If I Only Had a Heart:

A DisCO Manifesto

DisCO

—
distributed
cooperative
organizations

If I Only had a Heart:
a DisCO manifesto

—

Value Sovereignty, Care Work, Commons and Distributed Cooperative Organizations

"If we can't take care of each other now,
when the world is going to shit,
how are we ever going to make it?"

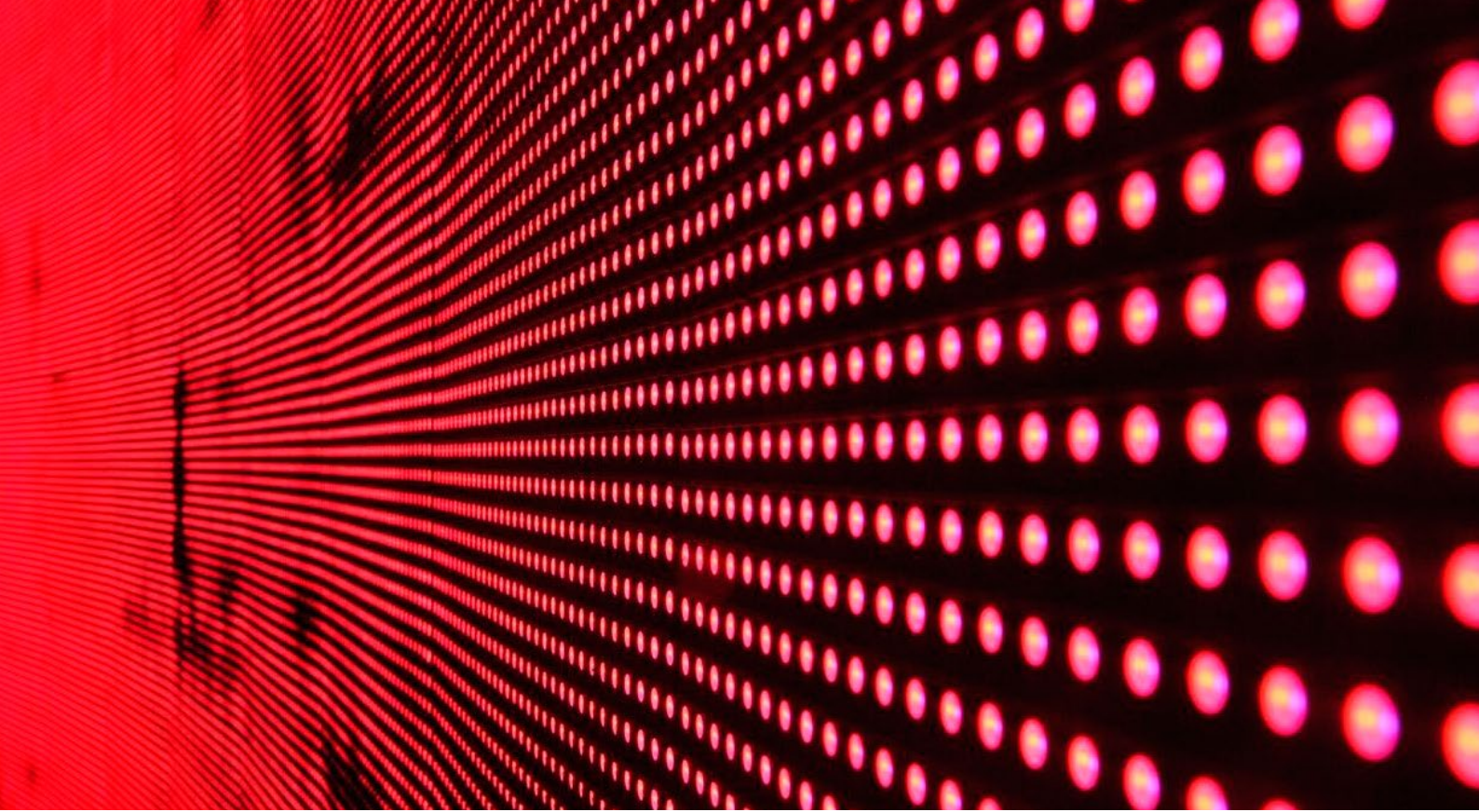**— Gary Shteyngart, Super Sad True Love Story.**

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If I Can't Dance... Foreword by Ruth Catlow

The DisCO manifesto induces a song in the heart and a skip in the step to those who, like me, yearn to see varied collectives of self-organised people empowered through more distributed forms of governance. The DisCO's cousins, the Decentralised Autonomous Organisations, promise to allow people to exchange economic value, to pool resources and form joint-ventures, without control from the centre, in ways that were impossible before blockchains; to agree on how risks and rewards should be distributed and to enjoy the benefits (or otherwise) of the shared activity in the future. However the core concepts of DAOs[1] and crypto-economic mechanism design — incentives, penalties and secrecy — are not a natural starting point for most people forming new ventures together. Neither, funnily enough, is money.

According to Elinor Ostrom institutions are what shape economics and, in turn, political and social change. The Nobel Prize-winning economist believed that rules and patterns of human interactions, and their co-production of value, were the source of economic flows. She also asserted tthe need for economics to use qualitative data to understand behaviour not just maths.[2] By reframing the question from, "How can DAOs or blockchains help us?" to "Why do we need Open Distributed Cooperatives and how do we get them?" DisCOs throw open the door and invite whole new tribes to join together with the crypto-economists on the dancefloor of planetary-scale cooperation, to co-create new moves and movements for working people, and to form common pools of care and value.

1   As Julio Linares likes to say: "The DAO that can be put on the blockchain is not the real dao (or way, in Chinese)"

2   Wall, Derek. 2017. Elinor Ostrom's Rules for Radicals, Pluto Press, London.

So what are DisCOs and why do we need them? Let's take this one track at a time.

DisCOs are an approach to forming Distributed Open Cooperatives.

1. Why co-operatives? Because we need to inject democracy into our economic systems (and politics and society in turn). Funded by direct member investment, rather than investment from third-party shareholders, co-operative members "decide on the values of the enterprise, which don't necessarily need to be about the maximization of profits." Cooperatives succeed when values are aligned around communal benefit to pooling resources and a shared desire to "avoid anti-competitive or extractive behavior."[3] Co-operatives offer a way for people to be rewarded for their labour while committing to shared social values.

2. Why Open-Value Cooperativism? Because we need to expand our economics and accounting to include care for living systems. Open-value cooperatives apply the logic of feminist economists like Marilyn Waring, to account for the care work vital to human prosperity and survival. They also acknowledge the value of intersectional approaches, currently ignored through the misleading narratives of our harmful economic systems. The huge cost to social and environmental justice of these systems are only now starting to be more widely acknowledged.

3. Why DAOs? Why distributed? To maximize radical and emancipatory cooperation across national borders (on- and off-chain) while operating within the laws locally (at least until we can change them). The promise of all DAOs is the development of interoperable, open source legal contracts, with a near zero-cost of organisation creation. This is about both cost efficiencies, and an invitation to imagine, design and build the organisations we need from the ground up, free (at first) from judicial constraints. These autonomous 'ownerless' organisations, or institutions, will each enable a pattern of interactions between its members. What is special about DisCOs though is their emphasis on lived experience, care and relations, and the uses and limits of "trustless" and "intelligent" machines. "We need to find ways to embrace not only technical solutions, but also people who have experience in community organizing and methods that foster trust, negotiate hierarchies, and embrace difference. Because there is no magic app for platform cooperativism. And there never will be."[4] (O'Dwyer, 2018)

DisCOs' attention on local conditions and the corporeal bodies of those involved in the new joint ventures is a crucial injection for the otherwise abstract and dangerously necrotic mechanisms for interacting with ledgers that pervade the current DAOsphere. It encourages whole-body systems checks, in which economic flows are just one part of the living system in constant flux, in need of constant renewal. It discourages us

3   Past, Present, Future: From Co-ops to Cryptonetworks by Jesse Walden, 2019.

4   Blockchain Just Isn't As Radical As You Want It To Be, by Rachel O'Dwyer, 2018

from the quest for the perfect, finished mechanism design, and we turn our attention and intentions back to our lives together, and the next collaboration challenge.

The famous anarcha-feminist Emma Goldman said "*If I can't dance, it's not my revolution!*" ... and we all know that the best dance floors are alive with a riot of new moves that just arrived from some foreign land, that we want to adopt and coordinate with.

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Find out more at www.furtherfield.org; www.decal.is

Introduction

This publication is divided into seven chapters and will take you approximately one hour to read:

Chapter 1: Rage Against the Machine and Science Friction | **Chapter 2: You say Potato, I say Decentralized: Semantics Matter** | **Chapter 3: Last Night A Distributed Cooperative Organization Saved My Life** | **Chapter 4: Punk Elegance: The Story of Guerrilla Translation and the Guerrilla Media Collective** | **Chapter 5: Turn the Beat Around: Community Algorithmic Trusts and Care Oriented Cooperativism** | **Chapter 6: Open-Value Co-ops for Radical Workplace Democracy** | **Chapter 7: The Last Dance: The Future is Unwritten**

"If I Only Had a Heart" represents a deep dive into Distributed Cooperative Organizations, or DisCOs.

What's a DisCO? It's a set of organisational tools and practices for groups of people who want to work together in a cooperative, commons-oriented, and feminist economic form. It's also an alternative to another type of organization called Decentralized Autonomous Organizations, or DAOs.

We'll examine the role of supposedly disruptive technologies in social change by providing a critical overview of blockchain technologies, DAOs and Artificial Intelligence. From there, we'll explain and compare DisCOs to DAOs, and why we stand for "distributed" over "decentralized" and "cooperative" over "autonomous." We'll also explore worrying trends and interests in the blockchain space, particularly the neoliberal context of techno-determinism and AI (artificial intelligence). Next, we'll talk about how cooperatives and the commons provide important historical precedents for decentralised models. Then we'll break down the four main components of the DisCO framework: the Commons and P2P, Open Cooperativism, Open-Value Accounting, and Feminist Economics. Following that, we'll offer the Seven DisCO principles, a 21st-century expansion on the original seven cooperative principles.

Next, we'll explain why DisCOs were not conceived as a theory, but instead arose from the [lived experience of a commons-oriented collective](): Guerrilla Translation/ Media Collective. There follows an overview of the [governance/economic model]() used in Guerrilla Media Collective, with its various value streams for tracking pro-bono/ commons generating "Love work", agency/paid "Livelihood work", and the explicit recognition of reproductive or "Care work". We also discuss the federation strategy for DisCOs and how nodes within a particular DisCO can work with each other.

The [next section]() explores the issue of care work, which is mostly absent in the blockchain space. We also question one of the defining features of the blockchain: "trustlessness", and how we see it as part of a spectrum with "trustworthy" at the other end. This leads us to the [Community Algorithmic Trust, or DisCO CAT](), the platform where value tracking takes place and how we conceive it as a human/machine hybrid that holds, even encodes, the goals and values of the collective. We then ask what [radical workplace democracy]() looks like by taking a closer look at what it means to be a DisCO and discussing the characteristics of Open-Value Cooperativism — the radical edge of Platform Co-ops.

The publication ends by [proposing our concept for the future of work]() — *restoration* — and how we believe that DisCOs represent a more realistic and socially positive use of the potential of Distributed Ledger and Blockchain technologies. We also discuss the [various demographics which are explicitly included within the DisCO framework]() (Co-ops, Commons, Feminism, Open Source communities, the precariat, etc.) and talk about [where we are with the DisCO project]() right now and where we're bound.

Why did we write this publication? Because we've been observing and interacting with the blockchain space from a very particular point of view, that of the commons, which is sometimes alluded to but often misunderstood. It also brings together our lived experience in Guerrilla Translation and Media Collective and what it means to be a distributed organization based on the needs of people, as opposed to making people fit the needs of software architecture. We strongly believe that DisCOs can be a useful tool for the precariat in self-organizing into purpose-oriented collectives to foster economic counterpowers against predatory capitalism.

We want the *DisCO Manifesto* to reach as many people as possible. We've taken the time to describe concepts from the [Commons/P2P](), [Open Cooperative](), [Feminist Economic]() and [Distributed Ledger Technology]() (or DLT) spaces. Each of these movements speaks to its communities in specific terms and cultural references, and of course the jargon that results can be alienating — both among these movements and to the general public. We've tried to strike a balance by providing descriptions, hyperlinking to further resources, and including extensive footnotes for those not familiar with the terminology.

On the subject of links: if you are reading this text in a printed version, you can find

an ordered list of all the hyperlinks in this webpage. All of the embedded videos are compiled in this playlist.[5] These materials will help enrich your understanding of DisCO and the movements it intersects.
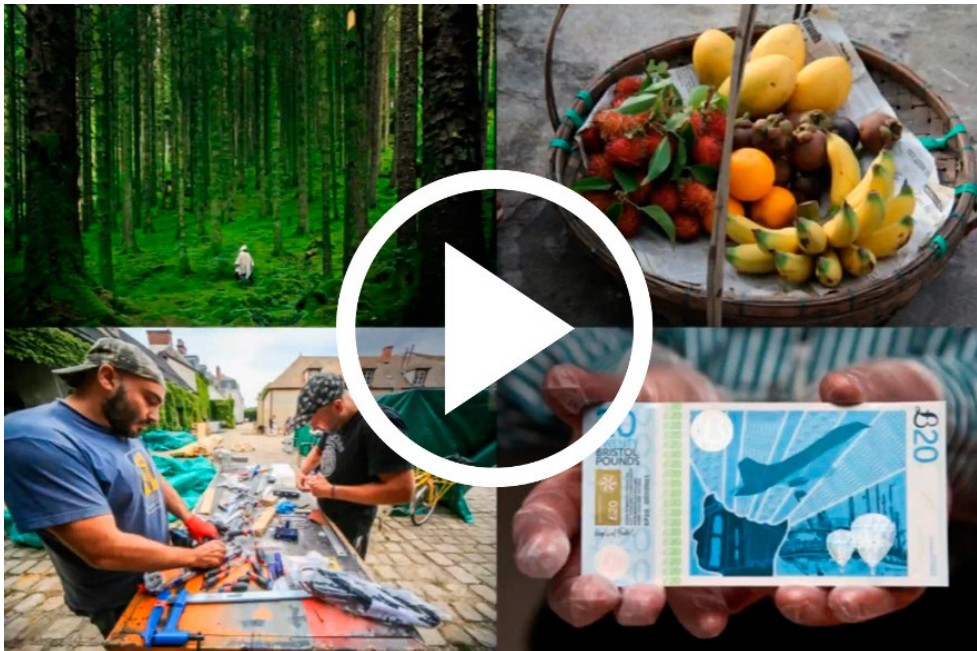
Watch A (Very) Short Introduction to DisCOs by Guerrilla Media Collective

For more resources on DisCOs, please visit our website: DisCO.Coop. If you're pressed for time, here is a simplified summary for those familiar with blockchains and DAOs.

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5   Available at https://youtu.be/60bZmRtA6LQ

Rage Against the Machine and Science Friction

In 1997, chess grandmaster Garry Kasparov faced off against the IBM supercomputer Deep Blue in a series of matches. This was Kasparov's and the machine's second encounter — the Grandmaster had beaten Deep Blue a year earlier. But history didn't repeat itself during this rematch. After a series of victories, defeats and draws, Deep Blue finished Kasparov off in a staggering 19 moves.

Kasparov was devastated. He couldn't comprehend what had just taken place. Initially, he accused IBM of relying on human consultants during the game. A particularly critical move during the second match, described as "human-like", was later theorised to have been a bug in the machine's code.

Deep Blue was later dismantled by IBM, but the 1997 match marked a turning point in the evolution of artificial intelligence and machine learning. Kasparov subsequently tried a more conciliatory approach. As one of the innovators of what would become centaur chess, he began playing with the assistance of computers against other similar player-computer hybrids. Players with average computers were, on occasion, able to defeat supercomputers significantly superior to Deep Blue.

Questions about the future of society, work, and humanity are often met with pat responses like "automation", or "artificial intelligence"; just the inevitable consequences of the cult of progress. But this reaction is far from universal. Many feel that there are things much more important than technology, like our collapsing ecosystems and social relationships. We're inclined to agree. In fact, technology can often obfuscate these issues, while the affordances of a technology depend heavily on the political, economic and human agendas imprinted into its machine DNA. Machine dominance or machine distrust aren't the only options on the table — we can be a lot more nuanced in the design and usage of technologies by being explicit about the values we imprint in our economic systems. DisCOs, like Kasparov's centaur chess, are a way to achieve that.

With resource and energy scarcity posing a quantifiable danger for humanity, the prescriptive prioritization of techno-normative solutions can come across as naive and shortsighted. But as a society, our approach to dealing with these issues will always be informed by the social, human, and even technological frameworks with which we choose to tackle those challenges. In short, even if you're not crazy about technology, technology is definitely crazy about you, and is becoming more and more entangled in your life and future.

Among the technologies predicted to "disrupt" our futures, one stands out as simultaneously exciting, terrifying, and overhyped: the blockchain.

This is not the place to offer thorough explanations about blockchains;[6] other introductory materials come highly recommended. For the purposes of our argument, what you do need to know is that blockchains are shared, synchronised, and theoretically incorruptible accounting systems. Originally developed as the "trustless" backdrop for the digital currency Bitcoin, the potential of blockchains (more broadly called *distributed ledger technologies,* although not every DLT is a blockchain) was advanced in 2013 with the popularisation of smart contracts — snippets of code tacked into the ledgers which allow for the creation of decentralised programs and applications.[7]

The promise of smart contracts soon led to the creation of something known as Decentralised Autonomous Organizations, or DAOs. These are blockchain-based entities that can execute payments, levy penalties, and enforce terms and contracts, sometimes with and — think about this — sometimes *without* much human interaction.[8] The latter half of 2014 saw a deluge of proposals describing how DAOs would revolutionize the market, maximize organizational efficiency and dismantle existing monopolies. How would they accomplish these lofty goals? The argument goes that by encoding rules into immutable, self-executing systems, human error and messiness could simply be designed out of institutions, making our futures more reliable and trustworthy. Um - yay?

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6   Yes, plural. One of the most common misunderstandings of blockchain stems from treating it as if there was a *single* blockchain. It's not a trademark or a brand, but a type of technology with many iterations.

7   This is an admittedly simplistic description of the Blockchain and Smart Contracts. For an accessible yet thorough introduction to the Blockchain, we recommend this video course, as well as Daniel Drescher's excellent book, Blockchain Basics.

