

The zoo of decentralized governance

What is a co-op to do?

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RCon3

2018-09-06

Who am I?

Alex Stokes

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Following crypto since 2011

Decentralized governance researcher

Cofounder at Polaris, <https://www.getpolaris.io/>

Why are you here?

Why are we here?

Decentralization is *trendy*

Great promise to use technology for *positive* social change

Coop: “Rebooting the major coordination technologies”

Goal of decentralization

Mass adoption of tools to promote and facilitate

- Freedom of choice
- Freedom of expression
- Freedom of association

But, we have a problem

Crisis in governance

Already tough problems

Harder in the decentralized context with little history to guide us

What is governance?

“How do we deal with change?”

Coordination for the coordination

Good governance?

“Integration of disparate parts”

Why is it hard?

Sticky problems because they don't have easy answers

Questions around identity, belonging and culture

Who am I?

Who are we?

What do we do?

Why do we do it?

Decentralized governance?

Gets murkier when we are
all just “strangers on the internet”

0xdeadbeefcafe...: 2x block size!



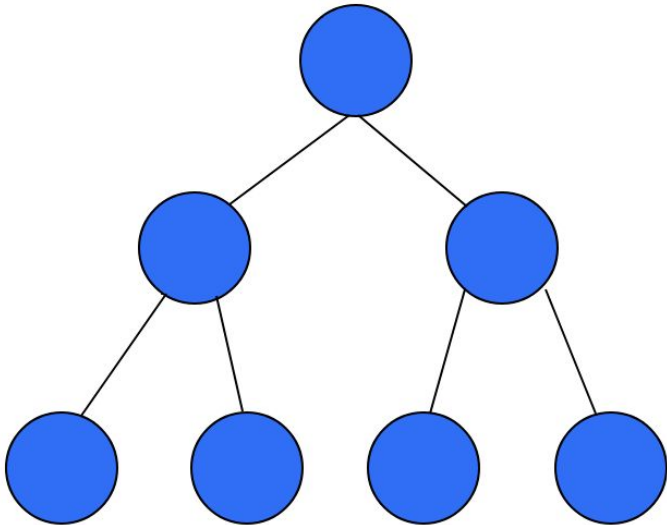
Decentralized governance?

Examples of things to be governed:

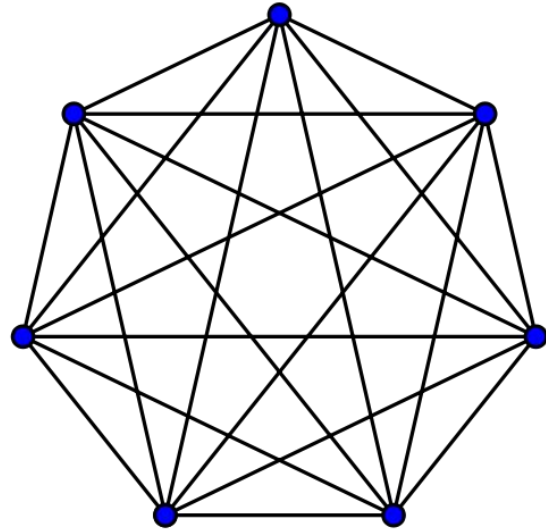
- Community values
 - Monetary policy
 - Censorship resistance?
 - “Code is law” immutability?
- Brand, trademark
- Protocol source code, access to software repos

Decentralized governance is hard

How do we organize?



VS



Decentralized governance is important

We won't reach our goals without strong governance

Existing power structures will fight change

More insidious, simple apathy

=> If we come off as incompetent or spend time fighting amongst ourselves, we will go nowhere.

