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ONCHAIN CAPITAL ALLOCATION

HANDBOOK

Allo.Capital

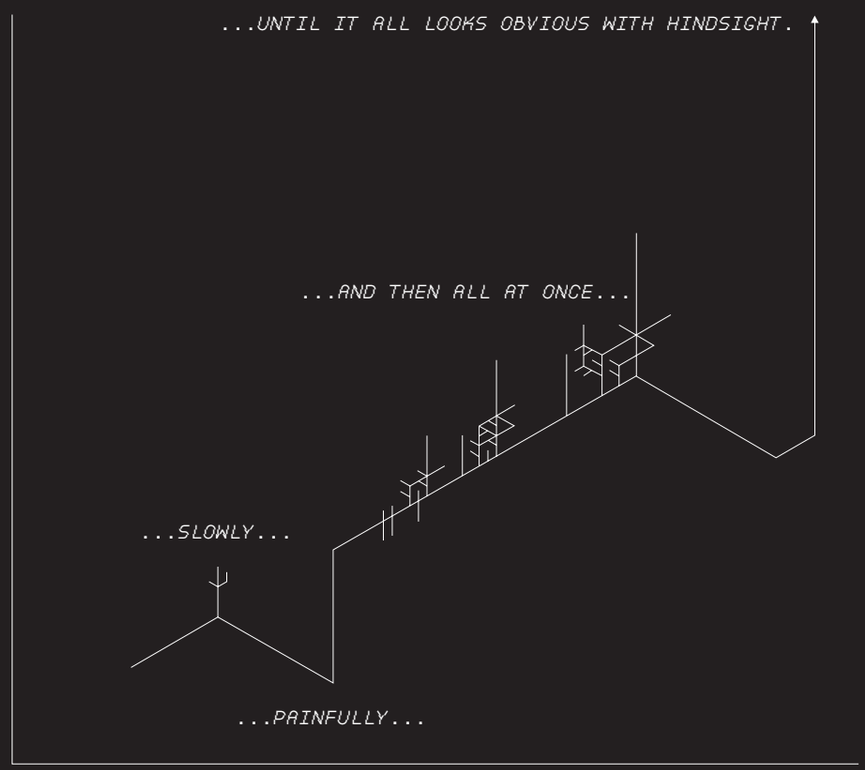
Allo.Capital (founded by Kevin Owocki + Rena O'Brien) is dedicated to funding what matters in the 21st century. We are building a network of thinkers, hackers, and doers, figuring out how to allocate capital in a post-AI, post-tokenization internet.

We believe that education is a core component of building this network, and have helped to sponsor some amazing resources. Check them out:

2024	Exploring MycoFi - Mycelial Design Patterns for Web3 & Beyond	Jeff Emmett Jessica Zartler
2024	Onchain Capital Allocation: Innovators Edition	Kevin Owocki
2024	Onchain Capital Allocation: Explorers Edition	Kevin Owocki
2025	Grassroots Economics: Reflection and Practice	William Ruddick
2025	Ethereum Localism: Grounding the future of Coordination	Open Machine
2025	AI x Onchain Capital Allocation	Kevin Owocki
2025	Abundance Networks: Winning in the Community Economy	Kevin Owocki
2025	Pathways to Regeneration: Hope and Resilience through Anticipatory Design	Scott Morris Stephen DeMeulenaere

You can download these books (or order a print copy) at **https://allo.capital**

FOR THE ETHEREUM
ECOSYSTEM CIRCA GITCOIN 2.1



MAY WE FUND WHAT MATTERS...

TABLE OF CONTENTS

IT'S SPRINGTIME FOR ONCHAIN COORDINATION

Crypto, with its programmable smart contracts and properties of trustlessness and tamper resistance, presents incredible advantages towards allocating capital in an efficient, effective, democratic, and transparent manner.

Since these systems are built open source, we can all learn from them or even fork them when we want to use or improve them. The result is a rapidly evolving multiplayer exploration of the design space that compounds and accelerates exponentially over time.

The old world is decaying and a new world is sprouting. We are in a springtime of onchain coordination. What a moment to be alive!

It is my great pleasure to have a front-row seat to this moment as a co-founder of Gitcoin and host of the Greenpill Podcast. My gift to you is paying it forward through this book and it's digital community. This book is a labour of love & a celebration of this design space. I've put countless hours of research, networking, weaving, and writing into this handbook to give a reader a peek into the latest and greatest in what's possible. The next horizon is hard to see alone, but by exploring it together & sharing our findings we will discover it faster and more effectively traverse its cartography.

You will notice that the mechanisms featured in this book are visualized as though they are ecological networks. This is not an accident. I believe that tending to communities is like tending to a garden.

Just as organisms in a garden require sun, fertile ground, water, and nutrients, open-source communities require care, tending, data, and financial resources. Just as different nutrients can change the expression of a flower, different approaches to capital allocation can change how onchain communities express themselves.

While a primary lense through which I study the space is through Gitcoin, this book goes way beyond Gitcoin's ambitions or roadmap. Given the volume of grants we've managed, Gitcoin is a significant vehicle for me to explore the space. However, our vantage point is limited, and our primary mechanisms as of 2024 (QF, RetroPGF) are just scratching the surface of the possibilities. In places where I mention Gitcoin, I have gone to lengths to do so as a vehicle for creating understanding for the reader of the design space (shilling Gitcoin is only secondary).

The book is not designed to be consumed strictly linearly. While I have laid out the chapters in a way that provides a reader with an end-to-end download of my vision, I invite you to jump around the book and follow your interests. Just as a hiker uses a field guide to identify organisms, you can use this book as your field guide as you explore this frontier of web3.

As you dive in, note that there are two types of chapters in this book.

Mechanism chapters	Meta chapters
Describes capital allocation strategies and what they're good at.	Gives context for how to think about the patterns or space in between mechanisms.

These two types of content are designed to complement one another.

As you explore this design space, I invite you to envision an emergent pluralistic ecology of capital allocation mechanisms. Each excels at one thing, but together they create a diverse tapestry of effective capital allocation for the entire web3 space. This book is your guide to progressive elaboration of this ecosystem!

And it gets better. We are not only mapping this design space; we are manifesting it. We are in an strange loop of (1) discovering & (2) creating this beautiful design space. By following this strange loop recursively, we are memeing a pluralistic ecology of capital allocation mechanisms into existence. The infinite garden grows & thrives the more we tend to it.

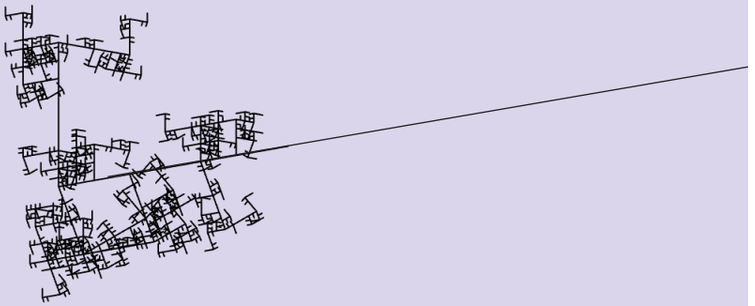
I believe that we will see these onchain coordination networks increase in usefulness and proliferate into many places in the web3 ecosystem (and eventually in the real world) in the coming years. While I've attempted to make this book timeless, some of its content will invariably become dated given how fast the space evolves. If you wish to continue the discussion, feel free to join the Telegram group of readers of this book. Maybe we can create a second edition (or translate it to new languages) together in the coming years.

Owocki

Join the telegram group for this book @

META

ONCHAIN CAPITAL *ALLOCATION*



Capital allocation is a simple concept: it's the act of deciding how to distribute funding or resources. If you've ever paid bills, taxes, or repaid friends for a meal, you've allocated capital.

Capital allocation is a task for most individuals but a full-time job for many: governments and grant-making organizations spend vast amounts of time and money figuring out the process, logistics, and decision-making involved in allocating capital. At scale, capital allocation inevitably becomes mired in gatekeeping, rivalrous decision making, and lack of transparency and accountability.

Blockchain and crypto, with their programmable smart contracts, present novel opportunities in (1) accumulating (2) allocating & (3) distributing capital in an efficient, effective, and transparent manner. Gitcoin has seized this advantage by moving the entirety of our grants program onchain:

from governance, creation, management, and disbursement. Moving the grants program onchain and it being open source also allows us to build a network of developers, grants programs, and capital allocators in web3 – all of which ultimately benefit the Gitcoin ecosystem.

Gitcoin has previously experimented deeply with a few forms of grantmaking, primarily focused on fair and effective ways to implement Quadratic Funding. We've created a market for this grants mechanism and scaled it from $0 to $millions distributed per year. We're now starting to see traction with new mechanisms, like Direct Grants and Retro PGF, and are poised to scale those as well.

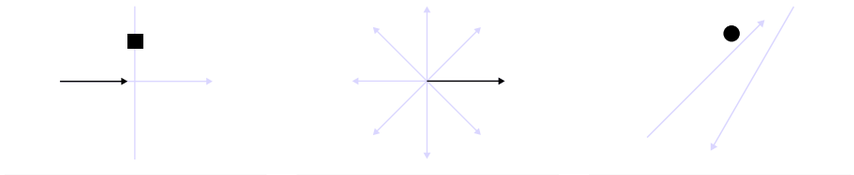
The crypto ecosystem has funded over $1B across 5,900 grants and is continuing to scale to support blockchain's enormous growth goals. The potential of capital allocation extends beyond grants and represents a game-changing category that Gitcoin and its extended network of partners and protocol builders is poised to help accelerate. Our north star of funding $1B in grants is both an aggressive growth target for Gitcoin, and only the start of what's possible.

CAPITAL ALLOCATION: THE NEXT GROWTH FRONTIER

One of the most recognizable forms of capital allocation is government spending. It also perfectly depicts many of the limitations of traditional capital allocation.

LEGACY CAPITAL ALLOCATION

Governments accumulate funds through levying taxes – something each citizen is obligated to participate in. The funds collected are, in theory, spent in order to benefit the collective group of taxpayers. This system also illustrates many of the problems that traditional capital allocation methodologies suffer from:



GATEKEEPING

Small groups of decision makers, who may become power brokers, and are unwilling or unable to be democratic.

NOT SCALABLE

Not taking advantage of the primitives the internet (easy access, direct to consumer interfaces) and Ethereum (credible neutrality, composability, transparency, democratic decision making, censorship resistance) have to offer.

NOT PRECISE

Without the ability to programmatically manage large amounts of information at scale, they are not able to precisely allocate capital resources.

Over the past 30 years, advancements in technology have created opportunities to solve previously intractable problems of capital allocation. The internet has introduced the ability to communicate at a scale that was formerly infeasible.

Blockchains have created a transparent ledger to report on activities and create accountability through easy data availability and the immutability of onchain actions. By combining internet-speed innovation and

blockchain-level transparency, we will unlock a new frontier of capital allocation – one where communities can fund what matters to them in ways that are not only more effective, but also more aligned to their values.

ETHEREUM-BASED CAPITAL ALLOCATION CAN BE:

Accessible

Anyone with an internet connection can participate through web or mobile applications.

Democratic

The ability to easily create and run onchain voting enables governance that reflects the will of the people.

Evolutionary

Anyone working with open source software can easily fork and modify existing methods to evolve according to their own needs.

Incorruptable

Leveraging blockchain's core feature of an incorruptible public ledger, with audit trails available to anyone.

Transparent

Using programmable smart contracts able to precisely allocate resources at scale.

Precise & Scalable

The mechanisms invented in web3 can scale with high levels of precision.

The time to solve the problems of capital allocation is now. We can build capital allocation systems that solve the constraints noted above. We can remove barriers to adoption by emphasizing the transparency and extensibility of these systems. We can build

more effective, efficient or novel capital allocation methodologies by using democratic voting and creating accessible systems of participation.

ONCHAIN CAPITAL ALLOCATION

Today in web3, there are hundreds of DAOs with $millions of capital to distribute to fund growth in their ecosystems. These DAOs have unlocked new global markets to turn ideas and APIs into products and adoption so much faster than before.

Gitcoin is positioned to help stimulate the creation of this new category of capital allocation, building on the success of Quadratic Funding and web3 grants. Through its grants program, Gitcoin has more experience with onchain capital allocation than anyone else. We believe in the potential so strongly that we spent two years architecting a protocol and product suite that will easily allow anyone in web3 to participate in new methods of capital allocation.

GITCOIN STATS

AS OF JUNE 2024

4.2m unique donations

4k Grantees

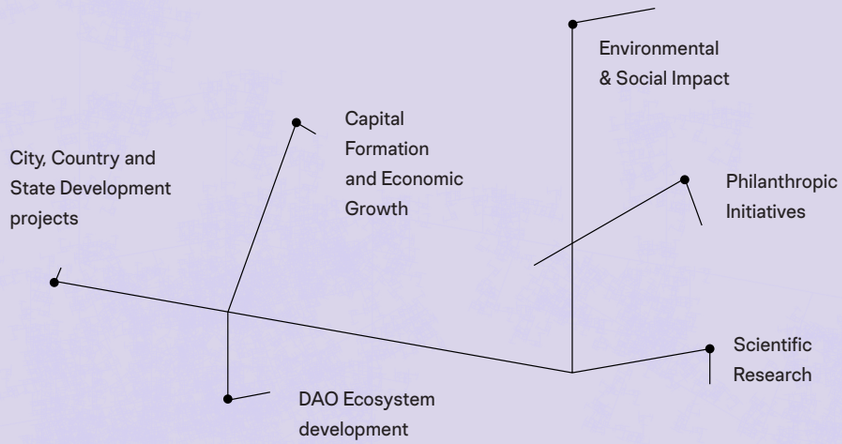
$60m funded

We believe the impact and reach of next-generation capital allocation will be felt across many industries – from web3 social and marketing to traditional industries like crowdfunding, real estate, scientific

research, and more. Next-generation capital allocation represents not just a technological evolution, but an evolution in our social practices around how we organize, exercise buying power, and own assets.

While Gitcoin's initial focus is on grant-making for DAOs and other tokenized communities, we believe that as more assets become tokenized in various industries, a wide open design space will emerge to reimagine how capital allocation is done. These industries include but are not limited to:

WHO NEEDS CAPITAL ALLOCATION?



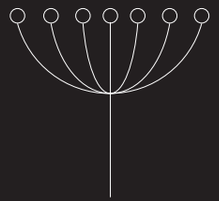
Each of these industries will demand new levels of strategy development, thought leadership, constituent engagement, and new applications that serve their specific needs. The Gitcoin network has already run pilots in many of these industries, including collaborations with the American Cancer Society, DeSci projects, UNICEF, in Boulder Colorado, and more.

The potential of capital allocation in each of these industries feels underexplored yet transformative. One way to reason about it is by analogy to how email changed written communications. The average human sends 100x more messages now than they sent physical mail decades ago. We believe that the future of capital allocation will entail 100x higher volume and higher resolution funding decisions than are available now.

The evolution of capital allocation has occured in a skeuomorphic fashion over the last few decades: physical cash was supplemented by physical checks, which were supplemented by virtual checks (credit cards). Credit cards and the internet introduced a higher speed banking that enabled ecommerce and crowdfunding platforms like Patreon, Kickstarter, or Gitcoin Grants.

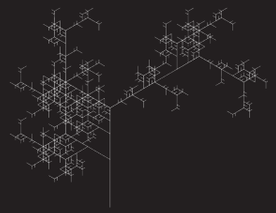
The next horizon is hard to see today, but by exploring it through this book & through the Gitcoin network we will discover it together. And because it is built upon blockchains, we believe it will bring more transparency and accountability to organizations and more buying power to individuals through new methods of collective ownership. We can reason about what this frontier looks like by looking at the properties of blockchains that it will be built upon. It will be faster, more democratic, more emergent, and more powerful than what has existed in the past.

This essay originally appeared in the Gitcoin 2.0 whitepaper. It has been edited and condensed to fit this book). Read the whole thing @



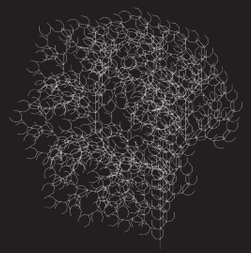
Direct Grants

Keep it simple. Just send $$$ to projects.



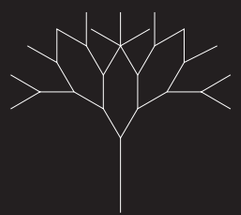
Quadratic Funding

Send $$$ to projects, matched by a matching pool according to QF formula (sum(sqrt(c))^2).



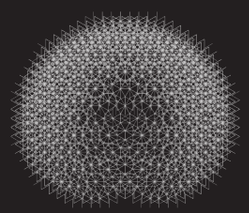
Retroactive Public Goods Funding

Send $$$ to projets based on expert (badgeholder) votes after completion of goal. In a mature Retro PGF ecosystem, proactive funding sources may emerge over time because of the reliability of retroactive sources.



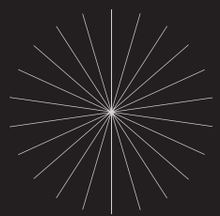
Requests for Proposal

RFPs, or Requests for Proposals, are formal documents issued by organizations seeking to procure services, products, or solutions from external vendors.



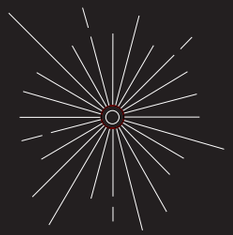
Conviction Voting

Conviction voting is a decision-making process where participants allocate continuous support to proposals, with the weight of their vote increasing over time the longer they support the same option.



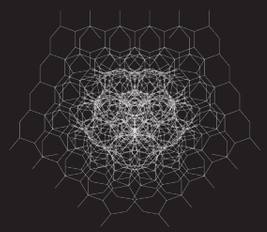
Assurance Contracts

Assurance contracts are agreements where participants pledge to fund a project only if a minimum number of contributions is reached.



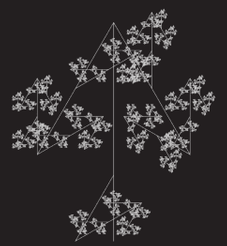
Self-Curated Registry

A self-curated registry, like Protocol Guild, is a decentralized list where members maintain and manage their own entries, typically to organize contributions or credentials within a community.



Gift Circles

Gift circles are a method where team members allocate tokens to each other to reward contributions, enhancing collaboration and mutual recognition within the group.

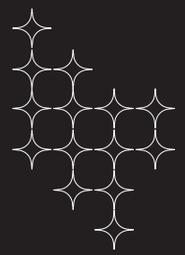


Delegated Domain Allocation

Delegated Domain Allocation is a system where domain-specific experts are empowered to allocate resources or make decisions within their area of expertise, as implemented by platforms like Questbook.

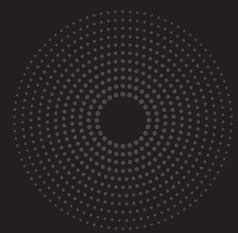
Universal Basic Income

A guaranteed, unconditional payment given regularly to all individuals regardless of their circumstances.



Bounties & Hackathons

A bounty is a reward offered for completing a specific task or project, often used in contexts such as software development, security, and community contributions.

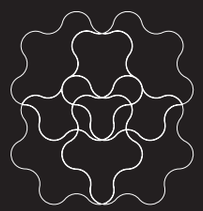


Stokvel

A Stokvel is a communal savings and social group in South Africa where members contribute fixed sums of money to a central fund for mutual financial benefit.

Buidl Guidl Streams

Buidl Guild Streams are streams of money that fill up, and the streamee can then “pull” the funds out and leave a note with what they worked on. The streamer can then go back and see who is contributing and decide to top up (or not top up) the stream.



Sourcecred

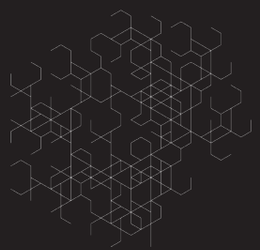
SourceCred is an open-source tool for measuring and rewarding contributions within online communities by assigning scores based on the value of work done. It enables decentralized and transparent recognition of contributions using a reputation system.

Mutual Aid Networks

A mutual aid network is a community-driven system where members voluntarily support each other by sharing resources, skills, and services without monetary exchange. It emphasizes collective well-being and solidarity, often organized to address social and economic needs within a community.

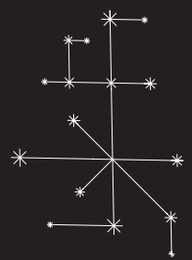
Honour

Honour is a currency that is minted into existence when needed and is burned when no longer needed. Each HON doesnt represent an asset, but instead is a liability.



Dominant Assurance Contracts

Ensure a public good is funded by refunding contributions with a bonus if the funding goal is not met.

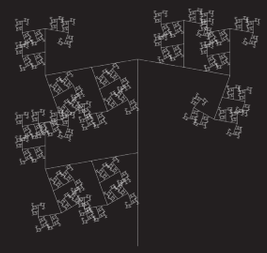


Impact Attestations

Impact Attestations are verified statements confirming the positive outcomes of a project or initiative.

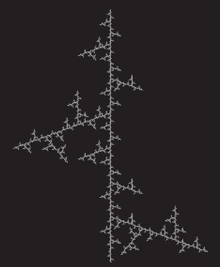
Zakat

Zakat is one of the Five Pillars of Islam, requiring Muslims to donate a fixed portion of their wealth to charity, typically 2.5% of their savings and investments annually. It aims to redistribute wealth and support those in need within the community.



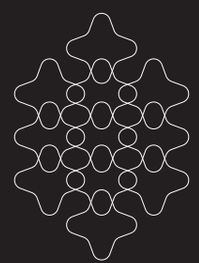
Social Media Based Capital Allocation

With an onchain social graph and distribution to tens of thousands of active users, web3 social media can shift from maximizing attention to maximizing earnings by programming values into the platform.



Revnets

Revnets are onchain cap table and incentive machines. With a revnet, you can bootstrap and sustain your open source project, campaign, business, scene, or meme. No governance, no management overhead.



Decentralized Validators

Decentralized Validators are networks of volunteers who run hardware that ensures the operation of the network. In exchange for running the hardware, node operators are rewarded with cryptocurrency.

Futarchy

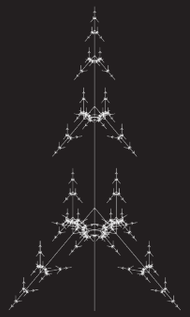
Futarchy is a governance system where policies are chosen based on prediction markets that forecast their outcomes.

Ranked Choice Voting

Ranked Choice Voting is an electoral system where voters rank proposals or candidates by preference, and votes are redistributed until a candidate achieves a majority.

Community Currencies

Community Currencies are local currencies designed to complement the national currency within a specific community or region. They aim to boost local economic activity, encourage spending within the community, and strengthen social ties.



Evolutionary Grants Games

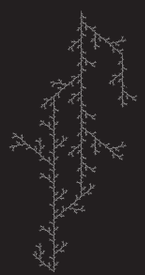
A competitive grants game where subDAOs in an ecosystem distribute funds, report activities, and are ranked by the community, with successful ones receiving more funding in subsequent rounds.

Cookie Jar

Cookie Jar is an optimistic governance mechanism that relies on high social trust and low amounts of funds at stake. It help DAOs reduce governance overhead (no one has to vote on Cookie Jar proposals) and track contributions transparently.

Gnosis Safe

A Gnosis Safe is a smart contract-based Ethereum wallet that allows for multi-signature transactions, enhancing security by requiring multiple approvals for transactions.

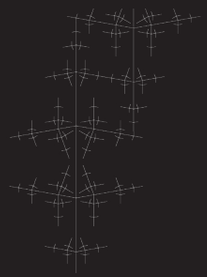


Direct-to-Contract

Direct-to-Contract rewards are incentives that are automatically distributed to users who complete specific tasks or achievements onchain.

Waqf

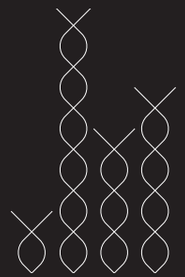
A Waqf is an Islamic endowment of property or funds, typically for religious or charitable purposes, that is held in trust and cannot be sold or transferred.



MolochDAO

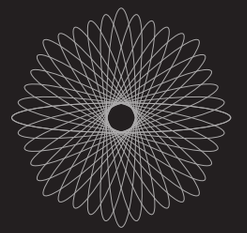
MolochDAO is a decentralized autonomous organization (DAO) designed to fund Ethereum-based projects and improve the Ethereum ecosystem.

Its primary innovation was Ragequit is a mechanism in MolochDAO allowing members to exit and withdraw their share of funds if they disagree with the groups decisions.



Bonding Curves

A bonding curve is a mathematical curve used in economics and finance to define the relationship between the price and supply of a token or asset. It ensures that as more tokens are purchased, the price increases along the curve, and conversely, as tokens are sold, the price decreases, allowing for dynamic pricing based on demand.



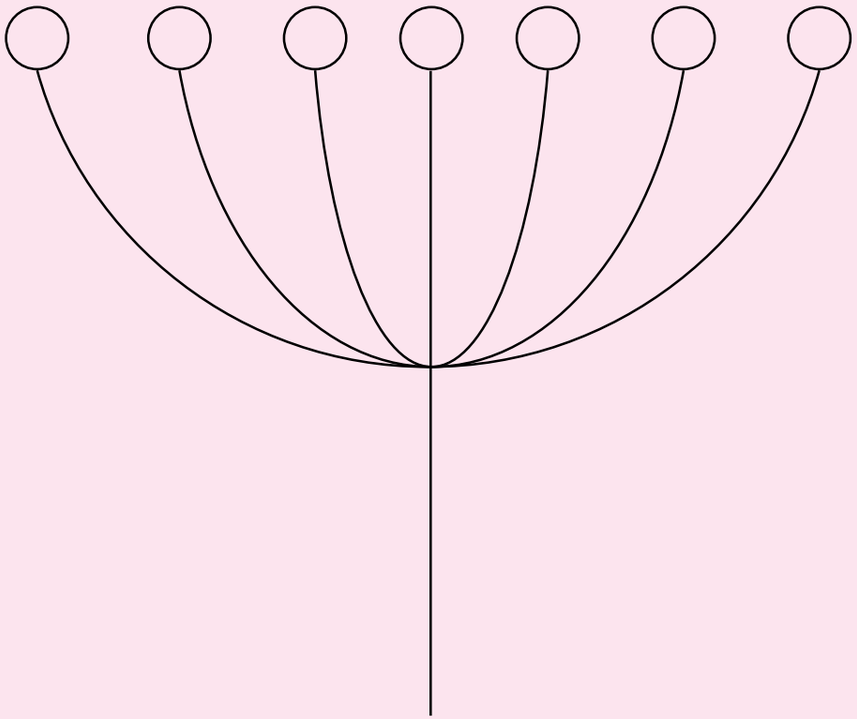
Angel Investment

Angel Investments are financial contributions made by affluent individuals, known as angel investors, to early-stage startups in exchange for equity ownership or convertible debt. These investments provide crucial funding to startups that may struggle to secure traditional financing.

MECHANISM

DIRECT GRANTS

01



Skeumorphic

Existed before onchain primitives

MOST SIMPLE

TL;DR

Direct Grants are financial awards provided by governments, foundations, or other organizations directly to individuals, businesses, or institutions without requiring repayment. They are often given to support specific projects, research, education, or community programs. Recipients typically must meet certain eligibility criteria and may need to report on how the funds are used to ensure they achieve the intended goals.

WHO SHOULD USE IT?

Direct Grants should be used by individuals or projects that need financial support for specific projects, research, educational initiatives, or community programs.

They are ideal for those who meet the eligibility criteria set by the grantor and can demonstrate a clear plan for utilizing the funds to achieve specific goals. Direct Grants are particularly beneficial for startups, researchers, educators, and community organizations looking to fund innovative ideas or expand their impact without incurring debt.

WHO USES IT?

Uniswap Grants

The Uniswap Grants Program Funds Projects That Help Grow the Uniswap Ecosystem, including content, events, developer tools, and governance.

Ethereum Foundtion

The Ethereum Foundation Ecosystem support program provides grants and other support to the builders of the Ethereum ecosystem.

MolochDAO

MolochDAO is a Decentralized Autonomous Organization, deployed on Ethereum mainnet. Members contribute capital with the sole intention of giving it all away to fund Ethereum infrastructure as an essential digital public good.

A RICH HISTORY

Direct Grants are a great starting point in understanding capital allocation strategies because they are simple, and they have a rich history.

Some notable Direct Grant programs include the National Institutes of Health (NIH) grants in the United States, which provide funding for medical research projects to advance public health. The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs also offer Direct Grants to small businesses to support technological innovation and commercialization of new products.