8   DLT/Open Source experts Sam Hart and Eleftherios Diakomichalis add that DAOs can incorporate human entities via voting rights or market mechanisms. DAOs can also be thought of as a set of institutional protocols that are enforced programmatically, often coordinating with humans, bots, or other contracts. Despite this, most of the DAOs that get traction today (Moloch DAO, Leap DAO, ETH DAO) are focused on human interaction but only through capital/coin voting (as identity remains an issue on the blockchain). Jaya Klara Brekke adds "There is always some form of human interaction, it's just a question of where and how — the Curator, for example, that determines which wallets can receive payment from the DAO etc. And this then becomes the interesting question — it's never that humans are removed, it is always that there is a reconfiguration of the role of humans in relation to each other and the system."

Five years on, the excitement around the blockchain and DAOs hasn't abated, but what about the results? Despite their high visibility and hype factor, a research study on blockchain-based projects found that so far, most have underdelivered on their promise. The name "DAO" was also badly tarnished by a speculative venture of the same name which suffered a hack so severe that it provoked significant contention in the Ethereum community.[9] The resulting fork in the code and community undermined the credibility of the oft-repeated promises of immutability and security. The upside of this cautionary tale is that new alternatives are being worked on by many projects.

Meanwhile, adoption of blockchain dApps (decentralized applications) remains low when compared to Silicon Valley giants. The world's top ranked dApp has 1300 daily active users. Yes, you read correctly: that's one *thousand* three-hundred users — contrast that to Facebook's 1.56 billion daily users. On the flipside, the energy consumption of most blockchain validation systems remains terrifyingly high, with estimates comparing it to that of the national consumption of Ireland or Denmark.

Levied against the hype, these results have led some to say that blockchains are pretty much good for nothing. Others question their promises of decentralization when taking into account existing gender, race and power hierarchies. The jury is still out but remember, Big Tech still has a crush on you, and sometimes takes unpredictable paths to stalk you.

According to a recent Forbes list, 50 mega banks and corporations are poised to invest a minimum of double-digit billions of dollars in distributed tech in the near future. Take HSBC for example — you remember, the bank that laundered money for terrorists and drug cartels, manipulated interest rates, and promotes mass deforestation? HSBC has already processed transactions to the tune of $250bn through FX Everywhere, its permissioned blockchain[10] which, according to their literature, ensures "A shared, single version of the truth." In February 2019, Facebook, the 2.7 billion-person

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9   From Ethos.io's introductory article to Ethereum: "Ethereum is an open platform that enables developers to build and deploy decentralized applications such as smart contracts and other complex legal and financial applications." The development of Ethereum sparked the interest in Smart Contracts and DAOs.

10   A permissioned blockchain places limits on who can access, transact and validate in the network, as opposed to a *public* blockchain, where anyone can access and contribute, as long as they have the technical means and understanding.

social experiment whose business model thrives on hostility, surveillance and social manipulation, "acquired" a team of humans previously enmeshed in developing a civic democracy blockchain-based system within a publicly-funded EU project. Fast forward a few months and Facebook announces Libra (June 2019), a dubious cryptocurrency proposition at best and unsurprisingly coded by the same team of developers. Consider that these "solidly trustworthy" banks and corporations then become the "soul" of the tech, in that they influence its development, priorities and eventual outcomes to attain their own bottom-line goals, and of course, even more power.

It took Deep Blue a year to face Kasparov again and defeat him. IBM built its supercomputer on top of many years of failed experiments and defeats, but the corporation that assisted Nazi Germany in identifying, segregating and exterminating Jews persisted until they were proven right. They had the necessary capital to not only indulge unlimited dead ends, but to increase the likelihood of a future where their vision would prevail.

Some like to compare the current state of disillusionment around the blockchain and DAOs to the state of the Internet after the dot-com bubble, a temporary dark night of the soul preceding a brilliant new dawn where the urgent technical, scaling, and energy consumption problems are overcome by human ingenuity. But what about the human and societal problems these technologies pose? Who is going to address or overcome them? When Facebook doesn't even miss a beat as the US Federal Trade Commission levies a $5 billion fine for violating a consent decree, what counterforces

can possibly stand in the way of Big Tech?

Like Kasparov and the centaur chess players, we think it's time for a more sober, cooperative, and purposeful assessment of the potentials of Distributed Ledger Technologies.

Someone call Emma Goldman, we're going DisCO dancing.

You say Potato, I say Decentralized: Semantics Matter
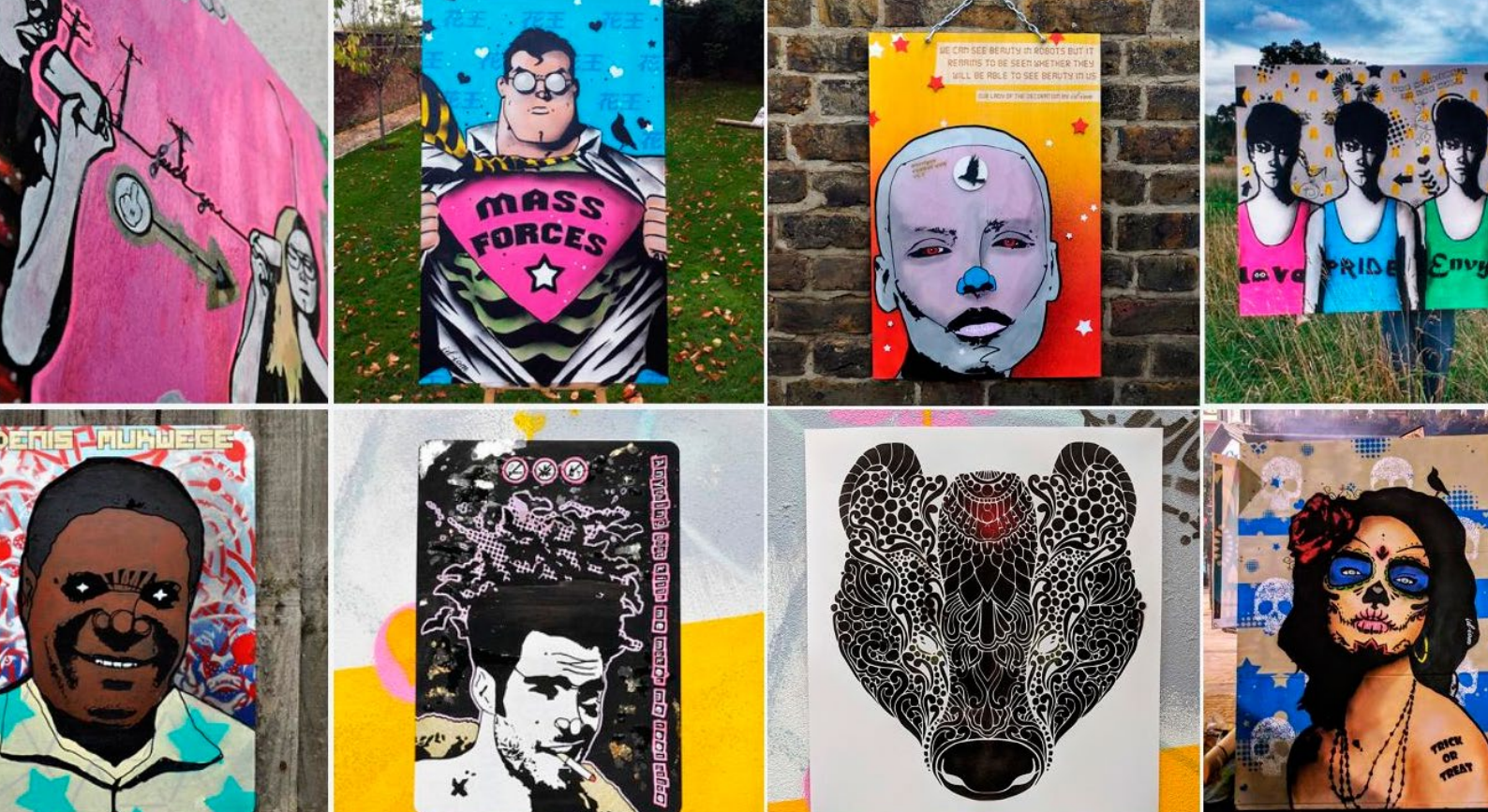
As we've hinted, DisCOs or Distributed Cooperative Organizations are our way of rescuing the baby from the DAO bathwater. If DAOs have arguably been individualistic, techno-deterministic and male dominated[11] (a persistent complaint against the tech world), the Distributed Cooperative Organization proposes corrective measures by prioritizing **mutual support**, **cooperativism** and **care work among people**.

To contrast DisCOs and DAOs, it is useful to examine some of the relevant semantics and underlying assumptions. DAOs and DisCOs agree on the importance of organization — although, in a brief glimpse of the man behind the curtain, a subset of DAOs have also been described as Decentralized, Autonomous Corporations.

So, why use "distributed" over "decentralized", and "cooperative" instead of "autonomous"?[12] Precision in these terms can help define what form of horizontalism these will take, and who has the agency. Yes, it's about power, again.

Decentralized / Distributed

Paul Baran's classic 1964 series, On Distributed Communications, introduced the figure below to illustrate network topologies:

Baran's diagram is trotted out ad nauseam to describe peer-to-peer networks, which are generally assumed to be built on computer nodes or servers. There's also a different angle on this. Behind each node or computer there are living human beings with bodies that need nourishment, sleep and affection, and these topologies represent how they relate, whether supported by online networks or not.

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11 The Bitcoin community is 91% men, 96% of Ethereum users are male. Initiatives such as She256, the Women on the Block Conference, Women in Blockchain Global and Crypto-Knitting Circles are welcome exceptions with varying degrees of explicit feminism.

12 In 2015, some of our colleagues contributed to a model called Distributed Collaborative Organizations. It's a fascinating proposal mainly geared towards US legal entities, but quite distinct from the cultural/structural frameworks of DisCO.

Centralized   Decentralized   Distributed
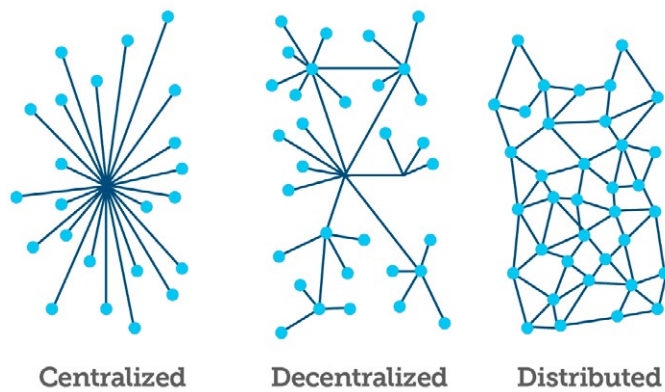
Centralized topologies you already know about, they form the backbone of our current world order (central points of power and limited access). The other two, "decentralized" and "distributed" are often used interchangeably but they aren't really synonymous. The former is characterised by tree-like structures where the main branches can disperse informational bandwidth to the smaller nodes or edges, or even sever it altogether.[13] Distributed networks ensure that every node can act as a receiver or sender: as the old song goes, "from each according to their capacity, to each according to their need." This describes end-to-end systems where certain nodes are *not* inherently privileged, in other words, all have similar power or capacity.

In [this video](#) [Dmytri Kleiner](#) explains why decentralized systems, with their dependency on investments and servers, can't compete with centralized technologies. Decentralized systems become more cost-intensive as they grow, but true 'end-to-end' or distributed systems grow in strength and resilience as they add users who pool their resources.

Beyond network considerations, we prefer to use "distributed" to explicitly highlight the issue of *power*. As Spanish cyberpunk theorist David de Ugarte says, "Every network architecture hides a power structure." Decentralized networks boast of the connectivity among nodes, *but not about the power dynamics and influence of each node.*[14] For example, the Bitcoin network privileges those with early access to the protocol

13 Often enough, a small number of dominant hubs more or less control how nodes can interact.

14 Platform Cooperativism's co-founder Nathan Schneider states: "The measure of a technology should be its capacity to engender more accountable forms of trust."

(i.e., the technology, early access to its use) and with the economic privilege to invest in server farms running on dirty power[15] to mint new coins. As a result, Bitcoin holds the dubious honour of having a Gini (inequality) coefficient higher than most fiat currencies. Decentralized technologies do not guarantee decentralized outcomes. Yes, in theory anyone can participate in the network, but only if you're starting from a position of elevated privilege and power which is designed to increase: the guardians of the decentralised center can take the whole network down if they so choose. Let them eat (Bitcoin) cake!
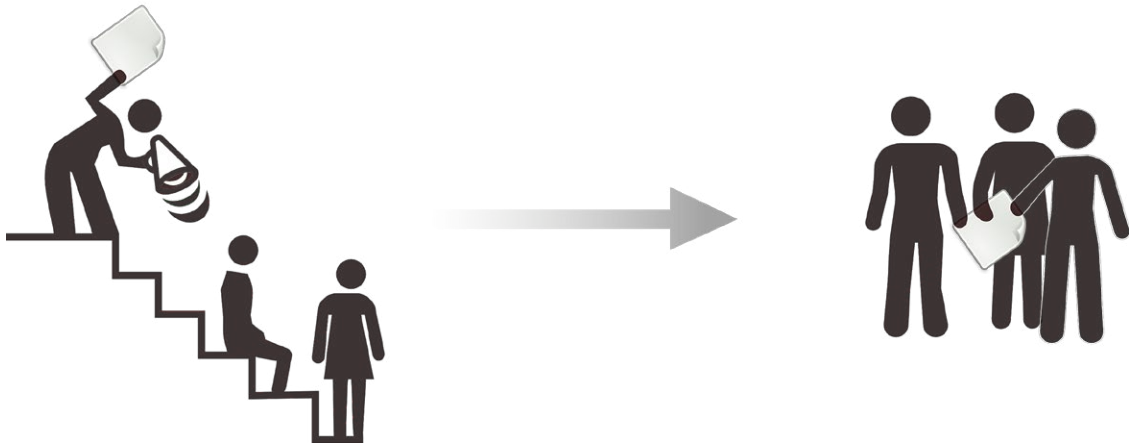

To be clear, by "distributed" we are not describing artificially enforced equality, but federated heterarchical and equipotential systems. This basically means that all nodes/persons can engage in consented, fluid modes of governance (something that recent anthropological studies tell us was the norm before the advent of predominantly vertical systems), and that while "peers" in a network are expected to have different talents, personalities and preferences, all have the same rights to contribute to the network and participate in its decisions. So, how can we achieve these structural goals? Through specific governance and federation/replicability patterns that we will describe below.

When we favour "distributed" over "decentralized", we are referring to two things. First, we address distributed power structures among individuals *within* an organization, as well as among subgroups of an organization. Secondly, we refer to distributed power structures *between* the organization and other DisCOs.

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15 This is, no pun intended, a *hotly contested* issue! Bitcoin devotees have made the Trumpian claim that research on the pernicious effects of Bitcoin's energy use amounts to "Fake News." Meanwhile, some authors claim that the energy use of Bitcoin is not so dirty after all, while other sources assure us that the energy consumption of Bitcoin and DLTs in general will become less intensive over time. We maintain that the computational/resource intensity need for Proof of Work system remains structurally problematic (why not use that energy for a clean energy transition instead?) and only viable for small scale pilots until less resource-hungry options are mature enough to be deployed on a large scale.

ONE DOES NOT SIMPLY DISTRIBUTE POWER BY DECREE
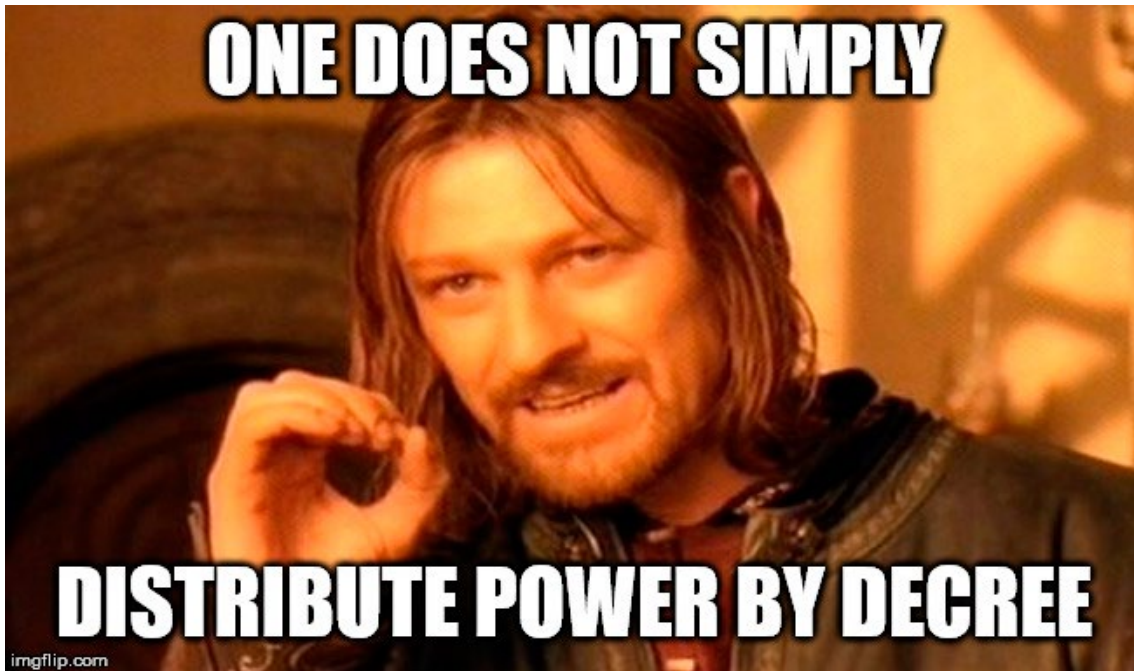
One does not, however, achieve distribution by merely proclaiming it and then setting it as a flexible goal. DisCOs are designed to highlight the uneven power dynamics of decentralised systems while offering more diverse ecologies of power and influence.

Autonomous/Cooperative

In a visionary article and video lecture titled *Ethereum: Freenet or Skynet?* Harvard/ Berkman Klein Center researcher Primavera de Filippi summarized the main characteristics of DAOs:

- First of all, they are **autonomous** in the sense that once they've been created on the blockchain, they no longer need their creators, nor are they under any obligation to respond to, or be responsible for any requests made by them.

- Secondly, they are **self-sufficient** in that they charge users for the services they provide in order to pay others for the resources they need (such as bandwidth and processing power).

- Finally, they are **decentralized**, since they do not subsist on a specific server, but instead are encoded into the blockchain (which is distributed to the entire network), and their code is executed in a decentralized manner by every node of the network.

Not to be pedantic, but did you get that second part? They earn their own money, and contract and pay for services: they can create and wield their own economic power.

