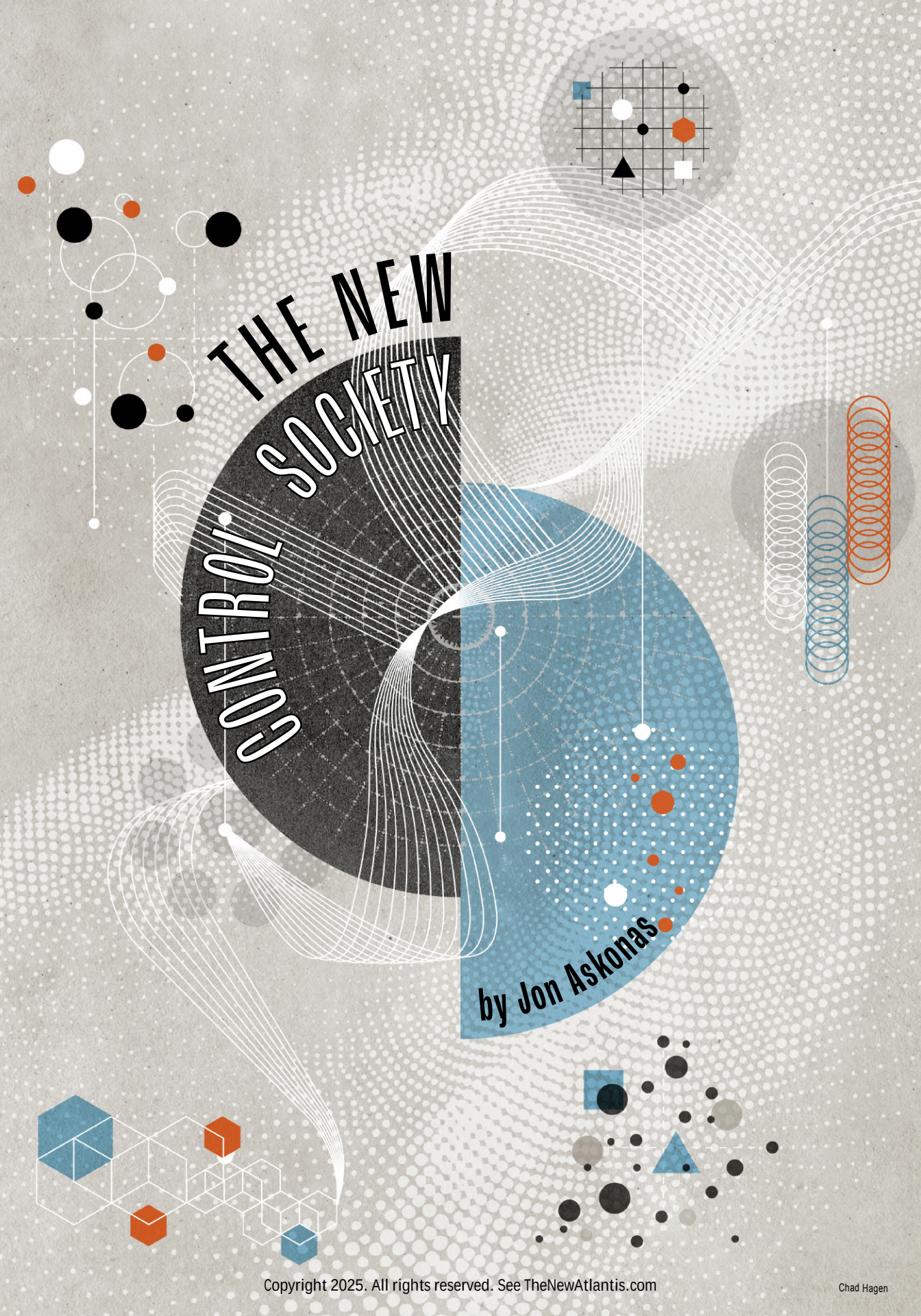
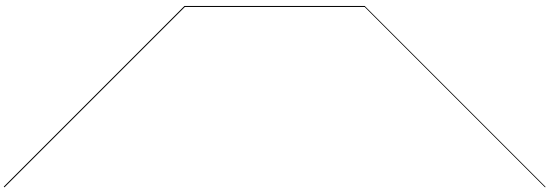


Chad Hagen



If the gatekeepers are dying, why does everything feel so average?

Let me tell you two stories about the Internet. The first story is so familiar it hardly warrants retelling. It goes like this. The Internet is breaking the old powers of the state, the media, the church, and every other institution. It is even breaking society itself. By subjecting their helpless users to ever more potent algorithms to boost engagement, powerful platforms distort reality and disrupt our politics. YouTube radicalizes young men into misogynists. TikTok turns moderate progressives into Hamas supporters. Facebook boosts election denialism; or it censors stories doubting the safety of mRNA vaccines. On the world stage, the fate of nations hinges on whether Twitter promotes color revolutions, WeChat censors Hong Kong protesters, and Facebook ads boost the Brexit campaign. The platforms are producing a fractured society: diversity of opinion is running amok, consensus is dead.

The second story is very different. In the 2023 essay "The age of average," Alex Murrell recounts a project undertaken in the 1990s by Russian artists Vitaly Komar and Alexander Melamid. The artists commissioned a public affairs firm to poll over a thousand Americans on their ideal painting: the colors they liked, the subjects they gravitated toward, and so forth. Using the aggregate data, the artists created a painting, and

Fractal patterns: all via WolframAlpha

Jon Askonas *is assistant professor of politics at the Catholic University of America and a senior fellow at the Foundation for American Innovation.*

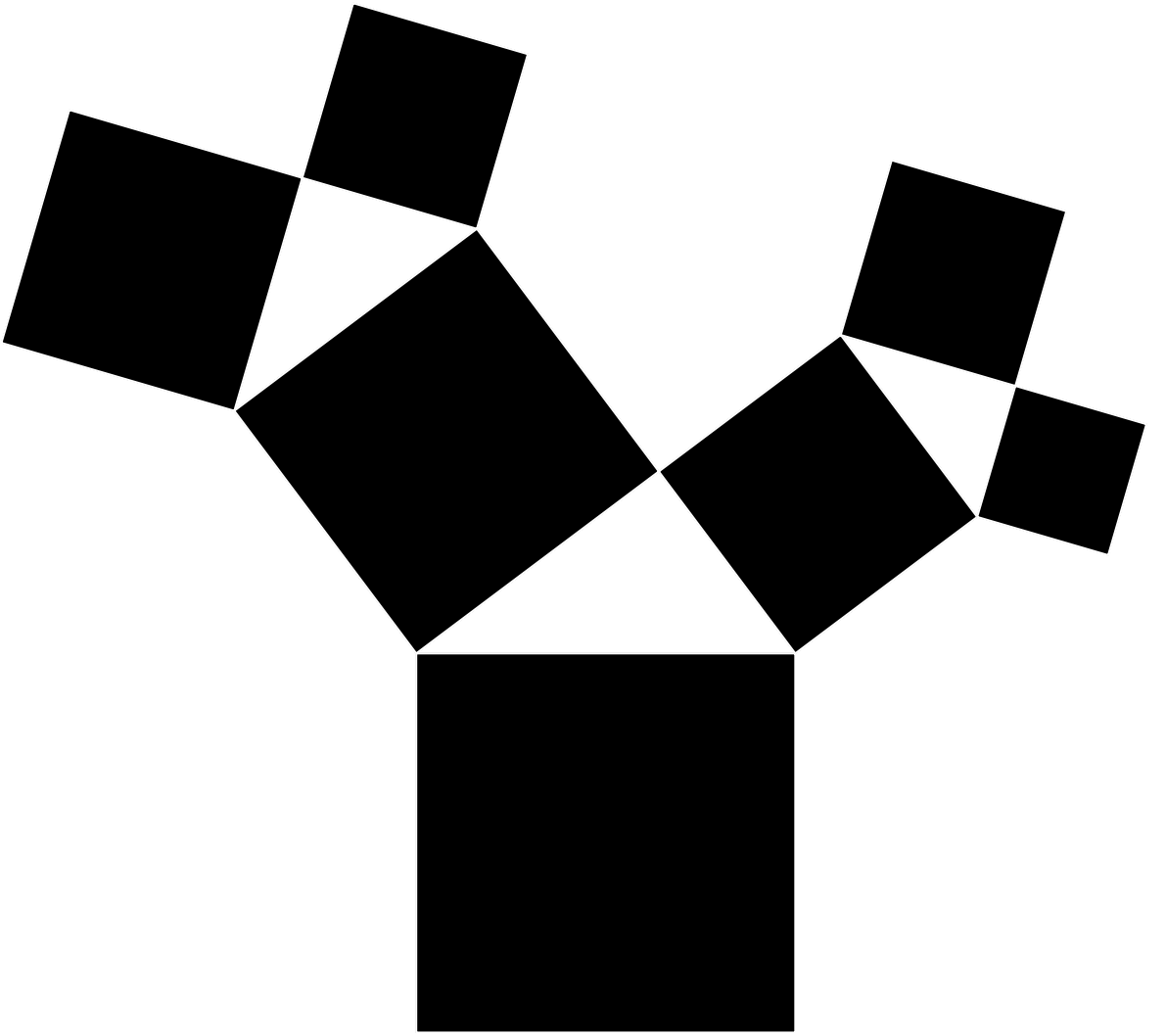
they repeated this procedure in a number of other countries, exhibiting the final collection as an art exhibition called *The People's Choice*. What they found, by and large, was not individual and national difference but the opposite: shocking uniformity—landscapes with a few animals and human figures with trees and a blue-hued color palette.

