

Crypto's First Amendment Hustle

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Crypto industry attorneys have argued in litigation and before regulatory agencies that the First Amendment immunizes their line of business from ordinary market regulation. On the merits, these arguments range from weak to frivolous. But they nevertheless create value for the crypto industry in two ways. First, they help to drive a predatory marketing strategy that attracts retail investors with appeals to individual liberty and resistance to “financial censorship.” Second, they tee up arguments that financial regulators’ jurisdiction should be interpreted narrowly under the “canon of constitutional avoidance” and the “major questions doctrine.” Overall, crypto’s First Amendment opportunism interferes with public efforts to protect investors, collect taxes, and fight financial crime—and ultimately, it debases the First Amendment itself. At every opportunity, agencies and courts should debunk these arguments in terms that are clear enough for the industry’s target audiences to understand.

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Introduction

Cryptocurrency (“crypto”) products and decentralized finance applications share a founding myth: namely, that it is possible for capital markets to evade public regulation and oversight through skillful use of blockchain and autonomous software. This myth has never quite borne out. Rather than relying on technical infrastructure as a regulatory shelter, the crypto industry seeks its shelter in law.

To build this shelter, the crypto industry is running a playbook that is familiar in the world of finance and corporate law. Industry counsel engineer novel crypto-adjacent assets and business structures that fuzz existing regulatory lines. Lobbyists work legislators and regulators in the hope of shaping the regulatory framework. And today, as crypto’s biggest players begin to lose persuasive influence over policy and its evasive maneuvers begin to lose effectiveness, the industry is leaning more heavily into constitutional and Administrative Procedure Act (“APA”)-based litigation—and threats of such litigation—as a last-ditch means to secure the regulatory shelter that the blockchain continually promises and fails to provide.

This Article focuses on the role of First Amendment argumentation in crypto’s litigation and lobbying strategy. In court filings, Securities and Exchange Commission comment letters, white papers, and op-eds, crypto industry groups have advanced theories that virtually every aspect of decentralized finance and the crypto ecosystem is somehow pervaded with First Amendment significance.

The theories advanced in these fora are out of step with First Amendment case law and basically doomed to fail in court. But because they are couched in terms of “code as speech,” “financial censorship,” and the need to sacrifice public priorities to make way for long-term techno-utopias

(here, the crypto-enabled “Web3”),¹ the crypto industry’s First Amendment story nevertheless resonates deeply with crypto culture’s defining ideological obsessions.

This storytelling promotes the interests of the crypto industry in multiple ways. First, it does identity-affirmation work for crypto’s most devoted investors while reinforcing marketing claims that crypto is “democratizing finance.” Second, it encourages the mistaken impression that the regulation of crypto assets is a subject of “serious” constitutional debate (perhaps even the basis of a “major question”), and that policymakers must proceed with unusual delicacy.

This Article concludes with recommendations on how public institutions—courts, regulatory agencies, and Congress—can best confront and answer the crypto industry’s First Amendment theories without inadvertently reinforcing them in the public mind.

I. Crypto’s Pursuit of “Censorship Resistance”

Crypto promoters have long claimed that they could code a “censorship-resistant” financial asset that is nearly impossible to regulate.² The problem with the pre-crypto world, as they

¹ Web3 is a proposed infrastructure for a “decentralized” future Internet that would use cryptocurrency-powered blockchains to distribute computing power and public information across a worldwide, mutually anonymous set of computer systems. One often-touted benefit of Web3 is that it would not depend on the “centralized” institutions, including social platforms and payment processors, that enable censorial control in today’s “Web2” Internet architecture. See Thomas Stackpole, *What is Web3?*, HARV. BUS. REV. (May 10, 2022), <https://hbr.org/2022/05/what-is-web3> [<https://perma.cc/6ZP4-8NC6>].

² Cryptopedia Staff, *What is Censorship Resistance?*, CRYPTOPEDIA (June 29, 2022), <https://www.gemini.com/en-US/cryptopedia/what-is-censorship-resistance-bitcoin-censorship-resistant> [<https://perma.cc/HZR6-APMC>]; Justin Siegel, *What Does Censorship-Resistant Really Mean?*, BITCOIN MAG. (June 28, 2021), <https://bitcoinmagazine.com/culture/uphill-battle-bitcoin-ban> [<https://perma.cc/53K6-LZJC>]; Coin Telegraph Staff, *How and*

saw it, was that banks served as regulatory choke points for governments: by licensing, overseeing, and regulating the banking system, governments could surveil and throttle the flow of capital.³ The Internet, too, had a choke-point problem: governments could control the technical layer (e.g., routers) and the content layer (e.g., search and social platforms) of these bottlenecks, and from there they could surveil and control the flow of information.⁴ All this action at the choke point, within the crypto ethos, is not merely control but

When Did Bitcoin Start? The Complete Bitcoin History, <https://cointelegraph.com/bitcoin-for-beginners/the-history-of-bitcoin-when-did-bitcoin-start> [<https://perma.cc/SZ4U-4XJS>]; Bitcoin Magazine Staff, *Lamar Wilson, Founder of Black Bitcoin Billionaire, Discusses Freedom from Censorship*, BITCOIN MAG. (Dec. 17, 2021), <https://bitcoinmagazine.com/culture/lamar-wilson-black-bitcoin-billionaire-discusses-freedom> [<https://perma.cc/9LL9-9HEF>]; George Kaloudis, *Crypto Means Absolutely Nothing Without Censorship Resistance*, COINDESK (Oct. 23, 2022), <https://www.coindesk.com/business/2022/10/23/crypto-means-absolutely-nothing-without-censorship-resistance> [<https://perma.cc/NYW9-P9GB>] (“Censorship resistance is fundamental to any functioning cryptocurrency or blockchain project. It’s been a pillar of crypto from the start, one of the biggest reasons the whole movement got started. What it means is this: As long as a participant in the Bitcoin or whatever network follows the predetermined technical criteria to construct a valid transaction, then nobody - not the cops, not your nosy neighbor - should be able to prevent that.”); *What is Censorship Resistance?* BITCOIN.COM, <https://www.bitcoin.com/get-started/what-is-censorship-resistance> [<https://perma.cc/GU4V-HRWP>] (“Governments are traditionally the main censors, though other financial intermediaries like banks, credit card companies, and web2 platforms, are suppressing financial activities more and more. Censorship resistance, then, is the ability to carry out financial actions despite the wishes of any third party.”).

³ *Why Do We Need Cryptocurrencies?*, COINTELEGRAPH, <https://cointelegraph.com/defi-101/why-do-we-need-cryptocurrencies> [<https://perma.cc/9CSX-6JHW>]; Matt Levine, *The Crypto Story*, BLOOMBERG (Oct. 25, 2022), <https://www.bloomberg.com/features/2022-the-crypto-story> [<https://perma.cc/94NB-VJXR>] (“US banks, often though not always in conjunction with US government agencies, are very much in the business of *blocking payments*.”).

⁴ See, e.g., Chris Dixon, *Why Decentralization Matters*, CDIXON.ORG (Feb. 18, 2018), <https://cdixon.org/2018/02/18/why-decentralization-matters> [<https://perma.cc/3TXX-FCHM>].

“censorship”—censorship of finance, commerce, culture, and *speech*.

Blockchains were supposed to avoid these problems by running on many anonymous computers all at once. With Bitcoin, a person could keep an account that existed *everywhere*, effectively; the technical architecture did not depend on any single bank-like choke point for the law to interfere with. And on more advanced blockchains like Ethereum, communities could set up platform-like Internet services that were similarly decentralized and, as a result, “censorship-resistant.” Such services would not run on any single group of servers; they would run on a distributed computing system maintained by innumerable anonymous machines. No single party—not even the government—could “censor” these services unless the consensus of all these machines allowed it.

The claim that this kind of technical architecture puts Blockchain beyond the reach of the law has always been false.⁵ And it is false for the same reason that earlier claims about “cyberspace” being unregulable were false:⁶ well-functioning

⁵ Brady Dale, *How Transactions Might be Censored after Ethereum Changes Next Month*, AXIOS (Aug. 23, 2022), <https://www.axios.com/2022/08/23/how-transactions-might-be-censored-after-ethereum-changes-next-month> [https://perma.cc/P2V6-ZLJM]; Ana Paula Pereira, *51% of Ethereum Blocks are Now Compliant with OFAC Standards, Raising Censorship Concerns*, COINTELEGRAPH (Oct. 14, 2022), <https://cointelegraph.com/news/51-of-ethereum-blocks-are-now-compliant-with-ofac-standards-raising-censorship-concerns> [https://perma.cc/C9C3-CCSN].

⁶ This claim has forebears. John Perry Barlow famously claimed that the internet transcended boundaries and governments, and that by nature cyberspace lay beyond any national jurisdiction. John Perry Barlow, *A Declaration of the Independence of Cyberspace*, ELEC. FRONTIER FOUND. (Feb. 8, 1996), <https://www.eff.org/cyberspace-independence> [https://perma.cc/U7R3-WAG6]. Bill Clinton, around the same time, pooh-poohed China’s early efforts to restrain online speech. Bethany Allen-Ebrahimian, *The Man Who Nailed Jello to the Wall*, FOREIGNPOLICY.COM (June 29, 2016), <https://foreignpolicy.com/2016/06/29/the-man-who-nailed-jello-to-the-wall-lu-wei-china-internet-czar-learns-how-to-tame-the-web>

systems operating a high scale tend to incorporate some degree of centralization.⁷ Completely decentralized systems—whether technical, economic, or social—put unreasonable demands on everyone involved. Most people would rather buy clothing from stores, for example, than make it themselves. Nor do very many people want to run their own web servers⁸ or manage their own crypto assets. This is why stores, email services, and commercial crypto exchanges exist. All of these centralized services capture (and share in part with their customers) the massive economies of scale that result when, for example, ordinary people are not forced to manufacture their own clothing.⁹ The tendency toward centralization is so natural and so strong—especially where the Internet is concerned—that it generally takes public intervention, through antitrust law, for

[<https://perma.cc/YY6X-MSNF>] (“On March 8, 2000, U.S. President Bill Clinton hailed the arrival of a new era, one in which the internet would mean the triumph of liberty around the world. He dismissed China’s fledgling efforts to restrain online speech. ‘Good luck,’ quipped Clinton. ‘That’s sort of like trying to nail Jello to the wall.’”). *See also* Timothy C. May, *The Crypto Anarchist Manifesto* <http://groups.csail.mit.edu/mac/classes/6.805/articles/crypto/cypherpunks/may-crypto-manifesto.html> [<https://perma.cc/5LLJ-52JQ>] (“Computer technology is on the verge of providing the ability for individuals and groups to . . . exchange messages, conduct business, and negotiate electronic contracts without ever knowing the True Name, or legal identity, of the other These developments will alter completely the nature of government regulation, the ability to tax and control economic interactions, the ability to keep information secret, and will even alter the nature of trust and reputation The State will of course try to slow or halt the spread of this technology, citing national security concerns, use of the technology by drug dealers and tax evaders, and fears of societal disintegration But this will not halt the spread of crypto anarchy.”).

⁷ *See* Moxie Marlinspike, *My First Impressions of Web3*, ABOUT LIFE PROJECTS BLOG (Jan. 7, 2022), <https://moxie.org/2022/01/07/web3-first-impressions.html> [<https://perma.cc/F7EX-HJN2>].

⁸ *Id.*

⁹ *See generally* VIRGINIA POSTREL, *THE FABRIC OF CIVILIZATION: HOW TEXTILES MADE THE WORLD* (2020) (tracing the development over millennia of the technologies and social structures needed to make raw fiber into affordable fabric goods).

example, to achieve the opposite result.

This is why the blockchain's decentralized computing architecture has done nothing to prevent the rise of bank- and platform-like institutions to help retail investors manage crypto assets. These include Coinbase, Gemini, and Kraken, which facilitate cryptocurrency exchange and offer cryptocurrency investment products,¹⁰ and OpenSea, a web platform for marketing NFTs.¹¹ These services' American operations are *already* subject to *some* financial regulation, even in the absence of a comprehensive crypto reform package. Centralized crypto exchanges and banks that handle crypto are subject to anti-money laundering ("AML") and know-your-customer ("KYC") obligations, among others.¹²

Web-based exchanges are not the only centralized choke points where regulators can apply pressure. Many crypto projects that are decentralized at the engineering level are nevertheless highly centralized as businesses. It is typical, among newer projects, for a concentrated group of venture firms and developers to put up the startup capital, retain a controlling bloc of votes in governance decisions, and reap a concentrated share of the gains.¹³ As businesses, such

¹⁰ *The Future of Money is Here*, COINBASE, <https://www.coinbase.com> [<https://perma.cc/X5MM-SG8P>]; *The Four Pillars of Gemini*, GEMINI, <https://www.gemini.com/about> [<https://perma.cc/46E9-XU5A>]; *Financial Freedom Starts Here*, KRAKEN, <https://www.kraken.com> [<https://perma.cc/PKA3-246C>].

¹¹ *Building an Open Digital Economy*, OPENSEA, <https://opensea.io/about> [<https://perma.cc/7U8N-Y478>].

¹² Samantha Altschuler, *Should Centralized Exchange Regulations Apply to Cryptocurrency Protocols?*, 5 STAN. J. BLOCKCHAIN L. & POL'Y 92, 105-06 (2022).

¹³ Sirio Aramonte, Wenqian Huang & Andreas Schrimpf, *DeFi Risks and the Decentralisation Illusion*, BIS Q. REV., Dec. 6, 2021, at 28. And beyond this control through bloc voting, "many if not most DeFi projects have, at least for a while, administrators with 'god-mode' access keys" to facilitate quick executive decisions. *'Decentralization Theater' and the Myth of DeFi*, PYMNTS (Sept. 8, 2022), <https://www.pymnts.com/cryptocurrency/2022/decentralization-theater-and-the-myth-of-defi> [<https://perma.cc/544X-YAY7>].

operations are well within the grasp of business law and financial regulation. And all these businesses ultimately rely on traditional banks, subject to traditional banking law, to exchange crypto for cash.¹⁴ That arrangement serves as another pressure point.

The bottom line is that it doesn't actually matter very much whether blockchains themselves are hard for governments to tamper with. What matters is whether states have effective means to regulate what people *do* with blockchains—at least most of the time. And they do. So, for any practical purpose, blockchain products have never delivered and probably never can deliver on crypto's promise to evade public regulation forever through clever software design.

This is why lawyers and lobbyists—not engineers—are the ones who have been entrusted to build and defend a more durable regulatory shelter for the industry. And in doing so, they run a very conventional two-pronged play.

First, transactional lawyers design novel financial instruments. These crypto-based financial instruments and business structures bear features that differ in various aspects from traditional instruments and structures. The differences then invite controversy over whether the new thing looks enough like the old thing to fall within the old rule or the jurisdiction of the existing enforcement agency.¹⁵ It is often

¹⁴ *The Financial Stability Risks of Decentralised Finance*, FIN. STABILITY BD. 25 (Feb. 16, 2023), <https://www.fsb.org/wp-content/uploads/P160223.pdf> [<https://perma.cc/3FGV-Y9RB>].

¹⁵ In the late 2010s, for example, a number of crypto ventures attempted to design an asset that would, in the SEC's words, "essentially seek to obtain the benefits of a registered public offering without assuming the disclosure responsibilities and legal strictures designed to protect the investing public." Complaint at 48, *Sec. & Exch. Comm'n v. Telegram Inc.*, No. 19 Civ. 9439, 2019 WL 5305462 (S.D.N.Y. Oct. 11, 2019). Under this "Simple Agreement for Future Tokens" model, Andreeson Horowitz and others paid \$1.8 billion to the firm Telegram, which in return promised to give Horowitz \$1.8

unclear just how novel the new thing actually is, but the ambiguity itself can create profit opportunities during the time when legal institutions are deciding on the appropriate response.¹⁶ This is an old game.¹⁷ If software plays any role in upping the ante, it is only because software's quick configurability allows promoters to make the product more bespoke and confusing to regulators as they get their bearings.

Second, industry lobbyists push an influence campaign to write crypto-specific exemptions into the regulatory framework. This, too, is an old game that one does not need a blockchain to play. But the high-tech element nevertheless

billion in its new GRAM tokens at the time of their initial sale to the public. Press Release, U.S. Sec. & Exch. Comm'n, SEC Halts Alleged \$1.7 Billion Unregistered Digital Token Offering (Oct. 11, 2019) (on file with author). A16z's hope here was that the SAFT itself would count as a security, but that the tokens themselves would not. If the tokens were not securities, then they would not need to be registered with the SEC, Complaint at 50, *Telegram Inc.*, 2019 WL 5305462. And, even if the SAFT itself was a security, the SAFT sale would be exempt from registration because it was only offered to accredited—i.e., wealthy or institutional—investors. Exemption from registration, in turn, would allow Telegram and its underwriters “to maximize the amount initial purchasers would be willing to pay Telegram by creating a structure to allow these purchasers to maximize the value they receive upon resale in the public markets.” Sec. & Exch. Comm'n v. *Telegram Grp. Inc.*, 448 F. Supp. 3d 352, 358 (S.D.N.Y. 2020).

¹⁶ Julian J. Z. Polaris, *Backstop Ambiguity: A Proposal for Balancing Specificity and Ambiguity in Financial Regulation*, 33 YALE L. & POL'Y REV. 231, 239 (2014) (“With clever lawyers and bankers at their disposal, regulated entities can often find ways around bright-line definitions This type of evasion may be particularly common in the ‘area of corporate and financial regulation, in which sophisticated and resourceful actors pair with complex law to produce at times maddening and costly games of regulatory cat-and-mouse.’ As a result, even rules that seem to be overinclusive as written may not end up playing out that way in practice.”) (quoting Samuel W. Buell, *Good Faith and Law Evasion*, 58 UCLA L. REV. 611, 612 (2011)).

¹⁷ See, e.g., KATHARINA PISTOR, *THE CODE OF CAPITAL: HOW THE LAW CREATES WEALTH AND INEQUALITY* 43 (2019) (describing the private-law development of uses and later trusts as vehicles to avoid taxation and regulation in the 15th and 16th centuries).

allows crypto’s policy teams to claim that they are driving “innovation” and that public policymakers must therefore move with unusually extreme caution if America wants to “win the future.”¹⁸ Crypto’s promoters often claim that cryptocurrency will become the bedrock for a completely new type of Internet (Web3)¹⁹ that will support a new and better way of life. And in this respect, it helps that the crypto products at issue are confusing, and the promised benefits are hard to evaluate. Public decisionmakers hesitate, understandably, in the face of apparent complexity.

The risk for the industry here is that public decisionmakers will eventually come to understand the *people* who are pushing these visions—and that when they do, they will realize it is a mistake to try too hard to follow the details of crypto products

¹⁸ *How to Win the Future: An Agenda for the Third Generation of the Internet*, A16Z (Oct. 2021), <https://a16z.com/wp-content/uploads/2021/10/How-to-Win-the-Future-Deck.pdf> [<https://perma.cc/B6ME-7ZCV>]. Note that Axie Infinity and Helium, two of the four futuristic “use cases” for Web3 that a16z offers in its slide deck, ended in disaster within a year. Andrew R. Chow & Chad de Guzman, *A Crypto Game Promised to Lift Filipinos Out of Poverty. Here’s What Happened Instead*, TIME (July 25, 2022), <https://time.com/6199385/axie-infinity-crypto-game-philippines-debt> [<https://perma.cc/GCE7-K4VT>]; Sarah Emerson, David Jeans & Phoebe Liu, *Crypto Darling Helium Promised a ‘People’s Network.’ Instead, Its Executives Got Rich*, FORBES (Aug. 23, 2022), <https://www.forbes.com/sites/sarahemerson/2022/09/23/helium-crypto-tokens-peoples-network/?sh=616baf437316> [<https://perma.cc/A25K-KP38>].

¹⁹ Nilay Patel, *Chris Dixon Thinks Web3 is the Future of the Internet-Is It?*, THE VERGE (Apr. 12, 2022), <https://www.theverge.com/23020727/decoder-chris-dixon-web3-crypto-a16z-vc-silicon-valley-investing-podcast-interview> [<https://perma.cc/7YYV-JMUD>] (“In my mind, if Web3 works right—if we can do it the right way—it is the best of both worlds of Web1 and Web2. The advanced functionality that we have come to like from Web2 service is the slick user interfaces, the ability to read and write as we say, and to both consume and publish. We also have the predictability, reliability, and neutrality of Web1 protocols. Very importantly, we have the ability for creative people, businesses, and startups to reach audiences directly, and to truly have a relationship with those audiences that is not mediated by algorithms and advertising, which is where I think we are today.”).

whose many bewildering variations amount to an elaborate shell game. This is why it does not matter that FTX's stunning collapse resulted from ordinary human malfeasance rather than some blockchain-related issue: an event that casts doubt on the institutional culture surrounding crypto is still a crypto story. And importantly, it is a story that undercuts the importance of those intractable technical details that play such an important role in stalling legislation, regulation, and enforcement.

As the crypto industry loses credibility, the effort to shape the law to crypto's advantage is beginning to fail as well. And if crypto's skeptics shape the law, then the efforts to *evade* the law by constantly redesigning assets will become more difficult as well. This is because a crypto-skeptical law is much less likely to concern itself with rules and much more likely to set out broad standards with enough flexibility for enforcers to catch new schemes as they arise.²⁰

It is unsurprising under these conditions that the industry has leaned heavily into litigation—and threats of litigation—as a next-best means to protect its regulatory advantage.²¹ Most of the energy here focuses on administrative law and theories that the Securities and Exchange Commission (“SEC”), the Commodity Futures Trading Commission (“CFTC”), and other regulatory agencies have exceeded their statutory mandate.

But administrative law litigation, too, could eventually

²⁰ Press Release, Elizabeth Warren, U.S. Senator, Warren, Marshall Introduce Bipartisan Legislation to Crack Down on Cryptocurrency Money Laundering, Financing of Terrorists and Rogue Nations (Dec. 14, 2022), <https://www.warren.senate.gov/newsroom/press-releases/warren-marshall-introduce-bipartisan-legislation-to-crack-down-on-cryptocurrency-money-laundering-financing-of-terrorists-and-rogue-nations> [<https://perma.cc/UL6F-SP6Q>].

²¹ David Yaffe-Bellany, *Government Cracks Down on Crypto Industry With Flurry of Actions*, N.Y. TIMES (Feb. 18, 2023), <https://www.nytimes.com/2023/02/18/business/crypto-crackdown-regulation.html> [<https://perma.cc/5CU9-SDCC>].

become inadequate if Congress makes statutory changes to the regulatory framework. So, it is not surprising that the crypto-products industry has begun to explore constitutional-rights-based theories as well. If successful, these theories could build the bombproof regulatory shelter that the blockchain promised and failed to deliver.

II. Theories That Crypto Is Speech

Crypto promoters have offered several arguments that the First Amendment protects the crypto industry from government regulation. The details vary with the type of regulation or regulatory proposal that is under discussion. But there are three basic genres:

“Code is speech” arguments. Several court decisions note that it is possible, in some situations, to use computer code as a protected medium for First Amendment expression. Most arguments for crypto as speech are predicated on a grossly exaggerated reading of this “code is speech” case law. Under this reading, government efforts to regulate the content of software are as contrary to the First Amendment as efforts to regulate the content of a work of literature.

Privacy arguments. These arguments claim that cryptocurrency is a significant source of funding for organizations engaged in expressive advocacy. According to these arguments, many donors are willing to donate only under conditions of strict anonymity—and for this reason, parties to cryptocurrency transactions have a general First Amendment right to conceal their personal identities from the government and the public more broadly.

Cryptocurrency as communications infrastructure. These arguments claim that cryptocurrencies deserve First Amendment protection because they allow for new forms of communication. The oldest version of this argument relied on the fact that people sometimes write creative or artistic messages in the blockchain ledger. The more recent version of

the argument alludes to the possibilities of Web3, a new Internet architecture that will depend at a technical level on a robust market for crypto tokens.

I will discuss each in turn.

A. “Code is Speech”

Claims that crypto is speech rest heavily on an assortment of cases at the district and circuit level going back to the late 1990s. The foundational opinion in this line, *Bernstein v. United States Department of Justice*, reasoned that computer programming languages, like natural languages, can be used to express ideas about mathematical concepts, software design, and more.²²

As crypto promoters tell it, this means any law that regulates the use or sale of human-readable computer code should be analyzed in the same way for First Amendment purposes as a law regulating the use or sale of a work of literature.²³ Most regulations of this code, meanwhile, would be

²² 176 F.3d 1132, 1137-38 (9th Cir.), *reh'g granted, opinion withdrawn*, 192 F.3d 1308 (9th Cir. 1999).

²³ See, e.g., The Defiant, *The War on Code: Investigating the Tornado Cash Sanctions*, YOUTUBE at 13:26-14:19 (Dec. 10, 2022), <https://www.youtube.com/watch?v=oEKSz4A3I2Q> [hereinafter *War on Code*]. This documentary-style report by The Defiant, a crypto media outlet, outright misstates the law three times in under a minute:

1. “Here in the Netherlands, one can actually be detained for writing open-source code that criminals take advantage of. But that’s not the case in the U.S.” *Id.* This is false. Dmitry Sklyarov was detained during a DMCA prosecution. See Gabriella Coleman, *Code is Speech*, REASON (April 2013), <https://reason.com/2013/03/21/code-is-speech> [<https://perma.cc/JV2D-3STU>].
2. “In fact, ever since the *Bernstein v. U.S.* hearings of the 1990s, one is protected by the First Amendment when publishing open-source software in the same way one is protected when publishing a book.” *War on Code* at 13:26-14:19. This is also false. The government has wide latitude to restrict software development and distribution in light of its functional characteristics, see *infra* notes 27-34 and 56-63 and accompanying text.

presumptively unconstitutional because of their interference with the open-source “message.”

One attorney has argued, for example, that it was unconstitutional for New York to adopt a two-year state-wide moratorium on “cryptocurrency mining operations that use proof-of-work authentication methods to validate blockchain transactions.”²⁴ Bitcoin uses the “proof of work” method to secure its transaction record;²⁵ some other crypto chains, including Ethereum, use different methods including a method called “proof of stake.”²⁶ For this critic, the moratorium on “proof of work” methods but not “proof of stake” methods draws a “content-based line” when it “imposes a significant economic burden on proof-of-work miners—a *burden not imposed on other data-center operators or crypto-protocol validators*—solely due to the content of the data they process and publish (e.g., solutions to proof-of-work algorithms and

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3. “That means that even if you publish code that could be fed to a 3D printer to produce an assault rifle, you cannot be prosecuted unless there is proven conspiracy to commit a crime.” *War on Code* at 13:26-14:19. The narrator goes on to cite the gunmaker Cody Wilson’s settlement in *Defense Distributed v. Department of State* as authority for this position. But the “code is speech” argument failed to move either the district court or the Fifth Circuit on review. *Def. Distributed v. U.S. Dep’t of State*, 121 F. Supp. 3d 680, 691-96 (W.D. Tex. 2015) (“Plaintiffs have not shown a substantial likelihood of success on the merits of their claim under the First Amendment.”), *aff’d*, 838 F.3d 451 (5th Cir. 2016). The case also was not a criminal prosecution, but a civil suit brought by Wilson’s organization. *Def. Distributed*, 121 F. Supp. 3d. at 686. The State Department settled after a change in presidential administrations. *Def. Distributed v. U.S. Dep’t of State*, No. 1:15-CV-372, 2018 WL 3614221 (W.D. Tex. July 27, 2018). Subsequent challenges to state laws prohibiting distribution of 3D-printed firearm code have floundered. *See infra* note 63 and accompanying discussion.

²⁴ Aaron Daniel, *New York’s Proof-of-Work Ban Violates Bitcoin Miners’ Right to Free Speech*, BITCOIN MAG. (Aug. 4, 2022), <https://bitcoinmagazine.com/business/new-york-violates-bitcoin-mining-rights> [<https://perma.cc/6K8C-HRG9>].

²⁵ *See infra* note 216 and accompanying text.

