**Research Question(s):**

How can platform cooperatives utilize data collection and its manipulation in a transformative and emancipatory manner, and what socio-political impact does this have on notions of self-sovereign/collective data ownership as it relates to value accumulation and distribution – particularly with regards to the motif for manipulation – within democratized digital networks enabled by blockchain technology? And with regards to these potential decentralized organizational networks and the ontologies that underlie them, can they truly come to challenge the long-held epistemology and its digital representations that dominate the networked era by serving as a viable and desirable alternative?

Further, what is the most effective means of conceptualizing how these more localized networks will interoperate within common spaces; in other words, how should we conceive the systems and structures that can enable the cooperative and collective governance of like-minded or similar organizations operating within an intersecting digital realm (necessitated by a transcendent understanding of a data commons as opposed to the proprietary and competitive digital climate as it exists today). If we were to conceptualize this in the form of a decentralized and democratic digital institution, how will this conception reverberate in the non-digital sphere?

Finally, taking the previous question to an even more meta level, how should we perceive the democratically-governed interrelationship of these developing digital institutions, especially when we consider the autonomous and automatized nature of decentralized and distributed ledger technology as it relates to powerful self-executing algorithms managing and manipulating incredibly complex and untethered datasets that must effectively belong to the individuals, the collectives, and the institutions simultaneously?

**Working Argument(s)**

Put simply, the collection and manipulation of user data by centralized and proprietary organizations betrays the true potential of a networked society, and the developing technological capabilities enabled by distributed ledger technology and its offshoots provides a direct challenge to the culminated logic of surveillance capitalism in its allowance of what should be considered as a highly-desirable alternative(s). We therefore look to the developing organizational structures of Web 3.0 applications at an epistemic level and focus on core values such as decentralization and democratization, and from there posit platform cooperativism as the truest, broad-based representation of these sorts of ideals; we would, for instance, prefer the term decentralized collective organizations (DCOs) as opposed to decentralized autonomous organizations (DAOs) as it more-so illustrates relationship between the sovereign participant and the network as participatory democracy and cooperative rather than something more individualistic and automatized. Semantics aside, though, we argue that the collective governance of data on these networks and the algorithms to manipulate them towards a particular goal could come to represent a new sort of digital paradigm – perhaps one that is not predominantly interested in sophisticated ways of getting users to click ads as a means of generating profit, and instead prioritizes the collective will of its participants and distributes the created value to those who are actually creating it (while simultaneously creating entirely new conceptualizations of the sovereign individual as it relates to labor, collective ownership, value, community, and so on).

And while this sort of analysis is not exactly unprecedented (though we certainly plan to help the conversation evolve), we would expand upon it to perhaps unprecedented territory by prioritizing the same core values highlighted in the previous section as a justification for an interoperable understanding of a transcendent data commons; holding onto decentralization and democracy as our core values, we recognize that we should not perceive various networks in a similar digital realm as in competition with one another (which mimics the political economy of Web 2.0). Rather, we should view them as in collaboration with one another, with perhaps the most poetic allegory being like that of nodes in blockchain. In this, the networked collectives would operate similar to individual nodes in the governance of a blockchain, with the main difference being that they are governing the digital realm(s) to which they belong, and the ethereal layer holding this realm together would be the data collected by the networks pooled into a sort of data commons. We would further argue that these digital realms should be best understood as a democratic digital institutions (DDIs) primarily concerned with the collective governance and safe management of the data tying them together and the algorithms manipulating it: the institution of digital media, for instance, collectively governed and managed by all of the DCOs that make it up, which are managed by the individuals who make up the individual networks. Or perhaps the institution of journalism, which could directly challenge the contemporary institutions of journalism and thus blur the lines between what constitutes as being digital and what is just inherent.