And it isn't just paintings that are converging, Murrell argues. Car designs look more like each other than ever. Color is disappearing as most cars become white, gray, or black. From Sydney to Riyadh to Cleveland, an upscale coffee shop is more likely than ever to bear the same design features: reclaimed wood, hanging Edison bulbs, marble countertops. So is an Airbnb. Even celebrities increasingly look the same, with the rising ubiquity of "Instagram face" driven by cosmetic injectables and Photoshop touch-ups.

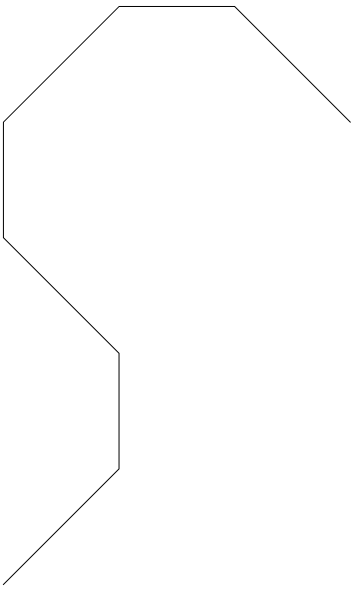
Murrell focuses on design, but the same trend holds elsewhere: Kirk Goldsberry, a basketball statistician, has shown that the top two hundred shot locations in the NBA today, which twenty years ago formed a wide array of the court, now form a narrow ring at the three-point line, with a dense cluster near the hoop. The less said about the sameness of pop melodies or Hollywood movies, the better.

As we approach the moment when all information everywhere from all time is available to everyone at once, what we find is not new artistic energy, not explosive diversity, but stifling sameness. Everything is converging—and it's happening even as the power of the old monopolies and centralized tastemakers is broken up.

Are the powerful platforms now in charge? Or are the forces at work today something even bigger?



I. The Rise of the Network



Professor Hayek's Elegant Argument

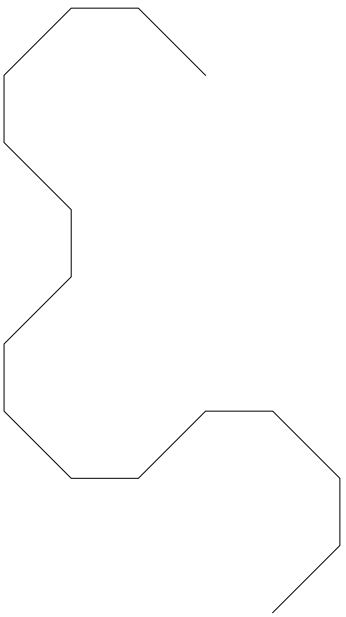
For decades after the First World War and the Russian Revolution, the profession of economics roiled with a theoretical debate with enormous practical consequences. The question was whether economies grew by getting better at calculation or at something else. During the war, each of the major combatants had engaged in massive economic mobilization, with varying levels of centralized planning of war production. Famously, after the war the revolutionary Soviet government instituted a centralized planning system. Would it work?

The first round of the socialist calculation debate, kicked off by Austrian economist Ludwig von Mises in 1920, argued that "rational economic activity is impossible in a socialist commonwealth," because central planners had no mechanism to efficiently coordinate supply and demand. By contrast, market economies had a decentralized planner of a size and scope vastly more efficient than any computing power then available: the price system. Socialist economists took Mises's argument in stride, on the one hand theorizing forms of decentralized planning called "market socialism," and on the other developing new mathematical techniques to solve calculation problems, like the Nobel Prize–winning discovery of linear programming by Leonid Kantorovich. Whatever other challenges

remained, calculation *per se* did not seem to pose an insuperable problem for economic planning.

In the 1945 essay "The Use of Knowledge in Society," Mises's student Friedrich von Hayek took the problem deeper than mere calculation. The fundamental barrier to central planning was not the decentralized distribution of desire or need but of *knowledge*. Market participants have unique local knowledge about the circumstances they face: the costs of making something, what they would accept as substitutes, their beliefs (right or wrong) about what other people might want. This knowledge was impossible to summarize and convey to a centralized planner, not least because it was *in motion*, "constantly communicated and acquired." This knowledge operates not only through buying and selling but through making a prototype, viewing the available wares, shutting a business down, taking out a loan, and many more kinds of human activity. What makes markets efficient is not that they are better at arriving at a full accounting of supply and demand than a centralized planner, but that they never require anything like full knowledge in the first place, allowing decentralized coordination across actors who each only have partial knowledge of the whole. The old conceit of a market as an auction where buyers and sellers met at a single clearinghouse hid a social structure that was much more complex.

For Hayek, the market is not a price system or an auction. It is a *network*.



'Intergalactic Computer Network'

The Advanced Research Projects Agency Network, or ARPANET, was not the first computer network, but it was the most important. Built in the 1960s, it was the first to show what could happen if you emphasized the network rather than the computer.

During the birth pangs of the Information Revolution, computing power was precious. It was the era of the mainframe, massive heaping computers the size of entire rooms, where various functions like working memory and disk space occupied separate cabinets. In this paradigm, networking was how you connected terminals, peripherals, or smaller computers to the coveted power of the mainframe. At a satellite location, you might work on a program or feed in some data from a terminal, but you needed to run it on the mainframe. And so did everyone else. This hub-and-spoke structure dictated everything. Network capacity was about the power of the mainframe, with computing resources metered like an electric utility. Inconsistent workloads meant that programmers used "batch processing" and multi-user time-sharing, running programs as computing resources became available.

The mainframe sat at the center of a closed system. To work, everything had to be keyed to its needs, including the programming languages you used and the compatible peripherals you attached.

It is sometimes said that the Advanced Research Projects Agency created ARPANET in order to provide for command and control in the case of nuclear war. While this use case helped motivate RAND Corporation researcher Paul Baran's development of distributed communications theory, it didn't have anything to do with the motivations and goals of the people actually building ARPANET. And ARPANET didn't really solve any problems for the big research laboratories, who already had powerful mainframes and who expressed wariness about the network "stealing" computing time from them. The engineer who was first presented with the request to actually build ARPANET said, "I can't see what one would want such a thing for."

So what was it for? The aim of ARPANET was to revolutionize human communication. That was the vision of J. C. R. Licklider, who jokingly referred to his vision of an "Intergalactic Computer Network" in which programmers could access resources and people anywhere in the network. This vision was elaborated by Bob Taylor, who imagined how the communities of researchers that were then beginning to form around individual mainframes could one day form around entire computing

networks. Together the two wrote the seminal 1968 article "The Computer as a Communication Device," in which they predicted that "in a few years, men will be able to communicate more effectively through a machine than face to face."

Community, self-organization, and the expansion of human consciousness were baked in from the start. That was why so many members of the California-centered Human Potential Movement became early enthusiasts and adopters of networked computing. The Stanford Research Institute formed one half of the first-ever ARPANET exchange. And the Stanford group that worked on ARPANET was initially called the Augmented Human Intellect Research Center, led by Douglas Engelbart. Senior leaders like Engelbart, not to mention almost all the junior computer engineers who worked for him, were fully immersed in the California counterculture, as John Markoff showed in his 2005 book *What the Dormouse Said*. The project was the computational equivalent of the counterculture's interest in reorganizing society by breaking free of imposed constraints and social norms in favor of new practices.

You can draw a straight line from the 1966 LSD-soaked Trips Festival to the 1967 Summer of Love to Engelbart's 1968 "Mother of All Demos," a public demonstration of how new networking and interface technologies would revolutionize how people worked together. If you had to give that straight line a name, it would be Stewart Brand, founder of the *Whole Earth Catalog*. ARPANET was ultimately not about getting computers to talk to each other; it was about getting *people* to talk to each other, to collaborate and work together and organize across distances. Anyone could connect to anyone or any resource to build anything: the "incredible popularity and success of network mail" was the "largest single surprise" of the entire project, according to the project's completion report.

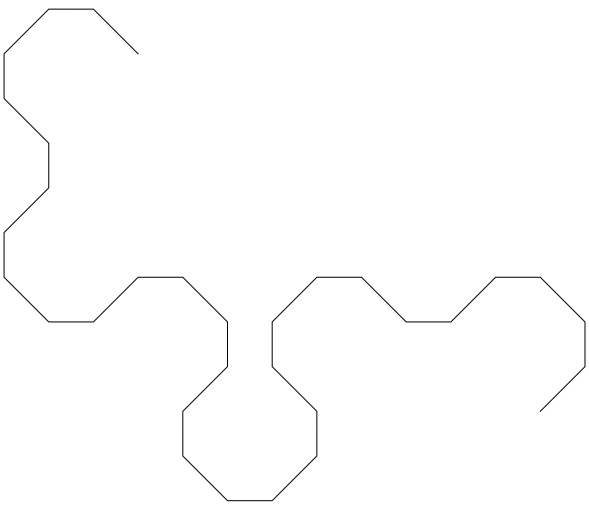
To get this to work, you needed to go beyond systems that were *built* to communicate to systems that were *designed* to communicate. Before ARPANET, distributed computer networks, like those used by airlines or the military, were built for distinct purposes, using hardware from the same vendors, custom systems integration, and a final plan of what the network would look like and what it was for. If you tried to add new hardware to the network or took out a mainframe that other parts of the system depended on, the whole thing could break.

