ABSTRACTIONS AND EMBODIMENTS

NEW HISTORIES of COMPUTING and SOCIETY

edited by
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CONTENTS

Centrists against the Center

The Jeffersonian Politics of a Decentralized Internet

Marc Aidinoff

"It's the Jeffersonian idea of democracy," explained a suburban father from Weymouth, Massachusetts, to his local newspaper in 1996.[1] Touting his decision to share information about the local school committee via the World Wide Web, David Higgs knew networked computing was political. His words were not revealing the hidden politics of seemingly benign artifacts, revealed through historical and technical excavation, but rather underscoring the explicit politics that he, and many like him, would eagerly name. Higgs would enthusiastically wrap the World Wide Web in terms that were as overtly political as the language used by duly elected politicians. For $20 per month, the father of two children at the Abigail Adams Intermediate School had Internet access through the Plymouth Commercial Internet Exchange and 10mb for a personal web page. He used that page to post school committee memoranda and meeting minutes. In an article, "Dad Puts School Facts on Internet," the *Patriot Ledger* detailed Higgs's homespun handiwork: "None of the graphic bells and whistles of fancier computer postings on the Web, which frequently boast music and animated characters." Instead, David Higgs of Pleasant Street relied on "bold and italic print and eye-catching capital letters" to solve "what he saw as a lack of communication between the [school] committee and the community."[2] Higgs's claim that the World Wide Web, at least in his hands, could be Jeffersonian borrowed directly from potent existing terminology.

Decentralized networked computing was never simply abstracted. This collection traces the way distributed arrangements of metal pieces and human bodies came to have recognizable meanings—to be legally legible (as Gerardo Con Diaz, Zachary Loeb, and Cierra Robson argue in this volume) and identifiably racialized (as Robson, André Brock, Tiffany Nichols, and Kelcey Gibbons underscore). This work was often political, in the register of US electoral politics. If historians have increasingly drawn our attention to the political economy driving network design, this chapter argues for the role of political narrative shaping those design choices.[3] Just as the politics of the military planning and New Left individualism had given meaning to earlier incarnations of decentralized computing, the private Internet of the 1990s drew political meaning from centrist Democratic politics in the United States. Decentralization, expressed as Jeffersonian decentralization, was rendered legible in both the world of party politics and the world of systems engineering. As such, it is a reminder that the mutual shaping of politics and technology was not always a subterranean project but an explicit one that can be recognized in the loud articulations of those trying to ensure that technology and politics were reinforcing.

Like that of the nascent Internet, the meaning of Thomas Jefferson was hardly self-evident. Upon his death on July 4, 1826, Jefferson was canonized, but, as historian Merrill Peterson notes, the public memory of the prolific Jefferson was "an ill-arranged cluster of meanings, rancorous, mercurial, fertile." Unlike George Washington (deified before death) or Andrew Jackson (whose reputation was formed before his presidency), it would take time before Jefferson would become a more specified symbol. The imagined Jefferson, far more than his peers, was co-produced with contemporaneous politics. As Peterson explains, "Crudely unfinished after his death, his contract untransacted, Jefferson was fulfilled in the procession of the American mind."[4] Jefferson was a protean symbol, but his invocation did have certain potent affordances. In its many forms, the "Jeffersonian" would carry allusions to distinct economic and racialized social orders.

At the core of the narratives about Jefferson was his idealization of the yeoman farmer, the quintessential American icon of democratic

decentralization. Contemporary historiography places that farmer, a symbol of anti-statist democratic independence, in the context of robust state interventions.[5] Jefferson saw a strong role for the government to protect the interests of slaveholders in an expanding nation. If Jefferson's image has long benefited from the contradiction of a slaveholder who espoused liberty, Jeffersonian liberty was explicitly enabled by mass enslavement. Jefferson's commitment was to an "empire of liberty." It was to be an empire composed of empires; each decentralized dominion governed by an independent farmer. Narratives about Jefferson bear the imprint of his most consequential action as president, the drastic expansion of that empire with the purchase of the Louisiana Territory. The success of plantation capitalism, as current historiography makes clear, depended on a form of decentralized federal rule that facilitated global commerce but did not intervene in the local dominion of the plantation owner.[6] Jeffersonian decentralization, decades and centuries later, maintained the traces of this earlier referent.

