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Liberation Through Radical Decentralization

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Wealthy societies around the world are facing a growing crisis of confidence in established authorities. Stagnating economies, mounting inequality, political corruption and the increasing monopolization of technology for the benefit of elites have provoked a populist backlash. We share and are driven by these feelings of discontent. However, we also fear that the most common responses on both the right and the left (a retreat from technology, markets and international cooperation) would destroy much of what we treasure in contemporary society while worsening the problems they seek to solve. Over the last half decade, each of us has, in his own way, been working on a part of an alternative solution: to find ways to harness markets and technology to radically decentralize power of all sorts and shift our reliance from authority and to formal rules. In what follows, we discuss how these projects interrelate and complement each other.

One of us has focused on technological solutions to the increasingly centralized control that has been established by powerful monopolies in the digital economy and financial spheres. Bitcoin and other cryptocurrencies in particular emerged directly as a reaction to the perceived excesses of the traditional financial system, with “The Times 03/Jan/2009 Chancellor on brink of second bailout for banks” carved indelibly into Bitcoin’s genesis block. That said, the decentralized technologies behind cryptocurrencies have potential applications far beyond finance. The news is filled with the failures of centralized systems to protect people’s privacy, ranging from large-

decentralized and very high-assurance store of data and computation features often in such designs.

The other has focused on designing rules of the economic and political games of mainstream society, aiming to both break up and reduce the need for concentrated centralized authority — what he calls “Radical Markets”. Traditional private property tends to create and perpetuate inequality of power, monopolizing resources in a few hands rather than deploying them to their best uses. A truer, radical free market would create greater competition and equality by a greater use of auctions and commonly owned property. One-person-one-vote democracy tends to oppress minorities, who then seek protection from the judicial system or international authorities, thus subverting democracy. A more creative democratic forms that give power to minorities to protect their own most deeply valued interests can restore the legitimacy of government. A leading candidate is “Quadratic Voting” (QV), in which citizens can use a (possibly artificial) currency to buy votes at the cost of the square of the votes bought on the issues that are most important to them.

Our projects developed largely separately and each of us has hesitations about especially the near-term aspects of the other’s project. For all their potential, cryptocurrencies show dangerous tendencies towards bubble behavior and the precise set of use cases in which they make the most sense remain to be worked out. Radical new kinds of social institutions, whether technical or economic or political, top-down or bottom-up, are best adopted incrementally and slowly, to give opportunity for experimentation and social learning and reduce the risk that they might disrupt existing social structures in a way that would cause precisely the sort of conflict they seek to heal.

Yet both of us also see great potential for collaboration and complementarity between our programs. Because Ethereum and other cryptocurrencies (intentionally) lack trusted judges and other authorities to adjudicate disputes, they depend heavily on formal and transparent rules. The failings of standard property and voting rules quickly manifest themselves when stripped of the protective coating of human-driven

cannot support; a Radical Market that can operate successfully on the blockchain is one that most fully achieves the goal of avoiding reliance on discretionary power. Finally, the cryptocurrency community is one with aligned philosophical values, and an unusual openness to innovation, that makes it an ideal place where Radical Market ideas can be tested at relatively limited broader social cost.

We thus see many opportunities to collaborate and are actively working to foster connections between our respective communities. Even if neither community achieves its sweeping social ambitions, there are a wide range of narrower contexts where collaborations seem capable of making important social impacts, including using blockchains to improve security of data markets and QV for aggregation of opinions in blockchain-based social networks. And beyond the specific ideas we have worked on, a range of related collaborations seem possible, from using electronic “postage” to deter spam to expanding access to high-quality financial planning for those with limited resources.

One particular example of a possible area for collaboration, and which illustrates some of the challenges involved, is the use of QV to address the substantial governance problems blockchain-based communities have faced. There have been many attempts to use votes to gauge community sentiment when deciding on potentially controversial protocol changes, but so far they have been criticized either for being too vulnerable to manipulation by sockpuppets (fake accounts) and malicious voting by non-community-members or for being too skewed toward reflecting the views of a small group of wealthy coin holders. Some form of QV could present a moderate alternative, as participants’ differing strength of views and stake in the community are taken account, but because the cost of buying many votes quickly becomes prohibitive (1000 votes would cost 1,000,000 credits) the ability for a small elite to disproportionately affect outcomes is limited.

However, QV also poses important technical and conceptual challenges to existing crypto-currency communities. In particular, QV relies heavily on the notion of verifiable, separate human identities, because a community member could multiply

also naturally gives rise to some of the inegalitarian wealth and power dynamics these communities hoped to avoid. After all, a system that formalizes only capital and not human individuality may inexorably serve wealth rather than humanity. In this sense, experiments with Radical Markets may help clarify important outstanding technical questions within crypto-currency communities.

More generally, as we have arguably seen with parts of the internet and the web, excessive and naïve reliance on any formalism intended to decentralize authority can inadvertently have the perverse effect of reestablishing monopolies and oligarchies. Only by making technical systems that offer a variety of mechanisms for checking concentrations of power and by simultaneously building social ideologies constantly on the lookout for failure modes of these mechanisms can we hope to succeed where previous attempts at decentralizing authority have failed. But we are hopeful that some combination of blockchain and Radical Markets technologies can make an important contribution to breaking up the most oppressive forms of corporate, government and technical power and building towards a more free, open and cooperative world in the 21st century.