ARPANET researchers overcame numerous technical challenges to build a network with the opposite approach. Different kinds of computers, using a machine called a router, could talk to each other. Special algorithms allowed data to get to the right place without the need for a

perfect map of the whole network, which was constantly changing. As long as you spoke in the same language, you could add new parts to the network without getting anyone's permission. Take a node off-line, and the network routes around it.

To describe the kind of communications required to get the network to function like this, researchers borrowed a term previously used for social etiquette or diplomatic convention. They called the grammar that computers used to talk to each other a *protocol*. Each protocol would consist of a formal procedure, a standard for interacting with a system, which anyone could adopt. For instance, just as mailing addresses have their own protocol, ARPANET would create protocols for addressing objects in the network. In the counterculture-inspired vision of Engelbart and his hackers, protocols would be developed and maintained by the community of users, open for anyone and free to license.

The vendor-driven computer systems beloved by the men in gray flannel suits got things to work by handcuffing the user: to specific hardware, specific computer languages, specific rules. The ARPANET vision of networked computers was of computing unshackled, as portrayed most powerfully in Apple's iconoclastic 1984 Super Bowl ad, with Orwell's centralized dystopia being literally demolished. You are totally free to build on top of the protocol, or to extend it different ways. It's a carrot, not a stick. The reason to constrain yourself to the protocol standards is the power of building something that works with everything else that does the same. The protocol wasn't just a useful software invention—it was a worldview.



SimCity

The problem was scale. When you expand anything—a factory, a railroad, a community, a democracy—to a certain size, communication can break down in surprising ways. The sheer complexity of interrelationships and interdependencies becomes impossible to keep track of. This has always been the case, and new organizational technologies—the file cabinet, the mimeograph, the punch-card tabulator—have always been developed to help keep up with the deluge. But even in the era of mainframe computers, the complexity and amount of data began to outstrip the ability of any one decision-maker to make sense of it all. As Licklider and Taylor had put it in their 1968 article, "society rightly distrusts the modeling done by a single mind." It was in the 1970s that the word "scalable," in the sense of a system you can enlarge without breaking it, appears to have entered into the English lexicon.

Or maybe the complexity was always there, and it was just that modern computers gave us the tools to notice it with the right data, to see how the butterfly flapping its wings caused the hurricane. After all, mathematician Edward Norton Lorenz conceptualized the "Butterfly Effect" not on a chalkboard but when he made a minor typo entering meteorological data into a weather simulation and found a shockingly different result.

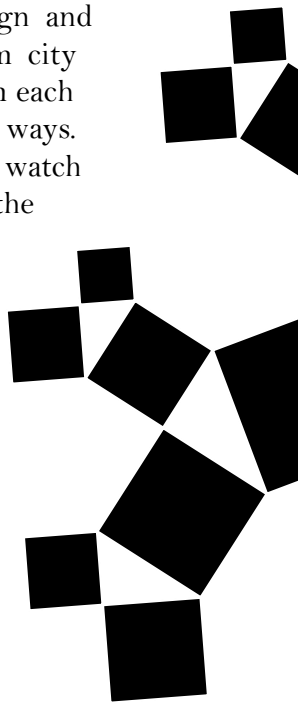
In the 1970s, two trends combined to shape the zeitgeist: sophisticated computer simulations of complex systems and ecological thinking driven by a sense that everything was connected—a realization fueled variously by atmospheric nuclear weapons testing, consciousness-boosting LSD trips, and the first pictures of the whole Earth from outer space. Thinking about inputs and outputs like a factory assembly line was out. Holistic thinking about feedback loops and emergent properties was in.

And it came with a new computing paradigm, too: cellular automata. If you tried to create a whole system all at once, God's-eye-view-linear-programming-style, even the largest mainframe computers would spaz out with only a few variables. But you could imitate much more complex systems—like cities, rainforests, or weather patterns—using only a few parameters. In the 1970s, British mathematician John Conway's Game of Life showed the way. Technically known as a cellular automaton, the Game of Life is essentially a large game of tic-tac-toe that plays itself. By creating a grid of cells that are either filled or empty, and simple rules for how each cell changes based on its neighbors, complex patterns emerge.

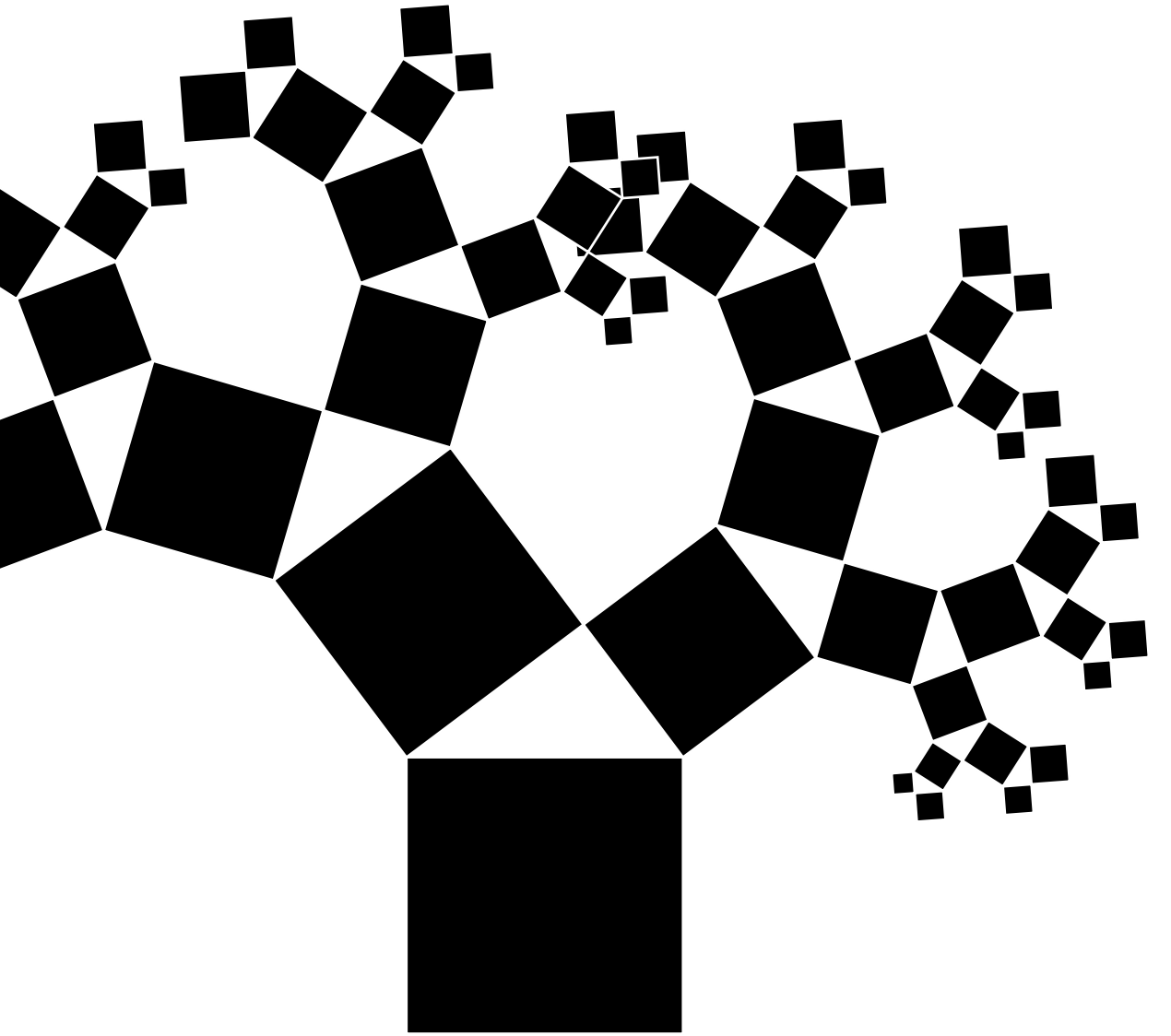
Bring this new computing paradigm together with books like Jay Forrester's *Urban Dynamics* (which used computer simulations to model

cities) and Jane Jacobs's *The Death and Life of Great American Cities* (an attack on the linear modernism of urban planning, focusing instead on the city as an organic system) and you get a new, and addictively fun, way of making sense of the world: the simulation video game.

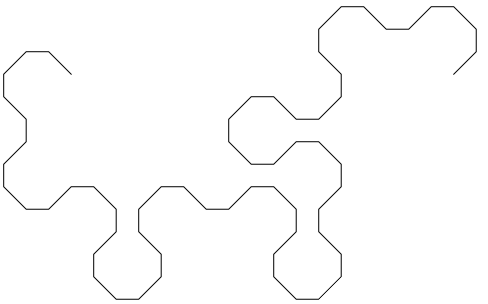
Will Wright's 1989 game *SimCity* allowed players to design and manage their own virtual cities, dealing with everything from city budgets and infrastructure to disasters. The challenge came from each of the underlying systems shaping the others in unpredictable ways. Summon an off-brand Godzilla to maraud through your city, and watch the housing density pattern and the road network change in the subsequent re-development.



