opposite of social media

Instead of competing for speed and sensation, journalistic media should go for trustworthy, high-quality content that leaves room for reflection. This product would be the opposite of what social media delivers.

Clickbait might work short-term for some media outlets, but it's highly doubtful it is a sustainable strategy for the long term. In the mid-seventies, Pepsi launched "The Pepsi Challenge" at shopping centers and other public locations across the US. Pepsi representatives asked people to blind taste test a small cup of Coca-Cola and one of Pepsi and subsequently rate the two. In the test, Pepsi repeatedly outscored Coca-Cola. In his book "Blink," Malcolm Gladwell presents evidence that Pepsi's success over Coca-Cola results from the flawed nature of the "sip test" method.

Pepsi contains more sugar than Coca-Cola, and generally, people prefer the more sugary beverage when taking just a sip. However, when drinking a whole bottle, people generally prefer the less sugary, which explains why Coco-Cola is still a much bigger brand than Pepsi. The Pepsi Challenge can be compared to journalistic media relying on clickbait. The numbers might be great short-term, but long-term, and with a deeper look, they most likely won't hold up.

Another kind of stories

During my fellowship, I had the chance to take a closer look at some of the overarching trends in social media behavior. In a class about the media habits of adolescents and young adults, I noticed something interesting. It seems there is a rising need for stories that are more genuinely human and authentic, as a counter to the celebrity-driven glossy stories of social media, where most of us try to convey perfect lives. This need for "compassionate stories" is probably also present in more mature audiences.

The exact definition of "compassionate stories" is difficult to pinpoint and could probably be the topic of an entire paper. Still, as journalists, we tend to know the type of stories that makes us see who we truly are as humans. In the US, a project like "The Moth" and "Story Corps" on NPR (National Public Radio) are examples of this rising trend, but also a project like "TED Talks" thrive on presenting new and surprising ideas

through the eyes of a profoundly human experience. In Denmark, a podcast like "Flyvende Tallerken" (Flying saucer) shows this direction when host Frederik Dirks Gottlieb and astrophysicist Anja C. Andersen give a very personal perspective on extraterrestrial life.

There is most likely a massive opportunity for journalistic media to tap into the trend of compassionate storytelling, as it would offer something unique that people can not find elsewhere. Not all journalistic genres and stories can use this approach, but it would create a general positioning.

Chapter 5:
Where the money grows

Journalists often argue that social media is destroying journalism by stealing the audience and the money. However, the tech giants never took anything away because nothing was there in the first place. The traditional media industry never had an answer to the news-hungry social media generation. Hence, the new generations had to turn to Facebook and the rest of the silicon-valley pack.

When we cover social media and big tech in general, we also have to start pointing inwards. What are the failures in the past couple of decades from journalistic media? Not to self-flagellate, but to understand where we can improve.

When we visited a prominent daily newspaper with Constructive Institute, the editor-in-chief said: "There is this collective delusion among newspaper journalists that the big omnibus newspapers are reaching everyone. But when you look at the numbers, they are only reaching a small niche of old people."

This statement might be a bit harsh, but there is a lot of truth to it. In a period where inventions like broadband, smartphones, artificial intelligence, augmented reality, and Blockchain all saw the light of day, media corporations are conducting their business like the first time they rolled off the printing press.

Beyond subscriptions
The media industry has stuck to variations of the old subscription model when looking for a business model for the Internet age. I have built media startups for a decade and developed a prominent online magazine for Magnum Photos in New York. We made money, sometimes even a lot of money, but looking back, it's clear that we never really

had a sustainable business model suited for the Internet era. We were limping by on the crutches of old media business models, which were easy for social media to disrupt with their data focus. At the same time, we didn't realize that big money is no longer in content but in interactions and relations. It was not just my team and me at Magnum, but the entire media industry.

During my fellowship, I started digging into very different models than traditional subscriptions and advertising, drawing inspiration from places other than journalism. Where are the new business models, and do they have common denominators that we can use for journalism?

It's essential to understand that the new audience for journalism, and storytelling in general, operates in a world without a clear line between consumer and creator. One day you are viewing a feed from the frontlines of Ukraine, and the next day you are mixing it into your coverage, which you share with your audience. Creation comes in many shapes and forms, from posting comments and remixing to creating original content for others to expand.

Unlocking creativity
Following the course "Media habits of adolescents and young adults" with professor Stine Liv Johansen gave me a chance to dig into some of the new media platforms outside journalism.

One of the typical traits I discovered is that unlocking people's creativity and helping them grow can be a fantastic business model for media. It dawned on me when I started analyzing gaming worlds like Roblox, Minecraft, and Fortnite. At first glance far from journalism, but at a second glance may be an outline of a future business model for journalism.

These gaming platforms are offering ways to enhance and evolve your avatar and your creations. They empower you to be a better version of yourself and monetize this service. You can often get there by doing work inside the game, or you can pay to shortcut the process.

