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Blockchain urbanism: Evolving geographies of libertarian exit and technopolitical failure

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Abstract

Libertarian "exit" imaginaries project new social, political, and economic structures separate from existing institutions in which "sovereign individuals" can opt-in to the governing system that fits their ideals. This paper traces libertarian exit imaginaries through a variety of territorial and technological projects. Demonstrating how these imaginaries evolve, it describes a recent proposal to build a semi-autonomous, blockchain-based smart city in Nevada. Reflecting on these projects, the paper highlights (I) their inevitable failure as they confront reality, (2) their role as spectacle, spreading libertarian ideology, and (3) their real-life impacts on distinct places and communities even when they fail or never materialize.

Keywords

anti-democracy, libertarianism, territory, digital technology, blockchain, cities

I Introduction

Early in 2021, the State of Nevada, USA, made headlines when Governor Steve Sisolak proposed Innovation Zones (IZ) as a strategy to promote economic growth and diversification following the crisis caused by the COVID-19 pandemic (Carlton, 2021; Metz, 2021). An IZ would be a new territorial division of the state equal to existing counties and municipalities where private companies developing "innovative technologies" would set up autonomous local governments. The proposal was backed by cryptocurrency millionaire and founder of Blockchains LLC, Jeffery Berns. IZ's, Berns argued, along with new blockchain governance systems would

allow him to "democratize democracy" while building a futuristic smart city in the desert near the city of Reno (The Nevada Independent, 2021).

The IZ proposal represents a key moment in the rise and evolution of a politics of *exit* and its recent manifestation in imaginaries of *blockchain urbanism* within the broader global context of anti-democracy movements. The politics of exit has long been a

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primary strategy of particular strains of right-wing organizing, especially within neo-reactionary (NRx) and libertarian circles (Craib, 2022). Exit projects aim to break away from existing institutional structures to create autonomous communities constituted on the free association of individuals and "new forms of jurisdictional sovereignty" (Smith and Burrows, 2021: 2). Exit imaginaries and strategies are not confined to the political right and can be observed in a number of smaller-scale experiments and movements that seek to withdraw from mainstream society (Wakefield, 2020). Yet, in this paper we focus particularly on the larger-scale, libertarian exit imaginaries for several related reasons. Libertarian exit imaginaries are particularly ascendant in public discourse, represent a specific threat to democratic ideals through their focus on "sovereign individuals," and share similar characteristics in the ways they repeatedly fail, are revived, and circulate into new areas.

Libertarian exit projects have typically taken one of two approaches. The first approach includes territorial projects creating new jurisdictions beyond existing states, or otherwise with expansive autonomy. Such projects include seasteading, autonomous cities of various kinds, and imaginaries of offworld colonization, among others. The second approach uses digital technology and the Internet to challenge or supplant the regulatory power of states. This includes cryptocurrencies, blockchain applications like smart contracts and Decentralized Autonomous Organizations (DAOs), open source legal systems, and imaginaries of deterritorialized life through the metaverse.

Once restricted to a small group of ideologues, libertarian exit logics have proliferated in recent years with proposals for new autonomous jurisdictions and the mainstreaming of cryptocurrency and other blockchain technologies. Increasingly, territorial and digital strategies of exit are brought together in proposals like the Nevada IZ, the CityDAO project in Wyoming (Ongweso, 2021), Blockchain City in El Salvador (Kharpal, 2021), or Próspera in Honduras (Geglia and Nulia, 2021). The territorialization of blockchain imaginaries in projects of urban development and their coupling with proposals for new forms of territorial governance aim to produce

"encrypted geographies" as "insular interstitial spaces that function as interface zones between the physical and digital world, between sovereign territory and extraterritoriality, between states and markets, and between different temporalities" (Simpson and Sheller, 2022: 2). Such proposals and the ideas that undergird them are increasingly backed by the work of policy think tanks as well as academic research across economics, political science, law, urban planning, and other disciplines. This includes research promoting special jurisdictions or blockchain applications as international development solutions, utopian new cities as solutions to multiple global and local crises, or broader private tech-driven approaches to transforming urban governance. This reflects a longer history of ties between academia and anti-democratic and authoritarian projects of modernization and techno-solutionism (Koch, 2021a).

Drawing together recent literature on libertarian ideology, new cities, cryptocurrency, blockchain, and other topics, this paper makes two main contributions. First, it traces the coming together of territorial and digital exit strategies in recent blockchain urban imaginaries, calling attention to their underlying assumptions and goals and stressing their fundamentally anti-democratic nature. Second, it develops a theory of technopolitical failure with the aim of elucidating such exit imaginaries and their impacts without falling prey to what Vinsel (2021: n.p.) terms "criti-hype" or "criticism that both feeds and feeds on hype." In particular, we argue that blockchain urbanism and the exit imaginaries on which they are based (1) inevitably fail to realize the futures they seek to produce as they confront the reality of existing political, social, economic, and material relations; (2) serve an important ideological function in the constitution and reproduction of libertarian and NRx communities and their relation to more traditional realms of policymaking; and (3) have real material impacts on the individuals and communities that get caught up in such utopian visions even when they never move beyond planning stages.

The remainder of the paper is organized as follows. Part II examines the politics of exit and situates it in relation to the history of neoliberalism and the contemporary emergence of new anti-democratic movements. Part III explores territorial

manifestations of exit through a review of projects aiming to create libertarian jurisdictions of various kinds, as well as digital exit strategies and the political, economic, and spatial assumptions they carry. Part IV examines the Nevada IZ proposal as an example of the ways digital and territorial strategies are combining in imaginaries of blockchain urbanism bringing extreme libertarian ideas into mainstream political discourse. Part V develops the above-outlined framework for studying the technopolitical failure of libertarian exit imaginaries.