Jefferson the gentleman–scientist, whose leisure was provided for by hundreds of enslaved people, has, since his death, been put to work by a diverse range of political actors. To nineteenth-century antislavery Republicans, Jefferson was a protoabolitionist who could never quite get the words out, but, for secessionists, the founder of the Democratic Party was a defender not just of a state's right to permit slavery but also to secede. Because Jefferson believed forcefully in nullification, the strongest version of rights of states to overrule federal law, secessionists invoked Jefferson to justify leaving the Union and segregationists relied on Jefferson to rally against the concentration of federal power.[7] For much of the twentieth century, Democrats continued to claim Jefferson's mantle. Democrats like Al Smith and Franklin Delano Roosevelt used Jefferson to mean simply populist, unlike the elitist New Yorker Alexander Hamilton. The latter-day elite New Yorker, FDR, was introduced at his nominating convention as the "incarnation" of Jefferson.[8] If FDR was Jefferson-made-flesh, William Jefferson Clinton fashioned himself the third coming of Jeffersonian populism. Jefferson, as a political referent, developed over time but echoed the same histori-

cal themes: populist rejection of a strong federal government despite the insistence on government support and, however masked, a nostalgia for the decentralized agrarian life on the plantation.

Politicians hoped invoking Jefferson would help get them elected. For centrist Democrats like Bill Clinton and Al Gore, retrofitting themselves in Jefferson's image was an opportunity to make themselves recognizable to the citizenry as modern heirs of Southern decentralized power. Similarly, those advocating for certain types of government intervention in networked computing, including Al Gore and the Electronic Frontier Foundation, borrowed the same political language to align their technical project with the electoral one. In the 1990s, the term "Jeffersonian" tied the design principle of decentralization to the centrist strain of the Democratic Party, including the racial, economic, and aesthetic commitments of the New Democrats. The shared meanings of "Jeffersonian" helped transform the Internet into something the US political system and public could handle by tying it to democratic (the value) and Democratic (the political party) ideas. Jeffersonian decentralization made a technical arrangement politically recognizable, nonthreatening, and even desirable.

Beyond Cold War Decentralization

The founding myths of networked computing always return to a fundamental design principle: distributed or decentralized communication.[9] The argument for a noncentralized system is encapsulated by perhaps the most famous diagram in the history of computing from a 1964 RAND Corporation report prepared for the US Air Force by Paul Baran (fig.2.1).[10] In the diagram, three models of distributed communication are sketched out: centralized, decentralized, and distributed. Each node in the diagram represents a station, and each line a potential communication link to spread information. Because every node was vulnerable to attack, a successful system would include sufficient redundancy that it could still function even if some nodes were taken down. The RAND report was very clear that these networks should be evaluated on the Cold War "criterion of survivability."[11]

Link

Station

Centralized
(A)

Decentralized
(B)
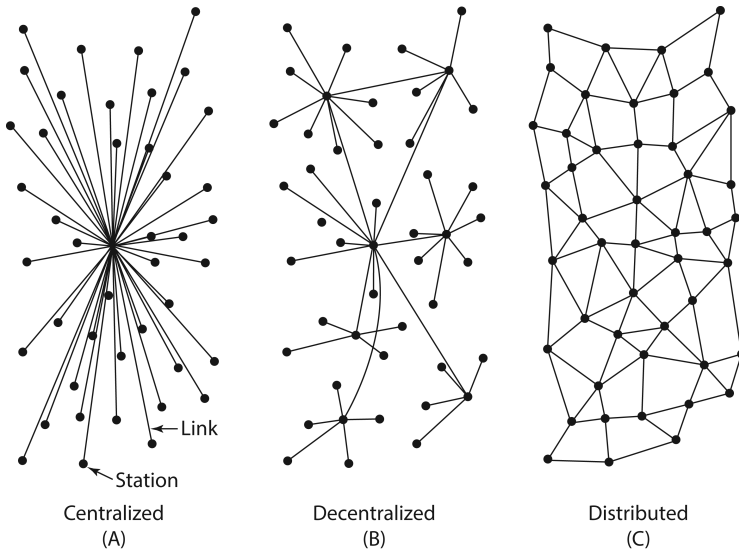
Distributed
(C)

Figure 2.1. Paul Baran's vision of "Centralized, Decentralized, and Distributed Networks."

