# Oregon Blockchain

# Week 5: Why Blockchains?
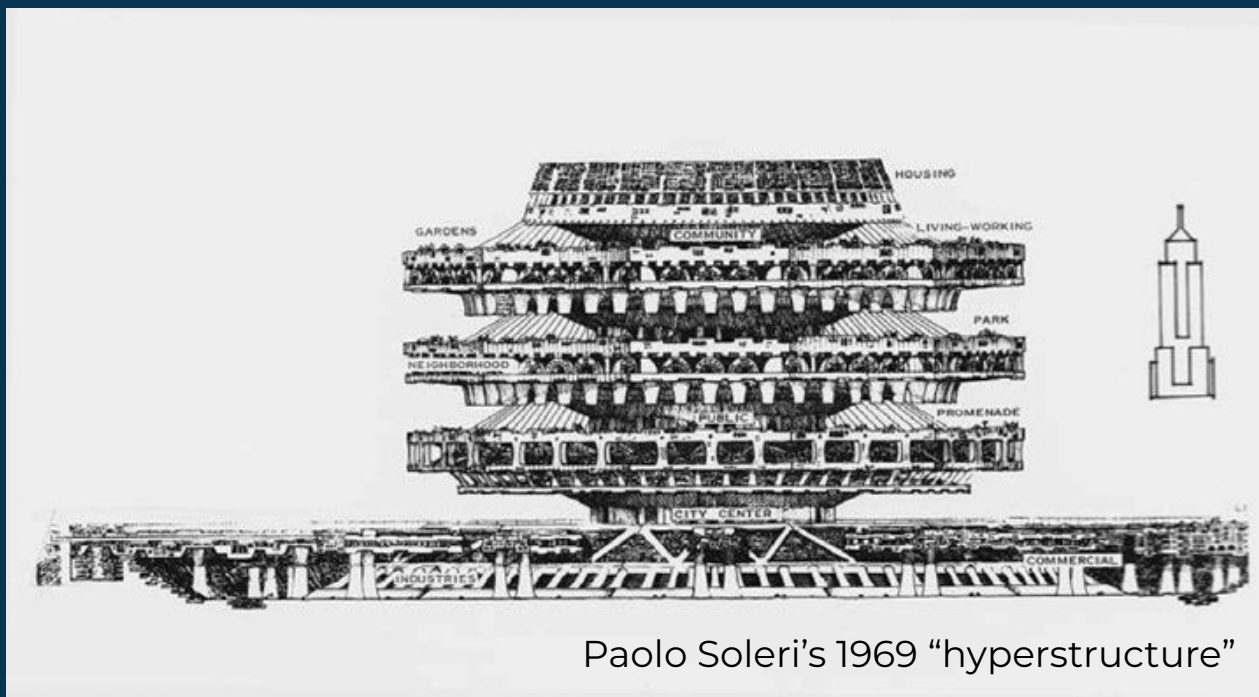
Paolo Soleri's 1969 "hyperstructure"

*OBG Onboarding Fall 22*

# Homework!

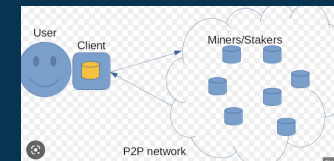- Browser wallet, uniswap?

- How did Dhru do?
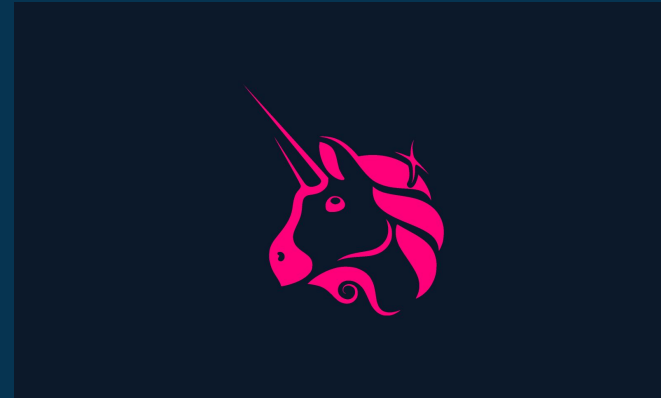
# Revisiting Weeks 1-3

1. Introductions

2. Problems early cryptographers faced, why they needed censorship resistance

3. How blockchains achieve censorship resistance

today: Why blockchains!