Autonomous, self-sufficient, decentralized… While on the positive side, DAOs could drastically lower the cost of horizontal social collaboration, cut the bureaucratic fat and automate tedious processes, they could also be deployed by the existing power structures to lock down the current hegemony into an inescapable, cybernetic one. In a prevailing political economy hell-bent on unquestioned growth, surveillance and mass social control, which of the two options seems more likely? De Filippi warns that DAOs:

> "…could lead to the establishment of a totalitarian society that is (almost exclusively) regulated by self-enforcing contracts, which establish the rules that everyone must abide by, without any constitutional constraints."

Skynet, you may recall, is the mega-computer in the Terminator franchise that decides to nuke humanity. But there are plenty of dystopian AI fantasies to choose from — *The Matrix, 2001: A Space Odyssey, The Moon is a Harsh Mistress, Ex Machina*, etc. — as we turn the scary up and engage in some future speculation, courtesy of IBM and what has happened since Deep Blue's 1997 victory.
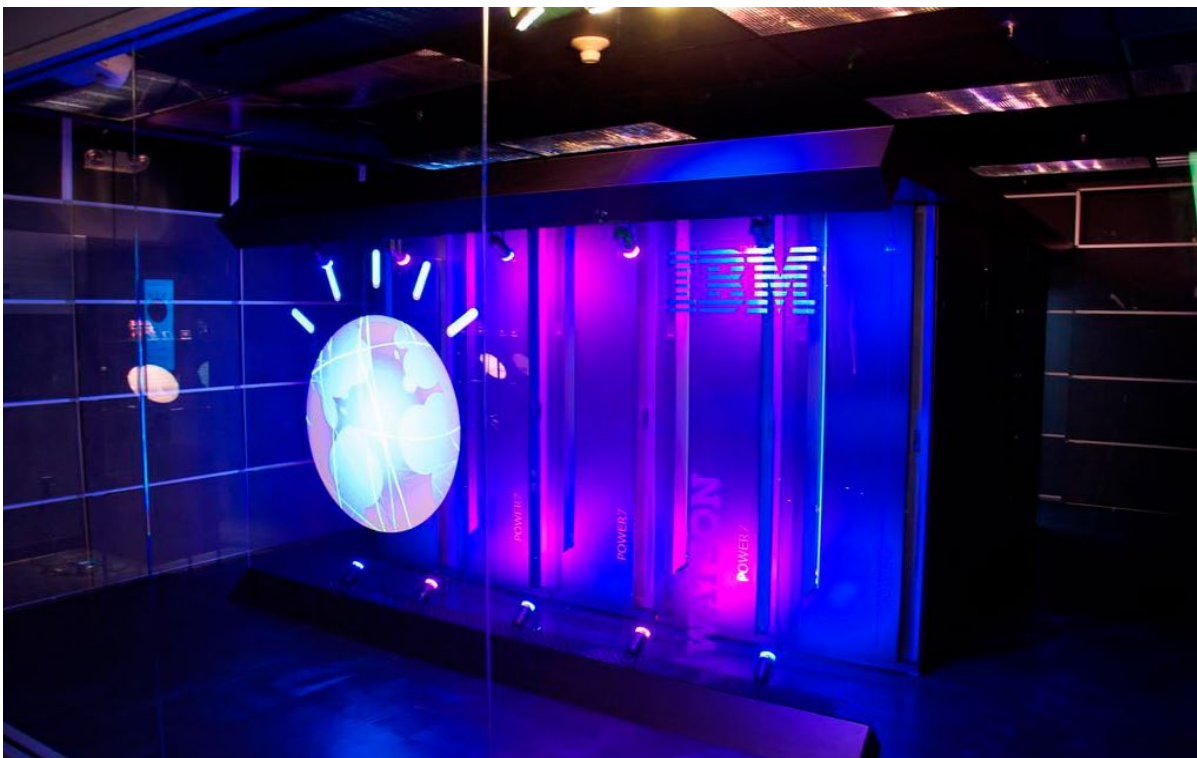
The *International Business Machines Corporation* (IBM) is well known for its support of the development of Linux, the free software operating system which, incidentally, powers IBM's successor to Deep Blue, Watson. Apart from winning at Jeopardy, Watson likes to do things like misguiding cancer patients, and possibly assisting the Trump administration's cybersecurity (read surveillance) policies. IBM also likes to do other things, like participating in Trump's security council whilst claiming to "not espouse a partisan or political point of view." The company is also not slacking on blockchain research and implementation. You don't have to be a speculative fiction aficionado to see where this narrative is going.

This isn't about calling out IBM in particular; its investment in open source is a complex matter with positive and negative aspects. Our critique is aimed more at the growth- and profit-oriented logic of capitalist organizations. When enticed by weapons development, unethical business or corruption, profit will trump any other consideration. As Milton Friedman put it: "There is one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game." A quaint comment considering how companies typically *make* the rules of the game, eclipsing the powers of nation-states through their sheer speed, resources, and first-mover advantages. In any case, states have more in common with corporations than differences, in the sense that both could welcome DAOs running on smart contracts as powerful ways to consolidate their centralized control. Similarly, when offered the enticement of decentralized autonomous organizations running on smart contracts, corporations and states will often take the same path.

IBM may have dismantled Deep Blue, but further down the speculative rabbit hole of dystopian machine-porn, we could encounter this: a **self-sufficient** artificial intelligence running **autonomously** on a **decentralized** system and programmed to advance certain values and interests, which would be virtually impossible for outsiders to hold accountable.[16]

On the other hand, we can start creating organizations which are both distributed and cooperative in nature. Organizations where the legal and technological infrastructures are based on the wild assumption that humans are a cooperative species — not so wild after all, as recent research demonstrates that before our dominant cultures lead us astray, we are naturally wired for cooperation.

16 Jaya Klara Brekke adds "There is no common humanity versus a common machine intelligence. The alliances criss-cross — you have humans deliberately building certain types of machines that damage other humans."

*Alice Roberts and Michael Tomasello on [What Makes us Human](#). As Tomasello says:
"What makes us really different is our ability to put our heads together and to do things
that neither one of us could do alone, to create new resources that we couldn't create
alone. It's really all about communicating and collaborating and working together."*

DisCOs are [associationist](#) instead of individualistic and based on building trust rather
than confirming laboratory-tested game-theory hypotheses. Autonomy,[17] understood
as a political tendency or the instinct for human self-expression, is not opposed to
the idea of cooperation. In fact, it is only through cooperation that we can thrive as
individuals. The so-called "self-made man", aside from the persistent gender bias of the
phrase, is an illusion: individuals are not only embedded in relations, but their identities
are created *through* relationships. When the human instinct to cooperate matures, we
have the Commons — understood as [omnipresent yet often invisibilized living systems](#)
[to meet human needs](#).[18] If humans are indeed the cooperative species, then we need to
create spaces, infrastructures and organizations for this instinct to express itself.

Let's take stock. Individual and collective autonomy are desirable, but is *automated*
organizational autonomy such a good idea? If we agree that cooperation is essential
for human fulfillment and stable social institutions, then our distributed organizations
have to take account of these human realities. We didn't have to wait for the advent of
the blockchain or even the Internet to tackle this challenge. Cooperatives were created
at the same time as the modern state and enterprise were, and have legally existed
since the 1840s. [Explicitly bridging](#) the perceived divide between autonomy and
cooperation, co-ops formalized the ancestral practice of commoning into applicable
legal structures offering islands of resistance in capitalist markets.

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17   [Jaya Klara Brekke](#) has written about the difference between political autonomy as meaning *more* control over the
environment that affects us, and autonomy as used in DAOs, which is explicitly about removing the possibility for
human control as much as possible. Read more in [Disassembling the Trust Machine: Three cuts on the political](#)
[matter of blockchain](#), pp. 93-110 and 203-209.

18   These ideas are further expressed in our colleagues David Bollier and Silke Helfrich's latest book [Free, Fair and](#)
[Alive: The Insurgent Power of the Commons](#).

Cooperatives and Commons bear important lessons for the whole decentralised/peer-to-peer/Web 3.0/DLT movement, heterogeneous as it is. Apart from the cultural considerations which must precede any technological design, cooperatives legally guarantee distribution of power and wealth while democratising decision making. These things are not easy. Automating them away does not eliminate the need for the difficult conversations and stages of personal development that humans must undergo in order to come to terms with these deviations from normative, profit-maximizing dynamics.

Cooperatives and the Commons teach us that there is an existing body of knowledge, tacit and factual, with triumphs and failures, that can strengthen efforts to effectively decentralise and distribute power through networked, distributed ledger-based organizations.

On the flipside, if cooperatives are islands in a sea of capitalism, we need better catamarans, bridges, and data lines to connect them to each other and to other transformative economies. Our view of cooperation in this context includes collaborations that make good use of the salvageable affordances of DLTs along with the culture of the Commons and Cooperative movements. Like Kasparov's centaur chess, we think that an accommodationist approach to the machine can let us harness its benefits while also providing a necessary critique and reference point against the blind instrumentalization of DAOs for speculative, technocratic, and capitalist purposes, with all the predictable socio-environmental dangers.

DisCOs are our proposal to use the power of distributed ledger and peer-to-peer technologies to prioritize taking care of human beings. They constitute an affirmative, entirely feasible vision for new and radical forms of ownership, governance, entrepreneurship, and financialization to fight pervasive economic inequality. At the same time, they focus on building synergies among related but often siloed sectors that urgently need to build better strategic alliances to develop creative, inclusive solutions.

What are these sectors? Beyond the blockchain space and the ideas of Commons and co-ops, there are more ingredients in the DisCO mixer.

Last Night A Distributed Cooperative Organization Saved My Life

chapter3

DisCOs are a cultural and structural framework combining several aspects and influences of other forms and movements into a practical toolkit that benefits from the potential of DLTs. Despite claims of decentralizing and challenging existing power structures, we find it curious that blockchain projects don't seem to include key aspects of the disruptive movements noted below, which have been baked into the DisCO DNA:

— **The Commons and P2P**: Commons are community led, self-organised systems for the long-term stewarding of resources, often flowering in the cracks between the market or State. Peer to Peer or P2P describes non-hierarchical, non-coercive social relations happening in human networks, often augmented through technological infrastructures. P2P provides an enabling infrastructure for acts of commoning. Examples include cooperatively managed forests, water distribution irrigation systems, social currencies, Free/Libre and Open-Source Software, self organized urban spaces, distributed manufacturing networks and so much more.

— **Open Cooperativism**: These are locally grounded, commons-oriented and transnationally-networked cooperatives focused on social and environmental work. Open co-ops can be viewed as the experimental edge of the work of Platform Cooperativism, exploring convergences between the Commons and P2P movements along with the world of cooperatives and the Social and Solidarity Economy. Examples include Enspiral, Fairmondo, L'Atelier Paysan, AnyShare and the Mutual Aid Network.

— **Open-Value Accounting**: A form of accounting where contributions to a shared project are documented to allow retrospective analysis of the distributions of effort and labor, and enable better and more fair distributions of incomes. Open-value accounting enables value sovereignty, or how a commons self-regulates its market relations so the core aspects of its common wealth and social relationships remain inalienable. Examples include Sensorica,

[Backfeed](), [CoMakery]() and [MetaMaps](). Open-Value Accounting also highlights invisible work, which leads us to...

— **Feminist Economics**: This school of economic thought also asserts value sovereignty by challenging normative[19] notions of economic abstraction — something very persistent in the blockchain space. Feminist Economics proposes a more holistic approach to the very idea of "the economy," factoring in often-invisibilized and unpaid factors such as care work, human connection, interdependency and emotional labor into economic theory. [Examples abound](), yet are often hidden.[20]

Other inalienable values inherent to the DisCO blender factor in an inclusive representation of class, race, gender identity, sexual orientation, ability, and/or immigration status, and the explicit acknowledgement of our integral role as responsible stewards and restorers, not dominators and destructors, of nature. All economic systems are dependent on social and ecological factors, and DisCOs explicitly so. [21]

While the blockchain space has excelled in disrupting notions of how to track and reward value, its *concept* of value remains anchored in mainstream ideas about absentee profit maximization — the same ideas that gave rise to calling care work and environmental stewardship "externalities."

Open Cooperativism came about as a convergence of three movements: the Commons, Open Source, and the Cooperatives. Over the last few years, we have [examined Open Co-ops and how they relate to their cousins in the Platform Coop movement](). Although firmly embedded in the Commons, Open Cooperativism seemed to us incomplete without incorporating two additional main ingredients: Feminist Economics and

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19 That is, often described as "masculine," acknowledging a longstanding, pervasive system of patriarchy.

20 For a quick overview, here are infographics for [P2P and the Commons](), [Open Cooperativism](), Open-Value Accounting ([1]() and [2]()) and [Feminist Economics]().

21 The same way Red Hot Chilli Peppers guitarist John Frusciante [once cited]() Robert De Niro and Harpo Marx as guitar influences, our collective brings a host other more personal and not immediately apparent values to *our own* particular DisCO blender. These include punk rock, Sci-Fi (and cyber/solarpunk in particular), Chaos Magick, Permaculture, Occupy/15-M, DIY/DIT and a host of other things.

Open-Value accounting. Whereas Open Cooperativism has four non-prescriptive principles (statutory orientation toward the common good, multiple constituents, active creation of commons, and transnational nature), we have taken the premise further, resulting in **Open-*Value* Cooperativism —** the basic DNA of the DisCO.
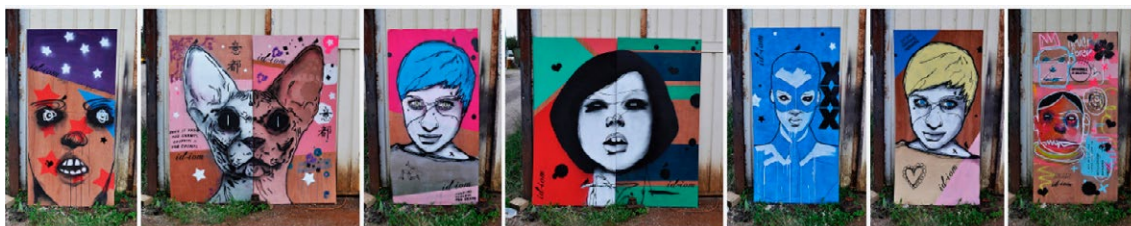
The Seven DisCO Principles

DisCOs are distributed cooperatives based on the original seven cooperative principles, but cooperatives have their shortcomings.[22] The seven DisCO principles build on the existing cooperative tradition, as well as Platform and Open Cooperativism to arrive at a series of guidelines for highly efficient, socially- and environmentally-oriented organizations.

With Open Co-ops as a starting point, DisCOs are:

1. **Geared toward positive outcomes in key areas:** In DisCOs, production is guided not by profit but by social and environmental priorities. Individual organizations embed these values in their cultural, productive and organizational processes, and technical/legal statutes.

2. **Multi-constituent:** DisCOs extend decision making and ownership to all contributors whether present in all value chains or affected by the coop's actions. Beyond workers, this may include neighbouring communities, suppliers, clients, reproductive and affective labor, financial backers, etc. as constituents.

3. **Active creators of commons:** Unlike the typical behavior of market enterprises that exploit shared resources, DisCOs steward existing common wealth and generate new forms of shared resources. These new commons are created through market *and* value-tracked pro bono work. Commons may be digital (code, design, documentation, legal protocols and best practices, etc.) or physical (productive infrastructure, deliberation spaces, machinery, etc.)

4. **Transnational:** While physical production is kept local and needs-based (following the "Design Global, Manufacture Local" logic), knowledge, resources and value flows are shared at the global level with like-minded enterprises to create political and cultural counterpower to the prevailing corporate/ capitalist economy.

5. **Centered on care work:** We distinguish between two types of care work: that performed **for the health of the collective** (where the collective is seen as a living entity that needs commitment, material inputs and fidelity to its social mission) and care work performed for **the individual persons within the DisCO** (mutual trust and support structures).

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22   These shortcomings are analysed in the following chapters. Click here to jump to that section.

6. **Reimagining the origin and flows of value:** Three types of value — productive market value, pro-bono/commons-generating value, and care work value — are tracked through complementary value metrics. Value tracking is applied to all DisCO members, in turn influencing decision making, payments, work priorities, and more.

7. **Primed for federation:** While networks may or may not share common goals, federations are held together by shared commitments. Scaling extends a worldview from a center and forces everything in its path to conform to the animating logic. By contrast, DisCOs, as distributed and differentiated structures, replicate themselves through a standard federation protocol that allows the federation to achieve critical mass without regimenting all parts. This dynamic resembles how TCP/IP allows a network of networks, the Internet, to function. Each node can be based on small group trust and mutual support while still achieving a larger impact through federation.[23]

Cooperativism could be viewed as a continuum, extending from traditional cooperatives to Platform (digital) Co-ops, to Open Co-ops and then the more radical, experimental Open-Value Cooperativism as a theory, with DisCOs as its practice. Open-Value Cooperativism is based on the existing seven cooperative principles but expands and supercharges them for viable post-capitalist futures and the digital, networked age.

Granted, notions of the future are speculative, but we believe that the organizations of tomorrow must learn how to respect resource limits and ecological boundaries, be grounded in Commons practices, and show technological sophistication. Open-Value Cooperativism provides a conceptual framework for building resilient, purpose-oriented DisCOs.

Wait — weren't we just talking about blockchain? Yes, but after a hard reality check and opening our field of vision to the broader context, we can now offer our take on how to bring a more human-centered practice to the use of DLTs. Instead of asking what blockchains could do for us and working backwards from there, we combined the existing elements— blockchain, cooperatives, commons open-value systems, feminist economics — with our years of experience in P2P and commons-oriented practices. The resulting idea, the DisCO framework, echoes Kasparov's intent with centaur chess — using machine power for the hardest calculation work, but without empowering machines (intentionally or not) in ways that marginalize the human capacity for ethical judgement and care.

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23   Our ideas around federation are largely influenced by the concept of Phyles — these are communities of interest bound together in transnational economic solidarity networks. For us federation is equally a cultural and a structural concept. While some have criticised the latter (see here and here), our structural view of federation is based on 'end to end' (or even partially offline, in the case of Secure ScuttleButt) systems. See also Dmytri Kleiner's writings on Counterantidisintermediation to see where we're coming from.

What are the needs we've identified as part of the DisCO vision?

— Socio-environmental mission
— Multiple constituents served
— Actively creates commons
— Networks transnationally
— Care work basis
— Complementary value metrics
— Aimed toward federation, not scaling

We believe that **each of these patterns could be made stronger and more transparent by encoding them in secure distributed ledger technologies**. At the same time, we actively reject the notion of techno-solutionism or implying that tech will solve what is, and should remain, primarily negotiated by people.

In developing the DisCO model, we had to address the re-engineering of value happening on the blockchain stage. A DisCO's coding architectures and tools can play a vital, constructive role in advancing a different vision of the future and more socially-minded tech narratives. They point to a future that includes the trends outlined above, but one less susceptible to co-optation by individualistic, self-interested factions, especially capitalist ones.