²⁶ *See infra* note 219 and accompanying text.

transactions generated pursuant to the rules of the respective proof-of-work protocol).²⁷

Traditionally, laws that draw “content-based lines”—a special tax on books with disfavored subject matter, for example—tend to have strong, obvious censorial overtones. At a minimum, such laws threaten to distort public discussion by placing special burdens on certain ideas or voices. That is why courts typically subject content-discriminatory laws to “strict scrutiny” under the First Amendment—a high bar that even most legitimate legislation could not pass. To clear it, the government must show that it intends to advance a “compelling” (as opposed to merely “substantial” or “legitimate”) governmental interest. The government must also show that its law advances the goal “directly” and that no content-neutral alternative would advance the goal as well.

But courts have never extended this kind of protection to computer code. What the “code is speech” case law actually does is reject an especially aggressive argument, advanced by the government in the 1990s, that computer code is “merely functional” and therefore *never* protected under the First Amendment from any kind of regulation.²⁸ There are situations, after all, in which speakers *use* code to speak—a computer science professor, for example, who shares code with students as part of an instructional exercise. Laws that regulate code may sometimes burden these expressive uses.

But when the government regulates computer code, the impact on expression (if any) is almost always unintended, incidental, and minor. This is why New York’s ban on proof-of-work crypto mining doesn’t set off the same intuitive red

²⁷ Daniel, *supra* note 24.

²⁸ *Bernstein v. U.S. Dep’t of Just.*, 176 F.3d 1132, 1142 (9th Cir. 1999), *reh’g granted, opinion withdrawn*, 192 F.3d 1308 (9th Cir. 1999) (rejecting “the government’s argument . . . that even one drop of direct functionality overwhelms any constitutional protections that expression might otherwise enjoy The First Amendment is concerned with expression, and we reject the notion that the admixture of functionality necessarily puts expression beyond the protections of the Constitution”) (cleaned up).

flags about censorship that a special tax on forbidden books would.

Courts entertaining “code is speech” claims have therefore settled on an approach that focuses on the government’s purpose. If the government actually meant to target the expressive uses of the code, then the regulation is content-based and courts will apply strict scrutiny.²⁹ But if the regulation targets only the “functional” aspects of the code, then courts will apply a more deferential intermediate scrutiny test that weighs the government’s purpose, the adequacy of alternative messaging channels, and whether the law burdens substantially more speech than necessary to achieve its purpose.³⁰

To date, *Bernstein* is the only case in which a court has applied strict rather than intermediate scrutiny to a regulation of computer code—and the only such challenge out of many that has ever led to the invalidation of a governmental policy. Since 2000, *every single judicial opinion* to engage with the “code is speech” doctrine beyond the pleadings—nine of them, in several jurisdictions—has ruled for the government.³¹

²⁹ *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 450 (2d Cir. 2001).

³⁰ In *Junger v. Daley*, the court held that “[b]ecause computer source code is an expressive means for the exchange of information and ideas about computer programming . . . it is protected by the First Amendment.” 209 F.3d 481, 485 (6th Cir. 2000). But after noting that “[t]he functional capabilities of source code, and particularly those of encryption source code, should be considered when analyzing the governmental interest in regulating the exchange of this form of speech,” the Court applied intermediate scrutiny without further explanation. *Id.*; see also *Corley*, 273 F.3d at 450.

³¹ See *infra* notes 56-63 and accompanying discussion. And the Supreme Court has never endorsed “code as speech,” despite occasional misconceptions on this point. See, e.g., *Statement by Perianne Boring, Founder and CEO of the Chamber of Digital Commerce, on the Detainment of Software Developer Alexey Pertsev*, CHAMBER DIGIT. COM. (Nov. 25, 2022), <https://digitalchamber.org/statement-by-perianne-boring-founder->

1. The Time That Code Was Speech

In the 1990s, the State Department interpreted its International Traffic in Arms Regulations (“ITAR”) to mean that any person who wished to communicate encryption software or source code internationally needed prior approval from State Department officials.³² The goal was to keep useful knowledge out of the hands of U.S. adversaries who might use it for dangerous purposes. This administrative interpretation of ITAR is the only act of government ever to have been challenged successfully as an unconstitutional restriction on the publication of source code.³³ The ITAR restriction raised genuine First Amendment concerns for two reasons.

First, it would have curtailed scholarly activity that was unambiguously expressive. Computer-science scholars, specifically, would have needed prior authorization to do things such as give a lecture abroad on cryptography³⁴ or post an example of an encryption algorithm on a university website where foreigners might see it.³⁵ Indeed those are the things that the respective challengers in these cases wanted to do.³⁶

Second, the government *intended* these burdensome effects on scientific expression: the whole purpose behind the regulation was to prevent the dissemination of useful knowledge into foreign hands.³⁷

and-ceo-of-the-chamber-of-digital-commerce-on-the-detainment-of-software-developer-alexey-pertsev [https://perma.cc/HT5A-MYDE] (“Cryptocurrency and blockchain applications are code and I believe code is protected speech. There is precedent for this in the U.S.; in *Bernstein v. United States* the Supreme Court ruled that any government regulations preventing the publication of source code is unconstitutional under the First Amendment.”).

³² *Bernstein*, 176 F.3d at 1137-38.

³³ *See infra*, notes 45-55 and accompanying text.

³⁴ *Id.*

³⁵ *Junger v. Daley*, 209 F.3d 481 (6th Cir. 2000).

³⁶ *Id.* at 483; *Bernstein*, 176 F.3d at 1136.

³⁷ *Bernstein*, 176 F.3d at 1145 (“[T]he government is intentionally retarding

a. Karn

In *Karn v. U.S. Department of State*, the first in a set of three code-is-speech challenges to the State Department's cryptography policy, the plaintiff sought to export a copy of Bruce Schneier's book *Applied Cryptography* with an enclosed diskette containing some of the source code discussed in the book.³⁸ The State Department refused Karn's request for clearance to export the materials, and Karn appealed to the U.S. District Court for the District of Columbia.³⁹ The court rejected the plaintiff's First Amendment claim as "meritless."⁴⁰

In particular, the court rejected Karn's contention that "the Karn diskette is 'pure speech,' the regulation of which should require strict scrutiny review" as an argument that "places form over substance."⁴¹ If the First Amendment applied at all, the appropriate standard was intermediate scrutiny because the policy was "clearly content-neutral." The court observed that the Department of State was "regulating because of the belief that the combination of encryption source code on machine readable media will make it easier for foreign intelligence sources to encode their communications" rather than "because of the expressive content of the comments and or source

the progress of the flourishing science of cryptography. To the extent the government's efforts are aimed at interdicting the flow of scientific *ideas* (whether expressed in source code or otherwise), as distinguished from encryption *products*, these efforts would appear to strike deep into the heartland of the First Amendment.").

³⁸ 925 F. Supp. 1, 3-4 (D.D.C. 1996).

³⁹ *Id.*

⁴⁰ *Id.* at 2-3 ("This case presents a classic example of how the courts today, particularly the federal courts, can become needlessly invoked, whether in the national interest or not, in litigation involving policy decisions made within the power of the President or another branch of the government. The plaintiff, in an effort to export a computer diskette for profit, raises administrative law and meritless constitutional claims because he and others have not been able to persuade the Congress and the Executive Branch that the technology at issue does not endanger the national security.").

⁴¹ *Id.* at 10.

code.”⁴²

The *Karn* decision is less-remembered, and certainly less-glorified, than *Bernstein*, the decision that famously laid down the “code is speech” principle and struck down the ITAR regulation. But as discussed *infra*, the post-*Bernstein* case law actually looks a lot more like *Karn* than *Bernstein*. Just as in *Karn*, courts consistently treat regulation of software as content-neutral regulations subject only to intermediate scrutiny,⁴³ rejecting techno-libertarian First Amendment claims that “plac[e] form over substance.”⁴⁴

b. Bernstein

In *Bernstein*, the challenger was a graduate student who wished to go abroad and present a paper on a new encryption algorithm he had designed, accompanied by the source code. He had much better luck than *Karn*. The Ninth Circuit ultimately invalidated the State Department’s restrictions on cryptography software as a standardless prior restraint that was “intentionally retarding the progress of the flourishing science of cryptography.”⁴⁵

In doing so, however, the court took pains to “emphasize the narrowness of [its] First Amendment holding. *We do not hold that all software is expressive*,” the court wrote.⁴⁶ “Much of it surely is not.”⁴⁷ In particular, the *Bernstein* court suggested that this was an exceptional case precisely because “the government’s efforts [were] *aimed* at interdicting the flow of scientific ideas (whether expressed in source code or otherwise).”⁴⁸ A more typical law aimed at policy effects from “encryption products,” meanwhile, would have a merely

⁴² *Id.*

⁴³ See *infra* notes 56-63 and accompanying discussion.

⁴⁴ *Karn*, 925 F. Supp. at 3-4.

⁴⁵ *Bernstein v. U.S. Dep’t of Just.*, 176 F.3d 1132, 1145 (9th Cir. 1999), *reh’g granted, opinion withdrawn*, 192 F.3d 1308 (9th Cir. 1999).

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

“incidental effect on expression,” and would therefore receive more deference.⁴⁹

Bernstein was and remains the highwater mark for code and crypto as speech. But note that even *Bernstein* does not come anywhere close to the strong and sweeping First Amendment protection for software development that crypto proponents have endorsed. Indeed, *Bernstein* explicitly rejects the idea that laws regulating “encryption products” should receive close First Amendment scrutiny in cases where the “effect on expression” is “incidental.”⁵⁰ And again, *Bernstein* is the only code-is-speech case in which a court has applied strict scrutiny.

c. *Junger*

Junger v. Daley, the third ITAR case, involved a professor who wished to post cryptographic source code on his website for teaching purposes.⁵¹ In his case, the Sixth Circuit held that the First Amendment protected computer source code because it is an “expressive means for the exchange of information and ideas about computer programming.”⁵² And in doing so, it rejected the trial court’s determination that source code was at most expressive conduct.⁵³ But the Sixth Circuit also held that intermediate rather than strict scrutiny was the appropriate standard to apply.⁵⁴ The case was mooted after the government withdrew its crypto-export controls in light of *Bernstein*, and the lower court never had the opportunity to apply

⁴⁹ *Id.* In *Junger v. Daley*, the other successful “code is speech” challenge, the Sixth Circuit went ahead and characterized the export restrictions as content neutral. 209 F.3d 481, 483 (6th Cir. 2000).

⁵⁰ *Bernstein*, 176 F.3d at 1145.

⁵¹ *Junger*, 209 F.3d at 483.

⁵² *Id.* at 485.

⁵³ *Junger v. Daley*, 8 F. Supp. 2d 708, 715 (N.D. Ohio 1998), *rev’d*, 209 F.3d 481 (6th Cir. 2000).

⁵⁴ *Junger*, 209 F.3d at 485 (remanding for the district court to apply intermediate scrutiny to “resolve whether the exercise of presidential power in furtherance of national security interests should overrule the interests in allowing the free exchange of encryption source code”).

intermediate scrutiny on remand.

Aside from *Bernstein*, *Junger* is the “code is speech” theory’s best case. Yet, even in a case involving bona fide academic expression and a governmental intent to halt scientific progress, the *Junger* court *still* would have applied only intermediate scrutiny. This kind of tepid protection is more typical of marginal expression such as nude dancing than of core expressive activities such as book and newspaper publication.⁵⁵ So even *Junger* may well have ended in a loss for the code publisher if it had not been mooted by *Bernstein*, and neither *Bernstein* nor *Junger* endorses a close First Amendment analogy between coding and more traditional forms of writing.

2. 21st Century Decisions on “Code Is Speech”

Since the initial trio of ITAR cases, many litigants have successfully *pled* that the government interfered impermissibly with their First Amendment right in computer code. But every

⁵⁵ Laws that regulate adult entertainment impose clear restrictions based on the “content” of the expression. Nude dancing venues, for example, are subject to zoning restrictions that the ballet is not. Under ordinary First Amendment doctrine, this content discrimination would trigger strict scrutiny. But the Supreme Court has held that only intermediate scrutiny is required. The Supreme Court’s rationale—or rationalization—is that laws such as these are aimed not at the expression itself, but at “secondary effects” such as crime and declining property value that the expression seems to trigger. *See City of Erie v. Pap’s A.M.*, 529 U.S. 277, 289-96 (2000) (recognizing erotic dancing as “speech” but applying only intermediate scrutiny to a regulation requiring dancers to wear “at a minimum, ‘pasties’ and a ‘G-string’”); *but see City of Los Angeles v. Alameda Books*, 535 U.S. 425, 448 (2002) (Kennedy, J., concurring) (characterizing the “secondary effects” test and its rationale as “something of a fiction”); *see, e.g.*, LAURENCE TRIBE, *AMERICAN CONSTITUTIONAL LAW* § 12-3, n.17 (2d ed. 1988) (“Carried to its logical conclusion, the doctrine could gravely erode [F]irst [A]mendment protections . . . The *Renton* view will likely prove to be an aberration limited to the context of sexually explicit materials.”). *See also* Kyle Langvardt, *The Doctrinal Toll of “Information As Speech”*, 47 *LOY. U. CHI. L.J.* 761, 773-74 (2016) (describing how the “secondary effects” approach originated with cases involving adult entertainment and was later adapted to cases involving computer code).

court to consider such an argument at the merits stage, whether district or circuit, has rejected it.⁵⁶ These decisions all acknowledge that the use of source code *may* be entitled to First Amendment protection in certain cases where the regulation interferes with speakers' attempts to use code for expressive purposes.⁵⁷

But when the interference with expression is merely incidental—as it has been in every case except *Bernstein*—courts apply intermediate scrutiny. The government has never once failed to clear the bar in one of these cases. As a result, courts applying the allegedly formidable “code is speech” principle have repeatedly upheld schemes that impose heavy, even excessive regulatory penalties on software developers. To summarize the *entire set* of merits decisions on this issue since *Junger* was decided in 2000:

- Courts in multiple circuits have upheld criminal and civil prohibitions against the publication and distribution of digital rights management decryption software.⁵⁸

⁵⁶ This bulleted list includes every case to reach the merits since 2000. I have not included cases decided on 12(b)(6) motions. For example, in *CDK Glob. LLC v. Brnovich*, in which developers of “dealer management systems” made allegations that, “taken as true,” managed to “sufficiently allege a protected interest in the content of the code” they would have to develop to keep their product compliant with state law. CDK appears to have dropped the case after the district court denied CDK’s motion for a preliminary injunction on separate claims and the Ninth Circuit affirmed. No. CV-19-04849, 2020 WL 6290386, at *2 (D. Ariz. Oct. 27, 2020).

⁵⁷ *DVD Copy Control Ass’n, Inc. v. Bunner*, 75 P.3d 1, 10 (Cal. 2003) (“Because computer code is an expressive means for the exchange of information and ideas about computer programming, we join the other courts that have concluded that computer code, and computer programs constructed from code can merit First Amendment protection.” (citations omitted)).

⁵⁸ *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 434 (2d Cir. 2001); *United States v. Elcom Ltd.*, 203 F. Supp. 2d 1111, 1121 (N.D. Cal. 2002) (upholding a criminal prohibition); *321 Studios v. Metro Goldwyn Mayer*

- The Supreme Court of California upheld a preliminary injunction against the distribution of copyright protection decryption software as a violation of state trade secret law.⁵⁹
- The U.S. District Court for the District of Arizona upheld, over “code is speech” objections, the indictment of an engineer who unlawfully exported nuclear reaction simulation software to Iran.⁶⁰
- The Second Circuit upheld a requirement that software developers register with the CFTC as broker-dealers when they market stock advice algorithms to retail investors.⁶¹

Studios, Inc., 307 F. Supp. 2d 1085, 1099 (N.D. Cal. 2004) (“The DMCA does not unconstitutionally restrict 321’s speech.”); *Green v. U.S. Dep’t of Just.*, 392 F. Supp. 3d 68, 89-90 (D.D.C. 2019) (“[P]laintiffs’ arguments provide no support for their claim because they do not argue that the exemption process results in censorship based on what they want to express, their viewpoint, or who they are.”); *Green v. U.S. Dep’t of Just.*, 54 F.4th 738, 745-47 (D.C. Cir. 2022) (“[T]he DMCA may incidentally make it more difficult to express things with computer code if that code also facilitates circumvention, but that expressive activity is not the statute’s target.”). *See also Code Is Speech*, REASON.COM, <https://reason.com/2013/03/21/code-is-speech> [<https://perma.cc/3Z9Y-JZ2W>] (noting the lack of evidence in these cases that “the equation of software with free speech is widely accepted in the legal system” yet also finding that “by continuing to create a separate cultural reality, even a rival liberal morality, in which expression and autonomy are elevated above the potential for piracy, these outsiders are constructing a broader legal regime that will eventually challenge the way we interpret the Constitution”).

⁵⁹ *Bunner*, 75 P.3d at 7.

⁶⁰ *United States v. Alavi*, No. CR 07-429, 2008 WL 1989773, at *1 (D. Ariz. May 5, 2008). In response to Alavi’s argument that the software “qualifies as ‘information and informational materials’ and is therefore excluded from export prohibitions” under the governing statute, the Court rejected any possibility that this was the kind of material Congress would have sought to exempt for First Amendment reasons: “It is true that software source code is speech subject to First Amendment protections. However, BIS and OFAC’s control on exporting nuclear reactor simulation software would withstand intermediate scrutiny, which is appropriate for export prohibitions that are based on the function, not the expressive content, of computer source code.” *Id.* (citation omitted).

⁶¹ *Commodity Futures Trading Comm’n v. Vartuli*, 228 F.3d 94, 111 (2d Cir.

- The U.S. District Court for the Western District of Texas declined to issue a preliminary injunction against the government in a case where a gun maker sought and failed to receive preclearance from the State Department to “publish” 3D-printed handguns over the internet.⁶²
- The U.S. District Court for the District of Delaware held that 3D printed gunmakers had failed to establish a likelihood of success on the merits in their challenge to a Delaware law prohibiting the distribution of computer files needed to manufacture 3D-printed guns.⁶³

This isn’t a hopeful scorecard for crypto business interests who hope to get past the pleading stage on a “code is speech” theory. To beat this losing record, the crypto industry will have to find a set of facts on which they can plausibly allege—as in *Bernstein*—that a crypto regulation was designed to inhibit *speech or research about crypto for informational purposes* rather than to regulate the functional use of crypto as a product. But the government has never shown any inclination to restrict the distribution of the source code behind crypto

2000) (“The language at issue here was to be used in an entirely mechanical way, as though it were an audible command to a machine to start or to stop From a First Amendment perspective, Recurrence, as sold, did not materially differ from a system in which Recurrence’s signals electronically triggered trades. In other words, the fact that the system used words as triggers and a human being as a conduit, rather than programming commands as triggers and semiconductors as a conduit, appears to us to be irrelevant for purposes of this analysis.”).

⁶² *Def. Distributed v. U.S. Dep’t of State*, 121 F. Supp. 3d 680, 691-96 (W.D. Tex. 2015) (“Plaintiffs have not shown a substantial likelihood of success on the merits of their claim under the First Amendment.”).

⁶³ *Rigby v. Jennings*, No. CV 21-1523, 2022 WL 4448220, at *10 (D. Del. Sept. 23, 2022). *See also* *Def. Distributed v. Platkin*, No. CV219867MASTJB, 2023 WL 6389744, at *6-8 (D.N.J. Sept. 29, 2023) (dismissing a First Amendment challenge to a similar New Jersey law on grounds that plaintiffs had not adequately alleged that the gun-related code was expressive rather than non-expressive and that it was “unclear what speech Plaintiffs perceive the Challenged Statute as regulating”).

products, and it is hard to imagine a scenario in which authorities would see that as an effective regulatory strategy.

More realistically, the government might pursue policies that require crypto businesses to write certain functionality into their products for investor protection or law enforcement purposes. For example, two founders of a crypto money-laundering service were recently indicted for, among other things, failing to implement AML programs as part of their product.⁶⁴ But precisely because these kinds of policies are after the functionality rather than the expressive potential of the source code, they will trigger intermediate scrutiny, and based on the existing track record, the government will win.⁶⁵

Whatever force the “code is speech” doctrine actually has, crypto promoters claim that two recent regulatory developments cross the line. First is an ongoing SEC rulemaking that would treat “decentralized finance” applications—automated online crypto exchanges, essentially—as regulated securities exchanges.⁶⁶ Second, the crypto industry is concerned about the Treasury Department’s recent sanctions on Tornado Cash, an automated “financial privacy” application that North Korea used to launder \$600 million in stolen funds.⁶⁷ I address both in the next section.

⁶⁴ U.S. Attorney’s Office, Southern District of New York, *Tornado Cash Founders Charged with Money Laundering and Sanctions Violations*, JUSTICE.GOV (Aug. 23, 2023), <https://www.justice.gov/usao-sdny/pr/tornado-cash-founders-charged-money-laundering-and-sanctions-violations> [<https://perma.cc/2V7G-NPQ8>].

⁶⁵ See *supra* notes 56-63 and accompanying discussion.

⁶⁶ Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSs) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities, Exchange Act Release No. 94062, 87 Fed. Reg. 15496-01 (proposed Mar. 18, 2022) [hereinafter SEC “Exchange” Amendments].

⁶⁷ Press Release, U.S. Department of the Treasury, U.S. Treasury Sanctions Notorious Virtual Currency Mixer Tornado Cash (Aug. 8, 2022), <https://home.treasury.gov/news/press-releases/jy0916> [<https://perma.cc/AA2Q-2AGZ>].

3. DeFi: Regulatory Arbitrage Is Speech

“Decentralized finance” (“DeFi”) projects, as I explain below, have many of the functional attributes and governance characteristics of ordinary financial services companies. But their promoters claim that DeFi projects are not firms or companies at all—only software—and that ordinary business and finance regulations therefore cannot attach to them. This means that for crypto founders and certain venture capital funds, DeFi projects have created opportunities for regulatory arbitrage.

Perceptions that “code is speech” enhance this opportunity: now a DeFi enterprise offering financial services can claim it is not only exempt from business law because it is not a business, but exempt from public oversight *generally* because it is software, and software is speech. Grounding DeFi’s supposedly special status in the Constitution rather than some temporary regulatory loophole may help attract investment by solidifying a perception that the regulatory arbitrage position is permanent.

The DeFi software applications themselves are sometimes called dApps. dApps allow users to execute cryptocurrency transactions in an exchange-like environment, but on a peer-to-peer basis.⁶⁸ This means that DeFi users can, for example, borrow money without involving a bank or some similar human-operated institution. Instead, a borrower might call up a dApp for borrowing and lending,⁶⁹ and take out a crypto loan by putting up some greater amount of crypto as collateral. If

⁶⁸ See Jake Frankenfield, *Decentralized Applications (dApps): Definition, Uses, Pros and Cons*, INVESTOPEDIA (Apr. 16, 2023), <https://www.investopedia.com/terms/d/decentralized-applications-dapps.asp> [<https://perma.cc/ASX2-U4S7>].

⁶⁹ See, e.g., *A Better, Smarter Currency*, MAKERDAO, <https://makerdao.com/en> [<https://perma.cc/89DX-9GJ6>]; *AAVE Liquidity Protocol*, AAVE <https://aave.com> [<https://perma.cc/PL8E-V6QL>]; *Uniswap Protocol*, UNISWAP, <https://uniswap.org> [<https://perma.cc/RQ7N-DWU4>].

the loan is not paid back under the terms set, then the dApp takes possession of the collateral.⁷⁰ The process is entirely automated.

This automation is why DeFi companies claim to be “decentralized.” There is no “central” person or institution deciding, for example, whether the borrower is creditworthy. Instead, the software just makes the loan to any user who puts up the collateral. And the dApp itself does not run on a “central” server. Rather, the software runs on a blockchain that is hosted, in principle, by many mutually anonymous machines around the world.⁷¹ Unlike the automated software at an ATM or a bank website, a dApp does not have to phone home to a bank server that bad actors may, hypothetically, mess with.

DeFi’s promoters therefore tout these blockchain-based automated systems as a way to “remove the risk of trusting financial intermediaries.”⁷² In principle, “the decentralization, transparency, and trustlessness enabled by blockchain technology eliminates much of the risk that [regulation of

⁷⁰ See *How to Borrow in DeFi*, BITCOIN.COM, <https://www.bitcoin.com/get-started/how-to-borrow-in-defi> [<https://perma.cc/2W7D-AGSV>] (describing how this works on Aave, a lending dApp).

⁷¹ See Rakesh Sharma, *What is Decentralized Finance (DeFi) and How Does it Work?*, INVESTOPEDIA (Sept. 21, 2022), <https://www.investopedia.com/decentralized-finance-defi-5113835> [<https://perma.cc/MJ68-CTGZ>].

⁷² Miles Jennings & Brian Quintenz, *Regulate Web3 Apps, Not Protocols Part II: Framework for Regulating Web3 Apps*, A16ZCRYPTO (Jan. 11, 2023), <https://a16zcrypto.com/regulate-web3-apps-not-protocols-part-ii-framework-for-regulating-web3-apps> [<https://perma.cc/KM9K-M4JZ>] (“[I]n the world of CeFi, many regulations are designed to remove the risk of trusting financial intermediaries. . . . [I]n true DeFi, the decentralization, transparency, and trustlessness enabled by blockchain technology eliminates much of the risk that many CeFi regulations are primarily intended to address. By removing the need to trust and rely on intermediaries, DeFi can insulate users from many of the age-old acts of malfeasance prevalent in CeFi and do so better than any ‘self-regulatory’ or ‘public regulatory’ regime in CeFi ever could. In other words, it makes no sense to apply the “red flag acts” of CeFi to DeFi, or: can’t be evil > don’t be evil – cdixon.eth (@cdixon) December 13, 2021.”).

mainstream financial institutions is] intended to address.”⁷³ (Of course, much of the security provided by financial regulation and stable governance goes out the window as well.)

Emphasizing these attributes, DeFi promoters try to cultivate an impression that DeFi platforms are “pure” code that exist more in the realm of ideas—and incidentally of expression—than of ordinary business.⁷⁴ According to Peter Van Valkenburgh, policy director for the Coin Center lobbying organization: “[DeFi d]evelopers publish electronic cash and decentralized exchange software because they fervently wish to teach others *how* these private and person-to-person interactions are technologically possible and *why* they are essential to preserving human dignity and individual autonomy.”⁷⁵ Within this utopian frame, no one “owns” or “governs” a DeFi utility—the DeFi bank Uniswap, for example, where the top one percent of token holders control ninety-six percent of governance tokens⁷⁶—except the broad,

⁷³ *Id.*

⁷⁴ DeFi Education Fund, Comment Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade U.S. Treasury Securities and Agency Securities; File No. S7-02-22 at 3 (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123960-280119.pdf> [<https://perma.cc/2LVF-WRXZ>] (“Unlike proprietary software, these protocols are open source, with governance typically exercised by the broad community of users interacting through technology, rather than by a central operator or governing body; in some instances, there is no governance structure at all.”).

⁷⁵ Peter Van Valkenburgh, *Electronic Cash, Decentralized Exchange, and the Constitution*, COIN CENTER (Mar. 2019), <https://www.coincenter.org/electronic-cash-decentralized-exchange-and-the-constitution> [<https://perma.cc/4DMC-VN6B>].

⁷⁶ United States Congress Joint Economic Committee, *Written Testimony of Alexis Goldstein, Director of Financial Policy, Open Markets Institute, “Demystifying Crypto: Digital Assets and the Role of Government”*, OPEN MARKETS 13 (Nov. 17, 2021), https://www.jec.senate.gov/public/_cache/files/8ee556f9-650b-4c25-a145-94ce47ed130d/goldstein-testimony.pdf [<https://perma.cc/W6KD-S2VD>] [hereinafter *Alexis Goldstein Testimony*].

mutually anonymous “community” of freethinking idealists who purchase Uniswap “governance tokens” on the open market and vote on how the Uniswap ecosystem should be managed.⁷⁷

But if token-holder governance of a DeFi project qualifies as “decentralization,” then shareholder governance of publicly held corporations such as General Electric (“GE”) or Facebook should probably be considered “decentralized” as well. And in some sense it is. But what really matters, whether at GE, Facebook, or Uniswap, is who controls a governing bloc of votes.⁷⁸ That is where shareholder governance is “centralized,” and lower levels of governance are entrusted to directors and officers who also act from a centralized position.⁷⁹

Major DeFi projects are centralized in just the same way. At a DeFi project, it is typical for the development team or venture funders to hold a controlling bloc of governance tokens (and to capture a proportionate share of the profit from transaction fees).⁸⁰ And the significant DeFi platforms all have

⁷⁷ The first organization to tokenize governance in this manner described its purpose as: “To blaze a new path in business for the betterment of its members, existing simultaneously nowhere and everywhere and operating solely with the steadfast iron will of unstoppable code.” Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207 (July 25, 2017), <https://www.sec.gov/litigation/investreport/34-81207.pdf> [<https://perma.cc/TS2E-AP4D>] [hereinafter SEC DAO Report].

