

An Illustrated Field Guide to Social Media

Written and Edited by Chand Rajendra-Nicolucci & Ethan Zuckerman
Illustrated by Fiammetta Ghedini

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Foreword

Social media took center stage in discussions about U.S. politics and civic life during and after the 2020 presidential election. President Trump and his allies used Twitter and other tools to develop and advance the false narrative that the election had been stolen. Right-wing extremists organized on social media platforms to storm the U.S. Capitol on January 6 and briefly halted the official electoral vote count. Ultimately, Twitter and Facebook deplatformed the former president, sparking debates about the power these platforms have over speech online.

Is social media increasing political polarization in the United States and in other nations? Are conspiracy theorists and movements like QAnon incubating on social platforms? Can the algorithms of social media drag unsuspecting users into extremism? In short, is social media bad for democracy?

These are worthwhile questions, but they reflect a key blind spot. Because Facebook, Twitter, and YouTube are so prominent and are so widely amplified by mainstream media, we tend to assume that all social media operate in the same way and suffer from the same problems. This narrow view of social media not only limits our discussions about social media and its effects, it constrains our imagination about what social media could do or be. Our work on digital public infrastructures begins from the idea that we can build social media that works radically differently than Facebook, Twitter, and YouTube. Mapping the diverse range of social media "logics"—different ways social media can and does work—is proof positive that other worlds are possible.

This field guide is the result of a year-long exploration of social media platforms and practices. We set out looking for social media that works on a different "logic" than Facebook, Twitter, or YouTube. This led us to examine communities that have tried consciously to use different models than surveillance capitalism, like the crypto logic community and the creators of decentralized platforms. It also led us to reach out to collaborators in other countries and subcultures, leading to essays on Chinese and Russian social media, as well as an essay on gift logic in fanfiction communities.

We rely on the (partial, inadequate, and incomplete) indices of web-based popularity to identify other social media logics that surprised us with their popularity: question-and-answer platforms and forum-type social networks, for example. Our deep dive into the popularity rankings of social media reveals logics we've not yet written about, like social networks designed for the workplace. They also remind us that the landscape is ever-shifting, with networks like TikTok cementing their popularity

during the time of our study, forcing us to ask whether our categories need to expand to encompass new dimensions: Is a social network where you don't primarily follow friends a social network? Are algorithmically directed social networks their own thing, or are all social networks algorithmically directed to one extent or another?

It is important for us to disclaim—early and often—that this guide, originally published on the Knight First Amendment Institute's blog, is far from comprehensive. Not only are there logics we have not written about, there are logics we have not been smart enough to discern. The lines we've drawn are also not definitive. We don't believe that an ideal set of categories to understand social media is possible, and even if it were, we would have no reason to believe these are the correct categories. We use these categories because they allow us to talk about social media in different ways, acknowledging different combinations of business models, technical affordances, communities, norms, and other factors.

> **This field guide is not just an invitation to look, but to discover: new social media logics, new ways of classifying or talking about social networks.**

As our project developed over time, it became clear that we were creating a field guide. Much as a field guide to birds helps us look more closely at the birds we encounter on a walk through the woods, we hope this field guide might cause you to look at social media in a different way. To enliven the metaphor, we worked with the remarkable Fiammetta Ghedini of RIVA Illustrations to create a set of fancifully named avians to illustrate some of our favorite social media logics.

This field guide is not just an invitation to look, but to discover: new social media logics, new ways of classifying or talking about social networks. We hope this book may be a living guide and hope that more authors might join us over time, either to document new logics or to challenge the categories we've created. The main message we hope you will take away from this project is not that ours is a correct way of mapping the space of social media, but that social media is vastly more complex and diverse than we often conceive of it.

We celebrate this diversity consciously because we believe that having a too-limited

understanding of what social media is leads us to a too-limited vision of what social media can be. There is a diverse space of social media outside of the shadow of the major platforms, and we believe it is there where the key to a different future lies. As Ruha Benjamin says, "imagination is a battleground."[1] Currently, we are living in the imagination of venture capitalists, a few corporations, and Mark Zuckerberg. To break out of it, we will have to imagine something different. We hope this project will be a valuable contribution to that process.

Ethan Zuckerman

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1 Ruha Benjamin, assoc. professor Afr. Am. Stud., Princeton Univ., How Race and Technology 'Shape Each Other,' keynote address at Emerson University Teach-In on Race (Oct. 18, 2019) (https://today.emerson.edu/2019/10/18/ruha-benjamin-how-race-and-technology-shape-each-other/#:~:text=With%20that%20a%20third%20provocation,of%20technology%20and%20social%20order [https://perma.cc/5ZFK-BB99]).

Civic Logic



Avis Politicus

Civic Logic: Social media with opinion and purpose

It may be our best chance to build digital spaces that enhance our social and civic life

In late 2010, a young Egyptian named Wael Ghonim posted a Facebook page titled "We are all Khaled Said." The page called attention to the death of a young activist, tortured to death by Egyptian police. The page became the rallying point for protests against the Mubarak regime after Ghonim asked his readers when they were going to take to the streets like Tunisians had in overthrowing their government. As the movement grew, Mubarak reached out to Ghonim and asked him to pull "his people" from Tahrir Square and negotiate. Ghonim explained that they weren't "his people"—he had sparked a movement that grew organically and was far beyond his personal control. That movement succeeded in removing Mubarak from power by February 11, 2011.

Like many Egyptians who had supported the revolution, Ghonim was frustrated with the outcome—a transfer of power first to the Muslim Brotherhood and then back to the Egyptian army. The tools that were so powerful in bringing angry people out into the streets were far less useful in enabling careful deliberation about a way forward for the country. By 2015, Ghonim began to believe the limitations of tools like Facebook were responsible in part for misdirecting the energy of the Egyptian revolution. So Ghonim started a new social media network.

Parlio, the network Ghonim created, was explicitly designed for a different kind of conversation than those normally hosted on Facebook. It opened by invitation to a small group of political activists and community leaders in 2014, and Ghonim explained that the goal was not to reach a billion users, but to reach perhaps a hundred thousand young leaders. These leaders could connect to one another and develop their thinking about how to create lasting political change. Instead of positioning itself as a free speech zone where anything goes, Parlio offered an official etiquette statement:

> Be curious, open-minded, and civil. We want you to share opinions and experiences that strengthen the community's collective intelligence. We believe diversity of thought is a virtue, and we're here to learn new perspectives; not to win arguments. We are trying to define a new type of network. One void of Internet-trolling, where we can create a community of trust and respect that expands our horizons. Parlio values dissent, but above all else, civility.[1]

Parlio didn't last long—it opened to the general public in early 2015 and was acquired by question-answering social network Quora in early 2016. The conversations were remarkably civil and serious, but Parlio didn't replace Facebook for most of its users, and it had trouble building a stable, growing userbase. It remains useful as an example of some of the key traits of a social network built around a civic logic, where the goal is not to maximize profit or achieve a particular technical vision of decentralization or robustness. Social networks ordered around civic logics offer different affordances for different uses and may have different rule sets and revenue models. What they have in common is that they've got a specific social purpose behind them, and often a community that is a full participant in its own governance.

Different Affordances, Different Norms

Not far from Tahrir Square, Esra'a al Shafei was working to create another civic community in Manama, Bahrain, with a unique set of affordances and norms. As a Bahraini activist, al Shafei has created several online communities dedicated to freedom of expression. Mideast Tunes is a platform for underground musicians to share music for social change.[2] Crowdvoice.by encourages nonprofit organizations to amplify each other's campaigns and content. But in 2011, al Shafei was launching Ahwaa, a platform for LGBTQ+ youth in the Middle East—an especially challenging prospect given the social and legal threats to LGBTQ+ people from national governments in the region.

Ahwaa looks radically different from most social networks.[3] When you join, you create a cartoon avatar of yourself—it is forbidden to upload most photos, especially photos of yourself, as they could be used by the authorities to arrest or harass those depicted. Ahwaa is a gamified social network: You earn points by making comments or creating content that other users find helpful. Those points give you privileges, like the ability

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1 Parlio, Alchetron, https://alchetron.com/Parlio [https://perma.cc/B3P3-R4RS] (last updated Jan. 03, 2018).

2 *See generally* Mideast Tunes, https://mideastunes.com [https://perma.cc/VE2C-32AG] (last visited Nov. 28, 2021).

3 *See generally* Majal: Ahwaa, https://majal.org/ahwaa [https://perma.cc/G7H7-NFA8] (last visited Nov. 28, 2021).

to host chat rooms or send private messages. The system aims to insulate users from harassment, making it difficult for a troll to access sensitive content.

Ahwaa is not for everyone—most users would prefer to make friends in an environment where they can share photos of themselves. But that's really the point of networks that operate on civic logics. They're not for everyone, not for every use case, but they provide critically important spaces for conversations that are difficult to hold elsewhere, and which make us richer and more resilient as a society. If an aspect of Facebook logic is that a platform should be able to support 2 billion people and their various needs, one aspect of civic logic is that it's OK for a network to support only 20 people if those people have a real need for an online community space. Civic networks are easy to ignore because they likely cannot or should not scale to many millions of users. Instead, they are likely limited to communities of a few dozen to a few thousand, communities that can meet and dialog in person with a minimum of structure to provide representation and coordination.

Civic networks may demand participation in very different ways than we're used to interacting on social networks. Gell.com is a network designed to surface the best arguments on both sides of controversial political issues. A typical Gell page might feature a divisive question—Should travel bans be imposed due to coronavirus?—and a set of arguments for and against, each voted on by participants in the system. While the site invites participation, that participation is carefully scaffolded—you are giving your opinion on an issue or your thoughts about the merits of someone's argument. The site's CEO, Loren Bendele, noted in conversation with me (Ethan Zuckerman) that these affordances mean they have far less abusive behavior and remove less content than standard social networks, which is especially impressive given the political nature of the content. Gell might have more users and more engagement if they didn't manage participation so carefully, but the civic goals of the network are well served by the careful rule sets.

We can see these limits on engagement even more explicitly in platforms like vTaiwan that aim to facilitate direct participation in government.[4] vTaiwan and a similar platform called Decidim rose out of direct democracy movements in Taiwan and Barcelona, respectively.[5] On vTaiwan (which uses the open source tool Polis to host debate[6]) users cannot reply to posts. Instead, they participate solely through stand-alone

4 *See generally* vTaiwan, https://info.vtaiwan.tw/ [https://perma.cc/L64J-JNGP] (last visited Nov. 28, 2021).

5 *See generally* Decidim, https://decidim.org/ [https://perma.cc/2WB8-JQ87] (last visited Nov. 28, 2021).

6 *See generally* Polis, https://pol.is/home [https://perma.cc/Q8MP-JT66] (last visited Nov. 28, 2021).

posts. This is meant to discourage trolls and encourage constructive conversation. Additionally, vTaiwan uses upvotes and downvotes on posts to generate a map of the debate, creating clusters of people who voted similarly. The clusters show where there are divides and where there is consensus. People then try to draft comments that win upvotes from both sides of a divide, bringing them closer together. As Taiwan's Digital Minister Audrey Tang puts it, "If you show people the face of the crowd, and if you take away the reply button, then people stop wasting time on divisive statements."[7] vTaiwan was used to debate how to regulate Uber in Taiwan. Within a few days, the debate had settled into two groups, one pro-Uber and one anti-Uber. However, as the groups looked to attract more supporters, their members started posting things that everyone could agree on. In the end, a set of seven posts emerged with almost universal approval and informed the new regulations Taiwan implemented.

Platforms like vTaiwan could be the town squares of the civic logic ecosystem, serving as meticulously designed spaces that host larger conversations and encourage groups who spend much of their time in separate networks to connect. This could address concerns that smaller civic networks would become echo chambers and offer an alternative to taking to Facebook and Twitter when people want to engage in a larger debate. On the other hand, the demands of participating in these carefully constructed spaces and the lack of formal power can end up turning off many users. vTaiwan has 200,000 participants in a nation of 23 million, and while it is widely celebrated for helping to open a new era in participatory democracy, even its creators admit that it is a "tiger without teeth."

Who Makes the Rules?

Parlio, Ahwaa, Gell, and vTaiwan represent the civic visions of their founders—in each case, a passionate founder had a vision for how online conversations could operate differently. But the most subversive idea about how networks could act as civic spaces may come from a site often in the news for its most toxic communities: Reddit. The interlocking message boards of Reddit are collectively one of the most popular social media spaces online. While there are rules of the road that govern Reddit as a whole, and the site's owners periodically purge the site of "subreddits" that frequently break the rules, most of the governance of the site is handled by volunteer administrators for each subcommunity.

Some of these rules can seem trivial: On the popular /r/aww community where people

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7 Chris Horton, *V the People: Can Taiwan's Experiment in Participatory Lawmaking Teach the World Anything About the Future of Governing,* MIT Tech. Rev., Sept. 1, 2018, at 77.

share cute and funny pictures of animals, you cannot post images of pets that are dying, sick, or just back from the vet—there is a blanket ban on "sad" content.[8] Want bittersweet animal content? Start your own subreddit. Or become a moderator on /r/aww and lobby the other admins for your position. It might take a while—the most popular subreddits like /r/aww, which new Reddit users are subscribed to by default, usually only recruit experienced moderators, so you may have to warm up in the minor leagues first.[9]

Reddit is far from a model democracy—not all moderators poll their users before making changes to a subreddit's rules, and "drama" on Reddit often comes from moderators who make decisions out of step with their community's desires. But well-moderated corners of Reddit may serve as a model for how communities can make and enforce their own rules about acceptable online behavior with little outside supervision.

This, in turn, represents another way in which civic logic digital spaces could help our overall civic culture. While sites like Gell or Parlio encourage us to engage in certain types of productive conversation, Reddit offers practice in the day-to-day use of our civic muscles. Moderators put hundreds of (unpaid) hours into mediating online conversations. In the process, they get a practical education in politics, much like the people celebrated by Robert Putnam who ran neighborhood organizations like the Elks Lodge or the local bowling league.[10] Putnam worried that without these institutions to socialize us into running good meetings, compromising on controversial issues, and listening to those we disagree with, our ability to be good citizens would erode. Participating in online communities that take participatory civics seriously seems like a worthy way to exercise those neglected muscles.

(Is Reddit best understood as a civic logic social network? Probably not. Its core goal is building community around subcultures. But its governance model represents one of the most successful implementations of a civic vision of governance.)

Are Civic Networks Viable?

By conventional metrics of userbase or ad sales, the answer is simple: no. Networks like Gell and Ahwaa have barely enough traffic to register on measurement sites like

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8 (u/careless), REDDIT (Sept. 6, 2015, 5:15 PM), https://www.reddit.com/r/aww/comments/3jwc3e/rules_updated_rules_for_raww_please_read/ [https://perma.cc/B9H2-YZNR].

9 Robert Peck, *The Punishing Ecstasy of Being a Reddit Moderator,* WIRED (Mar. 13, 2019, 6:00 AM), https://www.wired.com/story/the-punishing-ecstasy-of-being-a-reddit-moderator/ [https://perma.cc/G9PG-VXP8].

10 ROBERT D. PUTNAM, BOWLING ALONE: THE COLLAPSE AND REVIVAL OF AMERICAN COMMUNITY (2001).

Alexa. They are unable to cover costs through advertising and most cannot rely on venture capital investment to grow their communities until they are viable.

But what does viable mean? If we accept that the goal of running a site that operates on civic logic is not to make money, but to nurture and support a community, viability might equal survivability. Medium-traffic image boards (tens of thousands of users) routinely run using volunteer labor at costs of a few hundred dollars a month. At these levels, subscription revenues could easily keep a site afloat.

But survival is a low bar to clear. The exciting possible future for civic logic networks is that they become regarded as public goods—aspects of our social infrastructure that are so important that we choose to support them through taxpayer dollars or through community giving, the way we support libraries and public parks.

Getting there won't be easy. The early attempts at civic logic are inspiring and have demonstrated the value of similar projects. But it's still too hard to create an independent civic logic space. You need a significant amount of technical work and money to build a platform, launch a community, gather users, and moderate the conversation. To truly enable a flowering of civic life online, we need tools and resources that enable civic groups with minimal technical expertise and money to spin up their own social media spaces.

Further, we have to address the problem of network effects and scarce attention. If you are a regular user of Facebook, it may not be because you think the network's tools are the most effective or that the community's values align perfectly with your own. You may be there because many of your friends and family are there. A new civic network has to fight for your attention, peeling a fraction of it away from Facebook to bring you into a new and different space. Most projects have set themselves up beside existing social networks and hoped to lure participants in, like a town meeting hosted between two busy bars, hoping to lure in stray patrons. Instead, these new networks may need to interoperate with existing networks, bringing highlights of their discussions into existing conversations and inviting participants to join in without forsaking their existing social ties. The Gobo project at the Initiative for Digital Public Infrastructure is building a social media client that's compatible both with new civic logic networks and with existing networks in the hopes that users will dip in and out of these new spaces.[11]

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11 MIT Media Lab: Project Gobo, https://www.media.mit.edu/projects/gobo/overview/ [https://perma.cc/FJJ3-Q7RA] (last visited Nov. 28, 2021).

Right now, many of our online interactions take place in the digital equivalent of a shopping mall. Controlled by corporations and designed to maximize advertising revenue, they sometimes host civic discussions, but they aren't real civic spaces. There is clearly an opportunity to build a better future, one that commits to digital spaces that enhance our social and civic life, one that gives communities control over where and how they come together online. We need to learn from the successes and failures of the civic platforms that have come before if we hope to exit the shopping mall and enter the park.

Local Logic



Communitarius Nimby

Local Logic: It's not always a beautiful day in the neighborhood

The advantages and disadvantages of local platforms and their potential to support healthy communities on and offline

Cameron Childs' parents own a beach house in Bethany Beach, Delaware. He told reporters at The Root that one day his wife and daughter, both of whom are Black, headed there for a vacation. Later that same day, Cameron received an alert on Nextdoor, the local social network, titled "Spook Alert," a phrase used by his neighbors in Bethany Beach when Black people are spotted in the neighborhood. As he read the posts, he realized that the alert was about his wife and daughter, who had just arrived at the beach house. Someone had already called the police to report a "suspicious woman" trying to break in. Thankfully, the investigation ended quickly when Cameron's wife explained the situation to the police, and they left.[1]

Unfortunately, Cameron's story is rather common on Nextdoor. Another story from the same article describes a man who often walks home from work late at night waking up to see Nextdoor posts describing him as a "dark, suspicious man" casing houses and cars. The discussion culminated in people cheering on a fellow neighbor who said he took his gun and drove around to investigate.

Naked racism isn't the only thing that happens on Nextdoor. Sometimes a photo of a dead hawk sparks a four-month-long debate.[2] Or a lost pet is found, and outgrown bicycles are given away. Nextdoor's hyperlocal and often toxic mixture of content has

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1 Michael Harriot, *The Racist Nextdoor*, Root (June 28, 2019, 11:17 AM), https://www.theroot.com/the-racist-nextdoor-1835939264 [https://perma.cc/2TZZ-CH8X].

2 Morgan Clendaniel, *Inside Nextdoor's Wild 2020, from Essential Service to a Reckoning on Racism*, Fast Co. (Oct. 14, 2020), https://www.fastcompany.com/90560430/inside-nextdoors-wild-2020-from-essential-service-to-a-reckoning-on-racism [https://perma.cc/H77W-5G6F].

led it to be described as "a home for racial profiling" and "Twitter for old people."[3]

Nextdoor's mission is to help "cultivate a kinder world where everyone has a neighborhood they can rely on." Why does that laudable goal often take a backseat to racialized paranoia, exhausting debates, and absurd pettiness? Taking a look at an alternative may help.

Front Porch Forum (FPF) is a local social network that's been described as "a model for online communities."[4] It serves every town in Vermont and a few in New York, Massachusetts, and New Hampshire. Michael Wood-Lewis and his wife Valerie got the idea for FPF in 2000 after they moved to Burlington, Vermont, from Washington, D.C.[5] Their son had developed cerebral palsy, and they realized they needed support from their neighbors. However, they struggled to build connections with the community—something flinty and taciturn Vermonters are somewhat famous for.

Wood-Lewis thought the forum would make it easier to connect with neighbors and for newcomers to become locals. It was a hit, and by 2006, the forum began to expand to other towns in Vermont. The growth was organic: Typically, towns would approach FPF and pay a one-time fee to cover the startup cost for their town. Eventually, with the help of two government grants, FPF expanded statewide.

That organic growth was key to maintaining one of the key differences between FPF and Nextdoor: proactive moderation. FPF uses a team of moderators that review each post to make sure it adheres to the site's code of conduct (which bars personal attacks and behavior "counter to its community-building mission") before it's posted. That helps to keep the discussion friendly and constructive. In contrast, on Nextdoor, moderation is done reactively and largely handled by volunteers. The person who starts their neighborhood's forum is moderator by default, and crucially, moderators enjoy a monopoly over their neighborhood's forum. People can't create a different forum for their neighborhood if they disagree with their moderators' practices. That's

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3 Pendarvis Harshaw, *Nextdoor, the Social Network for Neighbors, Is Becoming a Home for Racial Profiling*, Splinter (Mar. 24, 2014, 10:02 AM), https://splinternews.com/nextdoor-the-social-network-for-neighbors-is-becoming-1793846596 [https://perma.cc/VNU2-GZXB]; Nisa Ahmad, *Why I Quit the Nextdoor Neighbor App.*, Medium (June 16, 2018), https://medium.com/@MzAhmad/why-i-quit-the-nextdoor-neighbor-app-fcb64bfa1eae [https://perma.cc/8R3U-FDMB].

4 Front Porch F., https://frontporchforum.com/ [https://perma.cc/YH7G-SWYZ] (last visited Nov. 28, 2021).

5 Andrew Liptak, *How a Vermont Social Network Became a Model for Online Communities*, Verge (Jan. 24, 2019, 10:00 AM), https://www.theverge.com/2019/1/24/18129437/front-porch-forum-vermont-social-network-listserv-local-online-community [https://perma.cc/4AFL-T44H].

true with FPF as well, but instead of dealing with potentially hostile neighbors when you have an issue, you can appeal to professional moderators who have an incentive to keep you on the platform. Nextdoor's governance structure means moderation can be messy, frustrating, and biased. For example, in the wake of the George Floyd protests, there were many reports of people being banned or having posts deleted when they advocated for solidarity with protestors while racist and inflammatory posts went unpunished.[6] Without the ability to create a competing forum or contribute to their forum's governance, disaffected users either have to grit their teeth and accept the rules or leave the platform altogether.

Another key difference is in the affordances of each platform. Nextdoor is like most social media: As soon as you post something, it appears on the platform. That means posts and comments can quickly devolve. However, on FPF, instead of making content immediately available online, posts and replies are published once a day. It's like a local newspaper landing on front porches at the same time every day. The slower pace encourages users to think more about what they're saying, and FPF has even had people contact them asking to retract a comment before it appeared the next day.

Is FPF replicable? Or is it a product of northern New England's social norms, and relative ethnic and cultural homogeneity? The answer may become clearer as FPF expands, but for now, we are optimistic that it is replicable. We believe a platform that takes governance seriously, is designed for a specific purpose, and has ties to the communities it serves can be successful anywhere. FPF may be more polite or less political than other sites because of the region it serves, but that doesn't mean the model couldn't work elsewhere. A similar forum in New York City may be home to more profanity and casual conflict, but that's not necessarily an issue if it reflects the norms of the community it serves.

Local social media platforms like Nextdoor and FPF fall under what we will call "local logic." Local logic platforms share many of the characteristics of other social media platforms, except posts and communities are restricted to a local area that can be as small as a city block and as big as a rural town. They also tend to have strict identity requirements.

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6 Makena Kelly, *Inside Nextdoor's 'Karen Problem,'* VERGE (June 8, 2020, 1:44 PM), https://www.theverge.com/21283993/nextdoor-app-racism-community-moderation-guidance-protests, [https://perma.cc/7N24-APXC].

Figure 1. Axes of social media platforms

Technology	Revenue Model	Ideology	Governance	Affordances
The underlying technical architecture	How a platform pays the bills (subscriptions, crypto, donations, taxpayers, ads)	A platform's purpose	How a platform decides what speech and behavior is acceptable, and how it enforces those rules	The functionality a platform offers users

Using our evolving set of axes, or facets of a social media platform (see Figure 1 above), we can further analyze the characteristics of local logic platforms:

- Technology—centralized
- Revenue model—varied, but advertising is promising
- Ideology—social media organized around local communities
- Governance—varied, typically require proof of real identity
- Affordances—varied

Technology. Most local platforms use centralized technology, storing posts and user data in centralized databases. This is largely due to the business advantages of storing content and data centrally—companies are able to control their product and experience. However, it also makes sense because decentralization would be difficult for local platforms. Most towns and neighborhoods lack the resources to spin up their own site on a decentralized network. It's much easier for a company to invest in building a site and then offer it to many different localities. That's unfortunate because local social media with its thousands of unique communities could be a perfect place for decentralized tech to take hold. For example, different local communities may need different affordances from their platforms—a great use case for decentralized networks. Addressing the challenges of making decentralization work for local logic platforms is a priority for the Initiative for Digital Public Infrastructure.[7]

Revenue model. Varied. Some, like Nextdoor, rely on advertisements. Some, like Mycoop, rely on subscriptions. Some, like Neighbors (which is part of Amazon Ring), are cross-subsidized. FPF relies mostly on advertisements, which it supplements

7 Initiative for Digital Public Infrastructure, https://publicinfrastructure.org/, [https://perma.cc/YXC2-5VJH] (last visited Nov. 28, 2021).

with subscriptions for politicians and local governments, and donations. Also, as we mentioned above, FPF grew thanks to two government grants. Local platforms can offer advertisements with a great deal of certainty that they will be targeted locally and be seen by a lot of people. Local platforms that work in cooperation with local newspapers may be able to create a new revenue stream for local journalism.

Ideology. Local platforms aim to provide a social media experience that is organized around local communities. Local communities offer an experience that people can't get from other types of online communities. Discussions about lost pets, local politics, crime, handymen, and block parties are best had with neighbors, not a dispersed community of offline strangers.

Mark Zuckerberg crudely explained part of the appeal of local platforms when he told colleagues "a squirrel dying in your front yard may be more relevant to your interests right now than people dying in Africa."[8] Local logic recognizes the truth of this but also recognizes that it will always be a complement to platforms that focus on a broader set of concerns—Facebook's "global community" will still dominate our attention.

Governance. There isn't a settled governance model for local platforms. Some are centrally moderated like FPF and Neighbors (though FPF takes a much more proactive approach to moderation than most). Some are moderated by volunteers, like on Nextdoor. However, most local platforms require real names and proof of residence. For example, Nextdoor either verifies that your mobile phone plan's billing address matches the address you use on Nextdoor, or it mails a letter containing a verification code to the address.[9]

Because local platforms verify that users live in the same community and typically require users to use their real names, you would think they would be free of much of the harmful content and governance problems that plague other social media platforms. In some ways that's true. Local platforms face less of a threat from pseudonymous trolls and explicit content thanks to identity requirements. However, when governance is an afterthought, local social media can be hellish: the worst

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8 Uptin Saiidi, *Why Mark Zuckerberg's New Year Resolution is His Most Important One Yet*, CNBC (Jan. 10, 2017, 4:39 AM), https://www.cnbc.com/2017/01/10/why-mark-zuckerbergs-new-year-resolution-is-his-most-important-one-yet.html [https://perma.cc/AQK2-4346].

9 Nextdoor, *How to Verify Your Address*, Nextdoor Help Ctr., https://help.nextdoor.com/s/article/How-to-verify-your-address?language=en_US (last visited Mar. 24, 2022).

of Facebook but more closely connected to people's offline lives and more easily translated into real-world action. Just like it's easier to inspire people to look for a lost pet on local platforms, it's easier to inspire people to grab a gun and go looking for a "suspicious" person.

Nextdoor's monopolized volunteer moderation is particularly susceptible to such issues.[10] FPF's proactive moderation and slower pace works well but is less dynamic, which means that many local conversations are likely held elsewhere. NABUR, a platform developed by a family-owned network of newspapers based in Arizona, is a local platform that is trying to split the difference.[11] It looks and functions like Nextdoor or a local Facebook group, but it's organized around community newspapers and is moderated by local journalists—the hope being that local journalists' domain expertise, ties to the community, and established trust will make it a better place to discuss local issues than Nextdoor or Facebook.

Affordances. The affordances vary widely on local logic platforms. Nextdoor looks a lot like Facebook. FPF looks like a typical online forum, except it uploads new content once a day. Neighbors is centered around recorded clips from Ring doorbells, suggesting a surveillance-based version of YouTube.

Local communities are in many ways the ideal use case for social media. Platforms organized around local communities have inherent structures that support healthy discussion, like reputation and identity; they connect people who have shared interests and common goals; and they enable real-world community building. However, they are also prone to misinformation, paranoia, racism, and petty conflict, which can make them spaces that breed division, not unity. Which way a platform leans comes down largely to its governance and affordances. As we saw with FPF and Nextdoor, two platforms with very similar goals can be very different experiences thanks to differences along those two axes.

If there's a broader lesson from local logic platforms, it's that solving the "identity problem" will not remove bad behavior from social media. People are very capable of being racist idiots even when everyone knows who they are and where they live.

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10 Rebecca Heilweil, *The Messy Politics of Nextdoor*, Vox (Oct. 26, 2020, 8:00 AM), https://www.vox.com/recode/21526163/nextdoor-politics-misinformation-voting-election-2020 [https://perma.cc/64TX-PAPE].

11 HeraldReviewMedia, *NABUR: The Neighborhood Alliance for Better Understanding and Respect*, YouTube (Nov. 17, 2020), https://www.youtube.com/watch?v=ducoaqqqMBw [https://perma.cc/E9YE-66B3].

Good governance goes way beyond making people's identities visible—it requires real thought about what speech is encouraged and shunned, what the consequences for harmful speech should be, and how design choices interact with it all.

Getting local social media right is important. Local platforms present an opportunity to strengthen social capital and civic life. At their best, they can keep residents informed about local issues, encourage civic organizing and action, and facilitate new connections and greater understanding. For all the negative stories about Nextdoor, there are plenty of examples like this: Syrian refugees in St. Louis who met a local through Nextdoor and created an organization that feeds the homeless and hosts a supper club; a woman in Georgia who saw a Nextdoor post about a Black man being called a racial slur in her community and created an organization that brings people together to talk about racism.[12] FPF has a whole blog dedicated to documenting the kindness and community the platform has fostered.[13] The potential for local platforms to be positive spaces is clearly there—the key is building them in ways that encourage the best of us as neighbors, not the worst.