II Anti-democracy and the politics of exit

I Neoliberalism and anti-democracy

Political theorists have long examined the relationship between neoliberalism and the deterioration of democratic values and institutions. By increasing inequality, eroding the capacities of the state, and undermining collective life, neoliberalism constrains the kinds of politics deemed possible within nominally democratic governance (Giroux, 2018). Foucault (2010) describes the ascendance of neoliberal rationality, tracing how the market is transformed from an object of government regulation to the site in which government actions are deemed true or false. Brown (2015) further shows how neoliberal rationality turns political questions into economic calculations, eroding "the institutions and principles aimed at securing democracy, the cultures required to nourish it, the energies needed to animate it, and the citizens practicing, caring for or desiring it" (p. 17). Empirically, scholars trace the effects of neoliberal Structural Adjustment Programs across the Global South since the 1980s, noting the deterioration of democracy through increased social exclusion and states' inability to address basic social issues (Grant-Wisdom, 1997; Sutton, 1999). Others have examined how the shift in urban governance toward entrepreneurialism constrains the possibilities for urban democracy (Harvey, 1989; Sood and Kennedy, 2020).

While Brown (2015) describes the erosion of democratic norms and institutions through neoliberalization as a "stealth revolution," others note the deep connections between neoliberalism and explicit forms of anti-democracy, beginning with early neoliberal experimentation by the Pinochet regime in Chile in the 1970s (Fischer, 2009; Klein, 2007). With the rise of Trumpism in the United States, far right movements across Europe, and strongman leaders in the Philippines, Brazil, India, and Turkey, geographers have turned their attention to the ways anti-democratic projects are undergirded by neoliberal logics (Bialasiewicz, 2020; Chacko, 2020; Iglesias-Pascual et al., 2021; Luger, 2020; McCarthy, 2019; Miller, 2020). Bessner and Sparke (2017) describe Trumpism in the US as a simultaneous reaction against and a deepening of neoliberal logics. Likewise, in Turkey the rollout of neoliberal policy coincides with the re-centralization of state power (Tansel, 2019). This work builds on scholarship noting that neoliberalism is not opposed to state power but rather aims to transform the state (Harvey, 2007) and insulate it from traditional democratic processes (Bruff, 2014).

Scholars have noted the importance of recognizing the multiple strategies and logics through which market-led governance is pursued in theory and practice (Brenner et al., 2010). Given the ascendency of right-wing extremism globally, it is particularly important to examine the various manifestations of anti-democracy emergent within market-led governance logics. In the remainder of this paper, we trace one set of proposals that have given rise to recent secessionist political projects defined by a politics of "exit" from existing systems and institutions. These projects have been closely affiliated with Silicon Valley tech entrepreneurs and might be described as an increasingly antidemocratic evolution of the libertarian "Californian Ideology" that has long infused the tech industry (Barbrook and Cameron, 1996). While receiving less attention than right-wing populist movements, the politics of exit is increasingly infusing policy and planning proposals, and often in ways that fail to acknowledge their anti-democratic logics and their complex history of failure.

2 Politics of exit

While it is difficult to identify a single origin of libertarian exit imaginaries, many exit projects from

the Republic of Minerva in the 1960s (Craib, 2022) to contemporary plans for crypto-cities have drawn inspiration from literature. *Atlas Shrugged* (Rand, 1957) is often cited for its portrayal of wealthy industrialists "striking" by retreating to the town of Galt's Gulch to form a new capitalist society. Neil Stephenson's *Snow Crash* (1992) depicts a future Los Angeles in which the US government has dissolved after the introduction of electronic money leads to the loss of tax revenue. In the novel, global territory is divided and governed by privatized franchise-states and sovereign individuals retreat into guarded communities or into the virtual reality of the metaverse.

Beyond fiction, another influential articulation of exit is Davidson and Rees-Moggs' *The Sovereign Individual*, published in 1997 and republished in 2020. The authors argue that the "Information Revolution" will lead to the wholesale privatization of government, writing:

We expect to see a radical restructuring of the nature of sovereignty and the virtual death of politics... you are destined to see privatization of almost all services governments now provide... individuals will achieve increasing autonomy over territorial nation-states through market mechanisms... denationalized citizens will no longer be citizens as we know them, but customers (1999, p. 28).

The authors predict "the commercialization of sovereignty" (p. 298), the "denationalization of the individual" (p. 302), and "the end of mass democracy" (p. 330). Fundamental to this future is the individual right to exit existing institutions and obligations. While the rise of networked technologies did not bring about the imminent collapse of government in the way the authors predicted, this vision has been taken up and reimagined by others across the political Right.

Jones (2019, 2019b) examines the technophilic movement, with the Neoreactionary movement (NRx) as the most established intellectual group. NRx was shaped in several online blogging spaces, especially those of Nick Land and "Mencius Moldbug" (nom de plume for Curtis Yarvin). The movement blends extreme free-market governance

with an authoritarian rejection of liberal political theory, racial politics, right-accelerationism, and internet subcultures (Ambedkar, 2017; Haider, 2017; Jones, 2019, 2019b; Sandifer, 2017; Smith and Burrows, 2021; Zoda, 2021). NRx thinking rejects authoritarian populism, instead positioning itself as an elitist movement (Jones, 2019, 2019b; Smith and Burrows, 2021). Rather than focusing on public debate or mass movement building, NRx thinkers highlight their superiority and seek possibilities to secede from existing societal structures. As Jones (2019a: 106) argues: "For the NeoReactionary, the most important political right is the one to free exit. The ability to move out of one's community/city/ state allows for everyone to find the community that works best for them." As current opportunities to exit are limited, NRx thinkers call for a reimagining of territorial sovereignty.