⁷⁸ Liesl Eichholz, *The UNI Token: Is Uniswap Really Decentralized?*, GLASSNODE (Sept. 24, 2020), <https://insights.glassnode.com/uni-token-is-uniswap-really-decentralized> [<https://perma.cc/ZSX6-5XW4>]; see Samuel Haig, *Concern as Uniswap-Backed ‘DeFi Education Fund’ Dumps \$10 Million Worth of UNI*, COINTELEGRAPH (July 14, 2021), <https://cointelegraph.com/news/concern-as-uniswap-backed-defi-education-fund-dumps-10m-worth-of-uni> [<https://perma.cc/X72U-8TAG>].

⁷⁹ Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 264 n.30 (1999).

⁸⁰ Aramonte et al., *supra* note 13, at 28; Ephrat Livni, *Tales From Crypto: A Billionaire Meme Feud Threatens Industry Unity*, N. Y. TIMES (Jan. 18, 2022), <https://www.nytimes.com/2022/01/18/business/dealbook/web3-venture-capital-andreessen.html> [<https://perma.cc/FW4Y-SA9G>]; Faisal

some kind of management team, approved by the tokenholders, that is responsible for maintaining the software and governing its parameters over time.⁸¹

DeFi projects with these characteristics have enjoyed a good run as vehicles for regulatory arbitrage. At a functional level, funders can engage with them and profit from them in basically the same ways they would a traditional corporation.⁸² Meanwhile at the regulatory level, the project’s founders and managers can claim there is no actual firm for the law to attach to. Or at least this is true until regulators peer through the novelty and observe that there are, in fact, accountable parties

Khan, *What Does Increased Insider Ownership in Public Blockchains Mean?*, MEDIUM (May 19, 2021), <https://medium.com/open-source-x/what-does-increased-insider-ownership-in-public-blockchains-mean-97f8e9e50368> [<https://perma.cc/RB8S-P38K>] (“[V]enture capitalists . . . treat blockchains like companies and seek larger ownership allocations. . . . The trend could be seen in some of the more recent entrants into the market like Binance, Solana, Flow, and Avalanche—all of whom where insiders own more than 40% of each projects’ token supply. The allocation is even more extreme when you also consider foundation allocations.”).

⁸¹ Alexis Goldstein *Testimony*, *supra* note 76, at 10 (“[W]hile marketing oneself as ‘decentralized’ may be opportune from regulatory, legal and marketing standpoints, when crises happen that warrant quick action many DeFi platforms take actions with many indicia of centralized control.”). See also Eric Lipton & Ephrat Livni, *Reality Intrudes on a Utopian Crypto Vision*, N.Y. TIMES (Mar. 8, 2022), <https://www.nytimes.com/2022/03/08/us/politics/cryptocurrency-dao.html> [<https://perma.cc/LJV6-YKKX>].

⁸² Nicholas Weaver, *The Death of Cryptocurrency: The Case for Regulation*, INFO. SOC’Y PROJECT 19 (Dec. 2022), https://law.yale.edu/sites/default/files/area/center/isp/documents/weaver_death_of_cryptocurrency_final.pdf [<https://perma.cc/5LQY-P4XE>] (“The only major difference between a DAO and a modern joint-stock corporation is the paperwork. A DAO may or may not have a corporate parent created as a limited-liability corporation, but the DAO token itself is effectively never registered as a security.”).

including promoters and managers to regulate.⁸³

Today, regulators have shown a willingness to pierce the veil of technical decentralization and police DeFi projects in terms of underlying economic realities rather than technological form.⁸⁴ Crypto boosters now claim in

⁸³ Gary Silverman, *Cryptocurrency: Rise of Decentralised Finance Sparks 'Dirty Money' Fears*, FIN. TIMES (Sept. 15, 2021), <https://www.ft.com/content/beeb2f8c-99ec-494b-aa76-a7be0bf9dae6> [<https://perma.cc/PBP8-GPWA>] (quoting SEC Chair Gary Gensler: “Just as there was ‘a company in the middle’ of peer-to-peer lending, he said DeFi has ‘a fair amount of centralization,’ including governance mechanisms, fee models and incentive systems. ‘A lot of the developers want to suggest that they are not [doing anything] more than developing software,’ he added. ‘It’s a misnomer to say [DeFi platforms] are just software that is put out to the web’”).

⁸⁴ The SEC first staked out this position in a guidance document concerning the DAO, which was the first “decentralized autonomous organization.” SEC DAO Report, *supra* note 77, at 10 (“[S]tress[ing] that the U.S. federal securities law may apply to various activities, including distributed ledger technology, depending on the particular facts and circumstances, without regard to the form of the organization or technology used to effectuate a particular offer or sale.”). In late 2022, the CFTC filed and settled charges against the company bZeroX and its two founders for reconfiguring the company as a DAO (OokiDAO) and then, through the DAO, running an unregistered and noncompliant crypto futures exchange. *See* Press Release, Commodity Futures Trading Commission, CFTC Imposes \$250,000 Penalty Against bZeroX, LLC and Its Founders and Charges Successor Ooki DAO for Offering Illegal, Off-Exchange Digital-Asset Trading, Registration Violations, and Failing to Comply with Bank Secrecy Act (Sept. 22, 2022), <https://www.cftc.gov/PressRoom/PressReleases/8590-22> [<https://perma.cc/4MEM-7T8V>] (“By transferring control to a DAO, bZeroX’s founders touted to bZeroX community members the operations would be enforcement-proof—allowing the Ooki DAO to violate the CEA and CFTC regulations with impunity, as alleged in the federal court action.”); Complaint, Commodity Futures Trading Comm’n v. Ooki DAO, 3:22-cv-05416, 2022 WL 17822445 (N.D. Cal. Sept. 22, 2022). *See also* Cheyenne Ligon, *CFTC’s Ooki DAO Action Shatters Illusion of Regulator-Proof Protocol*, COINDESK (Sept. 26, 2022), <https://www.coindesk.com/policy/2022/09/26/cftcs-ooki-dao-action-shatters-illusion-of-regulator-proof-protocol> [<https://perma.cc/CQZ6-WHKY>] (“‘This notion that a founding team can hide behind a veil of decentralization, it falls flat on its face,’ Dilendorf said. ‘Even if a company or a protocol is able to reach the requisite level of decentralization, the

administrative filings and two lawsuits that this veil piercing violates the First Amendment. First, crypto lobbyists are warning the SEC in comment letters that decentralized crypto exchanges are immune from securities law under the First Amendment.⁸⁵ Second, crypto promoters are arguing inside and outside of court that the First Amendment protects DeFi “mixers” that automate money laundering.⁸⁶

a. Regulation of Decentralized Exchanges as “Exchanges”

The Securities Exchange Act gives the SEC broad authority to regulate “exchanges.”⁸⁷ Major exchanges such as the New York Stock Exchange must register as “self-regulatory organizations” and become front-line enforcers, under SEC supervision, of several policies set out in the Securities and Exchange Act.⁸⁸ Smaller “alternative trading systems” that offer a more limited suite of exchange-like services are free to opt out of most of these obligations, but only if they register as broker-dealers.⁸⁹ This subjects them to various investor

regulators will still be going after the individual founders if the product that is being offered on those smart contracts violates either CFTC or [Securities and Exchange Commission] regulations.”).

⁸⁵ See *infra* Section II.A.3.i.

⁸⁶ See *infra* Section II.A.3.ii.

⁸⁷ The Exchange Act defines an exchange as “any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood, and includes the market place and the market facilities maintained by such exchange.” 15 U.S.C. § 78c.

⁸⁸ SEC “Exchange” Amendments, *supra* note 66.

⁸⁹ These are sometimes called “dark pools” because they can make trades in relative secrecy. One benefit of a dark pool is that it can help institutional investors looking to make trades so large that they would be impossible to close discreetly on the trading floor. Edward M. Eng et. al., *Finding Best Execution in the Dark: Market Fragmentation and the Rise of Dark Pools*, 12 J. INT’L BUS. & L. 39, 45 (2013) (“Information leakage can significantly

protection rules and anti-money-laundering obligations, as well as to monitoring and examination by industry regulators.⁹⁰

All told, these regulations make it illegal to run a securities exchange that enriches itself or its partners by exposing retail investors to unconscionable risk, aiding money launderers, or otherwise harming the public. DeFi exchanges claim they are exempt from the whole picture because they are not “exchanges” at all within the definition of the law.⁹¹

The law today generally defines an “exchange” as an “organization, association, or group of persons” that “(1) [b]rings together the orders for securities of multiple buyers and sellers; and (2) [u]ses established, non-discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade.”⁹²

DeFi groups offer two reasons why this language does not cover them. First, they say that because decentralized exchanges (“DEXes”) are automated, “no actor facilitates or effectuates transactions between users.”⁹³ So, in the language

cut into trading profits when the market is able to ascertain the direction of order flow.”). The idea here—a reasonable concern—was to prevent the market from “seeing” the trade in progress and adjusting the underlying asset’s price in response before the trade was completed.

⁹⁰ SEC “Exchange” Amendments, *supra* note 66.

⁹¹ Blockchain Association, Comment Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade US Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade US Treasury Securities and Agency Securities 2 (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20124039-280165.pdf> [<https://perma.cc/W2NZ-589L>] [hereinafter Blockchain Association Comment Letter].

⁹² 17 C.F.R. § 240.3b-16 (2005).

⁹³ Blockchain Association Comment Letter, *supra* note 91, at 3. Instead, DeFi exchanges allow user-investors to set up bots called “automated market makers” that make trades from funds—“liquidity pools”—deposited by investors known as “yield farmers.” The “yield farmers” collect transaction fees that are paid out in a special crypto token.

of the rule, there is no “organization, association, or group of persons” to “bring together the orders.”

Second, though they concede that DEXes may use “established, non-discretionary methods” to settle transactions, they also note that there is no actor to “use” these methods as contemplated under the rule—just software.⁹⁴

Whether or not this characterization of the existing rule has much merit, the DeFi sector today is spooked that the definition of “exchange” will soon be widened in a way that would cover DEXes more clearly than the current one does. The proposal to amend the definition of “exchange” that the SEC is considering today does not mention crypto or decentralized finance explicitly, but it has fallen under heavy scrutiny as a “shadow ban”⁹⁵ on DeFi itself.⁹⁶

This is for a couple of reasons. First, the new definition would not require the human beings—the “organization, association, or group of persons”—to “bring together the orders” for securities with their own hands. Instead, the new definition would require only that an organization “bring together buyers and sellers of securities using trading interest.”⁹⁷ Basically, a platform that provides facilities to

⁹⁴ *Id.*

⁹⁵ Zelong “Derrick” Hou, *SEC’s Proposed ‘Dealer’ Definition: A Shadow Ban on DeFi?*, DINSMORE (Apr. 14, 2022), <https://www.dinsmore.com/publications/secs-proposed-dealer-definition-a-shadow-ban-on-defi> [<https://perma.cc/F397-6AJ2>].

⁹⁶ Joanna Wright, *The Obscure SEC Rule That Critics Worry is a Backdoor Attempt to Regulate DeFi*, DLNEWS (Feb. 2, 2023), <https://www.dlnews.com/articles/regulation/sec-reg-ats-means-regulation-for-defi-exchanges-like-uniswap> [<https://perma.cc/L7Y5-8YKU>].

⁹⁷ SEC “Exchange” Amendments, *supra* note 66 (“[T]he Commission is proposing to amend Exchange Act Rule 3b-16 to provide that an organization, association, or group of persons would be considered to constitute, maintain, or provide an exchange if it is not subject to an exception under Rule 3b-16(b) and it: (1) Brings together buyers and sellers of securities using trading interest; and (2) makes available established, non-

solicit buyers or sellers with information about the terms of exchange available would qualify.⁹⁸

Second, the new version of the rule would not require the “organization, association, or group of persons” to “use” any “established, non-discretionary methods” for handling transactions. Instead, the new definition would say it is enough to “make available” these methods “whether by providing a trading facility or communications protocols, or by setting rules.”⁹⁹ An organization that creates a DeFi platform and releases it to the public would seem to satisfy this criterion.¹⁰⁰ Hence the fears of a DeFi “shadow ban.”

The old Exchange Act language at least plausibly accommodated the type of regulatory arbitrage play that is common in DeFi: construct a “headless” business enterprise and then claim the whole regulatory framework depends on the question of whether there is some central human “actor” in the driver’s seat doing the thing to which the regulation applies. With the new proposed definition of “exchange,” the SEC has made clear that it does not care about this question nearly as much as DeFi would like.

Several DeFi and crypto-affiliated interests have submitted comment letters in opposition to the proposal.¹⁰¹ These

discretionary methods (whether by providing a trading facility or communication protocols, or by setting rules) under which buyers and sellers can interact and agree to the terms of a trade.”).

⁹⁸ *Id.* (“The Commission believes that a system that offers the use of a message that identifies the security and either the quantity, direction, or price would provide sufficient information to bring together buyers and sellers of securities because it allows a market participant to communicate its intent to trade and a reasonable person receiving the information to decide whether to trade or engage in further communications with the sender.”).

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ See *Comments on Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSs) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other*

Securities, U.S. SEC. & EXCH. COMM’N, <https://www.sec.gov/comments/s7-02-22/s70222.htm> [<https://perma.cc/FXE7-DH8H>]. Nearly all of the letters from the DeFi and crypto-affiliated entities discussed in this Article thus far focused their comments overwhelmingly on issues other than speech.

Some of them discussed speech considerations briefly. *See, e.g.*, Blockchain Association & DeFi Education Fund, Comment Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade US Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade US Treasury Securities and Agency Securities (Release No. 34-94868; File No. S7-02-22) (June 13, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20131087-301122.pdf> [<https://perma.cc/KT2E-RHKQ>] [hereinafter Blockchain & DeFi Comment Letter]; a16z, Comment Letter on Proposed Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSS) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20124045-280177.pdf> [<https://perma.cc/TTW5-2S8B>] [hereinafter a16z Comment Letter]; DeFi Education Fund, Comment Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade U.S. Treasury Securities and Agency Securities; File No. S7-02-22) (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123960-280119.pdf> [<https://perma.cc/N6DR-BEHM>]; Coinbase, Comment Letter on Proposed Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSS) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities, RIN 3235-AM45 (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123940-280077.pdf> [<https://perma.cc/7DMT-FG6U>] [hereinafter Coinbase Comment Letter]; LeXpunk, Comment Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade U.S. Treasury Securities and Agency Securities (Release No. 34-94868; File No. S7-02-22) (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123955-280110.pdf> [<https://perma.cc/Z7M3-PVL2>] (briefly citing *Berstein*).

Others did not discuss speech issues at all. *See, e.g.*, Crypto Council for Innovation, Comment Letter on Proposed Amendments to Exchange Act

generally focus on policy and administrative law issues. But some allude ominously to First Amendment concerns that would arise if the SEC enforced its new definition of “exchange” against DeFi entities.¹⁰²

These letters mainly argue that developers who “make available” open-source DeFi software will be forced under the new definition of “exchange” to register as broker-dealers.¹⁰³ Multiple commenters argue that it is impossible for developers to take this role on: “They lack the capacity to modify the code they have developed after it is launched to comply with regulations designed for intermediating financial institutions,”¹⁰⁴ argues Blockchain Association. By forcing

Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade U.S. Treasury Securities and Agency Securities (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20124040-280166.pdf> [<https://perma.cc/S94Q-5RX3>].

Two letters had heavy discussions of speech issues. *See* Coin Center, Comment Letter on Amendments Regarding the Definition of ‘Exchange’ and Alternative Trading Systems (Apr. 14, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123684-279908.pdf> [<https://perma.cc/5LNL-8R9Q>]; a16z, Comment Letter on Supplemental Information and Reopening of Comment Period for Amendments Regarding the Definition of “Exchange” (June 13, 2023), <https://www.sec.gov/comments/s7-02-22/s70222-205099-412162.pdf> [<https://perma.cc/D3MQ-H9AL>] [hereinafter a16z Supplemental Comment Letter].

¹⁰² *See, e.g.*, a16z Comment Letter, *supra* note 101, at 5-6; Coinbase Comment Letter, *supra* note 101, at 21; Blockchain & DeFi Comment Letter, *supra* note 101, at 14.

¹⁰³ *See, e.g.*, Delphi Digital, Comment Letter on Proposed Amendments Regarding the Definition of “Exchange” and Alternative Trading Systems (ATSS) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities 13 (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123874-280044.pdf> [<https://perma.cc/VDP7-G5GG>].

¹⁰⁴ Blockchain Association & DeFi Comment Letter, *supra* note 101, at 5; *see also* Coinbase Comment Letter, *supra* note 101, at *6 (“Because of the nature of DEXes, we believe there are real questions of whether a decentralized communication protocol that operates autonomously on a

developers to take on obligations that Blockchain Association argues are technically impossible, the requirement of broker-dealer registration “would amount to a *de facto* ban on merely ‘making available’ such software within the United States, improperly imperiling U.S. citizens’ First Amendment-protected rights to write and publish code.”¹⁰⁵

Likewise, Paul Grewal, Chief Legal Officer for Coinbase, argues that “applying regulatory obligation to persons who merely write and release code, without operating or controlling the system operating the code, raises serious constitutional questions under the First Amendment.”¹⁰⁶

blockchain, without intermediaries that control its functions, could be ‘constitute[d], maintain[ed], or provide[d]’ by an ‘organization, association, or group of persons.’ Attributing such functions and the resulting regulatory obligations to persons who initially created or deployed the DEX code may not be practicable or advance the Commission’s policy objectives because once deployed, the DEX typically cannot be significantly altered or controlled by any such persons.”). The famously crypto-friendly SEC Commissioner Hester Pierce herself indulged this theme in a recent talk, claiming that “[r]egulating people who write code . . . would impinge on free speech and would raise fairness issues since open-source coders cannot exercise control over how their code is used.” Commissioner Hester M. Pierce, Remarks Before the Digital Assets at Duke Conference (Jan. 20, 2023), <https://www.sec.gov/news/speech/peirce-remarks-duke-conference-012023> [<https://perma.cc/CVQ5-BQNB>].

¹⁰⁵ Blockchain Association & DeFi Comment Letter, *supra* note 101, at 5-6.

¹⁰⁶ *Id.* at 6. *See also* DeFi Education Fund, Comments Letter on Proposed Amendments to Exchange Act Rule 3b-16 Regarding the Definition of “Exchange”; Regulation ATS for ATSS That Trade U.S. Government Securities, NMS Stocks, and Other Securities; Regulation SCI for ATSS That Trade U.S. Treasury Securities and Agency Securities; File No. 57-02-22, at 20 (Apr. 18, 2022), <https://www.sec.gov/comments/s7-02-22/s70222-20123960-280119.pdf> [<https://perma.cc/K9FC-V58G>] (“The regulations target technology that [provides] ‘expressive means for the exchange of information and ideas’ concerning markets and facilitates dynamic user engagement. Moreover, a DeFi protocol’s community governance structure requires public interaction with the protocol’s core open-source code in order to decide how to update and evolve it. That public involvement, in turn, means that such code is more likely to merit First Amendment

But on closer look, “serious” might not be the best word for these First Amendment questions. Start with Coin Center policy director Peter Van Valkenburgh’s assertion that the SEC’s proposed registration requirements for DeFi are a form of “viewpoint discrimination: general purpose communications protocols are exempt, but those that might allow people to freely trade securities peer-to-peer are not.”¹⁰⁷ This is viewpoint discrimination, for Van Valkenburgh, because it discriminates against people who have views. After all, many crypto and DeFi advocates believe that “if cash disappears . . . only electronic cash and decentralized exchange technologies can serve as a safety valve against imminent payments-technology-enforced totalitarianism.”¹⁰⁸ That’s a strong view! And if we assume that DeFi developers “earnestly believe these views and publish their software to express them (rather than for some other cynical purpose)” such as making money, “then bans on software publication wade dangerously into the territory of stifling a vibrant and consequential debate.”¹⁰⁹

And this is to say nothing of the appalling compelled-speech violations that would supposedly occur if DeFi developers were required to introduce AML functionality into

protection.”); Gary Silverman, *Cryptocurrency: Rise of Decentralised Finance Sparks ‘Dirty Money’ Fears*, FIN. TIMES (Sept. 15, 2021), <https://www.ft.com/content/beeb2f8c-99ec-494b-aa76-a7be0bf9dae6> [https://perma.cc/6XRU-QQN3] (“‘The writing and publishing of software is free speech under the first amendment,’ says Miller Whitehouse-Levine, policy director at the DeFi Education Fund, an industry advocacy group. ‘How do you ex ante ask folks to change their speech essentially to comply with what the government thinks they should be doing?’”).

¹⁰⁷ Peter Van Valkenburgh, *A New SEC Proposal Has Serious Change Hidden Within its Complex Language*, COIN CENTER (Apr. 14, 2022), <https://www.coincenter.org/a-new-sec-proposal-has-a-serious-change-hidden-within-its-complex-language> [https://perma.cc/T46R-DR3S].

¹⁰⁸ Peter Van Valkenburgh, *Report: Electronic Cash, Decentralized Exchange, and the Constitution*, COIN CENTER (Mar. 2019), <https://www.coincenter.org/electronic-cash-decentralized-exchange-and-the-constitution/#iv-electronic-cash-decentralized-exchange-and-the-first-amendment> [https://perma.cc/B9NB-GF8M].

¹⁰⁹ *Id.*

their platforms. For Van Valkenburgh, this encroachment on personal conscience would be disturbing in the precisely same way that forcing young Jehovah’s Witness schoolchildren to commit idolatry by saluting the flag is disturbing.¹¹⁰ Indeed it would be worse:

Forcing such a developer to publish software that [discloses consumer and transactional data in the way traditional banks do] goes well beyond a simple order instructing a child to salute a flag. It is on par with forcing an academic to recant their previously published research and publish new, bogus research in its place or forcing a political organizer to condemn her constituency and form an opposition party.¹¹¹

Van Valkenburgh’s febrile claims ignore any reasonable distinction a person might attempt to draw between regulation of speech and regulation of conduct.

First, he casts the archetypical DeFi developer as a lone pamphleteer-type who writes the code as an ideological or philosophical statement and then submits it for discussion and criticism by like-minded intellectuals. That is usually not how it works. In practice, the big DeFi protocols are almost always coded for business purposes by business startups who hope to market a financial service to the public. The developers typically maintain some kind of governance role through ownership of a bloc of governance tokens; and if they don’t, then some concentrated group of successors typically takes control.¹¹²

Second, Van Valkenburgh ignores the real-life case law on

¹¹⁰ *West Virginia v. Barnette*, 319 U.S. 624 (1943).

¹¹¹ Van Valkenburgh, *supra* note 108.

¹¹² Financial Stability Board, *The Financial Stability Risks of Decentralised Finance*, FSB 25 (Feb. 16, 2023), <https://www.fsb.org/wp-content/uploads/P160223.pdf> [<https://perma.cc/6WDR-8SE6>].

the First Amendment status of software. As noted *supra* in Section II.A.1, courts have repeatedly held that intermediate scrutiny is the appropriate standard in cases where the government aims to regulate the functional characteristics rather than the expressive content of software. The conceit that government wants to shut down a “vibrant and consequential debate”¹¹³ among coder-philosophers is solipsistic and fanciful. If, say, Uniswap—a DeFi service that moves about \$1.2 billion per day—is eventually forced to register as an exchange, it will not be because the SEC wants to suppress ongoing discussion about the ideology that supposedly motivated the source code.¹¹⁴

Instead, the SEC regulates exchanges for purposes related to investor protection, AML, market stability, and so on. Under intermediate scrutiny, purposes such as these should easily outweigh whatever marginal expressive content might be found in the source code. That was the result in *Commodity Futures Trading Commission v. Vartuli*, at least, where the CFTC’s interest in investor protection trumped a rogue broker-dealer’s code-is-speech argument.¹¹⁵ To date, no one has *ever* leaned successfully on the code-is-speech concept as cover to market a product or protect a business model—or, for that matter, to do anything other than present code in an academic setting.

b. The Tornado Cash Sanctions

Tornado Cash is a decentralized “mixer”—essentially, a dApp for disguising cryptocurrency transactions. In June and July of 2022, the government of North Korea used Tornado Cash to launder \$600 million in crypto tokens that it had stolen from players of a blockchain-based online video game.¹¹⁶ The

¹¹³ Van Valkenburg, *supra* note 108.

¹¹⁴ Van Valkenburg, *supra* note 107.

¹¹⁵ 226 F.3d 94, 108 (2d Cir. 2000).

¹¹⁶ Adi Robertson, *Axie Infinity’s Blockchain Was Reportedly Hacked Via a Fake LinkedIn Job Offer*, THE VERGE (July 6, 2022, 12:57 PM EDT),

Treasury Department’s Office of Foreign Assets Control (“OFAC”) responded in August 2022 by sanctioning Tornado Cash and a list of Ethereum addresses controlled by the service.¹¹⁷ Since then, it has been unlawful for Americans to deposit or withdraw funds at these addresses except with special authorization from OFAC.

This was not the first time OFAC had sanctioned a crypto “mixer”—it had sanctioned a mixer called Blender.io, for example, earlier in the year.¹¹⁸ But Tornado Cash was the first *decentralized* application of any kind to be sanctioned. This incursion into the DeFi-adjacent space has provoked an outcry from the industry and those who speak for it.

Industry attorneys were quick to claim publicly that the Tornado Cash sanction had violated some kind of first principle in the law. Paul Grewal, Chief Legal Officer for Coinbase, told the *New York Times* that “[i]t’s important that the law’s distinction between people and code be respected. . . . If that disrespect is allowed to stand, there could be all sorts of other ways in which statutes are twisted and bent

<https://www.theverge.com/2022/7/6/23196713/axie-infinity-ronin-blockchain-hack-phishing-linkedin-job-offer> [<https://perma.cc/2UJG-H8WR>].

¹¹⁷ Press Release, U.S. Dep’t of the Treasury, U.S. Treasury Sanctions Notorious Virtual Currency Mixer Tornado Cash (Aug. 8, 2022), <https://home.treasury.gov/news/press-releases/jy0916> [<https://perma.cc/WFE4-SRVS>]; see also Chainalysis Team, *OFAC Sanctions Popular Ethereum Mixer Tornado Cash for Laundering Crypto Stolen by North Korea’s Lazarus Group*, CHAINALYSIS (Aug. 8, 2022), <https://blog.chainalysis.com/reports/tornado-cash-ofac-designation-sanctions> [<https://perma.cc/7QUX-BXHN>] (indicating that over one quarter of cryptocurrency received by Tornado Cash came from sanctioned entities or stolen funds); Press Release, U.S. Dep’t of the Treasury, *Treasury Designates DPRK Weapons Representatives* (Nov. 8, 2022), <https://home.treasury.gov/news/press-releases/jy1087> [<https://perma.cc/EGQ4-VB6B>].

¹¹⁸ Press Release, U.S. Dep’t of the Treasury, *U.S. Treasury Issues First-Ever Sanctions on a Virtual Currency Mixer, Targets DPRK Cyber Threats* (May 6, 2022), <https://home.treasury.gov/news/press-releases/jy0768> [<https://perma.cc/F79X-JQ92>].

to apply to crypto in ways that they shouldn't be."¹¹⁹ But the law does not in fact make any basic, thoroughgoing "distinction between people and code."¹²⁰ Instead, the "distinction" Grewal invokes here just plays to misperceptions that technolibertarians have cultivated for decades about the supposedly inviolate "code is speech" doctrine.

