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Navigating the CryptoCommons

Contribution to GTI Forum Technology and the Future

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For most technologists, there is a blindness between social systems and technological systems. Rather than dwell on such problems, I find it useful to pay attention to those attempting to solve them. Thus, I focus here on a movement of technologists already designing technologies to create new post-capitalist economic spaces. These hackers have moved from resistance to revolution. What can we learn from them?

There are multiple decentralizing and potentially democratizing technologies in the mix, but the core one is blockchain, a form of distributed ledger technology, created by Satoshi Nakamoto in response to the failure of large financial institutions and governments to protect the value of currency. At their most basic level, blockchains are encrypted ledgers of value transactions combined with "smart contracts," which enable the automation of contract execution and enforcement. A simple smart contract would be to purchase a certain amount of a product when it reaches the desired purchase price.

Permissionless blockchains (also known as trustless or public blockchains) are open networks available to everyone to participate in the consensus process that blockchains use to validate transactions and data. This architecture creates the possibility of global open-source civic networks and generative economic coalitions surpassing the capacities of both state hierarchies and capitalist market dynamics. Blockchain technologies could enable the construction of a technological commonwealth wherein advanced exchange, communication, and decision-making technologies are used to aggregate, distribute, and govern capital at multiple levels and on a cooperative basis.

My research focuses on the emerging ethical questions related to the impact of technology on humanity and how a commons-based economic model with a new approach to value, ownership, production, equity, work processes, and social dynamics can be built. While still in the minority, there is a diverse and growing global community experimenting with distributed technologies to create alternative forms of production, relationships, and ownership, with radically new and different logics beyond capitalist extraction, exploitation, market competition, and private ownership. The CryptoCommons movement is building systems incentivizing sharing, decentralization, and cooperation based on a global commons of knowledge, data, and the environment for the collective good, creating the new commonist economy of the future. Much of the debate around emergent technology focuses on technology's tendency to strengthen existing inequalities. Yes, let's be critical, but let's not stand so far removed that we do not take advantage of the new opportunities available to us with these extremely powerful technological tools.

As with all technology, design choices made early in its implementation lay down path dependencies, opening some possibilities and foreclosing others. The Internet ushered in a new phase in the history of the commons in 1993 because it enabled organizing outside the modalities of the state. The Internet distributed information and communication; however, because of the centralized architecture of the platform on which people interact, self-governance was not a natural right. That same architecture also governs the interaction between separate user-generated institutions. Most of the current digital platforms we inhabit constrain users' ability to create their own institutions and govern the interaction between separate ones.

The question is how to design distributed systems that increase humanity's responsiveness through popular sovereignty and collective empowerment.

Cryptocurrencies can be designed to reproduce capitalist inequalities, but they can also be designed to enable cooperation at scale, empowering every individual to be their best self. The Spatial Web moves the Internet into the material world. By combining online data and communication with Artificial Intelligence agents, virtual reality devices, decentralized computing, and blockchain, the Spatial Web will pair real and virtual relations. This technology enables users to both build a twin of physical reality in a virtual realm and bring the digital world back to the physical. It will overlay everything, including conversations, roads, conference rooms, and

classrooms, with AI-powered interaction and intuitive information. The Spatial Web requires new code to bring it to life, but not merely software code. Critically, it requires ethical and social codes as well.

An ethical starting point for the CryptoCommons movement is to design technologies so every part can see the whole, where the needs are, and where to participate, thereby creating feedback loops incorporating the energy from the edges. Another principle is designing technologies as non-corruptible "unenclosable carriers" of information so that people can interact freely. Additionally, they argue, overarching systems design for the future must include stakeholder incentive alignment, open-source code, semantically compatible protocols, and robust engineering practices.

The CryptoCommons movement includes activists working on open source, the commons, permaculture, platform and open cooperatives, blockchain, feminist economics, and open-value accounting. Technologies can deliver more than one type of technological civilization, and we have not yet exhausted their democratic potential. Already functioning corporate sovereignties such as Google are expanding their power by incorporating these new technologies into their systems. The introduction of new technologies' powers of verifiability and permanence could have the immediate effect of strengthening current hierarchies, centralizing power, exacerbating inequality, and generally weakening democracy. Furthermore, as some of the most advantaged players in the world system, corporations enjoy a significant head start in the race to program their logics into mainstream applications, as well as the capacity to enact state policies that block new applications threatening future disintermediation.

Yet, popular sovereignty, envisioned by the CryptoCommoners, may have a future by building a coalition of technologies and broader publics. As the proximate constitutionalizers of the new blockchain world, the technologists designing all our digital systems are in a potentially determinative position, and their affinities matter. They hold an intense desire to rebuild the world based on nature's design of regenerative, resilient, living systems. Let's embrace and support this movement and grow the commons together.

About the Author

Sarah Manski is a scholar of technology and political economy at George Mason University and the founder of the International Society of Blockchain Scholars. She studies technology as a site of social struggle and a force for democratization. For twenty-five years, she worked as activist, journalist, and researcher on projects for empowering workers. She advises foundations, conducts research for the P2P Foundation and the George Mason University Center for Social Science Research, and serves as an Expert Reviewer for the National Science Foundation. She holds a PhD in global studies from the University of California, Santa Barbara.

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