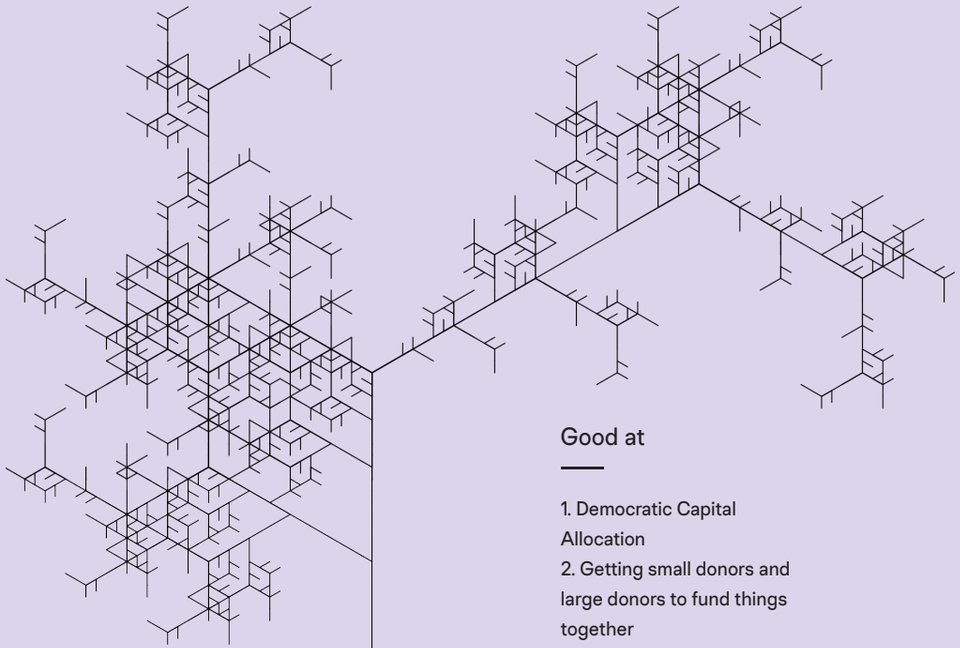
Another well-known program is the Fulbright Program, which offers grants for international educational exchange for students, scholars, and professionals to study, teach, or conduct research abroad.

Another is the European Union's Horizon 2020 and Horizon Europe programs provide substantial funding for research and innovation projects across various fields, aiming to enhance Europe's global competitiveness.

MECHANISM

QUADRATIC *FUNDING*

02



Good at

1. Democratic Capital Allocation
2. Getting small donors and large donors to fund things together

Dependencies

Sybil and collusion resistence - assumes you cannot make up identities and that people will not collude with each other. There are ways to mitigate collusion such as cluster mapping.

Not good at

Taking into account the opinions of experts

MOST DEMOCRATIC

TL;DR

INVENTED BY VITALIK BUTERIN, GLEN WEYL, AND ZOE HITZEG

Quadratic Funding is a crowd-funding mechanism that amplifies available resources by inviting community members to make donations (big or small) that act as votes on where to allocate funds.

Quadratic Funding uses quadratic voting to aggregate individual preferences and democratically allocate funding to public good. Matching funds are distributed to recipients more based on the number of contributors rather than the amount contributed, ensuring that projects with a larger base get more funding.

QF encourages wide participation and aligns funding with the broader preferences of a community, so it's useful for allocating funding democratically and for accurately revealing the preferences of a large group.

WHO SHOULD USE IT?

Quadratic Funding is particularly well-suited for communities that can provide a matching pool and have members decide on the allocation of the matching funds. This includes:

DAOs

Decentralized Autonomous Organizations (DAOs) with large treasuries: Quadratic Funding can help DAOs allocate their treasuries towards public goods that benefit the broader community, aligning incentives and fostering a more participatory decision-making process.

Networks & Network States

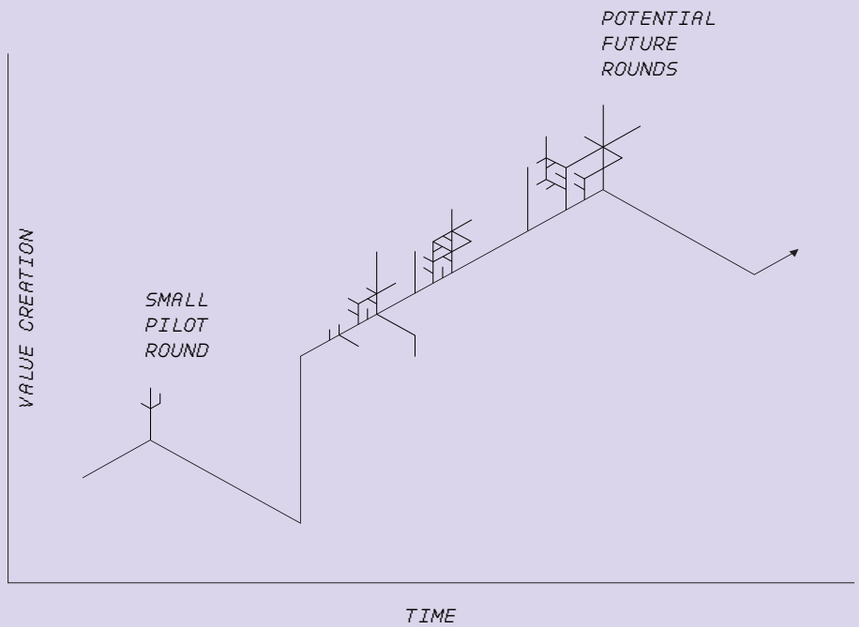
Networks and network states that rely on community participation and collaboration can benefit from Quadratic Funding by incentivizing the development of public goods that improve the network's infrastructure, security, or usability. By allowing network participants to vote on funding allocation, blockchain networks can harness the collective wisdom of their communities to support projects that drive long-term growth and adoption.

Large Protocols

Established blockchain protocols with substantial treasuries can leverage Quadratic Funding to incentivize the development of public goods that benefit the protocol's ecosystem. By allowing token holders to vote on project funding, protocols can ensure that resources are allocated towards initiatives that contribute to the protocol's growth and success.

Quadratic Funding is particularly valuable for groups that expect to run multiple rounds over time and leverage the preferences revealed by their community.

By iteratively funding public goods projects based on community input, these groups can continuously adapt and refine their funding strategies, ensuring that resources are allocated towards initiatives that consistently provide value to the community.



FUNDING STRATEGY

Who is eligible to receive funding from the pool?

Public goods projects submit an application to be included in a Quadratic Funding round. These applications are typically reviewed by program managers: the group of people tasked with operating the round. Eligibility should be determined by some preset requirements. Projects that are accepted through this application process are then eligible to receive individual contributions from community members and their share of the matching pool.

Who is eligible to allocate?

Community members, usually represented by token holders. These are the “voters” in this case, but they vote by donating tokens to the projects they want supported, in proportion to how much they want to support that project.

How are payouts calculated?

Payouts are calculated after the voting window has closed and all the contributions are in.

The share of the matching pool that each project gets is equal to the sum of the square roots of their contribution amounts. As a rule of thumb, the number of contributions a project received is used to determine their share of the matching funds. This is what makes QF so democratic: it’s the number of community members who support a project that determines how much funding it will receive. Libraries like Pluralistic.js or the Allo Starter kit can help in doing these calculations.

Note that calculations are generally done off-chain because the math required would otherwise incur a high gas cost.

How is the pool distributed?

After calculating the matching pool distribution in the previous step, the managers of the QF round then distribute the pool. In Allo Protocol (Gitcoin’s capital allocation protocol), they upload this distribution to the strategy, then distribute it to the accepted projects in one transaction.

HOW DOES IT WORK?

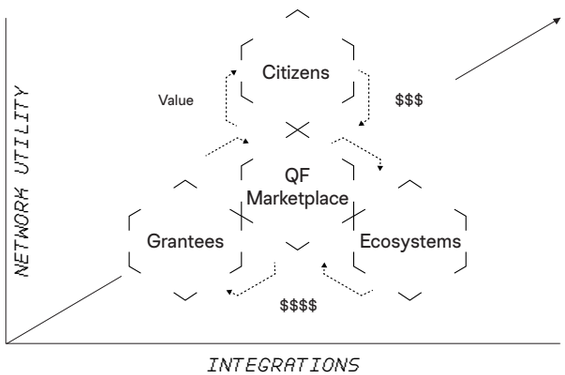
1. Someone who wants to support a community sets up a funding pool.

This could be a wealthy philanthropist that wants to give back, or a local government that wants to support community projects.

2. Projects that service the community sign up.

These projects could be anything that helps the community (businesses or local civic groups).

3. A crowdfunding campaign is run where each contribution is matched by the matching pool.



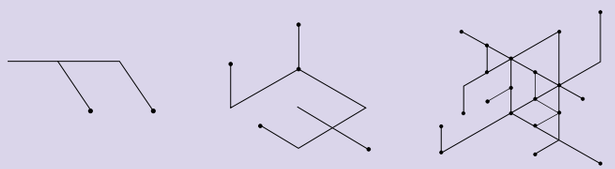
Here's the cool thing about Quadratic Funding. This is the one weird trick that makes QF into a funding powertool.

Each crowdfund contribution is matched. The match is based more on the number of contributors than the $ amount given.

Quadratic Funding uses quadratic voting to determine how funds are allocated. Instead of voice credits (as in quadratic voting), donating to a public good is how you cast a vote; the amount you donate is your voice or voting power.

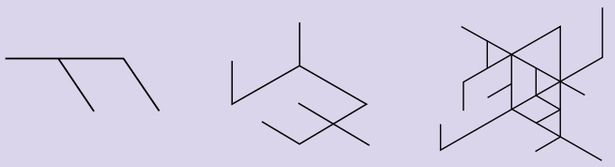
As an example, let's say a community puts forward $10,000 for a matching fund and three projects are eligible to receive funding.

PROJECT 1	PROJECT 2	PROJECT 3
Receives $10,000 from 2 contributors	Receives $10,000 from 5 contributors	Receives $10,000 from 20 contributors



Each project receives their $10,000 from the contributors in full while the round is live. After voting ends, we can calculate and distribute the matching pool.

PROJECT 1	PROJECT 2	PROJECT 3
Receives $740 of the matching funds	Receives $1,8851 of the matching funds	Receives $7,407 of the matching funds



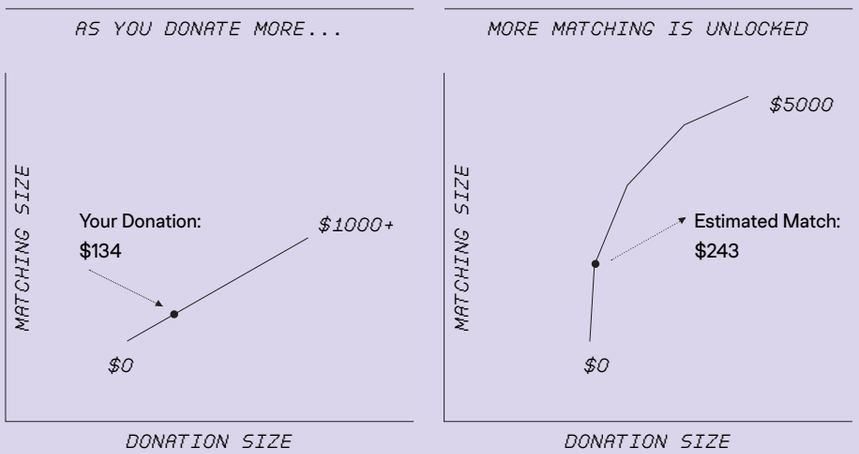
WHAT MAKES IT POWERFUL?

We're giving money to causes supported by everyday people. This creates crazy matching multiples for popular projects.

When you give $1 and a community project gets $100, lots of people open their wallet and participate.

A regular crowdfunding campaign wouldn't get as many contributions from as many people. What's better?

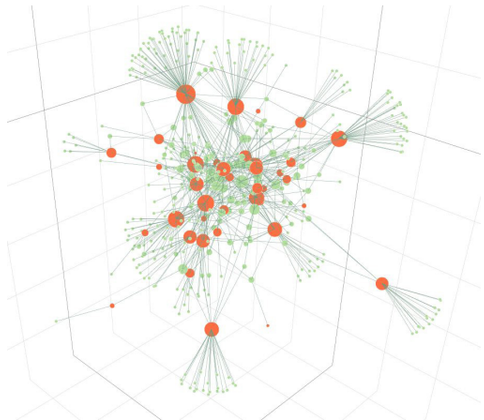
Give a $1 and the project gets $2?
Give a $1 and the project gets $100?



Quadratic Funding stimulates engagement from a broader range of donors living in these communities.

What's neat about this is that it lets civic leaders know which projects their constituents care about.

This map shows what goods people care about. Each dot is a contributor or a project and each line is a contribution. Using this data, we can give local civic leaders a high resolution view of their constituent preferences, when before they mostly had low resolution data.



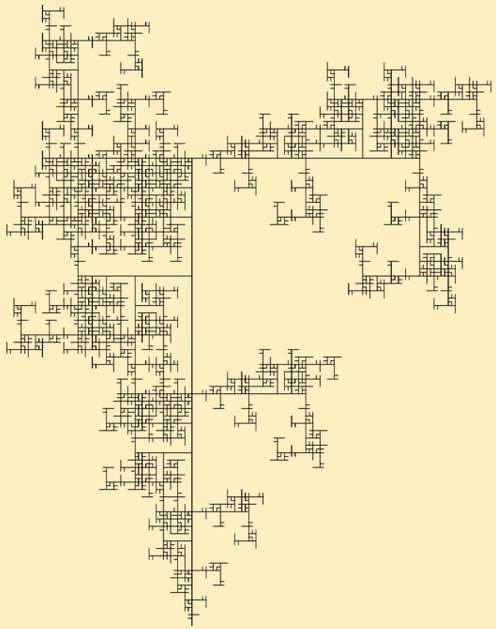
In analogue democracies civic leaders know what their constituents want every couple years through elections. Quadratic Funding campaigns can be a more frequent (and more high resolution - thousands of data points) signal for democratic leaders.

This data can then be used to create relationships between civic leaders and the members of their community doing the most good.

MECHANISM VARIANT

PRIVATE QUADRATIC *FUNDING*

2.1



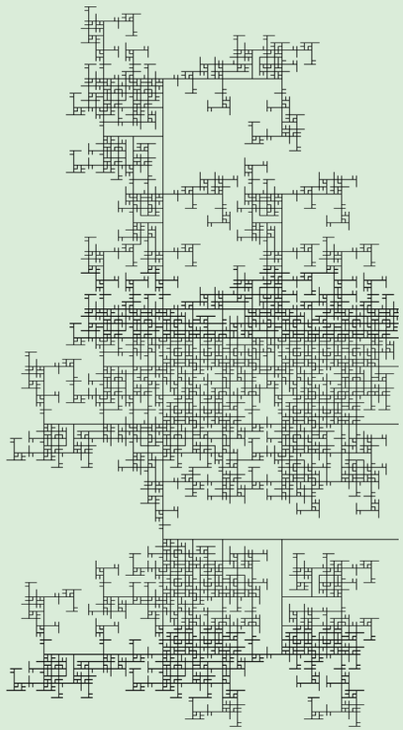
QF + Vote Privately

1. MACI - Minimum Anti Collusion Infrastructure
2. Uses Zero Knowledge Proofs to hide who you vote for, so that information can't be leaked or used to bribe you.

MECHANISM VARIANT

STREAMING QUADRATIC *FUNDING*

2.2



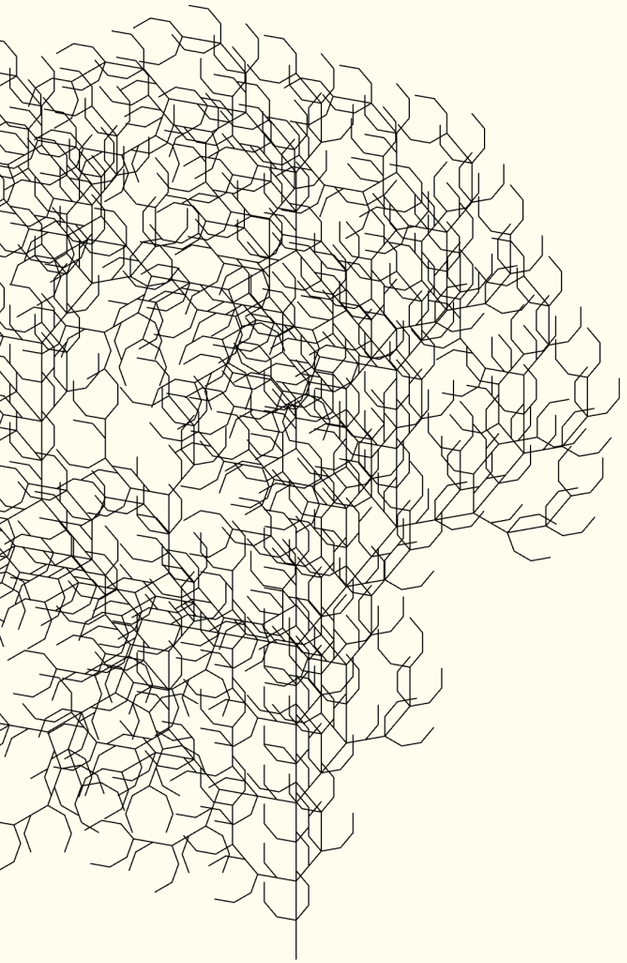
QF + Vote Continuously

1. Uses Superfluid - streaming money
2. Uses Allo Protocol to allocate capital
3. Pilot Application built by Geoweb

MECHANISM

RETRO *FUNDING*

03



BEST AT DECISION MAKING BY EXPERTS WITH HINDSIGHT

Good at

1. Decision making by experts
2. With benefit of hindsight

Dependencies

A large ecosystem with enough history to fund retroactively

Not good at

1. Creating opportunities for everyday people to allocate capital
2. Funding proactively

TL;DR

INVENTED BY VITALIK BUTERIN, & OPTIMISM, POPULARIZED BY OPTIMISM

Retroactive Funding is a financial model that rewards creators and developers of public goods—such as open-source software, scientific research, and community projects—after they have demonstrated a significant positive impact. Instead of funding these projects upfront, funders assess the outcomes and benefits generated and then provide grants or financial rewards based on the achieved results. This approach incentivizes high-quality work and impactful projects by ensuring that resources are allocated to initiatives that have proven their value and effectiveness.

WHO SHOULD USE IT?

Retroactive Public Goods Funding should be used by ecosystems who are looking to establish long term incentives for contributors.

This funding model rewards impactful work after its positive effects are demonstrated, encouraging the development of high-impact public goods over the long term.

WHO USES IT?

Optimism

Optimism has been the pioneer of Retroactive Funding, using it to reward impact within the Optimism and Ethereum ecosystems. This program has distribued over $100m worth of rewards in rounds 1-3.

DAO Drops

DAO Drops is an experiment in retroactive funding that directly empowers Ethereum users to allocate ecosystem funds.

In Round 1, DAO Drops distributed $250,000 DAI to nominees.

EasyRetroPGF.xyz

Gitcoin has partnered with Optimism to build voting interfaces for Retro Funding. Then it has packed up this experience up into a product called easyretropgf.xyz which allows anyone to do Optimism-style Retro Funding. This is being used by Filecoin, Celo, Libp2p.

PIONEERED BY OPTIMISM

Here is a summary of Optimism Retro Funding Rounds 1-3:

Round 1 (Q4 2021)

Distributed $1 million among 76 nominated projects. 24 badgeholders were appointed, with 22 participating in the voting process. 58 projects received funding.

Learnings: The process highlighted the importance of means testing and identified unconscious biases among badgeholders. The round also stressed the need for balancing democratic and technocratic elements in governance.

Round 2 (Q1 2023)

Distributed 10 million OP tokens among 195 nominated projects. 90 voting badges were offered, and 69 badgeholders voted. This round also saw the launch of the Citizens' House.

Learnings: The round underscored the need for improved means testing of applicants and emphasized the benefits of including a broader range of contributors. It also explored the impacts of nomination versus self-nomination processes.

Round 3 (Fall 2023)

Allocated 30 million OP tokens. 145 badgeholders participated in the voting process, with projects self-nominating for funding. There were a total of 1596 applications.

Learnings: This round highlighted the limited scalability of experts voting on individual projects. The process highlighted the need for standardized and verifiable impact metrics to reward projects accurately

FUNDING STRATEGY

Who is eligible to receive funding from the pool?

In Optimism RetroPGF Round 3, the eligibility criteria for receiving funding included:

1. Contributors to the Optimism Ecosystem: This includes developers, educators, artists, writers, builders, and evangelists who have made impactful contributions to the development and adoption of Optimism.

2. All Contributions Considered: Any contribution that supports the Optimism ecosystem is eligible, regardless of when it was made. This means past contributions are also eligible for funding.

3. Inclusivity: Both VC-funded teams and teams that have received grants from the Optimism Token House are eligible for retro funding.

Who is eligible to allocate?

Optimism RetroPGF Round 3, badgeholders were eligible to allocate the funding. All badgeholders have equal voting power. There were 208 badgeholders selected through various methods. This included Round 2 bagdeholders, top 50 recipients of RetroPGF 2, and 10 badges from the Optimism Foundation. This diverse selection approach aimed to ensure a broad representation of knowledgeable individuals capable of fairly assessing and allocating the funding.

How are payouts calculated?

In Optimism RetroPGF Round 3, payouts were calculated using a median voting system. Badgeholders could allocate up to 30 million OP tokens among the projects, with each badgeholder able to allocate between 0 and 30 million OP to a single project. To qualify for payouts, a project needed to receive 17 votes or more. The results were then normalized to ensure the total allocated amount matched the round size of 30 million OP.

How is the pool distributed?

In RetroPGF 3, following KYC completion with the Optimism Foundation, projects received their rewards via a 90 day stream using Superfluid.

In EasyRetroPGF, the payout strategy is configurable. Funders may send different types of tokens on any network, and may opt to use streaming protocols like Superfluid or Hedgey to distribute the tokens.

HOW DOES IT WORK?

1. Project Applications

Projects self-nominated and/or submitted their applications.

2. Badgeholder Voting

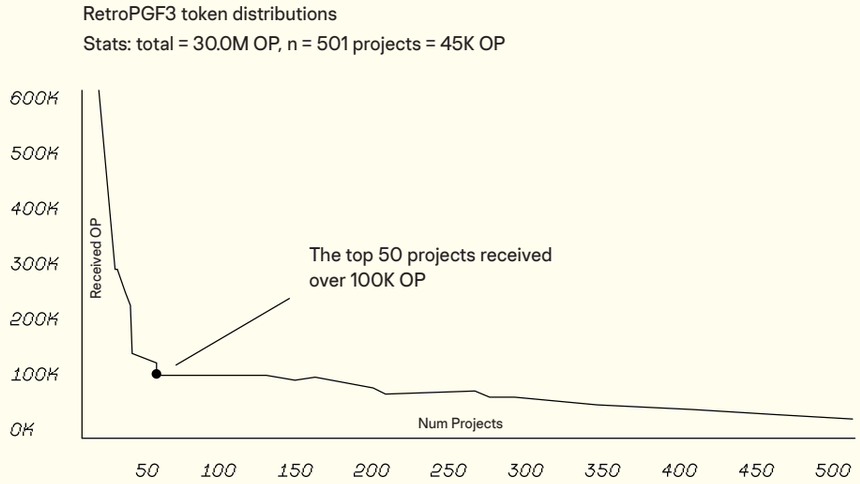
Badgeholders, who were selected through various methods, reviewed the applications and allocated OP tokens to projects.

3. Calculation of Results & Distribution of Funds

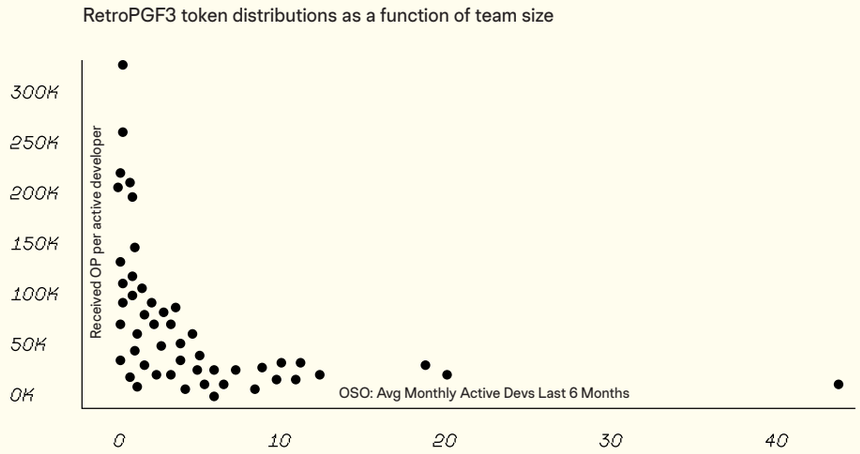
The results were calculated, a conflict of interest check was made, and projects applied to receive distributed funds.

While each Retroactive Funding round is a discrete event, Retroactive Funding rounds can be run periodically over time in order to reinforce new behaviors in an ecosystem. The more predictability, the stronger the assurance that current actions could be rewarded retroactively in the future.

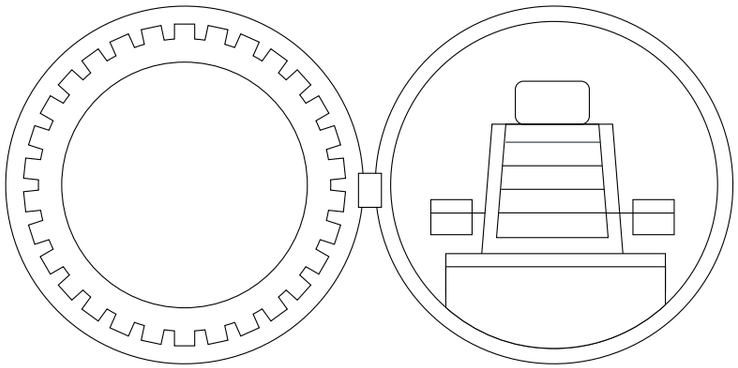
RetroPGF 3 projects received a power law distribution of tokens.



There was not a strong correlation between the number of team members and the amount funded.



YOU DON'T NEED A TIME MACHINE



UNLOCK THE POWER OF RETROACTIVE FUNDING

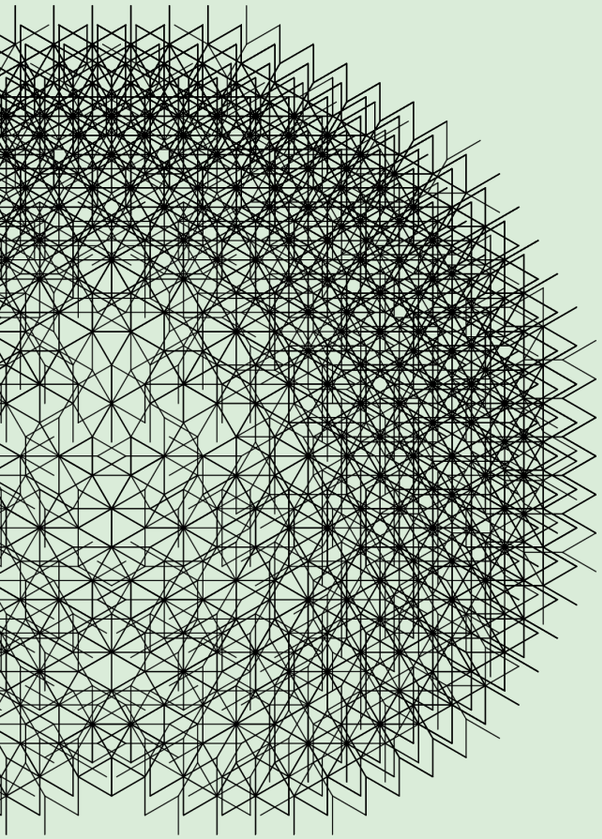
Feel free to visit the website for more detailed information: easyretropgf.xyz.

EASY RETRO PGF

MECHANISM

CONVICTION VOTING

04



Good at

1. Bottoms-up decision making
2. Addressing voter apathy

Dependencies

Tokenized ecosystem

Not good at

Immediate decision making

BEST AT BOTTOMS-UP DECISION MAKING

TL;DR

DESIGNED BY DR. MICHAEL ZARGHAM, POPULARIZED BY 1HIVE

Conviction Voting is a decision-making process where participants allocate their voting power to proposals over time, with the intensity of their support increasing the longer they back a proposal. This system allows voters to express the strength of their preferences and aims to balance minority and majority interests by emphasizing sustained commitment over fleeting majority opinions.

WHO SHOULD USE IT?

Conviction Voting is ideal for decentralized organizations, cooperatives, and communities where long-term commitment to decisions is valued. It is particularly useful in environments where balancing minority and majority interests is crucial and where participants need a nuanced way to express the strength of their preferences over time.

WHO USES IT?

Gardens.fund

1Hive recently launched Gardens v2, a tool that allows any DAO to implement Conviction Voting with their own governance token.

Gardens is a coordination platform that fosters vibrant ecosystems of shared wealth by providing healthy funding mechanisms to communities in web3.

1Hive

1Hive uses conviction voting to allocate community funds to various projects and initiatives. This system allows members to continuously express their support, with proposals gaining more funding as they accumulate sustained backing from the community.

ATTRIBUTES OF CV

Dynamic Support

Voters can continuously adjust their support, allowing for real-time preference shifts and more responsive decision-making. This is a strong hedge against last minute vote swings.

Intensity over Quantity

Conviction Voting measures the strength of commitment rather than just counting votes, reflecting true preference intensity.

Enhanced Participation

Encourages active and ongoing engagement from participants, fostering a more involved and committed community.

Funding Allocation

It has practical applications, like in 1Hive, where community funds are allocated based on sustained support for proposals.