Two legal challenges to the Tornado Cash sanctions press this same code-is-speech line. The first suit, *Van Loon v. Department of Treasury*,¹²¹ was financed by the crypto exchange Coinbase. The U.S. District Court for the Western District of Texas rejected all of the plaintiffs' claims on cross-motions for summary judgment.¹²² It is unclear as of this writing whether an appeal is in the works; Coinbase indicates it would be willing to support one.¹²³ The second suit is in the Northern District of Florida, where the lobby group Coin Center is the lead plaintiff.¹²⁴ This second case, *Coin Center v. Yellen*, has not yet progressed far enough for a court to have issued a merits opinion.

Both suits lead with typical DeFi theories that Tornado

¹¹⁹ David Yaffe-Bellany, *Investors Sue Treasury Department for Blacklisting Crypto Platform*, N.Y. TIMES (Sept. 8, 2022), <https://www.nytimes.com/2022/09/08/business/tornado-cash-treasury-sued.html> [https://perma.cc/8WUB-KAWT]. Peter Van Valkenburgh of Coin Center took a more strident tone, describing the sanctions as "conceptually incoherent." Jack Shickler, *'We Are All F****d': The Developers of Tornado Cash and the Future of Crypto*, COINDESK (Dec. 5, 2022), <https://www.coindesk.com/consensus-magazine/2022/12/05/alexey-pertsev-most-influential-2022> [https://perma.cc/2Y4X-TRSG]. "Sanctions are a tool for behavioral change," said Van Valkenburgh. *Id.* "Software in the abstract cannot change its behavior, it's just there." *Id.*

¹²⁰ Yaffe-Bellany, *supra* note 119.

¹²¹ *Van Loon v. Dep't of Treasury*, No. 1:23-CV-312, 2023 WL 5313091 (W.D. Tex. Aug. 17, 2023).

¹²² *Id.* at *13.

¹²³ Turner Wright, *Tornado Cash Lawsuit Judge Sides With US Treasury in Motions for Summary Judgment*, COINTELEGRAPH (Aug. 17, 2023), <https://coindesk.com/news/tornado-cash-lawsuit-judge-sides-treasury-request-summary-judgment> [https://perma.cc/9FKD-6EEP].

¹²⁴ *Coin Center v. Yellen*, No. 3:22-cv-20375, 2023 WL 2889736 (N.D. Fla. Apr. 10, 2023).

Cash—mere autonomous software—is simply too decentralized to fall within Treasury’s jurisdiction.¹²⁵ Both suits urge that Treasury only has jurisdiction over “persons,” and that Tornado Cash is not a “person” even under the Treasury Department’s definition of “person” as “individual or entity.”¹²⁶ Both suits also argue that the Tornado Cash software cannot be sanctioned under the International Emergency Economic Powers Act (“IEEPA”) because Tornado Cash is not “property” as contemplated by the statute.¹²⁷

But the *Van Loon* plaintiffs also raise a code-is-speech theory that the Tornado Cash sanctions interfered with their “right to publish . . . source code.”¹²⁸ The Electronic Frontier Foundation (“EFF”) submitted an amicus brief to the same effect, arguing that the sanctions “immediately and predictably chilled the speech of dozens of open source developers writing directly on the Tornado Cash project.”¹²⁹ *Van Loon*, EFF, and

¹²⁵ The relevant statute, the International Emergency Economic Powers Act (IEEPA), 50 U.S.C. § 1702, gives the President (and by executive delegation, the Treasury Department) broad regulatory authority over “any person” who would “transfer[,] . . . deal[] in, or exercis[e] any right, power, or privilege with respect to, or transactions involving, any property in which any foreign country or a national thereof has any interest.” *See also* Blocking the Property of Certain Persons Engaging in Significant Malicious Cyber-Enabled Activities, 80 Fed. Reg. 18077 (Apr. 1, 2015) (“The Secretary of the Treasury, in consultation with the Attorney General and the Secretary of State, is hereby authorized to take such actions, including the promulgation of rules and regulations, and to employ all powers granted to the President by IEEPA as may be necessary to carry out the purposes of this order. The Secretary of the Treasury may redelegate any of these functions to other officers and agencies of the United States Government consistent with applicable law. All agencies of the United States Government are hereby directed to take all appropriate measures within their authority to carry out the provisions of this order.”).

¹²⁶ *Van Loon*, 2023 WL 5313091, at *7; Complaint at 6, *Coin Center*, 2023 WL 2889736 (No. 3:22-cv-20375).

¹²⁷ *Van Loon*, 2023 WL 5313091, at *9; *see also* Complaint at 5, *Coin Center*, 2023 WL 2889736 (No. 3:22-cv-20375).

¹²⁸ *Van Loon*, 2023 WL 5313091, at *12 (modification in original).

¹²⁹ Brief of Amicus Curiae Elec. Frontier Found. in Support of Plaintiffs.’

others insisted that the sanctions chilled speech even after Treasury clarified that publishing source code on an academic web page would not qualify for sanctions purposes as an illicit transaction in cryptocurrency.¹³⁰

The court rejected these as “misleading” arguments that did not align with the facts.¹³¹ The Tornado Cash sanctions, like all sanctions under IEEPA, merely block *transactions with* the sanctioned entity. Americans, in other words, are no longer permitted to deposit cryptocurrency with or withdraw cryptocurrency from the Ethereum addresses controlled by the Tornado Cash platform. This restriction does not remotely imply that merely publishing or studying the code itself is against the law.¹³²

It is hard to see how a lawyer who has any passing

Motion for Partial Summary Judgment at 10, *Van Loon*, 2023 WL 5313091 (No. 1:23-CV-312).

¹³⁰ Frequently Asked Questions-Newly Added | U.S. Dep’t of the Treasury, <https://ofac.treasury.gov/faqs/updated/2022-11-08> [<https://perma.cc/WDN9-FNN2>] (“While engaging in any transaction with Tornado Cash or its blocked property or interests in property is prohibited for U.S. persons, interacting with open-source code itself, in a way that does not involve a prohibited transaction with Tornado Cash, is not prohibited. For example, U.S. persons would not be prohibited by U.S. sanctions regulations from copying the open-source code and making it available online for others to view, as well as discussing, teaching about, or including open-source code in written publications, such as textbooks, absent additional facts. Similarly, U.S. persons would not be prohibited by U.S. sanctions regulations from visiting the Internet archives for the Tornado Cash historical website, nor would they be prohibited from visiting the Tornado Cash website if it again becomes active on the Internet.”); Brief of Amicus Curiae Elec. Frontier Found. in Support of Plaintiffs.’ Motion for Partial Summary Judgment at 6, *Van Loon*, 2023 WL 5313091 (No. 1:23-CV-312). (citing the fact that the source code behind Tornado Cash “is no longer receiving active development” as evidence that the sanctions are chilling speech even after Treasury’s clarification).

¹³¹ *Van Loon*, 2023 WL 5313091, at *12.

¹³² *Id.* (observing that the sanctions do not “restrict interaction with the open-source code unless these interactions amount to a transaction. . . . Developers may, for example, lawfully analyze the code and use it to teach cryptocurrency concepts. They simply cannot execute it and use it to conduct cryptocurrency transactions”).

familiarity with the law of sanctions could have interpreted the Tornado Cash sanctions as some kind of prohibition on publishing computer code. Lay people are another story, however—and in online crypto communities, the Tornado Cash sanctions have become a focal point for handwringing about an impending “war on code” in which well-meaning coders might soon be subject to strict criminal liability merely for “publishing” or “distributing” useful software that criminals abuse in unpredictable ways.¹³³

When Alexey Pertsev, a developer behind the Tornado Cash utility, was arrested in the Netherlands,¹³⁴ the crypto press widely portrayed the prosecution in just those terms. In the words of one editorial: “Should Tim Cook of Apple be thrown in jail for manufacturing a phone that’s used by criminals to plan heists? Should the CEO of Boeing be punished for building the planes that hijackers flew into the World Trade Center? Is the inventor of the pressure cooker criminally responsible for making something that can be turned into a bomb?”¹³⁵ One concerned YouTuber made a protest video titled “This Song Is Illegal (Tornado Cash Code)” in which he sang portions of the Tornado Cash codebase.¹³⁶ Now that two

¹³³ See generally Schickler, *supra*, note 119; *War on Code*, at 13:26-14:19. See also Allison Prang & Paul Vigna, *SEC Charges EtherDelta Founder for Operating Unregistered Exchange*, WALL ST. J., <https://www.wsj.com/articles/sec-charges-token-trading-platform-founder-for-operating-unregistered-exchange-1541694306> [https://perma.cc/9BR6-W9QG] (“A common argument against regulation in the cryptocurrency space is that coders are just writing software, and aren’t responsible for the effects of the software.”).

¹³⁴ FIOD Belastingdienst, *Arrest of Suspected Developer of Tornado Cash* (Dec. 8, 2022), <https://www.fiod.nl/arrest-of-suspected-developer-of-tornado-cash> [https://perma.cc/A2VY-BFA4].

¹³⁵ Daniel Kuhn, *An Alleged Tornado Cash Developer Was Arrested. Are You Next?*, COINDESK (May 11, 2023), <https://www.coindesk.com/layer2/2022/08/12/an-alleged-tornado-cash-developer-was-arrested-are-you-next> [https://perma.cc/FH2W-E9Z5].

¹³⁶ Jonathan Mann, *This Song is Illegal (Tornado Cash Code)*, YOUTUBE (Aug. 17, 2022), <https://www.youtube.com/watch?v=2gekUIIP0Z4> [https://perma.cc/LRB5-TU8W].


of Pertsev’s partners have been indicted in the United States for their role in developing, promoting, and profiting from Tornado Cash, the crypto community is once again abuzz about an always-just-around-the-corner “war on code.”¹³⁷

B. Privacy Theories

A second class of arguments says that cryptocurrency and DeFi should be exempt from ordinary financial regulation because they are sometimes used to finance expression.

One suit claims that large cryptocurrency transactions should receive a special exemption, under the First Amendment, from tax-information reporting obligations.¹³⁸ Two additional suits argue that there is a First Amendment right to use the Tornado Cash automated money-laundering service—not just to publish the source code in an academic paper, as suggested *supra*, but to *use* Tornado Cash to hide financial transactions.¹³⁹

These are eccentric demands. As I will elaborate below, there is no general right to hide large transactions from the government—not under the Fourth Amendment, and certainly not under the First Amendment. The Supreme Court resolved that question in the 1970s, and today, bank transactions and large cash transactions are subject to a whole system of reporting requirements designed to frustrate money

¹³⁷ See CryptoWendyO,  *INSANE Crypto developers JAILED (Tornado Cash)*, YOUTUBE (Aug. 24, 2023), <https://www.youtube.com/watch?v=3IMOVpkykU> [<https://perma.cc/J4M2-XCAM>] (citing Coin Center for the proposition that “it’s the code behind the tech that the prosecutors are attacking, and code is free speech”); James Hunt, *Tornado Cash Case Could Criminalize Software Code Publication, Coin Center Says*, THE BLOCK (Aug. 24, 2023), <https://www.theblock.co/post/247165/tornado-cash-coin-center> [<https://perma.cc/F7NG-GC45>].

¹³⁸ Complaint at 2, *Carman v. Yellen*, No. 5:22-cv-149, 2023 WL 4636883 (E.D. Ky. July 19, 2023).

¹³⁹ Complaint at 32, *Coin Center v. Yellen*, No. 3:22-cv-20375, 2023 WL 2889736 (N.D. Fla. Apr. 10, 2023); Complaint at 17, *Van Loon v. Dep’t of Treasury*, No. 1:23-CV-312, 2023 WL 5313091 (W.D. Tex. Aug. 17, 2023).

launderers. Nor is there precedent from any court establishing a constitutional right to mingle funds with criminals in a known money-laundering pool.

The plaintiffs in these cases claim that crypto is different, however, because the blockchains that underlie cryptocurrencies keep pseudonymous records of every transaction that has ever occurred.¹⁴⁰ They point out that if the government can match a person's identity to just a single transaction on a blockchain, then in principle the government could trace this person through many other transactions as well—transactions that may include donations to expressive causes.¹⁴¹ This is a fine argument against *using* crypto, but a poor argument against regulating it. And the argument that it is unconstitutional to regulate a product because the product has security vulnerabilities is even more specious.

¹⁴⁰ See First Amended Complaint at 12-15, *Carman*, 2023 WL 4636883 (No. 5:22-cv-149) (“Anybody can view any transaction on the public ledger. . . . But the transactions listed on the public ledger are not linked to individuals’ identities. . . . Bob and Alice may choose to keep their addresses to themselves and thereby keep their transactions private. . . . If their addresses become known to others, though, then those others would be able to find all of the transactions using those addresses. Public ledger analysts may also find all of Bob and Alice’s transactions using *other* addresses by analyzing the activity of their known addresses. In other words, if Bob and Alice were forced to reveal that they were the participants in the above transaction, then they would each also effectively reveal their participation in a wide range of other, unrelated transactions.”). See also *infra* notes 192-196 and accompanying text (discussing a similar argument made in a separate case).

¹⁴¹ See First Amended Complaint at 32, *Carman*, 2023 WL 4636883 (No. 5:22-cv-149) (“Users of cryptocurrency will also be required to report expressive associations that fall within §6050I’s coverage and they will be required to report commercial activities that, as a result of the nature of public ledgers, allow the government to ascertain their unrelated expressive activities. As a result, users will naturally and foreseeably refrain from engaging in such expressive activities. They already are doing so in anticipation that present-day transactions may eventually be revealed.”).

1. Transaction Reporting

A cluster of laws require various parties to report large or suspicious cash transactions either to the IRS, to law-enforcement authorities, or both. These laws aim in part to prevent tax evasion and in part to prevent money laundering and financial crime. Congress, concerned that crypto might be used for both purposes, has already amended the relevant statutes to clarify that they cover crypto assets as well as cash.¹⁴²

The Bank Secrecy Act (“BSA”), first enacted in 1971, requires banks, broker-dealers, and a wide range of other “financial institutions” to make a “Currency Transaction Report” (“CTR”) when they handle cash transactions involving \$10,000 or more.¹⁴³ Later amendments require financial institutions to submit a “Suspicious Activity Report” (“SAR”) when they suspect that funds from crimes are being used to disguise criminal activity, or that small cash transactions are being “structured” to evade the \$10,000 trigger for a CTR. Both types of report—CTRs and SARs—sit on file with the Financial Crimes and Enforcement Network (“FinCEN”) for use in criminal investigations and prosecution.¹⁴⁴

Another provision, § 6050I of the Internal Revenue Code, applies a similar rule to businesses that are not financial institutions: “any person . . . who is engaged in a trade or business, and who, in the course of such trade or business, receives more than \$10,000 in cash in 1 transaction (or 2 or more related transactions)” must file a return identifying the parties to the transactions and other details.¹⁴⁵ As in the BSA, it is unlawful to “structure” a transaction by breaking it up into

¹⁴² 26 U.S.C. §§ 6050I(d)(3), 6045(g)(3)(D).

¹⁴³ See Bank Secrecy Act, Pub. L. No. 91-508, § 221, 84 Stat. 1122 (1970) (codified as amended at 31 U.S.C. § 5313(a) (2006)); 31 C.F.R. § 103.22(b)(1)-(2) (2008).

¹⁴⁴ See 31 U.S.C. § 5318(g) (2006); see also 31 C.F.R. § 103.18 (2008) (imposing SAR filing requirements on banks).

¹⁴⁵ 26 U.S.C. § 6050I.

small amounts that avoid the \$10,000 trigger.¹⁴⁶ Here, Congress sought to make up a tax shortfall that was attributed to underreporting cash-based businesses.

All of these requirements have recently been extended from cash transactions to crypto transactions. The Anti-Money Laundering Act of 2020 clarifies that the BSA’s reporting requirements cover transactions in “value that substitutes for currency”¹⁴⁷ and institutions such as crypto exchanges that handle these transactions.¹⁴⁸ A subsequent amendment to § 6050I requires parties to a “digital asset” transaction amounting to \$10,000 or more to report the transaction to the IRS.¹⁴⁹

In *Carman v. Yellen*, the lobby group Coin Center argues that § 6050I, the tax reporting requirement for digital-asset transactions over \$10,000, is unconstitutional on its face as a violation of the First, Fourth, and Fifth Amendments.¹⁵⁰ They face an uphill battle.

The Supreme Court has rejected claims that tax reporting obligations invade Fourth or Fifth Amendment privacy rights

¹⁴⁶ 26 U.S.C. § 6050I(f).

¹⁴⁷ 31 U.S.C.A. § 5312 (West 2021).

¹⁴⁸ A more recent bipartisan bill would extend these AML reporting requirements beyond crypto *exchanges* to other components in the crypto infrastructure, including crypto wallet providers, miners, validators, and more. Physical crypto kiosks would also be required to report their ownership and physical location to FinCEN and to verify and keep records on the identities of their customers. *See* Digital Asset Anti-Money Laundering Act, S. 5267, 117th Cong. (2022).

¹⁴⁹ 26 U.S.C. § 6045(g)(3)(D), in turn, defines a “digital asset” as “any digital representation of value which is recorded on a cryptographically secured distributed ledger or any similar technology as specified by the Secretary.” *Id.*

¹⁵⁰ Jerry Brito & Peter Van Valkenburgh, *Coin Center Has Filed a Court Challenge Against the Treasury Dept. Over Unconstitutional Financial Surveillance*, COIN CENTER (June 11, 2022), <https://www.coincenter.org/coin-center-has-filed-a-court-challenge-against-the-treasury-dept-over-unconstitutional-financial-surveillance> [<https://perma.cc/AQ6U-QU7N>].

for over a century, nearly as long as the federal income tax has existed.¹⁵¹ And in the early 1970s, when banks and depositors leveled similar privacy claims against the AML reporting requirements of the BSA, the Court upheld the requirements in large part because “a contrary holding might well fly in the face of the settled sixty-year history of self-assessment of individual and corporate income taxes in the United States.”¹⁵² Section 6050I itself, the \$10,000 cash reporting provision, has been on the books for decades and upheld repeatedly over Fourth and Fifth Amendment privacy challenges as well as claims that it interferes with the Sixth Amendment right to counsel by forcing attorneys to disclose the identities of clients who pay them in cash.¹⁵³

¹⁵¹ *Flint v. Stone Tracy Co.*, 220 U.S. 107, 174-77 (1911) (“Certainly the [Fourth] [A]mendment was not intended to prevent the ordinary procedure in use in many, perhaps most, of the states, of requiring tax returns to be made, often under oath. . . . [In making tax returns available for public inspection,] Congress may have deemed the public inspection of such returns a means of more properly securing the fullness and accuracy thereof. In many of the states laws are to be found making tax returns public documents, and open to inspection. We cannot say that this feature of the law does violence to the constitutional protection of the 4th Amendment, and, this is equally true of the 5th Amendment, protecting persons against compulsory self-incriminating testimony.”); *Helvering v. Mitchell*, 303 U.S. 391, 399 (1938) (“In assessing income taxes the Government relies primarily upon the disclosure by the taxpayer of the relevant facts. This disclosure it requires him of make in his annual return. To ensure full and honest disclosure, to discourage fraudulent attempts to evade the tax, Congress imposes sanctions. Such sanctions may confessedly be either criminal or civil.”).

¹⁵² *Cal. Bankers Ass’n v. Shultz*, 416 U.S. 21, 60 (1974).

¹⁵³ *United States v. Goldberger & Dubin, P.C.*, 935 F.2d 501, 504 (2d Cir. 1991) (“Appellants’ allegations of unconstitutionality merit only brief discussion. Their contentions relative to the Fourth and Fifth Amendments have been rejected consistently in cases under the Bank Secrecy Act by both the Supreme Court and this court. The reporting requirements of the 1984 Tax Reform Act, like those of the Bank Secrecy Act, target transactions without regard to the purposes underlying them and do not require reporting of information that necessarily would be criminal. Respondents’ principal constitutional argument, that section 6050-I deprives them of their Sixth Amendment right to counsel, is equally without merit.”) (citations

This history indicates pretty clearly that there is no Fourth or Fifth Amendment constitutional privacy right to hide \$10,000 *cash* transactions from the IRS. But the plaintiffs in *Carman v. Yellen* claim that *crypto* reporting would intrude on privacy in ways that cash reporting does not. This, they argue, is because requiring large crypto payors to identify themselves could also effectively deanonymize any number of smaller transactions that were made from the same account. “From one § 6050I report in 2024,” the plaintiffs hypothesize, “the government could discover that a person donated to a local mosque in 2016, paid for a son’s sobriety treatment in 2018, contributed to an unpopular political cause in 2020, and hired a marriage counselor in 2022.”¹⁵⁴

Some might call this an edge case. Most people who are paranoid enough about financial privacy to seek out marriage counselors, rehab centers, and houses of worship that accept payment in crypto might consider avoiding a § 6050I report by cutting a check for that one \$10,000 transaction.¹⁵⁵

Edge case or not, however, the hypothetical does illustrate a theoretical possibility that extending § 6050I to crypto transactions might interfere in a novel way with some very unusual person’s expectation of privacy in a very unusual situation. And if such a person is one of the “[m]any people [who] use cryptocurrency to engage in expressive activities,” then they might—conceivably—be chilled from donating to one of the “many charitable and advocacy organizations [that]

omitted); *United States v. Sindel*, 53 F.3d 874, 877 (8th Cir. 1995); *United States v. Garland*, No. 191-CV-2267, 1992 WL 138116, at *5 (N.D. Ga. Apr. 9, 1992); *Lefcourt v. United States*, 125 F.3d 79, 87 (2d Cir. 1997).

¹⁵⁴ Complaint at 28, *Carman v. Yellen*, No. 5:22-cv-149, 2023 WL 4636883 (E.D. Ky. July 19, 2023).

¹⁵⁵ As one court once observed when faced with a challenge that 6050-I would require reporting an attorney-client relationship to the government: “To avoid disclosure under section 6050-I, they need only pay counsel in some other manner than with cash. The choice is theirs.” *United States v. Goldberger & Dubin, P.C.*, 935 F.2d 501, 504 (2d Cir. 1991).

rely on cryptocurrency donations.”¹⁵⁶

Based on this chain of inferences, Coin Center claims it violates the First Amendment for the IRS to collect ordinary tax reporting information on *any* cryptocurrency transaction.¹⁵⁷

In doing so, Coin Center relies on a line of cases beginning with the 1958 case *NAACP v. ex rel. Patterson*.¹⁵⁸ In *Patterson*, the Supreme Court held that segregationist authorities in Alabama could not constitutionally compel the NAACP to turn over its membership rolls for public inspection as a condition to operate in the state.¹⁵⁹ Past disclosures of NAACP membership had resulted in “economic reprisal, loss of employment, threat of physical coercion, and other manifestations of public hostility.”¹⁶⁰ The chill on expression that disclosure presented was thus specific and palpable. And in this case, the state’s interest in obtaining membership information from the NAACP was too insubstantial—probably pretextual—to justify that chill.¹⁶¹

Cases in the *Patterson* line, until recently, have taken a broadly similar approach. Under “exacting scrutiny,” speakers who demonstrate some clear burden on their expressive association rights have succeeded in obtaining as-applied relief (i.e., exemptions) in cases where they can show that the government’s means and ends were out of proportion to that burden.¹⁶² In occasional cases involving a “comprehensive

¹⁵⁶ First Amended Complaint at 18, *Carman*, 2023 WL 4636883 (No. 5:22-cv-149).

¹⁵⁷ *Carman*, 2023 WL 4636883, at *19 (“Plaintiffs allege that the amended § 6050I will ‘chill’ protected associational activities in violation of the First Amendment.”) (citing Pl.’s First Am. Compl. at ¶ 229).

¹⁵⁸ *NAACP v. State of Alabama ex rel. Patterson*, 357 U.S. 449 (1958).

¹⁵⁹ *Id.* at 466.

¹⁶⁰ *Id.* at 462.

¹⁶¹ *Id.* at 464 (“The exclusive purpose was to determine whether petitioner was conducting intrastate business in violation of the Alabama foreign corporation registration statute, and the membership lists were expected to help resolve this question.”).

¹⁶² *John Doe No. 1 v. Reed*, 561 U.S. 186, 196 (2010) (noting that that

interference with associational freedom,”¹⁶³ courts might invalidate a law on its face.¹⁶⁴

But a recent case, *Americans for Prosperity Foundation v. Bonta* (“*AFPF*”),¹⁶⁵ took a significantly harder line against the government. In *AFPF*, the Supreme Court invalidated a California law that required all charitable organizations operating in the state to file copies of IRS Form 990 with the state Attorney General.¹⁶⁶ Form 990 includes information about mission, leadership, and finances, and Schedule B to Form 990 also discloses an organization’s major donors.¹⁶⁷ The Court applied exacting scrutiny in light of the “‘deterrent effect on the exercise of First Amendment rights’ that arises as an ‘inevitable result of the government’s conduct in requiring disclosure.’”¹⁶⁸ Exacting scrutiny, for the *AFPF* Court, “does not require that disclosure regimes be the least restrictive means of achieving their ends, [but] it does require that they be narrowly tailored to the government’s asserted interest.”¹⁶⁹

The Court held that the California law failed this standard. “It goes without saying that there is a ‘substantial governmental interest[] in protecting the public from fraud,’”

standard “requires a ‘substantial relation’ between the disclosure requirement and a ‘sufficiently important’ governmental interest”); *Citizens United v. Fed. Election Comm’n*, 558 U.S. 310, at 366 (quoting *Buckley v. Valeo*, 424 U.S. 1, 64, 66 (1976)). To withstand this scrutiny, “the strength of the governmental interest must reflect the seriousness of the actual burden on First Amendment rights.” *Davis v. Fed. Election Comm’n*, 554 U.S. 724, 744 (citing *Buckley*, 424 U.S. at 68, 71).

¹⁶³ *Shelton v. Tucker*, 364 U.S. 479, 490 (1960).

¹⁶⁴ *Id.* (invalidating an Arkansas law that required public school teachers to disclose annually every organization they had belonged to in the past five years).

¹⁶⁵ 141 S. Ct. 2373 (2021).

¹⁶⁶ *Id.* at 2389.

¹⁶⁷ *Id.* at 2380.

¹⁶⁸ *Id.* at 2383 (quoting *Buckley v. Valeo*, 424 U.S. 1, 65 (1976)).

¹⁶⁹ *Id.*

wrote the Chief Justice.¹⁷⁰ But in the Court's view, California's disclosure requirement was simply too detached from that objective to qualify as "narrowly tailored," even under the relatively relaxed "exact" but not "strict" level of scrutiny the Court applied.¹⁷¹ In particular, the Court highlighted the district court's finding that despite over 60,000 charities filing Schedule Bs every year, "there was not 'a single, concrete instance in which pre-investigation collection of a Schedule B did anything to advance the Attorney General's investigative, regulatory or enforcement efforts.'"¹⁷²

If any Supreme Court decision could make Coin Center's theory of the First Amendment appear plausible, it would be *AFPP*. This is because, as Justice Sotomayor pointed out in dissent, the *AFPP* majority was remarkably lax about grounding its First Amendment analysis in any actual, demonstrated burden on the exercise of any individual or group's First Amendment rights.¹⁷³ Rather than beginning from demonstrated evidence of a chill on expressive association, the *AFPP* majority took it as given that reporting and disclosure requirements "inevitabl[y]" chill expression at some level.¹⁷⁴

For the majority, "a reasonable assessment of the burdens imposed by disclosure should begin with an understanding of the extent to which the burdens are unnecessary, and that requires narrow tailoring."¹⁷⁵ This *a priori* approach is what allowed the Court to invalidate the California law in its entirety

¹⁷⁰ *Id.* at 2386 (quoting *Village of Schaumburg v. Citizens for Better Env't*, 444 U.S. 620, 636 (1980)).

¹⁷¹ *See id.* at 2386-87.

¹⁷² *Id.* (citing 182 F. Supp. 3d at 1055).

¹⁷³ *Ams. for Prosperity Found.*, 141 S. Ct. at 2392 (Sotomayor, J., dissenting) ("The same scrutiny the Court applied when NAACP members in the Jim Crow South did not want to disclose their membership for fear of reprisals and violence now applies equally in the case of donors only too happy to publicize their names across the websites and walls of the organizations they support.").