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12 Shannon Toliver, *More in Common: 3 Inspiring Nextdoor Neighbors Overcoming Differences*, Nextdoor Blog (Aug. 10, 2020), https://blog.nextdoor.com/2020/08/10/more-in-common-3-inspiring-nextdoor-neighbors-overcoming-differences/ [https://perma.cc/HG38-PSYE].

13 Front Porch F.: Ghost of Midnight, https://blog.frontporchforum.com/ [https://perma.cc/CG3D-ZVLV] (last updated Mar. 7, 2022).



Decentralized Logic

Chand Rajendra-Nicolucci & Ethan Zuckerman

Decentralized Logic: What if social media worked more like email?

Hearkening back to the internet's good ol' days with decentralized networks

When progressive lawyer Sanjay Hegde had his account suspended twice by Twitter, it sparked a national discussion about Twitter's moderation practices in India.[1] Many argued the platform discriminated against minorities, particularly Dalits (formerly untouchables), citing routine suspensions for activists and writers while trends started by Hindu nationalists like #BoycottAllMuslims were allowed to continue. In response, a number of Indian Twitter users shifted to mstdn.social, a server ("instance") on Mastodon, a decentralized alternative to Twitter.[2]

This sequence of events—a group finds dominant platforms unsuitable (often due to bans) and decides to migrate to an alternative that promises autonomy—is a common way users migrate to decentralized social media platforms like Mastodon. In fact, these marginal groups make up a large part of their userbase. Some of the most popular instances on Mastodon, with hundreds of thousands of users each, were created through a similar cycle: One instance hosts the hateful far-right community Gab, while other instances are dedicated to lolicon (sexually suggestive drawings of children), and another instance serves as a replacement for Backpage, a community for sex workers.[3] Decentralized platforms make it possible to create online communities

1 *Twitter in India: Why Was Rival Mastodon Trending?*, BBC News (Nov. 8, 2019), https://www.bbc.com/news/world-asia-india-50343054 [https://perma.cc/US77-WTBP].

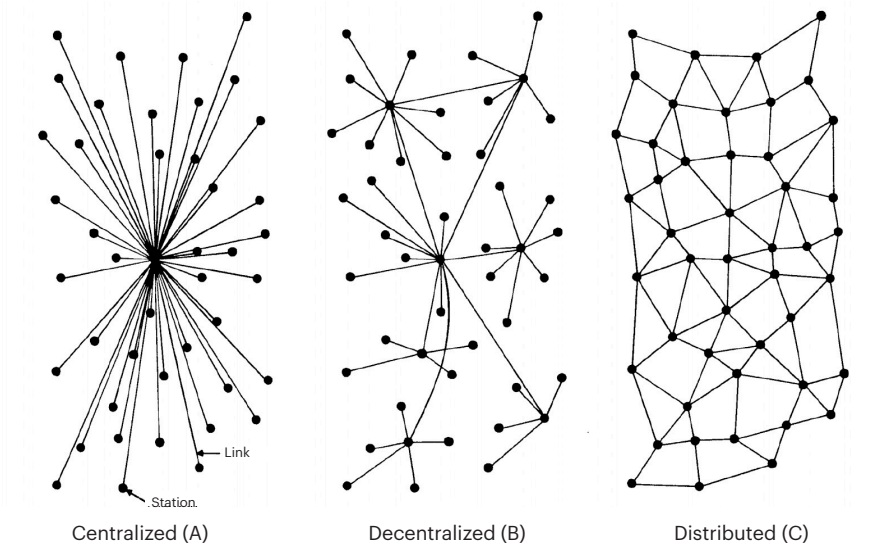
2 Manavi Kapur, *This Chart from Mastodon's Creator Shows Just How Angry Some Indian Twitter Users Are*, Quartz India (Nov. 12, 2019), https://qz.com/india/1746734/angry-twitter-india-users-are-migrating-to-mastodon-in-thousands/ [https://perma.cc/F255-25VZ].

3 *Mastodon Is Big in Japan. The Reason Why Is...Uncomfortable*, Ethan Zuckerman (Aug. 18, 2017), https://ethanzuckerman.com/2017/08/18/mastodon-is-big-in-japan-the-reason-why-is-uncomfortable/ [https://perma.cc/LE2M-DBZC]. For more on Mastodon instances, see Mastodon instances,

with all sorts of different rules while retaining the ability to interoperate with existing networks.

As we've begun our work on mapping social media, several alternatives to "Facebook logic" have become clear. Mastodon is an example of a platform that falls under what we will call "decentralized" logic. This group of platforms uses decentralized technology such as federation or peer-to-peer protocols. Federation means that users interact with an external server like when you use Twitter or Facebook, but instead of being limited to a single company, anyone can run a server that interoperates with the network, giving users more providers to choose from. Peer-to-peer protocols make everyone's device a server, completely decentralizing the network. Relying on decentralized technology means that these platforms typically emphasize autonomy and privacy. This is enforced by design—there is no central entity that controls user data, meaning centralized governance and surveillant advertising in the tradition of Facebook are essentially impossible. (This lack of control has downsides, as we will explore below.)

Figure 2. Centralized, decentralized, and distributed networks [4]



https://instances.social/ [https://perma.cc/ZZ7D-984P] (last visited Nov. 28, 2021).

4 Paul Baran, On Distributed Networks: I. Introduction to Distributed Communications Networks (Memorandum RM-3420-PR) 2 (Aug. 1964), https://www.rand.org/content/dam/rand/pubs research_memoranda/2006/RM3420.pdf [https://perma.cc/N5LY-VDUF].

Decentralized platforms may be worth a close look in the wake of the recent controversy over Twitter's and Facebook's reactions to a New York Post article about Hunter Biden. Twitter took the "nuclear option," preventing people from linking to the Post article and locking accounts of those who posted links.[5] It later backed down from this stance, changing a policy on hacked materials.[6]

Proponents of decentralized platforms like Mastodon would likely argue that the situation highlights exactly why we need alternatives to Twitter or Facebook. Instead of one company dictating the rules for everyone, on decentralized social media a wide array of instances would have reacted in their own ways. Some might have banned posts with the link, but others would have chosen not to, allowing anyone to share the link. Others may have allowed it to be shared but inserted context about the story with each post. Users upset with their instance's handling of the story could move to a different instance without losing access to the wider network.

This gets at the heart of the argument for decentralized platforms, which can be summed up like this: What if social media worked more like email?

Email is an unsung hero, allowing people to send rich messages to anyone with an internet connection. Even more impressive in our age of walled gardens is that you can use a wide variety of competing services to send and receive messages. You can send email from an Outlook account to a Gmail account. You can leave Gmail but still use your Gmail account with Apple Mail. You can use a service that offers unique functionality and features like Hey!, Superhuman, or Protonmail. You can take advantage of any number of third-party apps like Boomerang, SaneBox, and MixMax. As a result of email's ubiquity and usability, it's used as authentication for virtually all other internet tools, and it's become a hip new form of personal publishing with the rise of email newsletters.

Proponents of decentralized social media argue that it takes us back to an earlier,

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5 Kari Paul, *Facebook and Twitter Restrict Controversial New York Post Story on Joe Biden,* Guardian (Oct. 14, 2020, 10:36 PM), https://www.theguardian.com/technology/2020/oct/14/facebook-twitter-new-york-post-hunter-biden [https://perma.cc/7WUP-LLTT].

6 Elizabeth Dwoskin, *Twitter Changes Policy That Blocked a New York Post Story About Biden's Son,* Wash. Post (Oct. 16, 2020), https://www.washingtonpost.com/technology/2020/10/15/twitter-hacked-materials-new-york-post/ [https://perma.cc/GKL5-BWJW].

better era of the internet where "protocols, not platforms" dominated.[7] They contend decentralization will give users control of their privacy and enable more speech while minimizing the impact of trolling, hate speech, and disinformation. Currently, (as we saw above) the qualities of decentralized platforms largely appeal to people who find the dominant platforms unsuitable. Going forward, the biggest challenges to the success of these platforms are likely maintaining a significant userbase and finding a sustainable revenue model.

Using the axes presented in the last chapter, we can analyze what makes decentralized logic distinct:

- Technology—decentralized
- Revenue model—donations/subscriptions
- Ideology—autonomy, privacy for everyone
- Governance—community
- Affordances—varied

Technology. Decentralized platforms register users, host content, and store user data with decentralized technology like federated servers or peer-to-peer protocols. For example, Mastodon uses a federation protocol called "ActivityPub" that standardizes client-server and server-server processes for social media.[8] This is what allows different Mastodon instances to communicate with each other and also enables the "fediverse"—platforms that use ActivityPub (or other open protocols) and can thus interoperate. The fediverse started with GNU social and now includes over a dozen platforms like Mastodon, PeerTube, and Friendica. Peer-to-peer protocols offer similar features. For instance, Planetary.social uses the Secure Scuttlebutt protocol, which is a peer-to-peer "gossip" protocol.[9] User data and content are stored locally, and Planetary.social users can communicate with anyone using Secure Scuttlebutt—even if they don't use the Planetary.social platform.

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7 Mike Masnick, *Protocols, Not Platforms: A Technological Approach to Free Speech*, Knight First Amendment Inst. at Colum. Univ. (Aug. 21, 2019), https://knightcolumbia.org/content/protocols-not-platforms-a-technological-approach-to-free-speech [https://perma.cc/P68A-FTNL].

8 ActivityPub: W3C Recommendation 23 January 2018, https://www.w3.org/TR/activitypub/ [https://perma.cc/65EX-KE53] (last visited Mar. 2, 2022).

9 Scuttlebutt, https://scuttlebutt.nz/ [https://perma.cc/Q38C-A5SV] (last visited Nov. 28, 2021); *Gossip Protocol*, Wikipedia (Feb. 4, 2022, 4:03 AM), https://en.wikipedia.org/wiki/Gossip_protocol [https://perma.cc/A3D7-NP35].

Revenue model. Decentralized platforms often rely on donations and/or subscriptions for their revenue. For example, Mastodon founder and lead developer Eugen Rochko currently receives via Patreon about $6,000 per month to pay himself and fund hosting and moderation for the mstdn.social instance.[10] Meanwhile, Planetary.social relies on subscriptions and venture capital. Finding sustainable revenue models for decentralized platforms is an open problem and a significant barrier to growth and sustainability. Developers need incentives to create compelling platforms, and because decentralization (along with the entrenched positions of the dominant platforms) effectively rules out targeted advertising, new revenue models will have to emerge that can support sustainable growth.

Ideology. The main goal for these platforms is to provide social media with autonomy and privacy for everyone. Often, they are created due to disillusionment with the status quo. For example, Rochko created Mastodon to work the way he "wishes Twitter would."[11] Diaspora was built in response to a talk by Eben Moglen that described centralized social networks as "spying for free."[12]

However, because switching costs are high, and centralized social networks often have more polished and familiar interfaces, decentralized platforms struggle to attract users and largely serve people for whom centralized platforms are ill-suited. While different instances of decentralized platforms interoperate, it's harder to use a decentralized tool like Mastodon and a similar, centralized tool like Twitter together; further, most of your friends are already on Twitter. It is difficult to estimate the userbase of these platforms, but Mastodon likely has 3 million or fewer users, or roughly 1 percent of Twitter's userbase.[13]

Governance. Governance is handled by the community on decentralized platforms. On federated platforms like Mastodon, every instance has its own set of rules that are enforced by instance administrators. On peer-to-peer platforms like Manyverse, users control moderation largely by blocking other users. Some platforms like Planetary.so-

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10 *See generally Mastodon*, Patreon, https://www.patreon.com/mastodon/overview [https://perma.cc/4ZG6-49UF] (last visited Nov. 28, 2021).

11 Sasha Lekach, *The Coder Who Built Mastodon Is 24, Fiercely Independent, and Doesn't Care About Money*, Mashable (Apr. 6, 2017), https://mashable.com/article/eugen-rochko-mastodon-interview [https://perma.cc/X9YQ-6DWC].

12 Jim Dwyer, *Four Nerds and a Cry to Arms Against Facebook*, N.Y. Times, May 12, 2010, at A19.

13 Kev Quirk, *Centralisation and Mastodon*, KevQ (June 8, 2020), https://kevq.uk/centralisation-and-mastodon/ [https://perma.cc/28BR-KQEF].

cial offer centralized moderation on top of a peer-to-peer protocol, but that moderation only applies to users of Planetary.social—moderated content is still available to users of other platforms built on the same protocol.[14] Because no central entity can enforce moderation for the whole network, decentralized platforms that take trust and safety seriously often have to rely on indirect methods of moderation. For example, to be listed on Mastodon's official site, an instance has to agree to follow the Mastodon Server Covenant, which lays out commitments to "actively moderat[e] against racism, sexism, homophobia, and transphobia," have daily backups, grant more than one person emergency access, and notify people three months in advance of potential closure.[15] These indirect methods are meant to ensure that most people who encounter a platform have a safe experience, even without the advantages of centralization.

Decentralizing governance means that a diverse array of communities with different norms and standards can arise. For example, Mastodon is home to instances with strict harassment policies while also being home to the instance that hosts the vitriolic and far-right Gab. This is sustainable because users and servers can choose who to connect with. So when Gab forked Mastodon or ISIS recruiters joined Diaspora, most servers simply blocked all content originating from the offending servers and accounts.[16] Gab users can see their server and the few that are willing to federate with it; the rest of the Mastodon universe has functionally closed themselves down to Gab and its content.

This governance structure means that the community a user belongs to largely determines what they can and can't see. Some have argued this makes decentralized platforms more prone to "filter bubbles." However, the dominant centralized platforms are not so different—content is usually determined by a user's community (i.e., friends, follower lists, subreddits) and algorithms tuned for engagement.

Affordances. The affordances on these platforms vary and largely mirror the dominant platforms: Mastodon is a Twitter clone, PeerTube is a YouTube clone, and Plane-

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14 Planetary Support, *Overview of Our Rules and Policies*, Planetary (May 2021), https://planetarysupport.zendesk.com/hc/en-us/articles/360038511553-Overview-of-our-Rules-and-Policies.

15 Eugen Rochko, *Introducing the Mastodon Server Covenant*, Mastodon (May 16, 2019), https://blog.joinmastodon.org/2019/05/introducing-the-mastodon-server-covenant/ [https://perma.cc/HNA3-3S4R].

16 Adi Robertson, *How the Biggest Decentralized Social Network Is Dealing with Its Nazi Problem*, Verge (July 12, 2019, 2:51 PM), https://www.theverge.com/2019/7/12/20691957/mastodon-decentralized-social-network-gab-migration-fediverse-app-blocking [https://perma.cc/FL6R-QF6C]; Diaspora Found., *Islamic State Fighters on Diaspora**, diaspora* (Aug. 20, 2014), https://blog.diasporafoundation.org/4-islamic-state-fighters-on-diaspora [https://perma.cc/EQ9R-3ZQK].

tary.social looks somewhat like Facebook. As Planetary.social puts it, these platforms aim to provide experiences "that people want to use that works as much as possible as they expect, but which is backed up by better values and technology."[17]

Decentralized platforms are exciting because they hearken back to the original, decentralized vision of the web. Yes, that vision had its flaws—namely the conviction that the web would lead to a digital utopia—but the values at its core are still important today in our world of digital gatekeepers.[18] However, decentralized platforms face significant challenges to their widespread adoption, mainly: addressing their usability difficulties and overcoming the massive network effects of centralized platforms. We are not convinced decentralized platforms can face these challenges alone. Interoperability with existing platforms is likely a key precursor to the widespread adoption of these platforms and may require interventions from governments that require platforms like Facebook and Twitter to adopt open standards or share their application programming interfaces and social graphs. Ironically, it seems like for the decentralized movement to succeed, it may need to partner with the governments it once hoped to transcend.

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17 Planetary Support, *What is Planetary - the FAQs*, Planetary (Jan. 2022), https://planetarysupport.zendesk.com/hc/en-us/articles/360039199393-What-is-Planetary-the-FAQs [https://perma.cc/6MLD-SVAE].

18 John Perry Barlow, *A Declaration of the Independence of Cyberspace*, Elec. Frontier Found.: John Perry Barlow Library (Feb. 8, 1996), https://www.eff.org/cyberspace-independence [https://perma.cc/J72R-MV7M].

Crypto Logic



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Crypto Logic: The cautionary tale of Steemit

What makes crypto social media unique?

At first glance, Steemit looks a little like Reddit, the wildly popular internet community site where users vote posts to prominence on the site's front page.[1] Posts, accompanied by illustrative images, are authored by various users, and you can click on them to read more, or vote them up or down.

But there's something unfamiliar about Steemit: Each post has a price tag, which represents Steem tokens the post's creator stands to earn for creating a popular post.

Underlying Steemit and similar social media sites are cryptocurrencies, commonly called tokens, which are tracked on a shared ledger, usually a blockchain. Contributors to a site can be rewarded with tokens, encouraging the creation of high-quality content that gets upvoted by other users. Upvotes and downvotes are rewarded as well—the system creates new currency to reward people who participate in the life of the site.

But tokens aren't just a measure of how successful posts are at attracting attention—they're often a source of governing power. A Steemit user can earn Steem Power either by posting and voting on content, or by donating computing power to the system, analogous to participating as a "miner" in the bitcoin system.[2] Upvotes from a user with a lot of Steem Power matter more than upvotes from a less powerful user. And users with lots of Steem Power can sway how the system fundamentally works, including approving changes to the code for the Steem blockchain, which can lead to some

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1 Steemit, https://steemit.com/ [https://perma.cc/RHR5-A2TE] (last visited Nov. 28, 2021).

2 Rajat Dangi, *Still Confused by Steem, Steem Power, and Steem Dollars—Read This,* Medium (June 14, 2018), https://medium.com/hapramp/still-confused-by-steem-steem-power-and-steem-dollars-read-this-220ace402b-cb [https://perma.cc/MT5R-FVEE].

very strange situations, as we'll explore below.[3]

Steemit is an example of "crypto logic." There are other platforms that work like Steemit. DTube is a clone of YouTube where users are rewarded for their participation with a token called DTube Coin.[4] Minds combines Facebook and Twitter features with rewards for participation and a Patreon-like subscription service that allows users to support their favorite creators—many of whom are right-wing extremists.[5] These platforms have different technical affordances and norms but are united by a particular set of design decisions. Some of the key elements:

- A belief that users will create and curate high-quality content if they are compensated for their efforts.
- A governance system that gives users power proportionate to their token holdings.
- The attempt to use decentralized systems to provide strong censorship resistance.

Mapping these characteristics to the five axes framework we've been using to understand social media platforms looks something like this:

Affordances. Variable: Crypto logic platforms often look like clones of existing social media such as Reddit or YouTube. Some have novel capabilities, particularly related to monetization, like Minds' support for subscriptions and the ability to boost (promote) posts on DTube.

Technology. These platforms typically use public blockchains to register users and to decide and log how content and tokens are routed. When it comes to storing content, crypto logic platforms often claim they are "decentralized" or "censorship resistant," which they achieve by either storing posts on a blockchain or by using decentralized storage protocols such as IPFS (Interplanetary File System—a sophisticat-

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3 Steem, Steem: An Incentivized, Blockchain-Based, Public Content Platform (2017), https://steem.com/SteemWhitePaper.pdf [https://perma.cc/V7R3-9D4R].

4 Dtube, Turning the Tables in the Social Media Industry: A New Model Where Users Vote on Videos to Reward All Contributors (2019), https://token.d.tube/whitepaper.pdf [https://perma.cc/6CUJ-VSK7].

5 Bill Ottman et al., *Minds: The Crypto Social Network (v0.5)*, Minds, https://cdn-assets.minds.com/front/dist/en/assets/documents/Whitepaper-v0.5.pdf [https://perma.cc/83J3-AWBF] (last visited Mar. 25, 2022); Ben Makuch & Jordan Pearson, *Minds, the 'Anti-Facebook,' Has No Idea What to Do About All the Neo-Nazis*, Motherboard: Tech by Vice (May 28, 2019, 1:57 PM), https://www.vice.com/en/article/wjvp8y/minds-the-anti-facebook-has-no-idea-what-to-do-about-all-the-neo-nazis [https://perma.cc/2GU7-NDGQ].

ed BitTorrent-like distributed storage system). However, many of these platforms fail to live up to this billing either by implementing decentralization weakly or by simply storing content centrally.[6]

Ideology. Crypto logic platforms serve three main purposes: enriching token holders, empowering users, and providing censorship resistance. Underlying this model is a deep belief in the power of markets and market design. Every platform is looking to craft the right combination of economic incentives with the hope of creating a place where everyone is happy: Developers and investors get rich while users control the rules, what's popular, and their content—and get paid for their efforts.

Revenue model. In one way, crypto logic platforms are supported like conventional social media: ads.[7] But there's a secondary route to earning: the platform tokens themselves. The tokens are tradeable and can appreciate in value. Also, platforms can charge fees for transactions involving tokens like subscriptions or boosts. Many crypto logic platforms make the case that their tokens are useful as the backbone of different crypto-based systems, not just their service, with the hope that this leads to people purchasing and trading the tokens much as they do with bitcoin or Ethereum. Should this occur, the tokens could increase in value, leading to financial gains for early users of the system. This also means that the tokens are subject to pump-and-dump schemes, leaving the currency that underlies a platform's governance vulnerable.[8]

Governance. Many crypto logic platforms advertise a strong free speech stance, subscribing to the libertarian idea that markets will weed out unhelpful or unproductive conduct through price signals—i.e., unhelpful content will be downvoted and fail to make money, thus incentivizing quality content production and curation. However, this can fail to materialize in practice because engagement centered around profit-seeking instead of social interaction can lead to spam and poor moderation. For example, after Taringa! implemented a revenue-sharing program that paid creators in bitcoin, the amount of plagiarized content increased by 30 percent.

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6 Fredrick Brennan, *Bitchute Claims To Be a Decentralized Platform—That's Not True*, DAILY DOT (May 19, 2021, 9:55 PM), https://www.dailydot.com/upstream/bitchute-decentralization-claims/ [https://perma.cc/662K-MWEM].

7 DLive Team, *Introducing Ads on DLive*, DLIVE: COMMUNITY (Nov. 6, 2019), https://community.dlive.tv/2019/11/06/introducing-ads-on-dlive/?lang=tr/ [https://perma.cc/66Z4-HH9W].

8 *See generally* Rakesh Sharma, *How Cryptocurrency Pump-and-Dump Scams Work*, INVESTOPEDIA (Aug. 13, 2018), https://www.investopedia.com/news/how-cryptocurrency-pumpanddump-scams-work/ [https://perma.cc/UE4V-GN4Y].

Other decisions are often made through voting, with a user's voting shares proportional to her currency holdings, the idea being the best contributors and those with the most invested in the success of the platform will have the loudest voice in the governance of the network.

And here's where things can get complicated.

Steemit is a very different site now than it was early in 2020. Cryptocurrency investor and tech entrepreneur Justin Sun purchased Steemit from one of its founders in December 2019.[9] Because Steemit is governed by its community, this shouldn't have had much of an effect on the operations of the site—but it did. Along with purchasing the company, Sun acquired 20 percent of the Steem tokens in circulation, a stake that had been set aside by the founders.[10] This concerned the Steem community, who pushed for a rules change to the system that would prevent Sun from becoming the most powerful voice overnight, and ultimately, from moving Steemit to his own blockchain system, TRON.

But the Steemit users hadn't counted on the worldwide market in Steem tokens. Sun convinced several cryptocurrency exchanges to use their millions of Steem tokens to sway the vote in his favor and change the platform rules.[11] In response, many longtime Steem participants decamped for a different blockchain, Hive, bringing their tokens with them.[12] Users who supported Sun—many from South Korea—remain on Steemit, while others have moved their conversations to platforms, like Peakd, that run on the Hive blockchain.

This sort of drama might turn off users looking for a stable, consistent host for their online conversations. But it also reflects some of the deep values of crypto logic: Sun used market power to take over the Steemit platform, and Steemit users took their

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9 Greg Thomson, *Steem Network to Seize $5 Million from Its Own Users*, Decrypt (May 19, 2020), https://decrypt.co/29416/steem-network-to-seize-5-million-from-its-own-users [https://perma.cc/SAE4-X2C6].

10 Jonathan Goodwin, *The Steem Takeover Controversy Exposes Failings in Governance*, Sapien (Mar. 13, 2020), https://blog.sapien.network/the-steem-takeover-controversy-exposes-failings-in-governance-7288a1ceb46d [https://perma.cc/E284-6T3T].

11 Robert Stevens, *Did Binance Just Help Justin Sun Take Over the Steem Network?*, Decrypt (Mar. 2, 2020), https://decrypt.co/21108/did-binance-just-help-take-over-steem-network-justin-sun [https://perma.cc/837C-Z25Q].

12 Samuel Haig, *Hive Hard Fork is Successful, STEEM Crashes Back to Earth*, Cointelegraph (Mar. 20, 2020), https://cointelegraph.com/news/hive-hard-fork-is-successful-steem-crashes-back-to-earth [https://perma.cc/56XK-VE92].

money and went elsewhere, just as they would have if their favorite restaurant went downhill under new management.

However, the vulnerability of Steemit should give pause to those excited about crypto logic platforms because of their censorship resistance. Even if platforms use a blockchain to store content (which is not a given—Minds, for example, does not), it may not provide the guarantees that users expect when they hear "blockchain." Specifically, most crypto logic platforms use blockchains that rely on a consensus mechanism called Delegated-Proof-of-Stake (DPOS). In DPOS, users who hold the associated cryptocurrency elect a limited number of "witnesses" who verify transactions and produce blocks. This is in contrast to Proof-of-Work (POW) or Proof-of-Stake (POS), which allow anyone who meets a requirement (solving a hard puzzle in POW; staking currency in POS) to verify transactions and produce blocks. Vitalik Buterin, the founder of Ethereum, has described DPOS as "plutocracy" and "[not] wise for Ethereum (or really, any base-layer blockchain)."[13] It's DPOS that allowed Sun to take over the Steem blockchain—with enough Steem tokens (stake), he was able to appoint "witnesses" who agreed to the changes he wanted to make.

Crypto logic platforms have worthy goals, but it's not clear that they will be able to achieve them. The logic is a mix of libertarian values, speculation, and a strong belief in the power of markets to solve complex social problems. Existing platforms have struggled to attract large userbases, lacked quality content, and fallen short of their security guarantees. Even so, there are millions (single digit millions, not the hundreds of millions using major social media platforms) of people experimenting with crypto logic platforms. Clearly there is an appetite for social media with monetization built in and more user autonomy. It's just not clear that crypto logic is the way to do it.

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13 *Governance, Part 2: Plutocracy Is Still Bad*, Vitalik Buterin's Website (Mar. 28, 2018), https://vitalik.ca/general/2018/03/28/plutocracy.html [https://perma.cc/L9DK-7G2N].

Market Nationalism



Emporiko Megasinus

Market Nationalist Logic: The Great Shopping Mall of Chinese social media

The West tends to focus on security, but entertainment and commerce are the key goals here

Some 2,200 years ago, when Emperor Qin Shi Huangdi, the historic first emperor of China, ordered construction of the Great Wall of China to keep out nomadic tribes from Central Asia, he could scarcely have imagined what it's become today.[1] Now a UNESCO World Heritage Site, the physical Great Wall is a major tourist attraction, filled with souvenir tchotchkes, a cable car system, toboggan slides, and market hawkers.[2] Visitors can buy tickets for the wall using WeChat or AliPay, and they can post Bytedance and Bilibili videos of their experiences online thanks to free Wi-Fi and high-speed cell towers. Rather than keep people out, the contemporary Great Wall is designed to draw people in—to the tune of some 10 million tourists per year—making it one of the top tourist destinations in the world.[3]

The Chinese internet is often described using the image of the "Great Firewall," a system of information and access control infamous worldwide for its sophisticated censorship.[4] The words "Great Firewall" conjure up the days of Emperor Qin and the emperors who came after him, building section upon section of wall for hundreds of years as both a nationalist and military project. This outdated image of the Great Firewall promotes the idea of China as the isolated and fortified Central Kingdom,

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1 Kristin Baird Rattini, *Who Was the Chinese Emperor Behind the Terra-Cotta Warriors?*, Nat'l Geographic (June 3, 2019), https://www.nationalgeographic.com/culture/article/qin-shi-huangdi [https://perma.cc/V6ZQ-DKW7].

2 lewblank, *Great Wall of China Slide*, Atlas Obscura (Dec. 27, 2017), https://www.atlasobscura.com/places/great-wall-slide [https://perma.cc/A6MA-C8F5]; *see generally The Great Wall*, UNESCO: World Heritage Ctr., https://whc.unesco.org/en/list/438/ [https://perma.cc/2YXW-DKVG] (last visited Nov. 28, 2021).

3 Melanie Lieberman, *17 Secrets of the Great Wall of China*, Travel + Leisure (Apr. 20, 2017), https://www.travelandleisure.com/travel-tips/the-great-wall-of-china [https://perma.cc/GQV8-8DTT].

4 James Fallows, *'The Connection Has Been Reset,'* Atlantic, Mar. 2008, at 64.

unwilling to engage with the outside world. It remains difficult to scale the Great Wall (though it's an excellent and popular activity for interval training[5]) and dangerous to hold a political protest, but tourism, entertainment, and commerce better define the Wall today than isolation. While the country continues to maintain and construct border walls,[6] it is a global economic powerhouse, now leading the world in foreign investment.[7]

Rather than Emperor Qin to guide our understanding of the logics behind the Chinese internet, we should perhaps imagine Jack Ma. Ma, an international celebrity and billionaire, has gone viral globally with his Michael Jackson moves and martial arts powers.[8] While Ma does not formally operate social media—he is most famous for the e-commerce platform Alibaba and fintech provider Ant Financial—Alibaba platforms are effectively social. His story is a reminder of the twin tensions of commerce and state control that guide the logic of China's internet: After years of international fame and celebration as one of China's richest men and the CEO behind one of its great internet success stories, Ma was recently curbed by Beijing after he spoke critically about regulators,[9] even while Alibaba itself seems not to have fallen out of favor.[10]

Ma appears to have crossed a line, but for successful influencers in China, decisions made by commercial platforms represent a more significant constraint and concern than state censorship. Consider Li Jiaqi (aka Austin Li), China's King of Lipstick, a so-

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5 Brian T. Dessart, *Not Your Ordinary Workout: Climbing the Great Wall of China*, Sports Illustrated (Dec. 9, 2014), https://www.si.com/edge/2014/12/09/workout-climbing-great-wall-china [https://perma.cc/42QH-2JCX].