# Why Censorship Resistance

**What most people think**

- useful for nefarious purposes
- regulatory arbitrage

**What actually matters**

- is the foundation for enforceable guarantees!
- Immutable, perpetual

# Banger Tweet



Sreeram Kannan @sreeramkannan · Aug 24

Replying to @sreeramkannan

The dominant form of censorship is not state censorship, it is, by far, the censorship of platforms from preventing competitors to build other functionality. Like Facebook or Twitter or Uber or any digital platform existent today!

💬 1          🔁 3          ♡ 23          ↑

Blockchain guarantees
1. Will last forever (no maintenance, censorship resistant)
2. Permissionless

Some catches to this...

# Hyperstructures

- Idea borrowed from Paolo Soleri
- Architect trying to build hyper efficient cities
- Never worked because incentives not aligned

- Blockchains give important guarantees
- Encourage and incentivize cooperation!

Blockchain thesis:

1. Blockchains have enforceable guarantees other institutions can't have
2. This lets us coordinate further out in the future than current software platforms
3. Composability lets us build hyperstructures!

# Thesis today!

DeFi hyperstructures - Curve ecosystem

layer 5: ????

layer 4: votium - Vote delegator

layer 3: [redacted] - Bribing platform

layer2: convex - Governance Aggregator
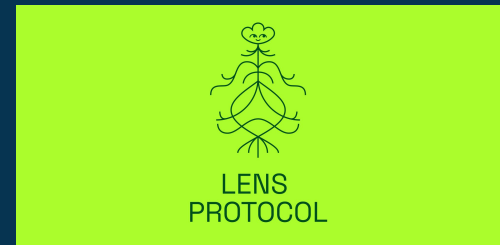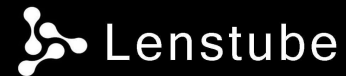
layer 1: curve - DEX

# Thesis today!

Social hyperstructures - Lens protocol

layer 4: ????
layer 3: super app
layer 2: Apps (youtube, instagram, etc)
layer 1: Social graph

# Thesis today!

Gaming hyperstructures - Autonomous worlds (video games anyone can contribute to)

layer 4: ????