¹⁷⁴ *Id.* at 2383.

¹⁷⁵ *Id.* at 2385.

even in the absence of evidence that the law had actually chilled any expression. The law required disclosures about a lot of people’s expressive associations, and this was enough to show it burdened expression. It was in disuse, and this was enough to show the burden was unnecessary and therefore unconstitutional.

If *AFPF* looks like a relatively encouraging precedent for the *Carman v. Yellen* plaintiffs, then it is because the *AFPF* majority required so little actual evidence from the parties who claimed their speech was being chilled. But *AFPF* would have had to lower its expectations even further for *Carman*’s theory to pass for something credible. Even *AFPF*, after all, does not say that *all* disclosure requirements are unconstitutional; those that pass exacting scrutiny can stand. That requires, in the *AFPF* majority’s words, that “the strength of the governmental interest . . . reflect the seriousness of the actual burden on First Amendment rights.”¹⁷⁶

The most basic difference between these two cases is that the California law in *AFPF* required *charitable organizations, specifically*, to report their major donors; charitable organizations were the explicit target of the law, and charitable organizations were what the case was about. Meanwhile, § 6050I, the law challenged in *Carman*, *excludes* contributions to charitable organizations. Instead, the statute applies exclusively to persons or groups “engaged in a trade or business” who take the payment “in the course of such trade or business.”¹⁷⁷ The IRS has advised that this language does not include charitable contributions.¹⁷⁸

¹⁷⁶ *Id.* at 2383 (quoting *John Doe No. 1 v. Reed*, 561 U.S. 186, 196 (2010)).

¹⁷⁷ 26 U.S.C. § 6050I(a).

¹⁷⁸ I.R.S. Notice 90-61, 1990-2 C.B. 347 (“‘Trade or business’ under section 6050I of the Code has the same meaning as it does under section 162 and refers to any activity constituting the sale of goods or the performance of services to produce income. . . . Thus, for example, [a tax-exempt] organization that receives a cash payment in excess of \$10,000 for the rental

So, when Coin Center claims that § 6050I, as amended, “casts a dragnet’ for sensitive information from everyone who participates in high-value cryptocurrency transactions,”¹⁷⁹ the “sensitive information” sought *does not even include* the kinds of donations to expressive associations that were at issue in *AFPF*. Instead, what the net drags up is the same kind of “sensitive information”—i.e., routine transactional information—that the IRS has had the right to compel without issue for over a century.

If the *Carman* plaintiffs want to show that the burden on speech is as “serious”¹⁸⁰ as in *AFPF*, then, they must close the gap between their facts and the facts in *AFPF*. They must, in other words, persuade the court that § 6050I will indirectly chill Americans who are concerned that:

(1) the government or hackers will be able to discover their charitable donations by tracking backward from

(2) a § 6050I form they filed in connection with

(3) a separate, business-related \$10,000 cryptocurrency transaction that

of part of its building must report the transaction on Form 8300 regardless of how the transaction might be viewed in the context of sections 511 through 514 of the Code. However, if, for example, the organization receives a charitable cash contribution in excess of \$10,000, it would not be subject to the reporting requirement since the funds were not received in the course of a trade or business.”). The *Carman* complaint alleges that “[a] wide range of expressive associations—from funders of independent media to non-profits that sell sponsorships to friendly supporters—would be protected [by the First Amendment] but nonetheless subject to §6050I.” Complaint at 56, *Carman v. Yellen*, No. 5:22-cv-149, 2023 WL 4636883 (E.D. Ky. July 19, 2023). But it seems doubtful that these situations would actually fall within the course of trade or business when defined as “activity constituting the sale of goods or the performance of services to produce income.” I.R.S. Notice 90-61, 1990-2 C.B. 347.

¹⁷⁹ Complaint at 57, *Coin Center*, 2023 WL 2889736 (No. 3:22-cv-20375).

¹⁸⁰ See *supra* note 176 (discussing *AFPF*’s requirement that “the strength of the governmental interest . . . reflect the seriousness of the actual burden on First Amendment rights.”).

(4) is traceable to the charitable donation.

Never mind that this kind of warrantless tracking is *already* possible without a warrant if the would-be charitable donor has bought crypto at some point from a centralized exchange that took their personal information.¹⁸¹ If we assume that the would-be donor is unaware of or indifferent to this existing privacy risk and has not *already* been chilled, then § 6050I may indeed produce some kind of chilling effect at the margin.

Such are the donors who may decide, in light of § 6050I, that donating to an advocacy group using the same crypto address they use to make or take five-figure business payments is simply not worth the risk of exposure.¹⁸² How much more “narrowly tailored” must the tax laws be in order to protect hypothetical people from this completely self-inflicted privacy vulnerability?

One suspects the fundamental objection here is to financial-reporting requirements *in general*, for cash as well as crypto.¹⁸³

¹⁸¹ Criminal investigators have had great success in catching criminals through laborious analysis of transactions that are publicly recorded on the blockchain. This kind of analysis does not require a warrant. So, while the *Carman* plaintiffs are correct that IRS filings might aid government snoops who want to uncover small transactions, the change would be at most a marginal one. Any crypto user who has bought crypto with cash at some point on an exchange has already provided information to the exchange that the government can subpoena to achieve the same effect. See Andy Greenberg, *How Bitcoin Tracers Took Down the Web’s Biggest Child Abuse Site*, WIRED (Apr. 7, 2022, 6:00 AM), <https://www.wired.com/story/tracers-in-the-dark-welcome-to-video-crypto-anonymity-myth> [<https://perma.cc/ZV3A-D5AD>].

¹⁸² The Complaint in *Carman* raises some other constitutional theories that are even less serious, including an argument that collecting transaction-identifying cryptocurrency addresses does not fall within Congress’ powers under the Taxing Clause or the Necessary and Proper Clause. Complaint at 66-68, *Carman*, 2023 WL 4636883 (No. 5:22-cv-149).

¹⁸³ See Grant Hespeler, *The Misguided Activism of the Cryptocurrency Industry: Reckoning with the Bank Secrecy Act of 1970*, 20 COLO. TECH. L.J. 145, 146-47 (2022) (“A few scholars have criticized this proposed rule as

Coin Center more or less confirms this.¹⁸⁴ Such suspicions about “financial surveillance” figure centrally in the crypto liturgy. Reasonable people can say that the bulk reporting requirements of the BSA and § 6050I constitute unreasonable intrusions on Americans’ privacy as policy. But the Fourth Amendment has never been interpreted that way, and the First Amendment, even after *AFPP*, does not go that far either.

So far, Carman and Coin Center are struggling to make the sale. The U.S. District Court for the Eastern District of Kentucky dismissed all of Carman’s claims for lack of standing, holding that “[p]laintiffs do not set forth any plausible allegations indicating that the Government will [use § 6050I to surveil their expressive activities]. . . . The harm is hypothetical, conjectural, and insufficient to establish an injury in fact. . . . Plaintiffs are constrained only by their own subjective chill.”¹⁸⁵ Carman has appealed to the Sixth Circuit.

2. Tornado Cash

In Section II(A)(3)(ii), I discussed a First Amendment challenge that has been raised against the Treasury Department’s imposition of sanctions against Tornado Cash, a crypto money-laundering tool. Part of the argument, as discussed above, was based on misleading claims that the

violative of civil liberties and the promise of anonymity central to the appeal of cryptocurrency, but these analyses fall short in that they are exposed to an obvious counterargument: that FinCEN’s proposed rule is simply closing the loophole between the federal surveillance of monetary transactions everywhere besides the blockchain.”).

¹⁸⁴ Corin Faife, *A Legal Challenge Over Crypto Reporting Could Strike Down Decades-old Anti-money Laundering Laws*, THE VERGE (June 21, 2022), <https://www.theverge.com/2022/6/21/23176774/coin-center-legal-challenge-crypto-money-laundering-6050i> [<https://perma.cc/CR8M-5PHT>] (“Given our cryptocurrency focus, our aim is [removing] the amendment that adds crypto to the 6050I cash reporting requirement,’ [Coin Center Director Jerry] Brito said. ‘But that said, if the entire 6050I has to go, that’s fine with us.’”).

¹⁸⁵ *Carman*, 2023 WL 4636883, at *8.

sanctions against Tornado Cash chilled “the right to publish . . . source code.”¹⁸⁶

Separately, the *Van Loon* plaintiffs have argued that the Tornado Cash sanctions chill donations to “important, and potentially controversial, political and social causes.”¹⁸⁷ A complaint in another suit, *Coin Center v. Yellen*,¹⁸⁸ raises a similar challenge to the sanctions.

As in the tax-reporting case *Carman v. Yellen*, these claims rest on concerns that snoops could use blockchain analysis to deanonymize crypto users’ expenditures on expressive activity.¹⁸⁹ Both suits claim that crypto users who neglect to use Tornado Cash—even if they follow the typical practice of using multiple addresses—expose themselves to extraordinary danger by putting so much activity on a publicly accessible and trackable blockchain: “The transparency of the blockchain . . . compromises individual privacy,” according to the complaint in *Van Loon*, the Coinbase-financed case.¹⁹⁰

The *Van Loon* plaintiffs further argue that “[b]ecause all records are transparent and all transactions are linked, a user’s complete financial history . . . can be identified when the accounts involved in a transaction are linked to identities.”¹⁹¹ And the *Coin Center* complaint puts an even finer point on it: “The transparent nature of the public ledger has allowed violent burglars to identify people holding valuable crypto

¹⁸⁶ *Van Loon v. Dep’t of Treasury*, No. 1:23-CV-312, 2023 WL 5313091, at *12 (W.D. Tex. Aug. 17, 2023).

¹⁸⁷ Amended Complaint at 25, *Van Loon*, 2023 WL 5313091 (No. 1:23-CV-312).

¹⁸⁸ Complaint at 2, 23, *Coin Center v. Yellen*, No. 3:22-cv-20375, 2023 WL 2889736 (N.D. Fla. Apr. 10, 2023).

¹⁸⁹ *See supra* Section II.B.1.

¹⁹⁰ Complaint at 10, *Van Loon*, 2023 WL 5313091 (No. 1:23-CV-312).

¹⁹¹ *Id.*

assets, and even torture them in front of their families until they hand over access to their crypto assets.”¹⁹²

“[B]y providing a certain degree of privacy,” according to the *Van Loon* plaintiffs, “Tornado Cash [facilitates] important, socially valuable speech.”¹⁹³ The type of speech affected “includes donations to important, and potentially controversial, political and social matters; software code; and speech in connection with commercial activities funded by crypto assets sent through Tornado Cash.”¹⁹⁴ In *Coin Center’s* words, “[t]he criminalization of Tornado Cash infringes on associational privacy by outlawing the use of an essential privacy tool and forcing users of that tool to disclose their activities to the federal government and the public.”¹⁹⁵

But the claim here that the Tornado Cash sanctions “force” anyone to “disclose their activities to the public” is even more detached from the case law than the chilling-effects claims in *Carman*, the tax-reporting case. In *Carman*, the First Amendment claim failed for lack of standing because (1) the transactions subject to the reporting requirement were non-expressive and (2) the notion that state actors would do the legwork required to connect these non-expressive transactions to expressive ones was speculative.¹⁹⁶ But *Carman* at least involved an affirmative requirement to report *some* kind of

¹⁹² Complaint at 15, *Coin Center*, 2023 WL 2889736 (No. 3:22-cv-20375).

¹⁹³ Amended Complaint at 25, *Van Loon*, 2023 WL 5313091 (No. 1:23-CV-312).

¹⁹⁴ *Id.*

¹⁹⁵ Complaint at 32, *Coin Center*, 2023 WL 2889736 (No. 3:22-cv-20375).

¹⁹⁶ *Carman v. Yellen*, No. 5:22-cv-149, 2023 WL 4636883, at *7-8 (E.D. Ky. July 19, 2023) (“Plaintiffs do not allege that the amended § 6050I itself prohibits or proscribes their associational activities—the statute only requires that they disclose details related to ‘trade or business’ transactions that exceed \$10,000 in cryptocurrency. . . . For Plaintiffs’ theory of ‘subjective chill’ to attain any plausibility, Plaintiffs would need to allege that the Government will actually use the information in the Form 8300 disclosures to gather additional information about Plaintiffs’ associational activities by tracking their transactions on the public ledger. Plaintiffs do not set forth any plausible allegations indicating that the Government will take such action.”).

cryptocurrency transaction information to the government.¹⁹⁷ The Tornado Cash challenges, on the other hand, do not involve any kind of government-mandated reporting or disclosure requirement.

Instead, they challenge a money laundering sanction against a service that some crypto users consider “an essential privacy tool” for anonymous crypto payments, some of which may go toward expressive causes.¹⁹⁸

The Western District of Texas rejected this argument and awarded summary judgment to the government: “[T]he First Amendment protects the right of individuals to donate money to social causes of their choosing. . . . However, it does not protect the right to do so through any particular bank or service of their choosing, and Plaintiffs do not cite any case to the contrary.”¹⁹⁹

And if the First Amendment *did* protect a right to make these payments in crypto, note how nearly absolute that right would have to be for the arguments brought forward by Coinbase and Coin Center to make any sense. The First Amendment right to crypto would have to be so inviolate that to make up for crypto’s admitted technical deficiencies as a privacy tool, the public would have to make exceptions to ordinary tax reporting and AML controls and allow on-demand access to money-laundering services used by criminals and rogue nations. All this, based on speculative concerns that some donors to advocacy groups might insist on paying in crypto rather than by cash, check, or credit card.

C. Theories About Cryptocurrency as Communications Infrastructure

The final class of argument for crypto as speech draws on

¹⁹⁷ Brito & Van Valkenburgh, *supra* note 150.

¹⁹⁸ *Id.*

¹⁹⁹ *Van Loon*, 2023 WL 5313091, at *11.

claims about blockchain technologies' potential as media for communications. One version of the argument is based on the fact that bitcoin miners sometimes leave graffiti—images, quotations, poems, etc.—in the blockchain, and that licensing requirements for bitcoin mining are therefore a form of prior restraint.²⁰⁰ A second variation argues that all participation in a cryptocurrency network involves relaying and validating records of past transactions—and that as such, it should be protected as “ecosystem speech.”²⁰¹

The final argument is even broader: namely, that stifling innovation and consumer uptake in the market for crypto products will impede the creation of a new decentralized architecture for online communications. This new architecture, typically referred to as Web3, is said to be preferable for various reasons to the current highly centralized, platform-driven “Web2” paradigm. One often-promised benefit of Web3 is that speech will be less subject to censorship by government and business interests.²⁰²

1. Terminology

Understanding these claims requires some basic understanding of blockchain.

A blockchain is basically a ledger that many computers take turns updating and validating. Within Bitcoin, the ledger

²⁰⁰ See *infra* notes 224-249 and accompanying discussion.

²⁰¹ See Hannibal Travis, *Crypto Coin Offerings and the Freedom of Expression*, 24 CHAP. L. REV. 401, 475-78 (2021).

²⁰² It is worth noting here that you can have decentralization without blockchain and vice versa. Decentralization is a question of degree. Reddit is less centralized than Instagram, and Mastodon is far less centralized than either one of those. It is likely that a service like Mastodon already delivers all the decentralization one might want, with much less computational overhead. Conversely, you can run a blockchain-based service and still reproduce platform-like dynamics simply out of practicality and consumer demand, and then you are back to square one.

includes all transactions that have ever occurred in Bitcoin.²⁰³

More advanced blockchains, most prominently Ethereum, can also be used as virtual computers.²⁰⁴ The blockchain keeps track of this computer’s “machine state”—i.e., what it is doing at any moment.²⁰⁵ Keeping the machine state “on-chain” is a way to ensure that every user interacting with the virtual machine at any given point is interacting with the same system.²⁰⁶ It also causes blockchain-driven virtual machines to run much more slowly than a conventional computer would.²⁰⁷ By one estimate, the Ethereum system has roughly .02% of the processing power that a \$45 Raspberry Pi hobby computer has.²⁰⁸

When users attempt a transaction in Bitcoin, they send a record of the transaction to a “node.” A “node” is a system in the Bitcoin network that validates the transaction by confirming, using software called Bitcoin Core, that the

²⁰³ Note, however, that many payment services marketed as “Bitcoin” are not actually recorded on a blockchain. When El Salvador made Bitcoin legal tender, for example, it created the “Chivo Wallet,” a conventional payment network that recorded “bitcoin” payments on a conventional, non-blockchain centralized ledger and then settled large numbers of transactions in bulk on the blockchain. See Kristin Majcher, *El Salvador’s Chivo Wallet Keeps Breaking, and Users Are Seeking Answers*, THE BLOCK (Jan. 28, 2022, 1:25 PM EST), <https://www.theblock.co/post/131452/el-salvadors-chivo-wallet-keeps-breaking-and-users-are-seeking-answers> [<https://perma.cc/RK7Q-KPDM>]. The reason for centralized, apparently purpose-defeating services like the Chivo Wallet is that the Bitcoin blockchain can only process four or five transactions per second, worldwide. (Visa’s payment system, by contrast, processes about 1,700 transactions per second.) Getting a small bitcoin transaction recorded on the blockchain typically involves either transaction fees or delays, or both, that would normally be considered intolerable.

²⁰⁴ See generally Matt Levine, *The Crypto Story*, BLOOMBERG (Oct. 25, 2022), <https://www.bloomberg.com/features/2022-the-crypto-story> [<https://perma.cc/HTG7-D83Q>].

²⁰⁵ *Id.*

²⁰⁶ *Id.*

²⁰⁷ Weaver, *supra* note 82, at 8.

²⁰⁸ *Id.* at 17.

transaction was conducted in a manner that is consistent with the rules governing the blockchain.²⁰⁹ If a user tries to spend the same bitcoin twice, for example, the Bitcoin Core software will bounce it out. Once a transaction is validated, it propagates to the broader network of nodes and each node repeats the validation procedure.²¹⁰ As described below, some crypto promoters claim straight-facedly that hosting a node is a form of First Amendment expression.

The final step is to compile these transactions into a “block” and attach the block to the existing blockchain as part of the permanent, authoritative ledger.²¹¹ Many participants in the network vie for the chance to mint the next block. The winner gets a crypto reward that is either newly generated (as in Bitcoin), paid from a pool of transaction fees across the system, or both (as in Ethereum).²¹² The idea here is to get so many entrants participating in the contest that nobody can hope to steal money by minting a block that contains a false transaction.²¹³

²⁰⁹ *What is a Bitcoin Node? A Beginner's Guide*, COINTELEGRAPH.COM, <https://cointelegraph.com/learn/what-is-a-bitcoin-node-a-beginners-guide-on-blockchain-nodes> [<https://perma.cc/4HDJ-UNL5>].

²¹⁰ David B. Black, *How Does Bitcoin Mining Work*, FORBES DIGITAL ASSETS (Mar. 17, 2023, 5:02 PM), <https://www.forbes.com/sites/digital-assets/article/how-does-bitcoin-mining-work/?sh=6a219f4b4a46> [<https://perma.cc/32V7-VUZU>] (“Every miner validates every new proposed transaction. Once there are enough transactions to fill a block, all the miners work on the new block to make sure it and all its transactions are valid. Once they’ve agreed that a new block is good, it’s added to the older ones in what’s called the Bitcoin (BTC 0.0%) blockchain.”).

²¹¹ *Id.*

²¹² *Id.* (describing Bitcoin mining); Anna Gotskind, *Ethereum: What Are Transaction Fees and How are They Determined?*, DUKE RSCH. BLOG (Feb. 2, 2022), <https://researchblog.duke.edu/2022/02/02/195-ethereum-what-are-transaction-fees-and-how-are-they-determined> [<https://perma.cc/RGW8-C6CT>].

²¹³ As described in the original Bitcoin white paper, “proof-of-work [] solves the problem of determining representation in majority decision making. If the majority were based on one-IP-address-one-vote, it could be subverted

On some chains, including Bitcoin, this contest is called “proof of work.” To simplify, proof of work is a guessing game in which the odds of guessing the winning number are almost impossibly low—so low that it takes about ten minutes for all the participating computers in the world, combined, to guess the winning number.²¹⁴ Computers that participate are called “miners,” and the miner that guesses the winning number mints the next block and captures the reward.²¹⁵ Bitcoin mining on the whole uses a bit more energy than the entire nation of Austria.²¹⁶

Other blockchains, including most notably Ethereum, do not rely on proof of work. Instead, Ethereum relies on “proof of stake.”²¹⁷ In the proof-of-stake model, participants compete

by anyone able to allocate many Ips. Proof-of-work is essentially one-CPU-one-vote. The majority decision is represented by the longest chain, which has the greatest proof-of-work effort invested in it. If a majority of CPU power is controlled by honest nodes, the honest chain will grow the fastest and outpace any competing chains. To modify a past block, an attacker would have to redo the proof-of-work of the block and all blocks after it and then catch up with and surpass the work of the honest nodes.” Satoshi Nakamoto, *Bitcoin: A Peer-to-Peer Electronic Cash System*, BITCOIN.COM, <https://bitcoin.org/bitcoin.pdf> [<https://perma.cc/R7FE-HFN6>].

²¹⁴ Scott Nevil, *What is Proof of Work (PoW) in Blockchain?*, INVESTOPEDIA (May 23, 2023), <https://www.investopedia.com/terms/p/proof-work.asp> [<https://perma.cc/ZPD2-TKM4>].

²¹⁵ *Id.*

²¹⁶ Benjamin A. Jones, Andrew L. Goodkind & Robert P. Berrens, *Economic Estimation of Bitcoin Mining’s Climate Damages Demonstrates Closer Resemblance to Digital Crude Than Digital Gold*, 12 SCI. REPS. 14512 (2022).

²¹⁷ Jake Frankenfield, *What Does Proof-of-Stake (PoS) Mean in Crypto?*, INVESTOPEDIA (Oct. 31, 2023), <https://www.investopedia.com/terms/p/proof-stake-pos.asp> [<https://perma.cc/PVL8-7LAT>] (“Proof-of-stake changes the way blocks are verified using the machines of coin owners, so there doesn’t need to be as much computational work done. The owners offer their coins as collateral—staking—for the chance to validate blocks and earn rewards. . . . To become a validator, a coin owner must ‘stake’ a specific amount of coins. For instance, Ethereum requires 32 ETH to be staked before a user can operate a node.”).

by “staking,” or locking up, a certain amount of ETH, the Ethereum native currency.²¹⁸ Every few minutes, a staker has the chance to be randomly selected to “propose” one of many “shards” that will be incorporated into the next block.²¹⁹ Other stakers are randomly assigned to review these new shards and “attest” that nothing is amiss.²²⁰ The more one stakes, the better one’s chances of being selected to participate in this process and collect a reward.²²¹ One benefit of this approach is that it avoids the massive waste of energy that a proof-of-work blockchain requires.²²²

This brief description leaves out a lot of detail, but the details it leaves out are extraneous to the First Amendment claims being made.

2. Crypto Graffiti

Every block in Bitcoin’s blockchain includes some space for the miner to leave a message of their choosing. Miners sometimes use this opportunity to inscribe the blockchain with content that is undeniably expressive.²²³ Bitcoin’s mysterious creator Satoshi Nakamoto included the message “The Times 03/Jan/2009 Chancellor on brink of second bailout for banks”—presumably a commentary on the dangers of

²¹⁸ The minimum amount of ETH that participants may stake is 32 ETH. 32 ETH was worth about \$70,000 in late January 2024. But the value has fluctuated widely over time.

²¹⁹ Andrey Sergeenkov & Toby Bochan, *How Does Ethereum Staking Work?*, COINDESK.COM (Feb. 10, 2023), <https://www.coindesk.com/learn/how-does-ethereum-staking-work> [<https://perma.cc/UBP3-H67A>].

²²⁰ *Id.*

²²¹ *Id.*

²²² Justine Calma, *2022 Was the Year of Crypto’s Climate Reckoning*, THE VERGE (Dec. 21, 2022, 9:30 AM EST), <https://www.theverge.com/23519473/cryptocurrency-2022-climate-change-energy-emissions-reckoning> [<https://perma.cc/Y6FN-5YXS>].

²²³ Ken Shirriff, *Hidden Surprises in the Bitcoin Blockchain and How They Are Stored: Nelson Mandela, Wikileaks, Photos, and Python Software*, KEN SHIRRIFF’S BLOG (Feb. 2014), <https://www.righto.com/2014/02/ascii-bernanke-wikileaks-photographs.html> [<https://perma.cc/N8XJ-H54H>].

traditional banking.²²⁴ Other blocks include baby pictures, prayers, or famously, a picture and quote from Nelson Mandela.²²⁵

It is also possible for parties other than miners to encode messages into fake addresses and then “transact” with these addresses so that the messages will be stored in the blockchain. People have done clever things with these opportunities, and the results are sprinkled throughout the Bitcoin blockchain.²²⁶

If the government made an intentional effort to police the expressive content in blockchain annotations, that effort would most likely violate the First Amendment. A law prohibiting profanity on the Bitcoin network, to take a trivial example, would be unconstitutional.²²⁷ Or suppose that a new regulation required persons running a Bitcoin node to reject blocks that contained defamatory statements. This law would also most likely be struck down because it would ensure for practical purposes that many protected, nondefamatory annotations would be censored as well.²²⁸

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ See generally *Cohen v. California*, 403 U.S. 15, 25 (1971) (“How is one to distinguish [‘fuck’] from any other offensive word? Surely the State has no right to cleanse public debate to the point where it is grammatically palatable to the most squeamish among us. Yet no readily ascertainable general principle exists for stopping short of that result were we to affirm the judgment below. For, while the particular four-letter word being litigated here is perhaps more distasteful than most others of its genre, it is nevertheless often true that one man’s vulgarity is another’s lyric. Indeed, we think it is largely because governmental officials cannot make principled distinctions in this area that the Constitution leaves matters of taste and style so largely to the individual.”).

²²⁸ See *Smith v. People of the State of California*, 361 U.S. 147 (1959) (invalidating an ordinance imposing strict liability on booksellers). This phenomenon is typically called “collateral censorship.” See Jack M. Balkin, *Old-School/New-School Speech Regulation*, 127 HARV. L. REV. 2296, 2309-10 (2014) (“[C]ollateral censorship has affinities both to overbreadth and to

These hypotheticals are unrealistic, however. Regulators care about Bitcoin as a financial asset. They do not care about Bitcoin graffiti, and they are unlikely to make laws that target Bitcoin graffiti specifically. The more realistic scenario is one in which a regulation of Bitcoin as a financial asset results in a purely incidental burden on some Bitcoin users' expressive efforts.

But courts do not generally apply close First Amendment scrutiny to regulations of conduct that burden speech only incidentally. At a formal level, courts apply only "intermediate scrutiny" to cases involving expressive conduct. Such regulations, assuming they are not motivated by any kind of governmental hostility toward the message, are upheld so long as they are narrowly tailored to a "significant" (as opposed to "compelling") governmental interest, and so long as they leave open ample alternative channels to convey the message.

This is the standard the Court applied, for example, in *Clark v. Community for Creative Non-Violence*, where it upheld a National Park Service regulation that prohibited sleeping on the National Mall.²²⁹ The regulation interfered with a public-interest organization's plan to build a temporary tent city as part of a demonstration calling attention to homelessness.²³⁰ The interest in preserving park property was "unrelated to suppression of expression," and it was substantial enough, in the Court's view, to justify its impingement on the expressive means available to the protestors. Nor was there "any barrier to delivering to the media, or to the public by other means, the intended message concerning the plight of the homeless."²³¹ And the Court was "unmoved by the Court of Appeals' view

systems of prior restraint. A acts without any prior judicial determination of the legality of B's speech, and B may have no prior notice of A's decision to block or withhold infrastructural services. The state creates incentives for A to overcensor. Because A's and B's incentives are not aligned, A's actions will likely block or restrict access to much protected expression along with the unprotected.").

²²⁹ 468 U.S. 288 (1984).

²³⁰ *Id.* at 289.