6 Iris Zhao, *China Is Building Border Walls with Vietnam and Myanmar to Keep People Out, but Also In*, ABC News (Jan. 24, 2021, 1:39 PM), https://www.abc.net.au/news/2021-01-25/why-china-building-border-walls-with-vietnam-myanmar/13068344 [https://perma.cc/ZA7N-WRTC].

7 Paul Hannon & Eun-Young Jeong, *China Overtakes U.S. as World's Leading Destination for Foreign Direct Investment*, Wall St. J. (Jan. 24, 2021, 7:40 PM), https://www.wsj.com/articles/china-overtakes-u-s-as-worlds-leading-destination-for-foreign-direct-investment-11611511200 [https://perma.cc/U24D-3K3H].

8 Josh Horwitz, *Jack Ma Just Celebrated Alibaba's Birthday with a Michael Jackson-Inspired Dance Number*, Quartz (Sept. 12, 2017), https://qz.com/1074888/jack-ma-just-celebrated-alibabas-baba-birthday-with-a-michael-jackson-inspired-dance-number/ [https://perma.cc/JDU5-3ZHW]; S. China Morning Post, *Jack Ma Fights Ip Man in Kung Fu Movie Gong Shou Dao*, YouTube (Nov. 14, 2017), https://www.youtube.com/watch?v=7bc-gRjM3mE8 [https://perma.cc/F6E6-GF4W]; *see generally Jack Ma*, Wikipedia, https://en.wikipedia.org/wiki/Jack_Ma [https://perma.cc/NN52-USYV] (Mar. 17, 2022, 7:25 AM).

9 Rob Davies & Helen Davidson, *The Strange Case of Alibaba's Jack Ma and His Three-Month Vanishing Act*, Guardian (Jan. 23, 2021, 11:00 AM), https://www.theguardian.com/business/2021/jan/23/the-strange-case-of-alibabas-jack-ma-and-his-three-month-vanishing-act [https://perma.cc/P4AT-WLY8].

10 Jane Li, *There's No Place for a Jack Ma in Today's China*, Quartz (Dec. 31, 2020), https://qz.com/1946723/theres-no-place-for-a-jack-ma-in-todays-china/ [https://perma.cc/FC63-LZMG].

cial media influencer from the second-tier city of Nanchang.[11] Li is part of an influencer industry that operates directly on commercial platforms like Alibaba, helping boost emerging and major brands alike.[12] He's generated sales of more than $145 million on the Black Friday-esque Singles Day,[13] thanks to 40 million fans on Douyin (China's TikTok) and a livestreaming service on Taobao,[14] Alibaba's consumer-to-consumer retail site. Despite a barrage of harassment for breaking gender norms, Li dons the lipstick himself and shares bold opinions about the products. He's since branched off to other products, including donating masks during a fundraiser for Wuhan when the pandemic struck.[15] The state and corporate controls on speech are real, significant, and influential. But they do not prevent China's internet from generating its own culture of celebrities and influencers.

Influencer-driven economic systems also bleed into Chinese video social media networks, which capitalize on China's powerful, highly saturated mobile payment usage. Douyin and Kuaishou are home to numerous online influencers like Li Jiaqi, ranging from rural youth to urban housewives, who cultivate an audience for financial reward. Audiences can quickly and easily send money through the platforms using WeChat Pay or Alipay (a platform by Ant Financial). A sense of entrepreneurialism prevails, while influencers and users ultimately remain beholden to platform policies and fees.

It is time for a new image of the Chinese internet to complement that of the Great Firewall: the Great Shopping Mall. As a recent Economist special report on the future of Chinese e-commerce has argued, the distinction between social media, entertainment, and e-commerce has become quite blurry on the Chinese internet, likely more so than on the American internet.[16] While others have long pointed to the salience of

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11 Alice Huang, *Who is Millionaire Li Jiaqi, China's 'Lipstick King' Who Raised More Than US$145 Million in Sales on Singles' Day?*, S. China Morning Post Mag. (Mar. 9, 2020, 4:00 PM), https://www.scmp.com/magazines/style/news-trends/article/3074253/who-millionaire-li-jiaqi-chinas-lipstick-king-who [https://perma.cc/F8EQ-2BQC].

12 Cai Xuejiao, *Lips Don't Lie? China's Livestreamers Provoke Sales, Scrutiny,* Sixth Tone (Nov. 14, 2019), https://www.sixthtone.com/news/1004839/lips-dont-lie%3F-chinas-livestreamers-provoke-sales%2C-scrutiny [https://perma.cc/D4HV-V9PU].

13 Terry Nguyen, *Singles Day is China's Biggest Shopping Holiday. Why Hasn't America Caught on?*, Vox (Nov. 11, 2019, 2:10 PM), https://www.vox.com/the-goods/2019/11/11/20959700/china-singles-day-2019-prime-day-black-friday [https://perma.cc/MZV8-A578].

14 *See generally Taobao*, Wikipedia, https://en.wikipedia.org/wiki/Taobao [https://perma.cc/D53X-QUJN] (Feb. 19, 2022, 4:18 PM).

15 CGTN, *China's Top Beauty Influencer Li Jiaqi: No Makeup When I Am Offline*, YouTube (Jan. 23, 2020), https://www.youtube.com/watch?v=PGJFA7sZSRQ [https://perma.cc/EXE4-PG9T].

16 *The Future of E-Commerce (with Chinese Characteristics)*, Economist (Jan. 2, 2021), https://www.economist.com/weeklyedition/2021-01-02 [https://perma.cc/2589-LC9E].

the shopping mall analogy for China's economic landscape, the analogy comes with consequences for civic tech and governance.[17] The Chinese vision of the internet, which has aimed to grow economic activity while tamping down political dissent, has seemed to be the exact opposite of Silicon Valley's techno-libertarian vision. And yet today, as nation states the world over put pressure on technology companies on issues like content moderation, trade, and user privacy, the dynamics between the state and private internet companies in China presaged a global era of tension between market forces and governments where private and public interests negotiate influence over internet governance and user rights. In this way, Chinese social media logic follows a double bottom line: The market and the state, which, as David Graeber describes in his book, *Debt: The First 5,000 Years,* are two flanks of the same animal.[18]

In the West, we've become accustomed to reports of censorship in China as the result of a menacing authoritarian regime that threatens the core tenets of free expression. While a convenient construction, this centers authoritarianism as the guiding force for China's social media platforms, missing the underlying capitalist logic behind the world's largest internet ecosystem that is starting to extend past China's borders to shape global commerce. Centering market-oriented logic helps blur the boundaries on both sides of the so-called Firewall, helping us understand that the history of China's internet—fostered as a tense alignment between the market and the state—has extraordinary implications globally, including for those of us in Western democracies.

Like a physical shopping mall, the Chinese internet operates as a market-oriented public space, beholden first to the market and the state, and only then to users. It is an internet that promotes commerce and socializing, so long as you play by its rules. It is an internet controlled by private companies but over which the government maintains regulatory control. And, like the global spread of shopping malls, it is a model that can and has been exported to places like Iran and Vietnam.[19] It influences global commerce, with the rapid spread of WeChat Pay and Alipay, accepted around the world, and Alibaba's popularity as a global portal to the Chinese product market. The Great Shopping Mall promotes free trade over free expression, privatization at the service of politics. It is an example of what we might call market nationalism—the use of private markets to support nationalist interests, with strong government oversight.

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17 *The Great Mall of China,* Barron's (Jan. 8, 2002, 11:59 PM), https://www.barrons.com/articles/SB1041978980192631664 [https://perma.cc/SK8L-U49F].

18 David Graeber, Debt: The First 5,000 Years, Updated and Expanded (2014).

19 Paresh Dave, *China Exports Its Restrictive Internet Policies to Dozens of Countries: Report,* Reuters (Nov. 1, 2018, 12:17 AM), https://www.reuters.com/article/us-global-internet-surveillance/china-exports-its-restrictive-internet-policies-to-dozens-of-countries-report-idUSKCN1N63KE [https://perma.cc/H9N3-CUXP].

Indeed, a strong state censorship mechanism in China alongside the erosion of a robust civil society has had severe consequences for journalists and medical professionals, as well as ordinary citizens who speak out online.[20] That said, the market logic of China's social media landscape is not dissimilar from that of Silicon Valley. In both contexts, private companies build platforms that operate using attention economics, where platforms are largely offered free to users, and companies make money through advertising.

Many of these companies end up publicly traded on international stock exchanges, creating further pressure for quarterly user growth and revenue metrics. In both contexts, a robust ecosystem of platforms, from public microblogging like Sina Weibo, to small group chat like Weixin, to viral video hosting like Douyin, satisfy a myriad of social needs. In fact, counter to conventional wisdom about China copying U.S. innovation, many Silicon Valley companies learn from and study Chinese platforms for innovative ideas.

One key difference lies in how platforms interface with their respective governments. In both China and the West, the digital is, in fact, political. However, those politics differ. The traditional framework for evaluating these distinctions has typically focused on individual user freedom. But in 2021, the notion of individual user freedom as unchecked "free speech" no longer suffices. Instead, another way of viewing the differences might be the relationship of platforms to community safety and agency, in a world with little difference between offline and online public squares.

In 2017, Bytedance was in the hot seat with Chinese government regulators. The platform that drew the ire of internet regulators in China was not the globally popular TikTok, but Bytedance's news app, Jinri Toutiao (今日头条). "In an age where technology is key, we can't let algorithms control everything," exclaimed a headline from the People's Daily.[21] Regulators worried that an algorithmically generated newsfeed of content was exposing users to a variety of unsavory material, from health misinformation to political content critical of China's authoritarian regime. This episode presaged concerns about TikTok, a Bytedance platform, that emerged in 2020 from countries like India, Pakistan, and the United States, which each raised issues with the platform's content moderation policies and influence over public discourse.

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20 The State of Journalism in China (James Geary ed., 2014) (ebook); *see* Audrey Jiajia Li, *Remembering Li Wenliang: The Wuhan Doctor Who Warned the World About Coronavirus,* Politico Mag. (Dec. 26, 2020, 6:23 AM), https://www.politico.com/news/magazine/2020/12/26/li-wenliang-the-covid-whistleblower-446417 [https://perma.cc/PUB7-3QZY].

21 Xiao Chu, *Suspect People Today's Headlines Are Low? Do You Dare to Bet on Its Future?*, Sohu (Sept. 25, 2017, 2:25 PM), http://web.archive.org/web/20201227190249/https://www.sohu.com/a/194401147_117077.

In the case of Chinese state censorship, notions of online community safety and agency are dictated by an authoritarian government, not actual communities using the platform. Legions of human censors are employed internally by companies like Bytedance like machetes, alongside automated censorship,[22] used as a "scalpel."[23] These dynamics echo similar structures in the West, where centralized platform governance hinges on low-wage content moderators rather than user communities—however, until recently, Western governments were reluctant to interfere in platforms' operations. Everyday users of Chinese social media networks—such as Weibo, Weixin (WeChat), and video platforms like Douyin (the Chinese version of TikTok) are subject to what is termed "porous censorship" by scholar Margaret Roberts, where the state uses "fear, friction, and flooding."[24] If China were to pursue a completely watertight censorship policy under absolute dictatorship, political unrest would be inevitable. Instead, under porous censorship, the vast majority of users are aware that the Great Firewall and censorship exists, though are not often directly affected by it.

As internet policy scholar Rebecca MacKinnon has argued, China's system of governance is an example of networked authoritarianism, a model we now see spreading throughout the technical and political worlds.[25] This critical scholarship was an early warning of the political risks of the internet, helping counter an extended period of techno-optimism. It is through the mechanisms of uncertainty and fear, information friction and flooding that digital authoritarianism proliferates. Users censor themselves before posting, and access to content banned by the state requires users to take additional, potentially risky steps like using a virtual private network (VPN). Additionally, social media users are bombarded with so much content that state-sponsored channels continually package up easy-to-read material, thus enticing users to read government crafted content rather than navigating an overwhelming information landscape by themselves. At the same time, a world of video games, luxury goods, open commerce, and viral videos provides both bread and circuses for the netizenry.

As anyone who has visited or lived in China can attest to, a sense of choice—that users

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22 Jiayang Fan, *Why China Cracked Down on the Social-Media Giant ByteDance*, New Yorker (Apr. 19, 2018), https://www.newyorker.com/news/daily-comment/why-china-cracked-down-on-the-social-media-giant-bytedance [https://perma.cc/5MXX-C8BN].

23 Cate Cadell, *RPT-China's Robot Censors Crank up as Tiananmen Anniversary Nears*, Reuters (May 26. 2019, 7:03 PM), https://www.reuters.com/article/china-tiananmen-censorship/rpt-chinas-robot-censors-crank-up-as-tiananmen-anniversary-nears-idUSL4N23207N [https://perma.cc/B7F8-JG65].

24 Margaret E. Roberts, Censored: Distraction and Diversion Inside China's Great Firewall 3, 18 (2018).

25 Rebecca MacKinnon, *Liberation Technology: China's "Networked Authoritarianism,"* 22 J. Democracy 32, 33 (2011).

can purchase a VPN to access restricted content or not—gives the majority of netizens a placid, false sense of agency. The narrative of individual choice and momentary, paid access to information on platforms like Twitter and Facebook belies how that choice itself is in a larger matrix of information friction and control. While VPNs are not required to navigate many Western internet systems (though recent General Data Protection Regulation, or GDPR, and commercial licensing regulations have made them somewhat more common for uses like streaming Netflix videos overseas), much of the choice presented to users outside the Chinese internet is still limited to large, commercial platforms that often prioritize profit over user rights.

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If we could sum up the logic of China's Great Shopping Mall, it is this: Private platforms seek user growth and capital appreciation, utilizing attention economics to grow a large userbase, within tight state constraints. The specific dynamics of the attention economics differ by platform, but in the end, they have the same goal of hockey-stick growth. The state, concerned about opinions and expression that may hamper its interests, imposes restrictions through regulatory guidelines that private platforms then interpret and implement. Platforms utilize small armies of paid click-workers—digital mall cops—who interpret these regulations in real-world contexts. Their actions, in turn, train artificial intelligence systems that provide blanket coverage. If further violations occur, actual police may get directly involved. But security is only one side of the coin; entertainment and commerce are the key goals here.

Take a visit to the malls of Beijing, Shanghai, Chengdu or countless other Chinese cities, and they look and operate like the malls of Minnesota, Manila, and Mexico.[26] All around the world, shopping malls are designed first and foremost for commerce, but double as a place of quasi-public gathering for parties, families, and bored teenagers.[27] Political dissent is not unheard of in malls, but it is rarely welcome. There are no dissidents, no homeless people, no gangs, no solicitors, no electioneering. Public squares they are not, even while they serve a function for the public. So long as you play by the rules of both capital and state, you are welcome. Good luck if you do not.

Government oversight of social media platforms is now a growing reality around the world, from calls to revisit Section 230 in the United States, to the GDPR in the Europe-

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26 Piper Gaubatz, *New Public Space in Urban China: Fewer Walls, More Malls in Beijing, Shanghai and Xining*, 4 China Persps. 72 (2008).

27 Katherine Astill, *The Right to Protest in a Quasi-Public Space*, Guardian, (Oct. 28, 2010, 10:00 AM), https://www.theguardian.com/commentisfree/libertycentral/2010/oct/28/protest-quasi-public-space [https://perma.cc/F5BT-JJMF].

an Union and the Brazilian General Data Protection Law, and regulatory discussions in India, Egypt, and others. Silicon Valley could once calmly proclaim that its platforms operated neutrally, while China's model of state-supervised internet governance once seemed unique to the country and its politics. Today, Silicon Valley platforms face regulations around the world that shape their content moderation policies and overall logics, while at the same time they make content moderation decisions that shape civic discourse around the world.

China's market-oriented, state-influenced logic of social media preceded by decades today's discussions around the state's role in the internet, but now the world is catching up. Market nationalism appears to be one dominant framework for how the internet is governed, influencing the internet's development in many parts of the world as nations seek to promote commerce while restricting dissent. That said, the internet is still young, and there remain opportunities for a new global logic of digital governance that can act more in accordance with international human rights norms while fostering technological innovation and strong economic growth.[28] China's government has presented its model, and now the world must decide its version too.

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28 Wafa Ben-Hassine, *Government Policy for the Internet Must Be Rights-Based and User-Centred,* U.N. Chron. (2018), https://www.un.org/en/chronicle/article/government-policy-internet-must-be-rights-based-and-user-centred [https://perma.cc/TP6E-5VAB].

About the Authors

An Xiao Mina is author of *Memes to Movements: How the World's Most Viral Media is Changing Social Protest and Power* (Beacon Press, January 2019). Kirkus Reviews called it an "incisive and illuminating study," and Booklist described it as a "thoughtful and engaging look at the complex role and power of memes in global politics and social movements."

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With The Civic Beat, a global research collective focused on the creative side of civic technology, she has led workshops and exhibitions in spaces such as the Victoria and Albert Museum, the Mozilla Festival Open Artist Studio (curated by the V&A Museum and Tate Modern), the Asian Art Museum, the Museum of the Moving Image, the ACLU, and RightsCon, and she's been producing what Net Monitor called "the cutest map of the internet"—a world map of animal memes in collaboration with over a dozen internet culture researchers.

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Russian Logic



Tupicus Runetus

Gregory Asmolov

Russian Social Media Logic: Between the East and the West

Contradiction is the defining feature of the Runet

Russia's Unique Internet Logic

In 1999, Vladimir Putin, recently appointed prime minister of Russia, held the first high-level meeting between leaders of the Russian internet community and Russian authorities. While some Kremlin officials urged an increase in the state's control over the new technology, Putin offered an encouraging statement: "We will not seek a balance between freedom and regulation: the choice will always be in favor of freedom."[1] Later, during his first candidacy for president, Putin argued that "The internet is a very promising form of communication" and praised its role in education, though also expressed regret that he didn't personally use it enough.[2]

After taking office, his enthusiasm for the internet began to wane, and Putin started to express some concerns about the impact of the internet on children and the absence of "positive content" online. But the decisive shift occurred in 2010, when the Russian leader famously stated that "50 percent of the internet's content is pornography."[3] In addition, he described the internet as a space for the propagation of terrorism, extremism, and xenophobia.

Since that pivot, Putin's discourse has focused on regulations aimed to protect children and copyright. His views have also become increasingly focused on the internet's sociopolitical influences. In 2014, Putin stated that "All this internet was created as a

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1 *"Do You Know What Is Happening on the Putin.ru Website Now?": Putin's First Meeting with the Internet*, Open Univ. (Dec. 28, 1999), https://openuni.io/course/6-course-5/lesson/14/material/614/ [https://perma.cc/PZA8-JUKR].

2 Clever Geek Handbook, *Holivar. History of Runet. Part 2. Counterculture: Populi, Marijuana and the Kremlin*, Tech in Japan: GitHub (2022), https://tech-in-japan.github.io/articles/469423/index.html [https://perma.cc/9CZ5-KXHA].

3 Terrence McCoy, *Vladimir Putin Hates Everything About the Internet Except 'Website Vladimir,'* Wash. Post (Apr. 25, 2014, 3:06 AM), https://www.washingtonpost.com/news/morning-mix/wp/2014/04/25/vladimir-putin-hates-everything-about-the-internet/ [https://perma.cc/Y6MY-T98Z].

CIA special project and it develops accordingly."[4] That statement signaled the start of increasing political regulation of the online space, a process that eventually resulted in the approval of Russia's internet sovereignty law.[5] Putin argues that there is no contradiction between internet sovereignty and internet freedom, since the purpose of the law is to protect Russian internet infrastructure from acts of external hostility that might disconnect the nation from the global network. Therefore, an autonomous Russian internet is essential to protect critical communications infrastructure. In that light, "The more sovereignty, including in the digital realm, the better," concluded Putin.[6] Finally, in 2021, Putin declared that the internet should follow not only legal rules, but also what he called "moral laws"; otherwise, Russian society could be destroyed from within.[7]

The dramatic evolution of Putin's position on internet freedom highlights the unique sociopolitical environment in which the Russian internet has developed. The histories of national internets can be generally divided into two groups. In the first case, we can see the development of the internet in liberal countries (e.g., the United States, and in Europe, and other more open societies). In the second case, we can see how the internet evolved in authoritarian environments (as in the case of China). The Russian internet is often considered an example of an internet developed under authoritarian principles, due to an increasing number of legal initiatives and policies, including the Internet Sovereignty bill, designed to increase control over the internet. However, the comparison of Russian internet sovereignty to the Great Firewall of China is misleading and incomplete.

The Russian internet is the only internet that started as a totally free space—to some extent even less regulated than the Western internet—and developed into one of the most regulated and restricted internet spaces. That's why, unlike other internet spheres that haven't experienced such a dramatic change, it's full of contradictions between different logics. Understanding the logic of Russian social media requires an analogy from geology. "Superposition" is the idea that "the oldest layer is at the base

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4 *Putin Says Internet Is a CIA Project*, Al Jazeera (Apr. 25, 2014), https://www.aljazeera.com/news/2014/4/25/putin-says-internet-is-a-cia-project [https://perma.cc/E9AH-JL4C].

5 Oliver Carroll, *Russia's Internyet: Kremlin Readies Test for Its 'Sovereign' Firewall*, Indep. (Oct. 30, 2019, 7:25 PM), https://www.independent.co.uk/news/world/europe/russia-interenyet-kremlin-internet-sovereign-klimarev-a9178306.html.

6 Moscow Kremlin, *Meeting with Representatives of Russian News Agencies and Print Media*, Kremlin: Devs. (Feb. 20, 2019, 7:30 PM), http://www.kremlin.ru/events/president/news/59865 [https://perma.cc/YAR2-FUBA].

7 *Putin Announced the Ability of the Internet to Destroy Society from the Inside*, Tass (Mar. 4, 2021, 7:48 AM), https://tass.ru/obschestvo/10834539 [https://perma.cc/R2NL-FQ6Q].

and that the layers are progressively younger with ascending order in the sequence."[8] In the case of the Russian internet (Runet), the internet as an alternative sociopolitical space without any substantial control of state, can be thought of as the base layer of Runet's development. Subsequent, more tightly controlled layers could not totally replace the existing structure, but were built on top of it, while creating contradictions between the different layers. The continuous conflict between different logics is the defining feature of the Runet, though the tightly controlled top layers now put increasing pressure on the older, unregulated foundation.

Runet: Between two logics

A renowned 19th century Russian philosopher, Pyotr Chaadayev, made a famous argument about the unique location of Russia between two major civilizations: "[W]e belong neither to the West nor to the East, and we possess the traditions of neither."[9] (Since Chaadayev questioned the unique role of Russia and its greatness, he was declared legally insane and put under medical supervision.) The early development of Runet was driven by the tension between those who believed the Russian internet was "something genuinely Russian" and those who supported the "Westernization" and "internationalization" associated with internet adoption.[10]

The development of the Russian internet can also be seen as a product of tension between two major digital civilizations. On the one hand, the initial development of Runet relied on libertarian ideas of the internet as an alternative sociopolitical and cultural space that offered new degrees of freedom beyond the state's control. This ideology, which became popular in Silicon Valley, also captured the idea of some Russian internet pioneers, notably Pavel Durov, founder of VKontakte. Many leading Russian platforms, including Odnoklassniki and VKontakte, were developed relying on Western prototypes and adopted some of the presumptions of these platforms.

On the other hand, in the economic domain, many Russian entrepreneurs tried to follow the Chinese model. A key player in the early development of Runet, Yuri Milner—a co-founder of Mail.ru Group—has told the press that he started to visit China in 2003 to learn from Chinese internet business models. China was the source of inspiration for the integration of social networks with online games, and the origin of premium digital badges and GIFs, a common practice in Chinese social media that has had little

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8 Brian Frederick Windley & John W. Harbaugh, *Geology: Earth History,* Encyclopedia Britannica, https://www.britannica.com/science/geology/Earth-history [https://perma.cc/X36P-RPWS] (last visited Mar. 25, 2022).

9 Yuri Glazov, *Chaadaev and Russia's Destiny,* 32 Stud. Soviet Thought 281, 284 (Nov. 1986).

10 Henrike Schmidt & Katy Teubener, *"Our RuNet"? Cultural Identity and Media Usage, in* Control + Shift Public and Private Usages of the Russian Internet 19 (2006).

traction in the United States. At the same time, China was also a model to consider when Russian authorities realized the need to increase their political control of Runet. The Great Chinese Firewall approach was impractical, both politically and technically, in a digital domain that was initially developed as a free space with a high level of integration with global platforms. However, some practices related to online control, including new forms of regulation and citizen engagement in state-sponsored surveillance, were inspired by Chinese practices.

Odnoklassniki vs. VKontakte: The logic of contradictions

The development of Runet can't be explained by a single logic, or even a couple of logics. Instead, it has been driven by contradictions between these logics and continuous tensions between cultural, social, political, and economic forces. Understanding the logics of Runet requires exploring the history of platforms' development in a way that accounts for internal complexity and continuous clashes between different logics. In effect, we need to look at the geologic strata that support contemporary internet developments. The battle between two major Russian social networks—Odnoklassniki and VKontakte—that ended with both networks being purchased by the same holding company illustrates the importance of this historical understanding.

Odnoklassniki was launched in spring 2006 and quickly grew to have 4 million users in 2007. It modeled Classmates.com as a prototype: Social networking was mostly driven by an opportunity to find former classmates and friends from high school and college. One of the major affordances of the platform was the ability to give "marks" to the photos of your friends. A paid service allowed customers to give special marks, as well as to remove bad marks from their own photos. In effect, the service introduced a variety of paid virtual presents and unique emoji. From the very beginning, Odnoklassniki sought to satisfy emotional needs related to interpersonal communication through a rich array of digital affordances associated with the symbolic manifestation of emotions.

Several months later, a new Russian social network was born. Unlike Odnoklassniki, VKontakte relied on Facebook as a prototype, targeting current university students based on their university affiliation and looked visually similar to Mark Zuckerberg's project. Odnoklassniki and VKontakte shared a focus on communities of classmates, but also shared the idea that the consumption of content on social networks doesn't necessarily need to be limited to content produced by "friends." Instead, these social networks also became platforms for sharing different types of content.

This innovation—a social network that features a broad range of content as well as posts from friends—was critical to the success of VKontakte. It wasn't only a social

network but also a mix of 4chan, Napster, and Pornhub. It offered an unlimited opportunity to host and share music and video files, including pirated full-length movies and pornography. It provided spaces for different types of underground cultures and communities to flourish. And it served as an imageboard that allowed continuous circulation of memes and black humor. Imagine a network that combined the reach of Facebook with some elements of the darknet—that was VKontakte to the Russian-speaking world.

The public pages of VKontakte became a leading publishing medium across the Runet. One of the most popular public pages—MDK—which has more than 11 million followers, was created as a countercultural space to poke fun at various mainstream trends and share politically incorrect humor. Today, the rating of top popular public pages offers pages dedicated to new music and movies, and pages used to share memes, jokes, black humor, and ironic depictions of modern life. A network of public pages under a common title Podslushano (overheard) is a popular space to hear—and spread—local rumors.

Both Odnoklassniki and VKontakte have dedicated significant effort to integrating online games, which offer a major source of monetization. Recent data indicates that gaming continues to be the second most popular function of Russian social networks after communication (62 percent vs. 54 percent), followed by listening to music (49 percent) and watching video (42 percent).[11] Other recent data shows that the major source of income for Odnoklassniki is still gaming and virtual GIFs, not advertising.[12] According to the current head of Odnoklassniki, Anton Fedchin, his social network makes substantial income from fulfilling emotional needs by sharing signs of virtual recognition. For instance, paid virtual GIFs are particularly popular for International Women's Day (March 8).

Despite similarities, there are substantial differences between Odnoklassniki and VKontakte, perhaps best represented by the personalities of the founders of these networks. The founder of Odnoklassniki—Albert Popkov—has said that he wasn't ready to break some of the boundaries that VKontakte had broken. In an interview with Russian journalist Andrey Loshak, he observed, "We had certain postulates that we did not want to overstep, but VKontakte could. Porn, theft of content, VKontakte

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11 *"OK" Study: Most Russians Use Social Media to Communicate,* Novye Izvestia (Mar. 23, 2019, 1:19 PM), https://newizv.ru/news/society/23-03-2021/issledovanie-ok-bolshinstvo-rossiyan-ispolzuyut-sotsseti-dlya-obscheniya [https://perma.cc/3DKT-S2MK].

12 Vladislav Skobelev, *The Head of Odnoklassniki - RBC: "YouTube Is More Dangerous for Us than Messengers,"* RBC (Mar. 26, 2021, 9:02 AM), https://www.rbc.ru/interview/technology_and_media/26/03/2021/6059b3a69a7947cba1675c4e [https://perma.cc/8NC9-TRZ5].

very quickly made music, made video sharing available."[13] Though Odnoklassniki ultimately lost the battle for the younger generation, it has been able to keep older users and users from areas far from Moscow ("the regions"). One of the Runet's founders, Anton Nossik, characterized the competitors as a network that looks into the past and a network that looks into the future: "For people who have lived their lives unsuccessfully and in vain, and in adulthood see that they have surrounded themselves with the wrong people, Odnoklassniki allows you to erase all this random foam. Facebook, VKontakte is for those who have everything ahead, and Odnoklassniki is for those who had their last interesting meetings 30 years ago."[14]

Despite the differences between the networks, Milner of the Mail.ru Group—a holding company anchored by Russia's most popular email service—tried to gather Russia's most influential internet projects under the same roof. In 2008, Odnoklassniki was sold to a holding company that Milner controlled. The story of the ownership battle for VKontakte was much more complicated, but eventually, it also was taken under full control by the Mail.ru Group.[15] By that point, Mail.ru was owned by several actors, including Russian oligarch Alisher Usmanov. (Usmanov formally left Mail.ru's orbit in 2018, interestingly handing more control of the conglomerate to Chinese companies.)[16]

According to Milner, the Russian internet presents a unique case of successful development of a local digital ecosystem without state-sponsored protectionism. However, Russia's nonintervention in internet development began to change in 2008. The global economic crisis that year forced independent internet companies to look for additional funding sources, including oligarchs with close ties to the Kremlin. Several years later, in 2012, thousands of Russians went out to the streets to protest unfair elections. Alongside Facebook, VKontakte was actively used by young Russians to share information about protests and support mobilizations. Russian security services demanded platforms disclose the personal information of members of oppositional groups. Pavel Durov, the libertarian founder of VKontakte, publicly refused to do so.[17] Eventually,

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13 Andrey Loshak, *Runet History. Business: OK, VK, and All-All-All*, Radio Liberty (Oct. 16, 2019), https://www.svoboda.org/a/30219424.html [https://perma.cc/9Z7C-A3KS].