Imagine we approached media this way? Media scholars like Provost Clay Shirky and professor Jay Rosen from NYU (New York University) have talked about the journalist as a mediator or facilitator for a century. The MeToo movement showed the power of journalists and citizens working together. Activist Tarana Burke initiated the hashtag, but it picked up immense speed when NY Times started reporting on the issue and

verifying stories shared on Twitter. However, articles from the Times could never have scaled to a global movement alone, and neither could a few tweets – but the combination was explosive.

What if we build journalistic platforms for this kind of mediation? What if citizens could earn money or rewards by contributing stories, research, and validation in a network mediated and steered by journalists? Not just comments to articles, but a deeply integrated process where the border between creator and consumer was blurred, just like social media and gaming platforms. It is by no means a new thought, but maybe the technology and thinking have reached the right maturity level.

It would provide entirely new business models for journalism - and mind you, the next generation of media users are no stranger to this. It's merely the journalists that are limited in their experience. So it would be fruitful for the entire publishing industry if more journalists started digging into these new models.

Rebuilding advertising
Journalists and other media professionals should dedicate much more time to exploring how advertising models can evolve. Social media have decided to harvest as much of our private data as possible by optimizing for polarization and sensation – and as social media users, we are fundamentally a means of production, like the cow delivering milk. Journalists could explore alternatives and suggest better ways.

Journalistic media organizations have more or less stayed with banner ad's even though this format is highly problematic. Most people hate banner ads, which is also why companies like Apple and Samsung are building ad blocking tools into their operating systems. But even worse, the banner ads are just as unethical as harvesting data from social media. When you see an ad in NY Times or your local newspaper, it does not come from the newspaper. They are merely the window of the ad. An online advertising network is tracing your browsing and serving you the ad. This setup explains why you will see an ad for trips to the Maldives next time you visit the NY Times if you just read about the Maldives elsewhere (the example is imaginary, but you get the picture). So, in essence, the traditional media corporations are just as flawed as social media, and it has a hypocritical ring to it when the journalists of those media outlets criticize Google and Facebook for harvesting data.

But what if the users kept ownership of their data and decided which ads they would like to see? Imagine a challenge where a selection of companies would compete to win the right to advertise to an online newspaper audience. The readers would vote on which

brand they would grant the rights to advertise, and maybe they would even receive part of the revenue. That would be empowerment. The example is imaginary, but it shows how much potential there is if journalists ask creative questions and media organizations start innovating and experimenting for real.

Epilogue:
A new beginning

A the start of the century, Facebook, Google, and Amazon transformed the Internet. It turned it from an open, experimental creative space into a highly commercial land of walled gardens that a few people own at the expense of everyone else. It brought us a lot of excellent products and features, like instant translation, navigation, and discovery of almost any information. But it came with the price of populism, polarization, and a more narrow worldview.

Until recently, it seemed improbable that we would change this anytime soon. Big tech had won the war, and there were no battles left. The journalist had to hope for a utopia. However, in the past year, it's become clear that Eden might not be so far away. The Internet seems to be entering a new era, and it is an open opportunity for journalists and the media industry to shape a better Internet. The new era is called Web3.

As a medium, the World Wide Web started with a bunch of chatrooms and blogs found with some patience and a bit of technical skill. This era was called Web1. In the mid-00s, Apple launched the iPhone, and suddenly you were constantly online and able to browse the web while on the go effectively. Google, Facebook, and Amazon were the first to exploit this new opportunity and became the new lords of the Internet, along with Apple. This era, where the web became centralized and effectively owned by a few corporations, is called Web2.

Now we are entering Web3, and the pendulum is again swinging towards decentralization. Of course, the rulers will not give up their lands without a fight, but it seems Web3 is gaining so much momentum that it will be unstoppable.

Beyond the Blockchain hype
The basis of Web3 is Blockchain, which some might recognize as the technology behind Bitcoin and a bunch of other cryptocurrencies. Most news stories connected to Blockchain focus on the sketchy, scammy nature of cryptocurrency. Or the suggestion that Blockchain is nothing but hype because nothing notable has yet grown from this

technology. But this is an unjust and biased picture, which journalists should put more research into dismantling.

Blockchain is an entirely new architecture that holds the potential to make the Internet much healthier and more useful for people in general. A new part of Blockchain is called Non-Fungible Tolkens or NFTs. The ultra-short explanation of an NFT is that it is a digital asset with a unique stamp certifying where it comes from and the history of ownership. This stamp is secured using Blockchain and is next to impossible to break. It has vast implications for the business models of journalism on the Internet because it introduces an effective way to trace rights and manage royalties in the digital realm.

People can "mint" an article, a photograph, and other journalistic assets as NFTs. This way, people can trace exactly where it comes from and which route it has traveled, making it much easier to eliminate fake news. Moreover, NFTs can have "smart contracts" embedded, enabling the creator of the asset to receive royalties. Creators can also use smart contracts to ensure their work is used in specific ways.

All technology holds the potential to tip in the wrong direction. Still, the media industry has a unique opportunity to tip Web3 in the right direction and to invent new business models using NFTs. Let's not miss the train like we did last decade. As a journalist, or anyone caring about journalism, you should deep dive into understanding this new technology, just as you would if Gutenberg himself presented you with his newly invented printing press.