Territorial exit is explored in Moldbug's (2008) theories of neocameralism and the Patchwork society, in which governments would be dissolved and replaced with private, independent mini-countries governed by joint-stock corporations. Smith and Burrows (2021: 8) describe the Patchwork as "feudal futurism" resting upon a "complex of cryptographic hierarchies of sovereign corporate power." Moldbug examines the social organization of the Patchwork society. At the top of the pyramid sits the CEO, an absolutist Monarch elected by a board of proprietors. Immediately below, residents live (and work) in the territory without owning it or having any power besides their right to exit. Finally, menial workers similar to slaves occupy the bottom of the hierarchy. Yarvin's ideas on corporate government and the right to exit were consolidated in Nick Land's (2012) blog "The Dark Enlightenment." Land's vision equates residents with customers in an undemocratic, free market governance where their voice is seen as "semi-criminal." To stay or leave the corporation's territory account as their only possible exercise of rights (Burrows, 2019). Residents' participation in the system is thus reduced to Land's principle: "No voice, free exit."

Although incubated in fringe online blogospheres, the reach of NRx thought cannot be underestimated, as its influence is evident in the discourses and projects of technolibertarians like

Peter Thiel, Balaji Srinivasan, or Patri Friedman (Armistead, 2016; Smith and Burrows, 2021; Zoda, 2021). Peter Thiel, for instance, has fostered these ideas and financially supported several projects discussed below, including the Seasteading Institute and the creation of the Ethereum blockchain. Thiel (2009) calls on libertarians to escape politics through new spaces for "freedom" made possible by new technologies. These include cyberspace, outer space, and seasteading (Fosset, 2021; Wiener, 2021).

III Exit imaginaries

I Territorial exit

While extreme, the exit imaginaries discussed above build on existing practices of territorial experimentation in neoliberal governance. Through the "rescaling of governance" in which neoliberal policy has "hollow[ed] out the nation-state" (Warner and Gerbasi, 2004), governments often establish special zones—economic zones, development zones, and import–export zones. Zone-based governance has come to function as a "spatial ideology" within international policy-sharing networks (Martin and Geglia, 2019), with such jurisdictions acting as spaces of exception in which financial, environmental, labor, and other regulations are rolled back or eliminated (Holden, 2017; Ong, 2006; Park, 2005).

Proposals for territorial exit push such logics to the extreme. Rather than reshaping the contours of state practice, they aim to dissolve or radically remake the state (Simpson, 2021). Examples include Larry Page's proposed unregulated territory for tech experimentation (Ingraham, 2013) and Balaji Srinivasan's call for Silicon Valley to secede from the United States to create an opt-in society run by technology (Combinator, 2013). Yet, recognizing the difficulty of succession from the United States, most proposals for exit rely on the desire for a "blank slate" or terra nullius from which to "start from scratch"—reproducing centuries of settler colonial imaginaries (Hobart, 2019). Perhaps unsurprisingly, this search for a terra nullius has primarily focused on a series of sites and locations that have long been the object of utopian imaginaries and political experimentation: on oceans and islands (Baldacchino,

2010), deserts (Koch, 2021b), purportedly "empty" lands often in the Global South (Liberti, 2013), and outer space (Smiles, 2020).

The seasteading movement serves as an influential imaginary of territorial exit. Reviving earlier imaginaries of sea-born libertarian utopias like Operation Atlantis (Simpson, 2016) or Freedom Ship (Mieville, 2007), The Seasteading Institute (TSI) promotes "the creation of autonomous communities on floating platforms in the open ocean" (Lynch, 2017: 85). Co-founded by Peter Thiel and Patri Friedman, the TSI orientation towards "exit" is explicitly based on the unsuitability of liberal democracy for the libertarian cause (Friedman, 2009a, 2009b). TSI describes its supporters' vision of government "as an industry" with high entry barriers that prevent competition (The Seasteading Institute, 2014: 8). In order to compete in the "government industry," TSI proposes an open sea network of micro-governments competing to attract citizens/ customers with an "unprecedented physical mobility" constituted on the ability to detach and move floating platforms, experimenting with the "dynamic geography" of ocean space as a "blank slate" (Steinberg et al., 2012). Residents would move between mini-countries or, said differently, "vote with their feet" (Lynch, 2017). TSI proposes to convert what they see as a political problem of democracy into "an engineering challenge," building the infrastructure for floating platform communities.

The secessionist imaginaries developed in Moldburg's Patchwork and embodied in seasteading also inform proposals for autonomous cities. Proposals for "startup cities" or "free private cities" reproduce narratives about corporate-style governance and opt-in jurisdictions (Lynch, 2017), while pointing to global cities like Singapore (Luger, 2020), Hong Kong (Ebner and Peck, 2022), and Dubai as inspiration. Proponents hold up China's Special Economic Zones (SEZs) as a model for carving out small jurisdictions within existing countries to experiment with market-based governance schemes. Proponents try to convince world governments to create new jurisdictions with high levels of autonomy that might attract investment and allow experimentation. These proposals push the logics of SEZ's to new extremes. Mark Klugmann proposes "LEAP Zones," explaining that the *economic* autonomy offered by SEZs is not sufficient, instead calling for *legal*, *economic*, *administrative*, and *political* autonomy. Similar proposals have emerged and circulated through networks of academic research centers, libertarian think tanks, and urban policy consultants—among them: the Cato Institute, the Mont Pelerin Society, or the Startup Societies Network.

Recognizing the difficulty of finding a perfect "blank slate," promoters of the autonomous city model focus instead on spaces that are "too small and too empty to fight over" (Mark Klugman, quoted in Lynch, 2019: 86), typically in the Global South. The most established example of this model is the Zone of Employment and Economic Development (ZEDE) in Honduras. Following a 2009 coup d'etat, a new conservative government partnered with advisers interested in autonomous cities, including Klugmann and representatives from the libertarian-leaning Universidad Francisco Marroquín in Guatemala City. Situating the project in the history of enclave governance in Honduras and the rise of authoritarian neoliberalism, Geglia (2016: 354) explains:

The ZEDEs, which were enabled first by the 2009 coup, represent a troubling convergence of Reaganite Cold War strategists, Honduran business and military elites, and a new generation of libertarian activists and interest groups. Together this coalition has rebranded the Cold War's free market crusade under a new rubric of futurist, disruptive innovation.