Minority Protection

It prevents transient majorities from dominating, giving minority opinions a chance to gain support over time.

FUNDING STRATEGY

Who is eligible to receive funding from the pool?

In conviction voting systems like the one used by 1Hive, any member of the community can typically propose initiatives to receive funding from the pool. These proposals are then subject to the voting process, where community members allocate their voting power to support proposals. The eligibility to propose and receive funding often depends on the specific rules and governance structure of the organization using conviction voting.

Who is eligible to allocate?

In conviction voting systems any member of the community who holds voting tokens or has voting rights is eligible to allocate their votes to proposals. The specific requirements for eligibility to vote, such as holding a minimum amount of tokens or having a certain level of participation, depend on the rules set by the organization implementing the conviction voting system.

How is Conviction Calculated?

In conviction voting systems, voting weight is typically calculated based on the accumulated "conviction" or voting weight that accrues by supporting a proposal over time. Here are some of the setup elements affecting this calculation:

1. Proposal Types: conviction voting systems can be used simply to signal community sentiment, or linked to funding pools where proposals can request tokens in discrete amounts or through token streams.

2. Conviction Growth: a parameter determining the rate that a voter's conviction grows or shrinks over time. Typically logarithmic and set as a half life.

3. Threshold: Funding proposals must surpass a conviction threshold to qualify for funding. This threshold often depends on the total funds available and the relative support for other proposals.

4. Spending Limit and Minimum Conviction: additional parameters often used to limit the amount of funds going to a single proposal, or require a quorum of community support for proposals to pass.

5. Voting Weight System: separate from the time weighted element of conviction, various strategies can also be used to determine total weight, such as 1 token = 1 vote, quadratic voting, or equal voting power for all.

The exact formulas and mechanisms can vary, but the core idea is that sustained and strong support increases the likelihood and amount of funding a proposal receives.

How is the pool distributed?

By nature, conviction voting systems are continuous, allowing proposals to be created and considered over time rather than in epochs or seasonal funding events.

In this way, conviction voting sacrifices the ability to make decisions quickly and resolutely, favoring a more truthful representation of community sentiment uncovered over time. Pool distributions can then happen either continuously or approved one-by-one as thresholds are met.

In Allo, the funds can be distributed to the accepted projects in one transaction, or via stream protocols like Superfluid or drips.

HOW DOES IT WORK?

1. Setup

A DAO sets up a treasury of tokens allocated to Conviction Voting

Usually this is a DAO that wants to incentivize and grow its own ecosystem.

2. Proposal Submission

Community members submit proposals for funding.

3. Continuous Voting

Members allocate their voting power to proposals they support, with conviction growing over time as votes remain allocated.

4. Threshold and Distribution

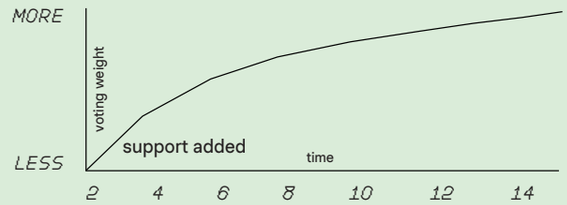
Once proposals reach the required conviction threshold, they receive funding from the pool, with funds distributed proportionally based on the accumulated conviction.

HOW DOES CONVICTION GROW OVER TIME?

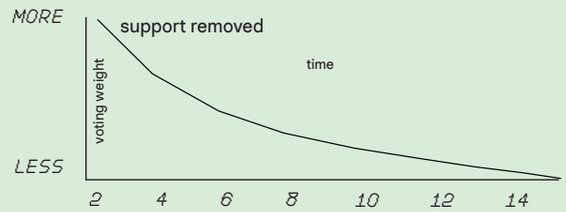
Typically, a mathematical formula, such as a weighted average or a decaying logarithmic function, is used to calculate the conviction, ensuring that sustained support leads to higher conviction levels.

Conviction Voting emphasizes long-term commitment and sustained support for proposals rather than short-term, transient voting.

Logarithmic Growth Curve



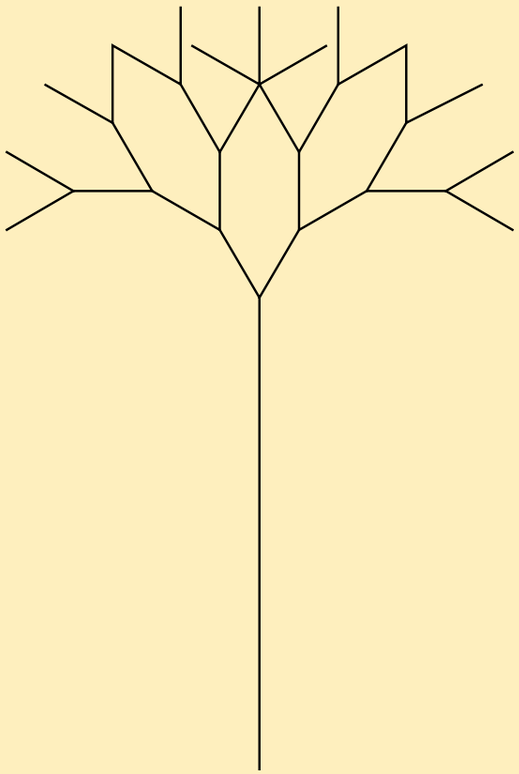
Logarithmic Growth Curve after support removed



MECHANISM

REQUEST FOR PROPOSAL

05



Skeumorphic

Existed before onchain primitives

Good at

1. Specific complex scopes
2. Creating competitive bidding processes

Dependencies

Clear requirements

Not good at

RFPs can be time and resource intensive

BEST FOR GETTING
VERY SPECIFIC BIDS
FOR PREDEFINED SCOPES
OF WORK

TL;DR

RFPs, or Requests for Proposals, are formal documents issued by organizations seeking to procure services, products, or solutions from external vendors.

They outline the project's requirements, objectives, and criteria for selection, inviting potential suppliers to submit detailed proposals. This process allows the issuing organization to evaluate and compare various bids to select the most suitable provider based on factors like cost, expertise, and proposed solutions.

WHO SHOULD USE IT?

Organizations seeking to procure specialized services, products, or solutions that require detailed proposals and competitive bidding should use RFPs.

RFPs are particularly beneficial when the project scope is complex, requires specific expertise, or when the organization needs to evaluate multiple potential suppliers to find the best fit based on criteria such as cost, quality, and innovation.

WHO USES IT?

Uniswap Grants

The Uniswap Grants Program (UGP) issues RFPs to identify and fund projects that can contribute to the growth and development of the Uniswap ecosystem. These RFPs target specific areas such as protocol enhancements, tooling, educational content, and other initiatives that align with Uniswap's mission to support decentralized finance (DeFi) and the broader Ethereum community.

Optimism

This Layer 2 scaling solution uses RFPs for projects that align with its vision of promoting scalability and user-friendly applications on Ethereum.

Ethereum Foundtion

Uses RFPs to fund research and development projects that enhance the Ethereum protocol and its ecosystem.

A TYPICAL RFP PROCESS:

1. Preparation and Planning

Define the project scope, objectives, budget, and timeline. Identify the evaluation criteria and assemble an RFP team.

2. Drafting the RFP

Create the RFP document, including a detailed description of requirements, submission guidelines, deadlines, and evaluation criteria.

3. Issuing the RFP

Distribute the RFP to potential vendors or make it publicly available through appropriate channels.

4. Vendor Response Period

Allow sufficient time for vendors to prepare and submit their proposals. Provide a mechanism for vendors to ask questions and receive clarifications.

5. Proposal Evaluation

Review and evaluate the submitted proposals based on the predefined criteria. This may include scoring, internal discussions, and possibly interviews or presentations by vendors.

6. Vendor Selection

Select the vendor(s) that best meet the project requirements and provide the best value. Notify all participants of the decision.

7. Contract Negotiation and Award

Negotiate contract terms with the selected vendor(s) and finalize the agreement.

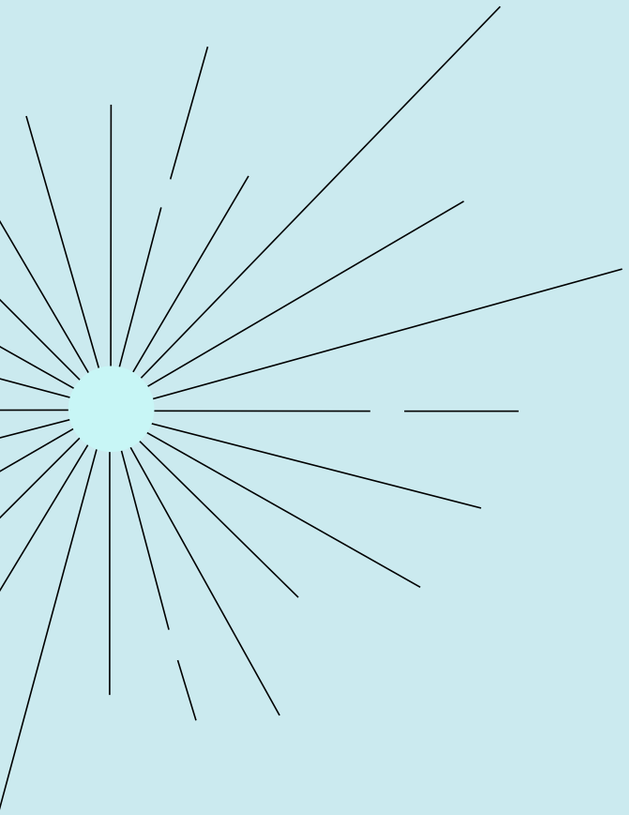
8. Project Execution and Monitoring

Begin the project according to the agreed terms, monitoring progress and performance to ensure compliance with the contract.

MECHANISM

SELF-CURATED REGISTRIES

06



Good at

1. Bottoms-up curation
2. Definition of important domains

Dependencies

Clear domain definitions proposal submission to get funding

Not good at

1. Scalability
2. Working in domains without clear boundaries

BEST AT MAINTAINING BOTTOMS-UP CURATION OF CONTRIBUTORS IN IMPORTANT DOMAINS

TL;DR

POPULARIZED BY PROTOCOL GUILD

Self-Curated Registries were popularized by Protocol Guild - a group of Ethereum protocol developers. The guild is a self curated registry, an onchain list maintained by the members of Protocol Guild themselves. This registry allows members to add, update, or remove entries without external oversight, ensuring that the information remains accurate and relevant to the community's needs. It empowers participants by giving them control over the registry's content, fostering a sense of ownership and responsibility - and enabling projects built upon Ethereum to directly contribute to Ethereum developers upon which they depend.

WHO SHOULD USE IT?

A self-curated registry should be used by communities with clear boundaries. This is particularly beneficial for groups focused on domains where there is no shared funding source, such as Ethereum protocol developers.

By allowing members to directly curate the registry, self-curated registries ensure the information remains accurate, relevant, and reflective of the community's evolving needs and contributions. This makes it easy for parties to fund their shared needs by just sending tokens to the self curated registry.

WHO USES IT?

Protocol Guild V1

Protocol Guild ran a one year pilot from May '22 - May '23 to test their assumptions about the Protocol Guild's funding mechanism and how to operate it. As of July 2024, Protocol Guild has received 7.9k donations from 600 donors, totalling $88mm in value at the time of donation The top donors include Ether Fi ($30m), Taiko ($24m), Layer Zero ($5m) and Arbitrum($2.4m).

THE PROTOCOL GUILD PILOT

Protocol Guild was initially conceived as a way to "boost the incentives around stewarding the core protocol." In retrospect, this goal was perhaps not ambitious enough. A significant portion of core protocol development is currently being funded by centralized—and potentially unsustainable—sources, including the Ethereum Foundation (EF), ConsenSys, and a few others. To secure the future of Ethereum's core development work, the goal was to create a new equilibrium in core protocol funding, sustained by the ecosystem built on top of it.

PROTOCOL GUILD'S GOALS:

To serve as a counterbalance to EF/corporate-funded core protocol development, or at worst, a funder of last resort.

To incentivize new contributors to join core protocol development.

To normalize setting aside a portion of ecosystem revenues to fund core protocol development.

To enable a one-stop-shop for funding the entire core protocol (research, implementation, coordination, testing).

To help retain existing core protocol developers over the long term.

Achieving the above in a sustainable and decentralized way will be a years-long process, and require buy-in from across the Ethereum ecosystem. Fortunately, it's the exact kind of challenge that our community is uniquely suited to rally around!

FUNDING STRATEGY

Who is eligible to receive funding from the pool?

In Protocol Guild, the registry is maintained through a self-curation process by its members, who are typically key contributors to the protocol. Members coordinate to add, update, or remove entries on a quarterly basis, ensuring that the registry remains accurate over time.

Who is eligible to allocate?

Protocol Guild's eligibility framework includes individuals who have made significant contributions to the protocol, such as developers, researchers, and other essential contributors. This ensures that the registry is curated by those with the most knowledge and investment in the protocol's success.

How are payouts calculated?

Protocol Guild is funded by projects built on Ethereum, who have a dependency on the continued development and maintenance of the protocol.

Projects are encouraged to donate their native token to the Protocol Guild, to give its members access to a diversified basket of funds representing the value being created in the ecosystem.

Funds are managed via smart contracts, which ensure transparency and automate the disbursement process. Members receive their allocated funds according to a linear 4 year vesting schedule.

Each members' individual allocation is proportional to the number of months they have been contributing to eligible projects.

Vesting and time-weighting ensure that the distribution is fair, efficient, and aligned with the long-term goals of the protocol.

HOW DOES IT WORK?

1. Registry Curation

Objective criteria are set up for inclusion in the registry. Proposals can be made to add or remove members to the registry.

2. Fundraising

Once a registry is deemed to have met the attributes of the desired domain, fundraising can begin. DAOs are then approached to fund the registry. Governance proposals are submitted.

3. Vesting & Payouts

Funds sent to the contract will vest over the course of 4 years. Members of the registry can withdraw vested funds from the contract.

4. Repeat

Protocol Guild and other Self Curated Registries are ongoing processes - registry curation can happen in parallel with fundraising and vesting.

Protocol Guild has several distinctive attributes that set it apart from other onchain mechanisms:

Focus on Protocol Development

The guild is designed to support and incentivize key contributors to the protocol, such as developers, researchers, and other critical roles, fostering an ecosystem of continuous improvement and innovation.

Funding from Ecosystem Stakeholders

The guild is typically funded by stakeholders within the ecosystem who have a vested interest in the protocol's success, such as apps, L2s or DAOs built on Ethereum,, as well as philanthropic entities focused on funding public goods.

Contributor-Centric Vesting

Tokens or rewards are vested to contributors over time, aligning their incentives with the long-term success of the protocol and encouraging sustained contributions.

Self-Curated Registry

Members of Protocol Guild maintain and update the registry autonomously, ensuring that the most knowledgeable contributors manage the relevant information.

Decentralized Governance

Decisions about the registry and other guild activities are made collectively by the members, often through proposals and voting, ensuring a decentralized and democratic governance structure.

Differences from other onchain mechanisms (cont'd):

Member-Driven Curation

Unlike many other onchain mechanisms that might rely on external parties or automated systems for updates, Protocol Guild relies on its members for maintaining the registry, ensuring that the information is curated by those most involved in the protocol.

Long-Term Incentives

The vesting schedule for rewards in Protocol Guild is designed to promote long-term engagement, whereas other mechanisms might provide immediate or short-term incentives.

Direct Community Funding

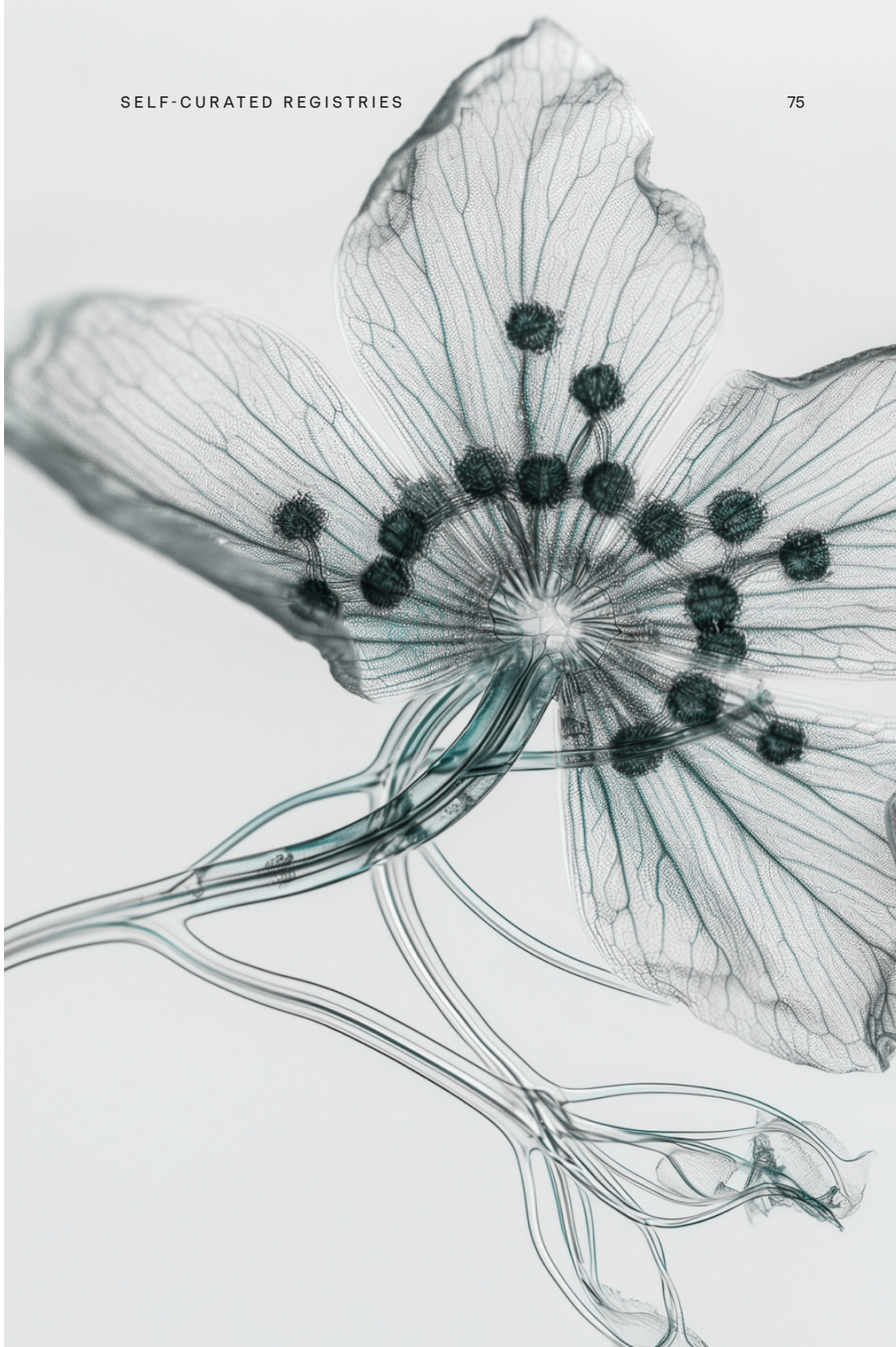
Protocol Guild only works when ecosystem stakeholders opt-in to fund the mechanism, as opposed to mechanisms that might rely on transaction fees or other indirect funding sources.

Targeted Support for Key Contributors

The guild aims to support individuals who play critical roles in the protocol's development, whereas other mechanisms might distribute rewards more broadly or based on different criteria

Wen Protocol Guild forks?

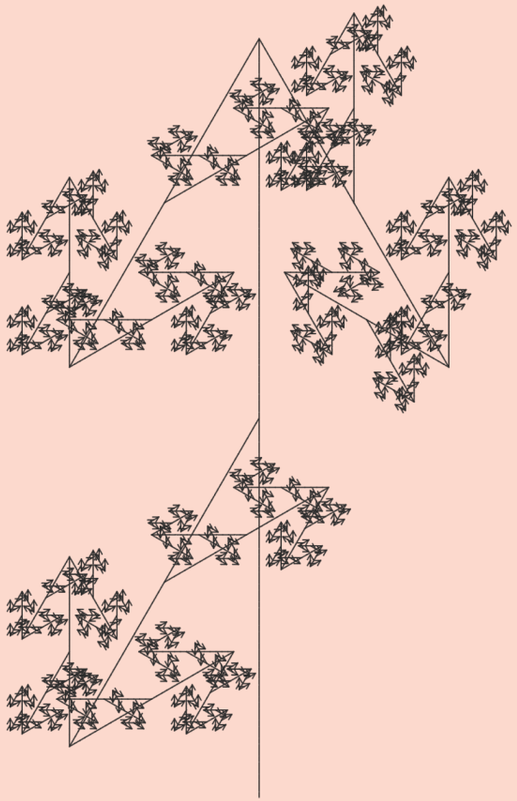
"The ecosystem needs to more fully recognize that cross-L2 infrastructure is a type of Ethereum infrastructure, alongside L1 clients, dev tools and programming languages, and should be valorized and funded as such. We have Protocol Guild; maybe we need Basic Infrastructure Guild." - Vitalik Buterin, 2024



MECHANISM

DELEGATED DOMAIN ALLOCATION

07



Good at

1. Targeting funding
2. Driving decisions by experts

Dependencies

Clear requirements

Not good at

1. Involving everyday citizens in decision making
2. May require more setup than other types of rounds

BEST AT DOMAIN BASED FUNDING BY EXPERTS

TL;DR

POPULARIZED BY QUESTBOOK

Dedicated Domain Allocation, as popularized by Questbook, refers to the practice of assigning specific funding streams or resources to particular domains or areas within a project or organization. This method ensures that resources are consistently directed towards designated areas, facilitating better management and tracking of funds. By clearly delineating which resources are allocated to which domains, DDA aims to enhance transparency, accountability, and efficiency in the management of project resources and funding.

WHO SHOULD USE IT?

Dedicated Domain Allocation is best suited for organizations that require precise control and accountability over the allocation of resources to different areas or projects. This approach is particularly beneficial for large enterprises, government agencies, and non-profit organizations managing complex operations with diverse funding streams and distinct project domains. By implementing Dedicated Domain Allocation, these organizations can enhance transparency, streamline resource management, and ensure that funds are directed towards priority areas in alignment with their strategic objectives.

WHO USES IT?

Questbook

Questbook has been the pioneer of DDA. They have used it to power the Compound Grants Fund of $800K USD (22k COMP), spread across two quarters, to find and fund a wide variety of teams building on Compound.

They've also used it to run an Arbitrum grants program with a budget of $1M spread across two quarters to fund a wide variety of teams building apps on top of Arbitrum in a transparent manner.

Each of these programs have budget that is managed by four individuals called domain allocators - chosen from the community and by the community. These domain allocators manage grants for a domain. These domains are strategic areas of focus for which the customer wants to disburse grants.teams building apps on top of Arbitrum in a transparent manner.

ATTRIBUTES OF DDA

These attributes collectively contribute to the effectiveness and success of dedicated domain allocation strategies.

Resource Segregation

Clearly delineates and segregates resources for specific domains or areas.

Transparency

Enhances transparency by making resource allocation visible and accountable.

Efficiency

Streamlines resource management processes by allocating resources directly to designated domains.

Accountability

Facilitates accountability as resources are allocated based on predefined criteria and objectives.

Flexibility

Provides flexibility to adjust resource allocation according to changing needs within each domain.

Focus

Enables focused investment and attention on particular areas or projects within an organization.

Optimization

Supports optimization of resource utilization by aligning allocations with domain-specific goals.

Risk Mitigation

Helps mitigate risks by ensuring resources are allocated strategically and monitored effectively.

Performance Evaluation

Facilitates performance evaluation and impact assessment within each domain.

Collaboration

Promotes collaboration and coordination within and across domains to achieve common goals.

FUNDING STRATEGY

Who is eligible to receive funding from the pool?

Eligibility often hinges on demonstrating how the proposed activities will contribute to the advancement of domain-specific objectives, address identified needs or challenges, and align with the overarching mission of the organization or project.

Who is eligible to allocate?

Eligibility to allocate funding is often based on factors such as expertise in the domain, knowledge of project priorities, and accountability for ensuring effective resource utilization.

These individuals are entrusted with making informed decisions about how to distribute resources within the allocated domain, aligning allocations with strategic objectives, and maximizing the impact of the funding to achieve desired outcomes.

How are payouts calculated?

In Dedicated Domain Allocation, payouts are typically calculated based on predetermined criteria and guidelines established for each domain.

Each domain can use a different capital allocation strategy. Typically, decision-makers responsible for allocating funds assess funding requests submitted by eligible entities within the domain, taking into account the alignment of proposed projects with domain objectives, available resources, and overall strategic priorities.

Payouts are then determined through a systematic evaluation process that aims to ensure equitable distribution of resources while maximizing the effectiveness and efficiency of funding allocation within the designated domain.

How is the pool distributed?

The pool may be distributed at the end of each DDA rouind, via a normal ERC20 txn on an L2.

In Allo DDA build (coming soon), the funds can be distributed it to the accepted projects in one transaction, or via stream protocols like Superfluid or drips.

START AT THE BEGINNING

When contemplating a dedicated domain allocation round, it's crucial to begin by clearly defining the domains and their objectives, ensuring they align with the organization's overarching goals. Understanding the specific needs and priorities within each domain will inform resource allocation decisions and facilitate targeted investments.

Next, establish transparent and legible processes for soliciting and evaluating funding requests. This involves developing clear guidelines for proposal submission, outlining evaluation criteria, and establishing decision-making mechanisms that involve stakeholders from relevant domains. By fostering inclusivity and accountability in the allocation process, organizations can ensure that resources are distributed effectively and in accordance with domain-specific objectives.

Finally, prioritize communication and collaboration throughout the allocation round to foster engagement and buy-in from stakeholders. Regularly communicate updates on the allocation process, solicit feedback from stakeholders, and provide opportunities for input to enhance transparency and trust. By actively involving stakeholders in the decision-making process and maintaining open lines of communication, organizations can maximize the success of their dedicated domain allocation round and drive meaningful impact within targeted areas.

& GO STEP BY STEP

Needs Assessment

Evaluate the resource requirements and priorities within each domain.

Funding Request Submission

Entities eligible for funding submit proposals outlining their projects or initiatives aligned with domain objectives.

Review and Allocation

Decision-makers assess funding requests, considering alignment with domain goals, available resources, and impact potential, and allocate funds accordingly.

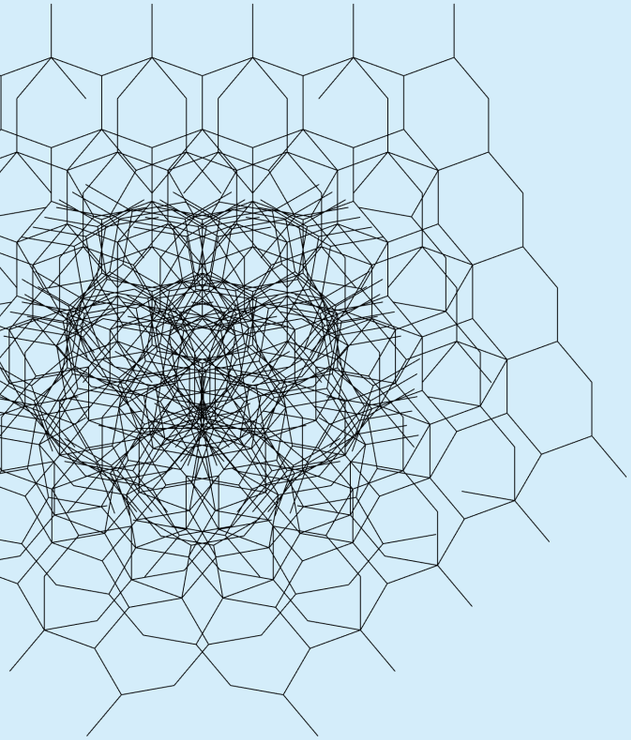
Monitoring and Evaluation

Track the progress and outcomes of funded projects, ensuring accountability and effectiveness in achieving domain-specific objectives.

MECHANISM

GIFT CIRCLES

08



Good at

1. Decentralized recognition
2. Community engagement
3. Transparency

Dependencies

Tokenized ecosystem

Not good at

1. Objective evaluation
2. Preventing bias
3. Scalability

GOOD AT FACILITATING BOTTOMS-UP COMPENSATION/ TRUST NETWORKS

TL;DR

POPULARIZED BY CHARLES EISENSTEIN & COORDINAPE

A gift circle, as popularized on Coordinape, is a decentralized, community-driven process where members of a team or organization allocate virtual tokens, known as GIVE, to recognize and reward each other's contributions. Participants receive a set amount of GIVE tokens to distribute among their peers based on perceived value and impact. This method fosters collaboration and appreciation within the community, ensuring that rewards are aligned with collective insights and efforts.

WHO SHOULD USE IT?

Gift Circles are best suited for decentralized organizations, collaborative teams, and communities that value peer recognition and collective decision-making.

They are particularly effective in environments where contributions are diverse and not easily quantified by traditional metrics. Teams in open-source projects, DAOs, and cooperative groups can benefit from gift circles to foster a sense of appreciation, enhance engagement, and align rewards with community values.