Emergent properties, ecological thinking, self-organizing systems, complex interdependence—the whole paradigm is there on screen, re-wiring not only the virtual city but the player's view of the world.



II. Protocol Society



The Bezos Mandate

Sometime around 2002, Jeff Bezos issued a mandate that would lay the foundation for Amazon to become one of the biggest companies in the world.

Amazon was growing like gangbusters and re-investing all of its profits into growing more. Having survived the dot-com bust, the company now found itself at the forefront of e-commerce just as a majority of American adults logged on to the Internet.

Amazon discovered that you could not run a company at the scale of the global Internet the way you ran a normal company. At that scale—not only of users, but of data, of speed, of items for sale, and of revenue—it was easy for things to break.

Bezos's mandate was designed to force every team, every product manager, every engineer to build for scale. And it had some extraordinary second-order consequences. The mandate was immortalized by former Amazon software engineer Steve Yegge, who, after going to Google, was trying to explain why Amazon was in many ways a more successful company. He thought the mandate held part of the answer.

Bezos's earth-shattering mandate, as remembered by Yegge, went like this:

> All teams will henceforth expose their data and functionality through service interfaces.

> Teams must communicate with each other through these interfaces.
>
> There will be no other form of interprocess communication allowed.… The only communication allowed is via service interface calls over the network.…
>
> All service interfaces, without exception, must be designed from the ground up to be externalizable. That is to say, the team must plan and design to be able to expose the interface to developers in the outside world.

It isn't necessary to understand the technical details, or why issuing this mandate in the dial-up Internet era was, in Yegge's words, a "huge and eye-bulgingly ponderous" act. To simplify, traditional software teams would build new features that hooked into existing programs. If you wanted to allow users to subscribe to a product, you might pull their address information from an existing database and build your new subscription software on top of existing programs that allowed you to charge a user's credit card. This approach is resource-efficient, but it creates *dependencies*, obvious and not-so-obvious ways in which new programs rely on older ones. With Bezos's mandate, the Amazon teams were forbidden to do any of that. Each program needed to run entirely on its own, hooking in to other Amazon services only by sending them a defined set of inputs and receiving and reacting to a defined set of outputs. That is what a service interface means.

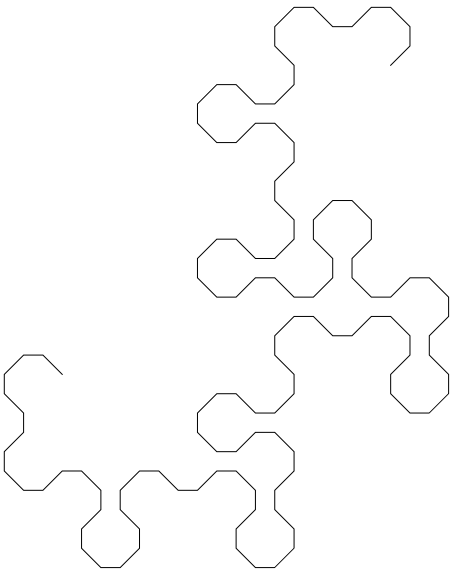
By analogy, imagine if you took a restaurant kitchen and made each station its own mini-business. Making a hamburger would mean buying the raw meat from the refrigerator, paying the griddle to take the meat and receiving a cooked patty in return, then paying the condiment station, and so on.

At an individual scale, this would be insane. But the traditional model breaks down as you make it larger and larger, scaling to millions of hamburgers in thousands of locations. There's a reason most restaurants don't slaughter their own cattle. At increasing scale, success depends on your ability to balance across a supply network, route around bottlenecks or breakdowns, and solve problems in a decentralized way. It looks like a market. It looks like a network.

Have extra server capacity? Let anybody purchase it (Amazon Web Services). Building a warehouse infrastructure? Let anybody use it (Fulfillment by Amazon). Have a shipping service? Let anybody deliver through it (Amazon Shipping). But the new businesses Amazon created only scratch the surface of the new kind of organization the company

achieved. Amazon transformed every aspect of its business from the logic of mainframe computing to the logic of networked computing, and it did so by requiring every part of its business to communicate in *protocols*.

Conway's Law says that organizations build systems that are copies of the communication structures of these organizations. In order to match his ambitions, Bezos had to reorganize Amazon for global scale. The mandate made Amazon into a business shaped like the Internet.



The New Order

While they don't agree on much else, critics and champions of contemporary capitalism share an assessment of the most important transformation of late-twentieth-century economics. The political economy of the mid-century, particularly in America and Europe, had been characterized by trends toward social democracy, environmental conservation, regulation of labor practices, and rising income taxes. Compared to the era before World War I, there were higher levels of tariffs and trade protectionism, more barriers to international investment and financial flows, and lower levels of international migration. In the 1970s and '80s, faced with

straining government budgets, stagnating growth, inflation, and other economic problems, policymakers looked for a new paradigm.

The program they turned to is often called "neoliberalism," and it is usually described as a governmental withdrawal from many fields of activity in favor of a revitalization of free-market thinking and an extension of the logic of decentralized coordination to ever more areas of life. The locus of political power began to shift from legislatures, which are easily gridlocked, to regulatory bodies, public–private partnerships, and independent central banks. Political life in the most powerful states was supra-nationalized in institutions like the European Union and the World Trade Organization to match the scale of these states' power, while small states faced pressure to adopt the set of fiscal and trade policies that came to be known as the "Washington Consensus." Between the 1970s and the 2000s, neoliberalism remade the global political economy and reshaped almost every society in the world.

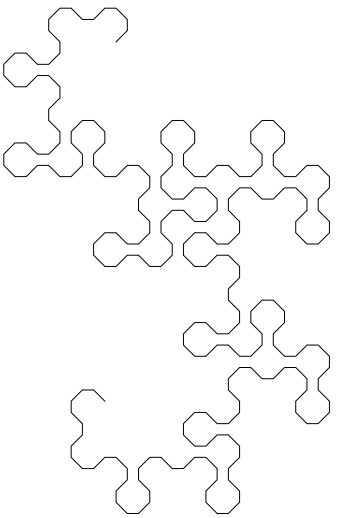
However, as Quinn Slobodian demonstrates in his 2018 book *Globalists*, when you descend from the theory to the practice of neoliberalism, the dominant action is not the removal or withdrawal of government interference but rather the imposition of new tools of governance to actively impede political interference, while making possible ever more fluid movements of labor, capital, and trade. His account of the Geneva School of neoliberalism traces the activities not only of thinkers like Friedrich Hayek and Milton Friedman but of lesser-known actors like international lawyer Ernst-Ulrich Petersmann, who advised organizations like the U.N., the Organization for Economic Co-operation and Development, the European Commission, and the World Trade Organization.

Rather than simply reducing the size and scope of government, neoliberalism invented new tools of governance. There was comparatively less emphasis on executive governance or legislative contestation. Instead, policymakers "set the agenda" through regulations, rulings, standards, ratings, and best practices defined by new metrics and reports. These changes would be issued not by diktat but in coordination with "stakeholders," who were expected to be active participants in their own governance. Market and social actors would be set free from political control, in exchange for participating in new forms of political oversight to manage the tidal wave of dynamism.

For example, neoliberalism is often described as lowering barriers to global trade. But high tariff rates or protectionist quotas were far from the most important impediments to trade. The biggest barrier to trade was *communication*: the jumbled assortment of local rules, practices, and laws

would-be merchants had to navigate. On the ground, lowering barriers to trade actually looked like *creating shared protocols* governing every part of the trading process: international air cargo handling (the Cargo Services Conference Resolutions), the size and shape of shipping containers (ISO 668), bills of lading (the Harmonized Commodity Description and Coding System), invoicing and accounting (International Financial Reporting Standards), and far more. Often, these were not even set or mandated by governments: international organizations and trade associations developed their own standards, maintained by technical committees and published for anyone to use.

The deregulatory agenda of political leaders like Margaret Thatcher, Ronald Reagan, and Deng Xiaoping only cleared the way for neoliberalism's real power: *designing* the world economic system for openness through shared protocols. When seen through this lens, it seems that larger forces even than the Reagan Revolution were at work.



Control by Carrot

After taking LSD in a Southern California desert in 1975, the French historian Michel Foucault developed a fascination with neoliberalism that has puzzled many as shockingly uncritical for a thinker who had made his name tearing off the masks that new forms of power used in order to conceal themselves throughout history. The kind of power that neoliberalism could wield seemed curiously invisible to him. He understood neoliberalism as a "technology of the environment" that incentivized people to behave in certain ways by shaping their economic situation. Compared to previous epochs of power, it was a "massive withdrawal with regard to the normative-disciplinary system." As sociologist Daniel Zamora has put it, Foucault "understands neoliberalism not as the withdrawal of the state, but as the withdrawal of its techniques of subjection."