The ZEDE model cedes near total authority over small areas of land to an appointed board and a "Technical Secretary" that would function as a CEO.

After a series of early failures, the ZEDE concept reemerged in 2020 with the establishment of *Próspera* on the Caribbean island of Roatán and *Ciudad Morazán* near the industrial city of Choloma (Ebner and Peck, 2022; Geglia, 2020). Geglia and Nuila (2021) examine the extreme limits on democratic participation in the *Próspera ZEDE*, with the jurisdiction managed by a private American company and overseen by a Council of Trustees. While four of the nine trustees are theoretically elected, the charter stipulates that "two of the four Trustees subject to

Resident vote will be elected by land-owning Residents only. Land-owners will exercise one vote per square meter of land owned and registered in the ZEDE's independent land registry" (Geglia and Nuila, 2021: n.p.). Further, residency claims are limited as "new residents must be approved by Próspera's private General Service Provider using criteria including available space in the ZEDE, ability for the ZEDE to manage growth, the reputation and social harmony of Próspera, the applicant's criminal record, and the ability to pay applicable taxes and fees." These questions of residency and differential rights recall the social hierarchies laid out in Moldbug/Yarvin's fantasy of the Patchwork Society.

Beyond Honduras, Lynch (2017) highlights failed projects to create private cities in the country of Georgia, the failure of Liberland's sovereignty claim over a sandbar in the Danube between Serbia and Croatia (see also Cattaruzza, 2022), and proposals for startup city refugee camps. In 2021, it was reported that Brazil's government was exploring similar plans (BrasilWire, 2021), while Free Private Cities are also being promoted across much of Africa (Wissink, 2020).

Others imagine a future in which they might escape the constraints of territorial models completely through outer space colonization, reflecting longstanding imaginaries that invoke the colony as a model for future human engagements in offplanet places (Sammler and Lynch, 2021; Smiles, 2020; Valentine, 2017). The private space race is currently dominated by Elon Musk's SpaceX and Jeff Bezos' Blue Origin. Both visions rely to different degrees on an imaginary of a blank slate allowing an escape from current political structures, the rise of corporate power, and the constitution of new social hierarchies (Scharmen, 2021). Musk presents a vision in which the individual is completely reliant on SpaceX once they have opted-in to the colony, with a form of indentured servitude for Martian settlers to repay the cost of their trip after arrival (Levin, 2021). Meanwhile, Bezos' vision to move certain industries beyond the Earth's atmosphere is driven by a desire to escape regulations that constrain Amazon's activities on Earth as well as the perceived limits of economic growth on a finite planet (Delfanti, 2021). Whether

seeking to build autonomous platforms in the ocean, private cities on an island in the Caribbean, or off-world colonies, the politics of exit signal the abandonment of a common future and thus the loss of an impetus to engage in traditional forms of democratic debate and government.

2 Digital exit

Davidson and Rees-Mogg's (1999: 196–197) exit vision was constituted on the premise that "cyber-space transcends locality" and would therefore free individuals from "the tyranny of place." In contrast to territorial exit, others have focused on realizing this imagined deterritorialization through the development of digital systems, including cryptocurrencies, blockchain, and the metaverse. Such imaginaries have deep roots in the cyberlibertarianism of the early Internet era but find new life in more recent innovations.

Attempts to create "digital cash" go back to the 1970s and draw on earlier experiments with alternative non-state currencies (Brunton, 2019). These historical experiments saw alternative currencies as a strategy to escape central banks and treasuries, allowing for speculation and unregulated exchange. Such practices reimagine the function of money. As Swartz (2018: 623) explains: "A theory of money... is a techno-economic imaginary, a theory of the larger social order (or a challenge to it) and a way of materially enacting that theory." In short, proposals for new or alternative currencies have long functioned as a tool for reimagining the broader social, political, and economic order.

The development of Bitcoin as the first cryptocurrency was based on the desire to disrupt sovereign power and deterritorialize global economies. Flood and Robb (2017) trace the antecedents of Bitcoin to the anarcho-capitalism of the Austrian School of Economics for the way it reduces society to a series of peer-to-peer interactions. Yet, while building on earlier systems, Bitcoin is new for the way it implements "an algorithmic intermediation for a hitherto socially embedded function" of money and was designed as "a global means of exchange" not tied to locality (Zook and Blankenship, 2018: 248). Atkins (2022: 1) explains: "Bitcoin's populist appeal can be found in its global, networked character, which has allowed for the technology to exist beyond the confines of the state and associated regulation." In sum, Bitcoin aimed to globalize the disruptive intentions of previous alternative currencies while harnessing the purported ungovernability of the Internet to realize the ambitions of state dissolution, recasting all social, political, and economic relations as one-to-one transactions.

Golumbia (2016) further traces the deep connections between Bitcoin and right-wing extremism, not only through imaginaries of individual freedom but also through faulty economic logics about inflation and anti-Semitic conspiracy theories around central banking. As Bitcoin and related technologies gain popularity, these right-wing narratives become embedded in public discourse, even when not made explicit or when individual supporters may not embrace such views. As such, Bitcoin functions as an ideological project reshaping public discourses on economics, government, and notions of individual freedom (Dodd, 2018).