WHO USES IT?

Coordinape ecosystem

Coordinape is a decentralized platform designed to facilitate peer-to-peer recognition and reward distribution within communities, particularly in DAOs. It leverages a system where members allocate virtual tokens, known as GIVE, to each other based on perceived contributions and value added. This process, known as a gift circle, promotes a more bottoms-up and transparent method of acknowledging efforts and distributing rewards, reflecting the collective insights and values of the community.

By utilizing Coordinape, organizations can enhance collaboration and engagement, ensuring that rewards are aligned with the actual contributions recognized by peers rather than top-down management. The platform's decentralized nature helps fosters a sense of community and mutual appreciation, making it particularly suited for collaborative environments and projects where traditional hierarchical reward systems might fall short.

ATTRIBUTES OF GIFT CIRCLES

Decentralized

Contributions are recognized and rewarded by peers rather than centralized management.

Peer-to-Peer Recognition

Members allocate virtual tokens to each other based on perceived value.

Transparent

The process is open, allowing everyone to see how rewards are distributed.

Flexible

Adaptable to various types of contributions and efforts.

Engaging

Encourages active participation and appreciation among community members.

Community-Driven

Reflects the collective values and insights of the community.

Incentive Alignment

Rewards are aligned with the community's understanding of value.

Bias-Prone

Can be susceptible to favoritism or popularity contests.

Scalability Challenges

May become less effective in larger organizations.

Inconsistent Evaluations

Variability in how different members perceive contributions.

FUNDING STRATEGY

Who is eligible to receive funding from the pool?

In gift circles, all participating members of the community or organization are eligible to receive funding from the pool. Each member is typically allocated a set amount of virtual tokens, which they can distribute to their peers based on perceived contributions and value. This ensures that anyone who actively contributes to the community has the opportunity to be recognized and rewarded by their peers.

Who is eligible to allocate?

In gift circles, all participating members of the community or organization are eligible to allocate virtual tokens. Each member is given a set amount of tokens, which they can distribute to their peers based on their perceived contributions and impact. This peer-to-peer allocation process ensures that recognition and rewards are distributed according to the collective judgment of the community rather than a centralized authority.

How are payouts calculated?

In gift circles, payouts are calculated based on the virtual tokens allocated by participants to their peers. Each member distributes a set amount of tokens to others based on their perceived contributions. The total amount of tokens received by each participant determines their share of the funding pool. The more tokens a member receives from their peers, the larger their payout from the pool, ensuring that rewards are proportional to the community's recognition of their efforts.

How is the pool distributed?

Typically, DAOs use their own tokens to reward contributors to a gift circle. These tokens can be sent out in an ERC20 transfer.

In Allo Gift Circles (coming soon), the funds can be distributed it to the accepted projects in one transaction, or via stream protocols like Superfluid or drips.

HOW DOES IT WORK?

Preparation

Before the ceremony begins, participants are informed about the process, rules, and timeline. They are given a set amount of virtual tokens to allocate.

Funding Request Submission

During the ceremony, each participant distributes their tokens to peers whom they believe have made valuable contributions.

Review and Allocation

During the ceremony, each participant distributes their tokens to peers whom they believe have made valuable contributions.

Conclusion

The ceremony concludes after a set period, and the final token distributions are recorded.

Once the ceremony is over, the tokens each participant received are tallied, and the payouts are calculated and distributed accordingly.

After gift circles, participants often receive various types of feedback, which can facilitate meaningful conversations and cultural changes within the community. Here are some key aspects:

Types of Feedback:

Qualitative Feedback

Comments and notes from peers explain why they allocated tokens to specific individuals, offering insights into what contributions were most appreciated.

Quantitative Feedback

Participants see how many tokens they received, providing a clear numerical representation of their contributions' perceived value.

Comparative Feedback

Participants can see how their token allocation compares to others, helping them understand their standing within the community.

Facilitated Conversations and Cultural Changes:

Appreciation and Recognition

Regular feedback fosters a culture of appreciation, where members feel valued for their contributions.

Transparency

The open nature of token distribution and comments promotes transparency, making it clear why certain contributions are valued.

Collaboration

Understanding what contributions are most valued can lead to more effective collaboration and alignment on goals.

Constructive Criticism

Qualitative feedback can highlight areas for improvement, encouraging personal and professional growth.

Open Dialogue

The feedback process can open lines of communication, allowing for discussions about roles, responsibilities, and expectations.

Addressing Tensions:

Community Cohesion

By addressing and resolving tensions openly, the community can become more cohesive and supportive, fostering a healthier working environment.

Conflict Resolution

The transparency and open feedback can help bring underlying tensions to the surface, allowing for constructive conflict resolution.

Mutual Understanding

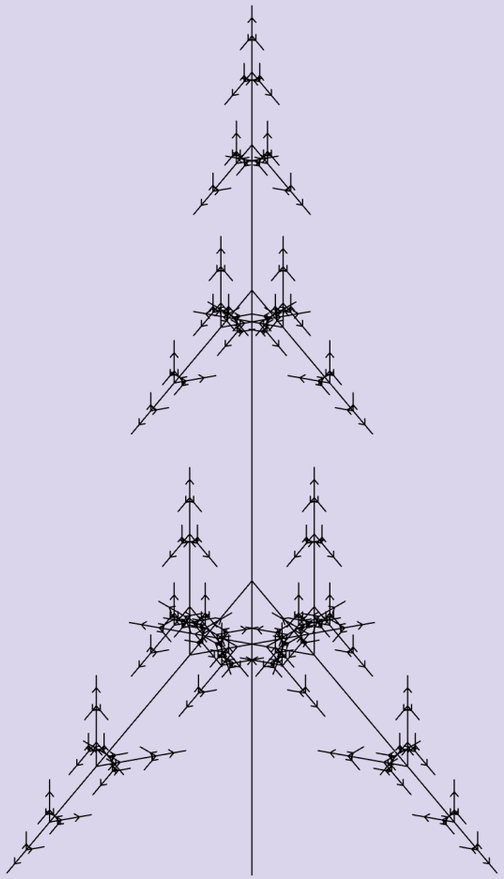
Through feedback and dialogue, participants can gain a better understanding of each other's perspectives and contributions, reducing misunderstandings.

Overall, the feedback from gift circles can significantly impact the community's culture, encouraging recognition, transparency, and open communication while addressing and resolving tensions constructively.

MECHANISM

EVOLUTIONARY GRANTS *GAMES*

09



Good at

1. Pluralistic design
2. Capture resistance

Dependencies

Grants SubDAOs

Not good at

Low Turnout

BEST FOR CONTINUALLY IMPROVING CAPITAL ALLOCATION

TL;DR

INVENTED BY DAO MASONS

Grant Ships is an “evolutionary grants game” where subDAOs (Grant Ships) compete to effectively distribute funds within any ecosystem. The process begins with electing and funding Grant Ships and a game facilitator team. Each round, Grant Ships receive capital, evaluate applications, and distribute funds. They report their activities, which the ecosystem community then ranks through a weighted token vote. Successful Grant Ships get more funding in subsequent rounds, while underperforming ones may be replaced. This system emphasizes pluralism, accountability, and adaptive improvement.

WHO SHOULD USE IT?

The customer is an ecosystem such as a DAO or large grants program that can recruit and field multiple such Ships. It is a useful tool for compressing governance overhead and fractalizing funding from large sources

Grant Ships is ideal for subDAOs within an ecosystem aiming to receive and distribute funds for ecosystem projects. It suits teams seeking to prove their efficiency in managing and allocating resources, as well as communities interested in fostering pluralism, accountability, and adaptive improvement through a competitive and evolutionary grants mechanism.

BEST WHEN COMBINED WITH OTHER MECHANISMS...

Meta Grants Framework

Evolutionary Grants Games like Grant Ships are less of a grant giving or capital allocation framework, and more of a Meta grant framework. Instead of designing a grants program, Grant Ships allows many grants programs to co-exist and compete for funding within the same ecosystem.

ATTRIBUTES

Accountability

Grant Ships report their activities and are ranked by the community.

Pluralism

Multiple subDAOs participate in the ecosystem.

Adaptive Improvement

Successful Grant Ships receive more funding in future rounds.

Competitive Distribution

Grant Ships compete to distribute funds effectively.

Community Involvement

The community votes to rank the performance of Grant Ships.

Enhanced UX

Improved user experience with aligned data sources.

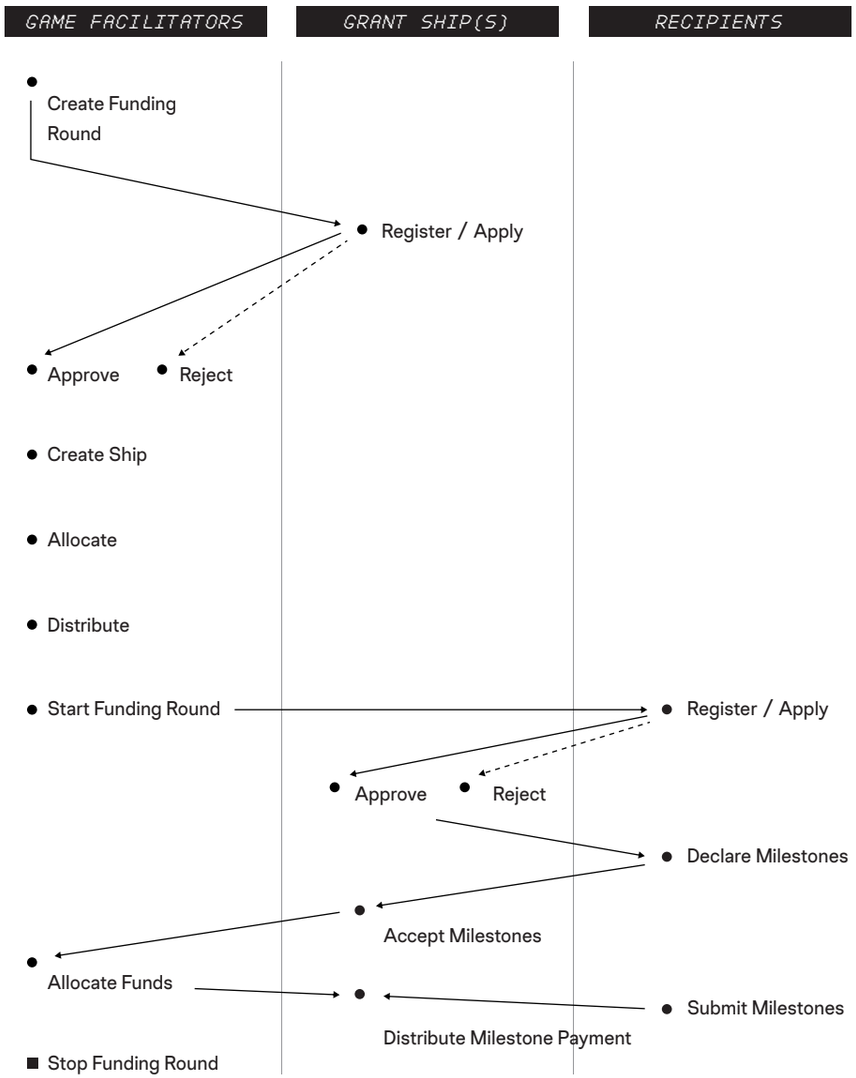
Increased Capture Resistance

Funds can only be withdrawn by specific roles to one address.

Better Record-Keeping

Improved data handling and storage for better reporting.

ROLES AND MAJOR ACTIONS



STEP BY STEP

1. Create Funding Round

Then Grant Ships (grant SubDAOs) are invited to apply.

2. Allocate

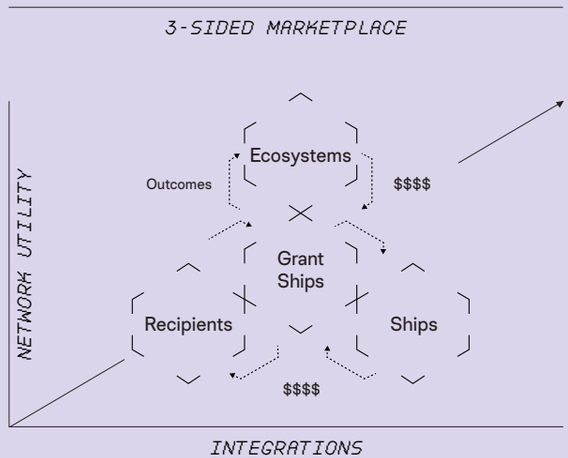
Individual Grant Ships will compete to allocate capital against each other.

3. Reporting

Grant Ships report their activities.

4. Ranking

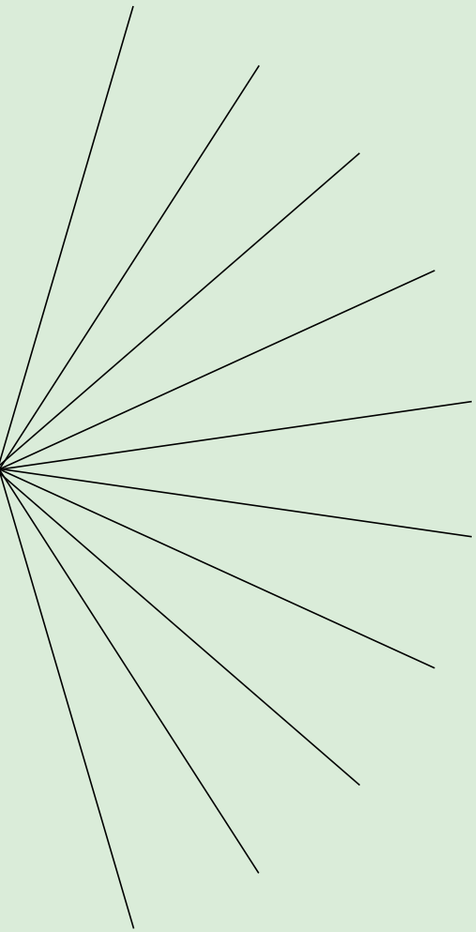
The community ranks Grant Ships through a weighted token vote, influencing future funding allocations.



MECHANISM

ASSURANCE CONTRACTS

10



BEST AT KICKSTARTING PROJECTS

Good at

Funding projects that need to be kickstarted

Dependencies

Clear goals

Not good at

1. Low engagement fundraises
2. Projects that require ongoing funding

TL;DR

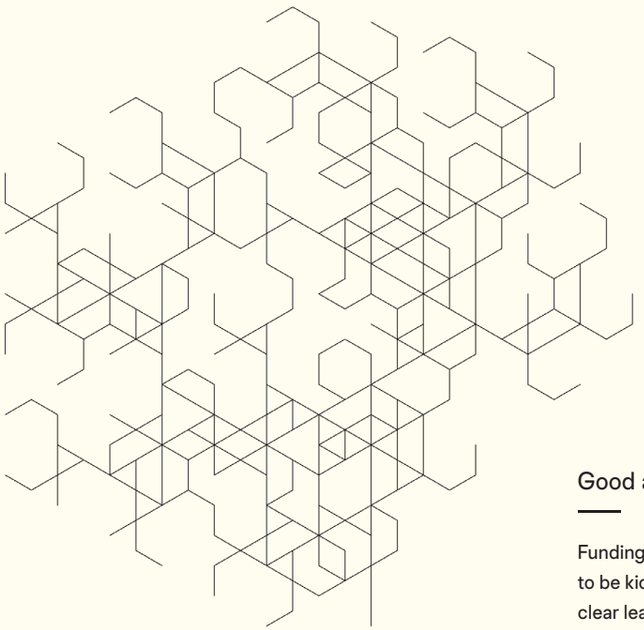
INVENTED BY GORDON TULLOCK

An Assurance Contract is where people agree to contribute money to a project, but only if enough others also commit to funding it. If the project meets its funding goal, everyone pays their pledged amount, and the project goes ahead. If the goal isn't met, the project is canceled, and no one has to pay. This way, contributors are assured that their money will only be used if there are sufficient funds to complete the project.

MECHANISM VARIANT

DOMINANT ASSURANCE CONTRACTS

11



BEST AT KICKSTARTING PROJECTS

Good at

Funding projects that need to be kickstarted and with clear leadership and aligned incentives

Dependencies

Clear goals and charismatic leader

Not good at

1. Low engagement fundraises
2. Projects that require ongoing funding

TL;DR

INVENTED BY ALEX TABBARROK

A Dominant Assurance Contract is a variant of an assurance contract with additional incentives. People pledge money with the promise that if the project doesn't get enough funds to proceed, they will get their money back, plus a bonus. This bonus comes from the project organizer and serves as an extra incentive to encourage people to contribute, making it a smart choice to pledge money regardless of what others do.

WHO SHOULD USE IT?

Assurance Contracts and Dominant Assurance Contracts should be used by project organizers and fundraisers who are seeking to overcome the free-rider problem and ensure sufficient participation in funding public goods or collective projects. They are particularly useful for crowdfunding campaigns, community initiatives, and other collective endeavors where reaching a funding threshold is critical for project viability. By offering a financial incentive to contributors if the funding goal isn't met, organizers can significantly increase the likelihood of achieving the required funding.

WHO USES IT?

Public Radio and Television

Assurance Contracts are often used in fundraising campaigns for public radio and television. Stations pledge to provide programming if they reach a certain funding threshold.

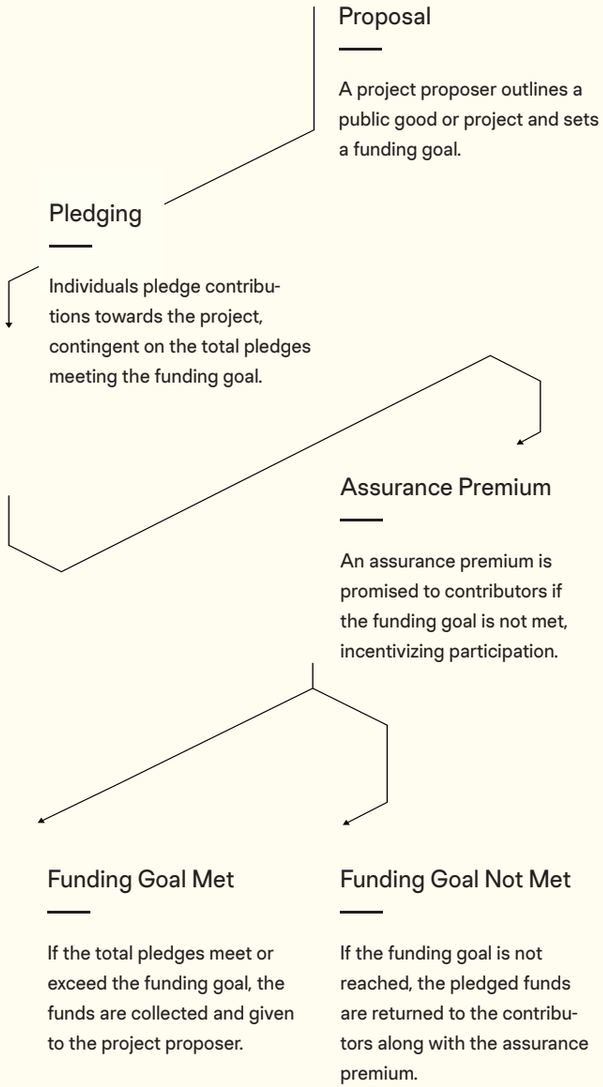
Kickstarter

Kickstarter operates similarly to an assurance contract. On Kickstarter, project creators set a funding goal and a deadline. People pledge money to support the project, but their contributions are only collected if the total pledges meet or exceed the funding goal by the deadline. If the goal is not met, no money is collected, and backers are not charged.

Environmental Campaigns

In 1999, the Save the Redwoods League used an assurance contract to secure the purchase of the Headwaters Forest in California. The campaign required raising a significant amount of money from donors, which was only collected once the target amount was reached.

HOW DOES IT WORK?



FUNDING STRATEGY

Who is eligible to receive funding from the pool?

In a Dominant Assurance Contract, the project proposer(s) are eligible to receive funding from the pool if the contract's conditions, such as reaching a sufficient number of pledged contributions, are met. If these conditions are not met, the contributors are refunded their money, and they may also receive an assurance premium as an incentive for their initial pledge.

Who is eligible to allocate?

In a Dominant Assurance Contract, the eligibility to allocate typically lies with the contributors who pledge funds to the project. These contributors decide whether to pledge their money, effectively allocating funds toward the project if the funding goal is reached. If enough pledges are made to meet the contract's conditions, the project receives the funding; otherwise, the funds are refunded to the contributors, along with any assurance premium.

How are payouts calculated?

In dominant assurance contracts, payouts are calculated based on whether the funding goal is met. If the required amount of contributions is pledged, the project proposer receives the pledged funds to carry out the project. If the goal is not met, the pledged funds are returned to the contributors, often with an additional assurance premium paid to them as an incentive for their participation. The premium compensates contributors for the risk they took in pledging to a potentially unfunded project.

How is the pool distributed?

In dominant assurance contracts, the pool is distributed based on the project's funding outcome. If the funding goal is met, the entire pool of pledged contributions is given to the project proposer to carry out the project. If the funding goal is not met, the pool is returned to the contributors, with each contributor receiving their pledged amount plus an assurance premium. This premium serves as an incentive for their participation, compensating them for the risk they took in pledging to the project.

The funds can be sent as an ETH or ERC20 txn. In Allo, the funds can be distributed it to the accepted projects in one transaction, or via stream protocols like Superfluid or drips.

THE GAME THEORY

A Dominant Assurance Contract is a mechanism in game theory designed to overcome the free-rider problem often encountered in the provision of public goods. In a traditional assurance contract, individuals pledge to contribute to a project only if enough others do the same, ensuring that the project will only proceed if it is sufficiently funded. However, this can still lead to suboptimal outcomes if individuals choose to wait for others to contribute first, hoping to free-ride on others' contributions.

To address this, the Dominant Assurance Contract introduces an additional incentive structure. The organizer promises to compensate contributors if the project fails to reach its funding goal, typically by offering a bonus or refund that exceeds their initial contribution. This turns the decision to contribute into a dominant strategy, meaning that contributing is the best option regardless of what others do. Even if the project does not go ahead, contributors are better off than if they had not contributed, due to the compensation offered.

By aligning individual incentives with the collective goal, dominant assurance contracts ensure higher participation rates. Participants are motivated to contribute because they are guaranteed to benefit either from the successful completion of the project or from the compensation if the project fails. This mechanism effectively solves the coordination problem and leads to the successful provision of public goods that might otherwise be underfunded.

AN ASSURANCE GAME

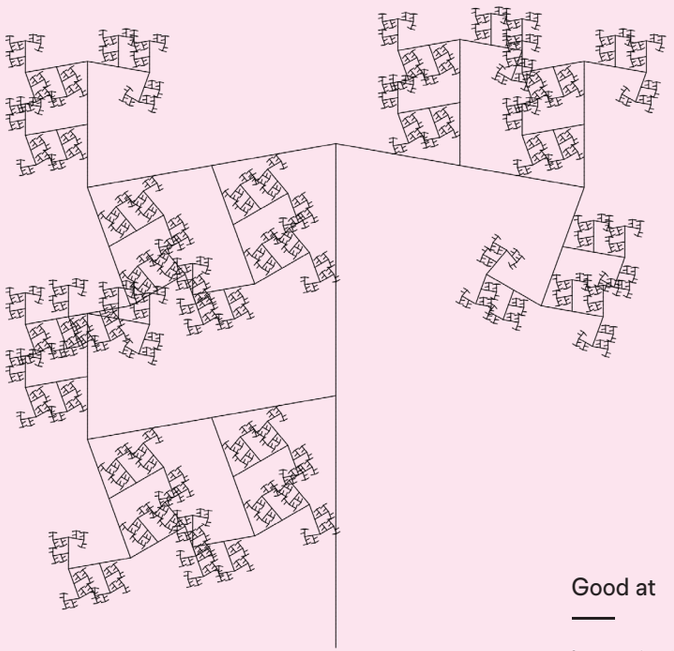
AGENT I / OTHERS	DO NOT CONTRIBUTE	CONTRIBUTE
Do Not Contribute	(0,0)	(0,0)
Contribute	(0,0)	(900,900)

A DOMINANT ASSURANCE CONTRACT

COLUMN PLAYER	DO NOT CONTRIBUTE	CONTRIBUTE
Do Not Contribute	(0,0)	(0, Bonus)
Contribute	(Bonus, 0)	(900,900)

SOCIAL MEDIA BASED *CAPITAL ALLOCATION*

12



GOOD AT BEING WHERE THE FLOW OF ATTENTION IS

Good at

Leveraging torrents of attention social media provides

Dependencies

Social Graph

Not good at

Funding non-visible things

TL;DR

What kind of onchain coordination would you be able to create if you had an onchain social graph and distribution to tens of thousands of active users?

In 2024, people worldwide spend an average of approximately 2 hours and 23 minutes per day on social media. The design space of web3 social media is exciting because there are lots of opportunities to leverage open social graphs and the attention that people spend on social media. What will we design now that we can program our values into social media?

WHO SHOULD USE IT?

Software developers who want distribution into active social media communities or need a social graph can leverage web3 social networks to build their killer onchain coordination networks.

WHO USES IT?

Farcaster Frames

Farcaster Frames are interactive elements embedded within Farcaster posts, allowing users to create and engage with dynamic content such as polls, live feeds, and interactive galleries. As of mid 2024, there are over 100 applications built using Farcaster Frames.

Quadratic Lenster

In the summer of 2023, we built microtips with Quadratic Funding matching directly into Lenster. The pilot round which allowed for QF tips on top of posts about #ethcc received 581 contributions from 181 unique contributors and allocated $14.9k (18.9k wMATIC).

IDriss Twitter Plugin

During GG18, IDriss released a browser extension that allowed users to contribute to Gitcoin Grants directly on Twitter.

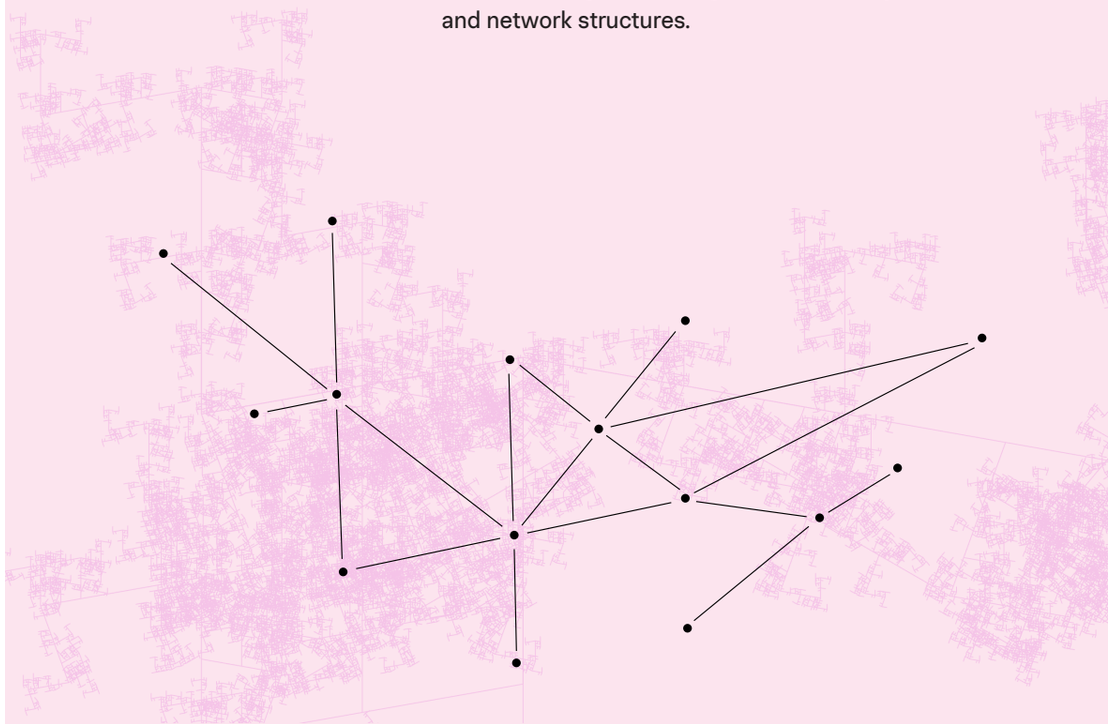
By replacing likes with microtips (augmented by Quadratic Funding matches), creators are now earning a living based on the public goods they create.

Rounds.wtf

Rounds.wtf is an experiment in doing capital allocation in Farcaster channels. Using rounds.wtf, channel participants can stimulate activity in their channel by providing tokenized incentives. And participants can tip creators of posts.

A social graph is a digital representation of the relationships and interactions between individuals within a social network. It maps out the connections between people, such as friendships, family ties, professional relationships, and other social interactions.

This graph helps social media platforms and other online services understand user behavior, suggest connections, and provide personalized content. Essentially, it visualizes how users are linked to each other, enabling better insights into social dynamics and network structures.