14 *Id.*

15 Ingrid Lunden, *Mail.ru Takes Over 'Russia's Facebook' Vkontakte in $1.47B Deal, Settles Durov Suit*, TechCrunch (Sept. 16, 2014, 6:22 AM), https://techcrunch.com/2014/09/16/mail-ru-pays-1-47b-to-take-over-vkontake-russias-facebook-settles-durov-suit/ [https://perma.cc/J7KS-NAAF].

16 Max Seddon, *Usmanov Relinquishes Control of Mail.ru*, Fin. Times (Oct. 22, 2018), https://www.ft.com/content/8c75f762-d5d4-11e8-a854-33d6f82e62f8 [https://perma.cc/F63H-ZKVW].

17 Gregory Asmolov, *Russia: Social Network In-Between Security Services and Free Market*, Glob.Voices (Dec. 28, 2011, 12:01 AM), https://globalvoices.org/2011/12/28/russia-social-network-in-between-security-services-and-free-market/ [https://perma.cc/JSE3-CGG2].

Durov was forced to leave both VKontakte and Russia.[18] He later founded Telegram outside of Russia, and that platform has consistently refused subsequent demands by Russian authorities.[19]

Since 2012, the state of the Russian internet has changed dramatically. Russian authorities started to realize the political importance of keeping the internet under tighter control. That's why new layers of control and surveillance were built on top of an architecture that was constructed as an independent and alternative space. At present, VKontakte cooperates with Russian authorities and allows surveillance of content by Russian security forces.[20] At the same time, despite stricter copyright regulations, it still serves as a major host for pirated music, movies, and pornography. VKontakte embodies the contradictions of Runet, where the libertarian spirit of Durov's vision coexists with the state's online regulation and surveillance model.

In addition to these contradictions, the trend on both Odnoklassniki and VKontakte is the shift from offering an opportunity to maintain social connections toward content production. Odnoklassniki's Fedchin summarized this trend:

> We really want to get away from the restrictions associated with the fact that users are subscribed to specific people and groups. Previously, we have always been a platform for communicating with close friends, but now the user's inner circle can no longer generate enough content for the user to cover his needs. So that he does not go to other platforms, we want to diversify the feed content by adding recommended content to the users in the main feed.[21]

The Rankings: Battleground Runet

Looking into the popularity of the websites in the Russian internet demonstrates a set of battles that have characterized Runet over the past 25 years. (There are many

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18 Amar Toor, *How Putin's Cronies Seized Control of Russia's Facebook*, Verge (Jan. 31, 2014, 9:30 AM), https://www.theverge.com/2014/1/31/5363990/how-putins-cronies-seized-control-over-russias-facebook-pavel-durov-vk [https://perma.cc/5M8W-G67W].

19 Matt Burgess, *Russia's Telegram Block Tests Putin's Ability to Control the Web*, Wired (Apr. 24, 2018, 12:44 PM), https://www.wired.co.uk/article/russia-google-telegram-ban-blocks-ip-address [https://perma.cc/S6MT-Q8C3].

20 Russian BBC, *VKontakte Says It Will Reveal Statistics About Government Requests for User Data*, Meduza (Aug. 14, 2018, 4:03 PM), https://meduza.io/en/feature/2018/08/14/vkontakte-says-it-will-reveal-statistics-about-government-requests-for-user-data [https://perma.cc/FJ2H-K3QF]; *In 'Kontakt' with the Cops: When Russian Police Go After Internet Users, Why Do They Target People on VKontakte Almost Exclusively?*, Meduza (Kevin Rothrock trans., July 7, 2016, 2:55 PM), https://meduza.io/en/feature/2016/07/07/in-kontakt-with-the-cops [https://perma.cc/3N3T-GA5C].

21 Skobelev, *supra* note 12.

Russian and Western versions of popularity rankings, though they all show similar trends with some differences; see e.g., Alexa, Similarweb.[22]) That history can be divided into several confrontations: the battle between Russian social networks, particularly Odnoklassniki and VKontakte; the battle between Russian platform ecosystems, particularly Mail.ru, Yandex, and Rambler; but also the battle for dominance between Russian and Western platforms.

The struggle between Russian and Western online platforms unfolds in several areas of Russian internet rankings. In search engines, we see a continuous struggle between homegrown Yandex and Google, which compete for leadership in their category. In the sector of social networking, the top positions are held by VKontakte and Odnoklassniki. The Western social networks, particularly Instagram and Facebook, are close to the top, while Twitter is a little farther behind. These Western networks are popular despite continuous pressure by Russian authorities on Facebook, Twitter, and recently TikTok, seeking to ensure that these foreign websites do not outrank homegrown counterparts on the charts.[23] Though these platforms haven't been banned as of this writing, Russian authorities' recent decision to slow down the access to Twitter may not only decrease its popularity but also serve as a "yellow card" prior to a more thorough ban of Western social media in Russia. [24]

The landscape of Russian internet platforms, integrated companies that combine several functions, is complex, crossing lines of functionality and, occasionally, nationality. LiveJournal, the American and, later, Russian platform that was once the symbol of Runet, is now just a bit player. Mail.ru is not only the leading email service in Russia, but also the winner in the platform game, owning both social networks Odnoklassniki and VKontakte. At the same time, search engine Yandex continues expanding into services and artificial intelligence, taking control over Uber in Russia and offering the Russian alternative of Amazon's Alexa: Alisa. There are no signs of the presence of eBay and Amazon on Runet's top popularity rankings. Instead, Russians have Avito.ru, Wildberries, Ozon.ru and AliExpress (the only Chinese platform that has a significant presence in the top ranks of Russian internet sites.) Western e-commerce plat-

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22 AndroLife, *The Most POPULAR Sites in Russia 1999-2019*, YouTube (Nov. 5, 2019), https://www.youtube.com/watch?v=fXJ5v-M626Y [https://perma.cc/J3A9-84JK]. *See also Top Sites in Russia*, Alexa, https://www.alexa.com/topsites/countries/RU [https://perma.cc/Z4S8-DZGQ] (last visited Nov. 29, 2021); *Top Websites Ranking: Russia*, Similarweb, https://www.similarweb.com/top-websites/russian-federation/ [https://perma.cc/G7GZ-98R5] (Feb. 1, 2022).

23 *Russia Fines TikTok for Leaving Up Navalny Protest Calls*, Moscow Times (Apr. 6, 2021), https://www.themoscowtimes.com/2021/04/06/russia-fines-tiktok-for-leaving-up-navalny-protest-calls-a73490 [https://perma.cc/6Y4J-E4BU].

24 Max Seddon, *Russia Attempts to Slow Down Access to Twitter*, Fin. Times (Mar. 10, 2021), https://www.ft.com/content/7b46cb83-1e42-45c1-9a25-86daofca24cc [https://perma.cc/9NRL-C3U5].

forms regularly fail to grow in Russia due to issues with international delivery and a failure to integrate with Russian online payment systems.

The Russian concept of internet sovereignty is driven by a vision that Russian platforms should occupy the top of all the rankings.[25] In addition to various regulations and restrictions on Western platforms (e.g., limiting the speed of access to Twitter), Russian authorities try to create favorable conditions for local platforms. For instance, a recent Russian government decision requires all mobile devices sold in Russia to have a long list of Russian applications pre-installed, including Odnoklassniki and VKontakte.[26] Russian authorities also have invested significantly to develop the so-called "social internet" that will offer free internet access to a "whitelist" of websites that the government has approved.[27] It seems likely that only Russian sites will be included on this whitelist.

At the same time, some key internet segments are dominated by Western platforms, highlighting the failure to develop Russian alternatives. Most remarkable is the popularity of YouTube—Russian RUTUBE failed to offer a viable alternative to the Western video-sharing platform despite the powerful backing of Gazprom-Media. The popularity of Wikipedia also demonstrates Russian authorities' failure to develop an alternative state-sponsored online encyclopedia despite several efforts to sponsor the development of an official Russian Wikipedia.[28] Runet chat logic is dominated by Telegram and WhatsApp, both outside of Russian control, despite Telegram's authorship by Pavel Durov. Finally, there is the striking absence of LinkedIn, the only major Western social network that has been officially blocked in Russia. There are almost no local alternatives that support professional development: The most popular platform in this segment is HeadHunter, which is a job board and an online resume website, but not a professional social network.[29]

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25 Dylan Myles-Primakoff & Justin Sherman, *Russia's Internet Freedom Shrinks as Kremlin Seizes Control of Homegrown Tech*, Foreign Pol'y (Oct. 26, 2020, 1:58 PM), https://foreignpolicy.com/2020/10/26/russia-internet-freedom-kremlin-tech/ [https://perma.cc/5YF9-QYVC].

26 Jon Porter, *Apple Forced to Offer Russian iPhone Users Local Apps at Setup Thanks to New Law*, Verge (Apr. 1, 2021, 7:59 AM), https://www.theverge.com/2021/4/1/22361762/iphone-russia-startup-local-apps-yandex-mail-ru-law [https://perma.cc/CS4J-5PGZ].

27 *Social Internet Will Start Working in Russia from April 1*, Sostav (Mar. 30, 2020), https://www.sostav.ru/publication/s-1-aprelya-v-rossii-zarabotaet-sotsialnyj-internet-42600.html [https://perma.cc/K498-WWB4].

28 Agence France-Presse, *Vladimir Putin Calls for 'Reliable' Russian Version of Wikipedia*, Guardian (Nov. 5, 2019, 1:11 PM), https://www.theguardian.com/world/2019/nov/05/vladimir-putin-calls-for-reliable-russian-version-of-wikipedia [https://perma.cc/373P-JW9R].

29 *See generally* HeadHunter, https://hh.ru/ [https://perma.cc/YVD2-S5RH] (last visited Nov. 29, 2021).

Conflict is the Way It is

The development of Runet is an outcome of the dramatic history of Russian social, cultural, economic, and political development over the last 25 years. Runet's logic should be seen in context as a continuous struggle between various internet visions that are promoted by different cultural, political, and economic elites.[30] In that light, the Russian social media logic is different from Western prototypes. It's an outcome of a history of contradictions and of tensions between different social, cultural, political, and economic realities. Very different, often contradictory logics coexist next to each other, while simultaneously struggling with each other in the same space. In the case of VKontakte, some of the underground and libertarian logics are so fundamental to the development of the platforms that it's impossible to remove and replace them without collapsing the whole system. Some of this coexistence of contradictions follows a tacit agreement that some prohibited practices are allowed, but they are also completely transparent to state surveillance.

These websites continue to be a battleground between different visions of the internet broadly and Runet specifically, shaped by political forces (those that regulate platforms) and economic forces (those that own platforms), as well as by developers and users. While it appears that Russian authorities are exerting more and more pressure in order to increase the control over Russian platforms, while limiting the access to Western ones, the overall battle for Runet is far from being decided. The nature of Runet is a struggle between different logics. When one logic gains the upper hand, it often results in the development of new spaces, as in the case of Telegram. Therefore, while platforms and their communities fall and new ones rise in the clash of conflicting logics and models, we may see Runet continue to look for its unique place between the East and the West.

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30 Gregory Asmolov & Polina Kolozaridi, *The Imaginaries of RuNet: The Change of the Elites and the Construction of Online Space*, 2 Russ. Pols. 54 (2017); Gregory Asmolov & Polina Kolozaridi, *Run Runet Runaway: The Transformation of the Russian Internet as a Cultural-Historical Object*, *in* The Palgrave Handbook of Digit. Russ. Stud. 277 (Daria Gritsenko et al. eds., 2020).

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Creator Logic



Instagrammar Artisticus

Creator Logic: It's like Uber but for culture

The original gig economy returns online

Artists and entertainers are the original gig workers. They've long sacrificed stability and security in exchange for freedom. Many work a day job to support their creative dreams and most are never able to make a living purely from their artistic work.

The emergence of social media platforms like YouTube promised a new age for creators. Finally liberated from the gatekeepers of the past, and with the internet's scale at their disposal, creators could build a solid living on the "long tail" of the internet with thousands, not millions of fans.[1] In some ways, that's been true. Many creators have been able to build solid businesses online, and a few have made fortunes. Culture has become participatory and personalized in a way we've never seen before. Perhaps as a consequence, almost 30 percent of kids ages 8 to 12 want to be a YouTuber when they grow up.[2]

But the new spaces for creativity online have also replicated many of the problems of the old system and led to new problems. Li Jin writes that the "creator economy needs a middle class," pointing to the fact that "the top creators are massively successful, while long-tail creators are barely getting by."[3] Furthermore, even top creators are stuck in perpetual precarity, with their livelihoods dependent on the whims of a platform and facing constant pressure to produce for increasingly demanding audiences and algorithms.

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1 Lorne Manly, *'The Long Tail' Foresees a Marketplace of Pixel-Size Niches*, N.Y. Times (Aug. 10, 2006), https://www.nytimes.com/2006/08/10/books/10manly.html?_r=0 [https://perma.cc/B6XE-TN8H]; Kevin Kelly, *1,000 True Fans*, KK: Technium (Mar. 4, 2008), https://kk.org/thetechnium/1000-true-fans/ [https://perma.cc/YZ23-UYA7].

2 LEGO Grp., *LEGO Group Kicks off Global Program to Inspire the Next Generation of Space Explorers as NASA Celebrates 50 Years of Moon Landing*, Cision: PR News Wire (July 16, 2019, 9:32 AM), https://www.prnewswire.com/news-releases/lego-group-kicks-off-global-program-to-inspire-the-next-generation-of-space-explorers-as-nasa-celebrates-50-years-of-moon-landing-300885423.html [https://perma.cc/TND7-LNY4].

3 Li Jin, *The Creator Economy Needs a Middle Class*, Harv. Bus. Rev. (Dec. 17, 2020), https://hbr.org/2020/12/the-creator-economy-needs-a-middle-class [https://perma.cc/WLK2-9LU4].

The platforms on which creators share their work fall under what we will call "creator logic." Creator logic platforms enable users to share a specific type of media (like video, livestreams, or art), in a one-to-many fashion. They are home to "creators," people who consistently make content for the platform, often as a source of income, and to audiences who turn to these platforms for entertainment, information, and a sense of identity and community in fandom. What distinguishes creator logic from other forms of social media—all of which enable users to create and disseminate media—are its tools for monetization and production, and its focus on consumption. Creator logic platforms mediate cultural production and consumption on a massive scale, essentially functioning as two-sided cultural marketplaces, matching producers with audiences. The power and importance of that role should not be underestimated: Legal scholar Jack Balkin argues that "cultural power is even more pervasive than state power," pointing to the ways culture constitutes our identities and affects our lives.[4]

Some creator platforms, like YouTube or Twitch, are more general purpose. Others, like Wattpad or TikTok, have more tailored use cases. The cultural forms that emerge on creator platforms are explicitly and implicitly shaped by the platforms, as well as by users. For example, TikTok's sound library, video filters, and 60-second time limit make it easy for users to mimic popular TikToks and give them their own twist, creating what are essentially video memes. Creators have used those tools to spawn a number of new trends, including dances like M to the B, comedy formats like #You-Have-To, and songs like #BoredInTheHouse.[5] Even more general-purpose platforms like YouTube shape cultural forms. Though YouTube allows you to share videos of virtually any length and format, it implicitly encourages lengthier videos and mainstream topics through its recommendation algorithm and content policies. This interaction between platform design and user agency is present on all social media, but is particularly prominent on creator platforms, which place a premium on creativity.

To attract creators, platforms offer them an audience, and help with monetization and production. Creator platforms help creators monetize their content by sharing revenue and by building tools that enable subscriptions and tips. Creator platforms help creators produce content with tools like TikTok's video filters and sound library, and

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4 Jack M. Balkin, *How to Regulate (and Not Regulate) Social Media*, Knight First Amendment Inst. at Colum. Univ. (Mar. 25, 2020), https://knightcolumbia.org/content/how-to-regulate-and-not-regulate-social-media [https://perma.cc/Q6MF-7J6X].

5 Peter Helman, *Remember Blackpool Grime? It Now Soundtracks the Most Popular TikTok of All Time*, Stereogum (Sept. 12, 2020, 2:36 PM), https://www.stereogum.com/2097845/remember-blackpool-grime-it-now-soundtracks-the-most-popular-tiktok-of-all-time/news/ [https://perma.cc/YL9X-7X8S]; Nev Schulman (@nevschulman), TikTok (Oct. 14, 2020), https://www.tiktok.com/@nevschulman/video/6883611527698599173?is_copy_url=1&is_from_webapp=v1; Curtis Roach (@curtistootrill), TikTok (Mar. 4, 2020), https://www.tiktok.com/@curtisroach/video/6800471860761971974?is_copy_url=1&is_from_webapp=v1.

resources like YouTube's "Creator Academy." By offering creators help with monetization and production, platforms incentivize and subsidize creation, raising the quality and quantity of content on the platform.

Monetization also serves a governance function. Platforms can use it as a carrot and a stick, offering help when content hews to their guidelines, and withdrawing help when it doesn't. For example, to qualify for revenue-sharing on YouTube, videos have to be "advertiser-friendly,"[6] which means, among other things, videos can't include violence or inappropriate language, and can't cover topics such as firearms or "controversial issues."[7] In addition to limiting the types of videos that can be monetized, YouTube sometimes demonetizes entire channels when creators repeatedly or egregiously violate the rules. For example, before Alex Jones was kicked off YouTube in 2018, his channel was demonetized after he called a survivor of the Parkland school shooting a "crisis actor."[8] Similarly, Steven Crowder's channel was demonetized in 2019 after he repeatedly harassed then-Vox writer Carlos Maza.[9] The channel was remonetized a year later because, per YouTube, "Mr. Crowder has ... taken steps to address the behavior that led to his suspension and has demonstrated a track record of policy-compliant behavior."[10] (Though Maza tweeted that the decision "proves that YouTube has no real interest in enforcing it's [sic] anti-hate policies."[11])

In addition to carrots and sticks, creator logic platforms use algorithms to govern content. Most social media platforms use algorithms to help moderate and surface content, but for creator platforms, algorithms are central. On social media organized around connection, users choose from whom they want to see content from, while algorithms play more of a background role, curating content and offering suggestions. But on creator platforms, users don't come to the platform with a list of content they

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6 *YouTube Channel Monetization Policies*, YouTube Help, https://support.google.com/youtube/answer/1311392#zippy=%2Ccreator-influence-on-youtube [https://perma.cc/AG74-7MW5] (Mar. 10, 2022).

7 *Advertiser-Friendly Content Guidelines*, YouTube Help https://support.google.com/youtube/answer/6162278?hl=en&ref_topic=9153642 [https://perma.cc/9HRH-SAHU] (Mar. 23, 2022).

8 Ingrid Lunden, *YouTube Removes Ads from InfoWars' Alex Jones Channel, Says It Has No Plans to Freeze or Ban It*, TechCrunch (Mar. 4, 2018, 11:59 AM), https://techcrunch.com/2018/03/04/youtube-removes-ads-from-infowars-alex-jones-channel-says-it-has-no-plans-to-freeze-or-ban-it/ [https://perma.cc/WB23-FUTZ].

9 Johnny Lieu, *YouTube CEO Apologizes, but Defends Decision on Hate Speech Controversy*, Mashable (June 10, 2019), https://mashable.com/article/youtube-ceo-crowder-maza?europe=true [https://perma.cc/J8LS-4RDJ].

10 Amanda Yeo, *YouTube Remonetizes Steven Crowder After Suspension for Racist, Homophobic Harassment*, Mashable (Aug. 13, 2020), https://mashable.com/article/youtube-partner-steven-crowder-demonetization?europe=true [https://perma.cc/9W97-BARS].

11 Carlos Maza (@gaywonk), Twitter (Aug. 12, 2020, 5:16 PM), https://twitter.com/gaywonk/status/1293657732940210176 [https://perma.cc/8FEC-U8V4].

want to consume. Instead, algorithms have to infer that list and connect creators with consumers. On TikTok, most of the videos people watch are chosen by its For You algorithm.[12] Similarly, YouTube's recommendation system chooses 70 percent of the videos people watch.[13] Because algorithms are so central, creators try to optimize their content for them, a challenging task, as platforms typically ensure their algorithms are opaque.

The canonical example of optimizing for the algorithm is the "reply girl" on YouTube. Creators figured out that using a suggestive thumbnail to promote their content drove a lot of clicks and thus a lot of views.[14] Because YouTube's recommendation algorithm mostly focused on views, it would push the video out to more people, driving even more views, and making the creators a significant amount of money. Eventually, YouTube revised its algorithm to focus less on the number of views and more on watch time, a change that mostly killed the phenomenon because people usually stopped watching when they realized the video was unrelated to the thumbnail.[15]

All of this discussion about the power of creator platforms highlights an important point: Creator platforms exist in a state of tension. On the one hand, they exert significant control over the creators and content on their platforms. On the other hand, they preach the gospel of creative freedom, pushing the ideal of the entrepreneurial, independent creator and celebrating the disruption of cultural gatekeepers. That tension enables creator platforms to switch between the role of gatekeeper and the role of creative liberator, depending on what suits their interests. If this tactic sounds familiar, it's because Uber, Lyft, Instacart, and their gig economy peers tell similar stories of individual freedom and bypassing gatekeepers, while exerting significant power over drivers and delivery workers.

In fact, creators share some of the challenges that face gig workers, citing burnout from dealing with demanding audiences and algorithms, frustration with opaque platforms, and the insecurity of work without traditional benefits. In 2017 and 2018, those

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12 *How TikTok Recommends Videos #ForYou*, TikTok (June 18, 2020), https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you [https://perma.cc/4Z87-R8EW].

13 Ashley Rodriguez, *YouTube's Recommendations Drive 70% of What We Watch*, Quartz (Jan. 13, 2018), https://qz.com/1178125/youtubes-recommendations-drive-70-of-what-we-watch/ [https://perma.cc/FPG6-FMEW].

14 Fruzsina Eördögh, *YouTube or Boob Tube? Reply Girls Scandal Rocks World*, Daily Dot (June 2, 2021, 8:54 PM), https://www.dailydot.com/upstream/reply-girls-yogscast-meganspeaks/ [https://perma.cc/XKY9-KL9L].

15 Megan O'Neill, *YouTube Responds to Reply Girls, Changes Related & Recommended Videos Algorithm*, Adwk. (Mar. 13, 2012), https://www.adweek.com/performance-marketing/youtube-reply-girls/.

challenges boiled over, and a wave of YouTube creators quit the platform.[16]

Consider Ethan Klein and his wife Hila Klein, the creators of h3h3Productions, a popular YouTube comedy channel. They make videos that satirize popular YouTube content and creators—for example, one of their most popular videos, with 27 million views, "VAPE NATION," makes fun of the popular genre of vaping videos.[17]

In 2017, at the height of their success, the Kleins posted a video titled "We're at an Important Crossroad in our Lives," about their struggles to make money from their videos after YouTube, in an attempt to make content more advertiser friendly, made changes to its algorithms and policies.[18] Ethan Klein explained, saying, "The problem is that YouTube, in an effort to bring brands back, has given them the tools to not put ads on anything that might seem controversial. But it's so blunt and it's so stupid that it is destroying our channel and our livelihood."[19] Since then, the Kleins have shifted away from primarily making comedy videos toward focusing on their vlog and podcast—content formats that are easier to monetize.[20] Seven months after posting the video about their difficulties to monetize, the Kleins posted a video titled "Where have we been?" that detailed Ethan's struggles with burnout.[21] Ethan said, "The truth is that I've been like, I've been depressed," saying he was "working nonstop" and that he "kind of like snapped a little bit, and I just … I couldn't make h3 videos anymore."[22]

However, for some creators, quitting isn't an option. During the pandemic, thousands of people who lost their jobs turned to creator platforms as a source of income.[23]

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16 Julia Alexander, *YouTube's Top Creators Are Burning Out and Breaking Down En Masse*, Polygon (June 6, 2018, 5:30 PM), https://www.polygon.com/2018/6/1/17413542/burnout-mental-health-awareness-youtube-elle-mills-el-rubius-bobby-burns-pewdiepie [https://perma.cc/3AFX-CAJG].

17 h3h3Productions, *VAPE NATION*, YouTube (Mar. 21, 2016), https://www.youtube.com/watch?v=Dkm8H-teeh6M [https://perma.cc/5ZXJ-J7HN].

18 h3h3Productions, *We're at an Important Crossroad in Our Lives*, YouTube (Apr. 24, 2017), https://www.youtube.com/watch?v=Tn46t8NksXo [https://perma.cc/JC6J-C9G4].

19 *Id.*

20 Geoff Weiss, *h3h3productions to Shift Priorities Away from Flagship YouTube Channel Amid Ad Boycott*, Tubefilter (Apr. 25, 2017), https://www.tubefilter.com/2017/04/25/h3h3productions-shift-from-flagship-channel-ad-boycott/ [https://perma.cc/5EA3-ZEW7].

21 h3h3Productions, *Where Have We Been?*, YouTube (Jan. 12, 2018), https://www.youtube.com/watch?v=I-5uXtODq74w&itct=CAoQpDAYCCITCOqDkt_R1tgCFYRvfgod3TEPuDIHcmVsYXRlZEiesu7tj-G3rM8B&app=desktop&ab_channel=h3h3Productions [https://perma.cc/2GPM-T9Q2].

22 *Id.*

23 Caitlin Dewey, *The Gig Economy Is Failing. Say Hello to the Hustle Economy*, Medium: OneZero (July 29, 2020), https://onezero.medium.com/the-gig-economy-is-failing-say-hello-to-the-hustle-economy-13ae3aa91954 [https://perma.cc/JVU6-7JET].

OneZero interviewed a massage therapist who started making videos about stretching and guided relaxation after her studio closed. She said it was never her "dream" to be a creator, but it's the only option she has. Unfortunately, many of the people turning to creator platforms find that the "long tail" fails to support them. On YouTube, the top 3 percent of creators receive 90 percent of the views, and even the average creator in the lucky 3 percent only receives $16,800 per year in ad income, less than one-third of the median household income.[24] Similarly, on Spotify the top 43,000 artists—1.4 percent of the platform—make 90 percent of royalties.[25] (It's worth noting that these distributions are exactly what's expected from a Pareto-distributed "long tail" economy.) The same OneZero article described a chef in Nebraska who, after seeing his shifts cut during the pandemic, was spending $400 per month on groceries to support a cooking channel on Twitch—an investment that at his current subscription rate would take years to recoup.

There are important differences between traditional gig economy platforms and creator platforms. Creators produce unique, differentiated goods—their labor isn't commodified like drivers or grocery shoppers—which should give creators more power to negotiate with platforms. But that may be changing. The latest manifestations of creator logic make it easier than ever for anyone to be a creator, and they distribute rewards based less on past performance and existing audiences, and more on the success of a particular piece of content.

For example, TikTok's production tools have made it easy for anyone to create videos for the platform, while its "creator fund" distributes money purely based on how much engagement a piece of content receives,[26] engagement that is determined by an algorithm in a "meritocratic" fashion—essentially every video posted to TikTok is shown to a small subset of people based on their interests, and depending on their engagement with the video, the video is shown to more or fewer people, with the process repeating itself.[27] On the one hand, this may democratize access to large audiences. More creators have a shot at going viral and being rewarded for it. (More freedom and cultural liberation, with a side of meritocracy!) On the other hand, this may be a way to commodify creators and increase platforms' control by unbundling audiences from

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24 Sissi Cao, *Here's Why Becoming a Lucrative YouTube Star Keeps Getting Harder*, Observer (Feb. 28, 2018, 1:29 PM), https://observer.com/2018/02/study-youtube-stars-earnings-us-median-income/ [https://perma.cc/4W6M-LD6X].

25 Jin, *supra* note 3.

26 *The Radical Egalitarianism of TikTok's Creator Fund Matters*, Substack: Hank Green (Sept. 30, 2020), https://hank.substack.com/p/the-radical-egalitarianism-of-tiktoks [https://perma.cc/2VB6-C89R].

27 *How TikTok Recommends Videos #ForYou*, *supra* note 12.

creators and ensuring that there will always be someone ready to produce engaging content.

To date, creator platforms have received proportionally less attention than other types of social media, particularly social networks like Twitter and Facebook. Co-author Ethan Zuckerman points out that between 2008-2019, YouTube was the subject of fewer papers per year than Twitter and Facebook—YouTube's number was a little more than half of Twitter's and Facebook's—despite YouTube's enormous reach and importance.[28] Likewise, evelyn douek asks in a recent Wired article, "Why isn't Susan Wojcicki getting grilled by Congress?" pointing out that congressional hearings on social media consistently leave out the CEO of YouTube. douek argues this overlooking of YouTube is because, "In general, researchers, lawmakers, and journalists focus on the problems that are most visible and tractable, even if they are not necessarily the only important ones."[29] Creator platforms can be harder to study because they often host content that is more difficult to analyze than text, like video, images, and audio. Their users also skew younger, which means the platforms are less visible to researchers, policymakers, and journalists who mostly use Facebook or Twitter. Also, creator platforms tend to portray themselves as spaces for creativity, downplaying political activity on their platforms in a bid to reduce scrutiny.[30]

Who does pay attention to creator platforms? Advertisers. And because brands do most of the advertising on creator platforms, they can have a significant amount of influence over creator platforms' policies. For example, in 2017, YouTube faced an ad boycott from brands that complained that their ads were appearing next to hateful and offensive content.[31] YouTube quickly changed its advertising policies and made it significantly harder for creators to monetize their videos.[32] Compare that with what

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28 Ethan Zuckerman, *Why Study Media Ecosystems?*, 24 Info., Commc'n & Soc'y 1495 (2021).

29 evelyn douek, *Why Isn't Susan Wojcicki Getting Grilled by Congress?*, Wired (Nov. 17, 2020, 12:37 PM), https://www.wired.com/story/why-isnt-susan-wojcicki-getting-grilled-by-congress/ [https://perma.cc/4Z7P-MYRW].

30 Georgia Wells et al., *TikTok, Once an Oasis of Inoffensive Fun, Ventures Warily into Politics*, Wall St. J., (July 8, 2020, 12:04 PM), https://www.wsj.com/articles/tiktok-ventures-warily-into-politicsand-finds-complications-11594224268 [https://perma.cc/7PT9-SDGZ].

31 Nick Statt, *YouTube is Facing a Full-Scale Advertising Boycott over Hate Speech*, Verge (Mar. 24, 2017, 4:13 PM), https://www.theverge.com/2017/3/24/15053990/google-youtube-advertising-boycott-hate-speech [https://perma.cc/9M9U-QM7P].