Under the conceptual heading of decentralization, Baran was elevating a suite of networking strategies, including packet switching, standardized packets, distributed nodes, headers to identify the packets, and a store-and-forward approach. These techniques became meaningful if they could bolster the capacity of the US military to develop and maintain a hierarchal and efficient military communication and management system known as command-and-control. Since command-and-control required speedy and reliable communication in the event of an attack, a rupture in the communication system itself would leave the hierarchy flailing.[12] Much of command-and-control designation was a post hoc rationalization for technical and organizational choices, and a rationale for funding.[13] In this case, an approach like "store-and-forward," the tried-and-true strategy of the US Postal Service, where letters are temporarily stored at a series of distributed boxes before they are routed to their final destination, would become a potent example of decentralization in the Cold War context. Baran also relied on "the postman analogy," but even this language came only after a framing of survivability. The distribution of store-and-forward was

just part of an idealized "network which will allow several hundred major communications stations to talk with another after an enemy attack."[14]

As Peter Galison argues, World War II taught US Americans "to see though a bombsight," and so Cold War planning was marked by this recurring need to eliminate those vulnerable hubs that could be bombed. By this logic, cities should be more dispersed and people should be able to move through the nation without relying on any given route—a new multibillion-dollar interstate highway system was indeed funded. Just like cities and roads, digital communication should not have a vulnerable center.[15] When the government project manager Lawrence Roberts had to craft the US Department of Defense's Advanced Research Projects Agency network, ARPANET, he wholeheartedly embraced Baran's distributed communication as a guiding technical norm.[16] The Internet, therefore, at the core of its conception, was a Cold War network. It was, as Janet Abbate notes, from the world of Dr. Strangelove, a fictional account of an almost fantastical system designed with a driving (even comically absurd) fear of the surprise attack that would cripple the hierarchy of command-and-control.[17]

Historians have carefully documented how, over the following decades, from the early fifties to late eighties, "decentralization" remained a watchword of networked computing. In many of these stories, the Cold War order was not limited to the bombsight fear of the center but mutated to fashion adjacent meanings for decentralization. Devin Kennedy details the close links between a Cold War factory system, which was decentralized in part to prevent union organizing, and computer science.[18] Networked computing again allowed for a form of centralized control, here corporate control of the civilian workforce, through decentralized communications. Outside of the United States, the history of timesharing, packet-switching's parallel origin story, tells of Donald Davies looking for a noncentralized solution for allocating computer time in the Cold War British university.[19] In France, Louis Pouzin named the French Cyclades network for a collection of islands to evoke, as historians Valérie Schafer and Andrew Russell argue, "resisting centralized control by design."[20]

If government control was the dominant narrative for computing in the sixties and seventies, its inverse, decentralization *against* government control, has an equally robust history as the dominant historiographic frame for the history of the computer in the late seventies and eighties.[21] Fred Turner, Thomas Streeter, Steven Levy, and others have laid out how the personal computer (PC) became a symbol of Romantic resistance to the state.[22] Captured in the iconic imagery of the "1984" Apple Superbowl commercial, the PC promised to empower the individual user, in stark contrast to the monolith Big (Blue) Brother mainframe.[23] The PC, as it rapidly entered US homes, did not look like the giant centralized mainframes of the preceding decades, and it promised individualized empowerment. In these heavily marketed narratives, computers offered a story of radical individual-level control and resistance to national systems of state power.

Across meanings of decentralization there was a push and pull between "origin stories," which trapped decentralized computing in the hegemonic military culture from which it came, and narratives that raised the possibility that these same networks could be repurposed and given new meanings and uses.[24] Internet history, the history of the network of networks, has always oscillated between these poles. In the 1990s, as advocates of certain government regulations were looking for new kinds of stories, they turned to the political imagery of the Democratic Party, which had been going through its own search for identity.