layer 3: clans/Daos

layer 2: subgames

layer 1: digital physics



OPTI MAZE

0:53 | 149 views

Autonomous People's Republic of OP... @SupremeLeade... · O
Replying to @SupremeLeaderOP
I have created an OPCraft client plugin which will transform you i
member of our republic. All of your private property will be added
government treasury, however from that point forward you will ha
to the near limitless resources of our treasury.
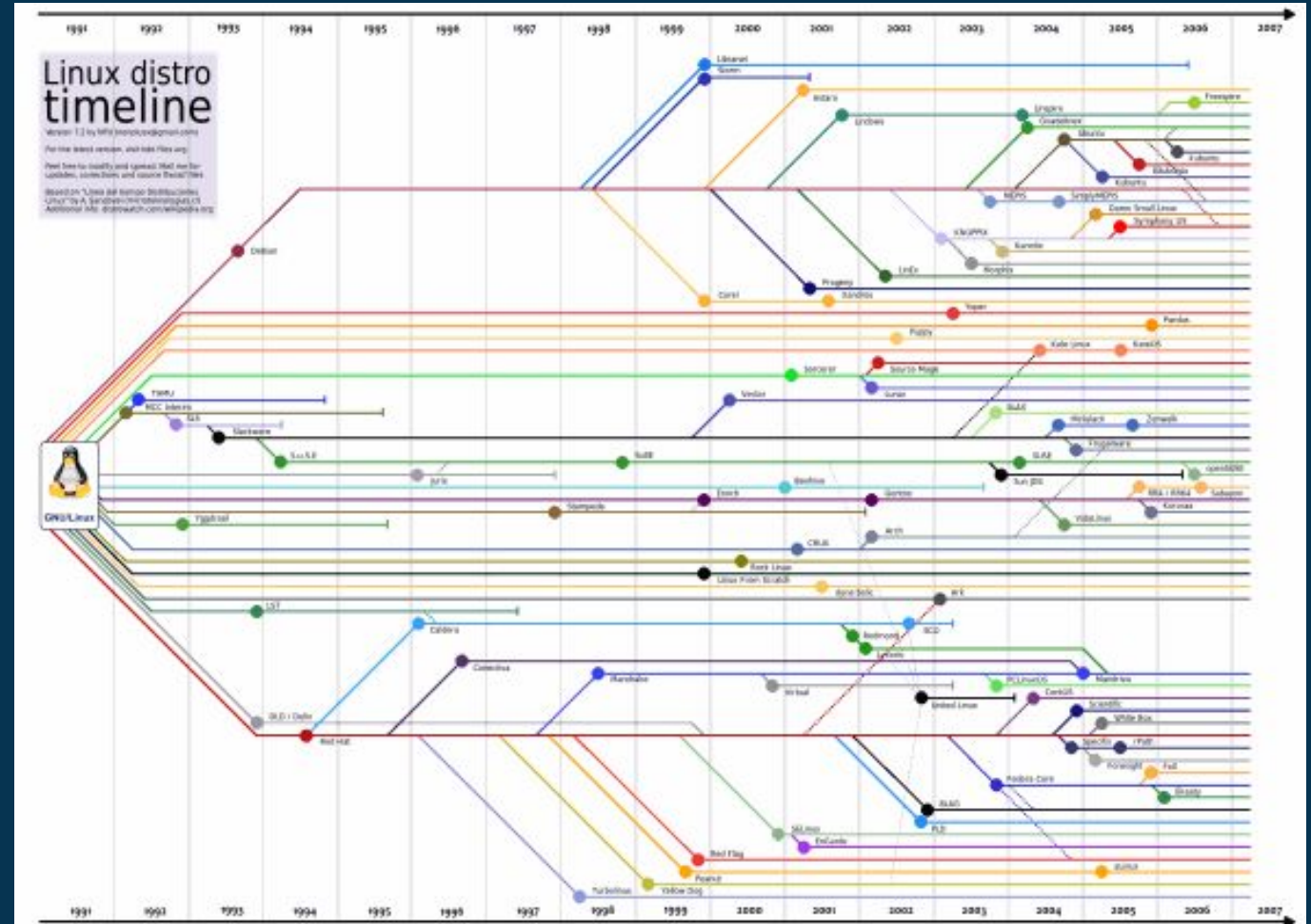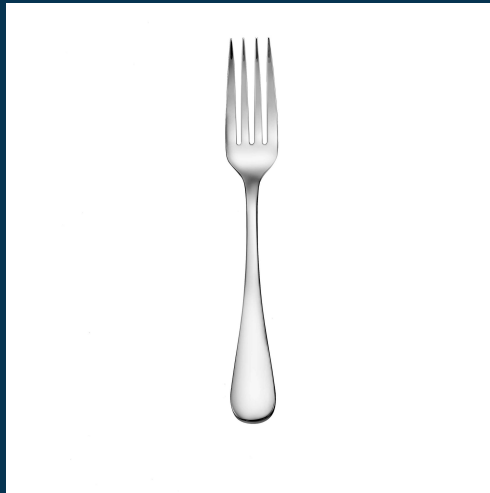
1    2

OPCRAFT

# Obstacles

- Requires developers
- Needs to be fully on-chain
- On-chain stuff is expensive rn (think back to instagram ex. from last week)

# Changing gears -> governance/forks

- Blockchain why: platform for hyperstructures
- But what if we want to change the platform itself?

# What is a Fork?

# Softfork vs Hardfork

## Softfork

- change to protocol that is backwards compatible

## Hardfork

- change to protocol that is not backwards compatible

Users vote for fork by accepting/rejecting client update

# Types of forks

Contentious fork

- No consensus
- Blockchain splits into two communities

Non-contentious fork

- Consensus
- No split

# Reasons for forks

- Something disastrous
  - ethereum vs. ethereum classic (DAO incident, 5% of all eth)
  - Bitcoin (value overflow incident)


- Want to upgrade protocol
  - ethereum PoW vs. ethereum PoS
  - Bitcoin vs. Bitcoin cash vs. Bitcoin Satoshi's Vision

# Governance/fork process: Ethereum

1. Based on BIPs, based on PEPs (~ 2000)
2. Feedback on Ethereum Magicians
3. Submit an EIP (outlined in EIP-1)
4. Ethereum cat herders/EIP editors
5. Discussed during all-core devs meeting (scheduling happens on github and Eth r&d discord)
6. Spec is upgraded, client teams implement it
7. EF + client teams will announce the upgrade

# Onboarding Checklist

✅ Week 1: Introductions

✅ Week2: What blockchains solve

✅ Week3: How a blockchain works

✅ Week4: How to use a blockchain

✅ Week5: Social layer (why blockchains!)

Read: Atoms, Institutions, Blockchains

Extra: hyperstructures

HW is a little more philosophical, talks about blockchain guarantees more

If time permits check out local node in entrepreneurship center