Decentralized governance is important

With good governance, encourage stability and foster growth

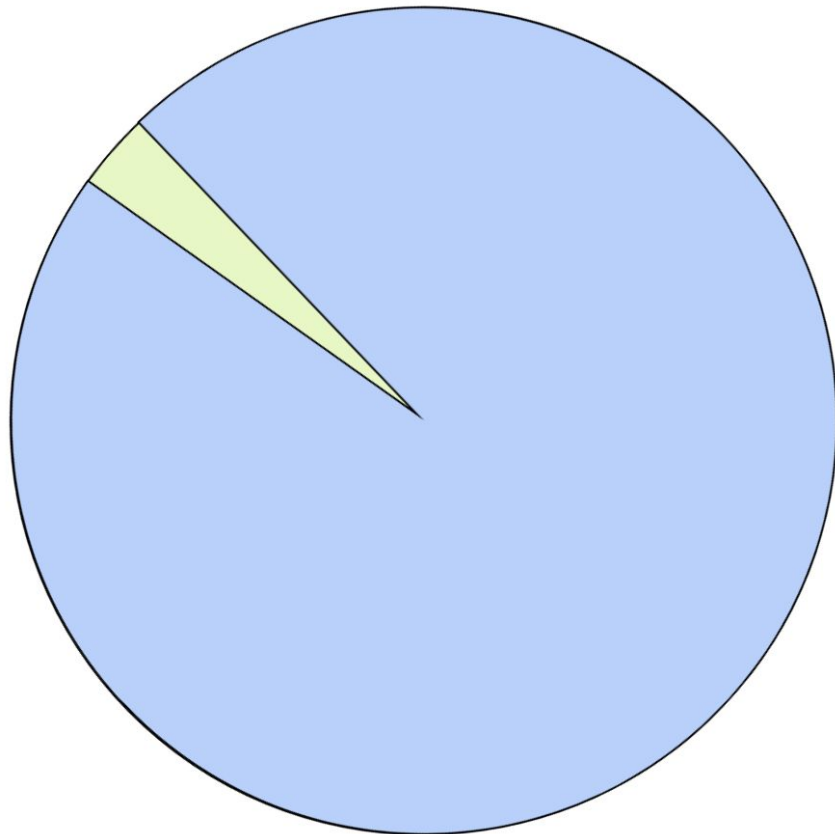
Example: inflation funding

Use protocol tokens to fund public infrastructure to accelerate innovation

Can imagine fine-grained decision making where a local community knows best about its own needs



vs.



Bad governance
blocks
mass adoption

Where do we stand?

Lots of examples of governance in cryptocurrencies.

The list keeps growing every day



ethereum



deCRED



ethereum
classic

Ad-hoc governance in Bitcoin

“No gods, no masters”

BIPs, mailing lists

In practice, see special interest groups form:

Core devs

Miners



Bitcoin vs Bitcoin Cash

“How do we scale?”

Debate over SegWit, block size increase

Bitcoin Cash hard fork

Bitcoin vs Bitcoin Cash?

Contentious... but could it have been avoided?

Nature of hard forks?



Foundation-based governance in Ethereum

Stewards the development of the protocol

Helps coordinate community around hard forks

Generally leads to faster innovation compared to Bitcoin



ethereum

Foundation-based governance in Ethereum

How well does the Foundation reflect the preferences of the users?

Can the Foundation make the best decision for a CryptoKitties user in Somalia?

What about a user who expects “code is law”?

Ethereum vs Ethereum Classic

Bug in a smart contract hosting The DAO

Do we roll back?

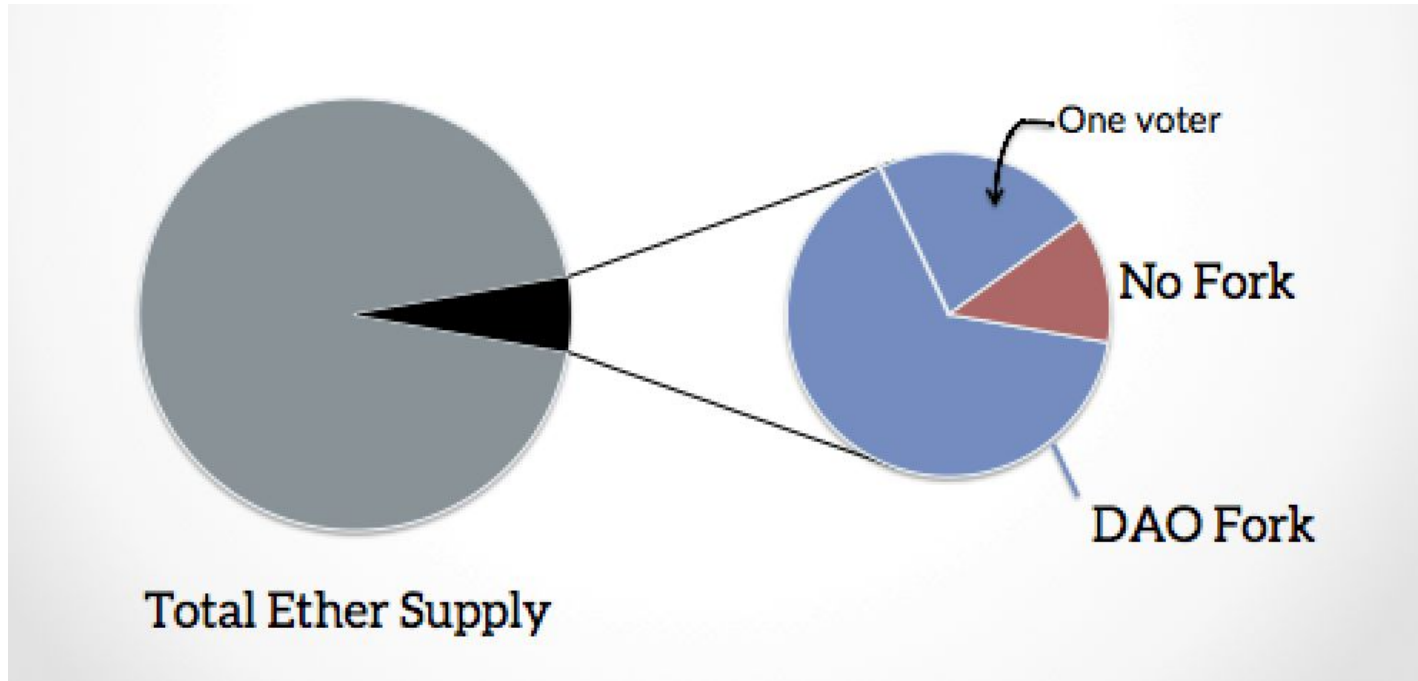
The DAO hard fork



ethereum
classic

Early decentralized governance

Carbonvote for the DAO fork



So, how can we
decentralize governance?