To be clear, distributed cooperative practices should *never* be solely dependent on technology, protocols or governance models. These are only tools to facilitate and strengthen our collaborative culture. There is a fundamental tension in all commons governance between **culture**, or that which defines the group's shared motivations and visions for the future, and **structure**, or that which formalizes the group culture into recognizable legal and institutional forms, and enables certain capabilities. Culture and structure are interdependent in a commons, but they also can pull in different directions. Creating resilient, self-organized communities requires an artful balance.

When speaking of governance, people working in the blockchain space often talk about off-chain and on-chain dimensions — the former describing the human agreements that get encoded into the latter, through smart contracts and DAOs, for example. However, there can be an ideological tendency in developer circles to believe that tech design can solve the messy problems of human disagreement and self-governance. The very dichotomy of off/onchain elevates the blockchain as the primary focus of attention, one that subordinates social practices.

We'd rather use a lighter-handed approach to the emergent, unpredictable and (sorry Deep Blue fans) very human processes that can be facilitated through self-executing programs. Furthermore, the *structure* of a living community cannot limit itself to the embedded designs in a series of smart contracts. It must contend with the material and legal realities of everyday life and state power that remain relevant to the effectiveness of a group.
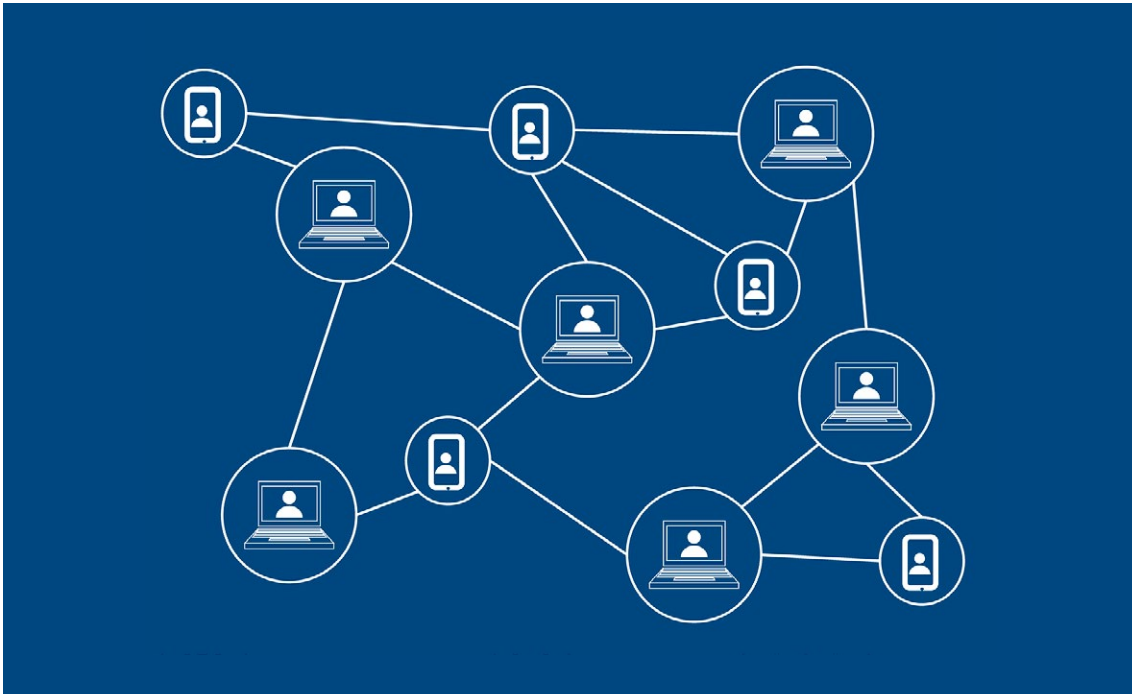
Our criticism of the overhyped claims for the blockchain has not been timid, so, on what grounds do we suggest an ambitious alternative such as DisCO?

Our team includes long-term core team members of the P2P Foundation (P2PF) who have been deeply involved in its organizational development. P2PF was founded in 2005 to catalogue, research and advocate for P2P and Commons alternatives in order to achieve societal change. In fact, it was one of the first places where the elusive Satoshi Nakamoto[24] shared their Bitcoin white paper (and they show up occasionally to prove they aren't dead). The P2P Foundation has tracked the evolution of blockchains and contrasted them against P2P/Network dynamics for more than a decade and collaborates regularly with many DLT innovators. P2PF has also researched these dynamics through the P2P Lab, a dedicated research hub, and has advocated for them through Commons Transition, another P2PF spinoff that works with media, narrative, and community empowerment strategies to make the Commons and P2P accessible, attractive and shareable for commoners and communities worldwide.[25]

But more importantly, we are committed to taking all the lessons, theory and currents informing this work to create something tangible and practical. Noted commons scholar Elinor Ostrom spoke about "moving back and forth from the world of theory to the world of action," and in 2013 we created a vehicle (Guerrilla Translation) that would incorporate all the different trends identified in the P2P Foundation. These trends have evolved and matured into the patterns outlined in this section. What's important to note here is that DisCOs are not theoretical fodder for a grandiose white paper promising the (decentralized, autonomous) moon. Just as the saying about nuclear fusion goes, "it's 20 years in the future and *always will* be," many blockchain projects are raising gargantuan amounts of capital through Initial Coin Offerings, or

24 "Satoshi Nakamoto" is the pseudonym used by the mysterious creator or creators of Bitcoin.

25 Meanwhile, other core DisCO development team members have extensive experience in the worlds of decentralization, blockchains and the arts (Furtherfield, DECAL), free/open culture and Platform Cooperativism (SUPERMARKT), Commons-oriented data DLT management and the Internet of Things (Ocean Protocol, AIOTI), and decentralized governance and leadership, onchain and off (DGov Foundation, Enspiral), and more. Jump to the credits section for more info on the DisCO team.

ICOs,[26] by promising disruption, revolution and (more importantly, it seems) *gain*. But as we have seen <u>again and again</u>, hype is a pied piper.

We set out with a different set of premises about humanity and a different vision of how technology can improve life. The result was Guerrilla Translation, which evolved into Guerrilla Media Collective. It's a small scale, well-regarded project with a committed group of people sharing a social mission. Let's explore the way this project, the first DisCO, was set up to prototype and discover methods of allocating value in P2P/Commons ways.

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26   <u>Initial Coin Offerings</u> were all the rage in the blockchain space during 2017-18. Crudely put, it's a type of *crypto-crowdfund* where individuals invest in blockchain projects that will, supposedly, provide great financial yields if and when the projects reach maturity. As a play on the expression Initial *Public* Offering you wouldn't be wrong in thinking that most ICOs are speculative, with little or no value "trickled down" to the real economy. In fact, they are prone to <u>constant</u> and <u>repeated</u> failure. Dot.com bubble anyone?

Punk Elegance: The Story of Guerrilla Translation and the Guerrilla Media Collective

The story of the Guerrilla Media Collective begins back in 2013, with the echoes of the Occupy and 15-M movements still resonating in the streets. A new kind of P2P and commons-oriented translation agency was created: Guerrilla Translation (GT). It was conceived as an innovative livelihood vehicle for activist translators, combining two compatible functions: a voluntary translation collective working for activist causes (e.g., social justice, the environment, etc.) and an agency providing translation and general communication services on a paid contract basis. The proceeds from this paid commissioned work would go, in part, toward financing the social mission by retroactively paying translators for their voluntary (aka 'pro-bono') work. It sounds simple, but when creating something radically new and commons-oriented from scratch, the devil is in the details.

The first thing that became clear back in 2014 was that a solid system to organize paid and pro-bono work would be necessary. GT was thriving: the collective was well regarded, the translations were reaching more people than ever and an increasing stream of work offers was flowing in.[27] At the same time, though, there was an imbalance between readily recognized productive labour and all the invisible, reproductive work required to keep the project healthy. Examples include time-consuming background work like upkeep of relationships with allies and clients, and maintaining good communication about issues raised in the collective.

Frustration followed, and some members (including the founders) decided to take an extended sabbatical from the project, though still managing to carry out a very successful crowdfunding campaign to translate and publish David Bollier's *Think Like a Commoner: A Short Introduction to the Life of the Commons.* The campaign featured the

27 Examples of GT's translated works include David Bollier's Think Like a Commoner and Charles Eisenstein's Sacred Economics, the documentary Money and Life by Katie Teague, and hundreds of articles and videos on the Commons, P2P, ecology, feminism and activism on the collective's Spanish and English websites.

Peer Production License,[28] and an innovative, distributed publishing model dubbed "Think Global, Print Local" to enlist commercial publishers to print and distribute the PPL-licensed book in various Latin American countries.

The crowdfund succeeded in its objectives, and the book was launched in Autumn of 2016. Yet despite these milestones, GT still suffered from the same mixed condition: strong social solidarity, continued offers of paid work, but no clear governance structures to ensure a stable team, fair distribution of work and rewards whilst maintaining its social mission.

GT's English and Spanish websites

By 2018, the collective decided it was high time to review five years of lessons learned, clarify its goals and values, and establish a more explicit governance model. To "reload" GT in an organized and sustainable way, an in-person meeting was held, welcoming allied experts in fields such as tech, decentralized/non-hierarchical organizations, facilitation, and governance to help develop the governance model and a long-term survival strategy for GT.

The meeting turned out to be a wild success. The group culture that emerged reignited the project, creating something precious in the process: a safe online space for collaboration and mutual support conjoined with a credible revenue model.

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28 From the P2P Foundation's Wiki entry on the Peer Production License: "This fork on the original text of the Creative Commons non-commercial variant makes the PPL an explicitly anti-capitalist version of the CC-NC. It only allows commercial exploitation by collectives in which the ownership of the means of production is in the hands of the value creators, and where any surplus is distributed equally among them (and not only into the hands of owners, shareholders or absentee speculators). According to Dmytri Kleiner, co-author of the license with the barrister John Magyar, it's not a copyleft license, but instead copyFARleft, and is intended for consumer goods or commodities rather than capital or producers' goods."

After more than a year, many challenges and a staggering amount of deep personal, theoretical and practical work, Guerrilla Translation has been using many of the practices that helped create the DisCO framework: members feel happy, cared for and are committed to GT's development as well as DisCO's in general.[29]

Part of the Guerrilla Translation/Media Collective team in full-on DisCO brainstorming action.

Guerrilla Translation and the DisCO Governance Model

In terms of structure, the last year of Guerrilla Translation activity brought about a complete overhaul of its governance and economic model. This model is key for understanding both the cultural and structural aspects of DisCOs in general:

Distributed Cooperative Organization (DisCO) Governance and Economic Model (currently at version 3.0)[30]

The full model can be read in the link above, but a simple summary of the model's logic is outlined below. This overview can help envision how important issues like value flows, income and decisions are handled in a DisCO.

The best way to understand it may seem counterintuitive at first:

If Guerrilla Translation is a co-op, the co-op members can be thought of as *shareholders* in a traditional corporate sense, but each holds different *types* of shares in the collective. These correspond to the three DisCO value streams: "pro bono" work (commons-oriented voluntary work chosen by the translators); "livelihood"

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29   For more info into Guerrilla Translation's achievements over the last years, check out the GT Blog, or subscribe to GT's Medium page. For precise documentation on these practices, visit the Guerrilla Media Collective Wiki.

30   The DisCO governance model is, effectively, the same as the Guerrilla Translation/Media Collective governance model and a template model for DisCOs in general. Other DisCOs can adjust it as needed, as long as it addresses the Seven DisCO principles. If you want to start organizing TOMORROW, start reading THIS

work (paid); and reproductive or care work.[31] Shares in these three types of work determine how much is paid on a monthly basis. The money to pay shares comes from the productive market-based work performed by the worker-owners — in GT's case, translation, interpreting, copyediting, subtitling, and related services.

In short, the more effort and care put into the collective by a member, the larger the member's share. This is not a competitive scheme influenced by game theory. It's a solidarity-based strategy for economic resistance that allows all members to contribute according to their capacity. All members create value of varying kinds. Part of this value is processed through a market interface (the agency) and is converted into monetary value, which is then pooled and distributed to benefit *all* value streams. This is called **value sovereignty**. And, although the default decision-making protocol is virtually identical to the traditional co-op principle of "one member, one vote," shares can influence decision making in critical situations, such as a blocked proposal.
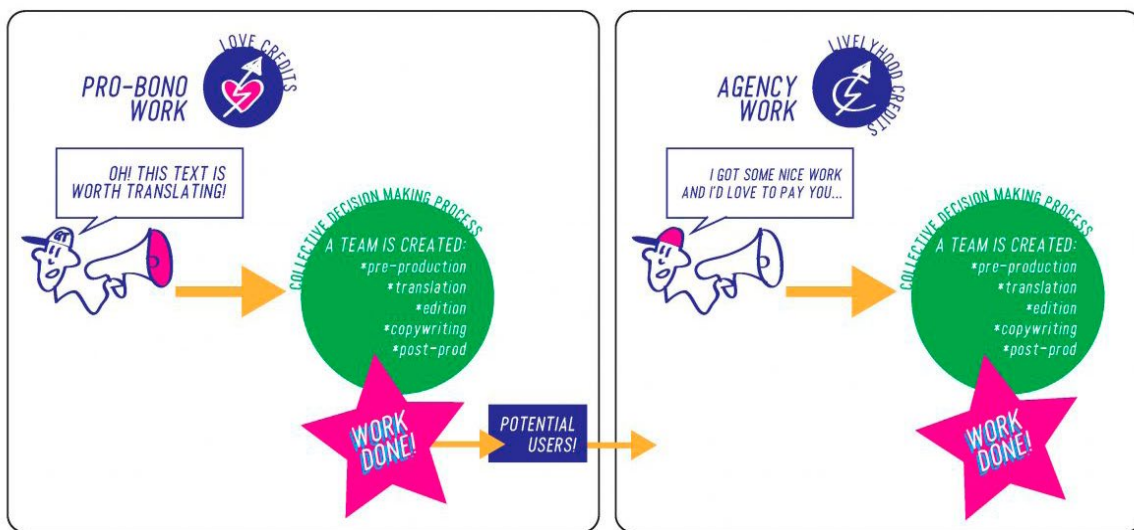
How does this type of shareholding contrast with that of a corporation? Let's break down the differences. While shareholders in a corporation accrue power through money, under GT's model, power is treated differently. The descriptions are power to and power with, accrued via productive and reproductive work taken for the health of the collective and the Commons. A corporation (or a start-up, or any capitalist business) employs wage labor to produce profit-maximizing commodities through privately-owned and -managed productive infrastructures. By contrast, in a DisCO, members work together for social and environmental purposes, create commons and build community locally and/or globally, while prototyping new forms of value creation and distribution. The model allows members' talents to be used for what the collective decides are worthwhile, not dead-end, causes. This is how DisCOs exercise economic resistance.

So, how does this work in practice? In this laypersons/introductory article to the Distributed Cooperative Organization Governance model, we explain some practical examples of value allocation and distributions, as well as some of DisCO's special characteristics.[32]

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31 Each of these three streams are value tracked. The value tracking of each stream determines the final percentage and value of each type of share.

32 The full version of the governance model looks at every aspect in detail, including roles and responsibilities, onboarding, mentoring, the legal/technical backdrop, community rhythms, graduated sanctions, payment mechanics, decision making, and much more.

(L-R) [Timothy McKeon](#), [Sara Escribano](#), [Stacco Troncoso](#), [Ann Marie Utratel](#), [Silvia López](#), [Bronagh Gallagher](#) and [Lara San Mamés](#). Click [here](#) to meet the full Guerrilla Media Collective team.

Guerrilla *Translation* has since become the first node of a larger umbrella (and DisCO) structure: the **Guerrilla Media Collective**. Within it**, Guerrilla Graphic Collective** offers graphic design, illustration, social media promotion, website design and UX design and implementation.[33] Meanwhile **Guerrilla Agitprop** advocates for commons-oriented and activist organizations and projects through online and offline channels, prioritizing pedagogical approaches and artivist methods.[34]

Guerrilla Translation, Agitprop and Graphic Collective are all nodes of their host DisCO — the Guerrilla Media Collective. This is where part of the federation strategy comes in: within the main DisCO (Media Collective) lie various nodes (Translation, Graphics, Agitprop, with future proposed iterations such as coding, facilitation and more). Each node has its own adaptations of the base governance model (as translation is quite different from design or illustration work, for example), but the value redistribution logic of livelihood, pro-bono and care work remains the same.

Other points in common include the umbrella legal structure (the Guerrilla Media Collective acts as the parent legal organization)[35] and the tools used to coordinate

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33   Some of the graphic collective's previous work includes The Commons Transition Primer [publication](#) and [website](#), the [Re-imagining Value: Insights from the Care Economy, Commons, Cyberspace and Nature](#) report, the [Changing Societies Through Urban Commons Transitions](#), [Catalan Integral Cooperative](#) and [Value in the Commons Economy](#) reports for the P2P Foundation, the [Commons Strategies Group](#) and [P2P Foundation](#) websites, as well as the [P2P Foundation blog](#) and the [Commons Transition website](#). GGC is also responsible for the overall design and all illustrations of David Bollier and Silke Helfrich's [Free, Fair and Alive: The Insurgent Power of the Commons](#).

34   Guerrilla Agitprop is also handling all aspects of the *Free, Fair and Alive* campaign (see preceding footnote), as well as the [Commoner Newsletter](#), the [Voices of the Commons Podcast](#) and the continuation of the [Commons Transition Project](#).

35   Guerrilla Media Collective is constituted as a [non-profit and socially oriented worker owned cooperative](#) in Andalusia, Spain.

distributed work.[36] Those are the bare essentials needed to become a node within the Guerrilla Media Collective.[37] GMC's federation protocol further states that nodes cannot be larger than 15-20 people. What happens as the collective *scales*? It's quite simple: within translation, the target Spanish, English and French nodes can become independent. In the graphic collective, Design and Illustration can form their own nodes. Other DisCOs can choose to federate into separate geographic, productive or even aesthetic entities once they surpass a certain scale; this is totally up to them.

To be clear, in the Guerrilla Media Collective, all nodes exist within the same distributed, cooperative organization and prioritise inter-node collaboration and support. But an individual's "base node" is their home. This is where regular check-ins happen, where colleagues get to know each other more closely and where safe, trusted relations are created. An individual may well belong to two or more nodes simultaneously but the intensity of their engagement will vary depending on the work at hand. Some members will stay in the same "home node," while others will act more as digital nomads, adding or subtracting their time to or from one node or another. Wherever members may be, they will be supported by others in the collective(s).