SOCIAL TRUST --> VALUE CREATION

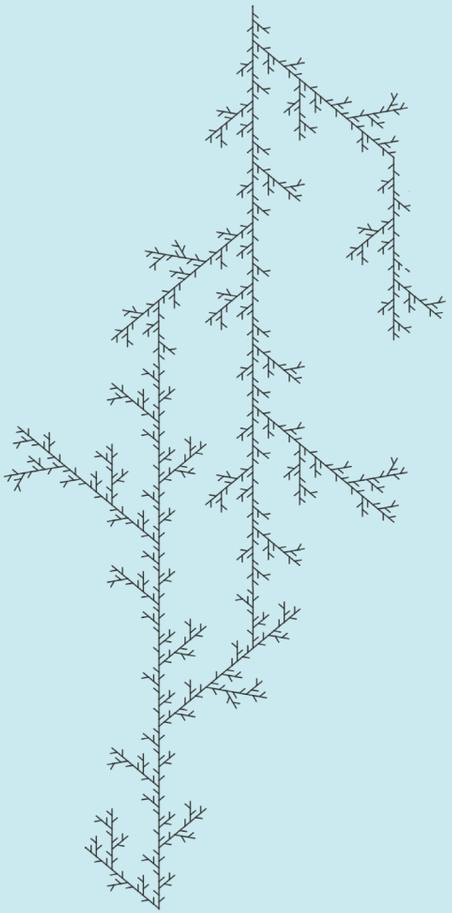
Using Social Graphs, anyone can build advanced capital allocation networks that significantly enhance funding processes and investment efficiency. One possible example is a decentralized venture network that leverages social graphs to map relationships between entrepreneurs, startups, and investors. This network could facilitate precise matchmaking, ensuring that capital is directed to startups with the highest potential based on trust and previous successes within the network. It would streamline the investment process by enabling investors to identify promising ventures through trusted connections and shared interests.

Another innovative application is peer-to-peer lending platforms that utilize social graphs to create trust-based lending networks. These platforms would allow individuals to lend money to peers within their social network or extended community, reducing default risks and fostering a sense of community-based financial support. Additionally, social graphs can enhance crowdfunding efforts by identifying potential backers within a project's social network, increasing engagement and funding success rates.

In summary, these networks leverage the power of social connections and trust to optimize capital distribution, improve funding outcomes, and promote collaborative financial ecosystems.

MECHANISM

DIRECT-TO-CONTRACT 13



Good at

1. Incentivizing growth
2. Definition of important domains

Dependencies

1. Clear specifications of what to incentivize
2. Onchain data about important events.

Not good at

Manipulation of inceitives

GOOD AT PROVIDING VERY MODULAR INCENTIVES TO EVM EVENTS

TL;DR

POPULARIZED BY BOOST (FORMERLY RABBITHOLE)

Direct-to-Contract rewards are incentives that are automatically distributed to users who complete specific tasks or achievements onchain.

These rewards are sent directly to users' smart contract addresses, ensuring a decentralized and transparent distribution process. This mechanism encourages participation and engagement by providing immediate and verifiable compensation for contributions and accomplishments.

WHO SHOULD USE IT?

Communities who want to incentivize certain activity within their ecosystems.

Service Provider Discovery

Direct-to-Contract Incentives are open access. So SPs can independently and concurrently test strategies at low cost, proving viability in the system and disrupting competitors.

Network-Wide Campaigns

Challenges represent some of the most interesting gamification campaigns in incentives DTC infrastructure allows challenges to take place across dozens of projects.

Standardized Data

Structurally consistent infrastructure means incentive data is standardized across each action type. This allows easy comparison, streamlined analysis, and accessible public data.

Modularity

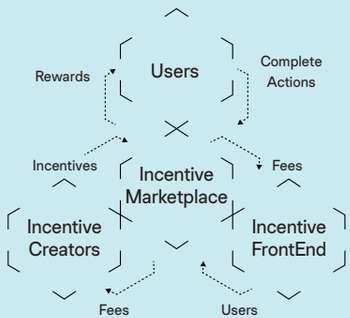
When built on scalable infrastructure, this degree of modularity creates a new design space and a playground for innovation in network-level incentives.

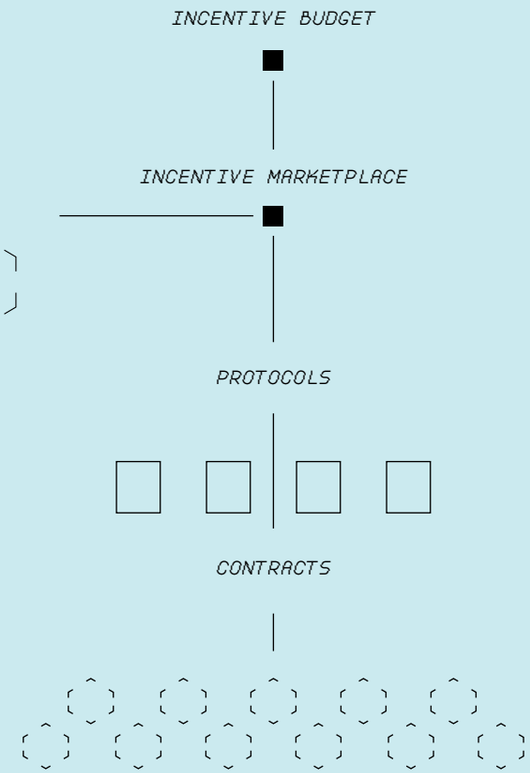
One to Many Incentives

Incentives can be created for strategic pairs (ETH/stETH), validated across 1 of X Dexes on the network.

DIRECT-TO-CONTRACT INCENTIVES PROGRAMS

Quest Protocol introduces open-source plugins that establish a network-wide distribution infrastructure. This infrastructure allows for the scalable distribution of incentives across an entire ecosystem. As a result, networks can now strategically implement objective-based approaches rather than relying on protocol-based strategies for the first time.





Thanks to @t__norm for spelling this out for us!

MECHANISM

IMPACT ATTESTATIONS & CERTIFICATES

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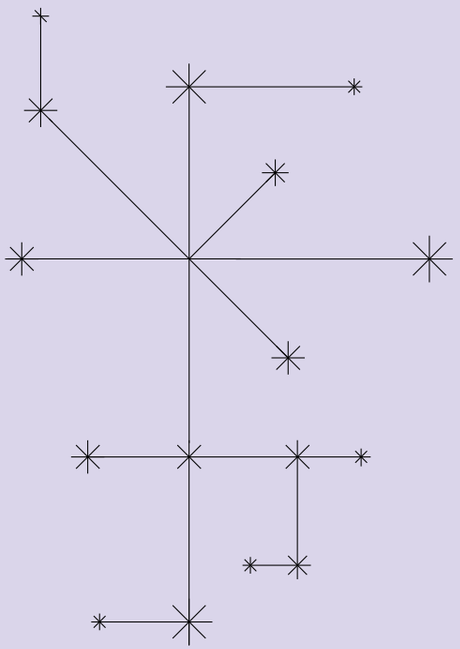


Good at

1. Rewarding some types of value creation
2. Transparency and verifiability domains

Dependencies

Accurate data collection and methodological rigor

Not good at

1. Predicting future impact
2. Addressing all nuances

GOOD AT CREATION OF MARKETS FOR IMPACT

TL;DR

An Impact Attestation is a formal declaration or documentation that verifies the positive effects or outcomes of a specific project, action, or intervention. It often includes quantitative and qualitative data to support claims of impact, providing evidence that the initiative has achieved its intended goals and benefited its target audience or community. This process is crucial for transparency, accountability, and demonstrating the value of investments in public goods or social projects.

An Impact Certificate is a transferrable financial asset that represents a financial stake in the impact. Impact Certificates are built upon Impact Attestations, and have the important function that they are owned by the funders who can claim the impact they bought, i.e. it is also a signalling device for the funders (could be used for industry norms, e.g. it becomes an industry norm to buy XX “impact” every year, or for proving to comply with some regulation, esp. regarding nature regeneration, for the prestige, etc.).

WHO SHOULD USE IT?

DAOs can benefit from Impact Attestations to demonstrate the effectiveness of their programs, ensure accountability to donors and supporters, and guide strategic decision-making for future investments. Additionally, Impact Attestations can be valuable for researchers to assess and compare the outcomes of different interventions and promote evidence-based practices.

WHO IS USING IT?

The Gates Foundation

The Gates Foundation uses Impact Attestations to evaluate the effectiveness of its global health initiatives, ensuring that their funding leads to measurable improvements in health outcomes.

The Rockefeller Foundation

The Rockefeller Foundation employs Impact Attestations to validate the success of its climate resilience projects, demonstrating the tangible benefits to communities affected by climate change.

Gavi, the vaccine alliance

Gavi uses Impact Attestations to measure the success of its vaccination programs in low-income countries, verifying that millions of children have been immunized against deadly diseases and that vaccination coverage rates have increased significantly.

THE GAME THEORY

The Strategic Interaction of Stakeholders

In a game theoretic context, Impact Attestations can be seen as a strategic tool used by various stakeholders to align incentives and ensure cooperation. For funders, such as governments, non-profits, and philanthropic organizations, the attestation acts as a verification mechanism to ensure that their resources are being used effectively. By providing transparent, evidence-based reports on the outcomes of funded projects, Impact Attestations encourage recipients to align their actions with the desired outcomes. This creates a scenario where both parties benefit: funders achieve their social or policy objectives, and recipients gain continued support and credibility.

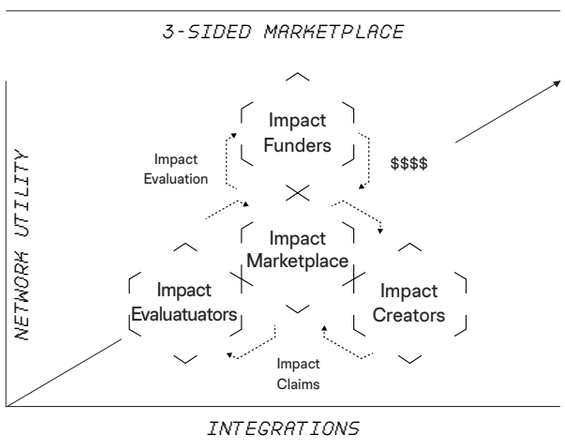
Signaling and Credibility

Impact Attestations also function as a signaling mechanism. Organizations that can provide credible attestations signal to potential funders and stakeholders their capability and effectiveness. This helps in differentiating them from less effective organizations, thereby attracting more funding and support. For funders, requiring impact attestations from grantees reduces the information asymmetry, as it provides a reliable means to assess the true impact

of their investments. This signaling leads to a more efficient allocation of resources, as funders can identify and support the most effective initiatives.

Risk Management and Assurance

Funders face the risk of their resources being misallocated or not achieving the desired impact. By requiring Impact Attestations, funders shift some of this risk onto the recipients, who must then prove the efficacy of their projects. This creates an environment where recipients are incentivized to design and implement high-quality interventions that can withstand rigorous evaluation. Additionally, Impact Attestations serve as a form of assurance for funders, providing them with the confidence that their investments are yielding the intended social benefits. This assurance can encourage further investment and long-term partnerships, fostering a sustainable ecosystem of funding and impactful social initiatives.



MECHANISM

UNIVERSAL BASIC *INCOME* 15

Good at

Providing financial footing to citizens of your ecosystem

Dependencies

Ongoing source of funds
Citizen Registry

GOOD AT PROVIDING A FINANCIAL FOOTING TO CITIZENS

TL;DR

INVENTED BY THOMAS PAINE

Universal Basic Income is a social welfare program where all citizens receive a regular, unconditional sum of money from the government, regardless of their income, employment status, or wealth. The primary goal is to reduce poverty and inequality, provide financial security, and support economic stability by ensuring that everyone's basic needs are met.

WHO SHOULD USE IT?

Universal Basic Income should be considered by policymakers seeking to address economic inequality, reduce poverty, and provide a safety net for all citizens, especially in economies facing job automation, unemployment, or underemployment. It can also benefit individuals in precarious employment situations, ensuring everyone has a basic level of financial security regardless of their work status.

WHO IS USING IT?

Finland (2017-2018)

Finland conducted a two-year experiment providing 2,000 unemployed individuals with a monthly payment of €560, unconditionally, to study the effects on employment and well-being.

Ontario, Canada (2017-2019)

Ontario launched a pilot program offering a basic income to 4,000 low-income individuals aimed at understanding the impact on health, education, and employment.

Stockton, California (2019-2021)

Stockton's SEED program provided 125 residents with $500 per month for two years, with results showing increased financial stability, improved mental health, and higher full-time employment rates.

THE GAME THEORY

In game theory, UBI can be viewed as a mechanism to shift the Nash equilibrium in a society. Without UBI, individuals might compete intensely for limited resources, often leading to suboptimal outcomes like poverty and inequality. UBI aims to change this dynamic by ensuring a basic level of resources for everyone, potentially leading to more cooperative behaviors and reducing the competition for survival.

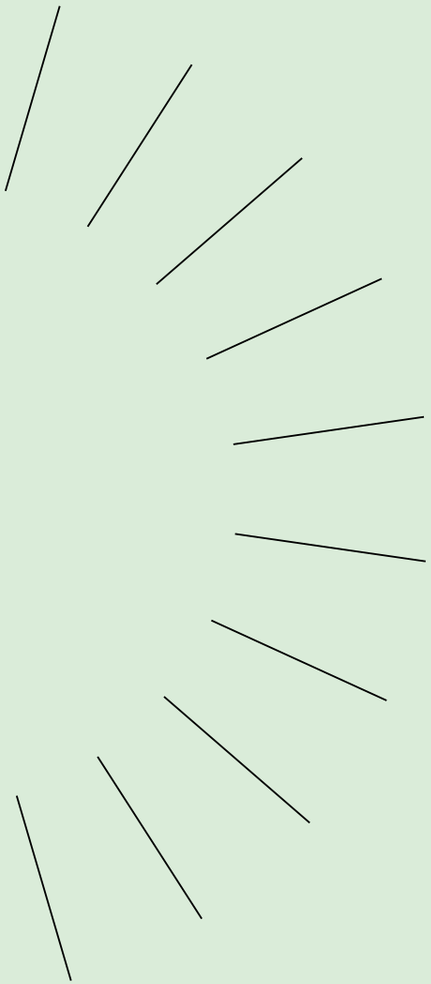
In a UBI, the assurance of a basic income reduces the desperation that drives individuals to accept poor working conditions or exploitative wages. This could result in a new equilibrium where employers must offer better wages and working conditions to attract and retain employees, as workers are not forced to take any job out of necessity. This change can lead to a more balanced labor market, where power is more evenly distributed between employers and employees.

UBI can impact social cooperation and trust. In game theory, trust and cooperation are crucial for achieving optimal outcomes in repeated interactions. By providing a financial safety net, UBI may reduce the economic stress that often drives short-term, self-interested behaviors, encouraging long-term cooperative strategies instead. As individuals feel more secure, they might be more willing to invest in education, entrepreneurship, and community engagement, fostering a more inclusive and resilient economy.

MECHANISM

COOKIE JAR

16



GOOD AT BOTTOMS-UP FUNDING

Good at

1. Reducing governance overhead
2. Creating bottoms-up leadership

Dependencies

Clear data about membership in a group.

Not good at

1. Low trust environments
2. High funding amounts

TL;DR

INVENTED AT RAID GUILD

Cookie Jar is a smart contract that contains a small amount of tokens in it that anyone in a DAO can withdraw from. The withdrawer must leave a note saying what the tokens are going to be used for, and DAO members can upvote/downvote those notes.

Cookie Jar is an optimistic governance mechanism that relies on high social trust and low amounts of funds at stake. It helps DAOs reduce governance overhead (no one has to vote on Cookie Jar proposals) and tracks contributions transparently.

WHO SHOULD USE IT?

People who want to reduce governance overhead and create more bottoms-up leadership should use Cookie Jar.

USE CASES

Want to host a party?

Don't make a proposal that the whole DAO has to vote on. Just take the money out of the Cookie Jar.

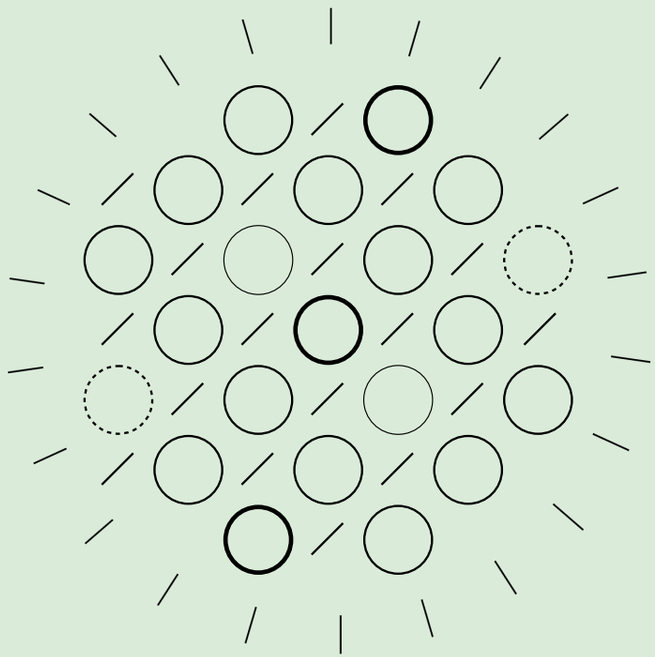
Went above and beyond at work last week?

Grab some $$$ from the Cookie Jar and treat yourself.

Spend $20 on a saas tool?

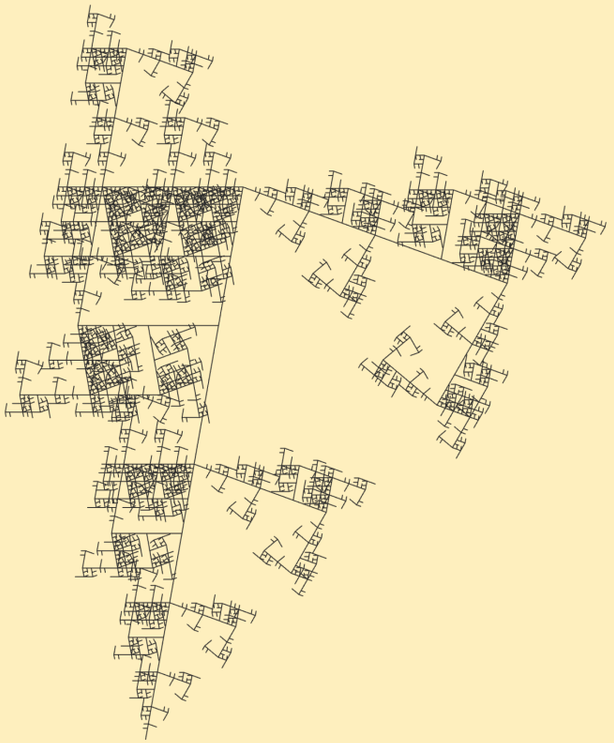
Don't ask your boss for the funding. Withdraw it from the Cookie Jar.

WHO IN YOUR DAO DESERVES A TREAT?



MECHANISM

COMMUNITY *CURRENCIES* 17



Good at

1. Stimulating local economies
2. Creating economic resilience

Dependencies

1. Community buy-in
2. Trust and legitimacy
3. Economic health

Not good at

1. Wide aceptance
2. Scalability

GOOD AT COORDINATING AROUND LOCAL GOODS & VALUES

TL;DR

POPULARIZED BY MICHAEL UNTERGUGGENBERGER

Community Currencies are local currencies designed to complement the national currency within a specific community or region. They aim to boost local economic activity, encourage spending within the community, and strengthen social ties. By circulating only within a defined area, these currencies help keep money within the community, support local businesses, and often promote sustainable and ethical economic practices.

WHO SHOULD USE IT?

Community Currencies are best suited for use by geographically or memetically local communities seeking to strengthen their local economies, support small businesses, and foster social cohesion. They are particularly beneficial in areas looking to enhance economic resilience, promote sustainable practices, and encourage community engagement. Community currencies can be valuable for DAOs towns, cities, and regions aiming to keep wealth circulating locally and reduce reliance on national currencies.

WHO IS USING IT?

Bristol Pound (UK)

Launched in 2012, the Bristol Pound is a local currency designed to support independent businesses in Bristol. It can be used in physical and digital forms, promoting local spending and sustainability.

Ithaca HOURS (USA)

Introduced in 1991 in Ithaca, New York, Ithaca HOURS is one of the oldest and largest local currency systems in the U.S. One HOUR is valued at ten dollars, and the currency can be used for various goods and services within the community.

BerkShares (USA)

Started in 2006 in the Berkshires region of Massachusetts, BerkShares are a local currency aimed at boosting the local economy. Businesses and residents can use BerkShares to support local enterprises, with over 400 businesses accepting them.

THE GAME THEORY

Game Theory and Community Currencies: Incentives and Cooperation

The success of a community currency hinges on the cooperation and participation of local businesses and consumers. From a game-theoretic perspective, individuals are incentivized to use the currency if they believe others will also participate. This creates a positive feedback loop where increased usage by some members encourages others to join, enhancing the overall utility and acceptance of the currency. The key to initiating this loop is ensuring enough initial buy-in and trust in the system's value, akin to achieving a critical mass in a coordination game.

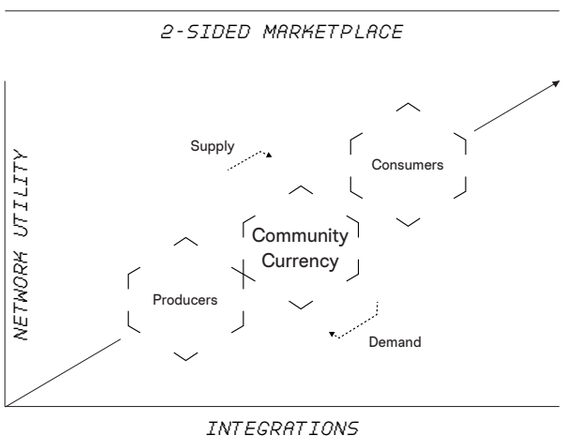
Trust and Reciprocity in Community Currency Systems

Trust and reciprocity are fundamental components in the game theory of Community Currencies. Participants must trust that the currency will be widely accepted and retain its value over time. This trust can be modeled as a repeated game, where ongoing interactions between participants foster mutual trust and cooperation. In such a setting, businesses and consumers engage in reciprocal behavior: businesses accept the currency, expecting customers to use it, and vice versa. Successful community currencies

often employ strategies to build and maintain this trust, such as transparent governance, community involvement in decision-making, and backing the currency with tangible assets or services.

Overcoming Free-Rider Problems and Ensuring Stability

Community Currencies face potential free-rider problems, where some individuals might benefit from the system without actively participating or contributing. Establishing clear rules and ensuring consistent enforcement can help maintain the currency's integrity and stability, creating a sustainable system where all participants benefit from mutual cooperation and contribution.

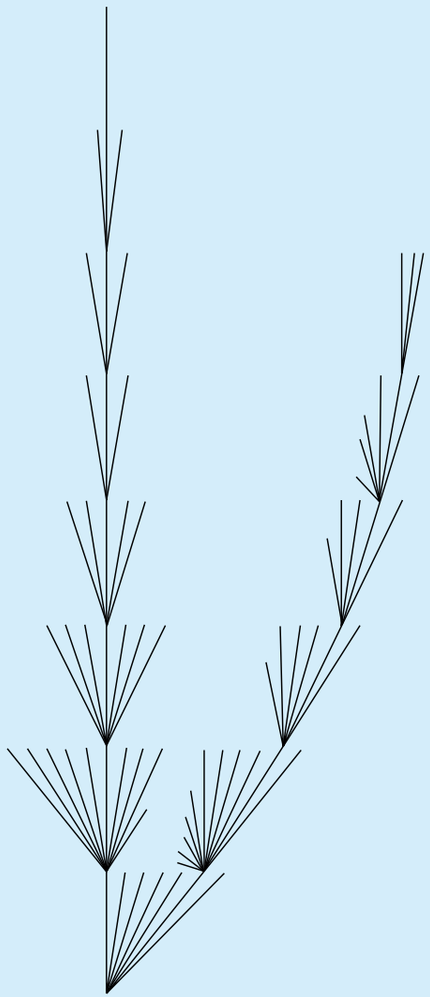


COMMUNITY CURRENCIES 138

MECHANISM

FUTARCHY

18



GOOD AT CREATING MARKETS FOR CAPITAL ALLOCATION DECISIONS

Good at

1. Reducing governance overhead
2. Creating bottoms-up leadership

Dependencies

1. Onchain data
2. Prediction market

TL;DR

POPULARIZED BY ROBIN HANSON

Futarchy is a form of governance where policies are chosen based on prediction markets. In a futarchy, elected representatives define and measure the metrics that reflect the well-being of the population. Then, prediction markets are used to forecast the impact of proposed policies on these metrics. The policies predicted to have the best outcomes are implemented. This system aims to combine democratic values with the informational efficiency of markets to make better-informed decisions.

WHO SHOULD USE IT?

Futarchy is best suited for organizations, governments, or communities seeking to make evidence-based decisions using the predictive power of markets. It is particularly useful in contexts where there is significant uncertainty about the outcomes of various policies and where stakeholders value empirical, data-driven approaches to governance. Futarchy can be effective for entities that prioritize optimizing for well-defined metrics of well-being and are open to innovative governance models that leverage collective intelligence.

PREDICT THIS

Predictive Power

Futarchy relies on prediction markets, which have been shown to outperform traditional forecasting methods by aggregating diverse information from multiple participants with financial incentives to be accurate.

Outcome-based governance

Unlike traditional governance, which often relies on elected officials' judgment, Futarchy bases decisions on measurable outcomes of well-being, determined and agreed upon by the electorate.

Founding Story

The concept was proposed by economist Robin Hanson in 2000, aiming to combine democratic values with the efficiency of market mechanisms to improve policy decisions.

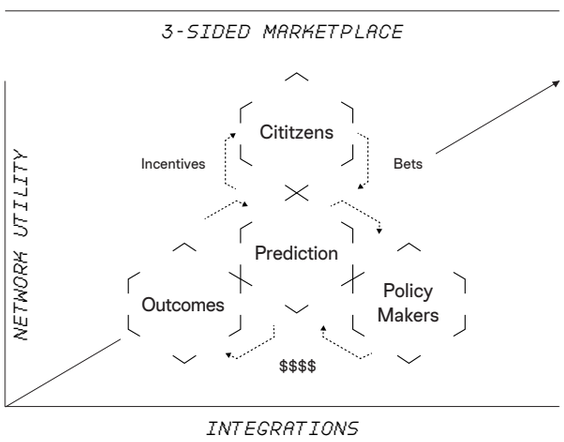
THE GAME THEORY

Futarchy leverages the principles of game theory to enhance decision-making processes by aligning incentives with accurate predictions. At its core, Futarchy relies on prediction markets, where participants buy and sell shares based on their expectations of future outcomes. These markets harness the collective wisdom of participants, who have a financial stake in predicting correctly, thus incentivizing them to utilize all available information and expertise. This setup ensures that the market prices reflect a consensus forecast, which theoretically represents the best possible prediction of future events, reducing the likelihood of biases or uninformed decisions.

In Futarchy, the interplay of incentives is crucial. Participants are motivated to provide truthful information because their financial gains or losses depend on the accuracy of their predictions. This creates a self-correcting mechanism where misinformation or poor predictions are penalized, and accurate, informed predictions are rewarded. The competitive nature of prediction markets, a fundamental aspect of game theory, ensures continuous improvement of the information available to decision-makers. As more participants engage in the market, the aggregate knowledge increases, leading to more reliable and precise forecasts.

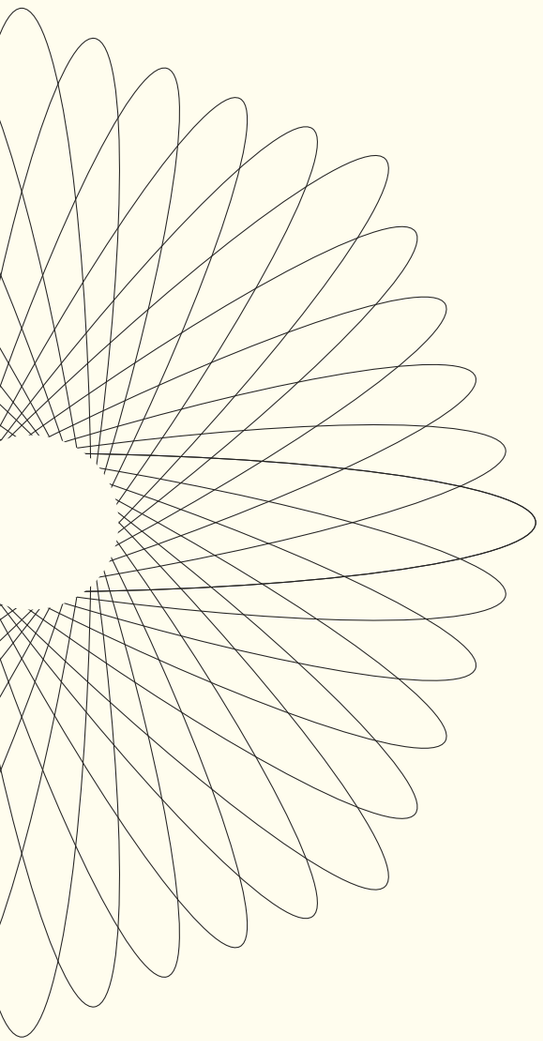
Futarchy addresses common issues in traditional governance, such as information asymmetry and the principal-agent problem. In traditional systems,

decision-makers might not have access to all relevant information or may act in their self-interest rather than the public good. In contrast, Futarchy decentralizes the decision-making process, distributing it across a diverse group of market participants. This diffusion of power and reliance on market-driven predictions helps mitigate the risks associated with centralized decision-making and the potential for corruption or misalignment of interests. By using game theory to structure these markets, Futarchy aims to create a more efficient, transparent, and accountable governance system.