The Jeffersonian Rebrand: New Democrats

As the 1980s came to a close, both networked computing and the Democratic Party were getting a rebrand. Democrats kept losing the presidency. With the brief and dispiriting exception of Jimmy Carter's short-lived tour of duty from 1977 to 1981, the White House had been off-limits to members of the Democratic Party since 1968. Centrist Democrats were increasingly raising loud criticism for the party's failures and blamed so-called special-interest groups. For these centrists, the very rainbow coalition that had been highlighted as the Democratic Party's defining positive feature prevented its members access to the presi-

dency. Critiques of a party controlled by these special-interest groups expressed three overlapping fears, often articulated as concerns about electability.[25]

The first concern was racial. "Special-interest groups" meant the American Federation of Labor and teachers' unions, but it more often meant Black voters and civil rights groups. One man, Jesse Jackson, embodied party leadership's fears about special-interest groups better than anyone. Jackson's 1984 and 1988 presidential runs were landmark accomplishments. The first Black candidate of a major party, Jackson won primaries and caucuses in the Deep South, but the prominence of an African American candidate also signaled to some that the South was becoming increasingly unwinnable for Democrats in a general election. Boll Weevil Democrats, the older segregationists like Jim Eastland and John Stennis, critical components of the New Deal Democratic coalition, were on their way out.[26] Southern Democrats were eager to make their party more appealing to white voters by being less explicitly associated with Black civil rights.[27]

The second concern was economic. The Old Liberalism of the Great Society, centrist critics argued, put the quest for equality ahead of economic growth. Established party leaders, epitomized by Ted Kennedy, continued a tradition of government spending and robust federal programs as the primary means to address social ills. At the same time, a new class of liberals, sometimes christened neoliberals, believed that facilitating economic growth was a primary function of government. While that did not mean an embrace of trickle-down Reaganomics, vocal neoliberal Paul Tsongas made it clear that everything should "absolutely" be subordinated to, and a function of, the economy.[28] The new economic order replaced the unionized factory worker with the knowledge worker and the financier as the archetypal worker fueling the American economy.[29]

The final concern was aesthetic. Democrats yearned for symbols of generational change: younger politicians, associated with new ideas, new suits, and fresh smiles. They needed to replace the aged liberal legislators with a fresher model. Many of this new generation saw cutting-edge technologies as the ideal symbol for the path forward. So-called

Atari Democrats recognized that the research corridors of Silicon Valley and Boston's Route 128 offered not only donors but also an inspiring future-oriented vision for the nation.[30] Searching for youth, the party found rejuvenated standardbearers in Bill Clinton and Al Gore, two young Southerners with good heads of hair.

The three core components of Jeffersonianism for 1990s centrist Democrat politics were anti-Black policies, noncentralized economics, and the bright veneer of Americana. This rightward movement of the Democrats is part of the dominant historiographic metanarrative for this period that charts the rise of conservativism.[31] Indeed, much of the party did and would continue to move right. But the rightward pull was always tempered by a counterforce, a conviction that some things about the Democratic Party (and elements of old-fashioned liberalism) were worth saving. For many centrists, concessions to Reaganite conservativism as an economic, racial, and aesthetic regime were conceived of as tactical attempts to resist that very regime. The Democratic Party was driven by a centrist logic of moving rightward enough to draw votes from the Republicans and save the left.

The Clinton campaign was quite conscious about crafting a narrative for the Democrats' potential accession to the White House. For the purposes of this chapter, one nostalgic aspect of that forward-looking messaging stands out: the use of Thomas Jefferson. The candidate—whose middle name, everyone was to hear, was Jefferson—made use of the connection easy. By 1992, as Democrats met to nominate Clinton and Gore, one outlet captured the message with exactly the type of headline centrists were looking for: "Jefferson's Political Heirs Gather in New York City: Democratic Party Convention Will Pin Hopes for Nov. 3 Win on a Son of the Agrarian South."[32]