Shortly after the launch of Bitcoin, followers began imagining other applications for blockchains, the underlying distributed ledger technology on which Bitcoin is based. Backed in part by Peter Theil, Vitalek Buterin developed and launched Ethereum, a blockchain similar to Bitcoin but with a broader range of applications, such as for digital identity systems, "smart contracts," and "decentralized autonomous organizations." Buterin (2014: 1) explains smart contracts as "systems which automatically move digital assets according to arbitrary prespecified rules." Essentially, the terms of a contract can be automatically carried out by a distributed computing system that cannot be controlled by any single party. Buterin continues, "the logical extension of this is decentralized autonomous organizations (DAOs) - long-term smart contracts that contain the assets and encode the bylaws of an entire organization."

Blockchain applications are seen by some as "a means to implement new governance structures that could potentially replace some of our existing systems of governance" (De Filippi, 2018: 270). This is not the first attempt to reimagine the basic structures of the Internet to maximize the autonomy of

individuals, as Smith and Burrows (2021) examine in the case of the peer-to-peer platform Urbit. Yet, blockchain offers several important possibilities. For libertarians, one of the only acceptable exercises of state power is to uphold property rights and facilitate exchange through the enforcement of contracts, identity verification, and related activities. If the execution and enforcement of such contractual relations could be automated, then the need for state power diminishes. In his study of blockchain-based development projects in Pacific island nations, Jutel (2021: 10) traces how "blockchain data empowerment resembles Hayekian price mechanisms and digital property law mediating all manner of social practices beyond the purview of the state." While promoted as non-ideological technical solutions to governance issues, blockchain applications like digital land registries work to realize libertarian imaginaries of a contractual society.

Blockchain proponents imagine new strategies for scaling up these visions, such as the "open source legal system" Ulex. Ulex is based on the notion that while many may "think of law as the sovereign command... distributed protocol communities need an entirely different approach. Non-territorial, opensource, opt-in governments need legal systems with the same features" (Bell, 2020: 7). Ulex consists of a standard set of rules and procedures that can be adopted directly into the governing documents or code of a decentralized or "non-territorial" community. Users would thus opt-in to these rules and norms which would then be automatically enforced through the blockchain. Pushed to the extreme, many crypto-advocates see in this combination of cryptocurrencies, blockchain applications, and opensource legal systems an opportunity for total digi-"the creation tally mediated exit with cryptonations - namely stateless, do-it-yourself governance services entirely based on the blockchain (e.g. Bitnation)" (Atzori, 2017: 5). Such projects imagine complete deterritorialization of social, political, and economic relations and the full realization of the libertarian ideal of the free association of individuals.

Yet, imaginaries of digital exit perhaps find their fullest form in utopian imaginaries of the metaverse as an immersive virtual reality world. Imagined first in Snow Crash, the metaverse imaginary was impregnated early on by libertarian principles. Davidson and Rees-Moggs (1999) imagined the metaverse would attract enough economic activity "into cyberspace" to cause "the value of the state's monopoly power within borders [to] shrink, giving states a growing incentive to franchise and fragment their sovereignty" (p.179). While recent reporting highlights ties between Facebook's metaverse strategy and right-wing think tanks (McKay, 2022; Waite, 2022), libertarians also experiment with their own platforms run on blockchain technology. Decentraland is a virtual world platform run on Ethereum in which users buy and sell virtual real estate and other digital goods using the cryptocurrency, MANA (Decentraland, 2017). Somnium Space, The Sandbox, and Cryptovoxels function in a similar way. As Knox (2022: 210) argues, the metaverse's "real power and appeal" lie in "its uncritical assumption of a frontier territory ripe for the taking, where, supposedly, anyone displaying an entrepreneurial spirit can stake a claim."

The libertarian imaginary of the metaverse has been enthusiastically embraced by other exit projects, such as Liberland's move to build a metaverse city (Palumbo, 2022). Facing the impossibility of territorializing in the Serbo-Croatian borderlands, Liberland proclaimed itself as "the first virtual platform state" and a "cyber-nation" (Cattaruzza, 2022; Riding and Dahlman, 2022: 290). Liberland's leaders imagine a digital city as a site of encounter bringing together like-minded libertarian thinkers within a space for digital exchange (Schumacher, 2022). Such projects see in a blockchain-driven metaverse the opportunity to revive classic cyberlibertarian notions of an ungovernable, market-driven Internet, such as described in John Perry Barlow's (1996) "A Declaration of the Independence of Cyberspace."

IV Blockchain urbanism

The examples above imagine either territorial succession or the digitally mediated deterritorialization of social, political, and economic relations. Yet, territorial and digital exit strategies are increasingly coming together in proposals for urban development

and special jurisdiction projects oriented around the blockchain. Such strategies can be understood in relation to broader developments in digital urbanism that involve technology taking on new roles in urban governance and development, from the informational city (Castells, 1992) to smart or platform urbanism (Barns, 2019; Kitchin, 2014). Sadowski (2020: 1739) compares the rise of platform urbanism to earlier moments in the urbanization of technology capital, arguing that "[r]ather than leave city functions in the hands of government and just exert pressure over how they behave... digital platforms attempt to snatch sovereignty away from those hands." Cases like Sidewalk Labs' now defunct plans to build a high-tech neighborhood on Toronto's waterfront show the desire of technology capital to experiment with territorial development and supplant existing regimes of sovereignty (Sadowski, 2020).

Building on this work, this section explores the failed plans for a semi-autonomous Innovation Zone (hereafter, IZ) in the Nevada desert proposed by crypto-millionaire Jeffrey Berns and Blockchains LLC. The section does not offer an exhaustive history of the project but rather traces the coming together of digital and territorial exit strategies proposed as a measure to ensure technological innovation and economic competitiveness in a time of crisis. The account here draws on extensive public reporting on the project, public interviews and presentations by Berns, and the draft legislation itself.

