
Notes for the Colloquium

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2021-05-12 06:14

This is a note to organize points I would like to address during my colloquium talk.

1 Prologue: one lesson based on our activities

1.1 Collaborators... or Dependants?

When conducting POC projects, we often have collaborators. These entities will be Real Estate companies, City Municipalities and related divisions, or stakeholders that have somewhat power over the district. These parts often form a centralized authority, which may be one layer of indirectness when we want to engage the citizens in a truly bottom up way. We have, as City Scope developers has always been touted to be a democratization of planning process, but are increasingly feeling the importance of governance and its process.

2 DAO's, Governance Tokens, Delegation and Liquid Democracy

2.1 Short Overview of DAO (Decentralized Autonomous Organization)

“The DAO” project **happend in 2016**, caught attention to create a mutual investment fund without an central authority. The project ended as a catastrophically, from an exploitation of a bug in the smart contract. This affected the Ethereum network so much that it had to fork. Ever since, there are numerous attemps still trying to create a organization that governerns itself without an central authority.

2.2 Governance Tokens

Within those trials, there are “governance tokens” which is a token that is used specifically for deciding topics that the token holders think is important. The topic here varies, depending on the type of community, yet most of the current descisions are motivated by financial gains. Other topics include descisions to amend the protocol, or what to prioritize within the development of that blockchain community.

2.3 Delegation

Within those attempts, we see a trend on delegation; where the system lets you vote not only policies directly but can delegate their vote to other participants. This method of delegation is a natural part of blockchains that use the proof-of-stake algorithm. Proof-of-stake is a mechanism where you mortgage your tokens and use that credit to get the right to decide the next block. The system pays a reward to that node each time a new block is approved, which is an incentive to participate in that network. However, in order to participate in the bid to choose the block, you have to be a node driving the core program or have a certain amount of tokens to begin with, which is a high hurdle. Staking enables people holding a small number of tokens to transfer credit to a node participating in the bidding process through depositing. Then the node can participate in the bid by combining the credit deposited with its own. The rewards of block generation are then naturally

split. Lending one's token to another entity to trigger a more significant movement is a close concept to indirect democracy.

2.4 Liquid Democracy

Liquid Democracy is a voting system proposed in various places about 10 or 15 years ago. What makes it different from ordinary voting systems is that it is a system that can handle both direct and indirect Democracy at the same time. There are two types of Democracy: Direct Democracy, where people directly nominate policies and proposals, and indirect Democracy, where people vote by proxy, which is more common in the political world. There are many variations of liquid Democracy, and among them, you can split your vote and cast a specific percentage of your vote directly on a policy or delegate the other ballots to a representative. It may not seem to be directly related to the blockchain or cryptocurrency area. Still, as I mentioned earlier, there is hope that communities can use blockchain technology for governance, and I feel that there is a high affinity looking into new voting systems.

3 The Meta City “Makuhari Project”

3.1 Project outline

The research agenda of the City Science group was to find a way to test the governance process without being influenced by such stakeholders. On top of that, I was personally invited to participate in a project called the Makuhari City Project in Japan. This project is to see culture as social infrastructure and whether it can be expressed in a virtual form without land, and to be more specific, to foster such a thing through collective human decision-making. Smart city projects that disguise as purely technological and objective often neglect the existence of “culture.” We are trying to see if collective decision-making can reassure this quality by supporting governance.

3.2 Urban Mural

We needed a pilot project to test the Makuhari City concept of creating a socially virtual city. So, as a first trial, we are thinking of making an urban

mural. The idea is to curate mural artworks through collective consensus building and eventually operate and manage them as art assets. Our goal is to exhibit the work this summer.

4 Epilogue: Experiments with clean NFTs

I have been experimenting with selling art through NFT markets for a few months now. The main criticism is the environmental impact, so I have been trying out NFT platforms that do not rely on blockchains using Proof of Work; in other terms clean NFT market places. I have yet to become rich, indicating that I should maybe rethink my career even as a part-time artist, but it is still interesting to see how my work could be for \$5 or so. Setting aside if this movement can endure the hype, since selling and managing artwork to support the community is at its core, I can share how it feels and findings as I use the system.