



Theorizing the 2017 blockchain ICO bubble as a network scam

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Abstract

In the popular imagination and in academic literature, scams are usually seen as dyadic, involving a con artist and a mark. This article retheorizes scams as networked, collective activity. Scams, like all commerce, are shaped by and in turn shape communication channels. The “network scam” is therefore offered as a lens for understanding scams in the digital economy more broadly. As a case study, this article documents the 2017 Initial Coin Offering (ICO) Bubble. ICOs were supposed to be a new, radically disruptive way of crowdfunding to finance the development of a new, radically disruptive blockchain technological ecosystem. All told, ICOs raised an estimated \$5 billion in 2017 alone. But by all analyses—both from observers and participants, both during the bubble and after—the vast majority of ICO turned out to be scams. This article uses these scams to theorize the “network scam” as a collaborative effort to bring about a shared future, but one that is fundamentally characterized by arbitrage on uneven belief among participants in that future ever coming to pass.

Keywords

Bitcoin, blockchain, crowdfunding, cryptocurrency, digital economy, Ethereum, Initial Coin Offerings, scams

Introduction

The 2017 ICO bubble was a peak of blockchain exuberance. That year, countless blockchain projects were financed using Initial Coin Offerings, or ICOs. ICOs were supposed to be a new, radically disruptive way of crowdfunding the new, radically

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disruptive blockchain ecosystem. And the resources, thrillingly, seemed to be there: ICOs raised an estimated \$5 billion in 2017 alone. But by all analyses—both from observers and participants, both during the bubble and after—the vast majority of ICOs turned out to be scams, leaving hapless investors with worthless cryptocurrency tokens.

In the popular imagination and in the academic literature, scams are seen as individualistic. A “confidence game” is usually imagined as a game with two players, or at least two teams: the con artist and the mark. The scams I theorize here are better understood, to maintain the game metaphor, as part of a massively multiplayer online game. Like the technological future ICOs were meant to fund, ICO scams were decentralized without a clear set of perpetrators and victims: a “network scam.”

This article uses the case of the 2017 ICO bubble to offer an initial theory of the network scam, defined for these purposes as a collaborative effort to bring about a shared future, but one that is fundamentally characterized by arbitrage on uneven belief among participants in that future ever coming to pass. This article first situates the study of scams within new media studies. Next, it offers an accessible, non-technical introduction to ICOs and the 2017 bubble. It then turns to ICO scams, identifying the two key types: the “exit scam” and the “pump and dump”. It argues that the scams of 2017 should not be seen as an unfortunate aberration in crypto.¹ Rather, scamminess is core to its ethos. Ultimately, this article suggests that the lens of the network scam could be meaningfully applied to scams in the digital economy more broadly.

Of course, network scams, as defined here, aren’t new. In his 1857 novel *The Confidence-Man*, perhaps the foundational text for understanding scams in modernity, Herman Melville offers a series of conversations between characters aboard a steamboat traveling down the Mississippi River, all of whom are attempting to scam each other. Ultimately, it’s unclear to whom the “confidence-man” of the title refers. Aboard the steamboat *Fidele*, everything is blurred: conversation and commerce, commerce and con artist, con artist and chump. The novel satirizes the idea that scams are an aberration within the market economy and the idea that there is one singular scammer rather than a network of scammers whose interactions constitute that economy.

But network scams are particularly important to understand at the present historical conjuncture because the boundaries between legitimate and illegitimate capitalism seem to be in flux. In part, this is due to the larger turn away from traditional institutions of the capitalist economy and of its twin, consumer protection—a turn that both crypto and the mainstream platform industry are very much situated within and accelerating. If we accept, following Manuel Castells (1996), that social and economic life is increasingly assembled according to networks, both technological and organizational, then we need a theory of the scam that unsettles the scammer–scamtee dyad.

This article is based on an almost decade-long ongoing ethnographic engagement with the crypto community “ecology” (Rella, 2020). This analysis is bound within a particular historical conjuncture. It is not a generic description of how cryptocurrency, blockchains, or ICOs specifically are *supposed* to work in theory, decontextualized from their social reality. Rather, this article documents and analyzes how they *did* work at during one period in their history.

Scams and new media studies

Despite important interventions (including this special issue!), scams are relatively untheorized in media studies. But scams as a topic sit squarely in the study of new media and society. This article is part of a larger ongoing project to situate scams therein.

As Swartz (2020) argues, commerce maps alongside communication channels and technology, and so too does the scammy. As Brooke Harrington (2012: 396) puts it, “fraud is essentially a crime of interaction” and so scams happen where interaction happens, including mediated spaces. Scams were an important part of the classified ads that made up no small part of the business model for newspapers during their heyday, as they are for online marketplaces today (Lingel, 2020). The telephone was always a vector for scam calls and remains so, especially in the shadow of the post-colonial geography of corporate call centers, where infrastructure and training are plentiful but “legitimate” work is scarce (Lewis, 2021).