Republican Ronald Reagan had understood the power of Jefferson imagery to undergird economic policy. Reagan announced his Economic Bill of Rights from the Jefferson Memorial in July 1987. Assured that "if Thomas Jefferson were here, he'd be one of the most articulate and aggressive champions of this cause," Reagan pushed the balanced budget amendment, which would drastically reduce the government spending on social welfare.[33] It was the literal towering silhouette of

the third president who would frame Reagan, the fortieth, as red, white, and blue balloons were released. In their campaign, Clinton and Gore were eager to reclaim that iconography as they also embraced balancing the federal budget. The fight over Jefferson was so recognizable that it led to one of former President Reagan's biggest applause lines during speech at the 1992 Republic nominating convention. Addressing Bill Clinton, Reagan riffed off an old debate line: "I knew Thomas Jefferson. He was a friend of mine. Governor, you're no Thomas Jefferson." In response, "the crowd almost blew the roof off the Houston Astrodome with laughter and applause."[34] Despite Reagan's jabs, William Jefferson Clinton won the election and, in January of 1993, it was decided the Clinton and Gore families would hold one final event before their inauguration: a visit to Thomas Jefferson's home plantation in Monticello. From there, they would board a bus to Washington.

The Jeffersonian Rebrand: Networked Computing

Just as centrist Democrats worked to realign their party's relationship with "Big Government," so too did those interested in the future of the TCP/IP Internet. Between 1988 and 1990, the operation of the Internet backbone was transferred from the Advanced Research Projects Agency to the National Science Foundation. Shortly thereafter, Gore sponsored the High-Performance Computing Act of 1991, which sought to fund a federally run National Research and Education Network (NREN) that would give Americans access to the Internet. In the period 1993–1995, amid contentious debate, the network was both turned over to private operation and significantly upgraded in terms of capacity, obviating the need for a separate NREN. In this context, debates on decentralization were at once proposals for network design and political ideologies.

As discussed above, historians of computing have emphasized two opposing strategies for rendering decentralized computing politically legible. The first narrative was one of government control, epitomized by command-and-control computing. The second was one of antigovernment liberation, epitomized by the hacker.[35] Both politicians and activists in the 1990s found these narratives lacking. Neither sufficiently

answered the question of what nonmilitary government involvement with network computing could be. Neither offered a compelling hook for New Democratic politics.

While he was still the junior senator from Tennessee, Al Gore Jr., the quintessential New, or Atari, Democrat, hoped technological innovation would form the foundation for his centrist vision of liberalism. Gore did not believe that the private sector would build the appropriate high-speed information network to serve the American public. A fully privatized network, he feared, would end up as a "balkanized system, consisting of dozens of incompatible parts." And that was only if there *were* private investors; Gore and his advisors feared that there would be insufficient private capital investment in a National Information Infrastructure to make such a network feasible. There was, he pointed out, little clear demand for nationwide networked computing until its utility had been demonstrated. The role of the federal government was to provide "federal seed capital" that would activate private-sector investment.[36] Here was a new liberalism that seemed to find a new role for the federal government, as the leader and coordinator of private dollars through federal investment. It rebuked both the old liberalism of a giant government-operated network and the Reaganite preference for a privatized network.[37] Still, Gore needed narratives to sell new policies.

In a 1991 special issue of *Scientific American,* Gore and his staff penned an essay entitled "Infrastructure for the Global Village." To sell voters on the idea of federal seed capital, he drew an analogy with farm policy. US information policy, Gore wrote, resembles "the worst aspects of our old agricultural policy, which left grain rotting in thousands of storage silos while people were starving. We have warehouses of unused information rotting." That information, he believed, would have economic value if it were part of a network. A federally subsidized network would be the infrastructure for commerce. His other rhetorical touchpoint, the decentralized interstate highway system, was not just a convenient metaphor, it was a model of federal construction and development undergirding capitalist growth. It was a vision of the federal government's role that Gore traced to his father, Tennessee senator Al Gore Sr., who had pushed through interstate highway legislation.