²³¹ *Id.* at 295.

that the challenged regulation is unnecessary, and hence invalid, because there are less speech-restrictive alternatives that could have satisfied the Government interest in preserving park lands.”²³²

Many, if not all, conduct regulations burden at least some speech incidentally. And in principle, any one of these burdens could trigger intermediate scrutiny under the First Amendment. But in practice, lawyers rarely press these arguments in court unless they can point to a burden on speech that is particularly serious in proportion to the legitimate sweep of the regulatory program. The speed limit, for example, takes a toll on expressive activities. People have to slow down, and the result is that they arrive later to the meeting, the concert, the political rally, and so on. And enforcement of the speed limit prevents speeding as a form of expressive protest. In principle, speeders could raise First Amendment defenses on these grounds, and intermediate scrutiny would govern their cases. But in practice, no competent attorney would make such an argument in court.²³³

This may explain why the crypto graffiti argument has never shown up in litigation: the burden on speech is incidental and small, with no realistic possibility of censorial motivation and no shortage of alternative venues in the world—social media, for example—to post the kinds of short messages and photos that appear on the blockchain.

²³² *Id.* at 299.

²³³ First Amendment theorists sometimes raise the speed limit as an illustration of an issue where mechanical application of First Amendment doctrine may suggest a First Amendment violation even though it is obvious that no violation has taken place. See Jed Rubenfeld, *The First Amendment's Purpose*, 53 STAN. L. REV. 767, 767 (2001) (using the speeding hypothetical to illustrate “a problem in the basic structure of current free speech law”); Richard A. Posner, *Pragmatism Versus Purposivism in First Amendment Analysis*, 54 STAN. L. REV. 101, 107 (2001) (accusing Rubenfeld of “making the easy seem difficult”).

Even so, the argument *has* popped up in administrative practice. In 2014, New York financial regulators proposed a licensing requirement for merchants who deal in bitcoin (“BitLicense”).²³⁴ EFF submitted a comment letter in opposition to the new requirement.²³⁵ The latter half of the letter raised three First Amendment objections: first a “code is speech” argument;²³⁶ second an argument that restrictions on bitcoin chill fundraising for expressive activities;²³⁷ and finally an argument that “[a]s a publishing platform, a block chain is inherently resistant to censorship: once information is published there, it is nearly impossible to remove. Some Bitcoin users have taken advantage of this feature by encoding data into Bitcoin transactions, which are then permanently added to the block chain.”²³⁸

EFF argued that New York’s proposal to license “Virtual Currency Business Activities” should be treated as a prior restraint on these forms of expression even if (really, even *though*) the motivation behind the regulation had nothing plausible to do with controlling expressive easter eggs hidden in the blockchain.²³⁹ “[The regulator’s] discretion is boundless. . . . The agency can deny a license if it harbors any doubt or concern whatsoever about constitutionally protected

²³⁴ Press Release, New York State department of Financial Services, NY DFS Releases Proposed BitLicense Regulatory Framework for Virtual Currency Firms (July 17, 2014), https://www.dfs.ny.gov/reports_and_publications/press_releases/pr1407171 [<https://perma.cc/4AXE-2YQY>].

²³⁵ Marcia Hoffman, *Comments to the New York State Department of Financial Services on BitLicense The Proposed Virtual Currency Regulatory Framework*, ELEC. FRONTIER FOUND., INTERNET ARCHIVE & REDDIT (Oct. 21, 2014), <https://www.eff.org/document/bitlicense-comments-eff-internet-archive-and-reddit> [<https://perma.cc/3NLB-5M56>].

²³⁶ *Id.* at 12.

²³⁷ *Id.* at 13.

²³⁸ *Id.* at 14.

²³⁹ *Id.* at 17 (“NY DFS may take the position that the licensing requirement is a content-neutral restriction that could have the incidental effect of impinging on protected speech and association. If so, it is still a prior restraint.”).

expression that [the agency] simply finds objectionable.”²⁴⁰

But if this kind of speculation were enough to invalidate a professional licensing scheme as a prior restraint on speech, then a great deal of professional licensing would be unconstitutional under the First Amendment. Barbershops, for example, are often important venues for First Amendment-protected discourse among barbers and patrons. Yet barber’s licenses often depend on vague criteria such as “good moral character.”²⁴¹ In principle, a public authority could revoke a barber’s license because of concerns about the barber’s speech, and indeed it would be surprising if this particular form of censorship had never occurred. But such effects on speech are incidental to the design of the law. Courts will not strike down a professional licensing scheme on First Amendment grounds when the effect on speech is “merely the incidental effect of observing an otherwise legitimate regulation,”²⁴² and more generally, courts avoid striking down laws on their face unless “the impermissible applications of the law are substantial when judged in relation to the statute’s plainly legitimate sweep.”²⁴³

If a court accepted EFF’s characterization of New York’s BitLicense rule as a prior restraint on speech, the consequences would be severe. If the prior restraint was considered content-based—and EFF contended that any regulation singling out crypto was automatically content-based under the code-is-

²⁴⁰ *Id.*; see also Justin S. Wales & Richard J. Ovelmen, *Bitcoin Is Speech: Notes Toward Developing the Conceptual Contours of Its Protection Under the First Amendment*, 74 U. MIAMI L. REV. 204, 264-65 (2019) (“The tendency of state and federal regulators to place broad restrictions on the sale, transfer, or use of Bitcoin may be constitutionally problematic and . . . require regulators to consider individual motivations for obtaining or using cryptocurrencies before barring all such uses.”).

²⁴¹ See, e.g., NEB. REV. STAT. § 71-201 (listing eligibility requirements including that a person be of “good moral character and temperate habits”).

²⁴² See *Locke v. Shore*, 634 F.3d 1185, 1191 (11th Cir. 2011) (quoting *Accts. Soc. of Va. v. Bowman*, 860 F.2d 602, 604 (4th Cir.1988) (quotation marks omitted)).

²⁴³ *City of Chicago v. Morales*, 527 U.S. 41, 52 (1999).

speech doctrine—then the licensing scheme would be unconstitutional.²⁴⁴

And even if the scheme was considered content-neutral, the “procedural safeguards” required for licensing speech would require that officials operate under strict rules, with little to no room for administrative discretion.²⁴⁵ Timelines for investigation could be abbreviated.²⁴⁶ Key considerations such as, the “character and general fitness of the applicant”²⁴⁷ would likely be considered unconstitutional because they would create too much room for censorial game playing: after all, what if the official denies the application because they want to prevent the applicant from dropping offensive statements into

²⁴⁴ See *Neb. Press Ass'n v. Stuart*, 427 U.S. 539, 559 (1976) (“[P]rior restraints on speech and publication are the most serious and the least tolerable infringement on First Amendment rights.”).

²⁴⁵ *Freedman v. Maryland*, the case that first set up the “procedural safeguards” for a system of prior restraint, required that the applicant for a license “be assured . . . that the censor will, within a specified brief period, either issue a license or go to court to restrain showing the film. . . . [T]he procedure must also assure a prompt final judicial decision” after a hearing in which the state would bear the burden of proof. 380 U.S. 51, 58-59 (1965). The Court has relaxed these requirements, however, in cases that involve permitting for adult businesses on a time-place-manner basis. Administrative licensors do not need to go to court to justify every denial of a permit. Instead, it is enough if, in the event of a denial, the local judicial review rules allow “that access to the courts can be promptly obtained, [and] also that a judicial decision will be promptly forthcoming.” *City of Littleton v. Z.J. Gifts D-4, L.L.C.*, 541 U.S. 774, 781 (2004). The key is to assure that a license can be “issued within a reasonable period of time.” *Id.*

²⁴⁶ *City of Littleton*, 541 U.S. at 781.

²⁴⁷ N.Y. COMP. CODES R. & REGS. tit. 23, § 200.6 (“[T]he superintendent shall investigate the financial condition and responsibility, financial and business experience, and character and general fitness of the applicant. If the superintendent finds these qualities are such as to warrant the belief that the applicant’s business will be conducted honestly, fairly, equitably, carefully, and efficiently within the purposes and intent of this Part, and in a manner commanding the confidence and trust of the community, the superintendent shall advise the applicant in writing of his or her approval of the application, and shall issue to the applicant a license to conduct Virtual Currency Business Activity, subject to the provisions of this Part and such other conditions as the superintendent shall deem appropriate; or the superintendent may deny the application.”).

the blockchain?

New York’s financial regulators do not appear to have been moved by these arguments. The BitLicense framework has been in place for several years now,²⁴⁸ and no one has mounted a First Amendment challenge against it in court.

3. “Ecosystem Speech”

Another line of argument is, in some ways, even more aggressive and extreme than the arguments advanced by EFF in the Bitlicense rulemaking. Under this subclass of arguments, the First Amendment’s protection extends beyond the expressive blockchain graffiti discussed above to cover essentially everything that occurs within the crypto “ecosystem.”

“Like the print press or social media,” writes law professor Hannibal Travis, “crypto coins create ecosystems.”²⁴⁹

Instead of readers/browsers, writers/uploaders, editors, and advertisers, crypto coins often have four “constituencies” in addition to their own founders and promoters: [1] subscribers who use or pay with the coin, [2] other subscribers who accept payment with the coin, [3] “miners” who verify the authenticity of transactions and maintain distributed ledgers, and [4] software developers and other creative businesses who make new uses of the coin possible. The creation of a forum for speech, edited by the founder or current manager, implicates First

²⁴⁸ See N.Y. State Dep’t of Fin. Servs., Virtual Currency Businesses, DFSNY, https://www.dfs.ny.gov/virtual_currency_businesses [<https://perma.cc/BP2H-KR65>].

²⁴⁹ Travis, *supra* note 201, at 475.

Amendment interests.²⁵⁰

Travis suggests, for example, that “[p]eer-to-peer payment systems often resemble labor unions’ organizational structure. . . . [T]o evade the ‘excessive fees’ of banks, payment processors, [and] app stores dominated by oligopolistic Internet platforms, . . . [crypto users] exercise their basic First Amendment rights to freedom of association and joint economic activism.”²⁵¹

Similarly, Justin Wales and Richard Ovelmen say “[t]here exists little doubt that, as contemplated by Satoshi Nakamoto, Bitcoin was created as an expressive association[, and] the overarching goal of Bitcoin was to advocate for a decentralized economic system by building a network large enough to be secure on a global scale.”²⁵² Wales and Overman concede that some occasional highly targeted restrictions on the use of Bitcoin may be appropriate—but they also say that incursions onto Bitcoin trading activity are analogous in First Amendment terms to restrictions on access to social media²⁵³ or participation in public protests.²⁵⁴

In a later blog post, Wales—now senior counsel for Crypto.com—described the Bitcoin network as “a collective worldwide association of individuals coming together to

²⁵⁰ *Id.*

²⁵¹ *Id.* at 438.

²⁵² Wales & Ovelmen, *supra* note 240, at 262.

²⁵³ *Id.* at 262-63 (discussing *Packingham v. North Carolina*, 582 U.S. 98 (2017)).

²⁵⁴ *Id.* at 264-65 (discussing *Giboney v. Empire Storage & Ice Co.*, 336 U.S. 490 (1949)) (“The opinion recognized that expressive behavior does not by itself immunize unlawful behavior, but the Court notably did not suggest that one can enjoin all forms of peaceful protest [here a labor picket] merely because one may be able to violate the laws through picketing activity. Indeed, such a restriction would surely be deemed constitutionally infirm under the Court’s overbreadth jurisprudence. As discussed below, the tendency of state and federal regulators to place broad restrictions on the sale, transfer, or use of Bitcoin may be constitutionally problematic and, like *Giboney* suggests, require regulators to consider individual motivations for obtaining or using cryptocurrencies before barring all such uses.”).

support a philosophical and political network that advocates against centralized monetary policy. . . . Money is no longer just a tool for contributing to an association, as was the case in [*Americans for Prosperity v. Bonta*], but the association itself.”²⁵⁵

There is no doubt that Bitcoin represents the culmination of what might be called a “philosophical project.” Utopians and anarchists had written about and experimented with alternative currency concepts for decades before Bitcoin came along, and many of these projects were based in critiques of government and the banking system that are present in Satoshi’s white paper and in Bitcoin and crypto culture today.²⁵⁶

It is also fair to describe the Bitcoin network as an

²⁵⁵ Justin Wales, *The Supreme Court, Crypto, and the First Amendment (Collecting Cases): Americans For Prosperity Foundation v. Bonta*, MEDIUM (July 1, 2021) <https://justinswales.medium.com/the-supreme-court-crypto-and-the-first-amendment-collecting-cases-ea7caff2cc07> [<https://perma.cc/K3TM-PV7N>] (arguing that in light of these activities, together with “the advent of decentralized autonomous organizations that require specific currencies to act collectively, we need to reevaluate how the principles of anonymity in association can and should be applied to those participating in these and other decentralized political experiments.”). See also Vlad Costea, *Video: How the First Amendment Protects Bitcoin*, BITCOIN MAG. (Dec. 4, 2019), <https://bitcoinmagazine.com/business/video-justin-wales-first-amendment-protects-bitcoin> [<https://perma.cc/QJ9N-VK3W>] (“[W]hen we think in terms of ‘Can the government pass a law which makes it illegal to run a node or mine?,’ well, it’s very difficult because what does it mean for me to run a node? It means that I’m running a piece of software that is connected to a larger network to which I am participating to keep track of all the Bitcoin transactions. That’s association! I’m saying that I want to be associated with that network for political reasons. It’s very clear that the First Amendment includes associational rights, and I think it would be really difficult for the federal government or state government to make running a node or mining bitcoins illegal.”).

²⁵⁶ See generally FINN BRUNTON, *DIGITAL CASH: THE UNKNOWN HISTORY OF THE ANARCHISTS, UTOPIANS, AND TECHNOLOGISTS WHO CREATED CRYPTOCURRENCY* (2019); DAVID GOLUBIA, *THE POLITICS OF BITCOIN: SOFTWARE AS RIGHT-WING EXTREMISM* (2016).

“association of individuals.” Federal regulatory authorities and at least one court have, in fact, defined multiple DeFi enterprises as “unincorporated associations” for law enforcement purposes over strenuous objections that they were dealing with mere software.²⁵⁷

But none of this implies even plausibly that using Bitcoin or engaging in routine, automated maintenance of the Bitcoin ledger is the kind of activity that qualifies for First Amendment protections. Let’s accept, for the sake of argument, Wales and Ovelman’s characterization of Bitcoin as a “philosophical network” and Travis’ contention that attempting to avoid “excessive fees” in concert with other people qualifies as “economic activism” similar to that of a labor union.²⁵⁸ It still would not matter, because “joint economic activism” in the form of joint economic *action* does not generally qualify as First Amendment protected advocacy or association.²⁵⁹ If it were otherwise, then antitrust law’s general prohibition against “contracts, combinations, or conspiracies in restraint of interstate commerce or foreign trade” would be unconstitutional.²⁶⁰

And this principle applies to organizations with much more credible expressive bona fides than the Bitcoin network. Labor

²⁵⁷ For similar reasoning, but in the DeFi context, see *Van Loon v. Dep’t of Treasury*, No. 1:23-CV-312, 2023 WL 5313091, at *7-8 (W.D. Tex. Aug. 17, 2023) (concurring with Treasury’s designation of Tornado Cash as an unincorporated association of “its founders, its developers, and its DAO”); see also *Commodity Futures Trading Comm’n v. Ooki DAO*, No. 3:22-CV-05416, 2023 WL 5321527, at *5 (N.D. Cal. June 8, 2023) (holding OokiDAO was subject to suit under the Commodities and Exchange Act as an unincorporated association).

²⁵⁸ And set aside the question of whether ledger-keeping at Costco or a credit union should also be considered “economic activism.”

²⁵⁹ See *Giboney*, 336 U.S. at 495-96 (“Aside from the element of disseminating information through peaceful picketers, later discussed, it is difficult to perceive how it could be thought that these constitutional guaranties afford labor union members a peculiar immunity from laws against trade restraint combinations, unless, as appellants contend, labor unions are given special constitutional protection denied all other people.”).

²⁶⁰ 15 U.S.C. § 1(a). All of these, after all, qualify as “joint economic action.”

unions, for instance, enjoy First Amendment protections when they engage in pure advocacy.²⁶¹ But even activities such as picketing that have a strong and clear expressive component can be regulated consistent with the First Amendment if the speech is part of a course of conduct that is prohibited under the law, such as a secondary boycott.²⁶² The Supreme Court has upheld the application of the Sherman Act to boycotts and mergers even by media entities—perhaps the consummate example of an expressive association.²⁶³

The breadth of coverage contemplated in the arguments for “ecosystem speech” is enormous, and it is hard to imagine how it would cash out to anything less than a total deregulation of the market for crypto products. But the idea fails because characterizing economic conduct such as using Bitcoin and helping to maintain the Bitcoin network as “joint economic action” or “association” does not convert the conduct to speech—even if the participants act out of deep conviction.

4. Web3

Arguments that Bitcoin is an expressive medium because of crypto graffiti and “ecosystem speech” are implausible. But more advanced systems such as Ethereum have the technical potential to facilitate a much wider scope of expression than the initial Bitcoin blockchain did. The reason for this is that

²⁶¹ *E. R.R. Presidents Conf. v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961); *Police Dep’t of City of Chicago v. Mosley*, 408 U.S. 92 (1972).

²⁶² *See Int’l Longshoremen’s Ass’n, AFL-CIO v. Allied Int’l, Inc.*, 456 U.S. 212, 226 (1982) (“We have consistently rejected the claim that secondary picketing by labor unions in violation of § 8(b)(4) is protected activity under the First Amendment. It would seem even clearer that conduct designed not to communicate but to coerce merits still less consideration under the First Amendment. The labor laws reflect a careful balancing of interests. There are many ways in which a union and its individual members may express their opposition to Russian foreign policy without infringing upon the rights of others.” (citations omitted)).

²⁶³ *Associated Press v. United States*, 326 U.S. 1 (1945); *Citizen Publishing Co. v. United States*, 394 U.S. 131 (1969); *Fed. Trade Comm’n v. Superior Ct. Trial Laws. Ass’n*, 493 U.S. 411 (1990).

while Bitcoin enabled a distributed ledger, later blockchains (beginning with Ethereum) enable a distributed *computer*—really a distributed *platform*—that can in principle run an unlimited range of blockchain-based based applications and crypto products.

Major crypto investors like Andreessen Horowitz and the Winklevoss twins have done much to promote these distributed platforms as “Web3”—a set of systems that will gradually replace the more centralized internet infrastructure (Web2) that we use today.²⁶⁴ This is mostly PR or marketing talk about a miraculous investment opportunity. A few observers, however, have attempted to connect the Web3 picture up to free speech principles and the First Amendment.²⁶⁵

Today, the crypto ecosystem hosts, or at least supports, a lot more expressive content than it did before these more advanced blockchains came online. There is a market for “NFT art,” for example—images, videos, and so on whose ownership is recorded and exchanged on distributed ledgers.²⁶⁶ Some

²⁶⁴ See, e.g., Patel, *supra* note 19; see also Andreessen Horowitz, *The web3 Landscape*, A16Z (Oct. 2021), <https://a16z.com/wp-content/uploads/2021/10/The-web3-Reading-List.pdf>

[<https://perma.cc/7U7P-Q334>] (“The decentralized networks of web3 offer an alternative to the broken digital status quo . . . web3 will put power in the hands of communities rather than corporations.”); Tyler Winklevoss (@tyler), TWITTER (Dec. 27, 2021, 3:48 PM), <https://x.com/tyler/status/1475584312917389312?s=46&t=QvKz0orBHq6Nzncw4o1gHw> [<https://perma.cc/LQC9-ME4N>] (“It’s really quite alarming how Big Tech has anointed themselves the arbiters of the world’s truth and morality. Power corrupts and absolute power corrupts absolutely. Web3 fixes this.”).

²⁶⁵ *Bitcoin is the Trojan Horse for a Decentralized Internet*, BITCOIN MAG. (Mar. 23, 2022), <https://bitcoinmagazine.com/culture/bitcoin-leads-to-a-decentralized-internet> [<https://perma.cc/9SPL-VBV6>]; see also Bitcoin Magazine, *Bitcoin Is Taking the World by Storm*, YOUTUBE (Mar. 22, 2022), <https://www.youtube.com/watch?v=sH8QJuFME7Q> [<https://perma.cc/8UTJ-MJ2Z>] (video from article).

²⁶⁶ See Mitchell Clark, *NFTs, Explained*, THE VERGE (June 6, 2022) <https://www.theverge.com/22310188/nft-explainer-what-is-blockchain-crypto-art-faq> [<https://perma.cc/ED5V-69GE>].

NFTs are used to represent characters or items in multiplayer games and other social activities. Players trade cartoon cats in *Cryptokitties*, which runs on Ethereum’s blockchain;²⁶⁷ they battle high-priced Pokémon knockoffs in *Axie Infinity*, which runs on the Ronin Network, an Ethereum “side-chain.”²⁶⁸ “The Sandbox” is a blockchain-driven virtual world where wealthy people live and play in virtual real estate.²⁶⁹ Some visions of the “metaverse” promise to roll these kinds of experiences into a decentralized, NFT-driven replacement for the current platform-driven social media paradigm.²⁷⁰

How much do these kinds of projections improve on past claims that cryptocurrency deserves protection as communications infrastructure? Wales and Ovelman say that even Bitcoin deserves protection today because it has room for growth as an expressive medium:

[W]hile it may be true that the most prominent use of bitcoin at this moment may be as a digital payment system, [one must also] consider the growing uses and expression made possible by the Bitcoin network. . . . Indeed, as we have seen with the internet itself, our utilization of open protocols varies and changes over time in ways that one cannot predict.²⁷¹

²⁶⁷ *CryptoKitties*, CRYPTO Kitties, <https://www.cryptokitties.com> [<https://perma.cc/NRE6-5CBY>].

²⁶⁸ *Axie Infinity*, AXIE INFINITY, <https://axieinfinity.com> [<https://perma.cc/9MSW-2DVX>].

²⁶⁹ Debra Kamin, *The Next Hot Housing Market Is Out of This World. It’s in the Metaverse*, N.Y. TIMES (Feb. 19, 2023), <https://www.nytimes.com/2023/02/19/realestate/metaverse-vr-housing-market.html> [<https://perma.cc/ACQ6-46DX>].

²⁷⁰ See Crypto.com, *NFTs: the Metaverse Economy*, FT.COM, <https://www.ft.com/partnercontent/crypto-com/nfts-the-metaverse-economy.html> [<https://perma.cc/4Z63-DBLE>].

²⁷¹ Wales & Ovelmen, *supra* note 240, at 265-66.

In support of what might be called a “longtermist”²⁷² perspective on the First Amendment, Wales and Ovelmen cite Justice Kennedy’s warning in *Packingham v. North Carolina* that “[t]he forces and directions of the Internet are so new, so protean, and so far reaching that courts must be conscious that what they say today might be obsolete tomorrow.”²⁷³ Wales and Ovelman seem to read this language to mean that courts should use the First Amendment to deregulate technologies that *may* in the future evolve into significant channels of expression.²⁷⁴

But *Packingham* dealt with technologies—“vast democratic forums of the Internet” and “social media in particular”—that

²⁷² “Longtermism” is a view, recently popular in Silicon Valley, that long-term benefits and harms accruing to future people should weigh more heavily in near-term ethical decision-making. Disgraced FTX founder Sam Bankman-Fried “pledged billions into longtermist causes.” Talib Visram, *Sam Bankman-Fried and Elon Musk Just Killed Effective Altruism*, FAST COMPANY (Nov. 11, 2022) <https://www.fastcompany.com/90809796/sam-bankman-fried-and-elon-musk-just-killed-effective-altruism> [<https://perma.cc/WC2C-LT8E>]. One variation on longtermism holds that decisionmakers should prioritize policies that have the potential to bring a larger population of human or sentient beings into existence over the very long term. Adherents to this view tend to prioritize human extinction risk over all other concerns based in large part on the possibility that human extinction over the short term could prevent trillions of sentient beings from existing between now and the end of the universe. See Sigal Samuel, *Effective Altruism’s Most Controversial Idea*, VOX (Sept. 6, 2022, 6:00 AM EDT), <https://www.vox.com/future-perfect/23298870/effective-altruism-longtermism-will-macaskill-future> [<https://perma.cc/6LTL-6TV9>]; see also Peter Singer, *The Hinge of History*, PROJECT SYNDICATE (Oct. 8, 2021), <https://www.project-syndicate.org/commentary/ethical-implications-of-focusing-on-extinction-risk-by-peter-singer-2021-10> [<https://perma.cc/67Z9-9PE7>] (“The dangers of treating extinction risk as humanity’s overriding concern should be obvious. Viewing current problems through the lens of existential risk to our species can shrink those problems to almost nothing, while justifying almost anything that increases our odds of surviving long enough to spread beyond Earth.”).

²⁷³ *Packingham v. North Carolina*, 582 U.S. 98, 105 (2017).

²⁷⁴ Wales & Ovelmen, *supra* note 240, at 264 (citing *Packingham*, 582 U.S. at 105).

were already well established as “the most important places for the exchange of views” by the time the case was decided in 2016.²⁷⁵ If anything, Justice Kennedy’s warning that courts should not decide too much all at once would seem to push back *against* the longtermist activism Wales and Ovelman seem to be encouraging courts to embrace.

So far, I have outlined the three main tropes in crypto-as-speech. At their very best, these arguments identify certain narrow circumstances with minimal commercial significance where some, but not most, of the case law is favorable. *Bernstein*, the best precedent for “code is speech,” suggests a respectable but far from slam-dunk argument that academics operating in a purely noncommercial setting have a right to publish a “white paper” that contains the specs for a crypto asset, a decentralized finance protocol, or some similar thing.²⁷⁶ And of course it is possible to imagine trivial hypotheticals where crypto is collateral damage in the course of some *other* First Amendment violation: for example, an embargo on crypto donations to Republican but not Democratic candidates.²⁷⁷

But these points don’t really speak to anything special

²⁷⁵ *Packingham*, 582 U.S. at 104 (quoting *Reno v. Am. Civil Liberties Union*, 521 U.S. 844, 868 (1997)). *See also id.* (“While in the past there may have been difficulty in identifying the most important places (in a spatial sense) for the exchange of views, today the answer is clear.”).

²⁷⁶ *See* Travis, *supra* note 201, at 417-20 (pointing out some plainly communicative elements that appear in “white papers” used to debut and promote new crypto coins: “[a]n ICO white paper typically strikes four major themes: bold and optimistic predictions for the future, summaries of the cryptographic solution employed, indications of how the coin or asset will unlock content or network resources, and arguments about how peer-to-peer production of that content or resource will help secure a better or more efficient future”).

²⁷⁷ Note that there was a lot of “freedom to transact” hype around the Trudeau Administration’s decision to sanction organizations involved in organizing semi truckers’ siege of major cities and bridges. But the difference is that those activities would not have fallen under constitutional protection under either Canadian or American law.

about crypto, and they come nowhere close to establishing that the crypto industry *in general* falls under First Amendment coverage. More to the point, they don't suggest any reason why crypto cannot be regulated like any other economic asset.

The more aggressive, more absolutist arguments—arguments that the First Amendment somehow pervades the whole topic of crypto regulation—depend on a few parallel fallacies. First, that if a course of conduct sometimes qualifies as speech, then it is always speech; second, that if a technology has any legitimate applications, then regulation of that technology probably violates the law; and finally, that if a law has any unconstitutional applications, then that law must be facially unconstitutional.

Interestingly, this latter class of bizarre and sometimes outright laughable arguments comes almost entirely from attorneys affiliated with the crypto industry or its lobbying organizations.²⁷⁸ In the next Part, I will consider a few reasons why industry players might think these arguments are worth financing despite their glaring deficiencies as litigation tools.

III. What These Theories Are For

Two things stand out about the First Amendment arguments that crypto promoters have put forth: first, that they have a certain crackpot quality, and second, that they come almost exclusively from lawyers who are either employed by crypto firms, running crypto firms, or writing for think tanks that are underwritten by crypto firms. The question then becomes: what value does the crypto industry see in these apparently worthless legal arguments?

I see two possible answers.