The social web, from its earliest days to the present, has created new opportunities for commerce of all kinds, including that which are labeled scams. E-mail is the domain of the so-called 419 or Nigerian Prince scam (Brunton, 2013; Burrell, 2012; Nakamura, 2014; Zook, 2007). More recently, social media has proven to be fertile ground for both the cultivation of a world in which scams make sense and the diffusion of scams themselves. Indeed, criminologists characterized the era of mass Internet adoption as “a virtual cornucopia of new opportunities for exploitation” (Shover et al., 2004: 60). Scams are a large part of what happens online and new media scholarship should attend more closely to them.

Scams not only take place within communication systems; they also shape them. They function to push up against and discover the limits of social, economic, and technological systems. In turn, scams, like all undesired behavior, shape the norms and rules of communication systems. These rules have institutional effects that have consequences beyond the initial cases they were meant to deal with. As Gillespie (2018: 67) demonstrates, in socio-technical systems, “every traffic light is a tombstone”—every rule is evidence of a previous, possibly catastrophic need for a rule. Scams, then, tell us something about the important socio-technical vulnerabilities in the economy and in communication ecosystems.

Recent scholarship has meaningfully interrogated the digital economy. We need to understand its shadow and the vexed relationship between the two. This is a study of how the attempted production of a new decentralized information infrastructure—and indeed, a future—was bound up in activity that, in retrospect and even at the time, was recognized by participants and observers as scams. These scams mirror the architecture of the communication systems they depend on and promise to build.

Understanding the 2017 ICO bubble

In the following sections, I offer first an accessible introduction to blockchain technology and ICOs, and then a short, high-level history of the emergence of ICOs. Because this article is intended for media studies and general academic audiences, it does not delve too deeply into the intricacies of the technology, nor into the deeper labyrinths of

the debates around maintaining it. Nevertheless, it is important to understand on a basic level the mechanics of ICOs and to situate the 2017 ICO bubble within a particular historical trajectory.

What is an ICO?

ICOs involve the production of a new cryptocurrency token, the promise to build a blockchain-based product that will use that token, and the sale of that token to finance that product. A typical ICO might have looked something like this. A group of people form a startup company to launch a product. They publish a whitepaper outlining their vision for the product, its viability, and the amount of funds they need to make it happen. The proposed project has something to do with blockchain technology, and cryptographic tokens will play some role in how the product operates. The founders then use a blockchain platform to create a new token. They spread the word online through social media, forums, and chat groups. Investors buy those tokens—sometimes even before they are issued—by sending cryptocurrency directly to the people launching the ICO. Sometimes the sale of the token is organized in more complex ways to incentivize early support. The company uses the funds raised to finance the development of their product.

The term *ICO* mirrored the term *Initial Public Offering* (IPO)—the standard way that companies “go public” and enter a stock exchange by offering shares to institutional and individual investors. But ICO tokens were different from traditional stocks, most importantly because ICO tokens did not constitute an ownership share in the company itself. Tokens were valuable, in theory, because one day the blockchain product that uses them would be useful. Like a stock, the price of a token was initially offered at a particular amount, and then the tokens were listed as part of the “economization stack” (Caliskan, 2021) on any number of different crypto exchanges and worth whatever the market would bear for them.

ICOs promised to democratize investment in technology beyond venture capital firms and the very wealthy, and by doing so democratize the kinds of technologies that could be funded and the kinds of people who could benefit from those investments. ICOs also promised to circumvent government regulation of investments, which, although designed to serve the public interest, were seen by some, especially in the crypto community, as unnecessary bottlenecks slowing down innovation.

More importantly, ICOs promised to fund not just any technology, but blockchain technology. The practice of ICOs partakes in a version of “blockchain dreams” (Swartz, 2017). As Rachel O’Dwyer (2015) puts it, blockchain is a “radicalizing infrastructure.” ICOs promise a future in which a significant portion of the infrastructures of economic and everyday life is organized on the blockchain instead of by traditional companies and governments (Herian, 2019). Each ICO builds a different product and those products are stitched together via a market exchange for their rainbow of tokens to constitute an “Internet of value” (Euchner and Tapscott, 2019). The resulting “cryptoeconomics” opens up “the economy itself as design space” (Bryan et al., 2018). The token economy thus ramifies into the infrastructure of society.

But ICOs also promised to make their investors rich. By purchasing tokens, investors were buying, at a low price, the very means of participation in the coming economic

order (Husain et al., 2020). In the meantime, investors could make money by speculating and trading tokens in a robust secondary market. Unlike regulated stock exchanges that have criteria for membership and operate on a strict schedule, crypto exchanges were open to anyone, globally, and ran around the clock.

A very brief history of ICOs

The fundamental technology underlying every ICO is a blockchain, a record of accounts that is verified and shared among a network of computers (DuPont, 2019; Vidan and Lehdonvirta, 2019; Caliskan, 2020; Woodall and Ringel, 2020). The best-known example—and the origin of the term—is the Bitcoin blockchain. By 2011, enthusiasts had begun to appropriate from the Bitcoin software to create alternative cryptocurrencies.