ANGEL *INVESTMENT*

19



GOOD AT STIMULATING FOR PROFIT ENTREPRENEURSHIP

Good at

1. Reducing governance overhead
2. Creating bottoms-up leadership

Dependencies

For-profit projects to invest in

Not good at

1. Non profit projects
2. Projects without value capture

TL;DR

Angel Investments are financial contributions made by affluent individuals, known as angel investors, to early-stage startups in exchange for equity ownership, convertible debt, or tokens.

These investments provide crucial funding to startups that may struggle to secure traditional financing. Angel Investors not only offer capital but often bring valuable expertise, mentorship, and industry connections to help startups grow and succeed.

WHO SHOULD USE IT?

Angel Investment is ideal for early-stage startups and entrepreneurs who need capital to launch or scale their businesses but may not qualify for other types of loans. These startups often have innovative ideas or products but require financial support and mentorship to navigate the challenges of early growth. Angel Investment is particularly beneficial for companies seeking not only funding but also strategic guidance and networking opportunities from experienced investors.

FAMOUS ANGEL INVESTORS

Esther Dyson

Esther Dyson is a prominent angel investor and entrepreneur with investments in startups such as Flickr, 23andMe, and Evernote.

Ron Conway

Ron Conway is often referred to as the "Godfather of Silicon Valley." He has invested in numerous successful startups, including Google, Facebook, and Twitter.

Chris Sacca

Chris Sacca is the founder of Lowercase Capital and is known for his early investments in companies like Twitter, Uber, and Instagram.

NOVEL ANGEL INVESTMENT EXPERIMENTS:

Equity Crowdfunding

Platforms like SeedInvest and Republic let startups raise funds from a large number of smaller investors, democratizing access to investment opportunities and allowing non-accredited investors to participate in early-stage funding.

Revenue-Based Financing

This model offers startups funding in exchange for a percentage of future revenue, providing a non-dilutive alternative to traditional equity financing and aligning investor returns with company performance.

Syndicates

AngelList Syndicates enable lead investors to pool capital from multiple backers, allowing smaller investors to participate in deals they otherwise couldn't access while diversifying risk across many investors.

Composable Funding

Angel Investments can be composed with other web3 capital allocation protocols to provide novel ways of gaining exposure to the ecosystem.

Rolling Funds

Platforms like AngelList Rolling Funds allow investors to commit smaller amounts of capital on a quarterly basis, providing continuous funding to startups and more flexible entry points for investors.

MECHANISM

MOLOCH DAO

20

Good at

Cohering a group of people around a treasury

Dependencies

Funding sources and engaged community

Not good at

Minimizing governance

BEST FOR MINIMUM VIABLE DAOS

TL;DR

INVENTED BY AMEEN SOLEMANI

The original MolochDAO was a decentralized autonomous organization (DAO) focused on funding and advancing Ethereum infrastructure and public goods. It operates with a minimal governance model to reduce complexity and streamline decision-making. Members contribute funds, which are then allocated to projects through a collective voting process. MolochDAO aimed to overcome the “tragedy of the commons” by incentivizing collaborative funding efforts within the Ethereum community.

WHO SHOULD USE IT?

MolochDAO forks are ideal for groups focused on funding and developing public goods, particularly within the Ethereum ecosystem. They are well-suited for communities and organizations seeking a streamlined, low-governance model to collaboratively allocate resources to public goods and infrastructure projects. Members who value the ability to easily exit the organization and withdraw their contributions if they disagree with its direction will find the ragequit feature particularly beneficial.

WHO USES IT?

MolochDAO

The original DAO designed to fund Ethereum infrastructure projects and public goods, known for its minimal governance and ragequit feature.

LAO

A MolochDAO-inspired organization that funds blockchain startups, providing a venture capital-like structure within a decentralized framework.

Metacartel

A MolochDAO fork focused on funding and supporting decentralized applications (dApps) and early-stage Ethereum projects.

WHAT IS RAGEQUIT?

Ragequit is a mechanism in certain DAOs, notably MolochDAO, that allows members to exit the organization and withdraw their share of the treasury at any time. This feature is designed to provide security and flexibility, enabling members to leave if they disagree with the direction of the DAO or its decisions. By offering a way out, ragequit helps mitigate risks and conflicts, ensuring that members can always reclaim their proportional share of the collective funds.

HOW HAS MOLOCHDAO EVOLVED?

MolochDAO V1

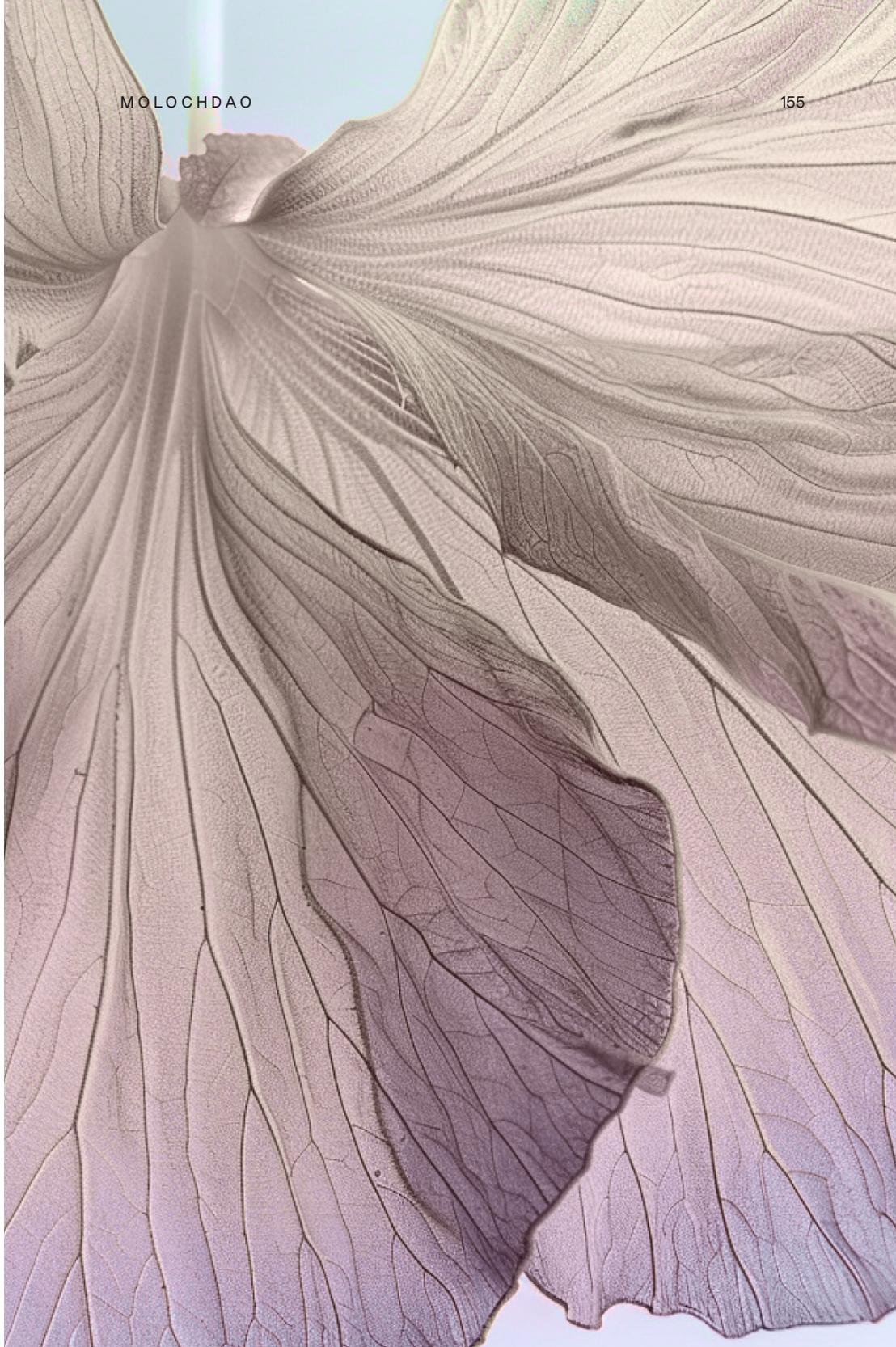
1. Launch Date: February 2019
2. Focus: Funding Ethereum 2.0 development
3. Key Features: Simple structure, ragequit mechanism, single token standard.

MolochDAO V2

1. Launch Date: March 2020
2. Focus: Enhancing flexibility and inclusivity
3. Key Features: Guild bank, multiple token support, granular permissions, improved voting and proposal mechanisms, shares and loot.

MolochDAO V3

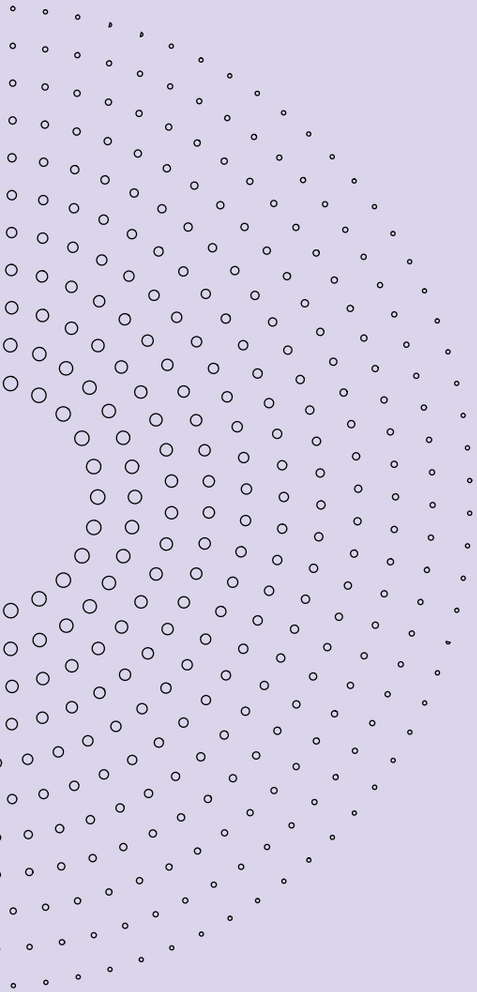
1. Launch Date: August 2021
2. Focus: Advanced governance and modularity
3. Key Features: Plugin architecture, advanced treasury management, DAO-to-DAO interactions, customizable governance modules, enhanced security features.



MECHANISM

STOKVEL

21



Good at

Creating mutual aid

Dependencies

Community buy-in

BEST FOR CREATING
MUTUAL AID

TL;DR

INVENTED IN SOUTH AFRICA

A Stokvel is a type of informal savings club or rotating credit association commonly found in South Africa. Members of a Stokvel regularly contribute a set amount of money to a common fund, which is then distributed to each member in turn. This system allows individuals to save collectively and access larger sums of money for significant expenses or investments. Stokvels also often serve as social and support networks, fostering a sense of community and mutual aid among members.

WHO SHOULD USE IT?

A Stokvel is suitable for individuals who:

Need access to lump sums

Those who might need access to larger amounts of money periodically for significant expenses like education, home improvements, or starting a business.

Value community and support

Individuals who appreciate the social and mutual support aspects of pooling resources and sharing financial responsibilities with others.

Lack access to formal banking services

Those who may not have access to traditional banking or credit facilities and need an alternative means of saving and borrowing.

Desire financial education

People interested in learning about money management within a trusted community setting.

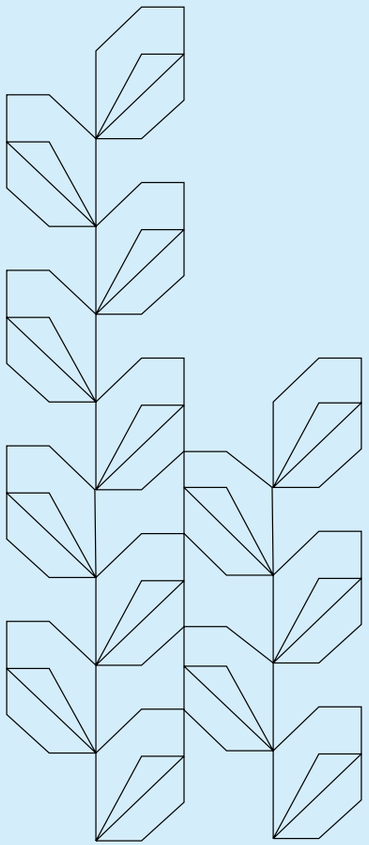
Want to save collectively

People who prefer a disciplined approach to saving with the support of a group.

MECHANISM

BUIDL GUIDL STREAMS

22



Good at

Optimistic hiring

Dependencies

Benevolent dictator

BEST FOR OPTIMISTIC HIRING

TL;DR

INVENTED BY AUSTIN GRIFFITH

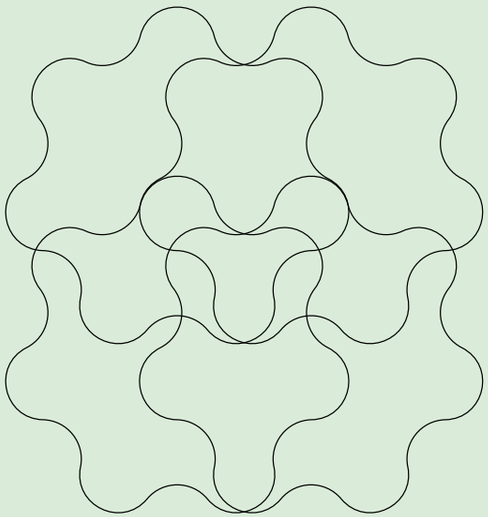
When Austin Griffith meets a new developer that he likes, he hires them by streaming them money. The streams fill up, and the developer can then "pull" the funds out and leave a note with what they worked on. Austin can then go back and see who is contributing and decide to top up (or not top up) each stream across his developer collective, the Buidl Guidl.

Buidl Guidl Streams allow Austin to give new devs $$$ without a bunch of hiring process (several rounds of interviews, ref checks). This form of optimistic funding has attracted dozens of great developers into the space.

MECHANISM

SOURCECRED

23



Dependencies

Rich contribution graph
Reliable data sources

GOOD AT MEASURING AND
REWARDING CONTRIBUTIONS
IN OSS PROJECTS

TL;DR

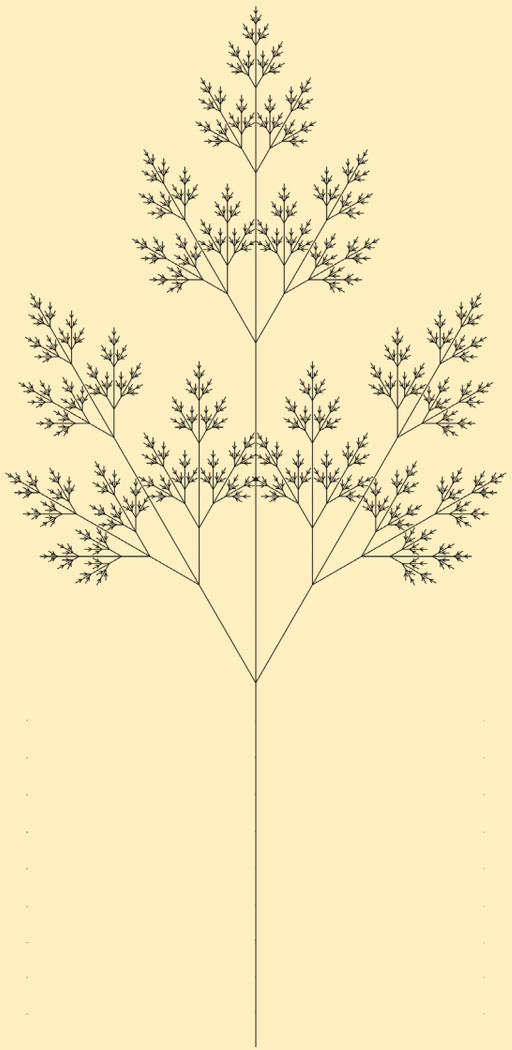
INVENTED BY DANDELION MANÉ

SourceCred is an open-source project that creates a reputation protocol for open collaboration, enabling communities to measure and reward contributions. It uses a graph-based algorithm to track contributions and interactions within a community, assigning "cred" to contributors based on the value and impact of their work. This system aims to fairly recognize and compensate contributors, fostering more sustainable and equitable open-source ecosystems.

MECHANISM

GNOSIS SAFE

24



Good at

1. Simplicity
2. Creating new DAOs

BEST FOR SIMPLICITY
& CREATING NEW DAOS

TL;DR

INVENTED @ GNOSIS

Gnosis Safe is a multi-signature wallet that allows users to manage digital assets securely and collaboratively. It requires a predefined number of signatures to execute transactions, enhancing security by reducing the risk of unauthorized access.

Gnosis Safe supports various digital assets and integrates with DeFi applications, providing a robust solution for individuals, teams, and organizations to manage their crypto funds safely.

Using Gnosis Guild and Zodiak, DAOs built on Gnosis can evolve new constraints and abilities over time.

HONOUR 25

TL;DR

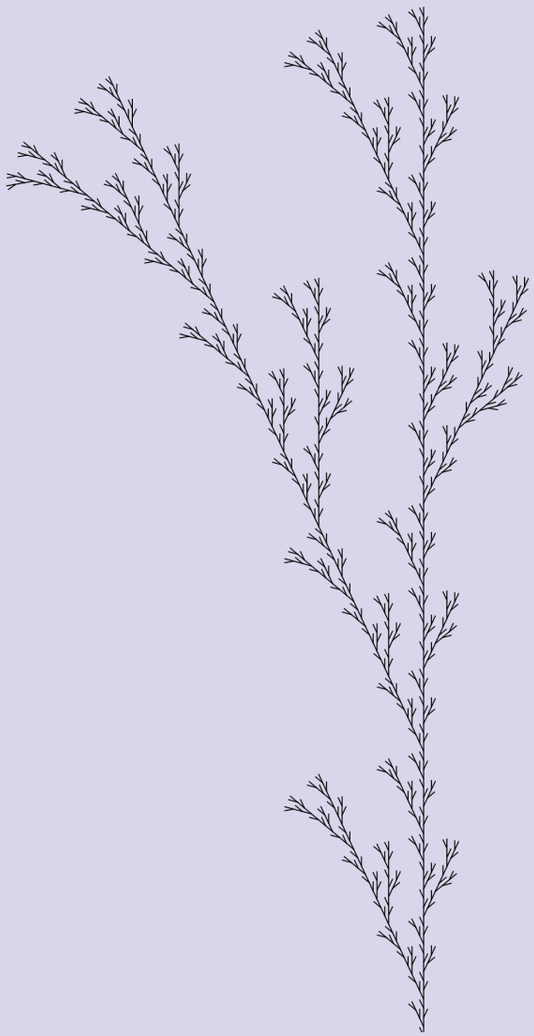
INVENTED BY ANDY THUDHOPE

Honour is a currency that is minted into existence when needed and is burned when no longer needed. Each HON doesn't represent an asset, but instead is an obligation. Honour implements social credit of a kind inspired by David Graeber, in a single smart contract which could, if widely adopted, lead to many communities of use who all price and use a single, global token differently.

MECHANISM

MUTUAL AID *NETWORKS*

26



HIGHEST LINDY

TL;DR

Mutual Aid Networks are community-based groups where members voluntarily support each other through the exchange of resources, services, and assistance. These networks operate on principles of solidarity, cooperation, and reciprocity, often filling gaps left by traditional social services. Mutual Aid Networks are as old as humanity, can address a variety of needs, such as food, healthcare, housing, and financial support, fostering a sense of community and collective responsibility among participants.

Mutual Aid Networks are not so much a mechanism in themself, but a category of mechanisms. They might include:

1. Social Credit Systems

A social credit system is a program that assigns individuals a score based on their social behaviors and trustworthiness, influencing access to services and opportunities.

2. Work Vouchers

Work vouchers are a form of currency or credit given in exchange for labor, which can be used to obtain goods and services within a specific economic system or community.

3. Rotational Labor System

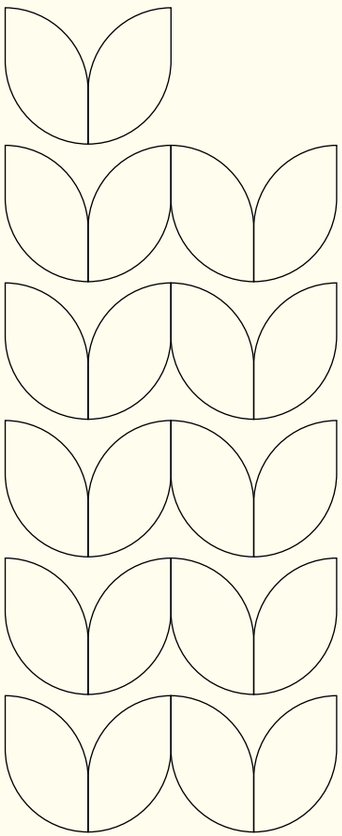
A rotational labor system is a work arrangement where employees rotate through different jobs or shifts on a scheduled basis to ensure a balanced distribution of tasks and skills.

4. Mutual Credit Systems

A mutual credit system is a community-based exchange network where members trade goods and services using a credit system that balances accounts to zero, eliminating the need for traditional currency.

WAQF

27



Good at

Creating sustainable public goods funding

Proper Management

Proper management, adherence to Islamic legal principles, and community support for its ongoing effectiveness

GOOD AT PROVIDING SUSTAINABLE FUNDING FOR PUBLIC GOODS

TL;DR

INVENTED IN ISLAMIC FINANCE

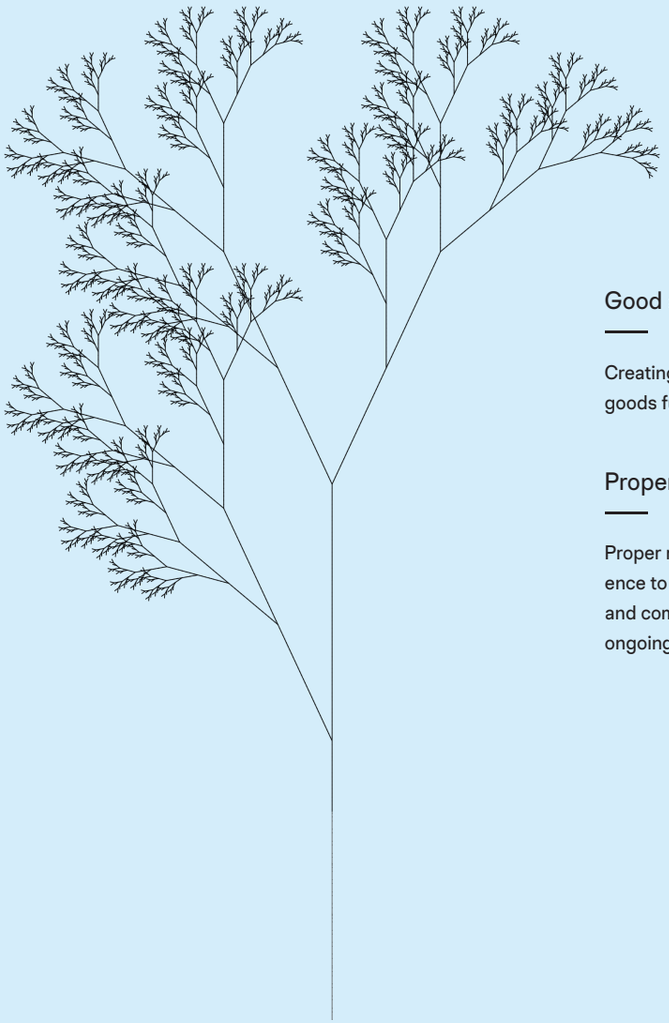
A Waqf is an Islamic endowment of property or funds for religious, educational, or charitable purposes, where the assets are held in trust and managed to benefit the community perpetually. The Waqf assets cannot be sold or inherited, and the income generated is used for specific purposes defined by the founder, such as supporting mosques, schools, hospitals, or helping the poor. This system ensures long-term community support and preserves the donor's legacy.

Like Endowments, Waqf's can be based upon yield (not interest) for more stability. Yield is the returns from productive assets, whereas interest is an invented monetary phenomenon.

MECHANISM

ZAKAT

28



Good at

Creating sustainable public goods funding

Proper Management

Proper management, adherence to Islamic legal principles, and community support for its ongoing effectiveness

GOOD AT PROVIDING SUSTAINABLE FUNDING FOR PUBLIC GOODS

TL;DR

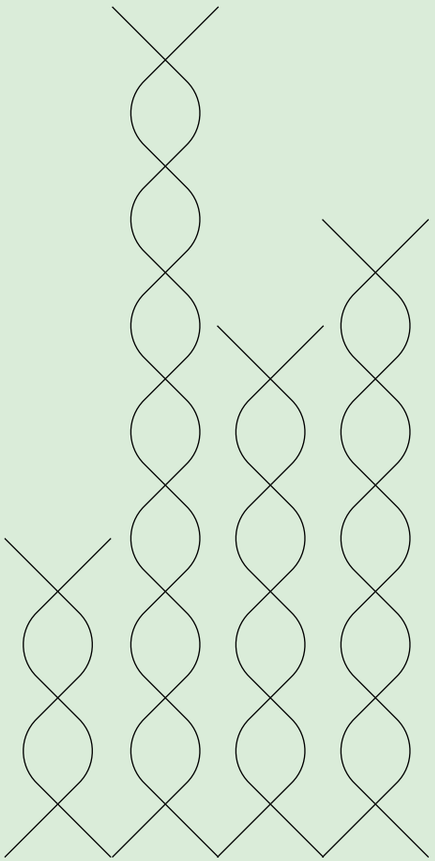
INVENTED IN ISLAMIC FINANCE

Zakat is a form of almsgiving in Islam that requires Muslims to donate a fixed portion of their accumulated wealth, typically 2.5%, to those in need. It is mandatory for eligible Muslims and aims to redistribute wealth, alleviate poverty, and support the welfare of the community, encompassing various categories such as the poor, the needy, those in debt, and others specified in Islamic law.

MECHANISM

BONDING CURVES

29



GOOD AT CREATING AUTOMATED, SCALABLE PRICE DISCOVERY, & LIQUIDITY MANAGEMENT FOR TOKENS

TL;DR

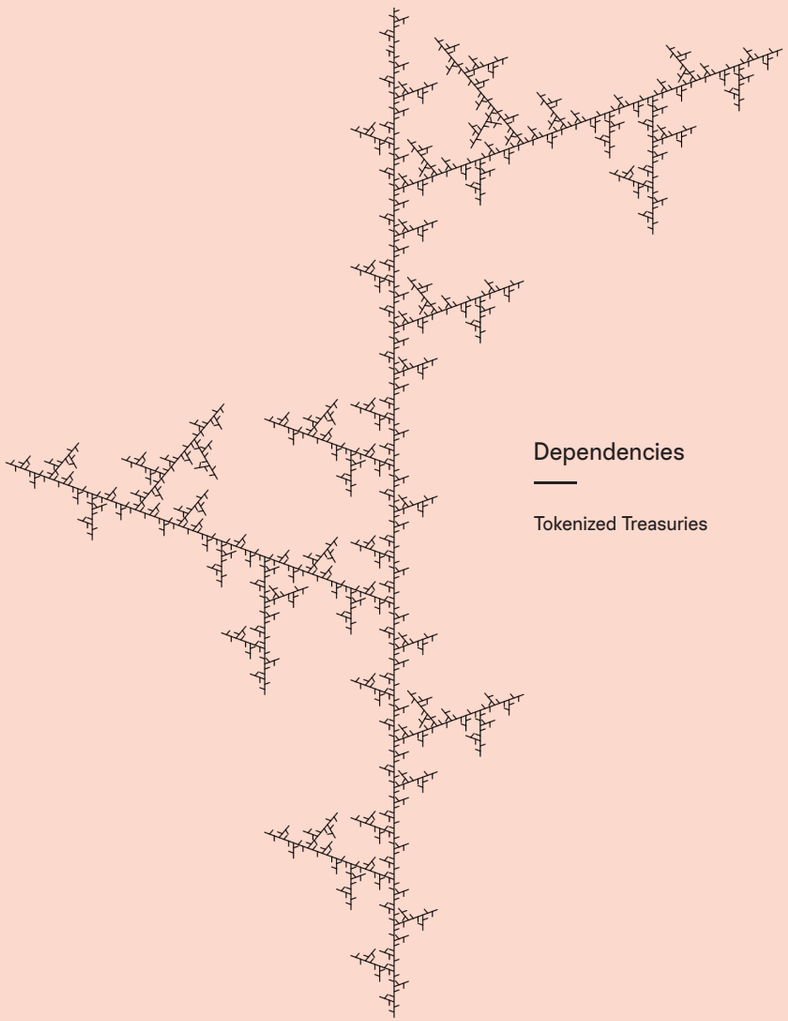
POPULARIZED BY SIMON DE LA ROUVIERE

A Bonding Curve is a mathematical concept used in economics and blockchain to describe the relationship between the price and supply of a token or asset. As more tokens are bought and the supply increases, the price rises along the curve; conversely, as tokens are sold and the supply decreases, the price falls. Bonding Curves are often used in decentralized finance (DeFi) to create automated market makers (AMMs) and to manage the issuance and redemption of tokens, ensuring liquidity and price stability based on demand.