²⁷⁸ Think of Coin Center's entertaining privacy hypo about the person who uses a single crypto wallet to pay the marriage counselor, the mosque, the rehab center, and the dark money PAC—what kind of reaction is this actually supposed to elicit? *See supra* note 155 and accompanying discussion.

A. *The Outside Game*

The arguments for crypto as speech bear an uncanny resemblance to the arguments for crypto as a political project. The pitch that software-based finance is *impossible* to regulate gets translated into arguments that it is *unconstitutional* to regulate software. The pitch that crypto is a hedge against “financial censorship” by tyrannical governments and bankers gets translated into an argument that crypto is a sacred security for First Amendment freedoms. And the hopes-and-dreams pitch that crypto investors are a “community” working toward some kind of anarcho-capitalist utopia gets translated into an argument that bitcoin mining and bitcoin transactions are acts of expressive association.

These parallels do not make the legal case that crypto is speech any more impressive. But for some investors, the appearance of First Amendment controversy around crypto-culture buzzwords like “censorship-resistant” may well have a validating effect.²⁷⁹ The ideological narrative behind Bitcoin and later DeFi has been especially important in building a meme-heavy online community in which small but fervent crypto investors encourage each other to “HODL” on to their crypto with “diamond hands.”²⁸⁰ Pressing these arguments in crypto media outlets, and making it known that these arguments have been advanced in official forums, may

²⁷⁹ BITCOIN MAG., *supra* note 265 (“I think Bitcoin is going to usher in this mental idea that no human being should have the right to censor another human being’s speech. Period. And speech includes your ability to transact with somebody else.”); Benjamin Pirus, *Bitcoin Is Not ‘A Hedge Against Doomsday Scenarios,’ Mark Cuban Says*, FORBES (Dec. 17, 2020, 8:48 AM EST), <https://www.forbes.com/sites/benjaminpirus/2020/12/17/bitcoin-is-not-a-hedge-against-doomsday-scenarios-mark-cuban-says/?sh=20ea6a2220ec> [https://perma.cc/59JC-NANG] (“‘It’s a store of value like gold that is more religion than solution to any problem,’ said billionaire investor Mark Cuban. ‘No matter how much BTC fans want to pretend that it’s a hedge against doomsday scenarios, it is not.’”).

²⁸⁰ See, e.g., u/KarryLing18, REDDIT (June 28, 2022, 1:00 PM EDT), https://www.reddit.com/r/cryptocurrencymemes/comments/vms0zy/with_these_diamond_hands_ill_hodl_for_eternity [https://perma.cc/EJ3K-JJEG].

reinforce a sense among some customers that crypto's business is freedom's cause. "Through buying and holding bitcoin," advises one *Bitcoin Magazine* think-piece, "holding your keys and taking back your self-sovereignty, you move the country back toward a sound money standard that can do much to fix our divisive problems. Furthermore, you are making it harder for tyranny and government overreach to take hold."²⁸¹

It may not matter much how far the legal theories actually get in court. As the case law on "code is speech" demonstrates, the legend of a legal doctrine can loom much larger than its life.²⁸² Even outright *losses* in court could have marketing value insofar as they confirm the impression that the government is overreaching, the product is "under attack," the law is no protection, and products for storing "unstoppable" crypto assets are the only refuge.

If any organization provides the template for this marketing strategy, it is the National Rifle Association ("NRA").²⁸³ For decades, the NRA has used Second Amendment rhetoric to market its product as the last bastion of liberty against an always-impending tyranny.²⁸⁴ For the NRA, even the smallest

²⁸¹ Mickey Koss, *Bitcoin is Freedom's First Line of Defense*, BITCOIN MAG. (May 30, 2022), <https://bitcoinmagazine.com/culture/bitcoin-is-freedoms-first-line-of-defense> [<https://perma.cc/S34M-BQXN>].

²⁸² See *supra* Section II.A.

²⁸³ Of course, the NRA also enjoyed great success in court over the long term—but because the "right to bear arms" appears explicitly in the text of the Constitution, the NRA began its quest to change the law with a strong foothold that the crypto lobby has no match for.

²⁸⁴ DAVID COLE, *ENGINES OF LIBERTY* 145 (2016) (quoting former NRA president and executive director Kayne Robinson: "[T]he threat is the thing. The most important thing in motivating the members is the threat. Understanding the gravity of the threat [of gun confiscation] is what produces action.' Cole reports interviews with several NRA officials who confirm that NRA memberships spike 'whenever there is a mass shooting . . . [the NRA] is strongest when the people's perceived need for it is greatest.' As a *Washington Post* account of the organization's successful advocacy put it, 'the NRA learned that controversy isn't a problem but rather, in many cases, a solution, a motivator, a recruitment tool, an inspiration.'").

governmental encroachments on the lives of gun owners—for example the “bump stock” ban implemented by the Justice Department in 2019—became nationwide sales events in which consumers were exhorted to buy now while supplies last.

As the NRA analogy might suggest, crypto products seem to sell best among disaffected young men, and that is where a good deal of crypto marketing and influencer content seems to be aimed.²⁸⁵ In a Super Bowl ad for Crypto.com, Matt Damon tours a “Museum of Bravery” that orbits Mars, urging investors who might be on the fence about crypto to “embrace the moment and commit, [for] fortune favors the brave.”²⁸⁶ Muscled crypto zillionaires pose on Instagram with Lamborghinis, private jets, yachts, bikini-clad girlfriends, and fast food. (“Live rich, eat poor 🍷...grind mentality,” advises

²⁸⁵ Christopher Mims, *NFTs, Cryptocurrencies and Web3 Are Multilevel Marketing Schemes for a New Generation*, WALL ST. J. (Feb. 19, 2022, 12:00 AM ET), <https://www.wsj.com/articles/nfts-cryptocurrencies-and-web3-are-multilevel-marketing-schemes-for-a-new-generation-11645246824> [<https://perma.cc/XC7U-7QPT>] (“‘Web3 is such a hyper-capitalistic way of trying to reframe the web,’ says Catherine Flick, a senior researcher in technology ethics who teaches computing and social responsibility at Britain’s De Montfort University. This view of human relations and the possibility of profiting from them taps into many Americans’ feelings of economic insecurity, and is not unlike direct-marketing schemes, only this one is aimed more at disenfranchised young men, she adds.”).

²⁸⁶ Todd Spangler, *Matt Damon Mocked Anew for ‘Fortune Favors the Brave’ Crypto Ad as Virtual Currency Values Crash*, VARIETY (June 15, 2022, 6:30 AM PT), <https://variety.com/2022/digital/news/matt-damon-mocked-cryptocurrency-crash-1235294923> [<https://perma.cc/GYH8-AK4V>] (“‘These mere mortals, just like you and me, as they peer over the edge, they calm their minds and steel their nerves with four simple words that have been whispered by the intrepid since the time of the Romans: Fortune favors the brave,’ Damon says in the spot, which ends with the actor peering onto the surface of Mars from a spacecraft.”); Jody Rosen, *Why is Matt Damon Shilling for Crypto?*, N.Y. TIMES (Feb. 2, 2022), <https://www.nytimes.com/2022/02/02/magazine/matt-damon-crypto.html> [<https://perma.cc/5P2C-TQGR>] (“The cryptocurrency industry’s marketing efforts are focused on young people, especially young men. . . . [Damon’s] words are high-flown—all that stuff about history and bravery—but they amount to a macho taunt: If you’re a real man, you’ll buy crypto.”).

@thecryptoking.)²⁸⁷ The paranoid, generally antigovernment tenor of big crypto's First Amendment rhetoric may resonate better with this particular market segment than most.

But more generally, the broad cultural association between free speech and democratic values sets the stage for crypto promoters to create a liberatory aura around their product.²⁸⁸ Thus, an ideology that begins as a fringe anarcho-capitalist rejection of fiat currency and the monetary system eventually morphs into liberation platitudes about “democratizing finance” and “financial inclusion.”²⁸⁹ Get-rich-quick schemes typically promise to free people from economic institutions that have failed to support them: You can be your own bank.²⁹⁰

²⁸⁷ Andrew Kersley, *How Much Money You Can Actually Make in Crypto*, VICE (Oct. 27, 2021, 4:15 AM), <https://www.vice.com/en/article/pkpeny/how-much-money-you-can-actually-make-in-crypto> [https://perma.cc/QL8V-755K]; see, e.g., Jake Greenbaum (@_thecryptoking), INSTAGRAM, https://www.instagram.com/p/CS2AqAglAOU/?utm_source=ig_web_copy_link [https://perma.cc/46YG-SA86] (last visited Oct. 26, 2023).

²⁸⁸ Noah Fields, *Censorship Resistance: A Path To True Financial Freedom*, KOMODO (Aug. 31, 2023), <https://komodoplatform.com/en/academy/censorship-resistance> [https://perma.cc/79SR-HT8E].

²⁸⁹ Tonantzin Carmona, *Debunking the Narratives About Cryptocurrency and Financial Inclusion*, BROOKINGS (Oct. 26, 2022), <https://www.brookings.edu/research/debunking-the-narratives-about-cryptocurrency-and-financial-inclusion> [https://perma.cc/M7DM-HV5A] (“Similar to how proponents depict cryptocurrencies as a way to ‘democratize finance,’ payday loans were once described as a way to promote the ‘democratization’ of credit.”).

²⁹⁰ *Can Crypto Really Replace Your Bank Account?*, COINBASE, <https://www.coinbase.com/learn/crypto-basics/can-crypto-really-replace-your-bank> [https://perma.cc/A8Q5-HSWA] (describing how services Coinbase offers can “help you take control of your financial future”); Ian Kan, *Crypto Makes You ‘Your Own Bank.’ But How Secure is Crypto Banking?*, CRYPTOSLATE (Sept. 14, 2021, 2:00 PM UTC), <https://cryptoslate.com/how-secure-is-crypto-banking> [https://perma.cc/EH7B-QEH2] (“When people realized that traditional banking systems are unable to secure their funds, there was a steep rise in the demand for alternative means of banking. . . . The goal of crypto banking is financial sovereignty.”); MyCrypto, *You Should Want to Be Your*

You can be your own boss and work from home.²⁹¹ First Amendment talk tells new investors this freedom is their birthright.²⁹²

Scheme promoters can easily customize the liberation narrative to fit within different market segments' experience with structural injustice. Just as multi-level marketing trap LuLaRoe, for example, has swathed its brand in faux feminism,²⁹³ the NFT “educational platform” SheFi

Own Bank, MEDIUM (Apr. 7, 2020), <https://medium.com/mycrypto/you-should-want-to-be-your-own-bank-8489352c2902> [<https://perma.cc/Z38B-6N6M>] (“As the quote goes, ‘Power tends to corrupt and absolute power corrupts absolutely.’ As financial systems have grown, so has their power. Today, governments and banks are so closely intertwined that they influence every facet of society. Unfortunately for you, the individual, banks rarely use their influence to benefit you, as there is little incentive to do so.”); Kirsty Moreland, *Self-Custody: How to Be Your Own Bank*, LEDGER ACADEMY (Oct. 13, 2023), <https://www.ledger.com/academy/tips-to-trust-yourself-in-becoming-your-own-bank> [<https://perma.cc/4GP3-R7XD>] (“[T]he philosophy of crypto is inclusivity and, in fact, crypto-custody isn’t as complicated as it may seem. . . . Forget relying on banks or third-parties to manage your funds - no one to tell you what to do or charge you fees. With Ledger, we can help make sure your money is, well, yours.”).

²⁹¹ Darryl Port, *Freelancing in Web3 and the Metaverse: The Future of Work*, MONEYMADE (June 14, 2022), <https://moneymade.io/learn/article/crypto-jobs> [<https://perma.cc/85DM-GJ6J>] (“Everyone’s going to be their own boss in Web3 and the metaverse.”); MintMe News, *Be Your Own Boss: Become a Crypto Entrepreneur*, MINTME.COM (Apr. 12, 2020), <https://www.mintme.com/news/be-your-own-boss-become-a-crypto-entrepreneur> [<https://perma.cc/KMG9-HRX4>].

²⁹² *Censorship Resistance Letter From the Editors*, BITCOIN MAG., <https://bitcoinmagazine.com/censorship-resistance-letter-from-the-editors> [<https://perma.cc/5PJY-6CJE>] (“When all is said and done, Bitcoin is just speech—an exchange of numbers that mediates financial settlement between distrusting parties. It is by definition neutral, impartial, a financial system open to teenagers, terrorists and everyone in between. It’s no surprise then that people who are attracted to Bitcoin oppose censorship. It’s why many of us are here to begin with. Because the traditional financial system excluded us. Made us feel victimized. Left us with a feeling of hopelessness. Of despair. Bitcoin offered a different way.”).

²⁹³ Adrian Horton, *‘It’s Very Culty’: The Bizarre Billion-Dollar Downfall of Fashion Company LuLaRoe*, GUARDIAN (Sept. 15, 2021, 3:37 PM EDT),

“empowers women and non-binary folks to unlock financial freedom through crypto education, experimentation, and community.”²⁹⁴ In an interview with Mastercard’s online newsletter (of all outlets—the ultimate centralized payments system!), SheFi founder Maggie Love repackaged the standard “financial censorship” trope as a story about gender subjugation: “For the first time, no one can say you can’t do something with your money,” Love told Mastercard. “It’s this inherently feminist technology.”²⁹⁵ Randi Zuckerberg, co-founder of her own for-profit “inclusiverse,” F²⁹⁶ told Kaitlyn

<https://www.theguardian.com/tv-and-radio/2021/sep/15/lularich-lularoe-amazon-docuseries> [<https://perma.cc/3REQ-BD4C>] (quoting Jenner Furst, director of the documentary LuLaRich, “The company appealed, said Furst, to the ‘middle America millennials who don’t have the same opportunities that their parents had, who are facing a lot of different struggles, who are susceptible on one hand to the patriarchal nuclear family structure but then also the pitch to be a girlboss and to be empowered and to be a feminist who is selling these leggings”); Elizabeth Yuko, ‘Oh My God, We’re In a Cult’: New Docuseries Shows the Dark Side of Clothing Brand LuLaRoe, ROLLING STONE (Sept. 18, 2021), <https://www.rollingstone.com/culture/culture-features/lularich-docuseries-lularoe-mlm-cult-1228224> [<https://perma.cc/N95M-MT6H>]; Jill Filipovic, *Caught With Their Pants Down* (Sept. 10, 2021), <https://jill.substack.com/p/caught-with-their-pants-down> [<https://perma.cc/4JSV-WBT5>].

²⁹⁴ Kaitlyn Tiffany, *The Many, Many Beautiful Cartoon Women of Web3*, THE ATLANTIC (Apr. 18, 2022), <https://www.theatlantic.com/technology/archive/2022/04/nft-world-of-women-web3-feminism/629593> [<https://perma.cc/JK58-SMP3>] (“(In place of the faux-intimacy of multilevel-marketing recruiters messaging strangers on Instagram and calling them ‘hun,’ crypto enthusiasts are rather liberal with their use of the word *bestie*.) In addition to ‘empowerment,’ women-oriented NFT projects promise ‘financial independence,’ echoing the pitch that MLMs have been making to women for decades.”).

²⁹⁵ Christine Gibson, *Inside Maggie Love’s Quest to Mint More Female Crypto Experts*, MASTERCARD (Oct. 11, 2022), <https://www.mastercard.com/news/perspectives/2022/women-in-crypto-maggie-love> [<https://perma.cc/BT9D-XWAQ>].

²⁹⁶ See *Join HUG*, HUG, thehug.xyz [<https://perma.cc/H8ZU-N7Q7>]. HUG’s “accelerator programs” include courses that cost \$3,000 or \$5,000; after creators complete the program, HUG takes a negotiated fee on all subsequent resales of the NFT. *Creator Accelerator Programs*, HUG, <https://thehugxyz.gitbook.io/hug/hug-studios/creator-accelerator-programs>

Tiffany of the Atlantic that “I think anyone who’s sitting and being skeptical is sitting in a massive place of privilege, which means that the old system works for them.”²⁹⁷

Other crypto promoters tout investment in unregulated crypto products as a way for investors of color to overcome a history of discrimination at the hands of banks. Cleve Mesidor, a former Department of Commerce official who now serves as executive director of the Blockchain Association lobby group, advises that “[f]or those of us who have been locked out, traditional finance is risky.”²⁹⁸ With crypto, she says, investors can build wealth through the power of “self-sovereign identity.”²⁹⁹ And at a Juneteenth “Crypto and Race” talk, crypto promoters invoked the Tulsa massacre to pump Bitcoin as a Black Wall Street 2.0 that “[y]ou can’t burn down”³⁰⁰ and intoned that Bitcoin’s mysterious creator Satoshi Nakamoto “was probably a Black woman because a man would have never been able to walk away and not take credit.”³⁰¹ (In fact, Satoshi Nakamoto, whoever they may be, “walked away”

[<https://perma.cc/Y482-GFYW>]. See also Amy Shoenthal, *The Queens of Crypto: Randi Zuckerberg*, FORBES (June 13, 2022), <https://www.forbes.com/sites/amyshoenthal/2022/06/13/the-queens-of-crypto-randi-zuckerberg/?sh=365cfb53dde0> [<https://perma.cc/NEW4-R8LW>].

²⁹⁷ Tiffany, *supra* note 294.

²⁹⁸ Jennifer Sor, *Black Investors Say Crypto Is Still Key to Building Wealth Even as Digital Assets See Steep Sell-off in 2022*, BUS. INSIDER (Jul. 23, 2022, 7:14 AM EDT), <https://markets.businessinsider.com/news/currencies/crypto-crash-bear-market-minorities-black-investors-financial-discrimination-bitcoin-2022-7> [<https://perma.cc/8N4N-A28E>].

²⁹⁹ *Id.*

³⁰⁰ Nate DiCamillo, ‘Satoshi Was a Black Woman’: Blockchain Entrepreneurs Talk Financial Inclusion on Juneteenth, COINDESK (June 19, 2020), <https://www.coindesk.com/business/2020/06/19/satoshi-was-a-black-woman-blockchain-entrepreneurs-talk-financial-inclusion-on-juneteenth> [<https://perma.cc/TP9H-HEBA>].

³⁰¹ *Id.*

holding a sizable share of the Bitcoin global supply.)³⁰² “I want to encourage everyone to stay vigilant,” said podcast host Isaiah Jackson,³⁰³ “and make sure you start to move your money and savings out of this failing system [i.e., the system of accredited banks].”³⁰⁴

³⁰² David Granahan, *How Many Bitcoins Are There?*, NASDAQ (Oct. 4, 2022, 5:44 PM), <https://www.nasdaq.com/articles/how-many-bitcoins-are-there> [<https://perma.cc/C6XX-NZK7>] (“Current data shows that 19.1 million bitcoins have been mined to date.”); *Who Owns the Most Bitcoin—2023 Edition*, ARKHAM INTEL. (June 17, 2023), <https://www.arkhamintelligence.com/research/who-owns-the-most-bitcoin-2023-edition> [<https://perma.cc/YFT2-VGB2>] (“Satoshi Nakamoto, the pseudonymous creator of Bitcoin, is presumed to be the largest holder of the currency, in possession of 1.1 million BTC.”); Anthony Cuthbertson, *Bitcoin Creator Satoshi Nakamoto Now 15th Richest Person in the World*, THE INDEP. (Nov. 15, 2021), <https://www.independent.co.uk/tech/bitcoin-satoshi-nakamoto-wealth-net-worth-b1957878.html> [<https://perma.cc/UPV8-9U5M>].

³⁰³ Granahan, *supra* note 302. Jackson is “Chief Technical Officer” of the “KRBE Digital Assets Group.” It is unclear what KRBE Digital Assets Group is. The URL krbecrypto.com, at the time of this writing, forwarded to a website called “The Gentlemen of Crypto,” which is home to a blog, a podcast, and a Masterclass course. *See The Gentlemen of Crypto*, KRBE, <https://thegentlemenofcrypto.com> [<https://perma.cc/4KST-2CZC>]. The following bank-like logo appeared in the upper right corner of the Gentlemen of Crypto home page:



³⁰⁴ DiCamillo, *supra* note 300; *see also* Jessica Bursztynsky, *Bitcoin is a Good Savings “Plan B” for Black Investors, Says Isaiah Jackson*, CNBC (Jan. 12, 2021), <https://www.cnbc.com/2021/01/12/bitcoin-could-heisaiah-johnson-.html> [<https://perma.cc/HS5P-DW3K>]; *Why the Crypto Crash Hit Black Americans Hard*, ECONOMIST, <https://www.economist.com/graphic-detail/2022/05/20/why-the-crypto-crash-hit-black-americans-hard> [<https://perma.cc/UL86-8MYD>]; Terri Bradford, *The Cryptic Nature of Black Consumer Cryptocurrency Ownership*, FED. RESERVE BANK OF KAN. CITY (June 1, 2022), <https://www.kansascityfed.org/research/payments-system-research-briefings/the-cryptic-nature-of-black-consumer-cryptocurrency-ownership> [<https://perma.cc/QSK4-ATFS>]; Algernon Austin, Julia Tache & Joshua

These pitches exemplify what some sociologists call “predatory inclusion.” As Tressie McMillan Cotton describes it, predatory inclusion is “the logic, organization, and technique of including marginalized consumer-citizens into ostensibly democratizing mobility schemes on extractive terms.”³⁰⁵ Arguments that cryptocurrency is constitutionally protected speech, “perhaps the largest peaceful protest in the history of

Timiiwayemi, *Stock Market Index Funds Can Beat Crypto: On Cryptocurrency Investing and Building Black Wealth*, CENTER FOR ECON. & POL’Y RSCH. (Jan. 10, 2023), <https://cepr.net/crypto-and-building-black-wealth> [<https://perma.cc/WY8Z-YSDL>] (“[A]t best, the existing White-Black wealth hierarchy will be replicated in the cryptocurrency space. At worse, cryptocurrency investing will widen the White-Black wealth divide.” (citing Juliet Elu & Miesha Williams, *COVID-19 Cryptocurrency Investment: Wealth Disparities and Portfolio Diversification*, 6 J. ECON., RACE, AND POL’Y 53 (2023))); Emily Stewart, *How Crypto Failed Black Investors*, VOX (Feb. 16, 2023), <https://www.vox.com/the-goods/23599845/crypto-bitcoin-black-investors-ftx-freedmans-bank-civil-war> [<https://perma.cc/SAQ3-H7M5>]; Morning Edition, *Why Americans Haven’t Been Convinced on Cryptocurrency*, NPR (Aug. 30, 2022, 5:10 AM ET), <https://www.npr.org/2022/08/30/1120023698/why-americans-havent-been-convinced-on-cryptocurrency> [<https://perma.cc/JZ4A-2FFV>] (“FADEL: I mean, the perception is, is that crypto is much more volatile than traditional markets. Is that the case? MESIDOR: Again, depending on your relationship with money, depending on your relationship with traditional finance. As a Black woman who has a master’s degree, who’s middle class, the traditional financial markets is riskier to me than cryptocurrency is. I have never been able to fully participate. So it depends on your vantage point.”).

³⁰⁵ Louise Seamster & Raphael Charron-Chenier, *Predatory Inclusion and Education Debt: Rethinking the Racial Wealth Gap*, 4 SOC. CURRENTS 199, 199 (2017) (defining predatory inclusion as “a process wherein lenders and financial actors offer needed services to black households but on exploitative terms that limit or eliminate their long-term benefits”); Tressie McMillan Cotton, *Where Platform Capitalism and Racial Capitalism Meet: The Sociology of Race and Racism in the Digital Society*, 6 SOCIO. OF RACE & ETHNICITY 441, 443 (2020) (“Internet technologies became a dominant tool of capital because of their ability to expand markets and consumer classes. To both expand and exclude, the platform-mediated era of capitalism that grew from Internet technologies specializes in predatory inclusion. Predatory inclusion is the logic, organization, and technique of including marginalized consumer-citizens into ostensibly democratizing mobility schemes on extractive terms.”).

mankind,”³⁰⁶ play into crypto’s brand as a “democratizing” force for retail investors.

B. The Inside Game

So far, I have discussed ways that the appearance of First Amendment controversy can act as a publicity vehicle among nonlawyers. For these purposes, it does not matter very much whether the arguments put forward line up well with the doctrine.

In actual First Amendment litigation, of course, the quality of the arguments does matter. I grant that “off the wall” arguments sometimes wind up “on the wall” in ways that are hard to foresee in advance,³⁰⁷ and that this seems to happen more often than it used to. Maybe crypto’s off-the-wall arguments will get there too. But most off-the-wall arguments *stay* off the wall, and there is no particular reason to think the crypto lobby’s fringe theories will beat the odds. As things stand today, crypto industry litigants seem highly unlikely to press their First Amendment theories successfully past the pleadings stage—and even less likely to press these theories successfully in cases that have actual commercial significance. These theories simply do not have what it takes to succeed as legal arguments, and to a great extent they may not even be *meant* to succeed as legal arguments.

Instead, the most sophisticated practitioners in crypto seem to value the First Amendment theories I have criticized in this Article as a form of *evidence*: evidence of a live controversy around the constitutionality of crypto regulation. This kind of evidence provides support for at least three lines of attack against new agency policy.

³⁰⁶ Koss, *supra* note 281.

³⁰⁷ Jack M. Balkin, *From Off the Wall to On the Wall: How the Mandate Challenge Went Mainstream*, THE ATLANTIC (June 4, 2012), <http://www.theatlantic.com/national/archive/2012/06/from-off-the-wall-to-on-the-wall-how-the-mandate-challenge-went-mainstream/258040> [<https://perma.cc/X53B-N9W9>].

First, under the “major questions” doctrine, agencies now need special congressional authorization before embarking on policy that raises a “major question.”³⁰⁸ Second, the canon of constitutional avoidance has a similar structure to the major-questions doctrine: courts interpret statutes (and by implication agency powers) narrowly to avoid potential constitutional questions.³⁰⁹ Under this doctrine, a constitutional argument that is too weak to win may nevertheless be strong enough to raise a “question” or “concern” that arguably takes a problem outside of an agency’s jurisdiction.³¹⁰ And third, an agency action might be challenged as arbitrary and capricious in light of its “failure to consider” a

³⁰⁸ Jake Chervinsky (@jchervinsky), TWITTER (Sept. 8, 2022, 4:43 PM), <https://twitter.com/jchervinsky/status/1567977070734745600> [<https://perma.cc/3RYU-4DQ2>] (“Regardless, crypto is a novel & unique technology: how it should be regulated is a major question for Congress (not the SEC Chair) to decide.”); see also Andrew Ackerman, *SEC’S Gensler Signals Support for Commodities Regulator Having Bitcoin Oversight*, WALL ST. J. (Sept. 8, 2022, 3:40 PM ET), <https://www.wsj.com/articles/secs-gensler-supports-commodities-regulator-having-bitcoin-oversight-11662641115> [<https://perma.cc/ZT7G-VJZT>].

³⁰⁹ Jerry Brito & Peter Van Valkenburgh, *Analysis: What Is and What Is Not a Sanctionable Entity in the Tornado Cash Case*, COIN CENTER (Aug. 15, 2022), <https://www.coincenter.org/analysis-what-is-and-what-is-not-a-sanctionable-entity-in-the-tornado-cash-case> [<https://perma.cc/GLT2-Z6MZ>] (“[T]here is a growing movement within the judiciary to simplify statutory interpretation and deny deference to agency interpretations that conflict with the plain meaning of the text. That aside, this narrow interpretation is made even stronger by virtue of a substantive canon of statutory construction called the Constitutional avoidance canon, wherein courts will generally choose statutory interpretations that are narrow when a broader interpretation raises constitutional concerns. In this case, a broader interpretation that allows ideas or software in the abstract sense to be the subject of a block raises at least two grave constitutional issues . . .”).

³¹⁰ See Neal Kumar Katyal & Thomas P. Schmidt, *Active Avoidance: The Modern Supreme Court and Legal Change*, 128 HARV. L. REV. 2109, 2117 (2015) (“Modern avoidance holds that constitutional doubts are enough to trigger the canon, without any need to adjudicate actual unconstitutionality. . . . The modern version of the canon itself encompasses varying levels of constitutional doubt--it can (in theory, at least) be triggered by any constitutional doubt, however weak and inarticulate, or only by very grave doubts.”).

constitutional argument whether or not that argument would ultimately stand under consideration.³¹¹

The common theme among all of these doctrines, then, is that they create opportunities, at least potentially, to disable or deter agency action by *mentioning*—not even endorsing—constitutional arguments that may be weak under close inspection. This sense of distance is a valuable thing for highbrow attorneys who have positioned themselves as trusted, sophisticated liaisons from industry to government.