I Innovation zone imaginaries

Jeffrey Berns and his company, Blockchains LLC, purchased 67,000 acres of land in the desert outside of Reno, Nevada, in 2018, paying \$170 million in cash. The majority of the land lies within the Tahoe-Reno Industrial Center (TRIC), a large industrial district home to Tesla's Gigafactory I and data centers for companies like Google and Switch. The location in the Nevada desert is perhaps unsurprising given the long history of utopian/dystopian experiments in desert landscapes (Koch, 2021b). Indeed, Blockchain's property is located only around 100 miles south of another desert-based utopian libertarian experiment, the annual Burning Man festival (Rohrmeier and Starrs, 2014). Berns' plans

for the property were revealed later that year, with a feature article in the New York Times and Berns' keynote address at Prague Blockchain Week. As journalist Nathaniel Popper (2018: n.p.) explained: "He imagines a sort of experimental community spread over about a hundred square miles, where houses, schools, commercial districts and production studios will be built. The centerpiece of this giant project will be the blockchain." Even in the New York Times article, Berns' belief in the power of blockchain to facilitate a kind of libertarian exit is clear as he foresees the future city being managed through "a corporate structure that will be held by residents, employees and future investors. That structure, which he calls a 'distributed collaborative entity', is supposed to operate on a blockchain where everyone's ownership rights and voting powers will be recorded in a digital wallet" (Popper, 2018).

Berns' keynote describes a world where all relations are reduced to contractual interactions among individuals, stating: "Imagine a world where anybody anywhere can collaborate, establish the rules of that collaboration, enforce those rules, exchange value, and do it all on the blockchain. No government. No bank. No corporation. Just trusting in math" (Blockchains Inc, 2018, 9:47). Berns' plan involved the creation of new blockchain-based digital identity tools (including hashed biometric vein scans), the storage of digital assets, a smart city with networked infrastructure on the blockchain, and the incubation of AI, nanotechnology, and 3D printing industries "all using blockchain as their core." This would create, Berns argues, "a completely new way to live."

In early 2021, Nevada Governor Sisolak announced his support for a bill creating Innovation Zones as new territorial divisions of the state developed and managed by private technology companies. It was immediately clear that Berns and Blockchain LLC were the intended beneficiaries. A draft bill explains that an IZ would be established on privately owned land and would assume the powers afforded to municipalities and counties ("Bill Draft", 2021). The bill consists of 38 sections. It defines a list of "innovative technologies" that could be the object of focus of an IZ, including, of course, blockchain as the first in the list (Sec. 10). Section 15 stipulates that

the IZ would be governed by a Board of Supervisors composed of three members. While all three would be appointed by the Governor, two would be appointed from a list of names supplied by the company that applied for the IZ and owns the land. Once appointed, this board would assume a wide swath of responsibilities related to public administration, justice, finances, and planning: "The Board may perform the duties and provide the services of county offices, including without exception the offices of county clerk, county recorder, sheriff, county treasurer, county assessor, county auditor, district attorney and public administrator" (Sec. 20.1). The board would also have the option of starting a School Board.

As the IZ grew, it would eventually return to traditional electoral processes, allowing residents to elect the IZ Board of Supervisors after reaching a population of 100 people (Sec. 30). This fact was touted by proponents as proof of the IZ's democratic nature. Yet, upon further reflection, it becomes clear how limited this form of democracy would be in practice. By the very definition of the IZ, Jeffrey Berns and Blockchain LLC would remain the sole landowner in the zone. Any housing development would be controlled by Berns or the company, with them determining who would be permitted to move to the zone and the nature of that tenancy. Hypothetical future voters would all be Berns' tenants, if not also his employees, or otherwise involved in contractual business relations with him. Further, the very nature of the IZ would be intended to attract like-minded individuals, with ideological homogeneity as a core principle of the community.

In a separate section, the bill explains that innovative technologies would not simply be incubated for eventual commercialization but would also be implemented in IZ governance itself, writing: "the Board shall adopt policies that facilitate the timely and effective development of the Zone and use of the innovative technology in government administration, government services, nonprofit organizations and private enterprise in the Zone" (Sec. 17.4). This would include contracting out services to private providers. The IZ governing institutions would thus themselves be the object of technological

experimentation. Berns explained in a 2021 interview with *The Nevada Independent:* "We're creating a space where the infrastructure that government depends upon is new." The most celebrated potential use cases of blockchain technology are in the administration of basic government services: maintaining voter rolls, birth and death records, property records, educational records, and a variety of other services that libertarians recognize as necessary to economic activity. As these services typically fall within the administration of the state, opportunities for blockchain to meaningfully "disrupt" this space are limited.

This aspect of the IZ proposal and its foundation in exit libertarian principles was something that most observers and journalists failed to grasp. The local government from which Berns sought to succeed was Storey County, an exceedingly business-friendly local jurisdiction. For many observers, it was difficult to understand why Berns could not realize his vision within the existing county. Yet, the "industry" that the IZ aimed to disrupt was government itself. Storey County was the legacy institution to be disrupted. The goal of claiming governing authority in order to experiment with it while insulating the IZ from democratic oversight is perhaps most clear when Bern states: "we need a place where politics is not going to affect how things are done" (The Nevada Independent, 2021: 31:10). The IZ, like other exit libertarian proposals, imagines the depoliticization of governance by replacing liberal democracy with technologically mediated transactions among autonomous individuals on the blockchain. While formal elections may eventually resume, the new blockchain-based governing infrastructure and its associated logics would already be in place.

The IZ combines digital and territorial exit strategies by bringing together the rights of private land ownership, a formalized though limited form of territorial sovereignty, and the disruptive potential of blockchain to supplant state institutions. While it is not clear that this strategy would be the magic combination leading to the eventual success of the exit libertarian vision, it does represent a new and potentially dangerous moment in the evolution of such projects and their continual attacks on the foundations of liberal democracy.

