

When talking about decentralization in computational terms one should take note of cryptographic hash functions and hash trees since they constitute the kernel upon which relevant computational paradigms and tools propagate. Among the available contemporary technologies in regard to decentralization, blockchains would be cited as the most prominent. Ignored and framed since the mid 90s – at least in theoretical terms – the actual real-world conception of such a technology did not take place until 2008. David G. Post (2001: 207–208) offered an interesting speculation about a plurality of online rule systems:

„Although each individual network can be constrained from ,above‘ in regard to the rule sets it can, or cannot, adopt, the aggregate range of such rule sets in cyberspace will be far less susceptible to such control. A kind of competition between individual networks to design and implement rule sets compatible with the preferences of individual internetwork users will thus materialize in a new and largely unregulated, because largely unregulatable, market for rules. The outcome of the individual decisions within this market – the aggregated choices of individual users seeking particular network rule sets most to their liking – will therefore, to a significant extent, determine the contours of the ,law of cyberspace‘” (Post 2001: 207–208).

2008 the first ever cryptocurrency, Bitcoin, was created by a faceless, anonymous online entity referred to as Satoshi Nakamoto. Since then, a number of cryptocurrencies and cryptonetworks have – for better or for worse – emerged. Their cumulative or individual evolution so far abides a blockchain’s fundamental principles which might be cited as:

Decentralization – no single party has control over what information goes in; Consensus – many different parties store exact copies of the same ledger, so the majority has to agree on the information being added; ‘Add-only’, meaning one can not edit what is already there, one can only add information; New information can not conflict with what is already been added; Information is able to be accessed and replicated by everybody on the network” (Dossman 2018).