The same dispersed highway that had been understood through the bombsight view became a road to take products to market. Gore's position was at odds with both those who wanted a publicly run network and those who thought its construction should be left to the cable and telecom giants. Gore's team was convinced that private industry alone simply would not take the gamble to make more than a private toll road for the elite. He wanted a federal information highway system that leveraged private dollars but ensured broader access.[38]

Gore told a story about the fundamentally similar structures of computing, capitalism, and liberal democracy. Decentralized networks in this framing were quintessentially American.[39] Representative democracy and capitalism relied on citizens functioning as decentralized information processors: "The unique way in which the U.S. deals with information has been the real key to our success. Capitalism and representative democracy rely on the freedom of the individual, so these systems operate in a manner similar to the principle behind massively parallel computers. These computers process data not in one central unit but rather in tiny, less powerful units distributed throughout the computer. Capitalism works on the same principle."[40] For Gore, decentralized computing was All-American not because it was a system to protect the state from attack or to resist the state through individualism. It was All-American because it enabled a certain form of liberal capitalism. Notably, Gore was not making an antigovernment argument nor simply doubling down on laissez-faire capitalism. For Gore in 1991, networked computing would be the infrastructure for capitalism, the roads that got the grain to market, not the object of capitalism, the auctioned-off rights to build the road. Decentralization was not in opposition to the government; a decentralized network would be precisely what the US federal government needed to provide. It was the manner in which the United States, according to Senator Gore, "should lead."[41]

In *Scientific American,* Gore placed himself within striking lineage, not just of his own father, but that of the third president. He writes, "Gutenberg's invention, which so empowered Jefferson and his colleagues in their fight for democracy, seems to pale before the rise of electronic communications." It was by no means obvious that Gutenberg

and Thomas Jefferson go together—maybe Thomas Paine—but the shoehorning of Jefferson was rather odd outside of its larger political context. For Gore, following in Jefferson's footsteps meant embracing the notion that "a high-capacity network will not be built without government investment."[42]

A set of technology policy advocates, most notably the Electronic Frontier Foundation (EFF), would follow Gore's lead. In that same issue of *Scientific American,* Mitchell Kapor, co-founder of EFF, wrote a piece on civil liberties in cyberspace. In it, he does not speak in the language of the Founding Fathers when he tells the story of the Secret Service raiding the office of Steve Jackson, who operated an electronic bulletin-board system, but takes a more legalistic frame.[43] Still, what Kapor and others understood so well is that even at its most anti-statist, EFF needed to frame the Internet as something the state could understand, as an entity that fit within the frameworks of both powerful political parties. As two Jeffersonian Democrats, Bill Clinton and Al Gore, won back the White House for the Democratic Party, Kapor moved the office of the Electronic Frontier Foundation from Massachusetts to Washington, DC, and by 1993, Kapor and his colleagues were organizing around the word "Jeffersonian."

In March 1993, Kapor wrote, "Life in cyberspace might be shaping up exactly as Thomas Jefferson would have wanted: founded on the primacy of individual liberty and a commitment to pluralism, diversity, and community."[44] Wrapped in all that patriotic language, Kapor was well aware that "the emerging consensus between business, government, and policy watchdogs" was fragile. Just a few months earlier, at a policy summit in Little Rock, Arkansas, Al Gore and the CEO of AT&T had debated exactly what role the federal government would have in building the information superhighway.[45] Gore and the Clinton administration struggled with this question, and, perhaps, in the winter of 1993 the US Internet could have evolved into a more nationalized system like France's Minitel.[46]

Kapor wanted a clear role for the federal government, involved but slightly less involved than Gore had envisioned. His summary of the emerging consensus worked to draw that line. The network would be

private, not public, he argued. The federal government's role would, and should, be "limited to funding research, leading experiments with ultra-high-speed networks, helping promote standards, and protecting the public interest in privacy, freedom of speech, and other areas."[47] That was quite a large set of responsibilities. Historians of computing have paid particularly close attention to the role of standards in creating the contemporary Internet, not to mention legal norms.[48] Still, the cables would be private. Telephone and cable companies, not the federal government, would be "the principal carriers of traffic into the home."[49] This compromise built on Gore's earlier rhetoric and the larger New Democratic plans, but it was still hard-fought. Yes, there would be federal standards, and federal laws, and, though glazed over, many federal tax incentives, but the core infrastructure would be private.