V Technopolitical failure

The IZ proposal was short-lived. First introduced in February 2021, by July the state legislature postponed a vote on the matter, instead commissioning a study to consider the proposal and its possible impacts on the state. By October, Berns withdrew the proposal, blaming a lack of political will by lawmakers (Rothberg, 2021). For observers of libertarian exit projects, this failure is far from surprising. The longer history of such exit proposals is also the history of their failure (Craib, 2022), as capitalists continually search for an elusive blank slate for the foundation of a purer form of capitalism unhindered by democracy (Slobodian, 2023). Much of the literature on libertarian exit recognizes this failure, though few have sought to comprehensively theorize how this failure should be understood in its full complexity. Based on the above review of existing literature and our own reflections on the IZ case, we argue that there are three main aspects of technopolitical failure that need consideration in relation to exit projects: (1) the inevitability of failure as utopian visions grapple with the messiness of existing political, economic, and material relations; (2) the performative nature of the projects and the ideological work they do in spreading libertarian values and imaginaries; and (3) the real, material impacts of these imaginaries on communities and institutions in the sites they target. The remainder of this section explores each point in further detail.

First, the failure of the exit projects discussed throughout this paper could be seen as inevitable, as they are based on fantasies that necessarily collapse as they encounter the material, institutional, and societal realities of the world. This tension is seen across all cases highlighted here. Seasteading imaginaries simultaneously face material and logistical challenges of engineering habitable platforms in the ocean, alongside the political reality that ocean space does not lie outside politics but is indeed at the heart of struggles over sovereignty, resources, and cultural meanings (Sammler, 2016; Steinberg et al., 2012). After negotiations to build a seastead in French Polynesia failed (Robinson, 2018), the only materialization of ocean exit took the form of a 64 square foot austere, immobile structure 12 miles off the coast of Thailand. In 2019,

the Thai Navy seized the structure, forcing the *seasteading pioneers* to flee, facing a death penalty for threatening Thailand's sovereignty (Picheta and Olam, 2019; Simpson, 2021).

Plans for autonomous cities have likewise had to grapple with the impossibility of escaping existing regimes of sovereignty. The ZEDE projects, for instance, have claimed autonomy under Honduran law, but that autonomy is currently being challenged by the Honduran state following national political shifts in 2022. These projects have also faced organized local resistance everywhere they have been attempted (Geglia and Nuila, 2021). There is no blank slate. Further, imaginaries of digital exit are based on the fantasy of the Internet as an ungoverned or ungovernable realm. Yet, digital geographers, media studies scholars, and others have long documented the fundamentally territorial and material nature of the Internet (Lynch, 2021) and the evolving ways states exercise authority over and within the Internet. Most recently, China and the US have intervened in the cryptocurrency economy, recovering stolen funds, curtailing mining, and prosecuting fraud.

Similar challenges are seen in the IZ case. While the desert landscape of Northern Nevada may appear "empty" to many, Berns' land forms an important part of Storey County and the broader region. Storey County lies close to the city of Reno and in the past years has seen significant industrial growth, yet it maintains a distinctly rural identity in conflict with Berns' vision of smart city development. Maintaining this rural identity became key to the opposition of local county leaders who have long sought to limit new residential development. The IZ proposal also quickly became associated with the idea of company towns, which have a long and controversial history in Nevada. Despite repeated attempts, Berns was not able to shift this discourse among lawmakers and the media. The plans thus drew far more criticism and proved more politically sensitive than Berns perhaps initially imagined, both among local and state lawmakers as well as the broader Nevada citizenry.

The plan also faced serious material and logistical barriers—in this case, the lack of water. The proposed site for the city lies in close proximity to the reservation of the Pyramid Lake Paiute Tribe, along the Truckee River just upstream from where the river

empties into Pyramid Lake. Tribal leaders and activists have long fought to protect the quantity and quality of water flows into the lake, which carry both ecological and cultural significance (Berry and Cohn, 2022). While Berns purchased water rights 100 miles north of the planned city, this plan would have required piping water across the desert through or around the reservation. He even hired the former Chief Engineer of the State of Nevada to help make that possible. In the end, had the plan moved forward, it would have almost certainly faced a lawsuit from the tribe, which has successfully challenged past attempts at similar water diversions.

Secondly, exit projects are often performative even in their failure, helping to constitute a community of actors and propagate libertarian ideology. This function is described in libertarian and NRx thinking as "hyperstition." Smith and Burrows (2021: 9) explain: "On occasion, portended social imaginaries – designs, diagrams, fictions, maps, movies, plans, philosophies, prototypes, theories, dreams and more – become generative of the future." As examined in Zoda's (2021) work, hyperstition operates in a quasi-occultic plane in which myth and fictioning engender their own reality. Steinberg et al. (2012) likewise argue that the relevance of seasteading does not necessarily lie in materializing exit but in elaborating a libertarian argument aimed to "spur fellow believers into action" (p.1545). Simpson (2021) similarly describes the Thai seasteading experiment as a "successful failure" in that it ultimately attracted new supporters and investors and "the attention of international media by telling a story... crafted to present its protagonists both as heroes of the blue frontier and as innocent victims of an authoritarian state" (Simpson, 2021: 81).

In this sense, exit projects function as spectacle and "forgetting" the many failures of past projects is key to that function. Koch (2019: 671) explains: "By captivating the gaze, the failures or the illogic of a spectacular project are/is cast aside and strategically ignored... spectacle's forgetting is diversionary – it is predicated on the future-oriented telos of high modernism." Such strategies appear to work as secessionist projects have continued to proliferate and are increasingly supported by powerful institutions, foundations, tech billionaires, and political strategists

(Smith and Burrows, 2021). Thus, even in their failure, these exit projects serve as a sort of hyperstitional loop; as events and fictions ideologically and materially enabling the next libertarian exit imaginary.