Foucault's friend and contemporary Gilles Deleuze tried to put a finger on what Foucault was missing. In his "Postscript on the Societies of Control," Deleuze identified the new mode of power that was growing in the West. The old disciplinary societies that had enclosed their wards in different systems—the school, the prison, the factory, the hospital, the army—were giving way to more flexible societies, what he called "societies of control."

In this new kind of society, control mechanisms steer us gently at all times, acting not by pushing (the stick) but by pulling—bringing new information, new models, new desires to our attention (the carrot). Crucially, the new control society presents its power as *choice*. You are free to choose to do what you want; the system just provides you with information, and tracks (or surveils) your choices. In the words of philosopher Byung-Chul Han, it seeks "to please and fulfil, not to repress." The core technologies of the disciplinary society, Deleuze explained, were for containing and releasing energy—think steam engines, railways, and factories. But in the control society, the core technology is the networked computer, which is for continuously gathering data and imposing control by numbers.

With this shift, our sense of self changed too. Deleuze compared the self of the disciplinary society to a mole, which burrows in and then makes itself comfortable within the bounds of the enclosures to which it is subjected. But in a control society, the self is more like a snake, an undulating *project* moving from one state to another, never quite at rest, always getting ready to shed its skin at the next stage of self-becoming.

BOOK PROTOCOL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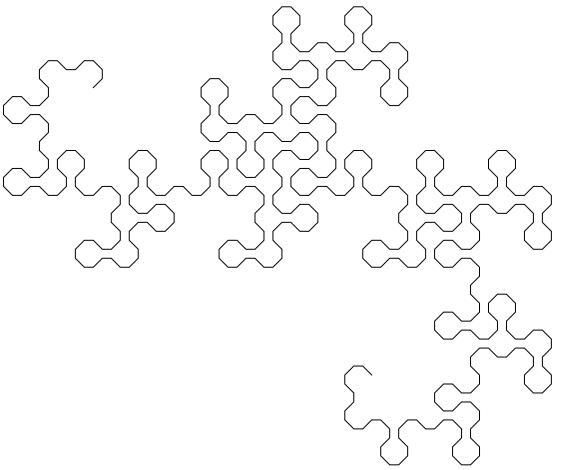


A Web of Our Own Making

The secret to how power operates today is that it looks like freedom. The control society uses data to build everyone a customized choice architecture in which the "rational" move, the "optimized" move, is always more: do more, work more, buy more, know more, scroll more, sleep more, relax more. The openness and positivity of the control society—giving you more choices, more options, more information, more efficiency—becomes a form of power.

It's not obvious, but the secret sauce of the control society is the protocol. You would never be able to pull together all the data, make sense of it, and create the architecture of "more" in a centralized fashion. But open protocols allow information, desire, and everything else to flow to where it is needed. They allow all sorts of people to try all sorts of things. Many protocols fail, but the overall effect is to create a precise simulation of every social desire, "spontaneous order" not just for marketplaces but for everything. Like the Internet, in the control society there is something for everybody.

Here is what I mean. Let's say I'm streaming *Agatha Christie's Poirot* and I become intrigued by a fountain pen wielded by Sir David Suchet's dashing Belgian detective. From this first little nub of desire, I search

Google to learn about the pen, finding a highly up-voted post on the r/fountainpens sub-Reddit with more information and a link to an online pen store. When I click it, marketing tools like Meta Pixel flag my interest. Later, as I scroll Instagram, I start to see more posts featuring fountain pens, and I start following a few fountain pen influencer accounts. One day, I see a pen I love, and purchase it directly from a store, supplying my email address for a discount. The more I press on in this direction, the more fountain pen content—not just advertisements but posts, articles, memes, and so on—flow to me. None of this is "designed" by a Big Pen cartel: rather, open protocols connect a network of actors with their own goals and incentives—Redditors, pen obsessives, manufacturers, online pen shops, ad tech companies—that "spontaneously" hook in to and meet my desires. (It goes without saying that, beneath this example, there are thousands of technical protocols operating my web browser, Netflix, the payments system, the luxury pen supply chain, and so forth.)

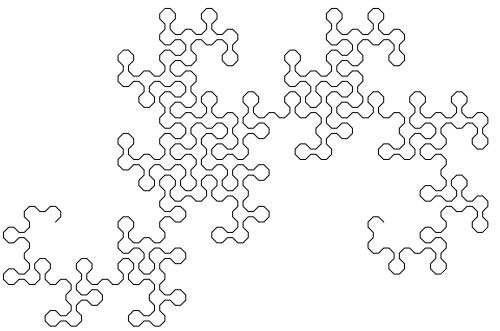
The result is what philosopher Antón Barba-Kay describes, in the name of his 2023 book, as "a web of our own making." Because all that the control society does is offer us choices—albeit ones optimized for our desires—we hold ourselves responsible for them, at a limbic level, even as we are increasingly surrounded by a super-stimulus system optimized to fulfill our desires. Deny it if you like, but the TikTok algorithm knows your inward thoughts. Nobody made you linger over that video. And whose fault is it if you DoorDash McDonald's at midnight? Nobody made you do it. If you really wanted to you could abstain, just as if you really wanted to you could hit the StairMaster at the gym. Hopelessly scrolling through Instagram? No one is making you. No matter which direction you want to go in the network of desire, the choice is yours, and the protocol will help you plug in to the businesses, influencers, ideas, and communities that will meet your wants. And if you're not happy with the existing market offerings? The protocol means that you and anyone else can make your own. The choice is yours.

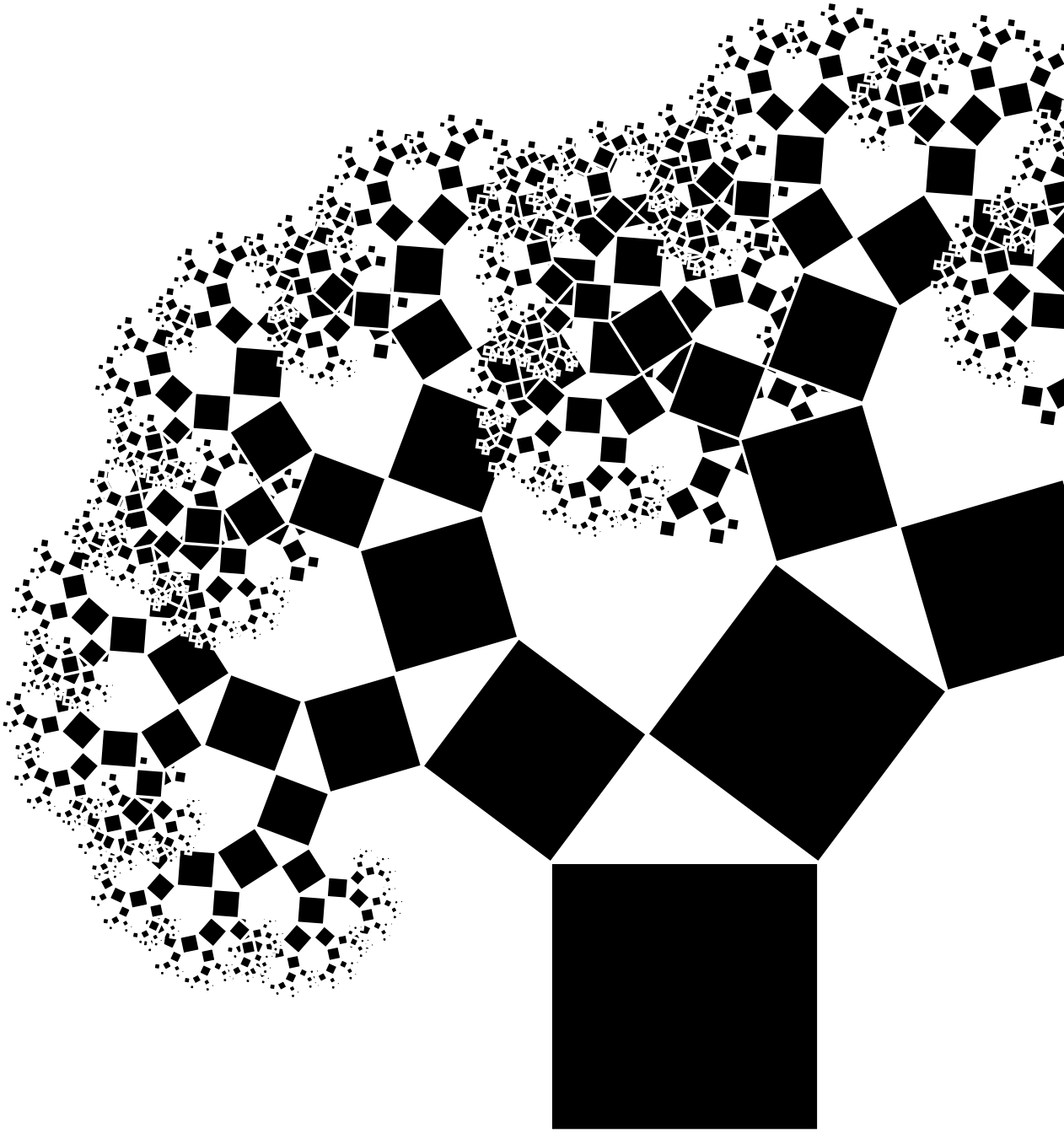
This liquidity and openness also underlies neoliberalism's paradoxical narrowness—that this world of radical choice results in convergence on the same ideas, platforms, aesthetics, and products. Margaret Thatcher's slogan "There Is No Alternative" is the natural outworking of a system where the most optimized, the most popular, the most viral, the most efficient anything can be known with *objective certainty*. The global Airbnb aesthetic, the moneyball three-pointer, the Marvel movie, the paintings of *The People's Choice*: these are not imposed by any cabal; they are the mathematical average of actualized desire, the calculable outworking of

information flowing freely. They will be displaced not by some authentic vision, but merely by the next algorithmic average.

