



#BitcoinDynamics: The Rhythms, Dynamics and Virtues of Bitcoin

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The Bitcoin Blockchain

In October 2008, a person or group of people using the pseudonym Satoshi Nakamoto distributed online a paper titled 'Bitcoin: A Peer-to-Peer Electronic Cash System'. The document describes a network of interconnected computers (or: nodes), which automatically monitor each other in real time. They thus *decentralize* the auditing power of any single 'trusted third parties' (such as



banks, tax authorities and credit card companies). The algorithmic codes that govern the operation of this system are openly exposed to the public so that it may be verified and maintained by a multitude of unrelated individual actors.

This feature is described as '*trustlessness*', i.e., one does not need to trust a single owner or stakeholder. Bitcoin enthusiasts around the world claim that this mesh of multiple interacting nodes successfully overcomes any human bias, misjudgment or corrupting vices that may appear in a 'centralized' bureaucratic system. These principles - decentralization and trustlessness - enable the functioning of a new form of digital money that is not subjected to the whims of any single issuing sovereign. Satoshi, as Bitcoin enthusiasts have come to call him/them through the years, dubbed this money as 'Bitcoin'.

While Satoshi used the term 'chain of blocks' to describe Bitcoin's underlying operation system, it soon became known as '*the blockchain*'. Strange-sounding at first, this term is in fact quite logical: every 10 minutes the systems seals with a permanent time-stamp a virtual 'block', which contains a record of the entire transactions made between individual nodes, including the amounts that were sent and the virtual addresses or accounts that these nodes used. As opposed to ledgers that are stored on one central hub, the blockchain enables all individual nodes to register and monitor the transactions in real time while verifying and 'agreeing' between them which of these transaction is false or fraudulent and which is honest.

Consequently, the data recorded in every block cannot be altered without that being noticed by all other nodes, and scrutinized. In parallel, these nodes also 'compete' between them to solve a complicated cryptographic code, which conceals a set number of coins that will be awarded to the finder upon successful decryption. Every new block the system creates thus contains both the details of all the transactions that were done in the last 10 minutes and these new coins. Once a block is signed it is immediately linked to a chain of all previous blocks created beforehand, all the way back to the first block that Satoshi produced on January 3rd 2009, which bitcoin enthusiasts mythically call 'the Genesis Block'.



Genesis

'Genesis' is not just a fancy metaphor. Bitcoin enthusiasts all around the world think of the first-ever block in the Bitcoin blockchain as a first step in the direction of a forthcoming decentralized and trustless future. This is so because the encrypted signature of this block - 000000000019d6689c085ae165831e934ff763ae46a2a6c172b3f1b60a8ce26f - concealed the following inscription: *'The Times 03/Jan/2009 Chancellor on brink of second bailout for banks'*.

It is thus generally agreed that Satoshi's choice to mention the main headline from *The Times* of London is a clear political statement aimed at rebuking and negating the occasional crashes and resulting governmental bailouts intrinsic to the precarious fractional reserve banking system. Satoshi's clever use of encryption in the 'Genesis Block' is consequently taken as a literal prophecy, which predicts the coming into being of a fairer and more egalitarian society that will decentralize the power of contemporary economic and political institutions by replacing 'mediated' relationships with 'frictionless' peer-to-peer (P2P) monetary relations.

There are probably millions of Bitcoiners around the world who explicitly and self-consciously attempt to implement this vision of unmediated sociality not only when they trade Bitcoin online but also in their everyday lives. For example, my interlocutors at the Bitcoin Embassy in Tel Aviv - most of whom early adapters who declare they seek the 'decentralization of power' in Israeli society through the widespread adoption of cryptographic monetary systems - run an organization that has no boss or formal leadership, wherein work is considered voluntary and responsibility is distributed among members ad hoc in accordance with the changing goals and challenges.

Lacking intermediary levels of hierarchy or a chain of command, mediation in such an organization is arguably smoother than that we might find in 'centralized'



bureaucratic organizations that rely on specialized work force with predefined roles (think of a bank, for example). Arguably, my interlocutors claim, a Brave New World will slowly emerge from the everyday practice of Bitcoin. Yaron, an interlocutor from Tel Aviv, explained why in an online interview he recorded in 2014:

Why is Bitcoin good as a substitute for money and gold? Let's start with the fact that it doesn't have a sovereign...[and] no central body... [instead,] there is... a wonderful internet ore, and/or an international freedom language that overrides boundaries and shatters the sovereign, or/and the Prophet Moses of the Third Millennia who will undoubtedly liberate us from Pharaoh... Bitcoin does not redistribute the chips on the table but it does straighten the table up. It will not bring an end to poverty and injustice in the world, but it will bring to the fall the abhorrent [financial] barriers and the profit of the few - banks, big-brother, weapon industries, a sovereign, a crazy apparatus - which rapes humanity by [instituting] borders and wars and rules and separating [people].

The Middle-Ground

But the scope of this 'decentralized', 'trustless' and frictionless social order is limited. Unless they physically dislocate to live in isolated communities that experiment with new blockchain-based applications for the governance of society (e.g. Liberstad project in Norway <https://www.liberstad.com/>), Bitcoin enthusiasts continue to live in a finite, enclosed and hierarchic world defined by third-party mediation. Evidently, even truthful intimate connections premised on immediate trust and emotional connectivity - such as close friendships and kinship relations - are always mediated by other relations that validate them (parents wouldn't relate to each other the same way if they didn't have children together).