MECHANISM

REVNETS

30



Dependencies

Tokenized Treasuries

GOOD AT STIMULATING
FOR-PROFIT
ENTREPRENEURSHIP

TL;DR

INVENTED BY JUICEBOX

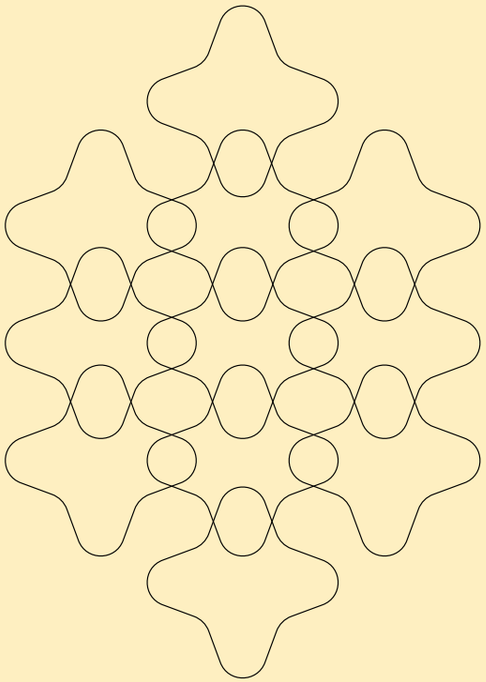
Revnets are onchain cap table and incentive machines. With a Revnet, you can bootstrap and sustain your open source project, campaign, business, scene, or meme. No governance, and no management overhead.

Revnet contracts are designed to be safer than SAFEs, more powerful than SAFTs, and are easy to use across borders and blockchains. Simple enough for a group of friends, and powerful enough for high net-worth, global communities, products, and brands.

MECHANISM

DECENTRALIZED *VALIDATORS*

31



Good at

Creating distributed compute networks

Dependencies

Very well-defined protoocol

BEST FOR CREATING DISTRIBUTED COMPUTE NETWORKS

TL;DR

INVENTED BY SATOSHI NAKAMOTO

Bitcoin is a decentralized digital currency that operates on a peer-to-peer network without a central authority, using blockchain technology to secure transactions.

Ethereum is a decentralized platform that enables the creation and execution of smart contracts and decentralized applications (dApps) using blockchain technology.

Hivemapper is a decentralized mapping platform that uses dashcam footage from contributors to build and maintain up-to-date maps.

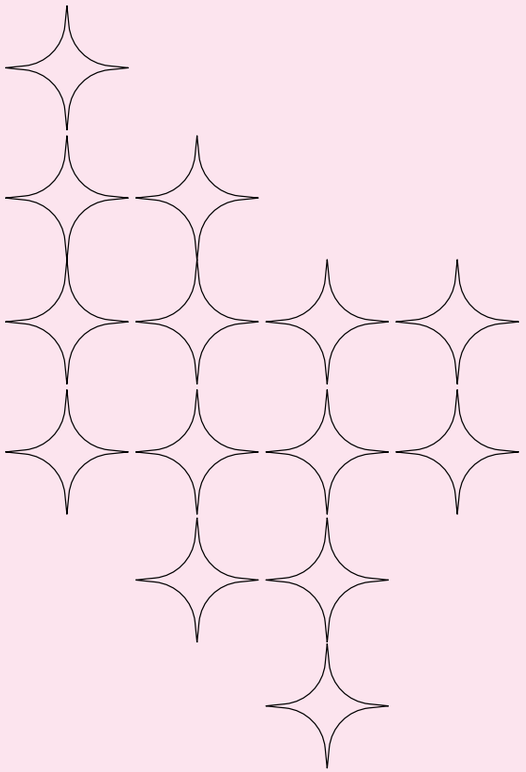
Helium is a decentralized wireless network that uses blockchain technology to incentivize the creation and maintenance of a global network of hotspots for IoT devices.

What do each of these have in common? They are networks of volunteers who run hardware that ensures the operation of the network. In exchange for running the hardware, node operators are rewarded with cryptocurrency.

MECHANISM

BOUNTIES & HACKATHONS

32



Dependencies

Well-defined tasks

BEST FOR INCENTIVIZING ACTION

TL;DR

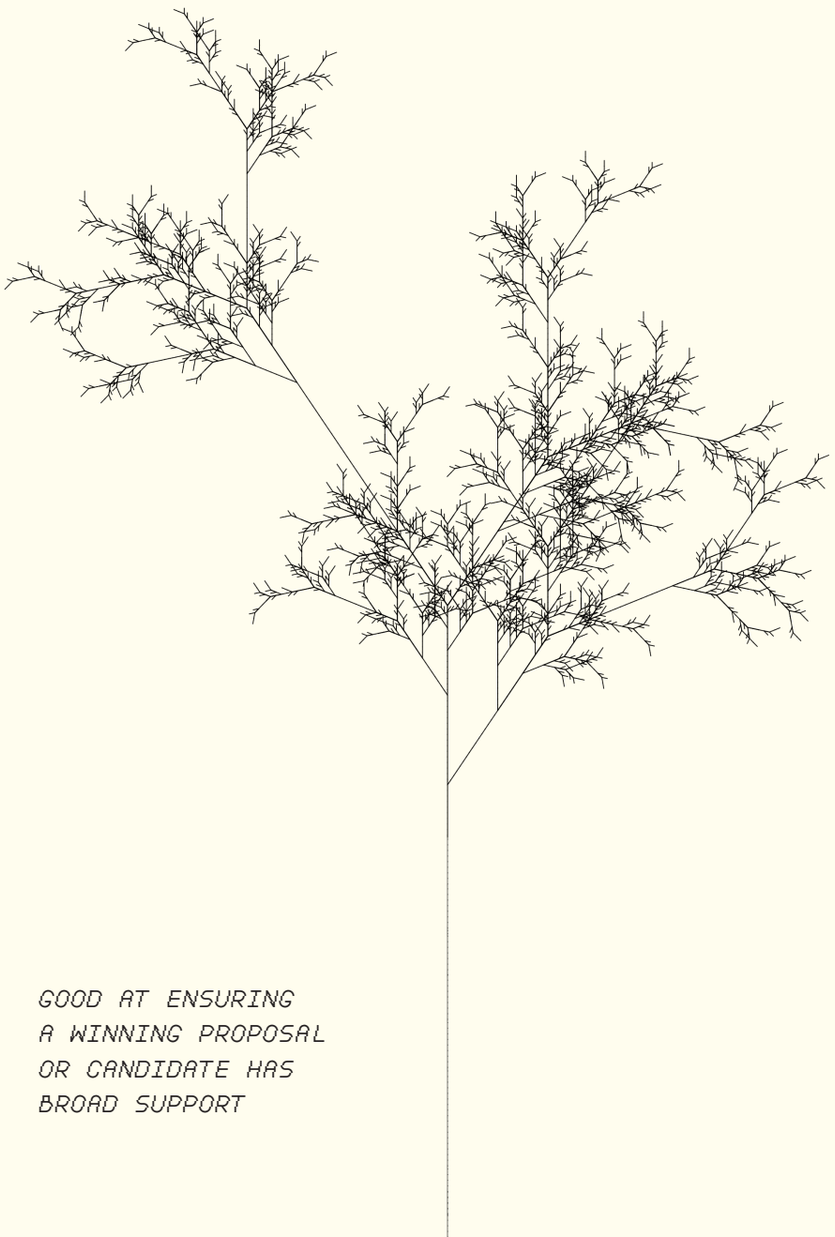
Bounties are incentives or rewards offered for completing specific tasks or challenges, often used in open-source projects, cybersecurity, and community-driven initiatives to motivate individuals to contribute skills, solve problems, or find vulnerabilities. These rewards can be monetary or in the form of recognition and aim to harness collective effort for achieving particular goals.

Bounties can be organized into Hackathons, where participants work intensively over a short period to solve challenges or complete tasks for rewards. Hackathons provide a collaborative environment that encourages innovation and rapid problem-solving, attracting diverse talent to tackle the bounties, which can lead to creative solutions and accelerated project development.

MECHANISM

RANKED CHOICE *VOTING*

33



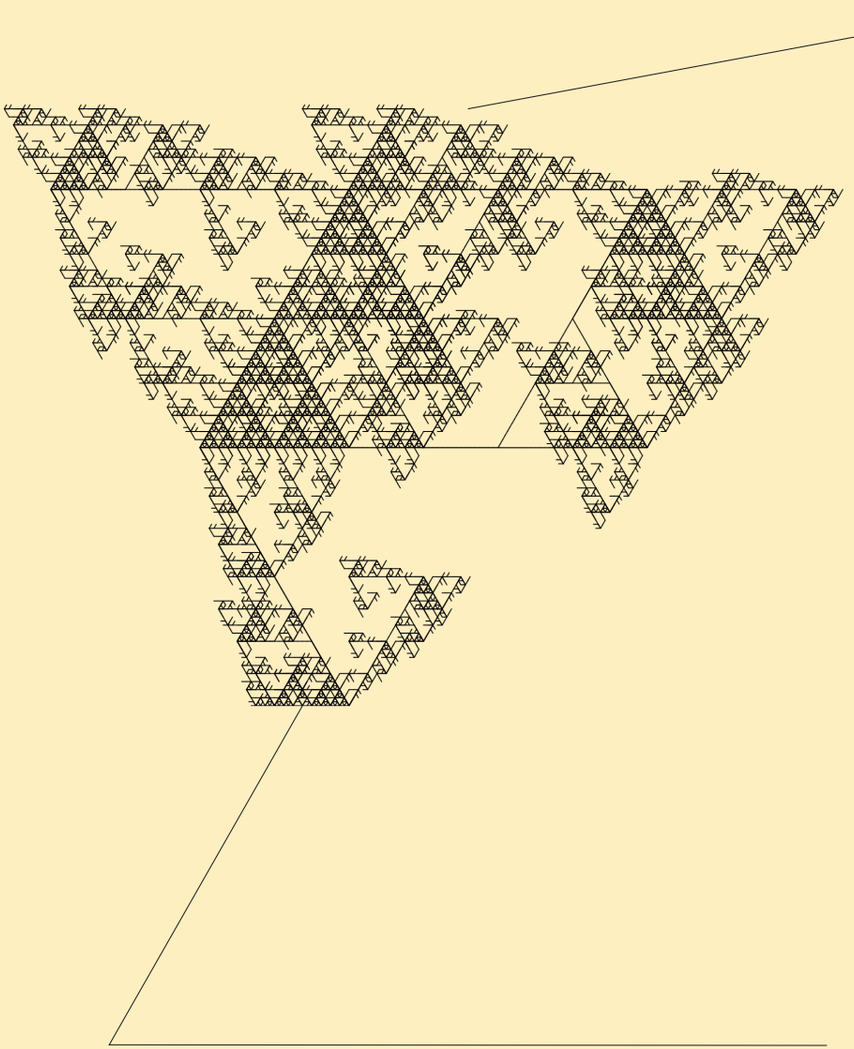
GOOD AT ENSURING A WINNING PROPOSAL OR CANDIDATE HAS BROAD SUPPORT

TL;DR

INVENTED BY WILLIAM ROBERT WARE

Ranked Choice Voting is an electoral system where voters rank candidates or proposals in order of preference. If no candidate wins a majority of first-choice votes, the candidate with the fewest votes is eliminated, and their votes are redistributed to the remaining candidates based on the voters' next preferences. This process continues until one candidate has a majority, promoting broader support and reducing the likelihood of strategic voting.

STACKING *MECHANISMS*



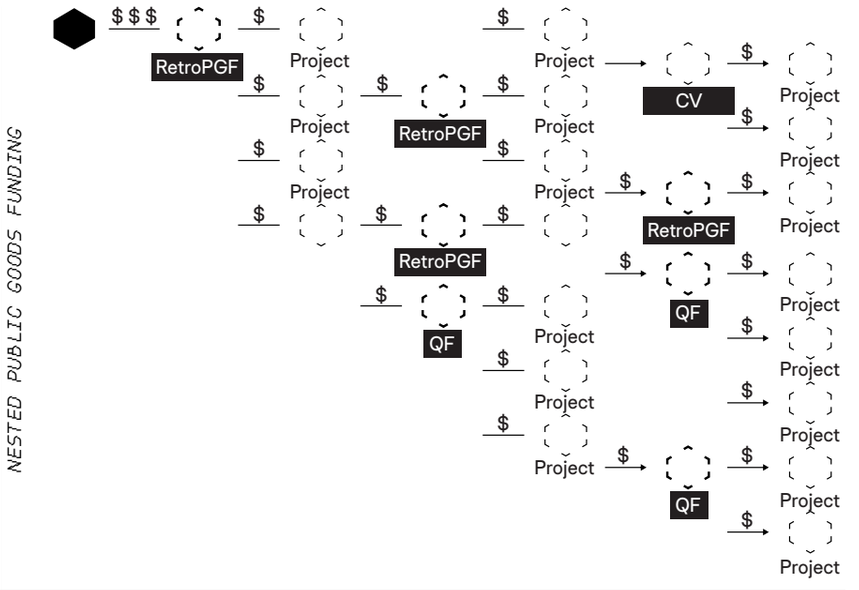
WHAT IF THESE MECHANISMS COULD FEED INTO EACH OTHER?

In 2023, tens of millions of $$ flowed through public goods funding mechanisms.

Two things will change in 2024 & beyond:

- New easy to use products will come online allowing anyone to do PGF.
- There will be more funding than ever to PGF.

What if these mechanisms start to interoperate with each other?



This presents many opportunities ahead:

Lots of bottom-ups curation now becomes possible

A community should decide the distribution of PG within its own ecosystem.

This will help create pockets of bottom-up governance that makes top-down decisions easier, because you can abstract away capital allocation decisions to subsidiary local communities.

As more and more communities do this

A. it diversifies funding sources and mechanisms, helping us reach fund the commons in a more pluralistic way.

B. as more and more tools come online to make it happen, it could become (1) very easy (2) very powerful to run PGF.

C. As the funding trickles out, there will be more long tail public goods funding.

There's an opportunity to

A. build Impact Attestations through open standards (EAS, Hypercerts), creating an emergent web of trust that measures impact throughout web3.

B. help web3 communities see that funding their public goods is a sustainable competitive advantage. Over time, this will grow into an arms race to fund public goods.

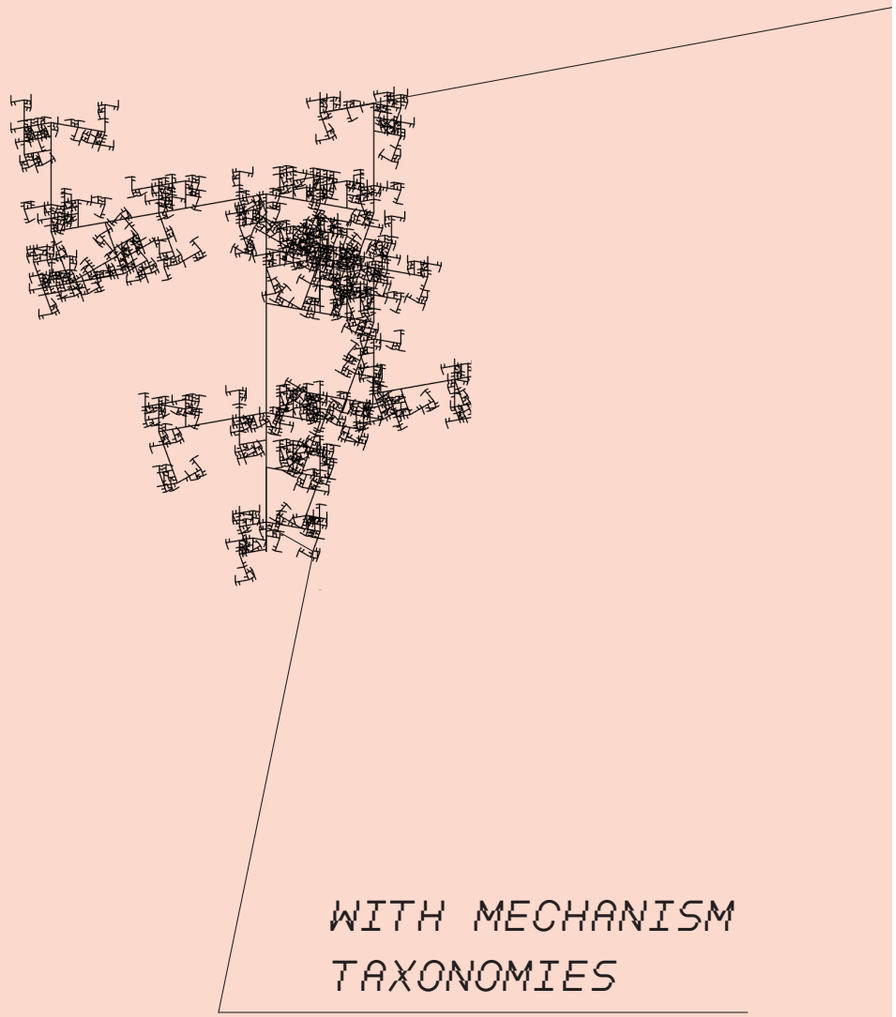
C. build a "web3 grants common app." Such an app would allow people to manage their grant in one place and push it to multiple grant programs. saving time and energy, saving time and energy in a world where there are many grant programs running concurrently.

D. get many different types of projects flowing tokens between them.

Read the whole thing @

META

EXPLORING *THE DESIGN SPACE*



WITH MECHANISM TAXONOMIES

HOW DO WE CLASSIFY THESE MECHANISMS?

Taxonomy is the science of naming, describing and classifying organisms.

How might we arrive at a way of classifying the mechanisms we've discussed in this book? In this chapter, I will try to cut through the "fog of war" of the design space and sketch out a path to a taxonomy of mechanisms.

THE DESIGN SPACE

By reflecting on the growth of the internet empirically, and by reasoning about the a priori parallels between web1 and web2, we can reason about how web3 might play out...

The internet of information

- Computers can send information across a computer network

- This radicaly changed anything in society that relies on information

- (entertainment, media, politics, social media)

The internet of money

- Computers can send value across a computer network

- This radicaly changed anything in society that relies on value transfer

- (banking, insurance, finance, art, jobs)

Just as email, IMs, Twitter and Tik Tok, and LLMs changed how we transfer information, the internet of money could change how we transfer money. How we Fund What Matters.

We have Massively Multiplayer Online Role Playing Games (MMORPGs). Now that we've got web3, will we have Massively Multiplayer Online Funding Games (MMOFPs)? Can large networks of people coordinating resources be more powerful than large corporations/governments/billionaires?

I have an instinct that peer-to-peer funding games may be the biggest wedge we have to create 21st century collective action. There is a greenfield opportunity to explore the design space around Gitcoin's mission, to "Fund What Matters."

FUNDING WHAT MATTERS

Gitcoin's mission, "Fund What Matters," is a directive emphasizing the importance of investing in or financially supporting causes, projects, or initiatives that hold significant value or impact. It suggests prioritizing spending in areas that make a meaningful difference, whether socially, environmentally, culturally, or economically.

This phrase often encourages individuals or organizations to think critically about where their money can have the greatest positive effect. It's a call to action for responsible and purpose-driven allocation of resources, aligning financial decisions with core values and priorities.

THE MISSION X THE DESIGN SPACE

By leveraging blockchain technology, the attributes of it that make it powerful (transparency, corruption resistance, global, open source, programmable), and the wave of innovation surrounding the EVM, we can help evolve how people "Fund What Matters" to them.

Just as the internet accelerated the flow of information, web3 can accelerate the flow of capital. We can ride this wave to build and scale new funding experiments.

THE PAST

In 2019, the bear market had just hit, and projects in the Ethereum ecosystem needed funding. At the time, the major forces in Eth public goods funding were the Ethereum Community Fund, the Ethereum Foundation, and Consensys. The EF/ECF had grants programs or you could get hired at Consensys.

Gitcoin discovered Quadratic Funding in late 2018 and launched Gitcoin Grants in January 2019. We were differentiated from the existing players by the decentralized decision making introduced by Quadratic Funding.

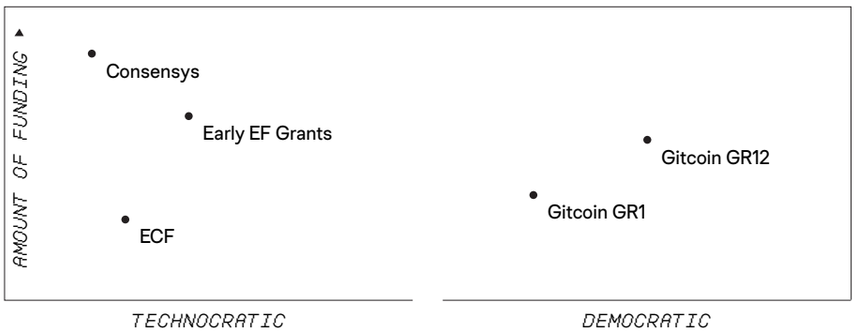
I think the design space kind of looked like this:

1. Technocratic = small group of decision makers. At the ECF/EF back then, you had to go through a grantmaking process where a small commitee would

got funding. At Consensys, you had to be hired by Joe Lubin or his disciples.

2. Democratic = larger more permissionless group of decision makers. At Gitcoin, anyone can help allocate the funding due to Quadratic Funding. This scales because 1000s of projects can get funded at once.

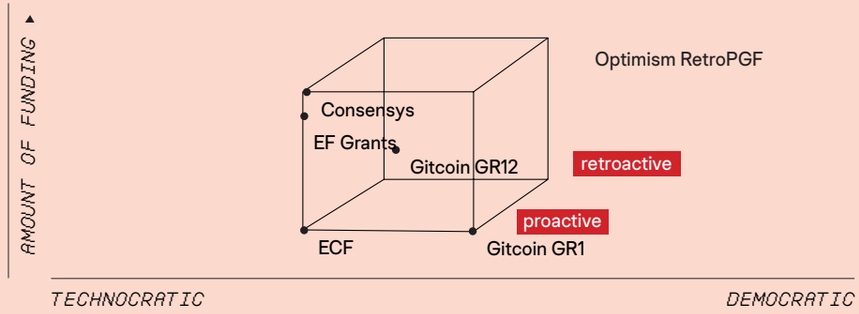
Of course, this doesn't tell the full story. If you were to add a 2nd axis showing the amount of funding being deployed, the design space would look something like this:



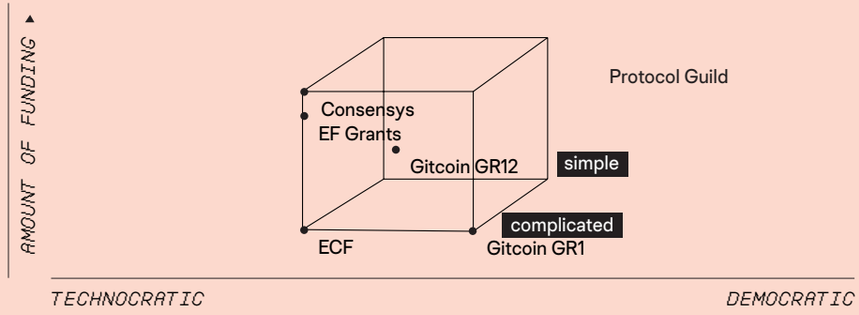
THE PRESENT

Over the course of 2022, more players entered the space and we began to see the rise of retroactive public goods funding experiments like Optimism RetroPGF and very simple but effective mechanisms like the Protocol Guild's self-curating registry.

Trying to further map the design space, adding another 3rd dimension looks like this:



If we were to make the 3rd dimension "simplicity," then it would kind of look like this:



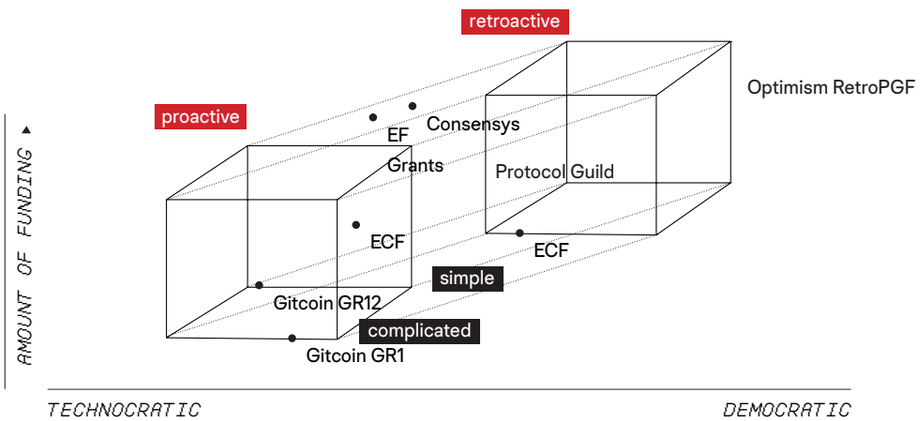
Optimism & Protocol Guild evolved the design space forward in important ways

1. Retroactive Public Goods Funding is based off the idea that it is easier to fund projects based on the impact they've already had. As opposed to speculating on the impact they might have in the future. After RetroPGF is established, we can then bet that projects could receive proactive funding based on future retroactive rewards.

2. Protocol Guild built a very simple mechanism, a self-curating registry. This registry allowed projects to easily contribute to protocol development.

LET'S GET WEIRD

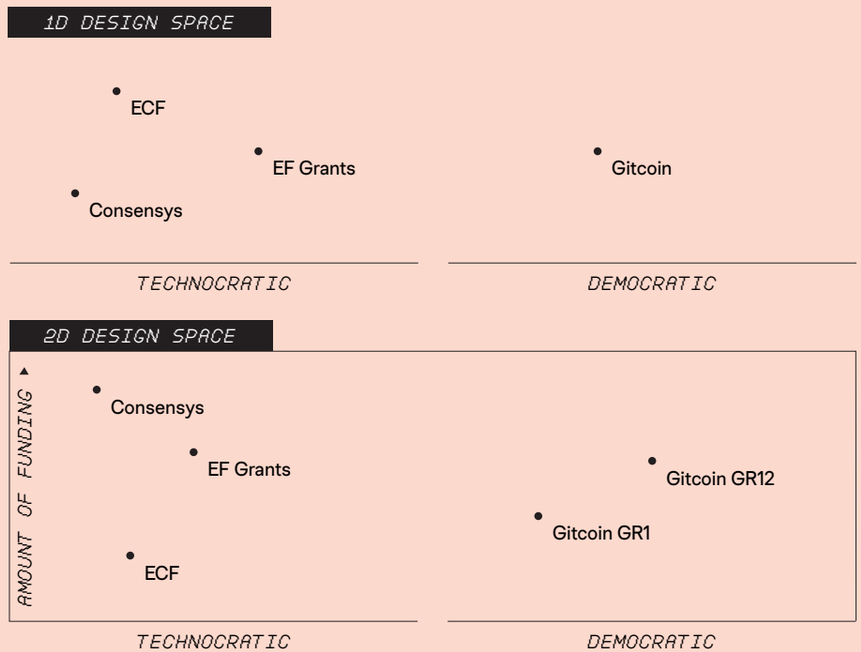
Lets look at what this new design space looks like all together. If we combine the two 3D cubes, we get a tesseract (4-dimensional cube) showing us the new design space.



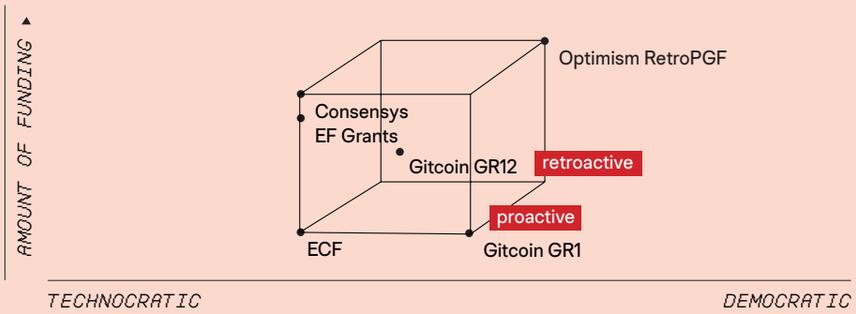
Since us humans have evolved to understand 3D images, this 4D visualization is a bit hard to grok visually. That said, once you spend some time staring at it, you will can internalize that we've found a way to conceptualize the entire design space across all 4 dimensions:

1. Technocratic vs democratic
2. Amount of funding
3. Proactive vs retroactive
4. Simple vs complex

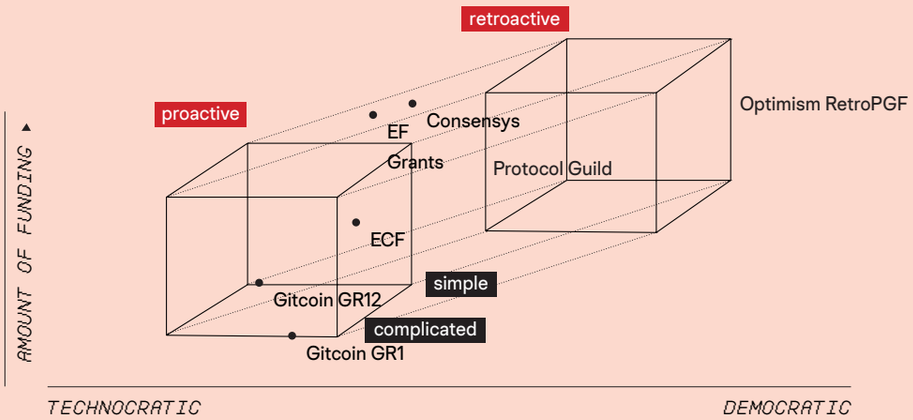
This is where things get interesting to me. As people begin launching projects that are empirically effective at funding what matters to them (maybe using the mechanisms in this book), we can start to build up a multi-dimensional space of what the design space looks like.