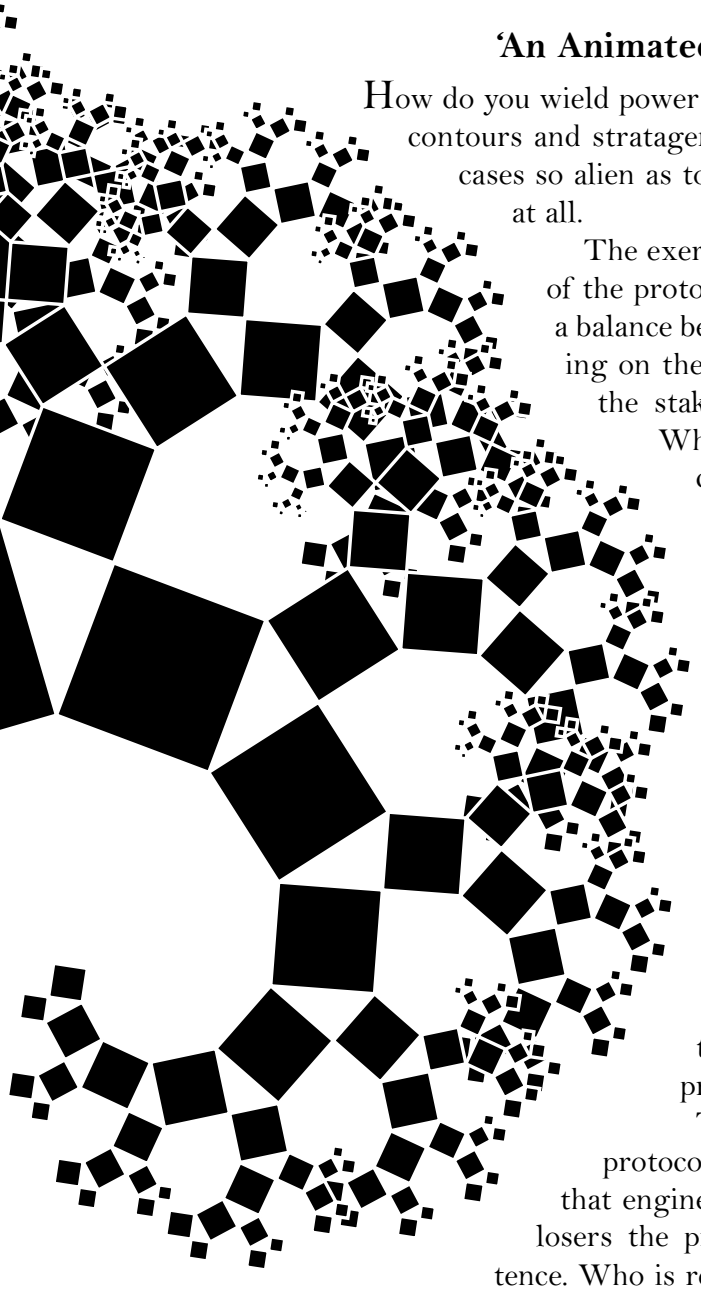
The networked computer imposes what the Thatcherites liked to call "market discipline" over everything: the ever-present possibility of users switching to a superior offering means that even monopolists can't rest on the laurels of network effects for long. The only way for platforms to maintain their power, in the long run, is to anticipate and pre-emptively adapt to their competition. When TikTok builds its superior feed, every other social media platform *must* TikTok-ify itself or get left in the dust. Western Union finds itself competing not just against banks but against payment platforms, fintech startups, and cryptocurrencies.

Jeff Bezos gets credited for the line "your margin is my opportunity," but this is really the protocol speaking. John Gilmore, an Electronic Frontier Foundation co-founder and Internet protocol creator extraordinaire, once boasted that "The Net interprets censorship as damage and routes around it." Swap out "censorship" for "rentier profits," "political correctness," "outdated systems," "good manners," "boredom," or any other barrier to efficiency or desire, and you get a sense of the shaping power of a protocol society.





III. The New Political Reality



'An Animated Swarm'

How do you wield power in the world of the protocol? The contours and stratagems of protocol power are in some cases so alien as to not register as a form of politics at all.

The exercise of power begins in the design of the protocol itself. Any protocol will strike a balance between breadth and depth, depending on the problem it is trying to solve and the stakeholders it is intended to serve. Who designs the protocol is often a contested question: some emerge almost organically from within a community (think of the rise of the hashtag), others from a technical committee of interested parties (like those of the World Wide Web Consortium), and some from a party that has designed a protocol from scratch and releases it to the world, seeking its broader adoption. In some cases, as with the videocassette format battle between Sony's Betamax and JVC's VHS, particular companies or actors serve to benefit from the adoption of one protocol over another.

The most powerful element of protocol design, though, is not this or that engineering choice but the winners and losers the protocol creates by its mere existence. Who is rendered "below the API"—that is, replaceable by automation? Who faces a glut of new competitors, or a glut of new customers? Who can organize or communicate that could not do so before? In the age of the protocol, groups attempt to protect their interests by controlling or even forbidding the construction of protocols that would harm them, or by building protocols that undermine their competitors. So, for instance, lawyers for Uber and

Lyft helped to dismantle the regulations that sustained taxi guilds all over the world, but would never do anything to harm their own profession's unique privileges.

The power of protocols comes from what economists call "network effects": the more people use a protocol, the more valuable it becomes. When, almost as if by Darwinian selection, one protocol has emerged as the universal choice, it can be very difficult to move away from it. While many powerful forces may work to establish protocols beneficial to their interests, these network effects are not the product of a decision. They come from the incentives that everyone faces, as a stone is held in place by its own weight.

We usually think about this effect in terms of the scale of a network, but every network in fact has a particular structure, and these structures tend to be highly sticky. Path dependency means that those who win early win more. The difference between Detroit and Cleveland in American automotive manufacturing, or between Palo Alto and Pasadena in high-tech electronics, emerged from a small number of early advantages that slightly inclined the playing field in one direction over the other.

Whatever their cause—early adoption, favor by an algorithm—one of the emergent properties of a protocol is that it will bless some and not others with *network centrality*. Some will become uniquely connected or uniquely well-positioned, often in a manner subtle or even invisible to outsiders.

To early Internet thinkers like Kevin Kelly and Manuel Castells, the distinctive political formation the network made possible was the "swarm" or the "crowd." This kind of decentralized, emergent coordination is characteristic of open systems in which the independent incentives each individual faces can lead to unexpected synchronicities, or focal points toward which everything suddenly rushes in, often overwhelmingly so. "Going viral" is functionally the same as experiencing a distributed denial of service attack. Color revolutions, fashion fads, flash mobs, meme stocks, and moral panics all have the same structure. The bigger the network, the more open the structure, the more potential a protocol has to generate a swarm. As Kelly wrote, "An animated swarm is reticulating the surface of the planet. We are clothing the globe with a network society." (Or, in the words of Marc Andreessen, "software is eating the world.")

The most important feature of the swarm is what it is not: it is not a "we," a movement or a community that one joins. Its constituent members may not even be aware that they are acting collectively and may have quite different incentives and goals. If anything, the swarm seems

to have an alien will, a collective direction that may be quite at odds with the beliefs and desires of any individual within it—literary theorist René Girard identified the swarm with the Satanic.

At the same time, most swarms are not truly leaderless. In Girard's analysis of scapegoating in *I See Satan Fall Like Lightning*, he fixates on the story of Apollonius of Tyana targeting a beggar. The magic of Apollonius' action is in goading and prodding the right people behind the scenes to create the cascade of emotions and actions that generates a stoning mob. We see the same thing at work in "cancellations" today—powerful influencers at the periphery who have mastered the art of generating and directing the swarm.

Many protocols are not totally decentralized or voluntary. They may rely on some discrete platform to provide fundamental infrastructure, whether it is software that makes the protocol accessible as a service, like Twitter or Uber, or something more foundational, like the Internet service providers that actually connect users to the Internet.

Platforms have a unique ability to exert power over the protocol using artificial limits. They can ban users, block payments, censor posts, blacklist IP addresses, halt shipments, or otherwise impose restraints not found in the protocols themselves.

The most powerful example is what political scientists Henry Farrell and Abraham Newman have dubbed "weaponized interdependence": the ability of sovereign states to leverage control over key chokepoints in global networks to exclude adversaries and protect their interests. The United States, for instance, uses its powerful control over banking protocols like SWIFT and critical technology in the global supply chain to levy sanctions on Russia and hamper Chinese GPU development.

Carl Schmitt's famous dictum that "Sovereign is he who decides on the exception" gains a new meaning in the age of the protocol. Unlike other kinds of protocol power, platform sovereignty is nakedly political, one of the reasons why many of the criticisms of Big Tech companies focus on their abuse of this power.