How does Guerrilla Media Collective fulfill the seven DisCOs principles shared earlier? How does this work in practice? First, GMC is **oriented toward positive outcomes in key areas** through its values, curation criteria and founding principles, as well as its care- and commons-oriented Economic/Governance model. GMC is **multi-constituent in nature** by enfranchising several layers of membership with a focus on fairness and flexibility in contribution. The collective **actively creates commons** through its pro-bono translation work, published through its language specific blogs and by documenting, open sourcing and sharing its cooperative practices.

GMC is **transnationally oriented** through its federated strategy and orientation towards low-transaction, transnational cooperative structures. It is also committed to creating a translingual knowledge commons to inspire and enable systems change. GMC is **centered on care work** through its mutual support practises and dedication to caring for the health of the collective. It also **reimagines flows of value** through its governance model and the importance of its livelihood, pro-bono and care value streams. Finally, GMC is **designed for organizational flexibility and modularity** through its federation protocols, where scale never comes at a cost of small group

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36 Some flexibility in legal structure and tools is foreseen, depending on the node. Regarding the specific tools, they are presently detailed in the Guerrilla Translation Handbooks — a series of Open Source operating manuals for the Guerrilla Translation node.

37 This is a lot more concrete than this description may suggest. A quick look at the governance model will demonstrate that its adoption conveys a host of ideological and practical requirements.

trust and support. In the Guerrilla Media Collective, the neat division between theory and practice is moot. We came up with the DisCO framework precisely because there are no conceptual frameworks to validate what we are achieving in practice.

The Guerrilla Media Collective is, as mentioned above, the first self-identified DisCO. But what might other DisCOs look like?

A lot boils down to their own governance models and the challenges expressed in this publication. While the lessons of GMC's development as a DisCO is instructive, the future is unwritten and no "whitepaper" or theoretical structure will dictate what other DisCOs might look like. Each will emerge on its own terms, in its own context. Our approach is to start with small pilots, like the Guerrilla Media Collective, and take it from there. Make no mistake, this is an experimental, complicated and risky proposition. We are primarily talking about people who need to be cared for and fed, not designing software code for crypto-assets.
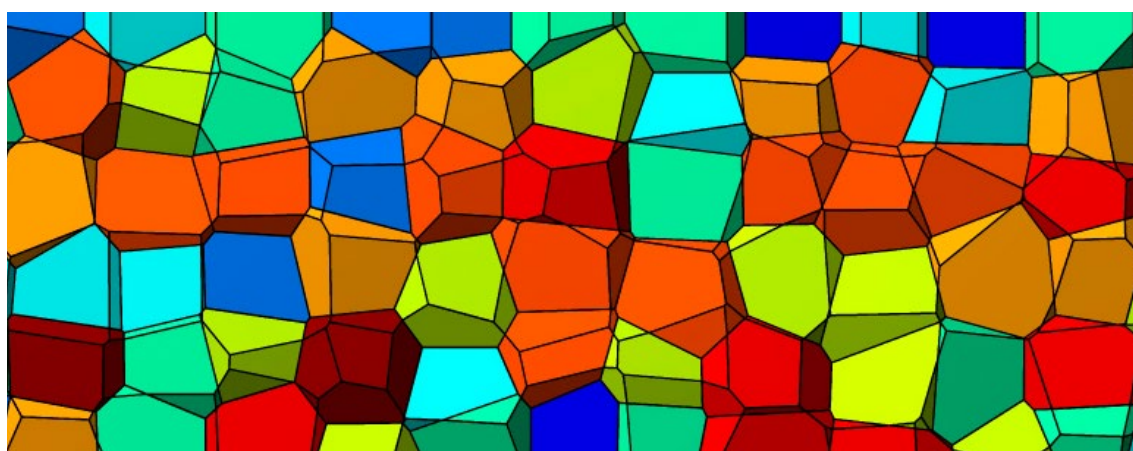
Some of the recent Open Cooperativism and DisCO workshops we have run have turned up fascinating proposals: from preserving the Amazon rainforest to creating DisCOs centered on craft beer manufacturing, open community art spaces and urban farms — the basic DisCO framework invariably leads to unique prototypes which wouldn't have existed otherwise. Existing organizations such as SpiralSeed, and Furtherfield's DECAL (Decentralised Arts Lab) are investigating how to adapt the model and operate as DisCOs. Meanwhile, Commons Transition, the commons-advocacy project incubated at the P2P Foundation, is currently being managed by Guerrilla Agitprop and operates as a DisCO node within GMC. Finally, FairMondo (a cooperative and value driven global online marketplace), Fairbnb (a cooperative accommodation booking platform that promotes and funds local initiatives and projects) and La Louve (a cooperative supermarket working in conjunction with CSAs) are all exploring the DisCO framework with an eye towards small-scale experimentation.

In the following sections we will delve deeper into the DisCO framework and its potential for radical, transnational cooperativism. After a deeper exploration of care work in DisCOs, we will examine one of the most misunderstood and divisive issues in the blockchain space — trust — before expanding beyond the Distributed Ledger Space to prefigure how the four main influences mentioned above — Commons/P2P, Cooperativism, Contributory Accounting and Feminism — can offer more nuanced, diverse and mutually supportive answers to the question of the "Future of work" mentioned earlier. Let's talk about cats and care-oriented co-ops…

Turn the Beat Around: Community Algorithmic Trusts and Care Oriented Cooperativism
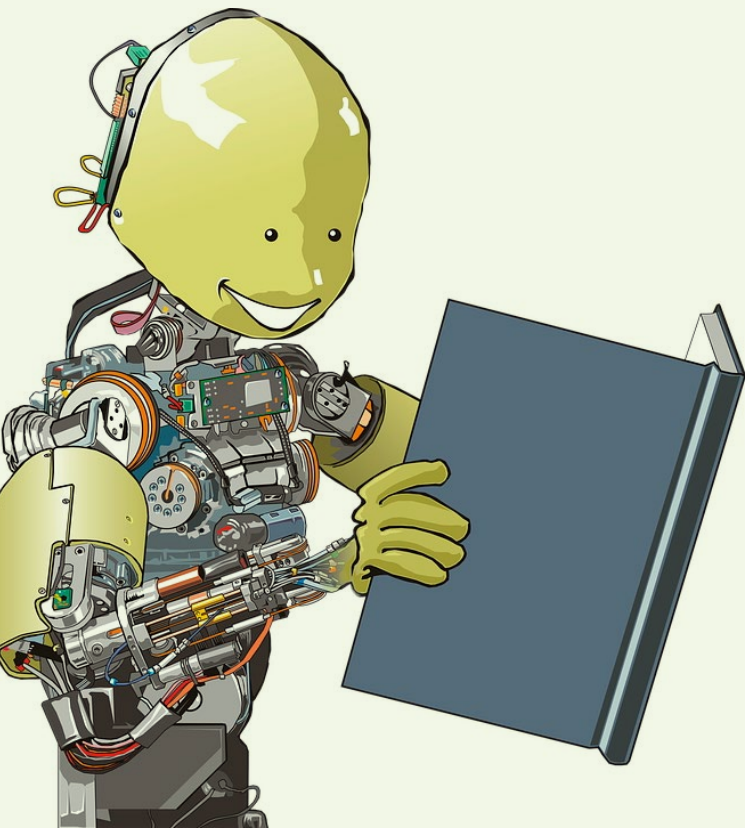
"Trust" is the hottest potato on the blockchain plate. Satoshi Nakamoto's stroke of brilliance in 2008 was to create a system for peer-to-peer transactions that did not require trusted intermediaries for the system to function reliably.

Intermediaries are typically centralized institutions like banks, governments or conglomerates, endowed with the legal authority to validate interactions among individuals or groups. Now, who *really* trusts banks and governments or, at least, their motives? According to the data, not too many people trust banks — and to nobody's surprise, not many trust governments, either. Stand-up philosopher Robert Anton Wilson, musing on the differences between physically identical Federal Reserve-issued and counterfeit bank notes concluded that the Fed simply waves a magic wand over the notes, to turn them into "Money." Validated, trust-endowed.[38]

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38   This is, of course, not so simple. David Bollier notes that "I can trust banks to make reliable, verifiable financial transactions. I don't trust them politically or as economic policy advocates. Also, fiat money backed by state power has a lot of legitimate credibility because the state has serious resources to deploy to stand behind their money. Newcomers do not. So it's not simply a fiction. It is a fiction backed by a vast apparatus of power."

"Stand-up philosopher" Robert Anton Wilson explains the strange phenomena of the Federal Reserve, counterfeit currency and interest-free money.

In the matter of money creation in particular, Nakamoto's proposal presented an elegant solution to the central-intermediary trust dilemma. Bitcoin achieves "trustlessness" by decentralizing trust and transferring it to the whole network.[39] This means that you can transact in secure ways (thanks, cryptography) with no need for third party validation. This is the one key aspect that engendered mass salivation (and investment) after the creation of smart contracts, projecting the possibilities of trustless interactions into the stratosphere. Through smart contracts, we could conduct *all* our transactions in disintermediated, peer-to-peer ways. Now we can get rid of all institutions and governments! It's easy to see how this vision engorges the right-libertarian imagination. Those of us on the other side of the ideological spectrum contend that not everything in life can be a neatly measured, defined transaction.

Ruth Potts, a political activist and one of the Stansted 15, asserted that "the soft stuff is the hard stuff." By "stuff" she meant the non-financialized, messy, human interactions we have to undertake in order to relate. Similarly, in her latest book,[40] noted ecofeminist Donna Haraway encourages us to "stay with the trouble," to come to terms with our complicity in the face of ecological, political and ethical crises through relationality and constant engagement. Many DAO projects are happy to sanitise this messiness through the machine, choosing to punish any deviations from the code with deferrals of payments and penalties. This, apart from creating huge legal problems in the areas of liability and responsibility, outsources the difficult work of having conversations and relationships to the very systems incapable of doing so, or simply ignores it.

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39 This is achieved by assuming miners/validators are rationally self-interested, highlighting the political bias of Bitcoin and, subsequently many posterior blockchain projects. In the Commons, however, we contend that this is not the full story, or perhaps even the *right* story. In materials related to Free, Fair and Alive: the Insurgent Power of the Commons, David Bollier and Silke Helfrich comment: "…The open/closed binary focuses chiefly on the legal status of the content-object and not on the social processes (such as commoning or private property/markets) that precede and make the content. We think this analysis helps explain why tech traditionalists in the DAO/blockchain space get so confused. They're more focused on objects, not relations, and they blindly project the libertarian worldview, failing to recognize the actual social dynamics (offline and online) that are needed to achieve successful collaborations."

40   Staying with the Trouble: Making Kin in the Chthulucene
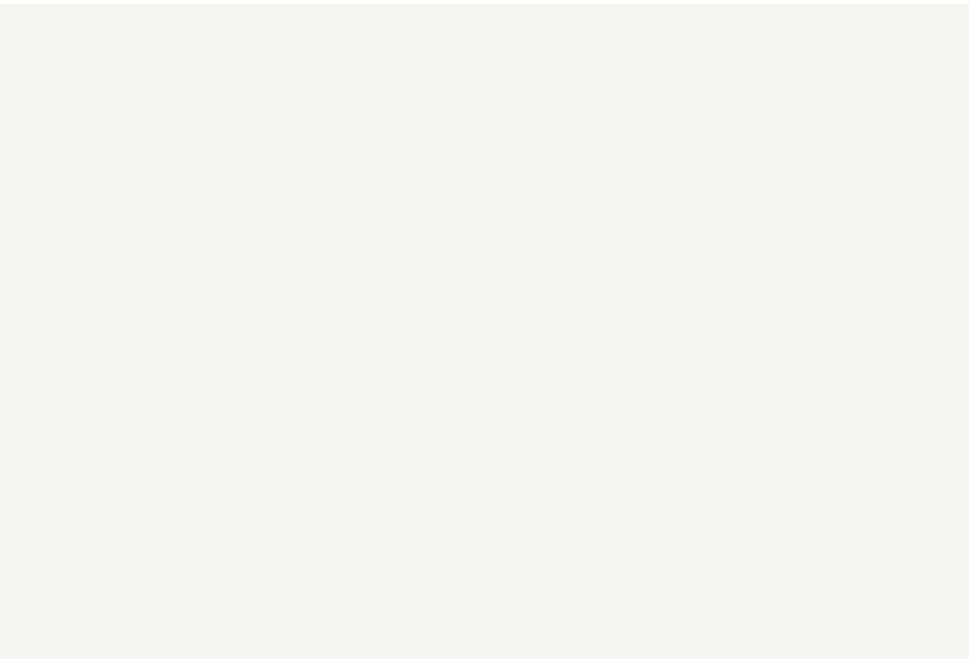
Stay with the trouble? In [this lecture](#), Donna Haraway speaks about the generative and destructive stories we need to engage in: the Anthropocene, the Capitalocene and the Chthulucene. But how can the techno-utopian futures of some Blockchain proponents tally up with such processes?

A Distributed Cooperative Organization, by contrast, exists in service to the humans in the organization. Every node within a DisCO has two clear priorities: care work for the collective and the humans within, and trusted relations. In DisCOs, trust at the node level is *built* on human interaction. Even though these may [typically happen online](#), there is an [in-depth system](#) to maximize mutual support and cooperation in the DisCO practical framework, developed out of Guerrilla Media Collective's lived experience.

These cultural aspects won't instantly download into your brain like Neo's mad Kung-Fu skillz in the Matrix. In fact, in Guerrilla Translation it takes [nine months](#) to learn and adopt these practices before becoming a full member of the collective. Your trust won't be bought through technical means or financial advantage — instead, it will be built on sweat equity, consistent relations and honest communication.

So where do trustlessness and blockchains come in? At the risk of stating the obvious, the spectrum between trustless to trustworthy can be subverted in the opposite direction.[41] It all has to do with the scale of the group. There is a very big difference between the way you relate in your household and the way you transact outside it.

A given DisCO node's own [Dunbar number](#) for trusted nodes is around 15-20 members, meant as a viable scale for the inevitable "soft but hard" stuff. But despite the focus on human-level trust, DisCOs are still value tracking at these small scales, daring to even measure the hours spent on something as precious as care work. Why is that?

The [Wages for Housework](#) movement of the 1970s served to "throw sheets over

41   And even technically *titrated* at certain scales, as blockchains can implement various gradual levels of trust. Primavera De Filippi explains how blockchains can foster varying levels of trust in minute 14:40 of [this video](#).

the ghosts" of unpaid, unrecognized emotional and care labour, making invisible work more culturally legible. As mentioned earlier, DisCOs track three types of work (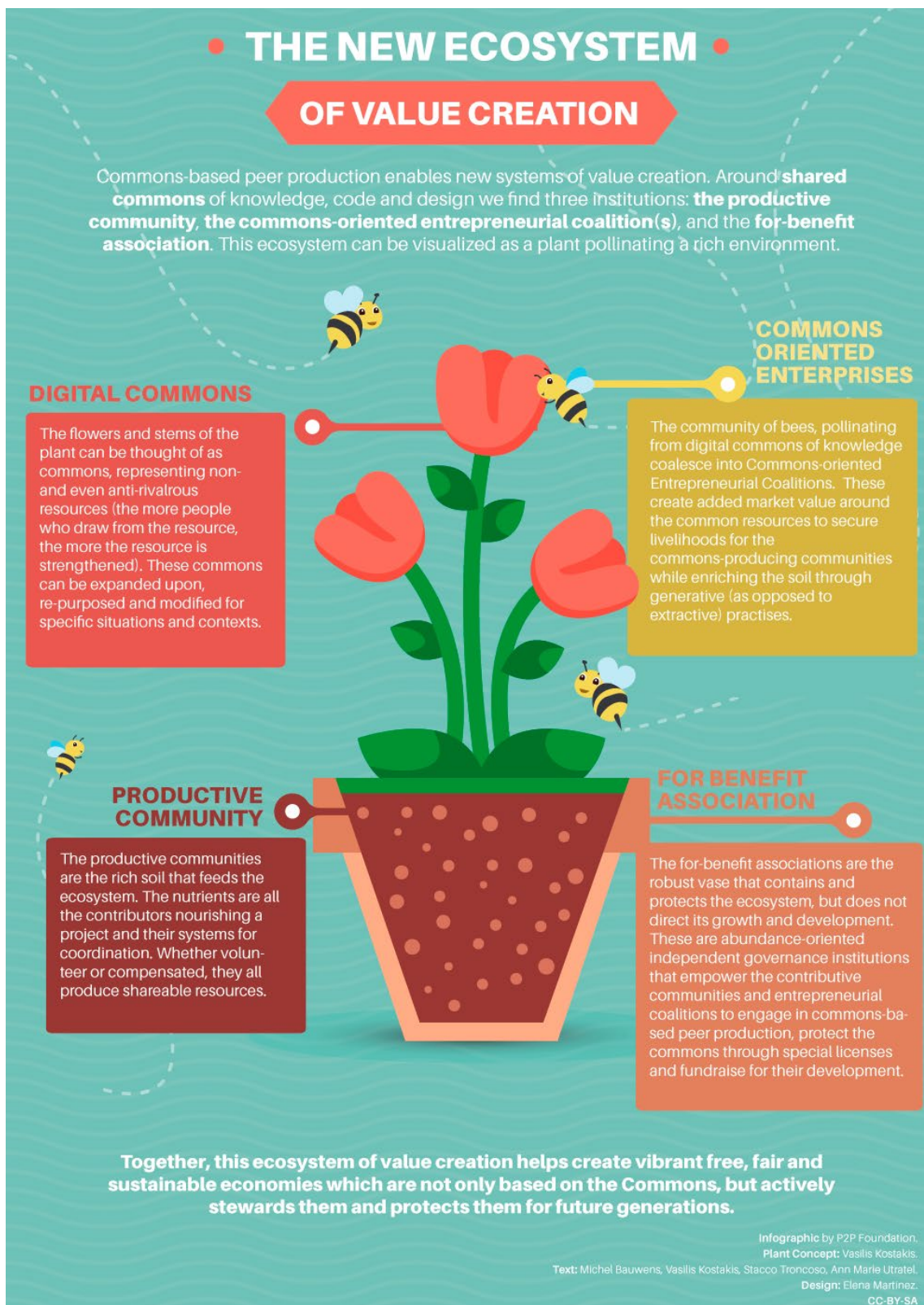paid, pro-bono, and care) to clarify difficult conversations, not to be algorithmically automated. Among the nodes that constitute Guerrilla Media Collective, where members of different nodes may not be as personally familiar with one another as in their "home" node, the tracking system helps the nodes interact, share and allocate value, and have open conversations about their individual contributions to the DisCO's larger social mission.
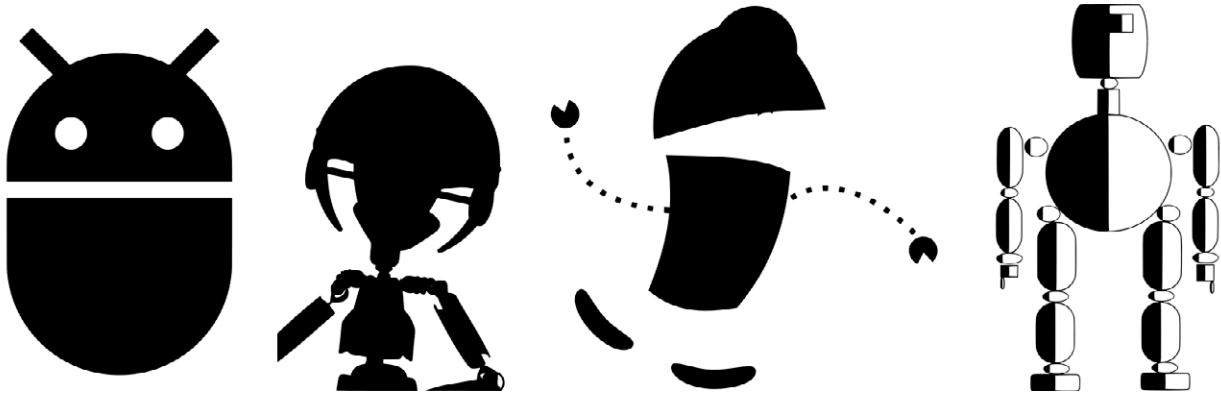
Beyond these small, established safe spaces and within the general context of entering into financial interactions with others, the issue of third party trust will inevitably arise. The International Cooperative Alliance's sixth cooperative principle is "Cooperation among Co-ops." While this ideal is honoured by some cooperatives and ignored by others, there are no simple plug-and-play mechanisms that assure that cooperation will concretely materialise. This is where the alleged value disruption promised by blockchain proponents can take a more associationist turn. Instead of helping those with the most computing power become decentralized capitalists, DisCO's cultural *and* structural frameworks can help solidarity movements learn to cooperate at the large scale while maintaining small-group trusted dynamics. What we are describing here is a continuum from trustless as the default norm at the large scale to trustworthy as highly feasible at the small.