The first ICO was likely MasterCoin, which was launched in 2013 to fund a supplementary protocol that would allow new financial products to sit on top of the Bitcoin blockchain. Anyone who sent one bitcoin to the MasterCoin address would receive 100 MasterCoins plus an additional 10 MasterCoins per week until the end of the sale. Only those who held MasterCoins could use the new protocol. The MasterCoin sale raised more than 5120 bitcoins, approximately \$500,000 at the time.

In late 2013, Vitalik Buterin released the Ethereum whitepaper, which laid out his vision for a “next generation” platform and programming language to build blockchain-based “dapps,” or decentralized applications. In 2014, Ethereum launched an ICO to fund its development. The ICO was considered a “presale” because neither Ethereum the blockchain, platform, nor programming language existed in any material way. Buterin was forthright that the ICO was a leap of faith: “You are trusting us to take the bitcoin and use it to develop Ethereum” (Van Eyk, 2014). This assertion of trust should also be read as an assertion of caveat emptor: investors were responsible for their own decision to trust. Ethereum serves as the archetypical example of an ICO. Since its beta launch in 2015, most ICOs have run on Ethereum. It was an ICO that made all other ICOs possible.

This rhetorical shift away from speculation was in part to ward off regulation, but can also be read as an attempt to set Ethereum up as a foil to Bitcoin. By 2015, hype shifted from Bitcoin as a currency to its underlying blockchain. Bitcoin, primarily useful as a form of “digital gold” and secondarily as a form of “digital cash,” was associated with anarcho-capitalism and cyber-libertarianism (Brunton, 2019; Dodd, 2018; Golumbia, 2016; Karlstrøm, 2014; Maurer et al., 2013; Swartz, 2018).

Blockchain, on the contrary, could be imagined to do just about anything and therefore could be used to develop a wider variety of utopian imaginings (Brekke, 2018; Swartz, 2018). Unlike Bitcoin, which was siloed from, if not hostile to, traditional institutions, blockchain was as useful for banks, healthcare, and governments to think with, as evidenced by the countless well-funded blockchain “innovation labs” and “accelerators” that sprung up during this time (Cheesman, 2020; Swartz, 2018).

One of Ethereum’s initial promises was to allow people to build not only decentralized apps, but the more ambitious decentralized autonomous organizations, or DAOs. The vision of a DAO was a company that “doesn’t need” humans: “no CEO, no boss, managed by blockchain” nor, indeed, “workers” (Pangburn, 2015; Epstein, 2017). In

April 2016, a whitepaper was released outlining a proposal for The DAO, an ICO intended to create a DAO that enabled investors to directly fund new DAOs (DuPont, 2017). It was described as “A Venture Fund with Plenty of Virtual Capital, but No Capitalists” (Popper, 2016).

With or without “capitalists,” The DAO attracted greed and thus fraud. On 17 June 2016, a hacker took advantage of one of its numerous security vulnerabilities and drained The DAO of 3.7 million ether tokens, about 30% of the total amount it held. The attack was seen as “one of the largest digital heists in history” (Leising, 2017). It “smashed” the “dreams” of those hoping to show that “blockchains are poised to replace our legal, political, and social frameworks with code” (Peck, 2016).

In the months that followed, the Ethereum community made the difficult and controversial decision to hard fork the Ethereum blockchain, essentially splitting the network off into a new a blockchain that reversed the hack and made whole the defrauded investors. This killed the DAO, but, it was reasoned, kept the Ethereum dream alive (DuPont, 2017). But in the eyes of some, the fork violated the core principles of Ethereum, a project whose ideology was inherited in the idea and practice of an immutable blockchain.

Just over a year after the attack in July 2017, the US Securities and Exchange Commission released a report of its investigation into The DAO. Although it did not take action, it did classify ICOs as a securities and therefore subject to regulation as such. But in the intervening year, there was a frenzy around ICOs that dwarfed The DAO and its scandals.

The 2017 ICO bubble

Perhaps surprisingly given its outcome, The DAO attack and the subsequent fork did not put a damper on crypto dreams or crypto speculation. Instead, The DAO made clear that it was possible to build and run ICOs on Ethereum, and that there were people who would throw money at them.

In 2017, more than an estimated \$5 billion was raised through ICOs (Russolillo, 2017). The ICO pitch became standardized: a website, a whitepaper, an animated explainer video, a GitHub repository, a subreddit, or other discussion group. In June 2017, Brave Software raised the equivalent of \$36 million in 24 seconds in an ICO to fund a new web browser that would bring micropayments to digital advertising. In September 2017, in the largest ICO of the year, Block.one raised the equivalent of \$700 million to create a product that would speed up blockchain technology, which was notoriously slow and hard to scale (Vigna and Rudegeair, 2017). According to one 2017 analysis (Koetsier, 2017), “the pace of this almost magical wealth creation seems to be doubling on a monthly basis.”