In addition, it is notoriously difficult to escape a multiplicity of bureaucratic state apparatuses that impose judicial, economic and moral restrictions on most interactions and relationships in society. My interlocutors in Tel Aviv, like most



Bitcoin enthusiasts around the world, ultimately cannot totally self-alienate themselves from what they call 'the old economy' (which is based on state-regulated fiat money) precisely because they are dependent on fiat cash flow *all the time*. Living and working at the heart of Tel Aviv, they receive salary, pay rent, and buy groceries in state-regulated Shekels.

Contributing in/being part of the Bitcoin vision always in that sense involves a regular back and forth motion, which tilts between fiat and crypto.

People who enter the Bitcoin world are forced to master the art of making-do in a border-zone that includes elements of both sides which it separates, living in a somewhat murky middle-ground between a 'centralized' mode of socioeconomic organization and its 'decentralized' crypto-alternative.

As Nissim, a research interlocutor from Tel Aviv, once told me:

We are in a transition period. Of course the idea is to live in the new world [of unmediated Peer-to-peer transactions] ... But everyday life dictates the rhythm of this transition, you intuitively identify the objectives you want to advance and act on them. It's a no-man's-land, but it is simultaneously also very dynamic. You aim for a target but you act as if it's not there. The inner feeling itself creates the way [forward]. You just need to listen to it. The idea of a middle is true for today but when the concept [of Bitcoin as a global currency] will mature, only then, freedom of action [...] will be synchronized with the truth. And when the truth is active, progress is unstoppable and its results are immense.

The middle-ground is continuously created through the ongoing tension existing between actions that take place in the so-called 'old' capitalist notion of mediated transactions and actions that take place in a 'new' so-called 'frictionless' flow of capital in decentralized cryptocurrency contexts. For Nissim, such tension is nothing less than a battle between good and evil.



But until the idea matures, as he says, he must accommodate both these practical worlds simultaneously, one leg in crypto and the other in fiat, always inhabiting a liminal position with respect to established perspectives on hierarchy, property, liberty, governance, citizenship and money in the wider society. Liminality is here a continuous situation rather than a temporary anti-structural position, an ongoing state of instability at the heart of the capitalist order that transmits itself in the actions and choices of its human carriers.



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Dynamics in the Middle

There are two distinct, yet mutually inclusive, market dynamics that define the emerging cryptocurrency economy in the middle-ground. The first is the dynamic of state regulatory practices, which tends to be slow, hesitant and conservative, to



the extent that it sometimes evokes a sense of deliberate leg-dragging. As long as cryptocurrencies - especially Bitcoin - remain unregulated, they continue to function outside the dominant economic system and in nominal opposition to it.

The Second is the dynamic fluctuations of supply, demand and value-making in the cryptocurrency 'eco-system' itself, which tends to be rapid, radical and unpredictable. This sense of impending and ongoing danger of a sudden devaluation or impending crash has notoriously reinforced a mythical Wild-West stereotype in the popular imagination about the cryptocurrency scene, along with its adjacent hyper-masculine key symbols (e.g. the images of the self-sufficient Lone Ranger, Cowboy or Outlaw versus the corrupt Sheriff and the biased Big Other of centralized governments, widely defined).

Cryptocurrency enthusiasts, especially those pertaining to the vibrant Bitcoin global community, are directly exposed to and play upon these simultaneous processes and imaginaries in their everyday lives, both on- and off-line, as they attempt to survive in the middle ground: on the one hand they must continue to hold and trade Bitcoin, but on the other hand they must keep checking the pulse to avoid a crypto-crash. The tension between 'centralized' and 'decentralized' imaginaries of social organization is in that sense intimately experiential and an embodied phenomenon.

#BitcoinDynamics

In this week's thematic thread, we reflect on the social dynamics and rhythms of living in this emerging decentralized middle-ground. My own article analyses a market strategy that Bitcoin enthusiasts call 'HODL', which mainly consists in 'holding' your coins for as long as possible while avoiding the uncertainty of online trading.

Quinn DuPont's excerpt from his recently published book *Cryptocurrencies and Blockchains* (Polity, 2018) traces the dynamic of his own gradual immersion in the



cryptocurrency world as a Bitcoin miner - an active participant in the maintenance of the Bitcoin blockchain - which then informs an up-to-date analysis of the infrastructural dynamics that undergird the cryptocurrency world at large.

Jacob Hjortsberg's contribution provides an acute critique of the dynamic of decentralization in Bitcoin by highlighting the notion of class and a 'politics of necessity', both of which for him relate directly to surveillance and the emergence of tyrannical contemporary powers around the world, beginning from the Blockchain, through the Internet of Things (IoT) to the Police State of the 21st Century.

Should we look at contemporary Bitcoiners as radical dissidents or simply as committed mavericks - that is, as people who are deeply rooted at the heart of the social and economic system which they ostensibly reject, and within which they are trying to assert their own autonomy? Do cryptocurrency enthusiasts in the middle-ground successfully instantiate a real alternative to the problems, shortcomings and instabilities that characterize the current state of capital accumulation and expansion around the globe? Or maybe their frequent zig-zag between crypto and fiat in fact accelerates some of the most destructive elements that undergird the dominant fractional reserve banking system, such as rapid value fluctuations and the concentration of financial power at the hands of few 'early adopters' and stakeholders?

Rather than offer clear answers to these questions, we hope that the three analyses presented this week will inspire a lively anthropological debate on decentralization, 'trustlessness' and the liminal dynamics of the middle-ground.

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