Finally, we take also take this transcendent understanding of a data commons to the next level when we look at the interoperability of DDIs with regards to the democratic governance and management of issues at the intersections, proposing a very human-centric understanding of such a thing. In this, when we consider the autonomous and automatized nature of blockchain technology (predominantly because of self-executing smart contracts) as it manages sophisticated algorithms manipulating data, it is natural for some to look at this culmination as an automatic, global, virtual machine; what some refer to as a ‘global brain’. And while we would not entirely refute this understanding, we implore that developments in this realm commit to the same core values that we have been highlighting throughout: that of sovereignty, democracy, decentralization, and the like. As such, rather than the automatized global brain (or perhaps better said as in correlation with), we propose Democratic Digital Confederalism (as inspired by Murray Bookchin) as the basis upon which we can best understand how these digital institutions will interoperate in a truly democratic manner. Thus, the core values that operate as an antithesis to the contemporary digital climate of surveillance capitalism reverberate throughout – from the individual, to the collective, to the whole – and we believe that these systems could create a new paradigm that is not just digital, but accelerates societal evolution beyond the erroneous institutions of old and towards something the world has never really seen.

**Methodology:**

While this analysis is going to be predominantly concerned with the socio-political potentialities of technological developments in the realms of blockchain and artificial intelligence, we will need to preempt the discussion with a deep dive into the nature of data as it exists in the contemporary world wide web. We intend to make this preamble highly lucid in its empirical analysis of the predominant sorts of algorithms collecting and manipulating data, and we then present this more empirical study through a socio-political lens examining the nature of value creation, labor, and distribution in the contemporary age of surveillance capitalism.[[1]](#footnote-1) Further, we intend to maintain this theme throughout: that of empirical analysis of the technology coupled with musings on the implications.

As for the main arguments, we will be examining platform cooperativism by looking at the technological innovations that allow for the creation of DAOs and DCOs, predominantly looking at the capabilities of smart contracts on the Ethereum Blockchain and then taking inspiration from organizations such as Consensys and Aragon to create a sort of working definition. We will then look at the primary sources (i.e. white papers) for the more prominent organizations having to do with data collection and sharing, and we will also be examining where cooperative structures have been applied or may be applied (data coops in the field of medicine would be a pertinent example).

From there, we will be expanding into a more hypothetical area but still maintaining a high degree of actuality in our analysis of the technological capability. We will, however, be proposing new systems of interrelating DCOs held together by a data commons, so we will effectively be looking to show how this could look at an organizational level and then backing it up by examining technological developments that could allow for it. In this particular example, analyzing the developing semantic web as a technological representation of a possibility for a sort of data commons could prove to be apt. Finally, we will present a literature review on all things having to do with the concept of an automated global brain as a means of gaining a working definition.[[2]](#footnote-2) And being that we mostly subscribe to this vision, we will simply map the concept of Democratic Digital Confederalism onto it as a means of maintaining the human and democratic elements.

**Research Process:**

The first step will be a literature review of pertinent sources critiquing data collection, storage, and manipulation in the contemporary digital climate. From there, we will also have to analyze the most important sources for platform cooperativism in order to gain a strong working definition. We will then dive into the primary source organizational white papers for organizations focused on decentralized data collection and sharing, and this analysis will then be cross-referenced with the literature reviews to see what is conducive to the developing concepts. We will then look to literature on institutions and anything that might be applicable to the creation of a coherent and feasible data commons pool. Finally, we will extensively review the concepts of Democratic Confederalism and the Global Brain to see where they might mesh.

**Contribution:**

Our hope is that this paper will be able to synthesize some of the incredible work that is being done to build a far more equitable digital future, and we particularly hope to help envision the broader systems and structures possible in the decentralized future.

**Timeline:**

October 31st: Analysis on Platform Cooperativism and potentials with data collection complete.

November 30th: Presentation of data commons holding together DDIs and Democratic Digital Confederalism complete.

December 31st: Introduction, Conclusion, Bibliography, all editing complete.

Early January: Publish.

**Sample Bibliography:**

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