But fundraising new blockchain startups was not the only, nor was it the primary, financial activity driving the ICO boom. Rather, the proliferation of tokens created a chaotic secondary market. With each ICO, cryptocurrency exchange platforms hustled to incorporate the new tokens into their systems. Interactive web dashboards tracked the relative prices of tokens and enabled users to swap one for another. Long after the end of an ICO, token traders remained glued to their screens, commiserating in group chats while they watched the value of their portfolios rise and fall.

In 2017, ICOs were widely seen as an on-ramp to participating in the blockchain revolution (and perhaps riches) for those who had missed out on the first Bitcoin gold rush and were determined to not miss out again. According to one study using data from 2016 to 2018, the median investor invested around \$1200, about the cost of the iPhone X, released in 2017 (Fahlenbrach and Frattaroli, 2021). A survey conducted in early 2018 found that the typical ICO investor was a 32-year-old, college-educated male with a background in business or computer science living in the United States or Europe (Fisch et al., 2021). Despite this relatively privileged background, they were not universally experienced investors: less than half reported previously investing in either investment funds or stocks, and 19% reported no prior investment experience at all.

While it was happening, the ICO bubble was described from both inside and outside the crypto community as something unusual. Terms like “ICO madness” were everywhere on crypto forums and in the press. There were ICOs for blockchain products that would track dental records, diamonds, carbon usage, and chickens. The ICO for the Useless Ethereum Token (UET), intended as satire, raised \$63,750 (Wong, 2017). Most ICOs used Ethereum, so the ICO boom drove up the price of ether. Some were worried that Ethereum was becoming nothing more than an “ICO machine” (Prusak, 2017), but it was easy to find comfort in the fact that, as one observer put it, “In a gold rush, it’s good to be selling the pans” (Shin, 2017).

In July 2017, when the US Securities and Exchange Commission (SEC) released a report of its investigation into The DAO, it asserted regulatory authority over ICO tokens, classifying them as securities and requiring that, going forward, they be registered as such. Some ICOs sought SEC approval, others structured their ICOs in creative ways that they believed would not fall under the purview of regulation, and others took their chances that the regulation would not or could not be enforced. The 2017 ICO boom occurred in a pocket of time between the ostensible need for a rule and its fruition: every stop sign is a tombstone indeed.

By January 2018, the ICO hype had fizzled. In a Twitter thread, one analyst put it plainly, “It’s now obvious that ICOs were a massive bubble that’s unlikely to ever see a recovery” (Cermak, 2019). More broadly, 2018 has been described as “the Great Crypto Crash” (Patterson, 2018) and the beginning of so-called “crypto winter” (Casey, 2018), which, for a short time anyway, seemed to cool financial and popular interest in blockchain projects from investors.

ICOs and scams

Why did the ICO bubble burst? One analyst wrote,

It’s now common knowledge that in addition to raising funds from “unsophisticated” retail investors, many token sales projects mismanaged funds and were nowhere near having a multivariate product . . . This unconventional method of fundraising left investors with little legal recourse for making a claim on projects that proved to be fraudulent or mismanaged. (Cryptus, 2019)

A 2017 headline from tech industry news site *Crunchbase* was a bit harsher: “Crypto Trash Fire Attracts Public Market Idiots” (Wilhelm, 2017). In other words, the bubble burst because too many ICOs were scams.

Indeed, today the ICO bubble has become synonymous with scams. Even amid the bubble, countless articles in the mainstream and crypto trade press documented their prevalence. The *Wall Street Journal* found that of the 1450 ICOs they analyzed, 271 seemed to, as the newspaper put it, “show hallmarks of fraud” (Jones and Shifflett, 2018). An industry report from the firm Satis declared that 78% of ICOs were scams (Dowlat, 2018).

Even in 2017, websites and posts that helped investors avoid scam ICOs abounded. Most of these articles included a list of red flags for scams. The *Wall Street Journal* report offered the following indicators: “plagiarized investor documents, promises of guaranteed returns and missing or fake executive teams” (Jones and Shifflett, 2018). In early 2018, the SEC’s Office of Investor Education and Advocacy made a surprisingly realistic decoy scam ICO website for HoweyCoin—, named for the 1946 landmark securities fraud case involving Howey-in-the-Hills Service company, whose sales of orange groves in Florida were found to be a scam, or at least an unregistered security— and an accompanying guide to identifying scams. But because the bubble was still expanding, these warning lists became checklists to help scammy ICOs create websites and whitepapers that passed muster with investors.

What did it mean for an ICO to be “a scam?” Sometimes the scam label is a way of seeing: for example, among ICOs, there were many insider token-pricing deals that would be chargeable as a felony in other, more regulated investing contexts. Does this lack of regulation mean that those arrangements, because they are not criminal, are not scams? Indeed, some ICO scams only became scams after the DAO report classified ICO tokens as securities: most of the actions the SEC would pursue in this domain in the years to come would be against those that failed to properly register. In practice, a “scam ICO” during the 2017 ICO bubble seemed to refer to one of two common types: the exit scam and the pump and dump.