That said, there is no free lunch. Some protocols—think Bitcoin or BitTorrent—are designed to escape command. And the network interprets coercion as damage and routes around it: as platforms abuse their power, the network calls forth alternatives, workarounds, and new protocols to escape their control.

Q-DROP PROTOCOL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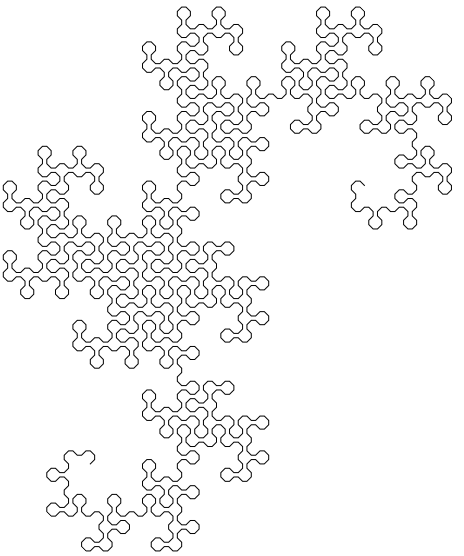


The Ghost in the Machine

Public discourse has fixated on the rare and ineffectual exercises of platform sovereignty—who is banned, which posts are censored, which countries are sanctioned—because in the age of the protocol they are the only exercises of power still familiar to us.

In every other regard, we find ourselves bewildered. If politics is about the question "who decides," protocols are profoundly *anti-political.* No one decides. No one is in charge. At the same time that every individual faces more choice, more freedom, more optionality, we find ourselves in a society characterized by no agency, no accountability, no center, no one to hold responsible.

In his new book *The Unaccountability Machine*, Dan Davies describes the emergence of "accountability sinks" in complex systems, where a decision is ineffably delegated to a policy or a computer system such that no human appears responsible or "in charge." But while some of the systems Davies examines are the result of bad design or even a malicious attempt to avoid responsibility, in the age of protocols we can also expect accountability sinks to develop automatically, as an emergent phenomenon. When

it is no one's duty to take care of the whole, no one can be held responsible for what falls through the cracks.

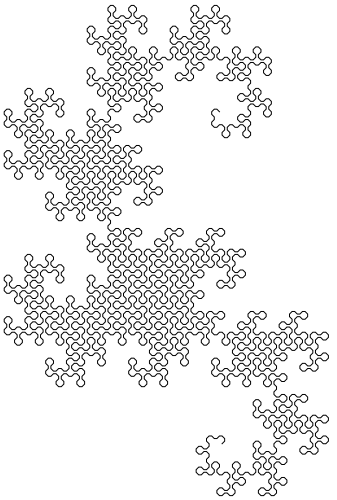
Things are supposed to work. And if they don't, whose fault is that? Everywhere, the political *shall* has been replaced by the economic *should*.

High demand from riders *should* get more ride-share drivers out on a Friday night. Draconian Covid policies in China *should* get entrepreneurs in Vietnam and Thailand to set up alternative supply chains. Your Bluetooth headset *should* automatically connect to your laptop. Your DoorDash delivery *should* be placed, complete and intact, on your doorstep.

But when these outcomes fail to materialize, who exactly is to blame? Whose job, exactly, is it to remedy the situation? And the more decentralized and scalable, the more disintermediated the protocol is, the more agency and responsibility evaporate into the ether. In a decentralized system, agency becomes invisible. And as complexity grows, a system totally transparent in its processes becomes totally opaque in its governance. Because the process rules, power flows to those who have mastered it: those who know the process, who can change the process, who can create an exception to the process, who can direct the attention of the process.

This is why we suspect that those who most loudly proclaim they are "following the science," "following the process," or "following the markets" are actually engaged in elaborate forms of ventriloquy. We can sense that power is operating. We believe we can tell when we are being disadvantaged and others advantaged. We believe we can sense—in the direction of the swarm, in the outputs of the algorithm, in when the protocol does or does not deliver the goods—some hidden hand, some force behind the scene. We experience growing paranoia about manipulation, and the growing reality of manipulation, in almost no relation to each other. We know that nothing that channels so much power and wealth, on which so much depends, can ever escape politics. But we cannot glimpse the operations of power: the protocol demands that the most effective exercises of power are the most invisible.

Protocol politics is fundamentally characterized by acephalousness—no head, no agency, no accountability. And yet we feel the ghost in the machine, the power that shapes the contours of our lives, even as we can almost never pin it down. As recounted in the last entry in this essay series, "An America of Secrets" [Summer 2023], we occasionally catch power after the fact thanks to transparency laws or government leaks. These serve not to bolster the legitimacy of the protocol but to make us wonder about all the things we missed.



Woke Dreampolitik

Paranoia induced by our increasingly formless experience of power is a key factor driving *dreampolitik* in the United States. That it takes different forms on the American left and right owes largely to a difference in how each encounters the power of the protocol, leading to what Matt Yglesias has dubbed "The Crank Realignment": anti-establishment conspiracy theorists have migrated from the left to the right over the past two decades.

Over the past two decades or so, the American left has become increasingly dominated by the Professional Managerial Class of college-educated, white-collar workers. This class vanguard understands far better than any on the right how to work the protocol levers of modern society. They know how to make adjustments deep in the infrastructural underbelly of modern organizations.

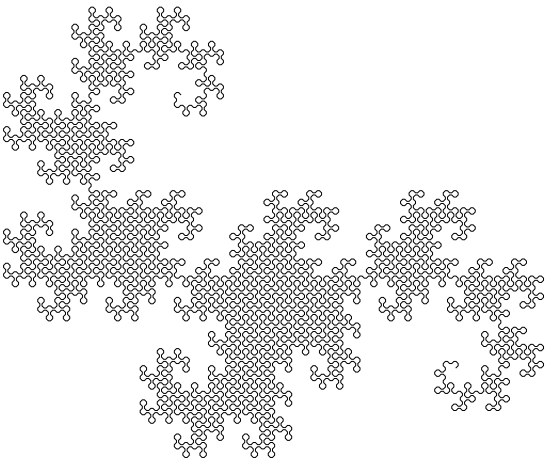
It is the failure of these methods to solve society's ills that is now generating a crisis of faith and a search for new approaches among policy elites, and an attendant zealous cult among activists and die-hards that wants to double down on the protocol society. In areas as disparate as primary school education outcomes, working-class life expectancy, criminal justice, and trade liberalization, much-hyped reforms to antiquated government programs or policies—think Obamacare, NAFTA, or Arne Duncan's education programs—failed to turn things around or created

new problems. Progressive believers need a scapegoat for the failure of protocol governance to deliver the goods. They have found one in "systemic racism" and other systemic -isms, which are the social equivalent of the "systemic risk" that had nearly destroyed the global financial system. In both cases, a complex web of unacknowledged problems, policies with hidden risks, inadequate metrics, and short-sighted leaders had created an institutional crisis whose boundaries were everywhere and nowhere. The progressive ideology that some have labeled "wokeness" is really the protocol society trying to save itself from itself by radically doubling down on the left's preferred tools of governance.

Not only does wokeness not threaten the status quo—it promises to patch the holes that status quo institutions have already been seeing. It is no coincidence that the biggest institutional boosters of wokeness were also the most stalwart advocates for the shift toward neoliberal governance: the Ford Foundation, the Open Society Foundations, technology and media companies, Fortune 500 corporations, large financial institutions, and the European Union. Their legitimacy and power have been greatly enhanced by the neoliberal turn and they would very much like to keep the status quo in place. They are perfectly happy to invest resources in fixing it.

This is why wokeness *as a practice* looks a lot like more protocol governance: a proliferation of regulations, metrics, scorecards, ratings, accreditations, standards, best practices, and all of the attendant compliance jobs. A woke Millennial banker might return from a mid-afternoon self-care break or a privilege-decentering mindfulness exercise to prepare a PowerPoint on Dodd–Frank compliance obligations for financial risk management standardization.

If these techniques have failed, progressives believe, it is only because they were not applied deeply enough. "Doing the work" means instantiating standards and best practices—of racial justice, sexual non-discrimination, and more—not in process, behavior, or policy but in one's own soul.



Q Dreampolitik

In contrast to the managerial classes, the denizens of Middle America know exactly what has happened to them: the American way of life has been hollowed out. And they know exactly who is to blame: the coastal elite. But they have no idea *how* this has happened. For the American losers of globalization, a theory like QAnon provides a factually distorted but spiritually true fable of the conflict shaping their lives. It is current history through the funhouse mirror of a Hollywood thriller.

QAnon and similar conspiracy theories have proven most attractive to the small-business bourgeoisie and the heartland working class. In American life, they have been the losers of neoliberalism and globalization. Where the small-business bourgeoisie once benefited from artificially lower costs and a large and growing market, they increasingly find themselves squeezed by international competitors on one hand and concentrated monopolies on the other, all while the administrative state continually seeks to roll back the size exemptions in regulations that had once provided a moat against Big Business. The shift in wealth and power toward large cities has also taken jobs and dynamism from exurban

and small city areas where the heartland working class engaged in manufacturing, agriculture, energy, retail distribution, and warehousing. Regardless of their personal economic circumstances, the small-business class and working class are likelier to live in parts of the country whose life chances are ebbing away, and to count in their immediate social networks victims of offshoring, drug abuse, or war.