Use the blockchain!

Methods of decentralized governance

Need scarce asset for Sybil-resistance

Options:

- Hashpower
 - Hard to get ASICs
 - Opportunity cost
- Coins
 - Easier to acquire than ASICs
 - Our protocols already deal with coins easily
 - Anyone watching the chain will see the activity

Use coins to signal preference

“1 token \Leftrightarrow 1 vote”

Example: supermajority coin vote

Pretty much the state of the art.

But, wealth \sim voice

Use coins to signal preference

Easy modification that helps: quadratic voting

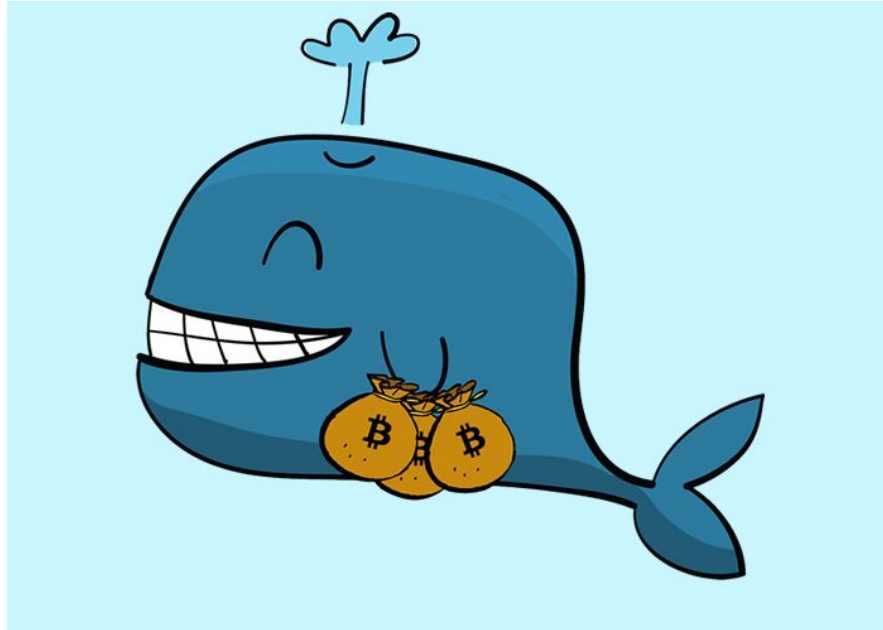
Each successive vote requires that many tokens squared.

Can also do this across time

“9x lockup implies 3x weight”

Use coins to signal preference

Helps but doesn't really change the influence of whales in such a system



Liquid democracy

Every user has some votes

Can delegate votes in real-time to other voters

If someone is abusing their power, delegate to another user

Liquid democracy in action

Lisk has this system in place, EOS delegated proof-of-stake

Open-air vote buying

LISK Home Voters Pending Voters History Donations Members 语言 ▾ ↻ Sign in

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Elite Group Members

#	Username	Address	Rank
1	iii.element.iii	13943256167405531820L	7
2	leo	15458001843048965724L	8
3	liskjp	4402625644334434270L	9
4	spacetrucker	14212484126746187777L	10
5	badman0316	801959860607939388L	11

Digital constitutions

We all agree to abide by the rules in this document attached to the protocol software

EOS, Polkadot, Cosmos

“I promise ;)”

When was the last time you read the Terms of Service?

Futarchy

Use prediction markets to determine expected outcomes

Measure actual outcomes against a metric to determine how well a policy worked

How to choose the metric?

“Paperclip maximizer”

Futarchy

Prediction markets are great at aggregating information

Avoids subjective calls with proper metric so easier to put into a protocol

Can introduce a cost to cartel formation (“vote buying”) with proper market structure

Decentralized governance

Decred



deCRED

Coin-based voting with “tickets” for proposals, fund allocation

Dash



Treasury to fund ecosystem growth

Both are stake-based but have good ideas around how to grow a platform

Decentralized governance

Legitimacy is important

Do it right the first time!

Example: eosio.saving fund, no process to spend tokens

RChain and the coop

Coop structure is pretty unique

Relatively flat organizational structure

Can use as a template to bootstrap more decentralized forms of governance

Can we decentralize the coop?



Why are you here, again?

Now is the time to experiment.

We won't know what works if we don't try it.

Moreover, it takes your participation for it to all work!

Start small, grow it into something big :)

Conclusion

Polaris, <https://getpolaris.io>

Futarchy for protocol governance

Interblockchain protocol to offer futarchy for other chains

Get in touch if you want to help!

Questions?

@ralexstokes

Polaris, <https://getpolaris.io>