Exit scams

Much scammy activity around ICOs took the form of exit scams. ICO exit scams are relatively simple: someone announces an ICO, builds a website, publishes a whitepaper, sells tokens (or the promise of future tokens), receives a bunch of ether—and then, instead of building the product, disappears, leaving investors with a worthless token. It’s the classic take-the-money-and-run scam, facilitated by the boundlessly exuberant and relatively anonymous and unregulated environment of crypto in 2017.

An example of an ICO exit scam that made the rounds in 2017 was that of Confido, which ironically is Italian for “I trust.” Confido had a website that looked much like every other ICO website, a whitepaper that read like every other ICO whitepaper, an animated explainer video that played like every other ICO animated explainer video. Confido, these materials explained, would provide a blockchain-based escrow service for buying and selling things with cryptocurrency in online marketplaces, adding a layer of protection in the caveat emptor world of digital cash. Its CEO was a Dutch developer with hipster-nerd facial hair and ecommerce experience. His partner wore a suit jacket and had worked at McKinsey. There were LinkedIn, Facebook and Twitter profiles. The ICO raised the equivalent of \$374,477 in 2 weeks (Mix, 2017).

Then, the leadership team of Confido disappeared. Clever Reddit users quickly determined that the accounts had been fake, the names and some of the details borrowed from real people to anticipate and seed Google searches. Redditors also noted—as some had been saying all along—that Confido had no code in any GitHub repository and no other indication of progress toward a product. Someone made off with hundreds of thousands of dollars and investors were left holding worthless tokens that would never operate a blockchain.

Confido is a textbook exit scam, one of the 78% of ICOs that, as the Satis report put it, “had no intention of fulfilling project development duties with the funds” (Dowlat, 2018). Indeed, many exits occurred after the pre-sale, after the ether had been sent to the ICO address, but before tokens were even produced.

But it is hard to know whether, from the outset, all of these exit scams were designed as such. And certainly, plenty of projects that may have started in good faith essentially functioned as exit scams; after all, the majority of ICOs funded in 2017—intentional exit scams or not—had failed by 2018 (Haig, 2019). One analyst charitably explained the larger “ICO failure” as a case of “misaligned incentives between founders and investors” (Cermak, 2019). Or, as a longtime professional in the crypto community told me, much more cynically,

Come on, if you were given a zillion dollars to make a stupid thing, no actual strings attached, would you actually make that thing? If you basically knew it would be impossible to make it and if you know that even if you did make it, no one [would] ever actually use it, why would you bother? And if you knew you could make a zillion dollars to not make a thing, wouldn't you try?

Useless Ethereum Token—the joke ICO that raised more money in a week than the average New York City schoolteacher (with a master's degree) earns in a year—provides a cutting satire on the “misaligned incentives” of the ICO bubble. Its website described it as “The world's first 100% honest Ethereum ICO” in that it involved “literally giving your money to someone on the Internet and getting completely useless tokens in return.” The anonymous creator of UET described the motivation behind the project:

I realized that people didn't really care about the product. They cared about spending a little bit of money, watching a chart and then withdrawing a little bit more money. So why not have an ICO without a product, and do so completely transparently just to see what happened? (Dale, 2017)

And, indeed, this was insightful: according to one analysis, ICO tokens without working projects traded better than those with them (Khariff and Russo, 2017).

Pump and dump

In a pump and dump, scammers buy up an asset at a low price and then “pump” it by using whatever communicative mechanisms they can to generate hype and thus drive its market price up. Then, when the market for the asset seems to be at a high, they “dump” that asset by selling it off, crashing the price and leaving other investors who

bought in with a worthless asset (see also Hamrick et al., 2021; Kamps and Kleinberg, 2018).

While exit scams benefit those running the ICO, pump and dumps can be run by and benefit anyone who holds enough of the token to make money off the pump and who gets out before the dump. Thus, some good faith ICOs might have had the trading price of their tokens artificially inflated by pump and dump groups, effectively transforming them into scams.

In addition to being a typical exit scam, Confido also provides an example of the pump and dump. Confido tokens were traded up to 20 times their initial price to reach a \$10 million valuation (Schroeder, 2017). Confido was hyped by a cacophony of now-suspicious-seeming posts on Reddit, 4Chan, and other crypto investment forums and messaging groups. Even after the team seemed to vanish, there was an attempt to continue to pump the tokens. Through forum posts and blog posts made by “shills,” the fictional world of Confido’s embattled founders became more elaborate. As one post explained, the (fictional) founder was “extremely distressed and was doing his best to rectify the situation” but had to go “into hiding” due to vague “legal issues” and “serious threats against his life,” but not to worry because “all remaining proceeds from the ICO have been placed in a trust fund, and preparations for refunding investors is underway.”