Why is the right today more susceptible to conspiratorial thinking? It has nothing to do with a so-called authoritarian personality or any other microwaved mid-century psychobabble. Loneliness is growing fastest among the groups that constitute the Republican base, including rural people, older people, residents of post-industrial areas, and low-education whites. Their life expectancy is dropping, and deaths from despair are on the rise. The Republican Party today is the party of the America that is being gradually destroyed. As Nicolas Guilhot put it in a *Boston Review* essay on the social sources of QAnon, "the proliferation of conspiracy theories reflects the dismal poverty of a political culture that fails millions of individuals confronted with the loss of their world."

Like any colonial subject, Middle Americans have a keen sense of *who* has stolen their country from them. But the citizens of "flyover country" are hostile to, and proudly ignorant of, the work-ways of the Professional Managerial Class. Even the elite of the "small business bourgeoisie," while they may be worth hundreds of millions or even billions of dollars, tend to operate in the business sectors whose models have been least overtaken by protocol governance at the level of the firm: energy, construction, logistics, manufacturing, and real estate. Many of them made their fortunes from the destruction of the prior New Deal regulatory regime, but they did not understand that they would have to pay the piper as political and social demands for control emerged in a new key. Middle Americans have lost any feel for the new grammar of power—indeed, that is how they got into this situation in the first place.

As a result, those truly responsible for the hollowing out of America are completely obscure to their victims. QAnon and other conspiracy theories, such as birtherism, emerged out of right-wing populism in the wake of the financial crisis of 2008. That crisis and its aftermath is a critical moment in the origin stories of Steve Bannon and other key influencers of the right-wing conspiracy metaverse. And so it is useful to consider the Tea Party's diagnosis at the time. Right-wing populists understood that something had gone very wrong with the American constitutional republic but evinced no serious engagement with how power operates today. The complex problems of the financial, real estate, and health care

sectors, all against the backdrop of global financial and trade flows, were reduced to a caricatured platform focusing on the constitutionality of laws and on lowering taxes. Many Tea Party proposals called for restrictions on legislative activities that had long gone extinct in practice, and completely ignored the displacement of power to outside the public sector. In 2012, Mitt Romney was hurt by his association with the "big bankers" and "Wall Street types" who had sought a bailout, but there was no sense that his critics on the right actually understood how a company like Bain Capital had operated or why it might be bad for America. Popular right-wing politics in America has almost become defined by its ignorance of how power and money operate today.

Bewildered by the layers of bureaucratic decision-making and professional standards-setting that end up imposing gender ideology in schools or replacing good, stable jobs with gig-economy wages, the right has resorted to a kind of kabuki-theater version of the story. The only thing more difficult to accept than that your way of life is being destroyed by insidious, malicious forces bent on destroying you is that your way of life is being destroyed entirely as a byproduct of impersonal global forces that are completely indifferent to the suffering they cause, perfectly willing to rip apart communities and families for increasing marginal profit. The result is a surrealist dream-state fantasy projection by which threatened Middle Americans work out the real intuitions infringing on their subconscious.

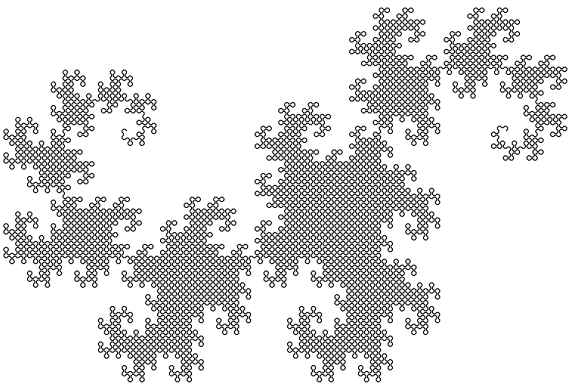
QAnon is what you would get if you gave a mediocre Hollywood screenwriter a theme—the destruction of the American way of life by a corrupt elite—and asked him to fill in the details. In contrast to the central figures of true conspiracies, who are almost always hidden deep in the bowels of a bureaucracy or network, the central figures of distorted conspiracy theories are almost always notable to start with. Q-type conspiracy theories take decisions that are largely made by countless grant-writers, management consultants, tax lawyers, and nonprofit executives and attribute them to Bill Gates or George Soros.

And yet, the most important polarity in American politics in the future will not be between Democrats and Republicans, or even the Professional Managerial Class and Middle America. Because the protocol is where power resides, the struggle that is only now beginning to emerge will be between two protocol elites: the managerial protocol elite of regulation and the technological protocol elite of computer code.

Though it may not be fully understood for many years, the advent of large language models now makes a clash of titans inevitable.

For the managerial elite, LLMs promise the ability to standardize and regulate with an automation and precision that was impossible before, using engineered prompts to finally scale regulation and platform governance to match the decentralized scale of the underlying technical protocols. Moreover, if AI regulations lead to a monopoly or oligopoly of foundational AI models, it would rebuild Internet civilization in the model of the mainframe computer: hub-and-spoke, centralized, controllable.

For the technological elite, by contrast, LLMs, along with technologies like Web3, promise the ability to free protocols from the only remaining constraint upon them: the need for a human programmer to make the connections between one protocol and another. Text-based protocols—popularized in the early World Wide Web era to make it easier for humans to build for the Internet—now make it trivially easy for LLMs to automatically translate across protocols or build new ones on the fly (like the ones interspersed in this essay). The only thing standing in the way are the management elites and their regulation-based protocols. AI seems like it could automate a lot of what they do too. Political contestation in the future will look a lot like a struggle over which protocols will win out.



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After the Protocol

Some of the oldest Internet communities were formed on Usenet, or User's Network, a distributed discussion system of protocols for generating, storing, and retrieving news articles and posts that launched in 1980. Many of the concepts and practices of contemporary Internet culture originated on Usenet. On top of the protocols that ran the servers, early netizens developed protocols of the older sort: shared terms, interests, conversations, etiquette—in short, a shared culture. That was, until the Eternal September.

Every September, users would complain about the flood of newbies on Usenet who had gained access to the Internet for the first time, as college freshmen. Until they absorbed Usenet's culture, they were a nuisance. But in 1993, America Online debuted direct access to Usenet for its customers, and wave after wave of newbs overwhelmed Usenet groups. Usenet's culture never really recovered, giving rise to the idea of an eternal September.

The scaling power of the protocol tends to flatten anything human in the direction of what the protocol makes possible. The Eternal September marches on, billions of Internet users soon to be matched by trillions of Internet-connected devices and AI agents.

From the postwar years until the 2010s, Western elites heralded the power of globalization to usher in a new age of human flourishing. But around 2016, they began to realize that the protocols they had built had leached power away from the traditional institutions from which they derived their power. Ever since, elites have been attempting to regain control through lockdowns—of borders, of cryptocurrencies, of misinformation—in a last-ditch attempt to reimpose the logic of the centralized mainframe over the world of networked computers. Absent the kind of totalitarian power the Chinese Communist Party exerts, efforts like the Department of Homeland Security's Disinformation Governance Board seem doomed to not only fail but immediately backfire.

We have to live here now, in the world built out of protocols. We have to build new habits, new institutions, and new ideas to make sense of it. After the beginning of the Eternal September in 1993, recovering Internet culture meant retreating to more felicitous protocols, like forums and blogs. We face the same challenge on a civilizational scale.

The Internet writer Realityspammer sees the potential we are being forced toward: "Is culture truly and irreversibly stuck? No, there are all kinds of opportunities and resources for those with the vision to create

new memetico-political assemblages"—new ways for people to model their actions for each other, new patterns of coordination, new habits, new ways of organizing culture—"but it cannot be done through aping the old means."

In the same way that the industrial age called forth a political science of management, we need a political science for the age of the protocol. We need to conceptualize new ways of asserting agency, new ways of finding both "exit" and "voice" in malfunctioning systems, ways of embedding protocols in the kinds of human communities that can generate legitimacy and accountability, ways of fighting the complexity and obscurity that can hide the exercise of power.

And we need to reclaim the paradoxical freedom of irrationality and self-limitation. In a protocol society, to default to responding rationally to incentives is to default to the swarm, to enslaving desire and burnout-inducing freedom. Deleuze argues that our age demands that we cultivate a new form of *idiot savant*, who can turn "the absurd into the highest power of thought." In the era of GPS, there is no longer a road less traveled by, no shortcut known only to locals, no path that is *your secret.* To see something new, one must find what is *not on the map*, the absurd traversal across a roof or through an unlocked window. Or one must find new paths in time instead of space, refusing to optimize by claiming some place, artifact, or community as one's own, the same way that a romantic relationship becomes something more when both partners *refuse to look for a better one.*

Make virtues of irrational attachment, cultivated ignorance, and stubborn loyalty. The day belongs to those who master the new tools for building, but who preserve in their hearts a secret garden of earnest loves untrammeled by the swarm. ♥

"Reality: A Post-Mortem" will continue with Essay 7 in a future issue. Read the whole series at TheNewAtlantis.com/RealityRIP.