This distinction between small-scale, inherently trustworthy groups and large-scale trustless systems bound by common goals reflects an often misunderstood dichotomy in the Commons movement: that between commons and large-scale P2P systems.

Commons such as community gardens, local forests or neighbourhood spaces thrive on *specificity*: their sense of place, and the human relations among those maintaining the commons. These interactions don't always translate well to large-scale, internet-based projects like Wikipedia or the Linux operating system, because there are simply too many people for anyone to interact with and get to know well enough to trust. Wikipedia and Linux are examples of Commons-Based Peer Production, P2P infrastructures that allow people to communicate, self-organize and, ultimately, co-create value through digital commons of knowledge, software, and design.

THE NEW ECOSYSTEM

OF VALUE CREATION

Commons-based peer production enables new systems of value creation. Around **shared commons** of knowledge, code and design we find three institutions: **the productive community**, **the commons-oriented entrepreneurial coalition(s)**, and the **for-benefit association**. This ecosystem can be visualized as a plant pollinating a rich environment.

DIGITAL COMMONS

The flowers and stems of the plant can be thought of as commons, representing non- and even anti-rivalrous resources (the more people who draw from the resource, the more the resource is strengthened). These commons can be expanded upon, re-purposed and modified for specific situations and contexts.

COMMONS ORIENTED ENTERPRISES

The community of bees, pollinating from digital commons of knowledge coalesce into Commons-oriented Entrepreneurial Coalitions. These create added market value around the common resources to secure livelihoods for the commons-producing communities while enriching the soil through generative (as opposed to extractive) practises.

PRODUCTIVE COMMUNITY

The productive communities are the rich soil that feeds the ecosystem. The nutrients are all the contributors nourishing a project and their systems for coordination. Whether volunteer or compensated, they all produce shareable resources.

FOR BENEFIT ASSOCIATION

The for-benefit associations are the robust vase that contains and protects the ecosystem, but does not direct its growth and development. These are abundance-oriented independent governance institutions that empower the contributive communities and entrepreneurial coalitions to engage in commons-based peer production, protect the commons through special licenses and fundraise for their development.

Together, this ecosystem of value creation helps create vibrant free, fair and sustainable economies which are not only based on the Commons, but actively stewards them and protects them for future generations.

The Commons Transition Primer describes the interaction between Commons and P2P systems in this way:

> P2P and the Commons together create a synergy for collaborations at larger scales and levels of complexity. The combination of P2P technical and social infrastructures can support the creation and maintenance of shared and co-managed resources (commons).

In brief, P2P expresses an observable pattern of relations between humans, while the Commons entails the specific **what** (as in *resources*), **who** (*the communities gathered around the resources*) and **how** (the protocols used to *steward the resources ethically and sustainably for future generations*) of these relational dynamics.

Guerrilla Translation (a node) and the Guerrilla Media Collective (an individual DisCO) act more like small-scale commons based on relationships, clearly established boundaries, and trust. Meanwhile, a **DisCO network** (composed of several DisCOs) can provide "lightweight" system protocols for commons-based peer production projects to interconnect and cooperate on larger scales. DisCO **networks** are characterized by:

— Horizontal federation through nodes
— Permissionless forms of action (where design protocols reflect prior "constitutional" parameters for action)
— Practice and continual iteration of the 7 DisCO principles

Together, these practices can enable DisCOs to expand transnationally by incorporating new groups of people and engaging in productive market activity without being absorbed by market dynamics.

We Are Family: introducing the DisCO CAT

While the blockchain aims to strip the power of "trusted" institutions and give it to decentralised nodes, DisCOs propose to examine *where* trust is placed at the smaller commons or organizational nodes.

Similar to how a [Community Land Trust](#) (CLT) helps maintain specific social values through shared ownership structures, a DisCO's on-chain design structures help the collective carry out its self-organised rules. In DisCOs, care work includes caring for the collective as a "living entity," but beyond a collectively imagined ideal, the digital heart of the DisCO is that living entity. Like an opening gambit in centaur chess (where machines are used to finesse and amplify the existing chess talents of humans), a DisCO's algorithms, whether encoded on a blockchain or not, support the collective in overseeing, simplifying and carrying out the human level agreements and rules.

Earlier we mentioned the fluid dialectic between culture and structure that defines all commons. If a DisCO's care orientation is an example of the former, how can we encode this into technological and legal structures to ensure that the culture thrives?

What we propose for the information and value tracking in a DisCO is a platform that acts as a shared information repository for the cooperative, which we'll call a **"community algorithmic trust" (CAT)**. In fact, why not just call it the DisCO CAT in honor of the only non-human creature on this planet that has [colonized the internet](#) completely. We'll refrain from trying too hard here, but the CAT might be the most important structural part of the DisCO, and we bow down to our feline overlords.

U NEED BIG DATA?

WAIT, I GET IT 4 U

The CAT platform is where members can input and review information about work done in the cooperative, including managing workflow; updating team documentation (e.g., quarterly review timelines, commitment statements); accounting for their pro-bono, livelihood and care work credits for work performed; creating client invoices and tracking payments; and most importantly, looking at visualizations drawn from the data for these metrics, which show the health of the collective displayed on each member's individual dashboard.[42]

The Guerrilla Media Collective team discovered the hard way that there simply aren't any all-purpose legal forms that are ideal for the type of cooperative that they were forming, and from which DisCO emerges. A legal structure is more than a registration number and an official stamp that permits a business to function, it's — well, no, it's mainly just that. The governance model is what makes it all function internally, while the legal structure is what ratifies the interactions with other, external legal entities in a way that is recognized as compliant, fiscally and legally. The legal structure also details ownership accountability, which differs greatly between a typical company and a cooperative. But at the moment, those legal forms only cover so many variables, and certainly do not provide a thorough framework that does what is required: support for the function of commons-oriented collectives that are arranged as clusters that can interact and reconfigure. Legal forms are, very soon, going to need to be adapted to support new types of cooperative practices, including those that are recorded on-chain.

With proper legal research, CATs can be developed to expand beyond their role as an online reflection of a group's activities according to DisCO principles. The objective is to prototype cooperative forms where the statutes are encoded and supported on-chain, always in collaboration with the worker-owners as a way to be sure the characteristic care-centered values are not lost. In this way, digital structures could provide social affordances that can facilitate certain types of group processes (cooperation, coordination, etc.) that are more difficult otherwise, while never replacing the face-to-face interactions that sustain any group.[43]

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42 Are you familiar with the game Operation? This was an electronic board game from the eighties in which player's actions could determine the healthiness of sickness of a patient. The dashboard of the CAT has been planned to follow a similar pattern, the various modes of value tracking and other inputs reflect the current health of a DisCO and its members.

43 As a program, it is important to stress that Community Algorithmic Trusts are regularly programmed by the humans affected by its actions. In contrast to the fully autonomous visions of some DAO proponents, the DisCO CAT is a convivial tool that allows for open adaptation to serve multiple uses in actual contexts. Convivial tools encourage people to think for themselves and be more socially engaged. In fact, the CAT can be seen as an encoded reflection and articulation of the DisCO governance model.

"Nothing about us without us" is a slogan that regained prominence in the South African disability movement of the 90s. Plainly put: don't let others design solutions for your problems without your active participation. CATs need to be built. We have all the cultural mortar prepped for this construction, but we still need the structural bricks (let's not be so quick to default to *blocks*). Based on these ideological premises and principles, DisCOs would do well not to outsource the construction of their CATs to alienated developers or otherwise techno-solutionist parties. For that, DisCOs need to explore partnerships with ideologically aligned coders and collectives to help inform the design and build of the technical infrastructure and more. As a Commons/P2P collective with a feminist backbone and a high proportion of women, Guerrilla Media Collective is initiating the Guerrilla *Coding Collective,* a home for feminist developers and proponents of the 3.0 decentralized internet.[44] GMC's goal is to co-build community-led, resilient, distributed alternatives for Open-Value Cooperativism and, in the spirit of Free/Libre software, pass on the love.

The Tin Man in the Wizard of Oz got fooled by the sweet-talking wizard into accepting a placebo made with silk and filled with sawdust. Solidarity and commons-based projects need to assess what specific values and affordances are encoded into the available algorithms before rushing to adopt FOMO-induced blockchain solutions. To assert themselves and foster healthy, mutually respectful collaborations in the DLT space, DisCOs need to clearly define their identities and politics even beyond the seven principles of DisCOs.

What follows is the blood that pumps through a DisCO's human/machine interface heart.

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44   For example, DAT, Scuttlebutt, IPFS and the more radical fringes of the blockchain space.

Open-Value Co-ops for Radical Workplace Democracy

Is technology neutral? Think again: Many decentralized autonomous organizations follow an individualistic philosophy (in the worst cases, right-libertarian) in a field populated heavily by white men with technical backgrounds and technocratic values. Most DAOs are also exclusively centered on quantifiable ("tokenized") aspects. By contrast, a DisCO stresses human mutual support, cooperativism and care work as enabled by an online platform. Thus the *onchain* dimension of commoning is a perpetually evolving, plastic prototype that is constantly being shaped by the *offchain,* lived experience of the collective.

The encoded dimension (e.g., digital platform or Community Algorithmic Trust) of the DisCO attempts to facilitate each individual DisCO's governance model. This model can be based on the existing and tested governance model developed for Guerrilla Media Collective, but it needn't be. To self-identify as a DisCO a collective needs a governance/economic model that recognises the seven DisCO principles, briefly summarized as:

- **Socio-environmentally oriented**
- **Multi-constituent**
- **Commons-creating**
- **Transnational**
- **Care work-based**
- **Value reimagined**
- **Federated**

These core priorities are reflected in the model and encoded onchain. How much resides on-chain and how much is left to be enacted in the messy human world? That is for each DisCO to decide, but a DisCO's on-chain dimension, its CAT, needs to be re-assessed and adapted regularly to account for members' real-life experiences. The DisCO is similar to DAOs in providing tools for easier invoicing, payments, value

tracking, and structural resilience. But rather than creating a standard, universal DAO for all purposes, DisCOs distribute power among nodes, facilitating easier bottom-up adaptations, change, and federation.

Good Times: DisCOs in Real Life

In summary, we can say that DisCOs are a framework for exercising the ideals of Open-Value Cooperativism in actionable, federated ways facilitated by digital technology. But this doesn't tell the whole story.

What would your DisCO be like? Who's there? What do they do to care for one another, make a living, and share their experiences with others? Beyond the magnificent seven DisCO principles, and in our experience,[45] DisCOs are:

Balanced in culture and structure: Onchain and offchain dimensions, tacit and explicit knowledge… everyone's out on the DisCO floor. The algorithm's positive feedback loops won't induce runaway machine tyranny. Rather than falling subject to the tyranny of structurelessness, the good working atmosphere is strengthened by the resilient, accountable and interoperable agreements of the Community Algorithmic Trust.

Inclusive, relatable and educational: Many blockchain projects are more exclusive and less decentralized than they claim, given that access is limited to those with special knowledge (often obtained as a result of one privilege or another). DisCOs attempt to rebalance this access by providing mentoring and resources to those interested in its underlying structures, including Open-Value Cooperativism, Distributed Ledgers and other bases described earlier. Here's an example: if you're visiting us today from blockchain-landia, you may be frustrated with our entry-level explanations of blockchains and DLTs. Fine, but, for many, impenetrable technical language and an exclusive culture are frustrating enough to leave people uninterested and uninformed. To fix this, accessibility and pedagogy are key components of the DisCO vision.

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45   That is, in our own DisCO experience within Guerrilla Media Collective. These features are meant to guide and inspire, but we look forward to other variations.

Non speculative or deterministic: DisCOs do not claim they will disrupt all industries. They are a framework that increases the possibility of positive changes in the work and marketplace. Their development is emergent and dependent on the lived experience of their members. What they are *not* is speculative or investment vehicles dependent on difficult to grasp, volatile aspects. Large or small, DisCOs are not algorithmic blueprints for humans to conform to. Instead they take things one step at a time, beginning with tangible community wealth and stable livelihoods, to then expand and federate through secure P2P infrastructures to create resilient solidarity economies.

Multilayered/holonic: Hebb's rule states that "Neurons that fire together, wire together." DisCOs are designed to prioritise the human beings within a collective and provide a home for these to create value together. Interdependence within a DisCO is starkly evident — everyone is privy to the reality that self and collective interests are not opposed to each other, but mutually dependent. Nodes within an individual DisCO, such as Guerrilla Media Collective, practice the most intimate form of value distribution, much like an income-sharing commune. Value distribution between distinct nodes within the collective prioritises solidarity. All DisCOs can develop encoded, revisable agreements to process value flows with other DisCOs, prioritizing value sovereignty and self-determination on the terms and means of exchange among network partners. In all cases, value tracking is transparent and exchanges are geared toward consensual solidarity, network resilience and mutual support. Finally, beyond their value-sovereign membrane, Community Algorithmic Trusts can function at different levels along the trustless-to-trustworthy spectrum, and transact with the market beyond.

Modular — but not prescriptive: DisCOs are one framework, and one possible answer. But if the question is "what economy do we want?," we can point to other complementary frameworks, old and new. DisCOs support traditional co-ops, Platform Co-ops, Open Co-ops and the Social Solidarity Economy, as well as newer proposals like microsolidarity, not-for profit/Post Growth Economics and the more radical edge of the blockchain space (more on the latter below). We admire and respect what they are doing and don't seek to impose "our" solutions. All these experiments are gaining traction on the rough roads of late-stage capitalism.[46] Sharing our stories, successes and failures and being willing to collaborate in cultural and structural ways can only increase our resilience by strengthening our diversity. You may choose to use DisCO or not, but if any of our ideas stick, we'd be happy to know our work has had an effect.

DLT-enabled, but not dependent: Contributory accounting is at the heart of each DisCO's Community Algorithmic Trust. This accounting must be validated in secure and tamper-proof ways — we want to disrupt mainstream notions of value beyond the *values* typically found in the blockchain space. But while we see incredible potential in

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46   In A Postcapitalist Politics, feminist economic geographers J.K. Gibson-Graham remind us that there are innumerable economic practises existing within, alongside and *beyond* capitalism. The panorama for non-capitalist economic diversity is vast, but capitalism blinds us to it by pretending to be all-encompassing and inescapable.

the future of Distributed Ledger Technologies, DisCOs cannot put all their eggs in one blockchain basket. DisCO cultures and structures are emergent, the former is the glue between organizations and the latter more prone to experimentation. Whether it's Secure Scuttlebutt, a bunch of spreadsheets or tally sticks, your DisCO can track value any way it chooses. On the one hand, being interoperable is essential to larger DisCO networks, but it's also important not to impose tools and structures to the point that they become a hindrance. We simply want to make the technologies of Distributed Cooperative Organizations available, "meshable," and open source.

Online or offline? *Onlife*! Mexican-Catalán Zapatista cyberactivist Guiomar Rovira breaks down the dichotomy between our "on" and "off" line lives as follows: "My position is that, beyond the differentiation between online and offline worlds, everything occurs *on-life*. Seen this way, the corporeal experience of encountering is the key." There really are no "material" and "immaterial" commons considering that all depend on material resources and knowledge. Geographically distributed DisCOs that produce digital services, like Guerrilla Media Collective, are the easier implementations of DisCO because value tracking is easier, there are fewer material inputs and less development capital needed, etc. But while material production is always more difficult than intangible creative production, the DisCO framework has been designed to ease the governance and economics of "Design Global-Manufacture Local" initiatives. Whether on- or off-line, we recognize our relations as happening *on-life,* striving to maximize trust through networks and regularly encountering each other face-to-face.

Copyfair-Licensed: To enable value sovereignty while maximizing mutualization, DisCOs can use commons-based reciprocity licenses, or "Copyfair" licenses. While this remains an incipient project, there is an existing Copyfair (or, as the authors like to define it, copy*far*left) license, the Peer Production License (PPL). The PPL allows cooperatives and solidarity-based collectives, but not corporations, to monetize productive works. Similar to how the Fairshares Association facilitates the capitalization of assets within their networks, DisCOs can use PPL to allow purpose-oriented organizations to become more economically resilient by creating and controlling their own shared assets in a permissionless manner. The possible on-chain dimension of these licenses needs to be modular and interoperable between all participating DisCOs and is a matter to be prototyped within the network (nothing about us without us!).