32 Julia Alexander, *YouTube Addresses 'Aggressive Action' Amid Creator Concerns over New 'Adpocalypse,'* Polygon (Nov. 29, 2017, 3:27 PM), https://www.polygon.com/2017/11/29/16716176/youtube-adpocalypse-kids [https://perma.cc/45N8-S7DC]; Neal Mohan & Robert Kyncl, *Additional Changes to the YouTube Partner Program (YPP) to Better Protect Creators*, YouTube Off. Blog (Jan. 16, 2018), https://blog.youtube/news-and-events/additional-changes-to-youtube-partner/ [https://perma.cc/U3Q7-WTFA].

happened when brands boycotted Facebook in the summer of 2020 in response to Facebook's actions in the wake of George Floyd's killing: Facebook made almost no changes, and Zuckerberg was quoted as saying, "We're not gonna change our policies or approach on anything because of a threat to a small percent of our revenue."[33] Unlike YouTube, Facebook is able to ignore brand advertisers because most of its revenue comes from small, direct-response ads (direct-response ads aim to persuade people to immediately click and buy a product).[34] Direct-response ads are estimated to make up only 20-30 percent of YouTube's revenue, with the rest coming from brands.[35] Recent efforts to grow direct-response advertising on YouTube could be a sign that the platform is looking to reduce brands' influence.[36]

Going forward, scholars, journalists, and policymakers who study the platforms should take seriously creator platforms' role mediating the mass production and consumption of culture. Research like Rebecca Lewis' "Alternative Influence: Broadcasting the Reactionary Right on YouTube,"[37] or Kevin Munger et al.'s "Fifteen Seconds of Fame: TikTok and the Democratization of Mobile Video on Social Media,"[38] and journalism like Kevin Roose's "Rabbit Hole"[39] are good examples. What types of content do creator platforms incentivize? What values are embedded in the algorithms that surface content? Who is allowed to participate in the construction and development of culture? Platforms are shaping the work of creators who in turn are shaping the culture and worldview for millions of fans. In essence, we have a new television industry, with creators reaching millions of people every day, but we talk very little

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33 Joseph Guzman, *Mark Zuckerberg Reportedly Defiant in Face of 500 Advertisers Boycotting Facebook Over Hate-Speech Policies*, The Hill (July 2, 2020), https://thehill.com/changing-america/respect/equality/505644-mark-zuckerberg-says-he-expects-advertisers-boycotting/#:~:text=%E2%80%9CWe're%20not%20gonna%20change,is%20changing%20FASTER%20THAN%20EVER [https://perma.cc/2YSN-WRG2]; Alex Hern, *Facebook to Be Hit by Its Largest Ever Advertiser Boycott over Racism*, Guardian (June 24, 2020, 8:34 AM), https://www.theguardian.com/business/2020/jun/24/ben-and-jerrys-joins-facebook-advertising-boycott-racism [https://perma.cc/3F9F-EXYV].

34 Megan Graham, *Facebook, Google, and Snap Have Found Their Knight in Shining Armor as Ad Spending Craters*, CNBC (May 4, 2020, 2:12 PM), https://www.cnbc.com/2020/05/01/direct-response-advertising-was-a-hero-for-tech-in-q1.html [https://perma.cc/G47X-YZE3].

35 *Id.*

36 Jessica Klein, *YouTube Expands 'Director Onsite' Service to Attract More Small Business Advertisers*, Tubefilter (Mar. 20, 2018), https://www.tubefilter.com/2018/03/20/youtube-director-onsite-local-business-advertisements/ [https://perma.cc/CMG2-RKMF].

37 Rebecca Lewis, *Alternative Influence: Broadcasting the Reactionary Right on YouTube*, Data & Soc'y (Sept. 18, 2018), https://datasociety.net/library/alternative-influence/ [https://perma.cc/7AKA-QZZY].

38 Kevin Munger et al., *Fifteen Seconds of Fame: TikTok and the Democratization of Mobile Video on Social Media*, Computational Commc'n Rsch. *(forthcoming 2022).*

39 Kevin Munger et al., *Fifteen Seconds of Fame: TikTok and the Democratization of Mobile Video on Social Media*, 4 Computational Commc'n Rsch. 463 (Aug, 28, 2022).

about the power and incentives behind it. One clear demonstration of this attention gap is a comparison of viewership for streamers on Twitch with popular television programs. Hasan Piker, a progressive political commentator, who streams daily on Twitch, averaged over 35,000 concurrent viewers during his 10-plus hour streams in January 2021.[40] For comparison, in January 2021, among adults 18-49 (a comparable but likely broader demo than Twitch), Fox News as a whole averaged 147,000 viewers.[41] Fox News' reach is larger with older viewers, of course, but it is still the most popular cable news network among adults 18-49.[42] Or consider TommyInnit, a 16-year-old Minecraft streamer from England.[43] TommyInnit averaged over 256,000 concurrent viewers in January 2021,[44] a level that outpaces popular late night shows like "The Late Show with James Corden" (176,000 viewers among adults 18-49) and "Late Night with Seth Myers" (227,000 viewers among adults 18-49).[45] Given the centrality of cable news and network television in our debates about media, politics, and culture, it's likely we need to be paying closer attention to figures like Piker and TommyInnit and the platforms they create on.

In the end, we should acknowledge creator platforms' role in fostering a more participatory culture, but we should also be wary of their preferred narratives and treat them as the powerful institutions that they are.

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40 Taylor Lorenz, *Political Commentator Streams to the Top*, N.Y. Times, Nov. 15, 2020, at ST8; *HasanAbi*, TwitchTracker, https://twitchtracker.com/hasanabi [https://perma.cc/GS5R-BFH6] (last visited Mar. 25, 2022).

41 *Fox News Channel Marks 19th Consecutive Year as the Number One Cable News Network*, Bus. Wire (Feb. 2, 2021, 2:37 PM), https://www.businesswire.com/news/home/20210202006044/en/FOX-News-Channel-Marks-19th-Consecutive-Year-as-the-Number-One-Cable-News-Network [https://perma.cc/6SFV-SKXH].

42 Michael Schneider, *Year in Review: Most-Watched Television Networks—Ranking 2020's Winners and Losers*, Variety (Dec. 28, 2020, 10:08 AM), https://variety.com/2020/tv/news/network-ratings-2020-top-channels-fox-news-cnn-msnbc-cbs-1234866801/ [https://perma.cc/QXN3-C42X].

43 *TommyInnit*, Wikitubia: YouTube Wiki, https://youtube.fandom.com/wiki/TommyInnit [https://perma.cc/3B88-5YBH] (last visited Mar. 25, 2022).

44 *TommyInnit*, TwitchTracker, https://twitchtracker.com/tommyinnit [https://perma.cc/F9JA-UYNG] (last visited Mar. 25, 2022).

45 ABC, *During 4th Quarter, "Nightline" Leads CBS in Adults 25-54 and Adults 18-49 for 3rd Straight 4Q and the 12th Quarter Overall*, Futon Critic (Dec. 31, 2020, 6:30 AM), http://www.thefutoncritic.com/ratings/2020/12/31/during-4th-quarter-nightline-leads-cbs-in-adults-25-54-and-adults-18-49-for-3rd-straight-4q-and-the-12th-quarter-overall-498204/20201231abc01/ [https://perma.cc/JM56-VK5K].

Gift Logic



Trochilidae Potlatchus

Casey Fiesler

Gift Logic: Labors of love flourish online under fandom's social norms

Fan culture's cycle of gifting, receiving, and reciprocating helps create and maintain social solidarity

Before the erotic novel *Fifty Shades of Grey* burned up bestseller lists and made author E.L. James the fastest-selling author in history, a large number of people had already read the novel for free.[1] The only difference was that in the original version, main characters Ana Steele and Christian Grey were named "Bella Swann" and "Edward Cullen"—characters from Stephenie Meyer's *Twilight* novels.[2]

Master of the Universe, originally published online by James under a pseudonym, was a work of alternate universe *Twilight* fanfiction.[3] Fanfiction is a type of transformative work—that is, a new creative work that is transformative of some original media. Imagine a story about the continuing adventures of Captain Kirk and Mr. Spock, though in the case of alternate universe fanfiction, perhaps Kirk is a barista and Spock is a veterinarian.[4] And fanfiction (along with other fanworks, like fan art) is the basis of a huge, thriving, and long-standing online community (fandom) that has actually existed since long before it moved online. Master of the Universe was part of this community—until it wasn't.

As Bethan Jones describes in an analysis of fandom debates around "pulling to publish"

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1 Liz Bury, *50 Shades Makes EL James World's Highest-Earning Author*, Guardian (Aug. 13, 2018, 7:38 AM), https://www.theguardian.com/books/2013/aug/13/50-shades-el-james-highest-earning-author [https://perma.cc/5Z6B-HXG4].

2 Jane Litte, *Fifty Shades of Grey by E.L. James Primer (and Books Like 50 Shades)*, Dear Author (Mar. 7, 2012), https://dearauthor.com/features/beyond-the-book/50-shades-of-grey-by-e-l-james-primer-and-books-you-might-like-if-you-liked-fifty-shades/ [https://perma.cc/V26H-MW8M].

3 *Alternate Universe*, Fanlore, https://fanlore.org/wiki/Alternate_Universe [https://perma.cc/HSF4-9CEV] (Mar. 22, 2022).

4 *Coffee Shop AU*, Fanlore, https://fanlore.org/wiki/Coffee_Shop_AU [https://perma.cc/JL45-8MZT] (Apr. 2021).

fanfiction commercially, criticism of *Fifty Shades of Grey* focused in part on the violation of a strong community norm against profiting from fanfiction.[5] This norm stems in part from a desire to protect the status of transformative works as "fair use" rather than illegal copyright infringement.[6] The "four factor" test to determine whether a use of copyrighted material is fair use considers the effects of the transformative work on the marketplace for the original work—by avoiding selling fanfiction, fans have hoped to cement their transformations firmly as fair use. In the case of *Fifty Shades of Grey*, the book is so far removed from any elements of *Twilight* that copyright is almost certainly not an issue (though there are more recent, fascinating cases of this particular deep legal question).[7]

What James' "fifty shades of norm violations" actually illustrate is the strength of the fandom community as a gift economy. Anthropologists have used this term to describe a number of nonmarket societies,[8] though there are also noncommodified spheres of exchange even in market societies (e.g., organ donation, the economics of zoo animals, or Burning Man[9]). In his 1993 book about the WELL, one of the oldest virtual communities, Howard Rheingold described "a kind of gift economy in which people do things for one another out of a spirit of building something between them, rather than a spreadsheet-calculated quid pro quo."[10]

It makes sense that a spirit of gifting might flourish more online than in other contexts in capitalist societies. As media scholar Henry Jenkins pointed out, companies were relative latecomers to the web, which was originally designed to facilitate collaboration between scientists and researchers, rather than to enable "the metered access expected within a commodity culture."[11] However, even among many examples of the online sharing economy (e.g., open source, Wikipedia, couch surfing), fandom stands out as representing a

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5 Bethan Jones, *Fifty Shades of Exploitation: Fan Labor and Fifty Shades of Grey*, 15 Transformative Works & Cultures (2014), https://journal.transformativeworks.org/index.php/twc/article/view/501/422 [https://perma.cc/GWC2-SVS2].

6 Casey Fiesler & Amy S. Bruckman, *Creativity, Copyright, and Close-Knit Communities: A Case Study of Social Norm Formation and Enforcement*, 3 Proc. Acm on Hum.-Comput. Interactions 241:1 (2019).

7 Alexandra Alter, *In a Fanfic Feud, Deep (and Kinky) Questions Emerge*, N.Y. Times, May 24, 2020, at BU1.

8 *Gift Economy*, Wikipedia, https://en.wikipedia.org/wiki/Gift_economy [https://perma.cc/TZP8-FCX8] (Mar. 18, 2022, 3:22 PM).

9 *See generally Burning Man: Gifting*, Wikipedia, https://en.wikipedia.org/wiki/Burning_Man#Gifting [https://perma.cc/RY3X-2R5D] (Apr. 13, 2022, 1:46 PM).

10 Howard Rheingold, *Daily Life in Cyberspace: How the Computerized Counterculture Built a New Kind of Place*, *in* The Virtual Community 25, 49 (2nd ed. 2000).

11 Henry Jenkins et al., *If It Doesn't Spread, It's Dead (Part Three): The Gift Economy and Commodity Culture*, Henry Jenkins: Confessions of an Aca-Fan (Feb. 16, 2009), http://henryjenkins.org/2009/02/if_it_doesnt_spread_its_dead_p_2.html [https://perma.cc/76PJ-WCZ9].

long-standing "labor of love" culture that has existed since before the community even moved online, dating back to Star Trek fandom and printed zines in the 1960s. However, as Jenkins notes, the move to digital distribution allowed for an even fuller embracing of the gift economy, as it lowered the cost of sharing stories; authors no longer even had to recoup costs.[12]

In their introduction to a special issue of Transformative Works and Cultures on "fandom and/as labor," Mel Stanfill and Megan Condis modify a famous open-source saying: "free as in free speech, not free as in beer."[13] Fanworks as "free as in a gift, not free as in without pay," noting that the circulation of fanworks as gifts produces and reinforces identities and relationships within the community. Indeed, this community aspect is incredibly important; in *The Fanfiction Reader: Folk Tales for the Digital Age*, media scholar Francesca Coppa offers a definition of fanfiction that includes not only rewriting and transforming stories written by others, but also "written within" a fandom community, describing it as "a case study in community production and reception."[14] She also notes that it is typically written as a gift for that community, and that in fact "many people write their first story to say thank you for all the stories they read previously, to give something back to the community that's fed them." And even those who consume but do not create fanfiction give something back, by way of sharing and accolades; there is also a strong social norm in fandom toward expressing appreciation, and indeed, explicitly positive feedback for fanworks.[15]

Legal scholar Rebecca Tushnet also describes a system based on "payment in credit" in which moral claims to attribution are incredibly important.[16] This also means that when attribution is the core value in fan concepts of authorship, plagiarism is one of the most serious crimes a fan can commit. When creators are not paid for their work, credit is critical, particularly acknowledging help received along the way. Karen Hellekson described fan gift culture as a cycle of gifting, receiving, and reciprocating, which includes providing commentary about those gifts with the goal of creating and maintaining social solidarity.[17] The normative violations of *Fifty Shades of Grey*, then, lie not only in com-

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12 *Id.*

13 Mel Stanfill & Megan Condis, *Fandom and/as Labor,* 15 Transformative Works & Cultures (2014), https://journal.transformativeworks.org/index.php/twc/article/view/593/421 [https://perma.cc/73M5-CQ4Q].

14 Francesca Coppa, The Fanfiction Reader: Folk Tales for the Digital Age 9 (2017).

15 Julie Ann Campbell et al., *Thousands of Positive Reviews: Distributed Mentoring in Online Fan Communities*, Proc. 19th ACM Conf. on Comput.-Supported Coop. Work & Soc. Computing 691 (2016).

16 Rebecca Tushnet, *Payment in Credit: Copyright Law and Subcultural Creativity,* 70 Law & Contemp. Probs. 135 (2007).

17 Karen Hellekson, *A Fannish Field of Value: Online Fan Gift Culture,* 48 Cinema J. 113 (2009).

mercializing it, and in taking a work out of the community in which it was created and subsequently gifted, but in failing to acknowledge the labor that fanfiction readers and reviewers did in shaping Master of the Universe.[18]

Fan community anger about *Fifty Shades of Grey* was fierce, and this anger was provoked by a single story—what about an entire platform that exploited this gifting culture?

Founded in 2007 by a group of male venture capitalists, FanLib was a commercial platform that sought to monetize fanfiction production.[19] Backlash was swift, and the platform shut down by 2008. Jenkins described their underlying misstep: "FanLib had done its homework by the standards of the VC world. ... They simply hadn't really listened to, talked with, or respected the existing grassroots community which surrounded the production and distribution of fan fiction."[20] Though the design and mission of the platform violated fandom norms around noncommercialism, it also failed to respect the community aspect of fanfiction production, where membership in that community is an important credential.[21] Or as Hellekson put it, they broke the rules of engagement by misreading "community" as "commodity."[22]

Around this same time, in addition to FanLib sparking concerns about further exploitation of fandom by outside platforms, there was also a mass exodus from LiveJournal.[23] LiveJournal had been a comfortable home for many fanfiction creators as it allowed pseudonyms, which were helpful for authors who wished to separate their fan identities from their professional lives. When Russian company SUP bought LiveJournal in 2007, many fans cited policy and design changes that LiveJournal had made that no longer made fan creators feel welcome. The resulting groundswell of support from the community to "own the servers" resulted in the creation of the nonprofit Organization for Transformative Works (OTW),[24] and the design and creation of Archive of Our Own

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18 Jones, *supra* note 5.

19 *FanLib*, Fanlore, https://fanlore.org/wiki/FanLib [https://perma.cc/H9SU-HCDX] (Mar. 26, 2022).

20 Henry Jenkins, *Transforming Fan Culture into User-Generated Content: The Case of FanLib*, Henry Jenkins: Confessions of an Aca-Fan (May 22, 2007), http://henryjenkins.org/blog/2007/05/transforming_fan_culture_into.html [https://perma.cc/D826-QZL3].

21 Casey Fiesler, *Everything I Need to Know I Learned from Fandom: How Existing Social Norms Can Help Shape the Next Generation of User-Generated Content*, 10 Vand. J. Enter. & Tech. L. 729 (2008).

22 Hellekson, *supra* note 17.

23 Casey Fiesler & Brianna Dym, *Moving Across Lands: Online Platform Migration in Fandom Communities*, 4 Proc. ACM on Hum.-Comput. Interactions 42:1 (2020).

24 Claudia Rebaza, *Free Copyright Course for Fans*, Org. for Transformative Works (Nov. 28, 2021), https://www.transformativeworks.org/free-copyright-course-for-fans/ [https://perma.cc/ERH7-38RE].

(AO3),[25] a fanfiction archive that today hosts over 3.5 million registered users and over 7.5 million individual works.

AO3 is notable for a number of reasons, including as a rare example of a technology being developed entirely by the community it serves, especially when that community is made up primarily of groups typically underrepresented in computing (i.e., women and LGBTQ+ people). The first developers behind AO3 decided they would have to "grow their own," and as a result a number of fans learned to code in order to contribute to the archive's development.[26] In speaking with a number of these early contributors as part of my research, I observed how the design of the archive is deeply embedded with many core values of the community, including those related to gifting and attribution.[27]

For example, AO3 includes mechanisms to both tag works explicitly as gifts for individuals and to tag works as "inspired by" other works, enabling credit. There is also extensive support for fanfiction exchanges, which are a core part of fandom gifting culture, and which previously required a huge amount of manual labor to organize.[28]

Creators also have the option to "orphan" a work, which allows them to disconnect their identity/authorship from it while it remains on the archive, a feature that discourages removing works from the community while allowing creators to maintain control over their work and privacy. AO3 also has an "open doors" mechanism for importing works from other archives, especially those that might otherwise be shut down. These features, along with the Fanlore wiki (also under OTW's umbrella) are meant to help preserve fan history,[29] which includes the content that was gifted to fandom.

Interestingly, some criticisms of AO3's design choices are also rooted in the gifting and attribution norms of fandom. Positive comments on stories are an important part of the gift culture and "payment" in credit. When AO3 implemented a "kudos" button that functions much like a "like" button on social media platforms, many users felt that this

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25 Archive of Our Own (AO3), https://archiveofourown.org/ [https://perma.cc/2LV7-LVNR] (last visited Nov. 30, 2021).

26 Casey Fiesler et al., *Growing Their Own: Legitimate Peripheral Participation for Computational Learning in an Online Fandom Community*, CSCW '17: Proc. 2017 ACM Conf. on Computing-Supported Coop. Work & Soc. Computing 1375 (2017).

27 Casey Fiesler et al., *An Archive of Their Own: A Case Study of Feminist HCI and Values in Design*, CHI '16: Proc. 2016 CHI Conf. on Hum. Factors Comput. Sys. 2574 (2016).

28 *AO3 Exchange*, Fanlore, https://fanlore.org/wiki/AO3_Exchange [https://perma.cc/VZ7G-X5PS] (Oct. 17, 2019, 8:18 PM).

29 *Main Page*, Fanlore, https://fanlore.org/wiki/Main_Page [https://perma.cc/SM33-TXG6] (Aug. 29, 2021, 9:34 PM).

design choice disincentivized thoughtful comments, thus shifting fandom toward consumption over engagement.[30]

However, an important component of AO3's success is the large number of volunteers that keep it going.[31] For example, in addition to developers contributing code and an abuse team that handles policy violations, there is also a small army of "tag wranglers" whose labor supports an impressive search and tagging system.[32] I am also part of the OTW legal committee, made up mostly of law professors and lawyers who are also fans, which provides a legal advocacy voice for fan creators. And AO3 is also a noncommercial platform without advertising or any other business model; it operates entirely on donated money and time.

Volunteer contributions that fuel the online communities in fandom stem from similar motivations as creating and sharing fanworks—love and enthusiasm for something, whether that thing is a media property or fandom itself. We also see evidence of this spirit of gift-giving in the social support that takes place in fandom. For example, research led by Ph.D. student Brianna Dym about LGBTQ+ participants in fandom illustrated how it can serve as a critical support space, and those who receive that support are often eager to give back by helping others and contributing to community resources.[33] Our research about computational projects in fandom also pointed to enthusiasm and contributing to a community to be powerful motivators in learning technical skills.[34] And though this community's strong social norms do at times fail and community values are contested, most online fandom spaces (including AO3) are far more pro-social than we tend to think of online communities as a whole.[35]

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30 Ellen, *What's Wrong with the Kudos Button on Ao3 and What to Do About It*, Medium (Feb. 26, 2018), https://medium.com/@ellenannes/whats-wrong-with-the-kudos-button-on-ao3-and-what-to-do-about-it-203a9cc45cfd [https://perma.cc/3NEX-H6NK].

31 Casey Fiesler, *Why Archive of Our Own's Surprise Hugo Nomination Is Such a Big Deal*, Slate: Future Tense (Apr. 9, 2019, 1:21 PM), https://slate.com/technology/2019/04/archive-of-our-own-fan-fiction-2019-hugo-nomination.html [https://perma.cc/Y9VZ-5LXE].

32 Admin, *Spotlight on Tag Wrangling*, Org. for Transformative Works (Oct. 12, 2012), https://www.transformativeworks.org/spotlight-tag-wrangling/ [https://perma.cc/Y3M8-4FZU]; Gretchen McCulloch, *Fans Are Better Than Tech at Organizing Information Online*, Wired (June 11, 2019, 7:00 AM), https://www.wired.com/story/archive-of-our-own-fans-better-than-tech-organizing-information/ [https://perma.cc/L993-GNCV].

33 Brianna Dym et al., *"Coming Out Okay": Community Narratives for LGBTQ Identity Recovery Work*, 3 Proc. ACM on Hum.-Comput. Interaction 154:1 (2019).

34 Brianna Dym et al., *"You Don't Do Your Hobby as a Job": Stereotypes of Computational Labor and Their Implications for CS Education*, SIGCSE '21: Proc. 52nd ACM Tech. Symp. on Comput. Sci. Educ. 823 (2021).

35 Brianna Dym & Casey Fiesler, *Social Norm Vulnerability and Its Consequences for Privacy and Safety in an Online Community*, 4 Proc. Acm on Hum.-Comput. Interaction 155:1 (2020); Elizabeth Minkel, *The Online Free Speech Debate is Raging in Fan Fiction, Too*, Verge (Nov. 8, 2018, 9:41 AM), https://www.theverge.com/2018/11/8/18072622/fanfic-ao3-free-speech-censorship-fandom [https://perma.cc/2GDA-8N74].

It is unsurprising that gift logic in an online community relies heavily on enthusiasm, volunteer labor, reciprocity, and a strong sense of community and group identity. However, as with other contexts, like open source or Wikipedia, such a system is vulnerable to drop-offs in participation and even a tragedy-of-the-commons scenario where self-interested actors overwhelm those contributing.[36] The "death" of Wikipedia has been predicted for years, particularly as volunteer contributions declined from their height.[37]

However, transformative fandom is still going strong after decades and decades, and despite numerous migrations across online platforms.[38] Though the "grow our own" philosophy and volunteer-led technological contributions to AO3 are vulnerable to bottlenecks in expertise,[39] the community seems to have mostly mastered this inevitable tension between fragility and resilience. If transformative fandom as an online community provides us insight into the "secret sauce" of gift logic, it is likely the genuine labor of love.

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36 *Tragedy of the Commons*, Wikipedia, https://en.wikipedia.org/wiki/Tragedy_of_the_commons [https://perma.cc/C5R3-MH6W] (Apr. 10, 2022, 2:13 AM).

37 *Predictions of the End of Wikipedia*, Wikipedia, https://en.wikipedia.org/wiki/Predictions_of_the_end_of_Wikipedia [https://perma.cc/M6RX-AEWV] (Apr. 7, 2022, 8:13 PM).

38 Casey Fiesler, *The Life and Death of Fandom Platforms | LiveJournal, Archive of Our Own (AO3), Tumblr, and ???*, YouTube (Sep. 25, 2020), https://www.youtube.com/watch?v=xzQO-vkX3q0 [https://perma.cc/7YTF-SZGC].

39 Casey Fiesler et al., *supra* note 26.

About the Author

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Discovery Logic



Avia Picamedia

Discovery Logic: Making friends while finding gems

Curation, review, recommendation, discussion, and user identity characterize these social networks

The WELL is one of the longest running communities on the web, started in 1985 to cater to an emerging crop of Silicon Valley tech workers and former hippies living in the Bay Area who were interested in exploring the new and exciting networking technology known as the internet. It was an exemplar of early internet communities, chronicled by Howard Rheingold in his influential book *The Virtual Community* as a salon hosting good conversation between all sorts of people from far-flung places.[1] Much like today's message boards or Facebook groups, it was divided into rooms based on interest and topic.

It was also, as described by historian Fred Turner, a site that kept its lights on thanks in large part to the community of Grateful Dead fans who paid for subscriptions to connect there.[2] On the WELL, a Deadhead could find a robust network of fellow Grateful Dead fans discussing news about the band, the state of Deadhead culture, and tape traders mailing each other cassette bootlegs of Dead shows. Tape trading was abundant in the Grateful Dead fandom, as the band gave its blessing to a thriving culture of fans taping their live performances, as long as no one profited from those recordings.

On the WELL and other early experiments in bulletin boards, Deadheads were early pioneers in using the internet to share music. Deadhead music-sharing culture would eventually extend to torrent technology with sites like etree.org and even the Internet Archive. Along the way, Deadheads were collectively innovating a new method of social network: discovery logic.

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1 Howard Rheingold, The Virtual Community (1993).

2 Fred Turner, *Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community*, 46 Tech. & Culture 485, 498 (2005).

Discovery logic, in broad strokes, is defined by four user behaviors—each of which were hallmarks of these early online Deadhead communities:

- **Curation.** The fans put together a huge catalog of available recordings, organized by date and documented with notes like set lists and recording techniques for each individual bootleg.
- **Review.** Fans often included notes about what made a specific show unique or some anecdotes from seeing that show in person.
- **Recommendation.** Often, specific shows from that larger curated collection of all available shows would be recommended, usually because it had a particularly good performance of a song or was one of the better shows in a given month or year, helpful for a band with as deep and deeply checkered live archive as the Dead's.
- **Discussion.** Through forum posts and user comments, users would weigh the merits of particular shows, entire years of performances, specific keyboard players, and so on.

Applied to social media, discovery logic has an important fifth characteristic: **user identity**. That identity is defined through those other four behaviors. For example, on Goodreads, a discovery-based social network for books, someone who gives all of Octavia Butler's and N.K. Jemisin's books five stars is self-identifying as a fan of science fiction written by Black women, while someone who has been discussing the merits of various travel books about Brazil might be revealing that they just came back from vacation.[3]

This performance of identity is different from the Instagram or TikTok model. Instead of posting their own original content, like a photo or video, discovery logic users create some record of things they like. In the case of Last.fm, a service that tracks every song a user listens to, a series of graphs are generated showing other users how often someone listens to specific artists or songs.[4] If you see that I listen to a lot of Prince, Dolly Parton, and Gregorian chant, you might either friend me because you, too, love a wide range of vocal styles, or because my taste is so bizarre that you need to see what else I'm interested in.

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3 Goodreads, https://www.goodreads.com [https://perma.cc/2797-DGEQ] (last visited July 13, 2022).

4 Last.fm, https://www.last.fm [https://perma.cc/V5KX-VCNE] (last visited July 13, 2022).

Some especially visible examples of discovery logic are communities built around user reviews like Goodreads, MyAnimeList,[5] Letterboxd,[6] and RateYourMusic.[7] Each of these offers the same basic affordances across different types of media. Goodreads lets users track, rate, and discover books; MyAnimeList does that for anime television; Letterboxd for movies; and RateYourMusic for music. On Wikipedia, these are grouped as "social cataloging applications," which highlight a communal approach to knowledge- and taste-making.[8] Discovery logic doesn't just appear in social networks focused on media: Fragrantica[9] and MakeupAlley[10] are long-running and incredibly popular communities for users to review and compare notes on perfume and makeup, respectively.

Perhaps the most familiar discovery logic platform of all is not one built for entertainment but for food: Yelp. Effectively, Yelp is a platform that aggregates user reviews, which are often a star rating and a short written blurb. It helps you find what to eat for dinner. But even though Yelp is powered by its users, it doesn't center social interactions like media-based discovery platforms do.

On the surface, Yelp satisfies all five criteria for discovery logic. It curates restaurants in your area, lets users review and discuss those restaurants in the comments, provides recommendations based on star ratings, and gives users the ability to build out profiles identifying them as prolific Yelpers. But since the platform's emphasis is ultimately on curating and recommending, the social component is incidental—participatory yet not interactive. You can have friends but there isn't much to do with them. This shallow sociality is a relic of, as the Initiative for Digital Public Infrastructure's Ethan Zuckerman puts it, "the social mediafication of everything." You are unlikely to follow an unknown person on Yelp because of their eclectic taste in restaurants, while that's exactly what social discovery communities around music, movies, or other things are for.

Discovery logic is often but not always social. It exists in a continuum of spaces, from the most to least community centered. The most social discovery spaces might be fo-

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5 MyAnimeList, https://www.myanimelist.net [https://perma.cc/WT57-8PK5] (last visited July 13, 2022).