This seemed to work, as the trading value of the Confido token rose again for a little while. Those who had been scammed by Confido the first time around had an interest in helping to pump it back up, so that they could sell at the new high and recoup even a small amount of their investment before it evaporated forever.

The repeated pumping and dumping seen in the case of Confido was not exceptional. Such boom-and-bust cycles were sustained through an ongoing discourse of speculation that occurred largely out of sight of casual observers. Crypto traders assembled in semi-public spaces such as Reddit and semi-private groups on Facebook Messenger, Telegram, and Whatsapp. Within these enclaves, technical advice, public relations messaging, and rumors comingled with jokes, memes, and playful antagonism. Combined with easy access to trading tools, it was an ideal environment for the kind of coordinated trading necessary to execute a profitable pump and dump.

What *is* exceptional about Confido—what made it a “cringey” laughingstock—was its pumpers’ attempt to conceal their motive. As Hamrick et al. (2021) demonstrate, brazen groups that did not try to conceal their plans to pump and then dump the token were more successful at driving the price up than those that obscured their scamful intent. Telegram groups like Elite Pumps Signals ran ads on Facebook inviting members to “buy and sell as a group,” illustrated by an image of a gas pump and a dump truck.

Consider a Telegram group like “Pump Notifier.” A typical pump would begin with an announcement from the pseudonymous moderator. This initial message, adorned with rocket emojis, aimed to hype up potential participants: “ALERT! Next pump at Bittrex in 3 hours!” When the token was finally announced, hundreds of traders rushed to the exchange to buy the coin simultaneously, causing its price to shoot up. Meanwhile, the Telegram group would be just as exuberant, a cascade of rocket emojis and “TO THE MOON!” messages to indicate, in crypto parlance which has now become

common among retail investors of all kinds, their collective will to send the price surging ever-upward.

As the seconds go by, the price would fluctuate wildly. The moderator might post, “Keep on pumping! #BuyTheDips #SpreadTheWord” to squeeze a little more action out of any latecomers. And, in a few short minutes, the trading volume would fall back down. Most of the early buyers would have already sold their tokens, holding just long enough to profit from those behind them in the queue. Someone might post a candlestick chart from the last hour of trading. An admin would post a poll: “We did it! How much profit did you make?”

For traders who came out on the winning end, riding the pump and dump cycle was exhilarating. The odds were better than scratch tickets, the profits were real, and the knowledge required to participate carried a high-tech imprimatur. The dump could come as little as 30 to 120 seconds after the pump.

By the end of 2017, pumping up altcoins had become so common that the Commodity Futures Trading Commission (CFTC) issued a report that cautioned consumers against joining pump groups and offered a bounty for unmasking group moderators. But to treat this as mere fraud was a mischaracterization of the ICO market. By singling out pump and dump schemes, the CFTC report implicitly suggested that a legitimate market existed somewhere outside of the raucous and freewheeling trader groups on social media.

In practice, flipping low-value “shitcoins” was the norm for many—perhaps most—participants in the ICO bubble. Indeed, the arcane details of blockchain technology belied the mundane reality of crypto trading. Day in and day out, traders stared at price charts, shuffled the coins in their wallets, commiserated in group chats, and cast about for opportunities to profit from a pump. Pumping became such an ordinary activity that the term “pump” shed some of its illicit association. In trader discourse, “pumping” became synonymous with legitimate promotion and growth. If a financial journalist covered a new blockchain startup favorably, they “pumped” demand for the tokens. If the value of a token went up following the release of a new update, it was said to “pump.” Pumping tokens was not an aberration or interruption but business-as-usual, the main driver of the ICO bubble.

The red-flag checklists for scammy ICOs primarily warned against exit scams; there were no analogous checklists for pump and dumps. You can’t insulate your investment from the exuberance of others. Anyone attempting to recoup their investment before a crash is participating in that crash, perhaps even becoming a scammer themselves.

Crypto-futurity and scams

Scholars from a variety of perspectives have pointed out that scams are a social construction. Historian Stephen Mihm (2007) has described how, in the 19th-century United States, “at its core, capitalism was little more than a confidence game [because] as long as confidence nourished, even the most far-fetched speculations could get off the ground, wealth would increase.” The same could be true today. Scams are capitalism out of place: what gets called a scam is used to perform boundary work that delegitimizes certain forms of economic activity (and exploitation) and legitimates others.

This article has focused on ICOs that were definitely scams. But there were plenty that were not scams, at least not definitely. In the years since the 2017 bubble, a small

number of ICOs—such as Brave, which released its web browser in stable form in 2021—have even produced actual products that function more or less as proposed but have yet to find widespread adoption.

But these are exceptions. Most blockchain projects are vaporware, even if they are not intentional exit scams. Most crypto investors are aggressively trying to “pump their bags,” even if they’re not coordinating market manipulation and posting rocket emojis on group chats (although I’d bet most of them have). The ICO scams of 2017 should not be seen as an unfortunate aberration in the crypto community. Rather, they are a slight exaggeration of its core ethos. Most ICOs were scams; all crypto projects are, as one interviewee told me, a “little bit scammy.”