Have viable, ethical business models: DisCOs have a nuanced vision of profit based on community control. If we define ourselves as "not-for profit," we mean not for absentee or shareholder profit, but for the benefit of participants in the collective and its social mission.[47] DisCOs are a framework for economic resistance achieved by creating economic counterpower. Call us ambitious, but we want to outperform capitalism in heterodox ways, and this calls for economic viability. Rather than relying on economic exploitation, extraction or philanthropy, DisCOs generate and reinvest their own income. This viability lets DisCOs operate in the market economy, i.e., offering tangible goods and services for sale, but with strict loyalty to the pro-social guidelines of their seven main principles. This contrasts with the economic premises of many blockchain projects, which are usually predicated on speculative ICOs or the seductive promises of big-picture disruption for capital gain.[48]

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47 Guerrilla Media Collective is, in fact, legally constituted as a non-profit, socially oriented Andalusian worker cooperative.

48 Many of these ideas are further explored in Donnie Maclurcan and Jennifer Hinton's How on Earth. Our future is not for profit.

Political: Of course, all cooperatives *are* political. They upend the three basic premises of capitalism: Private ownership of the means of production becomes *collective ownership*, wage labour becomes *worker-owners* and (absentee/hierarchical) production exclusively oriented towards profit and exchange is tempered by *the* original seven cooperative principles.[49] DisCO's additional seven principles turbocharge this. In particular, the addition of carework and feminist economics as essential components of the DisCO vision represents a change that is long overdue within movements that speak of emancipation (the old-school left) or the decentralization and disruption of hierarchical structures (the blockchain space). Whether a future DisCO chooses to "fly the flag" of these political aspects (like Guerrilla Media Collective) or not, the most important thing is that their practices will reflect these political principles.

Fun or bust! Humour, joyfulness and wellbeing are routinely disregarded in politics and changemaking projects. Fun is also painfully absent from many blockchain projects (notable exceptions would be Cryptoraves, Facecoin, Plantoids and Dogecoin — much meme, very wow). The name DisCO is no coincidence, nor are what we think of as the DisCO aesthetics. We think that true inclusivity needs to be an engaging and fulfilling process. When much of our leisure time has been hijacked by online platforms designed to encourage addictive behaviours, why can't we offer enjoyable alternatives which also fulfill a social mission? Relationships within a DisCO (including the DisCO CAT platform) have to factor in fun!
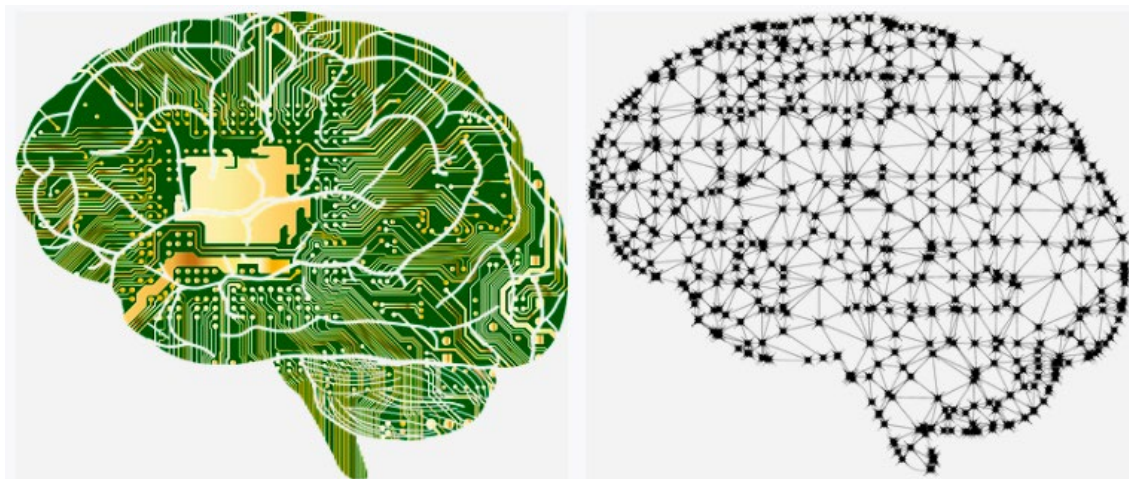
Don't stop 'till you get enough — radical workplace democracy

American economist Richard Wolff, argues that notions of representative democracy do not amount to much when democracy is overwhelmingly absent from the workplace: once you walk through the door of the company, your democratic rights have little meaning. The coop movement has been addressing workplace democracy for a long time. What we propose in DisCOs is **radical workplace democracy**, where communication is informed by other notions of value reflective of our experiences as human beings, in the workplace and beyond.

49   We must, however, point out that the original seven cooperative principles are often ignored. Many co-ops are simply market players for the collective benefits of their members. In spite of this, we believe that the DisCO framework can help make the cooperative principles more likely to be enacted.

In this video produced by the Extraenviromentalist, economics professor Rick Wolff
explains how cooperatives can be the cure for maladies of capitalism.

Together, these are the stories and the cultures that make a DisCO. It weaves previous approaches together into a new narrative. Stories, not genes, are what make humans unique, and stories inform the design of our technologies.

The story of DAOs is the result of certain (libertarian) sensibilities resulting in certain outcomes. That culture produces its own corresponding structures. Our approach explicitly identifies the importance of culture before it's unconsciously programmed into normative design structures. We want DisCOs to tell a better story, one that is more grounded and aligned with our values.

We also arrived here through experience influenced by P2P and commons theory. The more technical understandings of P2P collaboration are well-known in the DLT space but, despite a growing number of rebellious exceptions , the cultural and sociopolitical transformations that P2P networks can pursue remain underdeveloped and naive.

Plenty of worthy people and projects may be content with the semantics of the DAO, but perhaps not everyone. To those outliers, we present this as an alternative viewpoint to consider carefully. Unexamined values and biases certainly do inform technological design, and the more "disruptive" the aims, the more it's important to uncover any hidden, even if unintentional, capacity to do damage. As Carl G. Jung said, "Until you make the unconscious conscious, it will direct your life and you will call it fate." What exactly is being disrupted, who benefits from the result, and who or what could stand to suffer for it? Who decides what is a fair risk, how are those decisions taken, and how transparent are those processes? All questions worth exploring. Taking a critical view of potentially disruptive technology isn't necessarily a negative-Nancy stance, it's more about taking active, collective responsibility for the use of very powerful tools for change, and broadening the base of informed, involved stakeholders.

Aesthetics and semantics are important as tools to build better conditions for inclusivity. Humor, especially as a way to help unpack more historically complex and convergent political, social and philosophical movements, is experiencing a heyday in social media, especially in video (see below). However, it's also important to keep

a balance and make room for a plurality of possible aesthetic approaches. In the The Human Condition, Hannah Arendt argues that when aesthetics are linked to politics, it ultimately ends in fascism. Politics must honor the irreducible plurality of humans, which means that a single aesthetics can't be regimented and enforced as politically correct. We appreciate this cautionary reminder not to ever try to dictate. Instead we stand for enabling access to means of expression that can form a source of social cohesion and identification for collectives moving into new spaces (e.g., blockchain) formerly occupied by entities with the means to bankroll the subtle, often unnoticed influence that image and branding can inject.

As an example, we've chosen visual aesthetics for this DisCO manifesto to be colourful and rebellious. These aesthetics are an extension of the style we've evolved in our online presence for Guerrilla Translation and its extension, Guerrilla Media Collective.[50] The point for us is not to force a style but to empower others to recognize new ways of relating to things that formerly may have seemed unrelatable, through the bridges of color and cultural references.

Contrapoints explains "the Left" from at least two angles.

If this approach to aesthetic and semantic demystification and hands-on reconstruction appeals to you, well, it sounds like you've found the others. There's a lot of work to do, and we have some ideas about what that looks like, which we'd like to share with you.

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50 Our visual style stands in contrast to the aesthetics usually chosen in blockchain projects for a reason, we deliberately punkified, feminized and queered the DisCO optics to resonate with often underrepresented sectors in politics and tech (and, possibly, alienate others: that's the breaks).

The Last Dance: The Future is Unwritten

chapter 7

What is the future of work? *Restoration.*

Those of us working on DisCO stand at the crossroads of various movements: open source, the commons, permaculture, platform and open cooperatives, blockchain, intersectional feminism and feminist economics, open-value accounting. Individually, the change-making movements we take part in offer alternatives to the deficiencies of mainstream economic thought, but to address the root causes of inequality we need accessible frameworks that unite them. As noted British ecologist David Fleming said, "Large-scale problems do not require large-scale solutions; they require small-scale solutions within a large-scale framework." Individual commons (e.g., DisCOs such as GMC) are small-scale, trust-based solutions. Large DisCO federations of Open-value cooperatives constitute a potential large-scale framework.

We believe that greater public awareness about the power of the Commons plus the DisCO framework can offer a vision of empowerment to counter the bleaker prospects implied by "automation", and avoid blind faith in the blockchain as a panacea. Restoration of our living planet, ecosystems and human relationships are vital. This is not work for technology apart from human involvement. It will take transnationally networked and radically democratic workplaces. Participatory decision-making systems are worthy, but radical workplace democracy is needed to achieve the most important distribution: power. DiSCOs can more effectively embed a culture of inclusion in our future organizational forms and technologies, making room for diverse experiences and expressions while respecting boundaries, and creating dignified livelihoods.

The practitioners and activists at the self-managed Performing Arts Forum (PAF), situated in the North of France, offer a thoughtful exploration of inclusivity, awareness and "mind asymmetries" in their section on practicing accountability:

> "Accountability is a way of addressing each other as responsible for our acts and encouraging openness toward potentially changing our behavior. This

takes time and patience...People come from different places, inhabit different bodies, have different experiences, are situated differently in power structures and have different boundaries. Take this into account, challenge your own position and let it be challenged, while respecting other people's boundaries."

While we remain skeptical of technosolutionism, we must also acknowledge that those of us in social movements have unprecedented opportunities to develop new strategies and amplify our impact through technology. Talking about the mass Arab Spring/15-M/Occupy mobilizations at the start of the decade, John Postill, a communication anthropologist at the University of Melbourne, affirms that:

> "To succeed politically, IT specialists like geeks and hackers have to join forces with other technology experts (such as digital rights lawyers, online journalists, geeky politicians) as well as non-technological experts (for instance, artists, intellectuals, social scientists) and ordinary citizens with no specialist knowledge through inclusive initiatives where all can make a contribution. It is the coming together of everyday people, technology nerds and other political actors via social media, mainstream media and in physical settings such as streets and squares that drives processes of change."

Postill's observation was made in 2011, when social media's role in enabling the takeoff of a revolutionary movement was still possible. That is no longer the case. Beholden to its for-profit orientation, Web 2.0's data farming business model thrives on engaging our reptilian instincts, favouring discord, distrust and alienation. The present political landscape is evidence of this shift. The rise of web 3.0, with its focus on decentralization presents a new window of opportunity, but we have to make our claim in this space before the HSBCs and IBMs of the world co-opt (again) the technologies of decentralization. Silicon Valley appropriated the imagery of the commons and P2P for the micro-rental, calling it the "sharing economy." Nascent technologies promising huge disruptions must explicitly develop visible pilots that disrupt not just archaic business models, but the twin elephants in the room: mass inequality and biosphere destruction.
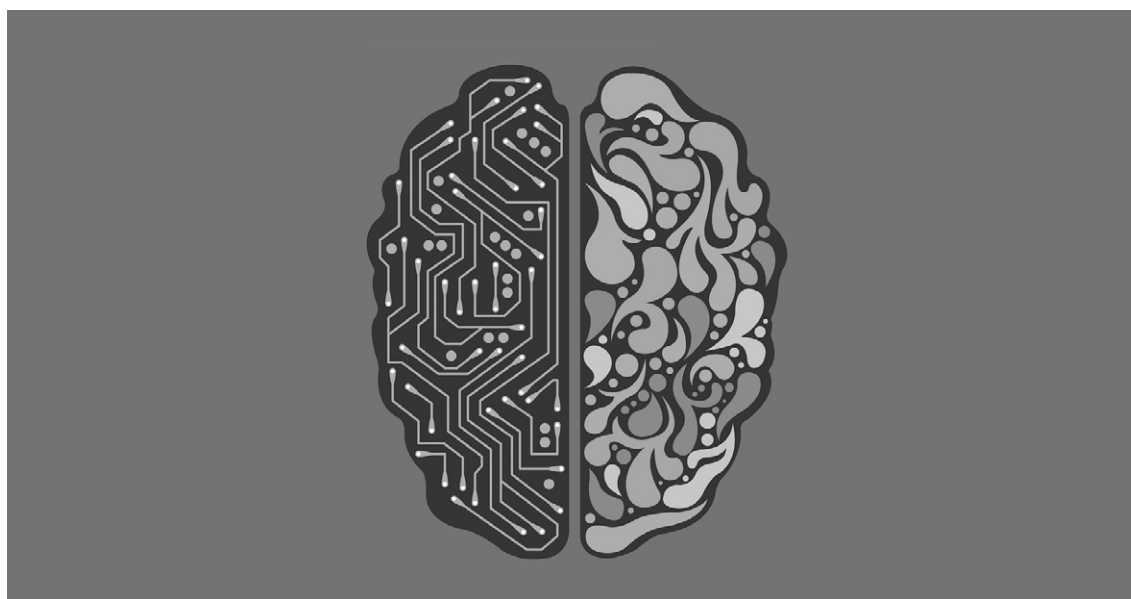
By now it should be clear that we are not buying into the blockchain hype of speculation for personal gain. Instead, we intend to promote large-scale pooling within the cooperative and Social Solidarity traditions. This goes from the low-hanging fruit

(knowledge, documentation, best practices), to the more difficult challenges like amassing physical or productive infrastructure (capital) and building economic solidarity. We need to transact with and support each other, not just through the available conduits and protocols of mainstream finance, but through other ways of tracking and distributing value, including the three modes of internal value allocation we propose in the DisCO governance model.

We are happy to acknowledge that we are not alone in criticizing the socio-political and cultural myopia of blockchain developers. Projects like P2P Models, OsCoin, Economic Space Agency, DECAL, The Commons Stack, DGov, Giveth, Trustlines, Circles, Terra0 and others are questioning the underlying assumptions of mainstream blockchain innovators,[51] by incorporating feminist, anticolonial, commons and cooperative principles into their own blockchain R&D.

Don't leave me this way: Who's dancing at this DisCO?

Throughout this series we have proposed the potential impact of DisCOs. This impact will emerge as the possible beneficiaries of the seven DisCO principles step into new social roles in developing distributed technologies. But who are these beneficiaries and what movements can benefit from and enrich the DisCO framework?

DisCOs spotlight a new political subject apart from "the worker" or "the precariat": the **commoner**, a person who co-manages their resources in community according to the norms of that community. The sustenance of an estimated 2.5 billion people worldwide depend on some form of natural resource commons, mainly in the global south, yet many of these remain unprotected and vulnerable to enclosure. It has been

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51   Some of these and more are highlighted in the report P2P Accounting for Planetary Survival written by the P2P Foundation's Michel Bauwens and Alex Pazaitis and edited and designed by the Guerrilla Media Collective team.

postulated that a similar number are co-creating shared resources online through digital platforms. These potentially massive affinity networks presently lack a common identifier or unifying vision to articulate a different path for change. But we see the ideas of commoning as a shared thread.
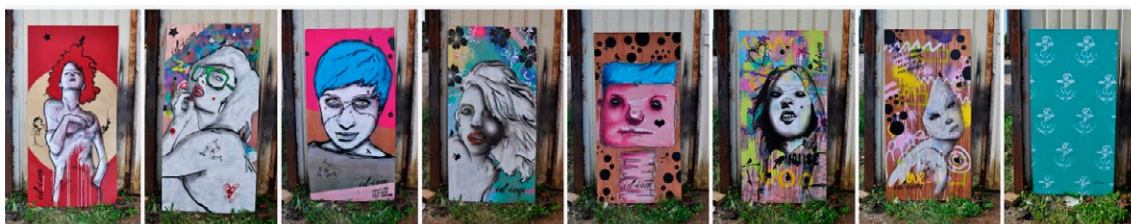
With 2.6 million cooperative societies, over 1 billion members and a combined turnover of 3 trillion US$, similar to the market capitalization of Microsoft, Amazon, Google, Apple and Facebook combined, the **cooperative movement** has the potential to radically reshape economies and overturn inequality. But it won't be able to do so by playing by the rules of the capitalist economy. Co-ops have existed for more than 175 years now, but they haven't brought about the desired economic revolution. Much of the coop movement is politically moribund, with big co-ops behaving like corporations, paying no heed to the seven principles or, in the worst of cases demutualizing all together. Platform Cooperativism has brought a breath of fresh air into this space, but to really leverage and expand cooperative culture to the next level, we need to adopt **digitally networked solidarity strategies and the large scale governance seen in P2P/Commons networks.** This is the way to crystallize radical reimaginations of value creation and distribution: transnationally and assertively.

Closely tied to the spirit of co-ops, **trade unions** have sought to minimize exploitation while favouring fair-value remuneration for workers for almost 200 years. Today unions remain at the forefront of social and environmental issues, encourage partnerships with cooperative organizations and assist precarious workers to self-organize into innovative union-cooperative structures. Meanwhile, **open source** forms the backbone of the internet and most IT companies run on open source software. Beyond software development, the Open Source way has branched into science, education, the arts, politics and more.[52] The economics of open source Software are staggering; it is time to turn that economic power to more worthwhile social ends than building IBM's next Watson.[53]

DisCOs are close in spirit to other **post-capitalist movements** beyond the commons, such as Buen Vivir, the Social Solidarity Economy, Municipalism, Ecofeminism, Decolonialism, Degrowth, the Maker Movement, Permaculture and anti-austerity protest movements. Together, these efforts can only be enhanced by **legislative and political initiatives.** In this sense P2P politics and the municipalist movements that have arisen around the world have often favoured co-ops, feminism, and the social

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52 When talking about software, we are obliged to acknowledge the distinction between Free/Libre and Open Source — which we agree with. We use Open Source in its wider sense, although our politics are much more radical than many Open Source projects. Regarding the latter, Nathan Schneider writes: "Those who use FLOSS self-consciously are overwhelmingly those who enjoy privileges like whiteness, maleness, and affluence. Lots more people benefit from this stuff as users of Firefox, WordPress, and LAMP servers, but huge portions of the economic benefit end up with shareholders of big companies like Google and IBM. These companies also help finance and sit on the boards of major FLOSS foundations. The result is products like Android, an operating system that employs Linux to carry out perhaps the most powerful engine of corporate surveillance ever invented."

53 Despite those "staggering" economic figures, the truth is that, as Mozilla's Emma Irwin and many other commenters remind us, the *cultures* of Open Source hide myriad economic biases which consistently favour a white/male majority, in often invisibilized detriment to others.

solidarity economy. It only stands to reason that DisCOs can provide a powerful a plug and play framework for these political allies to create meaningful employment through commons-public partnerships and bottom-up strategies for public provision.