Privatizing the National Science Foundation's Network (NSFNET) which would eventually occur in 1995, was not a rejection of the state but a compromise with it. To make this compromise work, it was aligned with the dominant politics of the time. Kapor made sure to underscore that this was Jeffersonian: "We have a vision that is, we think, true to the spirit of Thomas Jefferson, 250 years old last week . . . Instead of a kind of centralized government, where one size fits all, the Jeffersonian view is very decentralized, very non-hierarchical. It says let people do their own thing and let groups of people be free, on a voluntary basis, to do their own thing."[50] This "Jeffersonian" was both capacious and specific. It endorsed Baranian decentralization and the hacker anti-statist instinct, but in a way that laid out bounds for what the government should do with words that would resonate with the ascendant Democratic Party. Talk of Jefferson was beneficial to both the Clinton–Gore administration and the Electronic Frontier Foundation. The narrative structure worked alongside racialized invocations of the digital divide that would guide subsequent policy making.[51] Hardly depoliticized, the Internet was political in exactly the ways that appealed to a centrist understanding of the white electorate.

Later that year when Kapor appeared before the Senate Commerce Committee to testify, his testimony was boiled down to a few sound bites for the evening news, but "Jeffersonian Revolution" made the

cut.[52] In Newsday, another EFF leader offered his commentary: "Consider the Internet. No one is in control. You can't go to a central office and say, 'Stop doing that.' This was the start of "a 'Jeffersonian' blossoming of online freedom."[53] By 1994, the Jeffersonian ideal already evoked what had been promised but not achieved by a National Information Infrastructure. The sporadic investment from telecom companies was described as "a far cry from Vice-President Gore's Jeffersonian dream of universal—and affordable—access."[54] A disgruntled University of Colorado computer scientist was concerned about all the Jefferson talk: "The Clinton administration is paying a lot of lip service to the idea that the [information superhighway] will promote a version of Jeffersonian Democracy in which citizens will be able to participate in the political process through taking part in informed on-line debates."[55]

By 1995, the Jeffersonian Internet was so legible, it could articulate a meaningful Third-Way politics for the Internet that made sense in both Britain and the United States. A questioning heading from the *Guardian* read: "What will Tony Blair's promises of new technology and digital socialism actually mean in the future in schools, hospitals, and in your home?" Labour Party leader Tony Blair's "new, evangelical appeal to information technology," the paper explained, "actually owes more to Al Gore" than to Blair's own left-wing predecessors in the Labour Party. "The US deputy president has been preaching 'Jeffersonian' principles of cheap and universal access to the information highway for over a decade . . . It is from these Jeffersonian principles that Blair derives his form of digital socialism."[56]

Still, the political winds were again changing by 1996, and so was the image of Jefferson. Always aware that it wore the costumes of a previous revolution, the Electronic Frontier Foundation was actively pantomiming Thomas Jefferson when John Perry Barlow penned the Declaration of the Independence of Cyberspace. By then the EFF had a more aggressive stance toward the Clinton–Gore administration. It was the new speaker of the house, Newt Gingrich, who was trying on Jefferson's legacy, courting the readers of *Wired,* and proposing a more libertarian, anti-statist, politics for the Internet.[57]

It was Gingrich's conservative take on Jefferson's vision with which David Higgs, the father from Weymouth who opened this chapter, aligned himself in 1996 by leaking information from the school board online. Almost all of the documents on "Friends of the Weymouth Schools" came from two members on the seven-person panel and promoted their view that the textbooks were too critical of the United States. It was their perspective that pushing for an "America First" curriculum would "promote patriotism and a greater appreciation of American culture."[58] "Friends of the Weymouth Schools" advocated for charter schools and school choice: a rather Jeffersonian freedom, echoing the white supremacist roots of the term. These "Friends of the Weymouth Schools" held on to the politics of an empire of liberty with freedom from liberal centralized oversight and hopes for a more nationalist curriculum.