All crypto projects are characterized by futurity (Brunton, 2019; Husain et al., 2020; Swartz, 2017, 2018). They are at their core an attempt to summon an alternative techno-economic future in the present. The ICO dream promised a range of possible futures in which cryptocurrencies have use value. In some versions of this future, existing financial and governmental institutions have become so authoritarian or so incompetent (or both) that cryptocurrencies are necessary to sustain economic and communicative freedom. In other versions—and perhaps this was the one most often promoted in the 2017 ICO era—cryptocurrencies are valuable because the blockchain systems they entail have triumphed over their centralized and surveillant incumbents.

The ICO scams of 2017 are a conflict between temporal scales. In the exit scam and the pump and dump, the short-term future of financial gain is privileged over the long term of radical disruption. ICOs were predicated on the coming “Internet of value” run on a “token economy” and vice versa: in order for the token economy to come into being, ICOs were necessary to fund its development, but in order for ICO tokens to be worth anything—and therefore not be scams—the “Internet of value” had to have eventually come into being. So far, it has not. The scam is the misalignment between short-term and long-term futures, individual and collective.

As one longtime member of the crypto community told me, “it’s not a scam if you hodl long enough”—meaning if enough people hold (or “hodl,” in crypto argot) their investment long enough, if they believe or suspend disbelief long enough, the promised future will rush to meet reality. “On the other hand,” he told me, “no one wants to be a bagholder.” That is, no one wants to be the only one holding a worthless asset that has already been dumped; no one wants to be the only one holding out for a future that will never come.

It’s hard—impossible, really—to know on any quantitative level who among the participants in the 2017 ICO bubble were hodlers and who were bagholders, who lost money and who came out ahead, who were scammers and who got scammed. But it is certain that all participants in the 2017 ICO bubble occupied all positions: all “oscillated” between the economy as it is and the token economy that will be, between belief in short-term and long-term futures (Maurer, 2008).

The ICO bubble of 2017 could be seen as a frenzy stirred up to bring about a future driven by a collective that doesn’t really believe in that future. Indeed, when I talk to people in crypto, they tell me again and again to beware of everyone else that I’m interviewing or reading. “The thing you have to understand,” they say, “is that you can’t trust anything anyone says because everyone is just pumping their bags.” In this context,

pumping your bags is indistinguishable from promoting your vision for a better world. A true believer is indistinguishable from a shill. On the contrary, a shill is indistinguishable from a rational actor, someone trying, perhaps desperately, to protect their investment, perhaps even their life savings.

In all of these futures, those who choose to buy cryptocurrency in the now are enriched by their wise bet on the right future. Financial success, in this context, also confers an aura of technocratic authority upon ICO founders and investors. Unlike other activism communities, crypto does not make implicit or explicit “hostile worlds” arguments about the incompatibility between radical change and personal enrichment (Zelizer, 2005). As one crypto entrepreneur put it in 2015, “Unlike past revolutions, this is a revolution not to be joined, but to be owned” (Panchevre, 2015).

Crypto is at its core an attempt to build a future in which institutions—their paternalism but also their safety nets—are made obsolete by organizing collective activity beyond their purview. Bitcoin—as a form of digital cash that promises to create a truly free market without recourse to centralized authorities, in the case of scam, and as a form of digital gold valued solely by the market—is a clear illustration of the community value of caveat emptor. Ethereum is often held up as a foil to Bitcoin’s radical libertarianism. But Ethereum and all the projects it facilitates are valuable not just in the future because of their eventual use value. Rather, they are valuable in the now because of their present market value. Ethereum thus offers a form of “peer production without guarantees” (González and Tkacz, 2020). Crypto promises freedom, including the freedom to scam and be scammed.

The network scam beyond ICOs

In the ICO boom of 2017, the “blockchain dream” of a radically decentralized future was deferred to a yet more distant future, but some people made a lot of money in the now, perpetuating the hype that drives interest in the blockchain in the first place. Scams are ambivalent, but therein lies a frisson, a collective effervescence, that makes ambivalent belief in the future and thus even action possible.

In the years since, interest in crypto has rebounded. Crypto has only gotten stranger, more baroquely speculative. There has been a proliferation of new and newly popular crypto genres. Decentralized finance, or DeFi, circumvents the regulations put in place after The DAO by lending cryptocurrency through decentralized exchanges. Social tokens are crypto tokens issued by public figures to their followers. Non-fungible tokens, or NFTs, promise to create unique digital assets, from art to trading cards. All have seen adoption on a greater scale, driving interest in crypto and valuation for bitcoin and ether to previously unthinkable all-time highs.