6 Letterboxd, https://www.letterboxd.com [https://perma.cc/ASA8-WCCX] (last visited July 13, 2022).

7 RateYourMusic, http://www.rateyourmusic.com [https://perma.cc/6YHG-JDUE] (last visited July 13, 2022).

8 *Category: Social Cataloging Applications*, Wikipedia, https://en.wikipedia.org/wiki/Category:Social_cataloging_applications [https://perma.cc/37JH-9VQP] (last updated Mar. 20, 2013, 7:59 PM).

9 Fragrantica, https://www.fragrantica.com [https://perma.cc/9YZK-7PZQ] (last visited July 13, 2022).

10 MakeupAlley, https://www.makeupalley.com [https://perma.cc/F3N6-4S4R] (last visited July 13, 2022).

rums like Okayplayer[11]—founded in the early 2000s by Questlove, drummer of the popular hip-hop act The Roots—which acted not just as a space for fans to discuss and discover alternative hip-hop in the early 2000s but one where musicians connected to collaborate. The least social discovery space is arguably Spotify, where the majority of the social interaction happens off-platform, with users sharing playlists with each other by other means like text message, Discord, and social media. Spotify effectively outsources sociality to other technologies.

Another way to understand the discovery landscape is as a Venn diagram of community, content, and review. There are some services like Netflix that mainly focus on delivering content, ones like Yelp that are dedicated to crowdsourcing reviews, and ones like the Grateful Dead section on the WELL that build community around a specific shared interest.

Discovery as a technology can inhabit any of the circles in that Venn diagram. Truly social discovery logic, though, will only occupy the intersections. Consider Erowid,[12] which innovated a community approach to reviewing drug experiences, creating a massive trove of trip reports that leveraged the sociality of the internet without being explicitly interactive like the participatory social media we know today. Erowid doesn't provide access to any of those drugs, but it does provide content and review, helping users potentially discover (or avoid) substances of interest.

Collections. Discovery logic is at its most social when it inherits traits from gift logic, as outlined by Casey Fiesler in her own entry to this series of articles. Fiesler in her chapter on gift logic talks about communities of fans creating and sharing original work, and this very dynamic appears in discovery logic too: fans creating and sharing their knowledge of a given subject. Often they do this by building out *collections* of organized content, which can either be created by one user or by a group of them.

From 2007 to 2016, perhaps the most audacious and comprehensive discovery network of all operated for invited members only, called What.cd.[13] It was an awe-inspiring catalog of recorded music, with a lively forum culture where fans would discuss music and a collections feature called "collages" where users would

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11 Okayplayer, https://www.okayplayer.com [https://perma.cc/5LTR-DWHF] (last visited July 13, 2022).

12 Erowid, https://www.erowid.org/ [https://perma.cc/UJ6T-VNTE] (last visited Oct. 25, 2022).

13 What.CD, Wikipedia, https://en.wikipedia.org/wiki/What.CD [https://perma.cc/E85V-7Q4P] (Feb. 5, 2022, 1:54 PM).

collate albums based on genre, geography, year, or some sort of aesthetic commonality. Collections are a key part of a discovery platform, and the most exciting collections are ambitious cooperative curation efforts to pool knowledge. In the case of What.cd, for example, users created incredibly comprehensive databases around specific artists, fringe genres, or already-existing collections like Pitchfork's "Top 100 Albums of the 1990s."

So why was What.cd so short-lived? It was a private torrent tracker and an incredibly large one at that. Its well-developed discovery technology was tied directly to unauthorized sharing of MP3s, and it shut down when its servers were seized by the French authorities.[14] The tragedy of What.cd is that it would have been useful to users even without the links to torrents but, sadly, the connection to a technology for music "piracy" meant that the baby got thrown out with the bathwater. There was no opportunity for What.cd users to unlink that community from the huge trove of copyright content—it simply disappeared alongside those files.

That does not mean that user interaction is dead in discovery. In fact, Letterboxd, a movie-based discovery platform, has made social interaction via collections the central affordance of its platform. These collections are nearly identical to What.cd's collages and allow users not only to have discussions on pages for individual movies but on pages for collections too.

Those collections can be defined by anything from a genre to a group of movies referenced by a director in a particular interview to a specific trope. Letterboxd's collection affordance is so robustly social that it even facilitates a unique brand of play. Users will create hilariously specific collections based around some odd detail shared by a handful of movies, like "Movies that were released in 2021 in which Benedict Cumberbatch puts on an American accent and has a Strange relationship with a boy in his late teens named Peter who has a dead dad, telling the boy at some point in the film not to call him 'sir.'"[15] There are, in fact, two films in the collection.

Technology. Some kind of database of content is always core to discovery logic. In the case of file-sharing communities, these would be actual digital versions of the media. But in all other cases, that content is some sort of sorted metadata. Letterboxd is built around data from an open-source alternative to IMDB called The Movie Data-

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14 Marc Hogan, *Torrent Website What.CD Shuts Down*, Pitchfork (Nov. 17, 2016) https://pitchfork.com/news/69889-torrent-website-whatcd-shuts-down [https://perma.cc/4R29-K2AD].

15 Montenore, *Movies That Were Released in 2021 in Which Benedict Cumberbatch Puts on an American Accent*, Letterboxd, https://letterboxd.com/montenore/list/movies-that-were-released-in-2021-in-which [https://perma.cc/FRE7-GYRR] (last updated June 14, 2022).

base,[16] or TMDB. Goodreads is built around a proprietary corpus of data aggregated from publishers, online bookstores like Amazon, and the Library of Congress.

The other key component of this is a robust user profile, which often includes a catalog of all the media that that user is willing to share and reviews of that media. Users often communicate with each other through comments on specific items or collections of media.

Metadata is uniquely important to discovery logic, since so much of the social interaction on these platforms is built around organizing data. Typically, specific works get a single entry, and metadata are treated like tags.

For example, on Letterboxd, the film "Chunking Express" gets its own page that includes links to pages for its directors Wong Kar-wai, the year it came out (1994), its user-identified genres and themes, every notable member of its cast and crew, and so on. This is crucial for the social interaction on the platform, as it lets users do things like create a list for all romance movies from 1994 set in Hong Kong. Then, in the discussion on that collection, they can dissect which movies qualify, debate which is actually the best movie in the collection, and recommend, say, a romance movie set in Hong Kong from 1995.

Revenue model. Discovery platforms are often funded by a mix of paid advertising and user subscriptions. In the case of private torrent trackers, donations are often solicited in bitcoin to help support operating costs.

Governance. Centralized moderation remains the model of discovery platforms, likely descending from traditions of message board moderators. Discussion is inherently constrained to the relevant topic for that platform, providing some kind of guardrails for discourse. Governance effectively sets the bounds of that conversation. For example, on Goodreads there are clear rules against hate speech and bigotry, as well as established norms that keep conversations focused on the books themselves. Hence, on the site entry for *Mein Kampf*, you find neither antisemitic rants nor essays denouncing its author. Even so, as with any moderation rules, there is still a fair amount of trolling and line-toeing that barely fit within the bounds of said governance and norms.

Seemingly conflicting ideologies are embedded in discovery logic. On one hand, there is classical cyberlibertarianism that dates back to the WELL, taking the principle of

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16 The Movie Database, https://www.themoviedb.org [https://perma.cc/57Q9-V3E3] (last visited July 13, 2022).

individual liberty and extending it to information, boiled down to the idea that information wants to be free and should move unchecked. Such is the raison d'être not just behind ambitious cataloging projects, but What.cd's file distribution and Erowid's imperative to expand knowledge and know-how about illicit substances. The very term cyberlibertarianism was coined by Grateful Dead lyricist and early WELL member John Perry Barlow.

Yet discovery platforms are also consummately voluntarist, communitarian projects. Together, users are creating vast corpora of knowledge, making a huge amount of movies, books, music, anime, or even restaurants more accessible through review and categorization. The thing that elevates Letterboxd from simply being a repackaging of TMDB metadata is the fact that it exists as a social space where users, together, create context for artistic work.

This is where the aforementioned gift logic comes into play: discovery platforms are powered by passionate affinity groups that rally around work they want to support, in turn supporting each other's passion. Much like with the Okayplayer example, such support can extend to creators too. What results is the "cycle of gifting" that Feisler sketches out in her chapter, where participants reward each other for meaningfully taking part. That cycle makes discovery logic transformative, as the incentive structure does not simply reward engagement but creates a safe place for participants to try new ways of expressing themselves.

About the Author

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Chat Logic



Whatsappis Familiaris

Chat Logic: When you want a living room, not a town square

People want privacy and ephemerality, but can it scale?

When Mark Zuckerberg declared "The future is private" at Facebook's annual conference in 2019, it was seen as an odd—perhaps even laughable—statement.[1] Facebook has a long history of privacy scandals, one of which led to a Federal Trade Commission consent decree and a record-breaking $5 billion fine, and another of which, the Cambridge Analytica controversy, is the subject of articles, books, and films.[2] Privacy is not exactly what Facebook is best known for.

However, Zuckerberg's declaration actually made perfect sense. The digital town square Facebook had created was fundamentally at odds with the informality, privacy, and ephemerality of offline social interactions. For Facebook's first 15 years—especially after the introduction of the newsfeed—interacting on it was the equivalent of having your living room transported to a stage in the middle of the town square where you were recorded and archived. That's an unnatural way to structure social life. Many people prefer the intimacy of communicating one-on-one or with a few friends and family. They don't want a permanent, public record of what they've shared.

Where have people turned instead? Chat apps. Think about where you go to comment on breaking news, joke with friends and family, and share photos from your weekend. Increasingly, it's apps like WhatsApp, Discord, iMessage, and Snapchat.

This shift is hugely important. It means our digital town squares—Facebook, Twitter, YouTube—look more like our offline town squares: performative, dominated by elites, and subject to constant political contestation. Meanwhile, "living room" interactions that used to take place in digital town squares have migrated to chat apps.

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1 Nick Statt, *Facebook CEO Mark Zuckerberg Says the 'Future is Private,'* VERGE (Apr. 30, 2019, 1:22 PM), https://www.theverge.com/2019/4/30/18524188/facebook-f8-keynote-mark-zuckerberg-privacy-future-2019.

2 Press Release, Fed. Trade Comm'n, FTC Imposes $5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook (July 24, 2019), (https://www.ftc.gov/news-events/news/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions-facebook [https://perma.cc/W6DT-BPA3]).

Chat became a popular form of interaction online in the early 1980s, with programs like "talk" that allowed users of the same Unix systems to chat with one another, and "ntalk" that allowed chat between different computers on the same network. In 1988, Finnish programmer Jarkko Oikarinen created Internet-Relay-Chat (IRC), an open, decentralized protocol that allows users to chat in groups called "channels" and one-on-one.[3] IRC was quickly joined by platforms that used proprietary protocols and were able to offer superior user experiences like ICQ, AIM, and Yahoo Messenger. However, this meant that people had to use multiple instant messaging clients to communicate with friends across different platforms (similar to how social media works today). Jabber (now called XMPP) tried to address this by creating a protocol that used gateways—connections to other messaging protocols—to enable multiprotocol clients.[4] Using Jabber, you could access all your messages across different platforms using a single client (this is similar to what Gobo.social is trying to achieve with today's social media platforms[5]). However, the rise of mobile phones and companies' desire to create walled gardens meant that multiprotocol clients largely fell by the wayside. Today's dominant chat platforms run on proprietary protocols and explicitly discourage interoperability with other services and clients.

WhatsApp, Discord, iMessage, Snapchat, Slack, Telegram, Signal and other popular chat platforms fall under what we will call chat logic. The most important features of "chat logic" are privacy, ephemerality, and community governance. They are what make chat platforms more like a living room than a town square. We can map these characteristics on to the axes we've been using to understand social media platforms:

- Technology—varied
- Revenue model—varied
- Ideology—private, real-time communication for everyone
- Governance—community
- Affordances—privacy, ephemerality, real-time communication (text, audio, video)

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3 *See generally Jarkko Oikarinen*, Wikipedia, https://en.wikipedia.org/wiki/Jarkko_Oikarinen [https://perma.cc/EUN8-U3M4] (Apr. 26, 2021, 6:03 PM).

4 *See generally XMPP*, Wikipedia, https://en.wikipedia.org/wiki/XMPP [https://perma.cc/N7B7-S6DL] (Feb. 17, 2022, 9:17 PM).

5 MIT Media Lab: Project Gobo, https://www.media.mit.edu/projects/gobo/overview/ [https://perma.cc/FJJ3-Q7RA] (last visited Nov. 28, 2021).

Technology. Some chat platforms store messages in centralized servers. Others store messages on users' devices and use end-to-end encryption. All use centralized servers to route messages and most use proprietary protocols. The decision to store messages locally or in the cloud depends largely on the intended use case. Chat platforms that cater to larger groups such as Discord and Slack want the ability to enforce rules centrally. They maintain large chat histories that can't be stored on a user's device, so they tend to use the cloud. Chat platforms that are intended for smaller groups and one-on-one communication, like WhatsApp or iMessage, emphasize user privacy and have small footprints, so they usually store messages locally and use end-to-end encryption. In some cases, like Signal, the end-to-end encryption is the key selling point for the whole system.

Most chat platforms rely on proprietary protocols and discourage interoperability. This helps the platforms monetize and control their user experience. However, as we saw with Jabber, for as long as instant messaging has been around people have tried to find ways to build clients that fit their needs and still allow them to communicate with the wider network. For example, in Africa, alternative WhatsApp clients that are created by reverse-engineering WhatsApp are actually more popular than Facebook.[6] This is a great example of adversarial interoperability, which is explained by Cory Doctorow as "when you create a new product or service that plugs into the existing ones without the permission of the companies that make them."[7]

Revenue model. There isn't a settled revenue model for chat platforms. Some rely on donations, like Signal and Telegram. Others rely on subscriptions, like Slack (and formerly WhatsApp); on ads, like Facebook Messenger and Snapchat; or on paid features and add-ons, like Line and WeChat.

Ideology. These platforms aim to provide private, real-time communication for everyone. Rather than broadcast, chat logic is about one-on-one or small group communication. Some platforms are focused on encryption, like Signal, and others target businesses, like Slack or Wire. But overall, the purpose of chat platforms is to provide real-time communication, with tight control over who accesses your chat, to everyone who wants it.

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6 Caribou Data, *If an App Falls Outside the Play Store, Does Anyone Track It?,* Medium (Nov. 27, 2019), https://medium.com/caribou-data/if-an-app-lives-outside-the-play-store-does-anyone-track-it-c267c5c2b3a7; Cory Doctorow, *African WhatsApp Modders Are the Masters of Worldwide Adversarial Interoperability,* Elec. Frontier Found.: Deeplinks Blog (Mar. 18, 2020), https://www.eff.org/deeplinks/2020/03/african-whatsapp-modders-are-masters-worldwide-adversarial-interoperability [https://perma.cc/SXQ4-MSAT].

7 Cory Doctorow, *Adversarial Interoperability,* Elec. Frontier Found. (Oct. 2, 2019), https://www.eff.org/deeplinks/2019/10/adversarial-interoperability [https://perma.cc/GAW5-E5AE].

Governance. Because chat logic is about small groups, governance is handled by the community. Platforms that use local storage and/or end-to-end encryption like WhatsApp, iMessage, and Signal are unable to centrally moderate by design. Platforms that use cloud storage either choose not to moderate except in extreme circumstances, like Telegram, or set baseline rules that are then extended by the community, like Discord. Decentralizing governance means that chat platforms cater to a diverse array of communities with different norms, standards, and purposes. As Discord puts it, chat platforms are great "[w]hether you're part of a school club, gaming group, worldwide art community, or just a handful of friends."[8]

On platforms that cater to smaller groups, like iMessage, WhatsApp, and Snapchat, moderation is essentially an extension of offline social life. People can be "ghosted," removed from chats, and blocked for a number of reasons, but there is rarely a formal code of conduct for what speech is permitted or banned. Frequently smaller group chats are made up of people who know each other offline, which can incentivize good behavior.

On platforms that cater to larger groups like Discord and Slack, there are designated "channel" administrators (similar to subreddit moderators) who handle moderation and create formal policies that they then enforce. Larger group chats suffer from many of the same content moderation problems traditional social media faces. For example, Discord hosted a number of far-right chats that were used to plan the deadly Charlottesville protests in 2017.[9] Additionally, large WhatsApp groups have been blamed for inciting mob murders in India.[10]

Small group chats seem to avoid some of the moderation problems that plague many social media platforms. But as groups get larger, people are less likely to know each other in different contexts, and discussions can get out of control. Some of the WhatsApp groups that have been blamed for inciting violence had 100 or more members, which combined with easy message forwarding means they may have functioned more as a broadcast and amplification service than a private space for discussion.

Affordances. Chat platforms offer real-time communication, privacy, and ephemerality. Chats are private by default—you usually need an invitation to join one. This

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8 Discord, https://discord.com/ [https://perma.cc/TK9R-L3KF] (last visited Nov. 30, 2021).

9 April Glaser, *White Supremacists Still Have a Safe Space Online*, Slate (Oct. 9, 2018, 5:55 AM), https://slate.com/technology/2018/10/discord-safe-space-white-supremacists.html [https://perma.cc/ZSL6-9EM6].

10 *How WhatsApp Helped Turn an Indian Village into a Lynch Mob*, BBC News (July 19, 2018), https://www.bbc.com/news/world-asia-india-44856910 [https://perma.cc/6GBC-2J39].

means you can be fairly confident that what you share will only be seen by other people in the chat, giving you the freedom to be yourself and connect naturally. Chats are also ephemeral. Some platforms enforce this directly, like Snapchat and its disappearing messages. However, chats are also inherently ephemeral because they are usually real-time and typically high volume. Just like you don't remember the majority of your offline conversations, most online chats are quickly forgotten. Additionally, there isn't an easily accessible public archive of your messages that could be used against you. Remarks made on chat platforms will usually fade into obscurity, and capturing and reposting chat transcripts is a major violation of norms in many chat communities.

The evolution of chat logic spaces in parallel to more permanent and asynchronous social media spaces is likely a positive development. We shouldn't have to subject ourselves to the competitive, political, and highly visible digital town square when we are trying to hang out with friends and family or organize in small groups. That's what living rooms are for.

However, as chat logic platforms become the dominant spaces in some online ecosystems—particularly in developing nations, and in nations with large diasporas like India—they may act as powerful amplifiers and broadcasters. At that point, the advantages of chat logic—ephemerality, privacy, and speed—can become dangers instead of benefits. High-velocity misinformation, spread through channels that can't be easily studied, is a nightmare for scholars of hate speech and mis/disinformation.

Some chat platforms are trying to stop living rooms from turning into de facto public squares by limiting their size and virality. Whether users accept these restrictions, or whether they simply move to less regulated spaces may determine how the living room/public square tension is resolved going forward.

Alt-Tech Logic



Utentis Deplatformatus

Chand Rajendra-Nicolucci & Ethan Zuckerman

Alt-Tech Logic: Deplatforming our way to the alt-tech ecosystem

What happens when you exile users and communities?

On August 6, 2018, Alex Jones finally got deplatformed.

The conspiracy theorist behind the popular Infowars site had been pushing the bounds of acceptable speech for many years. His belief that the massacre of 20 children and six educators by a deranged shooter at the Sandy Hook Elementary School was a "false flag" operation involving "crisis actors" is perhaps the most offensive of Jones' theories, leading to defamation lawsuits from some of the parents of victims. But what finally led to Jones' removal from major social media platforms was his tendency to celebrate and endorse violence, in direct conflict with platforms' terms of service.

Apple moved first, removing five of Jones' six shows from its widely used podcast index. While Apple was not hosting Jones' content, their decision to de-index him had a significant impact, opening the floodgates for other platforms to take action. Facebook, YouTube, and Spotify deleted much or all of his content the same day, citing a variety of reasons. Facebook noted that Jones had previously been suspended from the platform for 30 days, pointing to a "repeat offenders" policy as the reason he could be removed from the platform.[1] Spotify had removed individual episodes of Jones' show a week earlier but defended the decision to completely ban it based on hate speech and incitement to violence. The deplatforming that most hurt Jones was likely YouTube's—his channels had 2.5 million subscribers and his videos over a billion combined views.[2] While many platforms quickly followed Apple's decision on August 6, Twitter allowed Jones to remain, finally banning him a month later.[3] (This sequence of events is a great

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1 *Enforcing Our Community Standards*, META (Aug. 6, 2018), https://about.fb.com/news/2018/08/enforcing-our-community-standards/ [https://perma.cc/V5GB-U55H].

2 John Paczkowski & Charlie Warzel, *Apple Kicked Alex Jones Off Its Platform, Then YouTube and Facebook Rushed To Do the Same,* BUZZFEED NEWS (Aug. 6, 2018, 1:34 PM), https://www.buzzfeednews.com/article/johnpaczkowski/apple-is-removing-alex-jones-and-infowars-podcasts-from [https://perma.cc/CUS4-YHLP].

example of what evelyn douek calls the "domino effect"—mainstream platforms often make controversial decisions in near unison in a scramble not to be the odd one left out.[4])

Deplatforming reduced the reach of Jones' Infowars website—a New York Times analysis reported 1.4 million daily views of the Infowars site and videos during the three weeks before the ban and only 715,000 daily views in the three weeks post-ban.[5] But deplatforming Jones didn't silence him—it just sent him to Gab. And Parler. And his own video streaming site, Banned.Video.[6]

Jones' deplatforming was a signature event in the growth of what we might call "alt-tech." Much as the alt-right has attempted to rebrand racist nationalism and neo-Nazism in a more acceptable guise, alt-tech platforms represent a slick, modern version of the old racist social media, hosted on sites like Stormfront. While Stormfront, which still exists despite sustained efforts to pull it offline, looks like a 1990s-style bulletin board system, alt-tech sites mimic contemporary social media sites, with an ideological twist. They promise to offer free speech, uncontrolled by the gatekeepers of Silicon Valley. Indeed, Parler—an alt-tech Twitter alternative started in 2018—advertises this on its front page, saying "Speak freely and express yourself openly, without fear of being 'deplatformed' for your views."[7] (This promise often isn't borne out in reality as Parler regularly bans trolls who hold opposing viewpoints.[8])

The logic of alt-tech platforms is simple: They exist to provide a parallel online space for individuals, ideas, and causes that are outside the boundaries of speech permitted on mainstream social media platforms.

There is no one set of technical affordances that describe the alt-tech space because providers are working to replicate every part of the tech universe. Consider Hatreon, the bluntly named alt-tech alternative to crowdfund site Patreon—it has been down

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3 Avie Schneider, *Twitter Bans Alex Jones and InfoWars; Cites Abusive Behavior*, NPR (Sept. 6, 2018, 6:29 PM), https://www.npr.org/2018/09/06/645352618/twitter-bans-alex-jones-and-infowars-cites-abusive-behavior?t=1619187838703 [https://perma.cc/D8ZB-8JDE].

4 evelyn douek, *The Rise of Content Cartels*, Knight First Amendment Inst. at Colum. Univ. (Feb. 11, 2020), https://knightcolumbia.org/content/the-rise-of-content-cartels [https://perma.cc/YCC6-S5FF].

5 Jack Nicas, *Bans Will Make Me Stronger, Infowars Founder Said. No, They Didn't.*, N.Y. Times, Sept. 5, 2018, at B2.

6 Banned.Video, https://banned.video/ (last visited Oct. 25, 2022).

7 Parler, https://parler.com/main.php [https://perma.cc/PK4V-J236] (last visited Dec. 1, 2021).

8 Mike Masnick, *As Predicted: Parler Is Banning Users It Doesn't Like*, Techdirt (June 29, 2020, 12:08 PM), https://www.techdirt.com/articles/20200627/23551144803/as-predicted-parler-is-banning-users-it-doesnt-like.shtml [https://perma.cc/H3DK-K9LV].

since 2017 when Visa stopped processing payments for them, but the name makes the mission quite clear.[9] Similarly, alt-tech sites replicate the functionality of YouTube, Reddit, Twitter, and even payment processing systems like PayPal or Square.

It's worth taking a close look at alt-tech platforms given Donald Trump's removal from Facebook, Twitter, Instagram, and other mainstream social media platforms. On January 6, 2021, President Trump held a "Save America" rally in Washington, D.C., where he urged his followers to march on Congress to protest the certification of electoral college votes for the 2020 election. Some of those follower stormed the Capitol, vandalizing and looting the building, forcing Congress to flee their chambers, and ultimately resulting in at least five deaths.[10] Asked by lawmakers on both sides of the aisle to condemn the riot, Trump released a video on Twitter and Facebook that repeated his unfounded claims about election fraud and expressed encouragement and solidarity with the rioters. Twitter and Facebook allowed the video to stand, with warnings, for a few hours before removing the posts and banning the president for incitement to violence. These bans were announced as temporary suspensions, though Twitter banned the president permanently on January 8 "due to the risk of further incitement of violence," and Facebook banned the president indefinitely.[11]

This was not the first clash between the president and mainstream social media platforms. The president and many of his supporters believe that mainstream platforms are biased against conservative points of view. (Some scholarly research suggests the opposite, showing that mainstream platforms serve as a more powerful echo chamber for right-wing points of view than they do for left-wing perspectives.[12]) As platforms got more aggressive about labeling the then-president's statements as falsehoods, Trump struck back, issuing an executive order that aimed to strip platforms of Section 230 liability protections if they restricted or removed access to content, i.e., if they labeled his tweets.[13] The president later vetoed the National De-

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9 Hatreon (2018), https://hatreon.net/ [https://perma.cc/8SPQ-KS4E] (last visited Dec. 1, 2021).

10 Ed Pilkington, *Incitement: A Timeline of Trump's Inflammatory Rhetoric Before the Capitol Riot*, Guardian (Jan. 7, 2021, 12:35 PM), https://www.theguardian.com/us-news/2021/jan/07/trump-incitement-inflammatory-rhetoric-capitol-riot [https://perma.cc/C8J7-GLZ9].

11 Press Release, Knight First Amendment Inst. at Colum. Univ., Knight Institute Comments on Permanent Suspension of President Trump's Twitter Account (Jan. 8, 2021) (https://knightcolumbia.org/content/knight-institute-comments-on-permanent-suspension-of-president-trumps-twitter-account [https://perma.cc/NN7P-EFCR]).

12 Steven L. Johnson et al., Opinion, *Facebook Serves as an Echo Chamber, Especially for Conservatives. Blame Its Algorithm.*, Wash. Post (Oct. 26, 2020), https://www.washingtonpost.com/opinions/2020/10/26/facebook-algorithm-conservative-liberal-extremes/ [https://perma.cc/J4D4-NWMZ].

13 Anshu Siripurapu, *Trump and Section 230: What to Know*, Council On Foreign Rels. (Dec. 2, 2020, 7:00 AM), https://www.cfr.org/in-brief/trump-and-section-230-what-know [https://perma.cc/WA7W-2QYS].

fense Authorization Act in part because it failed to overturn Section 230 protections as he had demanded. (Congress overrode his veto.[14])

After Trump was deplatformed, it seemed likely that he would establish a presence on an alt-tech platform, just as Alex Jones did when Infowars was deplatformed. And he eventually did, creating his own platform Truth Social. Tech journalist Kevin Roose speculated that deplatforming Trump will limit Trump's appeal to a narrow, ideologically insular audience, constraining his reach and power.[15]

Perhaps. But it's complicated: As prominent figures like Jones are forced onto alt-tech platforms, they bring their userbases with them. Gab's CEO claims that his service's userbase expanded 120 percent in the 24 hours after Trump's Twitter suspension.[16] That's impossible to verify, but consistent with the rise in popularity of other alt-tech platforms, like Parler, which had roughly 500,000 daily active users in late October 2020, but rose to almost 3 million after the 2020 U.S. presidential election and later stabilized to around 2.3 million users per day.[17] In fact, the alt-tech space may be poised to develop into a significant and influential part of the media ecosystem, especially if Trump is forced into it. Research from Harvard has shown the unique reach and power of Trump's social media presence, and though it inevitably diminished as he left office, his sizable influence will likely accelerate the development of the alt-tech space.[18]

It's not just people who get deplatformed: so do platforms. Pittsburgh synagogue shooter Robert Gregory Bowers maintained an active profile on Gab where his bio was filled with anti-Semitic statements, and where he posted the infamous phrase "Screw your optics, I'm going in" before killing 11 worshippers.[19] Companies that provided payment services, domain names, and web hosting to Gab terminated their

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14 Adam Mazmanian & Lauren C. Williams, *Senate Overrides Trump's Veto; NDAA Becomes Law*, Fed. Comput. Wk., (Jan. 1, 2021), https://fcw.com/articles/2021/01/01/ndaa-veto-overturned-senate.aspx [https://perma.cc/UHS7-USF6].

15 Kevin Roose, *Megaphone to Masses Goes Silent,* N.Y. Times, Jan. 8, 2021, at B1.

16 Andrew Torba, *Get President Trump on Gab.com*, GABnews (Jan. 6, 2021), https://news.gab.com/2021/01/06/president-trump-on-gab-com/#more-2463 [https://perma.cc/F7QS-TZLP].

17 Kaya Yurieff, *Conservatives Flocked to Parler After the Election. But Its Explosive Growth Is Over*, CNN Bus. (Dec. 10, 2020, 11:23 AM), https://edition.cnn.com/2020/12/10/tech/parler-downloads/index.html [https://perma.cc/Z3DV-KYQN].

18 Yochai Benkler et al., *Mail-In Voter Fraud: Anatomy of a Disinformation Campaign* (Berkman Klein Ctr. for Internet & Soc'y at Harv. Univ., Working Paper No. 2020-6, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3703701 [https://perma.cc/VFB8-V57T].