Finally, the potential of decentralised movements to also benefit working people, not only the largest profit-driven tech enterprises, will amount to nothing without addressing gender and racial inequality and geographic disadvantages at the design level of our organizations. Many objections to feminism and anticolonialism could be based on misunderstanding and misinformation, but attempts at equality will be lost without a clearer set of shared, tangible goals and visible outcomes.
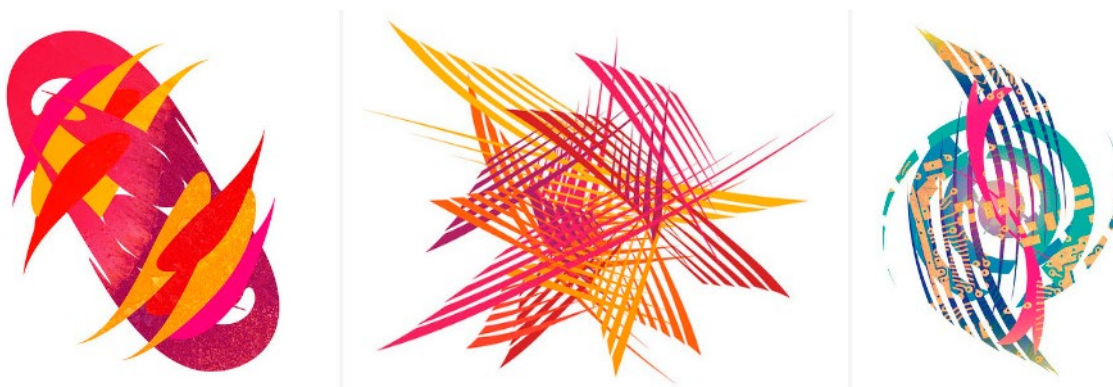
Tecktonic: Next steps on the DisCO dancefloor

Cooperativism, Open Source, P2P, Commons and Feminist Economics: the best of these movements can find a happy combination in DisCOs, thanks to their low startup costs and modular, open source nature, and philosophical affinities. Formerly unconnected actors worldwide can more easily join forces by working on shared network platforms, introducing cross-sectoral synergies and opening opportunities to create a new, diverse and resilient economic movement.

How do we propose to stimulate these sorts of shifts? Throughout this manifesto we've explained the cultural aspects of DisCOs. These are not theoretical, they are predicated on our real life experiences in Guerrilla Media Collective and what we have observed in researching and cataloguing peer to peer and commons projects. From this body of lived experience we propose a hypothesis: that DisCOs could become an economic counterpower by leveraging and federating the power of the movements mentioned above.

What is the precise technical framework to make this happen? Here we will utter a sentence not very present in the blockchain space: *We don't know*. The DisCO governance model gives us a solid framework for experimenting and prototyping Community Algorithmic Trusts for organizations, but it is not ironbound. If we follow the Guerrilla Media Collective model, the code for managing DisCOs is meant to be reprogrammed every three months, coinciding with a DisCO's seasonal evaluations when participants are invited to reflect: Has our on-chain algorithmic trust followed the values of the human group that birthed it? If yes, the algorithm remains the same. If not, it's suitably adjusted to help the collective better meet its goals and

expectations. All these details will be explored, but not predetermined, in our forthcoming documentation, but we already know that this is an emergent process of experimentation and continued interaction. The DisCO story needs to be a living one.

The DisCO project was created to cooperatively develop, prototype and popularize DisCOs, and provide integrated resources for Open-Value Cooperativism. With the Guerrilla Media Collective and CultureStake (a new DECAL project) as its first pilots, we intend to mature, codify and open source our **cultural practices** for other collectives practising contributive accounting. We are also co-developing a modular **legal/technical infrastructure** for other commons-oriented collectives and businesses to adapt. This culture/structure distinction will be expressed through two complementary components to the project: The DisCO **Framework** and the DisCO **Stack.**

The DisCO Framework (Culture) is predicated on care work, and prototypes real-world practices. It includes resources such as an educational portal (complementing the Platform Co-op Development Kit), handbooks, audiovisual materials, infographics, DisCO-thons and workshops to engage communities in developing and prototyping the model in practice. The purpose is to make DLTs, contributory accounting, feminist economics and other components accessible to the precariat. Finally, we will conduct Participatory Action Research with GMC and other pilots. The aim is to highlight the application of user privacy and feminist economics to contributory data governance within DLT frameworks, and also show how tokenization in different mediums affects social relationships.

The DisCO Stack (Structure) will be developed by the Guerrilla Coding Collective (presently being created - get in touch!) to build the Community Algorithmic Trust (CAT) platform for DisCO value tracking and accounting. The CAT's dual layer architecture is studying lightweight Web 3.0 solutions, such as Secure Scuttlebutt, ActivityPub, ValueFlows, IPFS and Radicle for energy efficient, trustworthy value tracking and economic networking at the individual DisCO level (not *everything* has to live on a trustless blockchain) and blockchain-based ledgers for interactions between DisCOs and other compatible entities. The purpose here is to dispose of unnecessary blockchain usage by crunching small-node data, and applying blockchains only to secure trustless interaction.[54] In summary: (non-blockchain) DLT tech is used at the trustworthy end of the spectrum, cryptographic blockchain tech at the trustless end. As a whole, this design can offer lightweight, agile and energy efficient DLT alternatives to sidechains or sharding.[55]

Adding to the value-tracking and economic components, the DisCO Stack will also develop collaborative FLOSS tools based on existing systems, to optimize DisCO workflow and facilitate all aspects of the DisCO governance model. These pilot-tested, inclusive educational materials will have state-of-the-art UX provided by Guerrilla Graphic Collective, to ensure the CAT's accessibility and user friendliness.

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54 We understand that some of these terms may be baffling to some of our readers. To remedy that, we are in the process of writing a basic article explaining how the DisCO stack facilitates the processes of the DisCO governance model. In the meantime we've tried to provide accessible links to explain what each of these components do.

55 Sidechains are a sort of "branch blockchains" where certain processes can take place. Sharding breaks down databases into smaller, more manageable chunks which are then distributed among several servers. Both strategies are designed to alleviate the transactional load, scalability issues and general sluggishness of large blockchains.
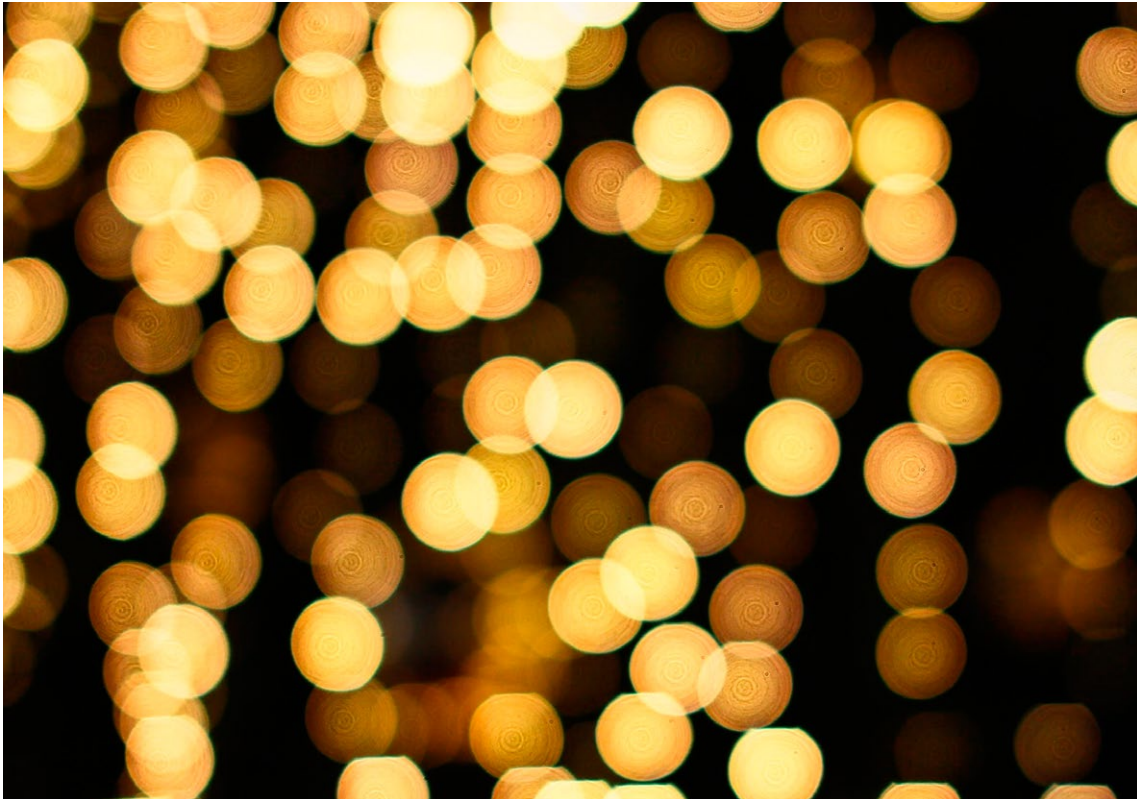
We believe that this combination of off-chain (cultural) and on-chain (structural) qualities are essential for any serious distributed project that wants to avoid being vapourware. To this end, we are working in partnership with a multidisciplinary team to bring something radically new to the cooperative and DLT/blockchain world. Collectively, we bring experience in entrepreneurship; research; programming; blockchain and web 3.0; communication, design and storytelling; P2P and Commons innovation; and culture.[56]

In essence, DisCO offers a real-world educational opportunity for those interested in creative work with a social and environmental benefit, open-value cooperativism, and non-hierarchical organising in digital spaces. The real-world tested and thoroughly documented set of cooperative practices and tools that we propose could ease the cooperative movements' work in harnessing the potentials of the digital economy for viable socio-economic outcomes. Watch this space.

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56   The authorship section below namechecks some of these individuals and their organizations.

The big problems of our time including inequality, the climate crisis, etc. need to be challenged, not from a position of privilege, but from the bottom up with paradigm-shifting alternatives. By educating, partnering with, and empowering those most directly affected by social and economic inequalities, DisCOs can attract people to help create livelihood vehicles that produce commons, not absentee profit, and grow from basic economic resistance to a viable, networked economic counterpower.

> *"If you are disgusted by what you see, and if you feel the fire coursing through your veins, then it's up to you. You don't have to be the leader of a global movement or a household name. It can be as small scale as chipping away at the warped power relations in your workplace. It can be passing on knowledge and skills to those who wouldn't access them otherwise. It can be creative. It can be informal. It can be your job. It doesn't matter what it is, as long as you're doing something."*

— Reni Eddo Lodge

Credits

Authorship

The lead writer for the *DisCO Manifesto* was Stacco Troncoso with Ann Marie Utratel as co-author and lead editor. Timothy McKeon provided additional editing and Susa Oñate took care of final editing and proofreading, editing and proofreading, with aditional proofreading by Elsie Bryant. Significant editorial feedback from David Bollier was indispensable.

The manifesto is the result of nearly a year of discussions among the rest of the Guerrilla Translation team including Sara Escribano, Bronagh Gallagher, Silvia López, Nati Lombardo, Lara San Mamés and Kevin St. John. Beyond their indelible influence on the Manifesto, the GT team also took an active part in its writing.

Similarly, the input of the DisCO Crew working on project development has been essential to maturing the manifesto, infusing the project with life and direction. Besides Stacco Troncoso and Ann Marie Utratel, the crew also includes Ruth Catlow (Furtherfield, Decal), Ela Kagel (SUPERMARKT), Irene López de Vallejo (AIOTI, BDVA, BlueSpecs) and Phoebe Tickell (DGov Foundation, Enspiral).

We are deeply grateful for the countless editorial suggestions made by Jaya Klara Brekke (Durham University, DECODE), Pat Conaty (Synergia Institute, New Economics Foundation, Co-operatives UK), Primavera De Filippi (Berkman Klein Centre, CNRS, COALA, DaoStack), Eleftherios Diakomichalis (OsCoin, Radicle), Lynn Foster (Mikorizal, Value Flows), Sam Hart (Avant.org), Bob Haugen (Mikorizal, Value Flows), Julio Linares (Circles UBI), Elena Martínez Vicente and Silvia Molina Díaz (P2P Models), Nathan Schneider (Internet of Ownership) and Lisha Sterling (Geeks Without Bounds). Part of this group will continue working with us in either an advisory and/or technical capacity in bringing the DisCO framework and stack to life.

Finally, many of these conversations were sparked by the 2018 Guerrilla Translation Reloaded Workshop which, apart from the Guerrilla Translators, was also attended by

Richard D. Bartlett ([Loomio](#), [Enspiral](#), [the Hum](#)), Sarah De Heusch ([SMart](#)), Virginia Díez ([Wikimedia Spain](#)), Emaline Friedman ([Holo](#)), Carmen Lozano Bright ([Nodocomun](#)), Mercè Moreno Tarrés ([Guerrilla Graphic Collective](#)) and Lucas Tello ([Zemos98](#)). We are thankful for their presence.

All errors and omissions are the authors' own, and feedback is welcome.

Acknowledgements

No manifesto is an island. There have been countless influences in the writing of the DisCO manifesto, mainly from our professional experiences as part of the core team of the [P2P Foundation](#) and in the movements we've mentioned above. [Click here](#) for a reading list of some of these influences — many of them are linked within this essay.

Design and Images

This edition of the DisCO Manifesto was designed by Guerrilla Graphic Collective. [Mireia Juan Cucó](#) created the logo and branding for DisCO and led the design process for the manifesto and [its website](#). The images for the text were curated by Stacco Troncoso and Ann Marie Utratel and are listed below in order of appearance.

Foreword

[Red Lights in Line](#) by [Pixabay](#)
Graffiti Strip by [id-iom](#): [Img 1](#); [Img 2](#); [Img 3](#); [Img 4](#)

Introduction

[We forge the chains that bind in life](#) by [id-iom](#)
Illustration strip by [NVM ILLUSTRATION](#): [Img 1](#); [Img 2](#); [Img 3](#); [Img 4](#); [Img 5](#)

Chapter 1: Rage Against the Machine and Science Friction

[Kasparov Defeated](#). Sourced from [Mashable](#)
Friday, Saturday, Sunday sequence by [id-iom](#): [Img 1](#); [Img 2](#); [Img 3](#)
[Blockchain group](#) by [VIN JD](#)
[Kasparov beats "Deep Blue" in one move](#) by [Jim Gardner](#)

Chapter 2: You say Potato, I say Decentralized: Semantics Matter

You say Potato, I say Decentralized collage by [id-iom](#): [Img 1](#), [Img2](#); [Img 3](#); [Img 4](#); [Img 5](#); [Img 6](#); [Img 7](#); [Img 8](#)

Centralized, Decentralized, Distributed. Sourced from Business Insider Singapore

From hierarchy to decentralisation by Anna Bauer

One does not simply distribute power by decree meme created by Ann Marie Utratel

Always read the label by id-iom

Watson in its cool room by John Tolva

Maps, DNA and spam by id-iom

Chapter 3: Last Night A Distributed Cooperative Organization Saved My Life

Street (He)art by Jan Kolar

Work, work, work by Victoria Wang

Artwork collage by id-iom: Img 1; Img 2; Img 3; Img 4; Img 5; Img 6; Img 7

We forge the chains variations by id-iom: Img 1; Img 2; Img 3; Img 4

Blockchain Technology by Tumisu

Chapter 4: Punk Elegance: The Story of Guerrilla Translation and the Guerrilla Media Collective

The Guerrilla Translators by Guerrilla Translation (read about this image here)

GT's English and Spanish Websites. Sourced from GuerrillaTranslation.org and GuerrillaTranslation.es

DisCO brainstorming action. Sourced from this article

Guerrilla Translation Governance Model infographic by Mercé Moreno Tarrés Sourced from this article

GT group picture by random passerby in Hervás, Spain :)

Pixelated by Glen Scott

Titel Polyeder by Markus Kraus

Chapter 5: Turn the Beat Around: Community Algorithmic Trusts and Care Oriented Cooperativism

Robot reading sourced from Max Pixel. Passengers reading by ArtsyBee

Robot SVGs sourced from from SVG SILH: Img 1; Img 2; Img 3; Img 4

The New Ecosystem of Value Creation infographic by Elena Martínez Vicente. Sourced from the Commons Transition Primer

All your base are belongs to us by id-iom

Mirrorball catz. Sourced from Img 1; Img 2; Img 3; Img 4

U need big data? meme

In Like Flint by id-iom

Chapter 6: Open-Value Co-ops for Radical Workplace Democracy

Green hair don't care by id-iom

SomHEROIES by Mercé Moreno Tarrés

Watercolor dots by 2768815-2768815

Brains 1 and 2 by GDJ

Chapter 7: The Last Dance: The Future is Unwritten

The future is unwritten by JaysCollection

AI brain by Seanbatty

Disco cat by Kelsey

Artwork collage by id-iom: Img 1; Img 2; Img 3; Img 4; Img 5; Img 6; Img 7; Img 8

Abstract and Patterns collage by Codice Tuna: Img 1; Img 2; Img 3

Fuzzy lights by Benjamin Wong

Hanging Tough by id-iom

Credits

Black Heart by Ed Robertson
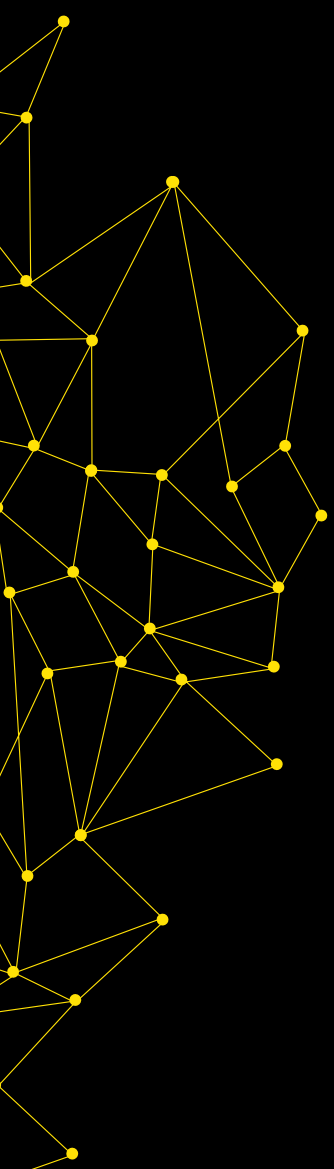
What's a DisCO?
It stands for "Distributed Cooperative Organizations" and it's a set of organisational tools and practices for groups of people who want to work together in ways that prioritize mutual support, cooperativism and care work. DisCOs focus on social and environmental work, exploring convergences between the Commons and P2P movements along with the world of cooperatives, feminist economics and the Social and Solidarity Economy.