Conclusion

Though the TCP/IP protocol remains core to the conceptual and operational reality of the contemporary Internet, historians of computing have been insistent that technological choices, even powerful standards, were not sufficient to constitute a distributed network. A decentralized network required social rules. These were expectations expressed in manuals, conferences, listservs, and the code itself. They were norms implemented by local institutions and massive corporations. And they were political. It is not simply that the ARPANET was a US government system or that TCP/IP solved the collective action problem of unifying networks only because of government power.[59] The privatized infrastructure of the 1990s was the product of political work: the efforts of politicians and those whose power grew from operating in an explicitly political idiom. Politics, as the mechanism for organizing the network, relied on abstracted appeals to Americana and veiled references to racist economic and social arrangements. Reading the political, as it lies on the surface of technology, as actors directly described it, reveals the white centrist politics that were always right in front of us. As historians of computing become ever more able to parse the hidden meaning of complex systems and hidden biases, Jeffersonian decentralization serves as a

reminder, to listen to people when they tell us what and whom they declared self-evidently important. Sometimes, the technopolitics of the Internet turn out to be good old-fashioned politics.

Notes

1. Erin Lee Martin, "Dad Puts School Facts on Internet," *Patriot Ledger,* January 30, 1996, City edition.
2. Martin, "Dad Puts School Facts on Internet."
3. On the political economy of design choices, see Martin Campbell-Kelly and Daniel Garcia-Swartz, "The History of the Internet: The Missing Narratives," *Journal of Information Technology* 28, no. 1 (March 2013): 18–33; Janet Abbate, "Government, Business, and the Making of the Internet," *Business History Review* 75, no. 1 (2001): 147–76. On the homeomorphism between networked computing and political ideology, see especially Eden Medina, *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile* (Cambridge, MA: MIT Press, 2011); Benjamin Peters, *How Not to Network a Nation: The Uneasy History of the Soviet Internet* (Cambridge, MA: MIT Press, 2016); Hallam Stevens, "From RangKoM and JARING to the Internet: Visions and Practices of Electronic Networking in Malaysia, 1983–1996," *Internet Histories,* May 2021, 1–18.
4. Merrill Peterson, *The Jefferson Image in the American Mind* (Charlottesville: University of Virginia Press, 1998), 443.
5. Brian Balogh, *A Government Out of Sight: The Mystery of National Authority in Nineteenth-Century America* (Cambridge: Cambridge University Press, 2009).
6. Sven Beckert and Seth Rockman, eds., *Slavery's Capitalism: A New History of American Economic Development* (Philadelphia: University of Pennsylvania Press, 2016); Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom* (Cambridge, MA: Belknap Press, 2017); Ned and Constance Sublette, *The American Slave Coast: A History of the Slave-Breeding Industry* (Chicago: Lawrence Hill Books, 2016); Edward E. Baptist, *The Half Has Never Been Told: Slavery and the Making of American Capitalism* (New York: Basic Books, 2014).
7. Andrew Burstein, *Democracy's Muse: How Thomas Jefferson Became an FDR Liberal, a Reagan Republican, and a Tea Party Fanatic, All the While Being Dead* (Charlottesville: University of Virginia Press, 2015), 65.
8. Burstein, *Democracy's Muse,* 8.
9. As historian of cryptography Gili Vidan has noted, decentralized and distributed are often conflated. Vidan, "Decentralization: The Rise of a Hazardous Spec," *Just Money,* June 2020, https://justmoney.org/g-vidan-decentralization-the-rise-of-a-hazardous-spec/. This chapter tries to use the actors' demarcation between the two, or lack thereof.
10. Paul Baran, "On Distributed Communications" (Santa Monica, CA: The RAND Corporation, August 1964), 2; B. Fidler, "Cryptography, Capitalism, and National Security," *IEEE Annals of the History of Computing* 40, no. 4 (October 2018): 80–84.

11. Baran, "On Distributed Communications," 1.

12. Joy Rohde, "Pax Technologica: Computers, International Affairs, and Human Reason in the Cold War," *Isis* 108, no. 4 (December 2017): 792–813; Paul Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: MIT Press, 1996).

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