19 Graham Kates, *Gab Appears to Be Losing Investors After the Pittsburgh Synagogue Shooting,* CBS News (Oct. 30, 2018, 5:14 PM), https://www.cbsnews.com/news/pittsburgh-shooting-gab-appears-to-be-losing-investors-after-synagogue-attack-robert-bowers/ [https://perma.cc/UAB3-MG3E].

relationships, and Gab was offline for several days until it could find a domain name registrar and web host willing to provide it with services. Gab also found itself exiled from the decentralized internet community Mastodon. In July 2019, Gab began using a forked version of the open-source Mastodon code to run its site. Mastodon issued a statement opposing Gab's values,[20] and makers of important Mastodon clients blacklisted the Gab site,[21] making it unreachable for their users. Gab has also been unable to create a mobile app as both the Apple App and Google Play stores have rejected Gab on the grounds that it supports hate speech.[22] Similarly, Parler was removed from Amazon's cloud services and the Google and Apple app stores in the days after the Capitol riot.[23]

Not only is it hard to keep an alt-tech site on the internet—it's even harder to make money from it. Gab is supported by user subscriptions (the site is free, but subscriptions give access to premium features) and donations/investments. Parler has been pursuing an investor-backed model, launching ParleyAds, an ad network that claims to be less restrictive than Facebook and Google.[24] However, a major investor in Parler is Rebekah Mercer, a prominent conservative donor, which suggests that her investment might be ideologically motivated rather than purely based on financial interests.[25]

Understanding the alt-tech space in terms of ideology helps explain the decisions some players in the space make. TheDonald.win is one of several community sites that broke away from Reddit when the company banned the notorious pro-Trump community, r/The_Donald. These .win sites—communities.win—are bare-bones, with no attempts at monetization, but host active discussions about Donald Trump, Tucker Carlson, and various conspiracy theories on a system that looks like Reddit.

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20 Eugen Rochko, *Gab Switches to Mastodon's Code,* Mastodon: Blog (Oct. 28, 2021), https://blog.joinmastodon.org/2019/07/statement-on-gabs-fork-of-mastodon/ [https://perma.cc/CAZ6-6972].

21 Ben Makuch, *The Nazi-Free Alternative to Twitter Is Now Home to the Biggest Far Right Social Network,* Vice (July 11, 2019, 3:01 PM), https://www.vice.com/en/article/mb8y3x/the-nazi-free-alternative-to-twitter-is-now-home-to-the-biggest-far-right-social-network [https://perma.cc/WJQ8-74HW].

22 Timothy B. Lee, *Google Explains Why It Banned the App for Gab, a Right-Wing Twitter Rival,* Ars Technica (Aug. 18, 2017, 2:15 PM), https://arstechnica.com/tech-policy/2017/08/gab-the-right-wing-twitter-rival-just-got-its-app-banned-by-google/ [https://perma.cc/VN36-LPF5].

23 Jack Nicas & Davey Alba, *Amazon, Apple and Google Cut Off Parler, an App that Drew Trump Supporters,* N.Y. Times (Jan. 13, 2021), https://www.nytimes.com/2021/01/09/technology/apple-google-parler.html [https://perma.cc/UP2Z-8V2N].

24 Parley Ads, *Parler Influencer Network | Parley Ads,* YouTube (Dec. 4, 2020), https://www.youtube.com/watch?v=IK449US64Bo [https://perma.cc/5SCT-F9S8].

25 Jeff Horwitz & Keach Hagey, *Parler Makes Play for Conservatives Mad at Facebook, Twitter,* Wall St. J. (Nov. 15, 2020, 1:05 AM), https://www.wsj.com/articles/parler-backed-by-mercer-family-makes-play-for-conservatives-mad-at-facebook-twitter-11605382430 [https://perma.cc/3S5E-99LS].

It's unclear how much it costs to host such a site but it's possible it's being run purely as a service to users by a small group of like-minded admins and sponsors. Other sites clearly have broader ambitions—in addition to its Twitter-like core site, Gab has launched GabTV as an alternative to YouTube,[26] and the Dissenter Browser, a forked version of the open source Brave browser (see our chapter on crypto logic platforms).

Deplatforming bad actors from mainstream social media—whether they are conspiracy theorists like Jones or U.S. presidents—likely limits the spread of their ideas. However, it could also lead to insular echo chambers, filled with only the most devoted extremists, a dynamic that could lead to further radicalization and extremism. A recent study found that conversation on TheDonald.win is significantly more toxic than the conversation on its predecessor, r/The_Donald.[27] Understanding the tradeoffs of deplatforming and looking for ways to combat extremism on alt-tech platforms will be crucial as the space develops.

The New York Times reported that Gab and Parler were used to help rally rioters to the Capitol on January 6, which has substantially increased the media and research scrutiny of conversations that take place on these platforms.[28] However, these platforms are significantly harder to study than mainstream platforms. Twitter maintains an application programming interface or API that researchers can use to download and analyze tweets. Gab on the other hand has no such interface. Pushshift—an ambitious one-man social media monitoring project—maintains an index of the site for researchers, but fights an uphill battle against Gab's attempts to block its data collection tools.[29] Similarly, security researchers reportedly scraped 70 terabytes of posts from Parler before it was taken down, which may enable research on the platform's role in the Capitol unrest.[30] However, scraping is a challenging research technique that requires significant technical effort to perform, and in this case the researchers even had to hack the platform to archive the data.

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26 *See generally Guide*, GabTV, https://tv.gab.com/guide [https://perma.cc/75FW-BARG] (last visited Dec. 1, 2021).

27 Manoel Horta Ribeiro et al., *Do Platform Migrations Compromise Content Moderation? Evidence from r/The_Donald and r/Incels*, 5 Proc. Acm on Hum.-Comput. Interaction 316:1 (2021).

28 Sheera Frenkel, *The Storming of Capitol Hill Was Organized on Social Media*., N.Y. Times (Jan. 6, 2021), https://www.nytimes.com/2021/01/06/us/politics/protesters-storm-capitol-hill-building.html [https://perma.cc/UMM6-JUSZ].

29 *See generally* Pushshift.io, https://pushshift.io/ [https://perma.cc/4GC7-PGTJ] (last visited Dec. 1, 2021).

30 Vilius Petkauskas, *70TB of Parler Users' Messages, Videos, and Posts Leaked by Security Researchers*, CyberNews (Jan. 13, 2021), https://cybernews.com/news/70tb-of-parler-users-messages-videos-and-posts-leaked-by-security-researchers/ [https://perma.cc/2V2U-RU8N].

This points to a larger lesson. Building a healthy social media ecosystem will be full of trade-offs, and it's important to understand and highlight them, not because the changes are necessarily wrong, but because examining and responding to trade-offs will be crucial to ensuring well-meaning changes don't cause us to take one step forward and two steps back. Alt-tech presents powerful questions about speech online. Is it better to exile toxic speech from popular platforms if it risks making communities even more extreme? If toxic speech becomes harder to study and track, how do we ensure that the act of deplatforming toxic speech isn't weaponized to silence any dissenting point of view? These questions are beyond the scope of this essay but are worth considering as this space develops.



Forum Logic

Chand Rajendra-Nicolucci & Ethan Zuckerman

Forum Logic: Topical, with a side of toxicity

Looking back at topic-based social networks may offer one way forward for social media

A group of Reddit users—"Redditors"—on the r/wallstreetbets subreddit began working in concert to push up the stock price of Gamestop, a moribund brick-and-mortar retailer suffering during pandemic lockdowns.[1] While some believed that Gamestop was undervalued, others saw the opportunity to pressure institutional investors who had bet against the stock—a technique called a "short squeeze," in which investors pump up the value of a stock and force those who've bet against it to buy shares to cover their losses, further increasing the stock value. Gamestop traded at just over $4 a share in June 2020. In late January 2021, it hit a high of $483 a share before settling down at more than 40 times its value from a year before. In the process, institutional investors and hedge funds lost more than $11 billion in bets against the stock.[2]

Gamestop was one of several "meme stocks" celebrated by the r/wallstreetbets community. Other "nostalgia brands," including movie theater chain AMC and smartphone manufacturer BlackBerry, have been championed by r/wallstreetbets and have gone on runs that seem more attributable to online popularity than to the financial fundamentals of a company.[3] Just to ensure that everyone remembers that you can't spell "memestock" without "meme," the r/wallstreetbets community donated more than $350,000 to gorilla conservation charities. Why? The community's motto is "Apes Together Strong," a line from the 2011 film "Rise of the Planet of the Apes"—members of r/wallstreetbets embrace their characterization as "dumb" day traders working together

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1 *See generally r/wallstreetbets*, Reddit, https://www.reddit.com/r/wallstreetbets/ [https://perma.cc/7PT3-Q4AP] (last visited Dec. 2, 2021).

2 Martin Baccardax, *GameStop Short Sellers Nursing $11 Billion in Losses This Year - Ortex*, Street (Mar. 9, 2021, 11:10 AM), https://www.thestreet.com/investing/gamestop-short-sellers-nursing-11-billion-in-losses-ortex [https://perma.cc/NA6H-BMGV].

3 Erin Gobler, *What Is a Meme Stock*, Balance (Oct. 31, 2021), https://www.thebalance.com/what-is-a-meme-stock-5118074 [https://perma.cc/7AWL-NVFS].

to overthrow the "genius" institutional investors.[4] (And, of course, it's also a Harambe reference.[5])

For the brief moment that Reddit-coordinated day traders did war with institutional investors, the vast, multifaceted, and confusing community that is Reddit was on display. And for once, the story wasn't about racism, sexism, political extremism, or pedophilia.

Reddit is massively popular. But because Reddit is so many different things to different people, it often gains widespread attention for the wrong reasons.

Reddit is the most visible American example of a style of digital community called a forum. Forums hail back to bulletin boards, a pre-networked form of digital community in which many users would dial in to the same single computer, read and post messages, then log out to make room for the next user. Forums tend to be text-based, though many support images, and some (imageboards) focus primarily on images. Usenet, a text-based internet forum created in 1979 by a pair of graduate students at Duke University,[6] became the breeding ground for pre-web internet culture, giving birth to emoji, fame wars, trolling, and abbreviations like LOL.[7]

Two important factors of Usenet's success have been embraced by many subsequent forums: a strong commitment to free speech and the ability for users to create their own topical communities. Usenet was a truly distributed network: Users would post messages to a particular node and their messages would be spread to other federated servers. There was no central way to moderate Usenet messages—when spammers began advertising on the network, the only way to delete their posts was by using blocklists at each individual server. While this was technically unwieldy, it illustrated a strongly held design principle—each user should have the right to decide the speech she wanted to see and wanted to filter out. While Usenet began with a small set of clearly defined topics, that "hierarchy" expanded rapidly as users requested new topics and subtopics. When users began requesting topics that administrators thought were inappropriate—notably rec.drugs—a group of Usenet pioneers created the "alt" hierarchy, inaugurating

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4 James Vincent, *WallStreetBets Donates More than $350,000 to Gorilla Charity to Prove 'Apes Together Strong,'* Verge (Mar. 18, 2021, 8:39 AM), https://www.theverge.com/2021/3/18/22337670/wallstreetbets-donate-gamestop-profits-gorillas-fund-apes-together-strong [https://perma.cc/H4BV-RQVS].

5 Don Caldwell, *Harambe the Gorilla,* Know Your Meme, https://knowyourmeme.com/memes/harambe-the-gorilla [https://perma.cc/683H-7B73] (last visited Dec. 1, 2021).

6 *Giganews' Usenet History—The Most Comprehensive Collection of Usenet History,* Giganews, https://www.giganews.com/usenet-history/ [https://perma.cc/LBQ2-4JPE] (last visited Dec. 2, 2021).

7 Cara Bonnett, *A Piece of Internet History,* Duke Today (May 17, 2010), https://today.duke.edu/2010/05/usenet.html [https://perma.cc/H4SF-LU97].

it with alt.drugs, alt.sex, and alt.rockandroll.[8] Surprising absolutely no one, this set of Usenet groups grew rapidly and quickly eclipsed the formal hierarchy of computation- and academic-focused groups.

Forums became an extremely popular form of web community in Japan. 2channel (2ch.net) was founded in 1999 by Hiroyuki Nishimura and emerged as a space for uncensored and anonymous speech. It was a powerful release valve in a culture known for structure and formality, but it was also a vector for harassment and extreme speech. 2chan inspired American teenager Christopher "moot" Poole to create an American successor, 4chan, in 2003, which quickly developed all the problems of its Japanese inspiration as well as a host of novel dysfunctions.[9] 4chan is relentlessly creative, responsible for many of the greatest hits of web culture, including lolcats and rickrolling. It's also a cauldron from whose depths have crawled the Gamergate harassment campaign,[10] aspects of the alt-right movement,[11] and perhaps worst of all, brony fandom.[12] Analyzing 4chan and its predecessors and successors in his book *It Came From Something Awful*, journalist Dale Berran identifies a strain of nihilism that he sees drawing users to 4chan and fueling movements like the alt-right and incel culture.[13]

Reddit's founders Alexis Ohanian and Steve Huffman were surely aware of 4chan when they launched their site in 2005 as a "front-page for the internet," a user-submitted collection of headlines of what was most popular on the internet on any given day. (Indeed, much of what was most popular had been incubated within 4chan.) Organized into topics called "subreddits," Reddit became even more user-driven in 2008 when Redditors were able to create their own subreddits. They did so, in droves—more than 2.5 million subreddits have been created.[14] Even though most are abandoned, hundreds

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8 *1987: The Alt.* Hierarchy,* GIGANEWS, https://giganews.com/?s=1987%3A+The+Alt.*+Hierarchy [https://perma.cc/7Q5H-H2NM].

9 4CHAN, https://www.4chan.org/ [https://perma.cc/4TEH-8ZD4] (last visited Dec. 2, 2021).

10 Aja Romano, *What We Still Haven't Learned from Gamergate,* VOX (Jan. 7, 2021, 11:43 AM), https://www.vox.com/culture/2020/1/20/20808875/gamergate-lessons-cultural-impact-changes-harassment-laws.

11 *Alt-Right*, S. POVERTY L. CTR., https://www.splcenter.org/fighting-hate/extremist-files/ideology/alt-right [https://perma.cc/72FR-FZRH] (last visited Dec. 2, 2021).

12 Una LaMarche, *Pony Up Haters: How 4chan Gave Birth to the Bronies,* OBSERVER (Aug. 3, 2011, 10:31 AM), https://observer.com/2011/08/pony-up-haters-how-4chan-gave-birth-to-the-bronies/ [https://perma.cc/FS4H-3AWE].

13 DALE BERAN, IT CAME FROM SOMETHING AWFUL: HOW A TOXIC TROLL ARMY ACCIDENTALLY MEMED DONALD TRUMP INTO OFFICE (2019). For more on incel culture, see Zack Beauchamp, *Our Incel Problem,* VOX (Apr. 23, 2019, 7:58 AM), https://www.vox.com/the-highlight/2019/4/16/18287446/incel-definition-reddit [https://perma.cc/M4X5-6EZN].

14 METRICS FOR REDDIT, https://frontpagemetrics.com/ [https://perma.cc/7DPA-6GRP] (last visited Dec. 2, 2021).

of thousands remain active, including r/TreesSuckingOnThings (trees growing over inanimate objects like fences),[15] r/unstirredpaint (surprisingly beautiful pictures of paint cans before they've been mixed),[16] and r/dogswithjobs (pictures of working canines, including livestock guardians and police dogs.)[17]

Unfortunately, with the ability to create subreddits came the ability to convene communities around hateful topics. When Ellen Pao took over as CEO of the company in 2014, she banned a set of subreddits focused on "revenge porn"—sexual imagery posted without the consent of the individual portrayed—as well as a number of explicitly hateful subreddits. While the response to Pao's removals was ferocious, Reddit has continued to remove communities it has perceived as toxic, including r/The_Donald, a pro-Trump group that became a hotbed of misinformation and conspiracy theories.[18]

Beneath the toxicity of some highly visible subreddits, much of Reddit is surprisingly healthy and even wholesome. Co-author Ethan Zuckerman teaches a class on fixing social media that includes an assignment in which students must identify and write a case study on healthy online communities—inevitably a third of these communities are subreddits, often support groups for people coping with chronic diseases, etc. These sites are important both because they can be some of the healthiest communities online and some of the weirdest. There's nothing weirder—and more representative of the internet's creative energies—than discovering an interest you've never had with thousands of passionate devotees posting endless variations of content you can't imagine caring about. For those who celebrate the internet's weirdness and wildness, forums are a glimpse back into the medium's earlier and stranger days.

While these sites have a common technical root in forum software, understanding them as subcultural logics may be a better way of absorbing their key characteristics. These forms of social media sites are focused on specific topics and often defend the boundaries of that topic, expressing hostility to the intrusion of other topics. They are likely to develop their own norms and practices, which may bring them into conflict with the broader norms and standards of the platforms they operate on top of. This can get truly confusing when the subculture of a subreddit (r/wallstreetbets) conflicts with the larger

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15 *See generally r/TreesSuckingonThings*, Reddit, https://www.reddit.com/r/TreesSuckingOnThings/ [https://perma.cc/SPV8-CY2F] (last visited Dec. 2, 2021).

16 *See generally r/unstirredpaint*, Reddit, https://www.reddit.com/r/unstirredpaint/ [https://perma.cc/M46F-HKEH] (last visited Dec. 2, 2021).

17 *See generally r/dogswithjobs*, Reddit, https://www.reddit.com/r/dogswithjobs/ [https://perma.cc/4X-ZU-U2SD] (last visited Dec. 2, 2021).

18 *See generally r/The_Donald*, Wikipedia, https://en.wikipedia.org/wiki/R/The_Donald [https://perma.cc/8WS2-5H8F] (Apr. 11, 2022, 7:33 AM).

subculture of Reddit as a whole and with the broader cultural norms of society at large. Many subcultural sites are built on generic platforms that don't have specific affordances for that community's needs—because Reddit never anticipated a subreddit on knitting, there's no special support for sharing knitting patterns. This lack of specific affordances leads to creative repurposing of other tools or the development of helper tools—there is a small ecosystem of tools like Imgur,[19] which exist primarily to provide services to communities within Reddit. Finally, because these subcommunities are so different, your experience interacting with one specific community may be wildly different than interacting with another subcultural community.

Beyond Reddit, which acts like a mega-forum in the U.S., absorbing stand-alone forums, subculture logic is quite popular. Some examples of communities with their own sites: Ravelry, which has emerged as a massive force in the knitting and crafting community, with 9 million registered members and a million monthly viewers;[20] Letterboxd, a community for film lovers;[21] and Mumsnet, a massively popular parenting forum in the U.K.[22]

Forums broadly, and Reddit specifically, present an earlier model for social media, focused on topics of common interest rather than on preexisting social relationships. General-purpose social networks like Facebook work to connect people with individuals they already interact with in the physical world. On signing up for Facebook, you are asked to list the places you've worked and schools you've attended so that Facebook can search for people you might have known at those places. Forums offer a different model, the ability to connect with people who share a common interest, but not necessarily a common background. Given that many people live and work in communities where people share many of their demographic characteristics, it is possible that forums can challenge patterns of homophily, in which "birds of a feather" flock together. Forums offer the intriguing possibility that we might meet people with different backgrounds and origins, united only by a shared interest.

This sort of heterogeneity does not come without consequences. As mentioned above, subcultural spaces often experience stress when other topics intervene, particularly

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19 *See generally* IMGUR, https://imgur.com/ [https://perma.cc/7ZV4-YM5V] (last visited Dec. 2, 2021).

20 *See generally* RAVELRY, https://www.ravelry.com/account/login [https://perma.cc/B5K9-J89H] (last visited Dec. 2, 2021).

21 *See generally* LETTERBOXD, https://letterboxd.com/ [https://perma.cc/8CXC-E9FR] (last visited Dec. 2, 2021).

22 *See generally* MUMSNET, https://www.mumsnet.com/ [https://perma.cc/8XNW-FGF4] (last visited Dec. 2, 2021).

political discussions. Knitting site Ravelry experienced intense pressures during the Trump administration as politics became an unavoidable part of the crafting subculture, as Carrie Battan explains in an excellent piece in The New Yorker.[23] Crafters posted patterns for the pink "pussy hats" that became iconic in association with the Women's March that followed Trump's inauguration. Right-leaning knitters responded by adopting names like "Deplorable Knitter" and posting patterns for MAGA crafts. Ravelry eventually banned Deplorable Knitter, who went on to establish her own Politically Incorrect Knitters community.[24]

Subcultural solidarity is strong but can be challenged when it encounters political tensions and other divisions. That may be part of why communities have such strong norms against straying off topic: It's capable of quickly pulling a community apart. Think about how this works in the offline world—you may like the people in your weekly basketball game, but that doesn't mean you want to discuss politics or religion with them. Subculture logic is an attempt to recreate those communities online, and an important one. The spaces where politics and identity aren't front and center are shrinking—spending time with people who may have nothing in common with us besides a common interest helps us appreciate diversity and build understanding. Those "we're not so different after all" moments are important.

Does subculture logic have any lessons for other types of social media?

Subcultural communities often rely on community governance. One reason may be that people in subcultural communities are passionate about them and thus willing to invest in them. Reddit maintains its massive site with only 400 employees. LinkedIn, which is much smaller, has 15,900 employees. The secret? Reddit relies on tens of thousands of volunteer moderators, who handle most of the work of site moderation and governance day to day. One of those moderators, Robert Peck, explains that Reddit literally couldn't pay him to do the work he does voluntarily for 20 hours a week—he would refuse the work as an overly taxing paid job but does it out of passion for the communities he serves.[25]

This implies that with platforms that lack a similar level of investment in the community, community governance may be less successful. The Reddit model of governance

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23 Carrie Battan, *The Unravelling,* New Yorker, Mar. 29, 2021, at 22.

24 Politically Incorrect Knitters, YouTube, https://www.youtube.com/channel/UCm8CME6h72cFfQ7ZBNGCj5w [https://perma.cc/4T7G-H7DV] (last visited Apr. 20, 2022).

25 Robert Peck, *The Punishing Ecstasy of Being a Reddit Moderator,* Wired (Mar. 21, 2019, 6:00 AM), https://www.wired.com/story/the-punishing-ecstasy-of-being-a-reddit-moderator/ [https://perma.cc/KME2-FUVA].

may not be transferable to Facebook, where people's main reason for being there is the platform's utility, or YouTube, where people are mainly there for entertainment. It is likely, however, that governing topic-focused communities is easier than governing general-purpose spaces like Facebook or Twitter. Peck, the Reddit moderator, offers one reason:

> At /r/aww, people don't always submit pictures of kittens and puppies. Sometimes they post gore porn, or threats to find me and hurt me. My rules are both obvious (kittens are great; no gore porn, no threats) and designed to prevent misuse of the platform (no social media links or handles, and no spamming). At /r/pokemon, I block pictures of, say, caterpillars, because those aren't Pokémon, are they? No, no, they aren't.[26]

It's easy to determine that caterpillars are not Pokémon. It's harder to determine whether a heated conversation on Twitter has crossed into harassment or into organized trolling. Having very specific purposes for communities and rules that follow from those purposes can make the task of governance significantly more manageable.

Additionally, the strong norms and practices in subculture communities help to fend off context collapse, a problem endemic to networks like Facebook and Twitter.[27] This points to a potential solution: Perhaps to avoid context collapse on those platforms, you simply take the conversation elsewhere. So if a conversation starts on Twitter but seems like it might be a better fit in a specific context, you move the conversation to that other space. Perhaps someone replies to an academic's tweet with a question or criticism. Instead of hashing it out on Twitter in full public view, with all the associated bad dynamics, what if the original poster suggested taking the conversation to a space dedicated to discussing that topic, or a space dedicated to intellectual discussion? This could be a way to combine what networks like Twitter or Facebook do well—virality and frictionless connection—with what subcultural spaces do well—putting a conversation in context and sharing it only with the people interested in it.

Maybe when we complain that Facebook and Twitter haven't led to a flowering of new connections, and instead encourage homophily and echo chambers, we are simply looking in the wrong places. Subcultural communities online have been connecting people of all different stripes since the earliest days of the internet. These interest-based communities may actually support some of the utopian proclamations about

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26 *Id.*

27 Charlie Warzel, *"It's Not Cancel Culture—It's a Platform Failure."*, Substack: Galaxy Brain (Apr. 13, 2021), https://warzel.substack.com/p/its-not-cancel-culture-its-a-platform [https://perma.cc/D6AS-JXJN].

the internet leading to a new age of human connection and development. Alas, these communities also host some of the most toxic and extreme subcultures found online. Perhaps there is no utopia without accompanying dystopia.



Q&A Logic

Q&A Logic: Questions, answers, and everything in between

Could social roles help us build healthier communities online?

"Is an egg a fruit or a vegetable?"

"Will my laptop get heavier if I put more files on it?"

"Is pepperoni pizza vegetarian?"

Yahoo Answers, the long-running question-and-answer platform that hosted bad questions, worse answers, and everything in between, shut down in May 2021.[1] While it may be tempting to conclude that its closure is a sign that the time for question-and-answer sites has passed, displaced by Facebook, Google, and Wikipedia, the opposite is true. As we discuss in the next chapter, Q&A is a popular social media logic, occupying a middle space between niche logics like crypto logic and the dominant logics that house platforms like Facebook, YouTube, and WhatsApp.

Who thought asking strangers on the internet to answer their questions was a good idea? And what makes Q&A logic different from other logics we've discussed in this field guide?

Let's start with a bit of background. People have been using the internet for Q&A since its earliest days. The WELL, an influential early bulletin board system, had a dedicated "Experts On The WELL" topic, which was a place to ask questions that experts in the community could respond to.[2] Similarly, Usenet, a decentralized precursor to internet forums, had a number of groups dedicated to Q&A, many of them about technical topics; for example, "comp.sof-sys.matlab" focused on the programming language

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1 Michael Freeman, *16 of the Greatest Questions Ever Asked on Yahoo! Answers*, Daily Edge (Apr. 8, 2014, 9:30 PM), https://www.dailyedge.ie/greatest-yahoo-answers-questions-1404204-Apr2014/ [https://perma.cc/XL4L-K8YQ].

2 Marc A. Smith, Voices from the WELL: The Logic of the Virtual Commons (Jan. 1992) (Ph.D. dissertation, University of California, Los Angeles) (on file with the Digital Library of the Commons, Indiana University).

Matlab.[3] Within active Usenet groups, .help groups formed explicitly to answer user questions and help with debugging and troubleshooting.

As Usenet faded in importance and web 2.0 emerged as a dominant internet paradigm, a lot of Q&A moved to dedicated Q&A platforms like Yahoo Answers, Quora, and Stack Overflow. Today, Quora, Stack Overflow, and homework-focused Brainly are some of the most popular sites in the world—though they aren't usually what comes to mind when we hear "social media."

Users of social media platforms like Twitter or Facebook may not know what kind of content to expect when they log on—"status updates" could involve anything from a joke or a selfie, to a rant designed to start an argument. But on Q&A platforms, the rules are much simpler—you can ask a question or answer one. Marc Smith, a sociologist and director of the Social Media Research Foundation, has done a number of studies focused on Q&A communities, particularly the different social roles that exist in them. He's found that users on Q&A sites largely fall into one of two roles: questioners or answerers.[4] Questioners mostly ask questions, and many ask only a single question. Answerers, on the other hand, mostly answer questions and typically return to the site fairly consistently to answer questions.

Smith has found that the distribution of questioners and answerers is quite skewed.[5] The vast majority of users are questioners—a study estimated that 83 percent of users on Stack Overflow, a popular Q&A platform for software developers, were questioners.[6] Because there are so many questioners, so few answerers, and little overlap between the two groups, it's common for tensions to arise. Answerers can feel like they aren't receiving proper recognition for their contributions, or that questioners are wasting their time by asking repetitive/basic questions and not following community rules. Meanwhile, questioners can feel intimidated and discouraged by the rude and unforgiving responses they receive from miffed answerers, especially when they are new to the community.

A good example of this dynamic can be found on Stack Overflow, where in recent

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3 Howard T. Welser et al., *Visualizing the Signatures of Social Roles in Online Discussion Groups*, 8 J. Soc. Structure 1 (2007).

4 Tamarra Combs Turner et al., *Picturing Usenet: Mapping Computer-Mediated Collective Action*, 10 J. Comput.-Mediated Commc'n (2005).

5 Danyel Fisher et al., *You Are Who You Talk To: Detecting Roles in Usenet Newsgroups*, 3 Proc. 39th Ann. Haw. Int'l Conf. on Sys. Scis. (HICSS'06) 59b (2006).

6 Haowei Wang et al., *An Empirical Study on Developer Interactions in StackOverflow*, SAC '13: Proc. 28th Ann. Acm Symp. on Applied Computing 1019 (2013).

years a number of users have complained that many Answerers are mean and discouraging, creating an environment that is annoying for most people and harmful for novice and marginalized software developers.[7] Unhappy questioners point to responses like these to illustrate their complaints: "[I]f you don't get this … you have no business making a portfolio as a web developer" and "I'm not sure I know how to spell it out in plainer English … not much to digest, even if you have to read it ten times."[8]

Some answerers have responded to this criticism by pointing out that they face a deluge of questions, many of which are repetitive, basic, or don't fit the norms of the community—the snarky responses are both a deterrent to bad questions and an outlet for their frustration. As one answerer put it: "[Stack Overflow] forces us to constantly interact with a stream of garbage; that will inevitably create hostility."[9]

Why do people bother answering random people's questions on the internet in the first place? They aren't being paid, so is it altruism? Smith observed that most answerers on the WELL were motivated by status and recognition: "Being knowledgeable in the WELL and being free with your knowledge is a sure way to gain status, friends, and visibility."[10] In a broader study of online cooperation, Peter Kollock argues that, in addition to status and recognition, contributors to public goods online are motivated by reciprocity (someone else will answer their question), attachment (they want to see the community succeed), and a sense of efficacy (pride in their work and observable impact).[11] Kollock's broader frame of online cooperation in the service of public goods can help us understand that people contribute to Q&A for many of the same reasons that people contribute to open source software, Wikipedia, and online reviews.

It is useful to think about Q&A platforms, especially those that are archived and easily searchable, as community constructed knowledge bases that are closer to Wikipedia than they are to Facebook. When people can't find information from their typical information sources, they turn to Q&A platforms.

One implication of understanding Q&A platforms as archives of knowledge is that

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7 April Wensel, *Suffering on Stack Overflow,* Medium (Apr. 19, 2018), https://aprilwensel.medium.com/suffering-on-stack-overflow-c46414a34a52 [https://perma.cc/6ABU-FGS6].

8 *Id.*

9 Martin Tournoij, *Tired of Stack Overflow,* Personal website of Martin Tournoij ("arp242") (Aug. 22, 2019), https://www.arp242.net/stackoverflow.html [https://perma.cc/5NMT-KY8Y].