Exit projects thus play an important role in spreading key narratives linked to libertarian and NRx's anti-democratic ideology. These narratives include the notions of the "sovereign individual" and the "franchise state," which become normalized and embedded in broader political debates, contributing to what Brown (2015) describes as a "stealth revolution" eroding democratic norms and ideals. Golumbia (2016) describes a similar phenomenon. While Bitcoin fundamentally fails to function in the ways promised (as a currency), it propagates a series of assumptions and beliefs linked to far right ideology that come to be echoed even by those who might not identify with the Right. The IZ proposal in Nevada again demonstrates a case where libertarian exit imaginaries become taken up by actors not traditionally on the political right. Gov. Sisolak, who supported the project and included it in his State of the State address, is a centrist Democrat. Jeffrey Berns is also a politically complex figure. By his own account, he is a former consumer protection attorney and he freely mixes libertarian exit imaginaries with calls for a mandated living wage and other traditionally left-of-center proposals.

Finally, many exit projects have material impacts even when they never move past planning stages. In the Honduran ZEDE, plans for a new city and libertarian enclave in the Gulf of Fonseca created significant uncertainty and fear for local residents who feared displacement. It also intensified conflicts over land and resources and posed challenges for local political leaders who struggled to respond to the proposal (Lynch, 2019; Roux and Geglia, 2019). As plans for a ZEDE shifted to the Caribbean island of Roatán, the development of Próspera has put pressure on the community of Crawfish Rock, which has seen 58 acres of land absorbed into the new jurisdiction and fears further expropriations (Geglia and Nuila, 2021). Since a change in national government brought about the reversal of the ZEDE statute (Olson, 2022), ZEDE leaders have continued fighting, filing a \$10.755 billion claim against the Honduran government in the International Centre for

Settlement of Investment Disputes (Ernst, 2022). Similarly, plans for a future Bitcoin City among other cryptocurrency-friendly initiatives in El Salvador have contributed to a land rush and the displacement of local populations (Clarke, 2022).

A similar case can be made in relation to cryptocurrencies. On one hand, scholars have highlighted the failures of Bitcoin as a functional currency, noting among other issues that it is neither a stable store of value nor functions as a global medium of exchange (Golumbia, 2016; Swartz, 2018; Zook and Blankensāhip, 2018). On the other hand, cryptocurrencies do not simply exist in a deterritorialized realm of the Internet but are territorialized in distinct uneven geographies (Zook and McCanless, 2022). While cryptocurrency has not forced the dissolution of the nation-state system, it has facilitated attempts at exit in particular spaces. Puerto Rico was cast "as a blank slate after Hurricanes Irma and Maria" (Crandall, 2019) and positioned as a place to build a crypto-Utopia, attracting cryptocurrency investors hoping to rebuild the island according to their libertarian visions with serious consequences for the local population (Atiles, 2022; Crandall and Vázquez, 2022). Elsewhere, blockchain projects in Pacific Island countries have been seen to weaken the sovereignty of local states (Jutel, 2021). These cases all highlight the ways local actors and populations necessarily encounter, live with, or contest exit imaginaries as they emerge in distinct places.

In the case of Nevada, the IZ proposal has had several clear impacts, even in its failure. The proposal was put forward early in 2021 as a key strategy for the State of Nevada to attract investment and recover from the COVID-19 pandemic. Nevada was one of the worst affected states by the pandemic economic crisis due to its reliance on tourism and hospitality. Exit proposals are often presented as solutions to crises of various kinds, occupying public debate and policy visions in ways that may distract from deeply pressing matters. Similarly, the ZEDE occupied policy discussions in Honduras as a solution to compounding crises of violence, poverty, and political legitimacy. We may also question the way visions of offworld colonization are proposed as a solution to climate change, distracting from meaningful efforts to mitigate disaster.

More directly, the IZ proposal created new pressures on the Storey County government, the Pyramid Lake Paiute Tribe, and other local actors, who were forced to spend time, energy, and resources responding to the proposal during a time of major crisis. Further, in his purchase of 67,000 acres of land in TRIC, Berns has come to occupy a large expanse of land that is key to plans for Northern Nevada's long-term regional and economic development. Regional officials have long sought to diversify the local economy away from dependence on the gaming and hospitality sectors, and TRIC has provided an important site for industrial development. Having that space occupied for a utopian experiment has direct effects on the development and planning of the regional economy.

VI Conclusion

Libertarian exit imaginaries aim to supplant liberal democracy's traditional forms of representation, debate, and collective decision-making with the right to exit and a kind of "consumer sovereignty" (Andrejevic, 2020) of the individual. While the long history of libertarian exit is full of fantastical and failed attempts to realize these visions (Craib, 2022), this ideology is finding its way into mainstream political discourse in new ways, as evidenced by the Nevada IZ proposal. These visions also become entangled in seemingly more mundane blockchain urbanism proposals, often supported by policy think tanks and emerging academic literature on blockchain applications and city management. Municipalities across the United States are increasingly embracing cryptocurrencies and blockchain systems to experiment with new governance arrangements (Yaffe-Bellany, 2022). While the outcomes of such projects are not necessarily pre-determined by the technology itself, the ways they may carry assumptions linked to libertarian exit imaginaries do raise important questions about the future of urban democracy that should be of concern to geographers. Scholars have offered important examinations of specific projects of libertarian exit and their views of democracy (Lynch, 2017; Simpson, 2022; Smith and Burrows, 2021; Steinberg et al., 2012) but have generally not recognized the totality of ways in which they may simultaneously fail, be reproduced

elsewhere, and have significant impacts on local communities and institutions. Future geographic research on blockchains and cryptocurrencies and on experimental, technology-driven urban development need to account for the libertarian exit imaginaries that often undergird such projects, examine how they reimagine notions of democracy, and carefully trace out their complex and impactful enactments of technopolitical failure.

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