Most of these new products are less ambitious than ICOs. There are no grand visions of future platforms or token economies, but there is always the hope of making money. As Bloomberg editor Joe Weisenthal (2021) put it, “Everybody knows it’s a joke, but nobody cares, because as long as they get into the joke early enough and sell before the peak, they’re happy. That’s the game.” The big difference between the 2017 ICO boom and their inheritors is the pretense of not-being-a-scam has been dropped. Disbelief is suspended to find glee and maybe wealth via the nihilism and absurdity of memes. In

May 2021, Barstool Sports gambling tipsheet publisher turned general Internet bro culture provocateur Dave Portnoy threw his weight behind “shitcoin” SafeMoon and told his followers, “If it’s a Ponzi get in on the ground floor.” The future can’t be betrayed when it isn’t promised.

Scams are usually camouflaged as part of regular commerce, made up of “deviant decisions and illegal operations blend[ed] imperceptibly into legitimate ones” (Shover et al., 2004: 73). While they are likely to be pitched as vanishingly rare and exceptionally clever opportunities, they are nonetheless still sold as exploitations of the rules, not violations of them. If anything, a scam’s shadiness is disguised as a revelation about how, indeed, shady the world of business is.

But ICO scams were not pitched as ordinary business but as an innovation upon it. Crypto, an exaggeration of the larger tech industry, is persistently seen as outside the rules because the rulemakers “haven’t caught up yet,” and never truly will. Regulators are vestigial. Blockchain is the future. Because of the proximity to power of its practitioners, crypto promises not to be an aberration but an update. It is always poised to supplant the old techno-economic order and take its place. John Kenneth Galbraith (1990: 188) has defined financial manias as “the mass escape from sanity by people in pursuit of profit.” The ICO bubble and the scams that comprised it were not an escape so much as an exodus, a migration to the crypto future. Indeed, the address used to buy into the Mastercoin ICO, and other ICOs that followed, was referred to as the “exodus address.”² What looks like a scam in the present is the way things are done in the future. Crypto markets rise and fall, but the broader economic norms crypto exemplifies change.

Melville’s *The Confidence-Man* was intended to be a satire of commercial life in America, written at a moment when commercialization and its shadowy other, scams, were a key public concern. As historian Jonathan Levy (2021: 128) writes, “how was it possible to distinguish fact from fiction, or genuine entrepreneurial ingenuity from well-disguised fraud? And what kind of moral universe were Americans living in if they had to walk around all day asking themselves such questions?” The novel itself is ambiguous and ambivalent. As Levy (2022: 144) puts it, “It is better to take the leap, and trust the confidence man, including our own inner confidence man” because “anyone who hoards his confidence—refusing to trust others—is isolated and miserable” because, as Melville saw it, “retreat from commercial society [is] miserly, in a moral sense.” For Melville, being willing to enter into scamful relations had become a precondition for free association, for social life itself.

Beyond crypto, the digital economy seems to be fertile ground for other similar formations. These networked activities organized via social media seem to be both a reaction to the precarity produced by the withering of institutions and a deepening of it: multilevel marketing direct selling companies (MLMs) that thrive on social media, retail investing as exemplified by the 2021 GameStop rally, work in the pyramid-shaped attention economy through platforms ranging from OnlyFans to Substack, and the proliferation of certification courses from yoga teachers to life coaches. Much of this sits within the “hustle economy,” where everyone is reminded to respect the hustle of the next person, to always try to out-hustle them but accept when they themselves have been out-hustled (Cotton, 2020; Thieme, 2018). These activities are frequently described as

scammy, if not outright scams, but it's difficult to pin down who exactly is the scammer and who is being scammed.

Like ICOs, these network scams are an effort to bring about a shared future—wealth for individuals but also a change in how the economy is run. But again, like ICOs, that effort is fundamentally characterized by ambiguity and asymmetry: among participants, there is an uneven (but perhaps knowable) likelihood of benefit from the scam and an uneven (and *unknowable*) belief in the likelihood of its promised future.


In an ICO, it's clear that those selling tokens have a greater likelihood of material benefit now and in a range of possible futures than those buying and speculating in them, but it's less clear, and really impossible to know with any certainty, who really believes in the decentralized “blockchain dream” and who is, as Weisenthal put it, just playing “the game.” Similarly, in an MLM, it's clear that your “upline”—the person who recruited you and to whom you owe a certain percentage of your earnings—by definition has a greater likelihood of benefiting than you do (Biggart, 1989). But it is impossible to know if they believe that the MLM will provide the financial freedom and community it promises.

Those who stand to benefit and who are cynical about promises offered by today's new economic formations could be called scammers, but the scam is only possible because of the effervescence produced by the network, a kind of shadow multitude (Hardt and Negri, 2000), self-organized but without a social contract. In this milieu, traditional notions of progressive consumer protection fall flat. As on Melville's allegorical steamboat, scamminess may be the terms of participation in the digital economy.

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Notes

1. As has become common parlance, I use “crypto” to refer to the larger surround of cryptocurrencies, blockchains, and related sociotechnical and economic projects, not cryptography in general.
2. This is a play on the first block of Bitcoins mined by Satoshi: the “genesis block.”

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