10 Smith, *supra* note 4.

11 Peter Kollock, The Economies of Online Cooperation: Gifts and Public Goods in Cyberspace (1996) (unpublished working draft) (on file with the Digital Library of the Commons, Indiana University).

people can use them to find their preferred answers to questions. For example, HuffPost India revealed that Quora India is home to a right-wing ecosystem of contributors who answer questions about controversial political and social topics like "love jihad" (a conspiracy theory that alleges Muslim men trick Hindu women into converting to Islam) and the Ayodhya dispute (a dispute over a Hindu holy site, previously home to a mosque that was destroyed in Hindu nationalist riots).[12] A political strategist for the BJP (the political party of India's current prime minister Narendra Modi) told HuffPost India she spends over an hour a day on Quora to clarify her party's stance on various issues. For people looking to express opinions as facts or to oversimplify complex issues, Quora's question-and-answer format can be attractive—it can give a false veneer of truth to top answers, which are largely selected on the basis of popularity, not accuracy or quality, and ignores whether a question is resistant to a single "correct" answer. As a PR executive working with CEOs on their Quora presence explained to HuffPost India: "opinions should be expressed as 'scientifically' as possible, they shouldn't seem bigoted."[13]

The veneer of authority offered by Q&A sites points to another issue: Even if a question is well-suited to the question-and-answer format, the crowdsourced answers can be wrong. For example, a study exposed major security flaws in some of the most popular C++ code snippets posted on Stack Overflow.[14] The snippets were included in over 2,500 GitHub projects, a sign of how widely the dangerous code spread. It's worth recalling that before Wikipedia became the arbiter of truth for major web platforms, it was widely criticized for flaws in quality.[15] Our understanding of the quality of the content on Q&A platforms will likely evolve, but just as with Wikipedia, robust rules, tools, and norms must be developed to improve the quality of the information on them.

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12 Piyasree Dasgupta & Gopal Sathe, *After Ruining Twitter, Indians Are Turning Quora into a Troll-Fest*, HUFFPOST (Dec. 29, 2018), https://www.huffpost.com/archive/in/entry/twitter-indians-quora-politics_in_5c24c958e4b08aaf7a8e0eb1 [https://perma.cc/HBY9-PG4E]; Arundhati Katju, *The Hindu Nationalist Myth of Love Jihad*, FOREIGN AFFS. (Dec. 23, 2020), https://www.foreignaffairs.com/articles/india/2020-12-23/hindu-nationalist-myth-love-jihad [https://perma.cc/P64T-XDC5]; *Ayodhya Dispute: The Complex Legal History of India's Holy Site*, BBC NEWS (Nov. 9, 2019), https://www.bbc.com/news/world-asia-india-50065277 [https://perma.cc/YK9V-Y3NS].

13 Dasgupta & Sathe, *supra* note 12.

14 Morteza Verdi et al., *An Empirical Study of C++ Vulnerabilities in Crowd-Sourced Code Examples*, IEEE TRANSACTIONS ON SOFTWARE ENG'G (2019).

15 Louise Matsakis, *YouTube Will Link Directly to Wikipedia to Fight Conspiracy Theories*, WIRED (Mar. 13, 2018, 6:36 PM), https://www.wired.com/story/youtube-will-link-directly-to-wikipedia-to-fight-conspiracies/ [https://perma.cc/E2GT-BFF2]; Noam Cohen, *Wikipedia Is Finally Asking Big Tech to Pay Up*, WIRED (Mar. 16, 2021, 12:00 PM), https://www.wired.com/story/wikipedia-finally-asking-big-tech-to-pay-up/ [https://perma.cc/XZZ5-PYQ7].

Business/Ownership Model

The business model of most Q&A platforms is a combination of advertising and subscriptions. Many Q&A platforms struggle to make a profit thanks to competition from Facebook, Google, and Amazon for advertisers and a weak value proposition for subscribers. For example, China's largest Q&A platform, Zhihu, recently explored an initial public offering but is facing questions about its valuation due to its weak revenues.[16] Additionally, as Zhihu has scaled, users have complained that content quality has decreased, a common problem for large Q&A platforms.[17]

Since Q&A platforms facilitate the creation of public goods, it's worth considering whether an alternative business/ownership model would be more appropriate. Both Wikimedia and Q&A platforms rely on volunteer communities to co-create a knowledge base that is broadly available. Freed of conventional venture capital success metrics, Wikimedia has been able to focus on maintaining and improving the quality of its platform even as it scales. Quora may find it easier to live up to its motto as "a place to share knowledge and better understand the world," if it were free of the obligation to justify its $2 billion valuation to investors.[18]

Governance/Affordances

As with any social platform, the experience of a Q&A platform is related to its governance and affordances. In a paper comparing the quality of content on LiveQnA (a mid-2000s Q&A platform) and Q&A groups on Usenet, Smith et al. argue that affordances, norms, and governance explain much of the differences in quality.[19] For example, LiveQnA's open-tagging system made it easier for users to create new, sensational tags and thus attract attention to off-topic posts. On the other hand, Usenet's balkanized and byzantine system made it "harder to attract widespread attention but easier to reach specialized audiences." Additionally, decades-old Usenet norms dictated that you were more likely to receive a reply if you referenced your role and involvement with the group, encouraging members to invest time and energy toward quality contributions. In contrast, LiveQnA lacked norms or affordances for people to document their contributions, making it difficult to establish

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16 Yawen Chen, *Breakingviews - China's Quora Haunted by Own Existential Question*, Reuters (Mar. 22, 2021, 10:05 PM), https://www.reuters.com/article/us-zhihu-ipo-breakingviews-idUSKBN2BF06J [https://perma.cc/BHJ2-A6DT].

17 *Id.*

18 Theodore Schleifer, *Yes, Quora Still Exists, and It's Now Worth $2 Billion*, Vox (May 16, 2019, 3:00 PM), https://www.vox.com/recode/2019/5/16/18627157/quora-value-billion-question-answer [https://perma.cc/YTU4-SKP7].

19 Howard T. Welser et al., *Whither the Experts? Social Affordances and the Cultivation of Experts in Community Q&A Systems*, 2009 Int'l Conf. on Computational Sci. & Eng'g 450 (2009).

and maintain standards for the community.

The importance of strong community norms becomes even clearer when we recognize that most Q&A platforms rely on volunteers to do much of the governance, using a model similar to Reddit's. Community moderators work to verify answers, prune questions, and set and enforce the rules for the community.[20] Governance also occurs through upvotes and downvotes, where users vote on whether a question or an answer is helpful and relevant. Users with a strong "reputation" have more influence with their votes.[21] Reputation is built up through a variety of actions that the platform thinks indicate that the user is reliable and deserves more sway in the community. Reputation systems can be gamed if they aren't designed correctly and can also result in a small group holding outsize influence on the platform. For example, April Wensel, founder of Compassionate Coding, described the influence high-reputation users have on Stack Overflow as a "self-reinforcing toxic power structure."[22]

Social Roles

The distinct "social roles'' on Q&A platforms may hold some lessons for other social media. Benjamin Mako Hill has proposed that Wikipedia's success came in part from its familiarity—people knew what an encyclopedia entry was, which provided a rough script for them to follow in contributing, rather than figuring out what a new tool or community was for.[23] Similarly, Q&A logic communities provide a simple script for participation and may benefit from the resulting social scaffolding. It's worth considering whether other social media logics have well-defined roles, and what this might tell us about them: YouTube's roles of "creator" and "audience" suggest another popular model with clearly defined ways to participate.

Tech companies sometimes imagine their users as interchangeable parts, when in fact, just like in the offline world, they form different parts of a community with distinct roles and responsibilities that require tailored approaches. Much as smart Q&A communities will design for the special needs of questioners and answerers, Facebook, Twitter, and YouTube likely need to design around elites and influencers as well as less-experienced users.

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20 *Who Are the Site Moderators, and What is Their Role Here?*, Stack Overflow, https://stackoverflow.com/help/site-moderators [https://perma.cc/RCS2-H9WC] (last visited Dec. 2, 2021).

21 *How Does the Ranking of Answers on Quora Work?*, Quora, https://www.quora.com/How-does-the-ranking-of-answers-on-Quora-work [https://perma.cc/8HM8-MQXA] (last visited Dec. 2, 2021).

22 Wensel, *supra* note 9.

23 Megan Garber, *The Contribution Conundrum: Why Did Wikipedia Succeed While Other Encyclopedias Failed?*, Nieman Lab (Oct. 12, 2011, 12:00 PM), https://www.niemanlab.org/2011/10/the-contribution-conundrum-why-did-wikipedia-succeed-while-other-encyclopedias-failed/ [https://perma.cc/X3H4-SPBT].

For example, someone with 1 million followers should not be treated the same as someone with 100 followers. (And, in truth, they are likely not handled the same way by platforms' moderation and content policies, with platforms reluctant to take action against their most popular users.) For a person with 1 million followers, Twitter is essentially a printing press on steroids, handling logistics and distribution for a one-person publication. For a person with 100 followers, Twitter is more like a book club, somewhere to discuss things they've read and maybe interact with the people who wrote what they're reading. An approach informed by social roles could make it so people with 1 million followers are subject to stricter rules around harassment and misinformation, while people with 100 followers are freer to interact without platform intervention. Moving toward a better understanding of social roles on platforms might help platforms escape from the impossible task of designing one-size-fits-all content policies.

Clearer roles might also help us better understand the scale and concentration of platforms. YouTube has billions of users who upload hundreds of hours of video each minute. But only 3 percent of the site's more than 50 million creators account for 90 percent of views on YouTube.[24] That changes the equations around YouTube's difficulties with content moderation—a small group of popular and controversial creators likely account for many of the site's most challenging moderation problems. Is the best way to handle those users with automated tools and overworked/underpaid contract moderators, or should YouTube invest significant effort in a separate, robust, and nuanced moderation process for those users? In any community, people take on different roles with different responsibilities. Social media should embrace that reality and implement policies and affordances that reflect it.

Conclusion

Q&A platforms can serve as a reminder of the narrow focus of much of the contemporary debate around social media. The hundreds of millions of people gathering on Quora, Stack Overflow, and Brainly to ask and answer questions are left out when we allow Facebook and Twitter to become synonymous with social media. Though Q&A platforms have their imperfections, we should marvel that millions of people donate their time and effort to help strangers online. Just as we celebrate and learn from Wikipedia, we should celebrate and learn from Q&A platforms, taking cues from their emphasis on social roles and how norms and affordances that respect those roles can lead to healthier social media spaces.

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24 Chris Stokel-Walker, *'Success' on YouTube Still Means a Life of Poverty*, Bloomberg (Feb. 27, 2018, 1:11 AM), https://www.bloomberg.com/news/articles/2018-02-27/-success-on-youtube-still-means-a-life-of-poverty [https://perma.cc/N6LC-4SAE]; Deyan Georgiev, *81+ Youtube Statistics – Growth Trends and Popular Videos in 2022*, Rev. 42 (Jan. 18, 2022), https://review42.com/resources/youtube-statistics/ [https://perma.cc/97GY-895N].



Top 100

Top 100: The most popular social media platforms and what they can teach us

Moving past U.S. and Facebook centrism

Top 100

Constructing a top 100 list wasn't easy. There's no official "registry" of website traffic that serves as a "league table" for social media. Instead, there's a variety of tools used by the advertising industry to choose where to purchase ads. Some of these tools work by auditing website traffic logs; others track a panel of users to estimate traffic to different sites. These methods are not consistent across providers, and it's therefore difficult to come up with a decisive ranking of the most visited websites, especially once you get beyond the most highly trafficked. Besides that, as we'll discuss here, it's not at all clear what websites should be considered "social media."

For our initial data collection, we used a combination of Similarweb's list of the top 100 social networks and online communities,[1] Alexa's list of the top 500 sites on the web,[2] and Wikipedia's list of social networking services.[3] (The initial collection was done in November 2020.) Measurement sites like Similarweb and Alexa aren't perfect tools for measuring popularity. They focus mostly on website traffic, which means they can be blind to mobile usage. However, the two services are complementary: Alexa uses a panel to measure what sites users visit, while Similarweb relies on "first-party direct measurement"—the logs maintained by website providers. We aren't claiming this list is definitive or comprehensive, but we do believe it offers a rough picture of the most popular social media platforms worldwide.

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1 *Top Websites Ranking*, Similarweb (Mar. 2022), https://www.similarweb.com/top-websites/category/computers-electronics-and-technology/social-networks-and-online-communities/ [https://perma.cc/6YQE-5R6C].

2 *The Top 500 Sites on the Web*, Alexa, https://www.alexa.com/topsites [https://perma.cc/4F4V-7LSQ] (last visited Apr. 20, 2022).

3 *List of Social Networking Services*, Wikipedia, https://en.wikipedia.org/wiki/List_of_social_networking_services [https://perma.cc/2FA9-C6VP] (May 10, 2022, 5:01 PM).

As we compiled our list, it became clear that social is eating the world. Many, many websites and apps have some social features. This made deciding what to classify as social media difficult. Are dating sites like Tinder and Hinge social media? Are wikis like Wikipedia and Namu.wiki social media? What about content subscription sites like OnlyFans or Patreon? Our definition of a social media platform from the initial post in our series was: "a digital space that combines communicating or sharing media with aspects of social networking sites." We think this definition still holds up but must be sharpened to deal with the pervasiveness of social features.

To help us with line-drawing, we settled on a subjective test: Is the platform in question more like "a site with social features" or is it "social first"? Consider The New York Times, which has a comment section on many of its online articles, or Amazon, which hosts customer reviews and discussions on product pages. We wouldn't call The New York Times or Amazon a social media platform. They are, respectively, a news website with social features and an online retailer with social features. Same goes for Wikipedia—it's a collaborative online encyclopedia with social features, not a social media platform. Dating sites were more difficult, but in the end, we decided that they were more akin to platforms like Uber which operate two-sided marketplaces—i.e., Tinder is a matchmaking platform with social features. Similarly, we decided that content subscription sites like OnlyFans, Patreon, and Substack are closer to being transaction platforms than platforms for sociality. (This could change if they achieve widespread adoption and add features like content aggregation. Today, these platforms are dominated by paid subscriptions to a small group of creators, but if they shift toward being dominated by content uploaded by the general public, it may make more sense to think of them as falling under creator logic.)

In the end, our definition and the lines we drew aren't the "right" way to define social media. They are just one way that's useful for our purposes.

After we determined a platform fit our definition of social media, we then categorized it by logic and by country. When assigning a platform's country, we assigned the country that was the source of the most visitors to the platform, as reported by Alexa.

Top 100 Analysis

The full top 100 list can be found at the end of this chapter, with a downloadable version available.[4] It is sorted in order of Alexa rank. (For platforms with popular mobile apps, we estimated their Alexa rank by using monthly active user numbers.) We urge

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4 knightcolumbia, *Top 100 Social Media Platforms*, GitHub (Jan. 2021), https://github.com/knightcolumbia/top-100-social-media [https://perma.cc/79N3-BP76].

you to avoid overfocusing on any one platform's rank, inclusion, or omission, though do feel free to ask about a platform you think was left out. As we said above, this is an attempt to offer a rough picture of the most popular social media platforms worldwide, not to provide a definitive or comprehensive ranking. We think the list is most useful for higher-level analysis, such as comparing the popularity of different logics or exploring the popularity of platforms by country.

Some Brief Observations

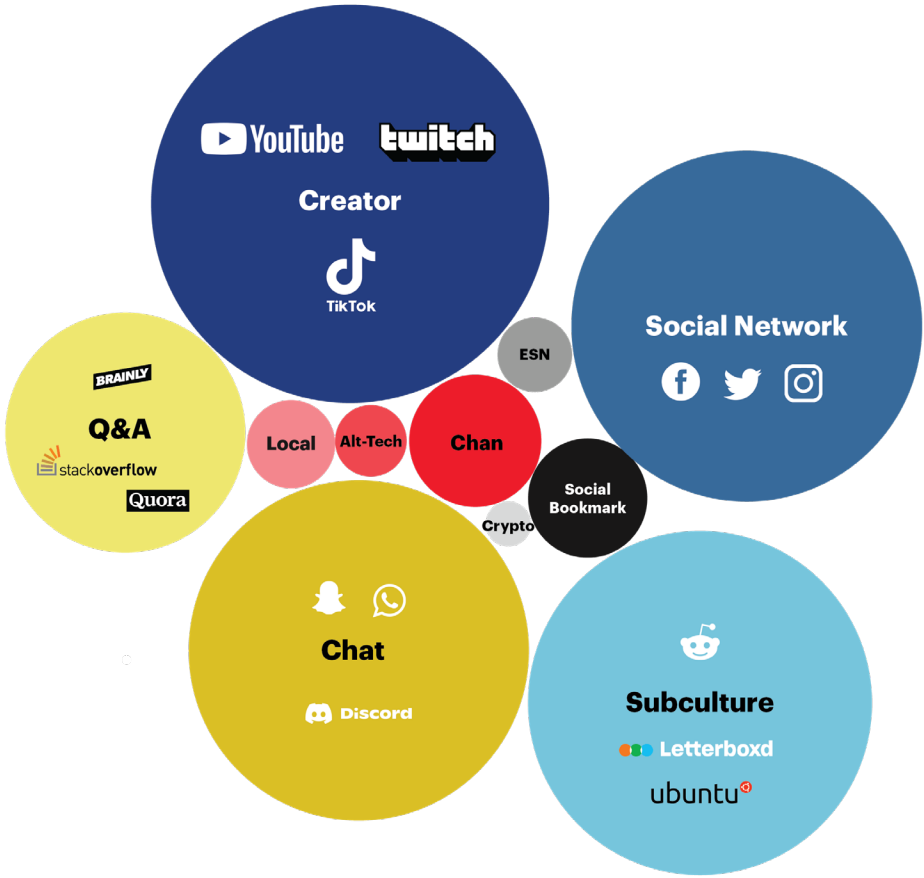
First, the large number of non-U.S. platforms that were in the top 100 surprised us and was a healthy reminder of our U.S. centrism. They made up the majority of the list, comprising 61 of the top 100. However, maybe it shouldn't be so surprising given, for example, that there are more than 900 million Chinese internet users who use popular Chinese social media platforms, including Sina Weibo, Douyin, and WeChat. Even platforms based in the U.S. that serve a large number of Americans sometimes serve more users from a different country. Take Quora: The country with the most visitors to Quora, according to Alexa, is India, which makes up 36 percent of traffic, followed by the U.S., with 28 percent of traffic.

Next, we analyzed the popularity of different logics in our top 100. We assessed the popularity of each logic with this formula: Take all the platforms that fall under a given logic and sum their points, where points are assigned in order, from most popular (by Alexa rank) to least popular. The most popular platform receives 100 points, the next most popular receives 99 points, all the way down to the least popular platform in the top 100, which receives 1 point. This allows us to capture a logic's frequency in the top 100 while also incorporating the magnitude of each platform's popularity. So a logic with 10 platforms ranked toward the bottom of the top 100 won't appear more popular than a logic that has five platforms that are all in the top 10. The results of that analysis follow:

Figure 3. Logics in order of popularity score

Logic	Popularity Score
Creator	1285
Social Network	978
Chat	958
Subculture	949
Q&A	461
Chan	140
Social Bookmarking	113
Local	62
Enterprise Social Network	46
Alt-Tech	42
Crypto	16

Figure 4. Logics sized by popularity score



(Circles are sized proportionally by each logic's popularity score)

The most popular logic was creator logic. The popularity of creator logic and its relative lack of attention in comparison to social network logic suggests that journalists, scholars, and activists should direct more energy toward scrutinizing and understanding it.

Following creator logic in popularity were social network, chat, and subculture logic, respectively. The popularity of social network logic is no surprise. It covers dominant social networks like Facebook, Instagram, Twitter, and LinkedIn, social networks that are run by a single company, for the use of anyone for a variety of purposes, supported by advertising. Similarly, chat logic's popularity isn't surprising—chat platforms such

as WhatsApp, Snapchat, and Discord boast some of the largest user numbers in the world and are hosting more and more of our social life online. Finally, subculture logic covers platforms that are organized around various subcultures. This logic is overwhelmingly populated by internet forums and their descendants—sites like Reddit, Steam Community, and Ubuntu Forums—but also includes sites like Ravelry, a social network for yarn enthusiasts, and Letterboxd, a social network for film lovers. Subculture logic, like creator logic, receives less attention than it deserves. One possible reason is that they are less popular among journalists, academics, and politicians, who mostly use Twitter or Facebook.

A surprise in the findings was the popularity of Q&A logic. It was the fifth most popular logic, occupying a middle tier between the dominant logics and the more niche logics. Q&A platforms are organized around users submitting questions and answers. Some are focused on a specific domain, like Stack Overflow, which serves mostly programmers, while others are more general-purpose like Quora. Q&A is a social media logic that is rarely in the spotlight, perhaps because it is particularly popular with communities that are less visible (programmers, students) and nations outside the U.S. (notably India). It clearly deserves more attention given its popularity.

What logics didn't make the top-100? Civic and decentralized. Their omission makes sense. Civic logic is an emerging idea that hasn't received enough traction to make a list like this one yet. Also, civic logic platforms typically cater to smaller communities. As we put it in our chapter about them, civic platforms "are likely limited to communities of a few dozen to a few thousand." Decentralized platforms face serious challenges to their adoption, specifically, they must "address their usability difficulties and overcome the massive network effects of centralized platforms."

To supplement our popularity score analysis, we provide a bar chart with the raw frequency of each logic in the top 100 broken down by whether a platform was categorized as a U.S. platform or a non-U.S. platform. We also include a table with the average popularity scores for select logics.

Figure 5. Logic frequency in top 100

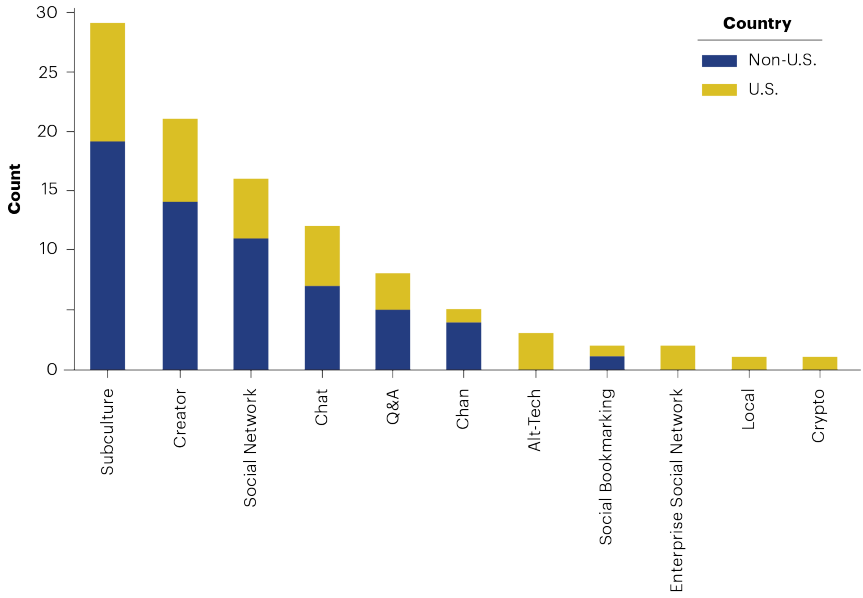


Figure 6. Logics in order of average popularity

Logic	Average Popularity Score
Chat	80
Creator	61
Social Network	61
Q&A	58
Subculture	33

The raw frequencies provide some useful context about the popularity results, highlighting differences between logics and nuances that aren't clear from the popularity scores alone. For example, Figure 5 shows that there is a much higher number of subculture platforms outside the U.S. than in the U.S. We believe this could be due to Reddit's popularity in the U.S., where it may function as a mega-forum, absorbing many stand-alone forums.

Additionally, looking at Figure 5, we see that subculture logic is first (by a large

margin) in terms of raw frequency though it's fourth in terms of popularity scores, implying that subculture logic is home to a broad array of platforms that cater to smaller userbases. Conversely, we can see that chat and social network logic have similar popularity scores to subculture logic but at much smaller raw frequencies, suggesting they are home to a less diverse array of platforms that host larger userbases.

To further investigate the differences in popularity concentration across logics, we calculated the average popularity for logics with at least eight platforms in the top 100 (see Figure 6). The frequency cutoff was eight, because the remaining logics had frequencies of five or less—small sample sizes that we believed were likely to give noisy results. The formula for a logic's average popularity was: popularity score/frequency.

Chat logic has the highest average popularity at 80, followed by creator and social network logic at 61. On the low end is subculture logic at 33, with Q&A falling in between at 58. These findings make sense. Subculture logic is organized around discrete, insular communities, which have a ceiling on their potential userbase—there are only so many yarn enthusiasts. Conversely, chat, creator, and social network logics are typically organized around functionality that has a much higher potential userbase—hence Facebook's mission to "connect the world." Q&A reasonably falls somewhere in between.

Lastly, another interesting finding from the raw frequencies in Figure 5 is that the U.S. is home to the majority of low-frequency logics. There are many possible explanations—we will offer two:

Social media is a space for experimentation in the U.S., and different logics continue to emerge as it matures. This is true in other countries and languages as well, and we are likely missing some of the more niche experiments due to our linguistic and cultural isolation. We would be grateful for pointers to social media in other countries that exemplify these less-common logics or are introducing new logics entirely.

Political and cultural differences may play a role in the popularity of different social media logics. Take alt-tech logic, which as we note in the earlier chapter covers platforms, like Gab, Parler, and TheDonald.win, that market themselves as bastions of free speech and mainly serve right-wing communities that have been deplatformed from mainstream platforms. Why could alt-tech be more likely to emerge in the U.S.? First, the U.S. receives disproportionate attention from the mainstream platforms because they are based in the U.S. and make most of their money in the U.S. This makes it more likely that fringe groups in the U.S. will be noticed, moderated, and kicked off. Second, political freedoms in the U.S. mean that fringe groups are allowed to create

and maintain their own social media spaces. Third, the U.S. has a large population, making it more likely that a given U.S. platform will be featured in the top 100.

Conclusion

As we said above, we do not claim our top 100 list is definitive or comprehensive, so any findings derived from it should be treated with caution. Even so, we think the results demonstrate the benefits of combining an empirical approach with a rich theoretical perspective when studying social media.

The findings that stick with us are: (1) social is eating the world; (2) social is global; and (3) social is much more than Facebook and Twitter. These findings get at the core of why we undertook this mapping project in the first place: To move past the problems of today's social media, we need to overcome those assumptions and their associated myths and reach a more sophisticated understanding of the topic. The diversity of social media is clear, as are the possibilities, when we reject U.S.- and Facebook-centrism and strive for more complex thinking about the domain.

Figure 7. Top 100: The most popular social media platforms

Name	Logic	Popularity	Country
YouTube	Creator	100	U.S.
Facebook	Social Network	99	U.S.
WhatsApp	Chat	98	India
FB Messenger	Chat	97	U.S.
WeChat	Chat	96	China
Instagram	Social Network	95	U.S.
TikTok	Creator	94	U.S.
QQ	Chat	93	China
Douyin	Creator	92	China
Sina Weibo	Social Network	91	China
Snapchat	Social Network	90	China
Reddit	Subculture	89	U.S.
Pinterest	Social Bookmarking	88	U.S.
Telegram	Chat	87	India
Twitter	Social Network	86	U.S.
Quora	Q&A	85	India
LinkedIn	Social Network	84	U.S.
Imgur	Creator	83	U.S.
Line	Chat	82	Japan
imo	Chat	81	China
Brainly	Q&A	80	U.S.
douban.com	Social Network	79	China
Yy.com	Creator	78	China
Twitch	Creator	77	U.S.
VK	Social Network	76	Russia
Babytree.com	Subculture	75	China
Discord	Chat	74	U.S.
Likee	Creator	73	China
Slack	Chat	72	U.S.
Wattpad.com	Creator	71	India
csdn.net	Q&A	70	China
zhanqi.tv	Creator	69	China
tianya.cn	Subculture	68	China

ok.ru	Social Network	67	Russia
zalo.me	Chat	66	Vietnam
Stack Overflow	Q&A	65	U.S.
DeviantArt	Subculture	64	U.S.
VSCO	Creator	63	U.S.
NextDoor	Local	62	U.S.
aparat.com	Creator	61	Iran
medium.com	Creator	60	U.S.
Pixnet.net	Social Network	59	Taiwan
cnblogs.com	Subculture	58	China
Tumblr	Social Network	57	U.S.
6.cn	Creator	56	China
Bilibili.com	Subculture	55	China
stackexchange.com	Q&A	54	U.S.
Tradingview.com	Subculture	53	U.S.
slideshare.net	Creator	52	India
zhihu.com	Q&A	51	China
Behance.net	Creator	50	India
nicovideo.jp	Subculture	49	Japan
Steamcommunity.com	Subculture	48	U.S.
kakao.com	Social Network	47	Korea
ameblo.jp	Creator	46	Japan
9gag.com	Chan	45	Germany
dcard.tw	Subculture	44	Taiwan
namasha.com	Creator	43	Iran
LiveJournal	Social Network	42	Russia
ninisite.com	Subculture	41	Iran
4chan	Chan	40	U.S.
flickr.com	Creator	39	U.S.
ptt.cc	Subculture	38	Taiwan
kizlarsoruyor.com	Q&A	37	Turkey
5ch.net	Chan	36	Japan
hatenablog.com	Creator	35	Japan
renren.com	Social Network	34	China

plurk.com	Social Network	33	India
eyny.com	Subculture	32	Taiwan
lihkg.com	Subculture	31	Hong Kong
xing.com	Subculture	30	Germany
miaopai.com	Creator	29	China
dxy.cn	Subculture	28	China
FetLife	Subculture	27	U.S.
yammer.com	Enterprise Social Network	26	U.S.
weheartit.com	Social Bookmarking	25	India
Parler	Alt-Tech	24	U.S.
letterboxd.com	Subculture	23	U.S.
Omegle	Chat	22	U.S.
wykop.pl	Subculture	21	Poland
workplace.com	Enterprise Social Network	20	U.S.
ask.fm	Q&A	19	Egypt
Taringa!	Subculture	18	Argentina
Mixi	Social Network	17	Japan
DLive	Crypto	16	U.S.
MeWe	Alt-Tech	15	U.S.
exblog.jp	Creator	14	Japan
2chan.net	Chan	13	Japan
skyrock.com	Social Network	12	France
mydigit.cn	Subculture	11	China
NewGrounds	Subculture	10	U.S.
nnmclub.to	Subculture	9	Netherlands
Hacker News	Subculture	8	U.S.
Fark	Subculture	7	U.S.
fuliba2020.net	Chan	6	China
computerbase.de	Subculture	5	Germany
instiz.net	Subculture	4	Korea
Gab	Alt-Tech	3	U.S.
skoob.com.br	Subculture	2	Brazil
Blind	Subculture	1	U.S.

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The Knight First Amendment Institute at Columbia University defends the freedoms of speech and the press in the digital age through strategic litigation, research, and public education. It promotes a system of free expression that is open and inclusive, that broadens and elevates public discourse, and that fosters creativity, accountability, and effective self-government.

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