Consider, for example, the former Department of Justice Bitcoin prosecutor Katie Haun, who joined the crypto venture fund a16z in 2018.³¹² At a16z, Haun hired a bipartisan policy team of former federal officials who ran an influence campaign with legislators, White House officials, and agency regulators.³¹³ The team took advantage of ethics loopholes to avoid registering as lobbyists.³¹⁴ Rather than lobbying, the head of the policy team in Washington—a former aide to then-Senator Biden—described these meals and meetings as “an opportunity to work constructively with policymakers to solve problems of mutual concern.”³¹⁵

³¹¹ See, e.g., Complaint at 29, *Coin Center v. Yellen*, No. 3:22-cv-20375, 2023 WL 2889736 (N.D. Fla. Apr. 10, 2023) (alleging Treasury’s Tornado Cash sanction was arbitrary and capricious in part because “Defendants failed to consider how their criminalization of a privacy tool would chill expressive associations and how their criminalization of the use of the same underlying software at different addresses would chill the right of Americans to write and publish code freely”) But the actual First Amendment count in this same complaint does not allege any chilling effect on coders or publishers of code. *Id.* at 31-32.

³¹² “[W]e don’t view this as a lobbying effort,” said Tomicah Tillemann, a former aide to then-Senator Biden whom Haun tapped to lead a16z’s efforts in Washington. See Eric Lipton, Daisuke Wakabayashi & Ephrat Livni, *Big Hires, Big Money and a D.C. Blitz: A Bold Plan to Dominate Crypto*, N.Y. TIMES (Oct. 29, 2021), <https://www.nytimes.com/2021/10/29/us/politics/andreessen-horowitz-lobbying-cryptocurrency.html> [<https://perma.cc/8PTN-BKER>].

³¹³ *Id.*

³¹⁴ *Id.*

³¹⁵ *Id.*

This is a tone that takes prestige, credibility, and finesse to pull off—and there is simply no way to maintain those strengths while pushing the fringe and paranoid First Amendment arguments that have been developed by organizations like Coin Center and the DeFi Education Fund. So, in a white paper released by her own crypto venture fund, Haun Ventures, Haun’s former Supreme Court co-clerk Steve Engel goes only so far as to say OFAC’s sanctions “plausibly” violate the First Amendment: “[I]t is difficult to predict exactly how a court faced with a First Amendment challenge to the OFAC sanctions will rule. Not all burdens on speech violate the Constitution. . . . But suffice it to say that the sanctions do burden protected speech to some extent . . . ”³¹⁶ It is Haun’s introduction to the white paper that communicates what really matters here: “It’s likely a court may not even reach the constitutional questions, however, because of the doctrine of constitutional avoidance. . . . As the Supreme Court noted recently, the constitutional-avoidance canon provides ‘extra icing on a cake already frosted.’”³¹⁷

IV. How Public Institutions Should Respond

As discussed above, the First Amendment case for broad crypto protections has very little merit. But it does not have to have any merit to interfere in pernicious ways with public policy formation, civic trust, and the fortunes of retail investors. The judges and policymakers who must confront these arguments should think strategically about how to reject them without inadvertently assisting the crypto lobby in its efforts.

³¹⁶ Steve Engel & Brian Kulp, *OFAC Cannot Shut Down Open-Source Software*, HAUN 13 (Oct. 18, 2022), <https://ipfs.io/ipfs/QmTC9q5yidSWoM2HZwyTwB3VbQLVbG5cpDSBTaLP8voYNX> [<https://perma.cc/7HWL-7BD9>].

³¹⁷ Katie Haun & James Rathmell, *OFAC Cannot Shut Down Open-Source Software* (Oct. 18, 2022), <https://mirror.xyz/haunventures.eth/ITTj2t5XoTYLH-3bRr1Vtg1joGSN89-wddRYbCkekPM> [<https://perma.cc/FZ73-S8GL>].

A. Courts

Courts are only now beginning to hear constitutional challenges to laws regulating the cryptocurrency industry.³¹⁸ These challenges, as discussed above, are unserious. But they have publicity value for the industry, and if only for that reason, they will probably keep coming for some time. Courts should do what they appropriately can to discourage or at least avoid rewarding this kind of public relations strategy.

The weakest constitutional challenges to crypto regulation are outright frivolous arguments—for example, the verbal sleight-of-hand that “two-party transactions” in crypto are immune from reporting requirements because the Fourth Amendment’s “third-party doctrine” only applies when there is a bank in the middle.³¹⁹ What the third-party doctrine actually says is that a person has “no legitimate expectation of privacy in information he voluntarily turns over to third parties.”³²⁰ This means, for example, that an individual relinquishes their constitutional privacy rights in discarded documents that are voluntarily given to a “third party” trash collector.³²¹ “Third party” plainly means *any party* other than the individual privacy claimant and the government—not just

³¹⁸ See *supra* Section II.A.3.ii (discussing *Van Loon v. Treasury and Coin Center v. Yellen*), Section II.B (discussing *Van Loon v. Treasury, Coin Center v. Yellen*, and *Carman v. Yellen*).

³¹⁹ Complaint at 46, *Carman v. Yellen*, No. 5:22-cv-149, 2023 WL 4636883 (E.D. Ky. July 19, 2023) (“Nor can the amended §6050I be saved by the so-called ‘third party doctrine.’ First, the parties to §6050I transactions are not conventional third parties because they do not serve in an intermediary role. One of the central stated goals of cryptocurrency is to allow transactions without the intermediary institutions that implicate the third-party doctrine, such as banks and telephone companies.”). See also Peter Van Valkenburgh (@valkenburgh), TWITTER (Sept. 17, 2021, 1:06 PM), <https://twitter.com/valkenburgh/status/1438912345904926720> [<https://perma.cc/5TRB-KK4P>] (“Your constitutional privacy rights are under threat. Say it with me: 🙅 no 🙅 third-party 🙅 doctrine 🙅 in 🙅 two-party 🙅 transactions 🙅”).

³²⁰ *Smith v. Maryland*, 442 U.S. 735, 743-44 (1979).

³²¹ *California v. Greenwood*, 486 U.S. 35, 40 (1988) (trash collector qualifies as a third party).

banks that intermediate what would otherwise intermediate a “two-party” transaction.

The argument that “two-party transactions” are immune from reporting requirements because there is no “third party” misrepresents the law so obviously that at least in principle, it would seem to risk sanctions by violating the prohibition in Rule 11(b)(2) of the Federal Rules of Civil Procedure against basing claims or legal contentions on frivolous arguments.³²²

First Amendment law is relatively open-ended, however, and for that reason it may be harder in this “sensitive area” than in others to say that an argument is so frivolous as to justify sanctions.³²³ Instead, when attorneys present the law in misleading ways—for example, by neglecting to acknowledge a wall of adverse case law on the First Amendment status of computer source code—it may be appropriate for courts to admonish them of their ethical duty of candor toward the

³²² FED. R. CIV. P. 11(b)(2) (“By presenting to the court a pleading, written motion, or other paper—whether by signing, filing, submitting, or later advocating it—an attorney or unrepresented party certifies that to the best of the person’s knowledge, information, and belief, formed after an inquiry reasonable under the circumstances . . . (2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law.”).

³²³ See *Murray v. City of Austin*, 947 F.2d 147, 153 (5th Cir. 1991), *cert. denied*, 112 S. Ct. 3028 (1992) (“Murray’s [First Amendment] claims are, at the very least, protected by the ‘good faith argument’ provision in Rule 11, especially for this sensitive area.”). See also Linda Ross Meyer, *When Reasonable Minds Differ*, 71 N.Y.U. L. REV. 1467, 1505 (1996) (“In the Rule 11 context, law looks almost radically indeterminate, and courts are very reluctant to sanction arguments as substantively legally frivolous (at least unless the litigant’s motives are also suspect). Instead, courts prefer to look to whether the lawyers have ‘done their homework.’ Law in the Rule 11 context means something like good sense or reason—as long as a lawyer makes a distinction ‘with a difference,’ or argues for a change in the law that seems to serve goals we can understand as worthy; the argument is a legitimate one, potentially part of the law.”).

tribunal.³²⁴

Other challenges to crypto regulation will raise First Amendment arguments that are merely weak without being fully frivolous. Almost all “code is speech” litigation fits into this description: strong enough to survive a motion to dismiss, but too flimsy to hold up on the merits.³²⁵ The danger in these cases is that industry representatives will seize on snippets of favorable language and use them to feed misperceptions among lay observers about the state of the law.

The “code is speech” opinions illustrate this danger perfectly. Almost all of the opinions *rejecting* code is speech nevertheless include dicta that, read in isolation, seem to point in exactly the opposite direction: usually some variation on “[c]ourts have held that computer code is speech, and therefore merits First Amendment protection.”³²⁶ Even a lawyer reading

³²⁴ As an example of such an admonition, see *Unum Life Ins. Co. of Am. v. Smith*, No. 2:17-cv-489, 2018 WL 1977257, at *5 (M.D. Ala. Mar. 28, 2018), *rep. and recommendation adopted*, 2018 WL 1973278 (M.D. Ala. Apr. 26, 2018) (“The Court advises counsel for Plaintiff that such advocacy is not acceptable and, in the future, counsel must make some effort to acknowledge or address binding negative precedent in future submissions to this Court. Counsel is free to distinguish negative cases but cannot merely ignore binding precedent.” (citing FED. R. CIV. P. 11)). *See also* MODEL RULES OF PRO. CONDUCT r. 3.3 cmt. 4 (AM. BAR ASS’N 1983) (“Legal argument based on a knowingly false representation of law constitutes dishonesty toward the tribunal. A lawyer is not required to make a disinterested exposition of the law, but must recognize the existence of pertinent legal authorities. Furthermore, as stated in paragraph (a)(2), an advocate has a duty to disclose directly adverse authority in the controlling jurisdiction that has not been disclosed by the opposing party. The underlying concept is that legal argument is a discussion seeking to determine the legal premises properly applicable to the case.”).

³²⁵ *See supra*, notes 58-63 for examples of cases in which the challenger met pleading standards but failed on the merits.

³²⁶ *321 Studios v. Metro Goldwyn Mayer Studios, Inc.*, 307 F. Supp. 2d 1085, 1099 (N.D. Cal. 2004); *see also* *Green v. U.S. Dep’t of Just.*, 392 F. Supp. 3d 68, 86 (D.D.C. 2019) (“The Court, as do defendants, agrees with plaintiffs that the DMCA and its triennial rulemaking process burden the use and dissemination of computer code, thereby implicating the First Amendment. Although the question has not been addressed by the D.C. Circuit, as other

language like this in isolation, rather than the whole series of cases on the issue, is likely to walk away with the impression that controversies around the First Amendment and software are much more serious than they actually are.

Courts should be mindful, in crypto cases, that they are dealing with an industry lobby that benefits from this kind of misperception. In an environment where much of the public walks around with a rough sense that software really does enjoy special constitutional protections, it is easier for crypto interests to make credible-sounding claims that their regulatory arbitrage position is natural and inevitable: “[i]t’s important that the law’s distinction between people and code be respected,”³²⁷ the Chief Legal Officer for Coinbase told the *New York Times* recently. If investors believe there really is such a distinction built into the law, and that it is a durable distinction, then they will tend to overvalue and overinvest in apparently high-performing crypto projects that, in reality, owe their success to regulatory noncompliance.³²⁸

courts have explained, code ‘at some level contains expression, thus implicating the First Amendment.’ Code is speech precisely because, like a recipe or a musical score, it has the capacity to convey information to a human.” (citations omitted) (quoting *United States v. Elcom, Ltd.*, 203 F. Supp. 2d 1111, 1126 (N.D. Cal. 2002)).

³²⁷ David Yaffe-Bellany, *Investors Sue Treasury Department for Blacklisting Crypto Platform*, N.Y. TIMES (Sept. 8, 2022), <https://www.nytimes.com/2022/09/08/business/tornado-cash-treasury-sued.html> [<https://perma.cc/DZR8-MG9A>] (quoting Paul Grewal of Coinbase).

³²⁸ Lael Brainard, Vice Chair, U.S. Federal Reserve Bank, Address at the Bank of England Conference: Crypto-Assets and Decentralized Finance Through a Financial Stability Lens (July 8 2022), <https://www.federalreserve.gov/newsevents/speech/brainard20220708a.htm> [<https://perma.cc/YX5H-CAWT>] (“Intermediaries earn revenues in exchange for safely providing important services. Someone must bear the costs of evaluating risk, maintaining resources to support those risks through good times and bad, complying with laws that prevent crime and terrorism, and serving less sophisticated customers fairly and without exploitation. In the current crypto ecosystem, often no one is bearing these

Judges must therefore take unusual care to avoid reproducing the slogans of crypto activists who are looking to promote misperceptions about the law. “Code is speech” is one of these slogans; other buzzy phrases courts should take care not to elevate include “financial censorship,” “democratizing finance,” and “self-sovereignty.”

B. Agency Regulators

Financial regulators must consider a spectrum of First Amendment-related litigation risks that arise when they adopt new rules or enforcement strategies to deal with crypto products. This spectrum includes not only the risk that a certain measure might be invalidated, but also that litigation challenging a certain measure might develop into a beachhead against the agency’s authority more generally.

Agencies will not have a hard time fending off direct First Amendment challenges in court. The *indirect* challenges, however—whether leveled in terms of constitutional avoidance, or the major-questions doctrine, or some other similar second-order doctrine—may pose a bit more trouble. If crypto industry messengers succeed in creating the impression that the First Amendment status of cryptocurrency is a subject of reasonable debate, then these indirect second-order arguments will gain force in spite of agencies’ best efforts to counter primary-level First Amendment arguments on their own terms.

Agencies should do what they can to deny the aura of credibility to crypto’s First Amendment theories. If crypto’s First Amendment theorists are seen as snake oil peddlers, then they will have a harder time invoking the constitutional-avoidance or major-questions doctrines successfully. The agencies should therefore engage and combat misleading

costs. So when a service appears cheaper or more efficient, it is important to understand whether this benefit is due to genuine innovation or regulatory noncompliance.”).

constitutional theories aggressively and proactively.

The SEC and the CFTC already engage in ongoing education campaigns to discourage investors from investing in risky products.³²⁹ These campaigns should include “pre-buttals” of frivolous theories and misconceptions about the constitutional status of crypto. For a model, regulators should look at “The Truth About Frivolous Tax Arguments,” a crisp but exhaustive guide to tax avoiders’ failure to advance sham legal theories in court.³³⁰

In a best-case scenario, an aggressive pre-bunking campaign might persuade crypto industry attorneys to stop promoting claims that crypto is speech. Crypto industry legal filings, comment letters, and white papers already tend to raise First Amendment arguments “at the back of the brief,” and this signals that the drafters of these documents recognize that the arguments are right at the threshold of reputability.³³¹ If a well-executed campaign of ridicule and scorn manages to nudge these arguments *over* the threshold of reputability, then some attorneys might decide to distance themselves and their clients from the whole concept of “crypto as speech.”

C. Congress and State Legislatures

First Amendment litigation from the crypto industry presents less of a challenge for Congress than for an administrative agency. When crypto interests face off against administrative agencies, they can paper over the weakness of their First Amendment theories by wrapping them in administrative law theories: an administrative regulation may

³²⁹ See, e.g., *Investor Education*, U.S. SEC. & EXCH. COMM’N, <https://www.sec.gov/education/investor-education> [<https://perma.cc/FD7B-6Y3G>]; *Learn & Protect*, SEC. COMMODITY FUTURES TRADING COMM’N, <https://www.cftc.gov/LearnAndProtect> [<https://perma.cc/D7V3-JN7U>].

³³⁰ See *The Truth About Frivolous Tax Arguments*, INTERNAL REVENUE SERV. (Mar. 2002), <https://www.irs.gov/privacy-disclosure/the-truth-about-frivolous-tax-arguments-introduction> [<https://perma.cc/2PK4-KBRA>].

³³¹ See *supra* note 101 and accompanying discussion.

raise a speech-tinged “major question,” or it may raise First Amendment “concerns” that can be sidestepped by narrowing the agency’s jurisdiction under the constitutional-avoidance canon.³³² But Congress does not have to worry about these second-order theories.

Instead, the only way to mount a successful First Amendment challenge to a *statute* is to show that the law *actually violates* the First Amendment. The risk of that happening, no matter what policy Congress pursues toward crypto, is very low because the available stock of First Amendment arguments is so weak. But some techniques for regulating the industry will run a particularly low litigation risk, and for that reason they probably deserve a look.

As is often the case in constitutional law, the bluntest and most dramatic policy interventions are the safest from challenge.³³³ Consider, as a starting point, a simple across-the-board ban on exchanging cryptocurrencies for cash. Couple it with a ban on exchange with financial institutions that do not comply with the cash-for-crypto ban. Cryptocurrencies that could not be converted to cash, at least not conveniently, would quickly lose all their utility both as a vehicle for speculation by retail investors and as an effective vehicle for money laundering and criminal activity. Plus, very few actual businesses accept cryptocurrencies as a form of payment. A ban at the point of exchange for cash would wipe crypto off the map as anything other than a hobby.

This kind of ban would also sidestep the “code is speech” canard completely. This is because (1) a ban on crypto-for-cash exchanges would not burden any speech *about* crypto; and (2) it would not hinder any person’s ability to develop or distribute code. People could sell copies of the code *itself* for cash, if they found a buyer; they just couldn’t transfer value on the blockchain in exchange for cash. Even in a world where code

³³² See *supra* notes 307-310 and accompanying text.

³³³ See Louis Michael Seidman, *State Action and the Constitution's Middle Band*, 117 MICH. L. REV. 1, 25 (2018).

enjoyed strong First Amendment protections, it would be very hard to argue that a ban on cash-for-crypto exchanges actually burdens code in any cognizable way.³³⁴

Nor would the analysis change if, for example, the banking embargo applies to some coins but not others on an allegedly discriminatory basis. Not even *viewpoint* discrimination violates the First Amendment when the law in question burdens conduct rather than speech.³³⁵

Imposing restrictions on the code itself—for instance, by imposing duties on developers and promoters to incorporate know-your-customer controls into DeFi protocols—would be slightly riskier, but not by much. At that point, legislators would be wading into the zone governed by the “code is speech” doctrine. But because Congress would be regulating the code in light of its functional rather than expressive characteristics, the law would still almost certainly survive. That is how every case in this line to date, except *Bernstein*, has come out.³³⁶ And the *Bernstein* court was clear that the law it

³³⁴ Consider two examples of the type of argument one would have to advance: (1) Maybe someone would argue that by blocking these exchanges, a crypto-for-cash ban would necessarily prevent the blockchain’s ledger from being updated in a way that reflected those changes, and that this would be a form of censorship. But that would be like arguing that the state cannot block transfers of real estate because the writing on the deed is speech. (2) Developers could complain that, because of the crypto-for-cash ban, the art of writing source code for crypto products is less remunerative than it was, and that this is a burden on code-as-expression. But this would be like arguing that Ponzi schemes should be legal so that writers can make money writing business books about Ponzi schemes.

³³⁵ See *Wisconsin v. Mitchell*, 508 U.S. 476 (1993) (upholding, over First Amendment challenge, a law that provided penalty enhancements in cases of “Bias-Motivated Crimes”); *Id.* at 487 (“Whereas [a viewpoint-discriminatory and unconstitutional hate-speech ordinance struck down the previous term] was explicitly directed at expression (i.e., ‘speech’ or ‘messages’), the statute in this case is aimed at conduct unprotected by the First Amendment.”).

³³⁶ See *supra* notes 56-63 and accompanying discussion.

invalidated really was the rare one that was aimed at expression rather than functionality.³³⁷ Courts are much more likely to read restrictions on crypto products the same way they read the “anti-circumvention” provisions of the Digital Millennium Copyright Act—as measures directed toward the economics of a certain type of software rather than its potentially expressive uses.³³⁸

Should Congress be any more concerned about the privacy-rooted First Amendment arguments? One proposed bill, for example, would impose reporting requirements on virtually every touchpoint in the crypto ecosystem, right down to the physical bitcoin kiosks that can sometimes be found in coffee shops and the like.³³⁹ Crypto advocacy groups will argue that these kinds of reporting requirements will put some kind of downstream chill on certain expressive activities where the spender would prefer total anonymity. And any kind of restriction on crypto as a medium for exchange would lend itself to a similar kind of argument.

The critique is accurate at some level—but if it had any legs as a legal matter, then Congress would already be in very hot water for imposing reporting obligations on traditional banks and payment processors. The expressive chill from those requirements is presumably many times greater, due to the volume of transactions processed, than any crypto reporting requirement could possibly be.

There is little reason to think courts want to rip up the whole landscape of AML policy because of its chilling effects on expression. If anything, the Roberts Court’s jurisprudence on “material support” for designated terrorist groups shows an unsettling willingness to carve away at First Amendment doctrine when it comes into conflict with key national security

³³⁷ See *supra* notes 45-50 and accompanying discussion.

³³⁸ See *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 435 (2d Cir. 2001); see also *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp .2d 294, 316 (S.D.N.Y. 2000).

³³⁹ Press Release, *supra* note 20.

policies.³⁴⁰ Anything can change, but until *everything* changes, Congress should not worry that the First Amendment requires it to tolerate and accommodate a technological underworld of illicit cross-border financial activity.

Conclusion: Onto the Wall?

The crypto industry's First Amendment arguments aim to make it difficult or impossible for the public to rein in a heavy-polluting, crime-facilitating industry that is rife with overt fraud and that, even at its best, depends on large numbers of ordinary investors taking unreasonable risks with their money. Fortunately, the First Amendment theories are weak and unlikely to get far in the courts under any existing doctrine.

But what if the doctrine changed in crypto's favor? Maybe some of the arguments for crypto-as-speech, flimsy as they are, are just plausible enough to move from off-the-wall to on-the-wall. This looks like a low-probability outcome, but it is perhaps worth contemplating if only because of the high collateral damage it would inflict on other areas of law and policy.

The first danger is that most of the arguments for exempting crypto from market rules are likely to metastasize into arguments for tearing up the rules altogether. The arguments in *Carman v. Yellen* against reporting crypto transactional information to the IRS, for example, apply with equal force (or lack of force) to cash payments; the claimed distinctions

³⁴⁰ Compare *Brandenburg v. Ohio*, 395 U.S. 444, 447 (1969) (articulating the normal rule that government may not “forbid or proscribe advocacy of the use of force or of law violation except where such advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action”), with *Holder v. Humanitarian L. Project*, 561 U.S. 1 (2010) (finding that “material support” for foreign terrorist organizations encompassed educational programming on nonviolent resistance). *Holder* has been criticized for undermining previously stringent protections for subversive advocacy and association in cases where the government invokes national-security concerns.

between these situations are laughable.³⁴¹ Arguments that DeFi investing platforms are exempt from regulation because “code is speech” depend on similarly flimsy distinctions between DeFi startups and traditional business associations.³⁴² First Amendment holdings limited initially to DeFi could grow in unexpected directions to threaten the core informational controls at the heart of securities law.³⁴³

Crypto-as-speech would also badly exacerbate the crisis of mission creep in First Amendment doctrine. It is true that many of the theories underlying crypto-as-speech already have some tepid level of acceptance in lower courts—no court in twenty years, for example, has rejected out-and-out the theory that computer code, and specifically cryptographic code, can qualify as speech. But the existing code-as-speech case law—in the one or two cases where it has produced something like a victory for the code purveyor—has dealt exclusively with academic situations that have essentially no commercial interest.³⁴⁴

A win for the multi-billion-dollar crypto industry, on the other hand, would move First Amendment law’s zaniest ideas to the center of the action and entrench them as pillars of First Amendment doctrine. One common feature among the First Amendment theories I have addressed in this Article is that

³⁴¹ See Section II.B.1 *supra*. The challenge in *Carman v. Yellen* posits that reporting requirements for large crypto payments threaten to reveal anonymous crypto donations to expressive causes if the payors decide not to take reasonable steps to anonymize their donations to expressive causes. See No. 5:22-cv-149, 2023 WL 4636883, at *8 (E.D. Ky. July 19, 2023) (“The harm is hypothetical, conjectural, and insufficient to establish an injury in fact. . . . Plaintiffs are constrained only by their own subjective chill.”). See also Faife, *supra* note 184 (discussing the possibility that exempting crypto from reporting would imply an exemption for large cash transactions as well).

³⁴² See *supra* text accompanying notes 72-80.

³⁴³ For a discussion of risks along these lines in a similarly tech-heavy investment setting, see Kyle Langvardt & James Fallows Tierney, *On “Confetti Regulation”: The Wrong Way to Regulate Gamified Investing*, 131 YALE L.J. F. 717, 736 (2022).

³⁴⁴ See *supra* notes 45-53 (discussing *Bernstein* and *Junger*).

they lack clear stopping points. If owning a Bitcoin node that automatically relays a transaction ledger qualifies as First Amendment “ecosystem speech” and a form of “economic activism,” then it is hard to even conceive what kind of abstract process or relationship should *not* qualify as protected speech. And if broker-dealer registration for DeFi projects is viewpoint-discriminatory, as Coin Center has claimed, then just about any regulation that affects people with opinions should also count as “viewpoint discrimination.” These kinds of arguments spread First Amendment doctrine as thin as it can possibly go, and over time they can debase the level of protection the First Amendment has to offer in more deserving cases.³⁴⁵

Finally, and perhaps most ironically, some of the arguments for crypto-as-speech would make it very difficult to incorporate meaningful speech protections into future internet architectures. Crypto promoters are quick to point out that cryptocurrencies such as Ethereum have features that could eventually provide the technical substrate for the new and more decentralized Internet architecture often referred to as Web3.³⁴⁶ Web3’s skeptics, however, are quick to point out that these architectures are vulnerable in their own ways to censorship by centralized private institutions—in some cases, the same crypto exchanges and brokers that insist they have First Amendment coverage today.³⁴⁷

³⁴⁵ See Langvardt, *supra* note 55, at 783 (“The pattern is always the same: the law announces a strongly protective doctrine with narrow coverage. Years later, the doctrine is applied in strange cases that resemble only abstractly the cases that inspired the doctrine in the first place. Applying the doctrine’s protections to a more diverse set of cases generates occasional undesired outcomes that were not within the contemplation of the Court when it announced the doctrine in the first place. The Court either defines down the terms of the doctrine or implements new doctrinal features that allow it to control its exposure to the undesired outcomes. Finally, the diluted doctrine is applied to the cases at its core.”).

³⁴⁶ See Patel, *supra* note 19.

³⁴⁷ See Marlinspike, *supra* note 7.

Strong First Amendment protections for these institutions all but ensure that some company in their mold will govern online expression in the same troubling way that today's platform giants do. Early public interventions on Web3 architecture could at least conceivably produce a future Internet that is less prone to centralization and less dependent on centralized censorship. But First Amendment protections for crypto would make public intervention on this front (or any other front, for that matter), far more difficult.

Crypto products, despite their frequent claims to “democratize” finance, are premised on a deep hostility to public governance. These products’ most ideological boosters define freedom as a withdrawal from institutional structures that are built on trust. First Amendment doctrine, in its worst moments, has a tendency to conceive of freedom in the same stunted way—and in doing so, it tends to ignore and ultimately promote concentrations of private power in much the same way that the crypto business does.³⁴⁸ Maybe this explains some of the First Amendment’s magnetism for crypto groups. It’s a good thing real-life First Amendment law doesn’t back what they’re selling.

³⁴⁸ Think of *Citizens United*’s hostility toward corporate political spending caps meant to head off the appearance of corruption. *Citizens United v. Fed. Election Comm’n*, 558 U.S. 310, 356 (2010) (“When Government seeks to use its full power, including the criminal law, to command where a person may get his or her information or what distrusted source he or she may not hear, it uses censorship to control thought. This is unlawful. The First Amendment confirms the freedom to think for ourselves.”).