General

Defining Bitcoin's Architecture

Geert Lovink

Column – November 2, 2013

Like the current economic order, Bitcoin privileges certain social relationships. It is a *Weltanschauung*, and, like all systems, it produces its own animal spirits.

If we wanted to end "creative poverty" and help artists, writers, and designers to earn money from their work directly, without intermediaries such as curators, galleries and publishers, what would such a "peer-to-peer economy" look like? The most fundamental contribution to resolving the growing "precarity" amongst the artistic multitudes has come from the geek community in the form of the Bitcoin project. This is the Internet's very own currency, and is by no means its first – or for that matter its last – attempt to create an internal payment system based on free software and open source concepts.

It is no coincidence that Bitcoin was founded in the wake of the Global Financial Crisis in 2009, and that it reached its first peak of intense mass media coverage during the Cyprus banking crisis in March 2013. While banking sector reform efforts have remained in a slump, it is no surprise that this techno-libertarian project has indeed taken off. However, despite all of the media hype, we need to stress that Bitcoin remains a work in progress and that the (public) debate amongst its architects is on going. Let's therefore contribute to the discussion and together and develop a way to generate a social income in this Internet age, for instance, by creating a basic income for all, which can be supplemented by micro-payments.

Bitcoin is based on a specific crypto-libertarian dream of the global private market, which consists of a market that is not dependent on state facilitation and regulation. For some this is an anarchist dream come true, for others a lonesome cowboy nightmare. Through the use of public key encryption technologies combined with distributed P2P software architectures, Bitcoin enables the semi-anonymous transfer of funds between users. In the early stages, the most visible antagonistic aspect of this new currency was its facilitation of illegal marketplaces (the sale of illegal goods), most notably that of Silk Road. These illegal transactions can be "seen" by governmental eyes but cannot be easily regulated or traced back to the users. But an even more damaging aspect for national governments, however, is the potential for this currency to simply scale up and be used for mundane "over the counter" purposes. What happens to the ritual of taxation when a critical mass starts operating within a private economy? The simple answer is that governments would never allow such a situation develop. But isn't it just a 90s dream to see cyberspace as a separate cosmos with its own laws?

If we leave this ideological agenda aside, the most disruptive potential of Bitcoin might very well be its range of less controversial and more pragmatic functions. It could be used, for example, as a default currency for remittances, which could greatly reduce, if not altogether eliminate, the fees associated with sending money across borders. Here the otherwise antagonistic and disruptive capacities of Bitcoin come to resemble the more palatable notion of "creative destruction", where current economic practice is overturned (outcompeted), but only in a way that reaffirms its overall logic.

Like the current economic order, Bitcoin privileges certain social relationships. It is a *Weltanschauung*, and, like all systems, it produces its own animal spirits. In order to come to terms with Bitcoin, we must account for its value, but also its "values", which is the domain of economic sociologists and anthropologists. In fact, these two notions need to be reunited. What are the values that underpin the design of Bitcoin, which gives it its value? Besides the recent thrill of financial speculation with Bitcoins during the Cyprus crisis, can we also speak of an aesthetics of the 'geek cool' or of hacker-geek values? Do you have any Bitcoins? How vet cool.

Is it possible to single out certain technical and material aspects of the currency system as explicitly political? Regular Bitcoin commentator and free market enthusiast Jon Matonis describes the currency as nonpolitical because, ultimately, it is not backed by the sword of Leviathan. But this obviously rests on an old-school definition of "politics", and on the desire to situate markets outside of politics. Even the liberal legal scholar, Creative Commons lead singer Lawrence Lessig, was able to acknowledge the political dimensions of software within his own quasi-legal paradigm using his formula "code is law". And so, as code, we could ask: What are the Laws of Bitcoin? What values have become law and how can creative workers, keen to get involved in designing the Shape of Things, gain influence here?

Other than supporting the dream of a digital, networked, global, anonymous private market, what are the concrete practices that are emerging through this currency system? One thing that has become clear is that it is now possible to see money as an artefact of design (in this case a particular set of computer code). No longer imagined as a universal commodity (gold), or as the monopoly creation of governments, basic questions about the function, source (of value) and purpose of money are once again on the table.

Text in collaboration with Nathaniel Tkacz.

Geert Lovink is a media theorist, Internet critic and author of *Social Media Abyss* (2016), *Networks Without a Cause* (2012), *Zero Comments* (2007) and *Dark Fiber* (2002). Since 2004 he is researcher in the Faculty of Digital Media and Creative Industries at the Amsterdam University of Applied Sciences where he is the founder of the Institute of Network Cultures. His centre recently organized conferences, publications and research networks such as *Video Vortex* (the politics and aesthetics of online video), *Unlike Us* (alternatives in social media), *Critical Point of View* (Wikipedia), *Society of the Query* (the culture of search), *MoneyLab* (Internet-based revenue models in the arts) and a project on the future of art criticism. From 2004–2013 he was also associate professor in Media Studies (new media), University of Amsterdam. Since 2009 he is professor at the European Graduate School (Saas-Fee / Malta) where he supervises PhD students.

Tags

Capitalism, Money

This text was downloaded on November 20, 2026 from
Open! Platform for Art, Culture & the Public Domain
www.onlineopen.org/defining-bitcoin-s-architecture