3D DESIGN SPACE



4D DESIGN SPACE



Now we are really starting to cartography the design space. By creating visualizations of how these mechanisms relate to each other, and extracting the criteria that makes them different, we're starting to get a visual of the design space! We've started to beat back the fog of war of the possibilities.

What dimensions would we even care to splice the design space by? And would each dimension justify the complexity of thinking in higher dimensional thinking? Since it's hard to think in higher than 3 dimensions, maybe we'd be better off focusing on design spaces 3 dimensions or less.

That said, there might be value in exploring what dimensions to even look at. We can make some educated guesses here. Here are all of the additional dimensions I think would ever matter within the design space of "how do you build a mechanism that helps people fund what matters?"

1. Mature projects vs seed projects - Is the mechanism more for mature projects or seed stage projects?
2. Age of the mechanism - Was it invented in pre-history, during the industrial era, early internet, or the onchain internet era?
3. Web2 vs web3 UX - Is the UX usable for web2 natives?
4. Effective or not - Is the mechanism actually effective at whatever its goal is (in Gitcoin's case, funding what matters)? How big is the TAM?
5. Return expected vs not - Is a return expected as part of the fundraise? Or not?
6. Virality vs no is virality - a big part of the mechanism? Like for Quadratic Funding, where people tend to share their grants on social media.
7. Does it depend on Impact Attestations? Does the mechanism depend on impact attestations? Do we have a reliable proof-of-impact?
8. Oracle-limited or not? If the mechanism depends on some external data source, is it limited by having reliable oracles or not? Eg if you were trying to fund a project to stop deforestation, what is the data-trail between the forest and the blockchain?
9. Credibly neutral vs not - Does the mechanism's constituents care that its credibly neutral, or does it allow for rent-seeking intermediaries?
10. Desktop vs mobile - Is the mechanism experience desktop first (okcupid, match.com), or mobile-first? (like Tinder)
11. Built into social media? Is the mechanism a standalone website,

or built onto a web3 social network like Farcaster/Lens Protocol?
12. Massively multiplayer? Will the mechanism work at scale? Will it enable Massively Multiplayer Online Funding Games (MMOFPs)?
13. Are assets fungible or not? Do the primary assets in the mechanism resemble fungible things like ERC-20s? Or are they more based on ERC-721 like assets?
14. Are they stateful or stateless? Ephemeral like a QF round or persistent like Protocol Guild?
15. Can it be built on top of Allo? This is a germane question for Gitcoin. Does Allo help make it easier to bring to market?
16. Can it be built on top of Passport? Does the mechanism benefit from sybil resistance? If so, does Passport newly enable it?
17. Where does the coordination breakthrough happen? Through novel onchain primitives, shared identity/high trust communities, novel game theory?
18. Single mechanism or multi-mechanism. These mechanism are composable after all..
19. Is the funding continuous/recurring? Is it based off dependably economically exothermic funding sources? Does the mechanism depend on fickle things like people donating? Or does it depend on continuous sources of funding (like sequencer fees or yield)?
20. There are probably more ....

Which combinations of these criteria have billion$$$ potential to 'Fund What Matters'? Where is the TAM very large now, and what design spaces have billion $$$ potential next cycle? Which will only be enabled by new UX breakthroughs (like PWAs, gasless apps, account abstraction)?

Would we be served well by building/researching many of these tools internally, or enabling 1000s of devs to build in these design spaces, on top of Allo? And perhaps finding (3,3s) with these builders?

Right now Gitcoin Grants Lab is focused on Grants-centric mechanisms. But there is a roadmap beyond that, which we call Grants+ and Grants++ for things that are over the horizon.

IN CLOSING

In this chapter, we reasoned about how the design space for Funding What Matters has evolved so far. We attempted to sketch out what a taxonomy of mechanisms might look like. We then visualized it.

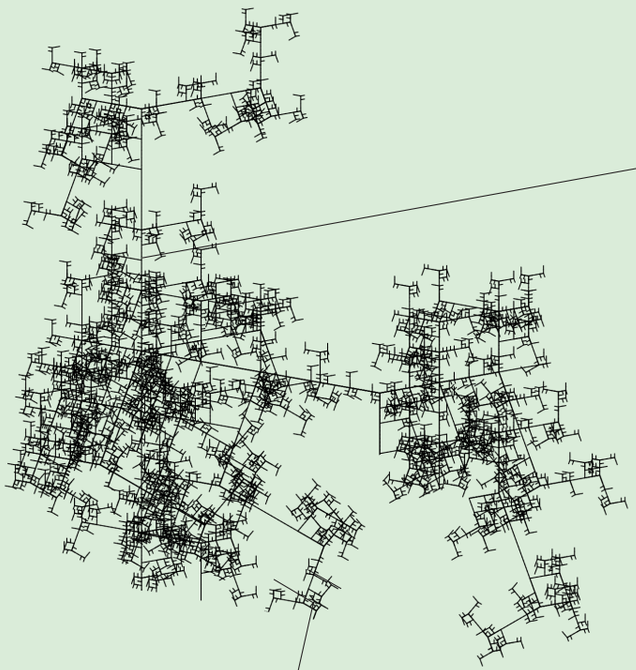
From there, we made some educated guesses about what other types of experiments for Funding What Matters may exist in the future. The design space is vast, and we expect it will be cartographied emergently as it is explored in the coming years.

I hope that articulating these dimensions of self-similarity between mechanisms helps orient you into the rapidly evolving world of onchain capital allocation.

There is still much to do to cartography the design space, build taxonomies, and build awareness of these mechansisms. I hope to see members of this books telegram community step up and help each other progressively elaborate the design space together. Maybe this book will become a shelling point for those efforts :)

This essay was originally published on the Gitcoin gov forum. It has been edited and condensed. Read the original @

EXPLORING *THE DESIGN SPACE*



LIKE A SLIME MOLD

SLIME MOLDS ARE A SOURCE OF INSPIRATION

Slime molds are a source of inspiration for me because they are a networked organism. This makes them a rich source of biomimetic inspiration for how to design DAOs. Some may even say your DAO is a slime mold.

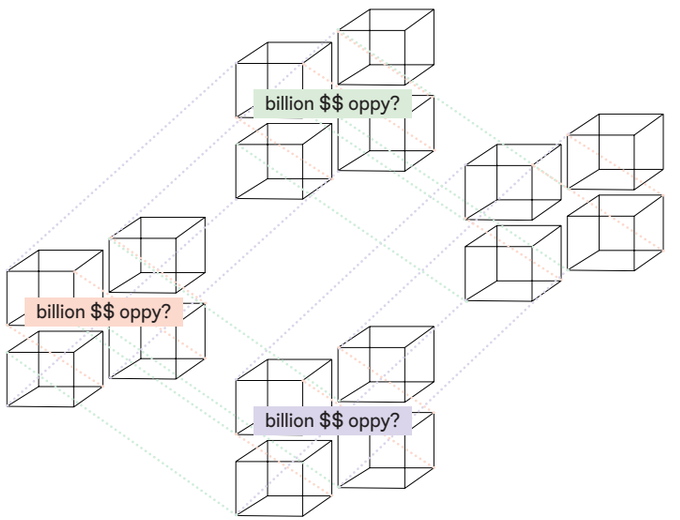
Slime molds have a unique and fascinating method of finding food. They do not have a brain or central nervous system, but they use a form of spatial memory and optimized search patterns.

When a slime mold encounters a food source like bacteria, fungal spores, or decaying organic matter, it forms a network of tube-like structures, or pseudopodia, to engulf and absorb the nutrients. As it moves, it leaves behind a trail of extracellular slime.

This slime trail plays a critical role in the organism's search for food. It acts as a memory system, allowing the slime mold to avoid revisiting areas it has already explored. This efficient search strategy, where it extends its network towards unexplored areas while retracting from nutrient-poor or already explored regions, enables slime molds to find the most direct routes to food sources and optimize their foraging efficiency. Remarkably, this simple organism can solve complex mazes and spatial problems to locate food, demonstrating a form of intelligence and problem-solving ability without a brain.

HOW DOES THIS APPLY TO US?

We are economic agents searching for value in a multidimensional design space with multiple billion $$$ opportunities to build new crowdfunding mechanisms/applications within it.



As we traverse this design space, we can be mindful of the two modes slime molds have when looking for resources:

1. Explore - how do we find the resources?
2. Enrich - how do we use the resources when we find them?

1. EXPLORE

How do we find the biggest (ideally billion $$$ +) opportunities?

Memory - In biology, the slime trail plays a critical role in the organism's search for food. It acts as a memory system, allowing the slime mold to avoid revisiting areas it has already explored.

Perhaps the lesson for us here could be to learn in public. What if we created some sort of memory system wherein we (or anyone else in the regen space) learns about something new and important, they publish it. We could all then benefit from each other's explorations of the design space. Groups like regenlearnings.xyz can serve this purpose.

Efficiency - The slime mold's efficient search strategy, where it extends its network towards unexplored areas while moving on from from nutrient-poor or already explored regions, enables slime molds to find the most direct routes to food sources and optimize their foraging efficiency.

Perhaps the lesson for us here could be to search efficiently and in parallel. We should retract from nutrient poor regions. We should be lean as we explore new design spaces. In particular, I think its really exciting how new Allo Protocol-enabled apps can be created in a matter of days/weeks.

2. ENRICH

When a slime mold finds food, such as bacteria or organic particles, it engulfs these particles using a part of its cell membrane. This process is known as

phagocytosis. Essentially, the slime mold surrounds and encapsulates the food source with its membrane, creating a small internal pocket or vacuole. Enzymes are then secreted into this vacuole to break down the food into smaller, absorbable nutrients. These nutrients are absorbed into the slime mold's cytoplasm, providing energy and materials for growth. This method allows the slime mold to efficiently process a variety of food sources in its environment.

Takeaways

1. The tactics used in finding resources are completely different than those used once they have been found.

2. Engulf the problem and break it down into composite parts.

3. The resources we invest into finding/exploiting opportunities should be relative to how big the resources we find are.

EXPLORATION SO FAR

The design space we are aware of so far, as identified by Gitcoin DAO, includes three resource-rich areas:

QF

TAM of ~ $20m/year - Located in the democratic and sybil-resistant part of the design.

RetroPGF

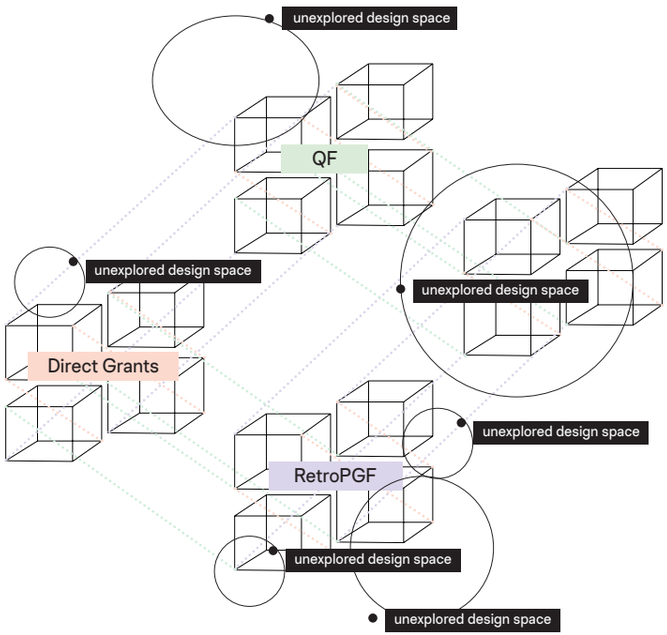
TAM of ~ $100m/year - Located in the retroactive part of the design space.

Direct Grants

TAM of ~$10-100m/year -
Located in the "simple" part of
the design space.

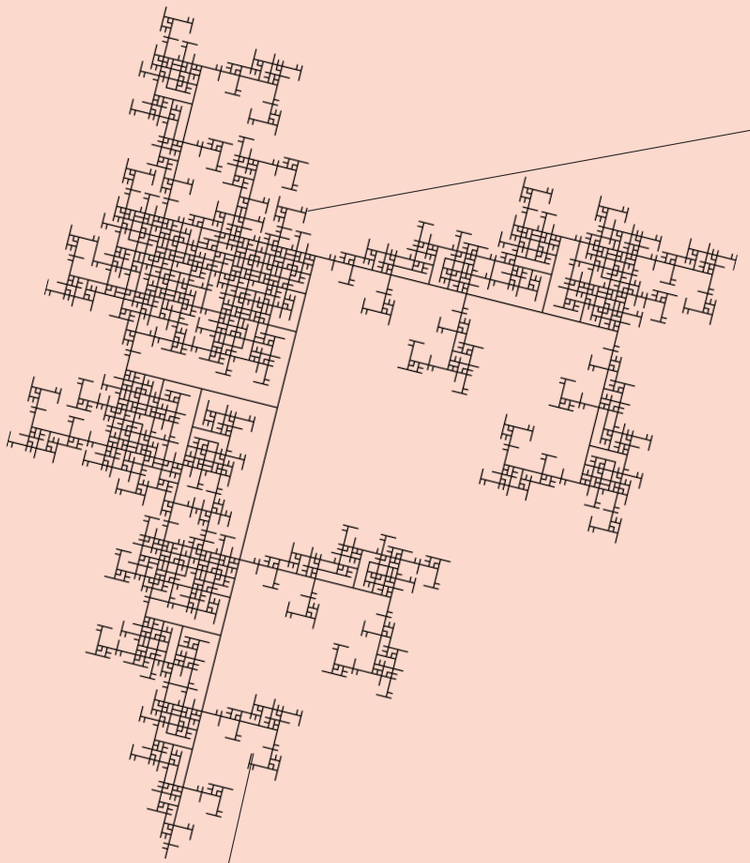
The Grants Labs team is working within those opportunities.

Yet, there is a lot of potential in the design space we've not yet explored yet. But the ecosystem is exploring those areas in parallel to the threads focused on the known opportunities (QF, Direct Grants, RetroPGF).



This essay was originally published on the Gitcoin gov forum. It has been edited and condensed. Read the original @

EXPLORING *THE DESIGN SPACE*



LIKE A MUSHROOM

DESIGNING FROM FUNGAL FOUNDATIONS

In our search for regenerative economic design patterns, the answers we seek may be hidden right beneath our feet. Over billions of years of evolution, mushrooms - and the underground mycelial networks to which they belong - have been iterating design patterns for distributed, autonomous infrastructures used for intelligent resource distribution and collective signaling between countless living organisms worldwide. Decades of study into the interaction patterns of mycelial networks in natural ecologies have offered us a glimpse into a cooperative underground world where resources flow dynamically between flora, fauna, and funga to generate thriving ecosystems. If web3 technology holds the potential to craft new economic paradigms, mycelial design patterns may just show us the way back to a more ecological future.

MYCELIUM = NATURE'S PUBLIC GOODS INFRASTRUCTURE

As one of the oldest and largest organisms alive, mycelium is a grand architect of nature. Fungi were among the planet's earliest multicellular lifeforms, and along with their algae symbiotes, they terraformed Planet Earth from a ball of cooled

magma into the green paradise we know today.

Mycelia form underground in a structure of networked tubes, which provide the “pipes” for a large proportion of nutrient distribution within and between most plants worldwide. From the earliest days of life on earth, fungi have been breaking rock and networking through the soil, building a vast and interconnected mesh across the face of the planet.

Like most well-operating public goods infrastructure, they remain underground and almost entirely invisible, even as they serve as a keystone network of species sustaining life on earth.

MYCOFI IS ECONOMIC BIOMIMICRY

MyCoFi is a movement to consciously apply lessons from the mycelial world to cryptoeconomics, and encourage web3 builders to “think like a mushroom” about the systems they are designing. Incorporating nature’s evolutionary design patterns into our economies could alleviate much of the disharmony we see between human economies and nature’s ecologies, gesturing towards a future of economic permaculture. This is also the basic premise of ecological economics - that we must move away from singular notions of value and orient our economies to reflect the interdependent coevolution of multiple forms of value flows, just as we see in nature.

BLOCKCHAINS ARE COORDINATIVE INFRASTRUCTURES

One of the core value propositions of blockchain technology is based on the use of distributed network architectures to serve as coordination substrates for new forms of organizing. This offers us a unique opportunity to rethink many of the power asymmetries we see in legacy systems, some of which were the inspiration for blockchain technology in the fi rst place. Every time technology has opened a path toward new coordinative infrastructures from the printing press to the telegraph, to the internet, the world has experienced massive shifts in geopolitical structure. Distributed ledger technology holds the same potential for paradigmatic and socio-evolutionary shifts.

DAOS AS DIGITAL FUNGI

Mammals are more closely related to fungi than to any other kingdom of life. A key difference is that while mammals internalize digestion by putting food into their bodies, mycelia externalize it by putting their bodies into the food, breaking down and consuming the environment around them. Some of the nutrients are absorbed and transported throughout the mycelial network to other organisms, while other nutrients are left to enrich the soil, enabling new life to form and thrive. When a mushroom feasts, it is a communal banquet, a public good for the whole ecology.

In contrast to mammalian private corporations that

enclose resources and intellectual property within the boundaries of the firm, DAOs could be considered the mycelia of the digital world; they network amongst themselves and expand into emergent collaborations to build shared value through open-source tooling and an ethos of permissionless participation.

If we were to ask this ancient, sentient network its secrets, perhaps it would whisper to us of design patterns it has iterated in the depths of deep time, patterns such as:

Network Infrastructure

"We are the mycelial networks, the ancient weavers of nature's oldest decentralized web. Our threads stretch across the world, silently sharing resources with all, creating life's sustaining mesh."

Fractal Nature

"In us, the fractal patterns of the cosmos are echoed. With minimal energy, we replicate these universal designs of self-similarity, from the smallest seashell to the vastest galaxysustaining mesh."

Adaptive Sense and Response

"At the edge of the known, we, the mycelium, innovate without requiring permission from our ancient roots. Here we thrive, at the frontier, adapting to the mysteries of life's sustaining mesh."

Mutual Reciprocity

"In our world, a delicate balance of give-and-take prevails. We, the fungi, alongside flora and fauna, partake in a life-sustaining dance, each exchange nurturing the reciprocal cycle of existence."

Polycentric Pluralism

"Within us thrives diversity, a celebration of life's myriad of forms. Responsive and varied, each part of our network contributes its unique voice to the chorus of nature."

Dynamic Flow

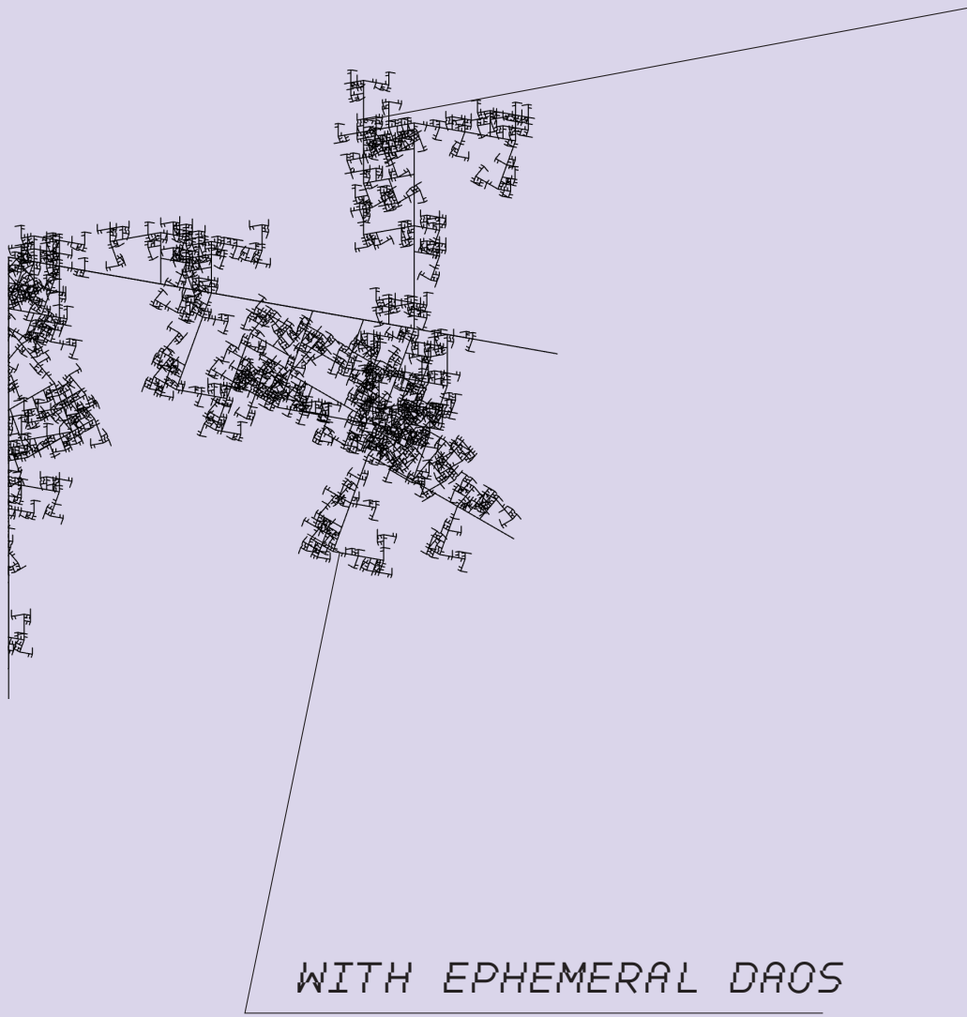
"Our network pulses with life, a never-ending flow of resources. Like a symphony, nourishment courses through us, shared freely, never still, never hoarded."

"In our search for regenerative economic design patterns, the answers we seek may be hidden right beneath our feet." - MyCoFi book

This essay was originally published in the MyCoFi book by Jeff Emmet & Jessica Zartler. It has been edited and condensed. Read the original @

META

EXPLORING *THE DESIGN SPACE*



WITH EPHEMERAL DAOS

EPHEMERAL DAOS: VEHICLES FOR FASTER EXPERIMENTATION

Ephemeral DAOs exist for a finite period of time to achieve specific goals or objectives. Once the goals or objectives of the Ephemeral DAO have been achieved, the DAO is dissolved, and its assets, if any, are distributed back to the participants or transferred to another entity.

Ephemerality and DAO-iness are powerful because:

We can learn from decentralized movements of the past, many of which ebbed and flowed, (Occupy Wall St or the Civil Rights movement are two examples) and transcribe their lessons into our ephemeral DAO experiments.

Without the burden of having to last forever, we can make more pragmatic decisions about what to do over a short period of time without worrying about entrenching power.

Without the burden of having to last forever, the stakes are lower, which enables more experimentation.

Examples of Ephemeral DAOs:

Gitcoin-style Quadratic Funding rounds (weeks long)

Optimism style Retro Funding Rounds (weeks long)

Point in time fundraisers like ConstitutionDAO or The Free Alexey & Roman Legal Defense Fundraise 1 (weeks long)

Protocol Guild's first cohort (1 year long)

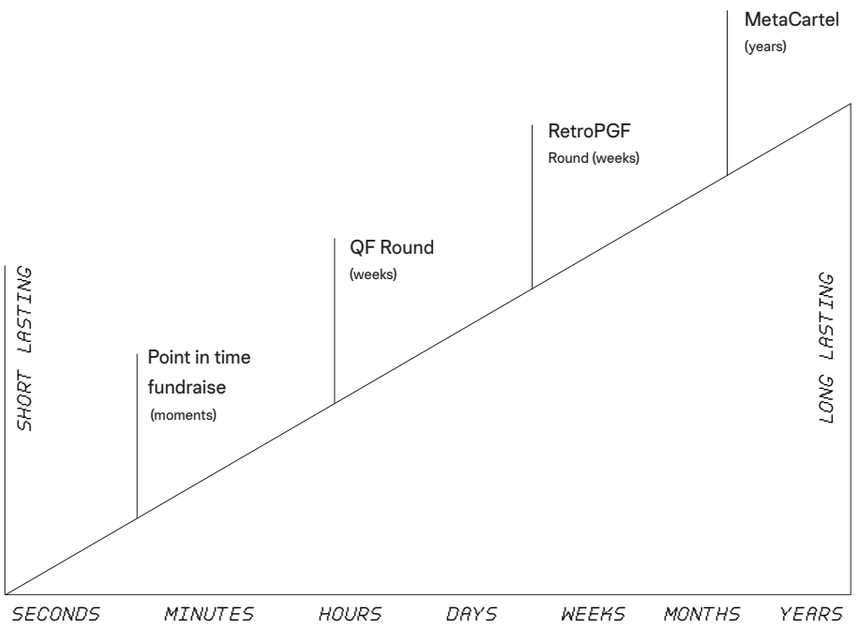
Examples (cont'd)

Projects like Meta Cartel, which dissolved itself after transferring all their remaining assets to the lawyers of tornado cash devs (years long).

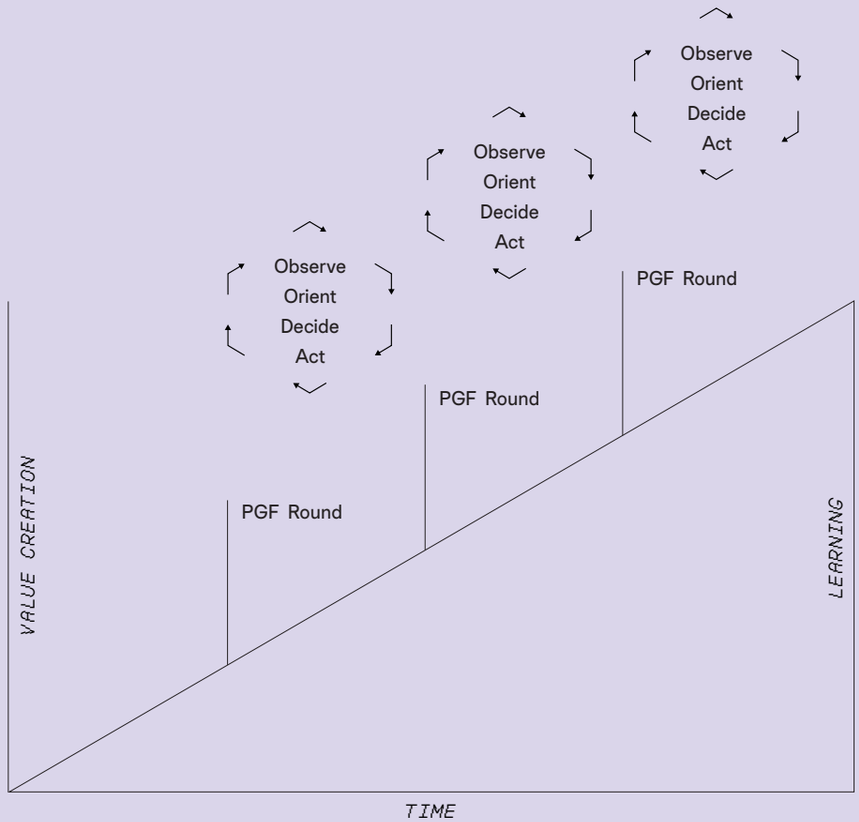
Investment DAOs like those created by Hydra Ventures 1 last only as long as they have capital to deploy (years long).

(other capital allocation experiments built on ideas in this book)

There is a spectrum of "how much longevity is baked into each Ephemeral DAO?" Ephemeral DAOs can be shorter lasting (like a SealOrg Whitehat op which could be hours-long) or longer lasting (or MetaCartel, which wound down after several years).



The faster the Ephemeral DAOs lifecycle, the faster designers can spin its OODA Loop. The loop of Observe Orient Decide Act is how mechanism designers can iterate towards their potential. Iteration is the key to Ephemeral DAOs becoming evolutionary. By launching ephemeral DAOs that last for only a short amount of time, then tweaking their designs, and then launching the next one, DAO designers can iterate towards a design goal. Here is a visual example of how Public Goods Funding rounds (each is a Ephemeral DAO) can be evolutionary experiments creating more value over time through learning and iteration.



From the perspective of this evolution, software communities like Gitcoin are kind of an Ephemeral DAO factory. Gitcoin launches Grants rounds (Ephemeral DAOs) and then round over round, tweaking the protocols they run on to launch progressively better and better Ephemeral DAOs.

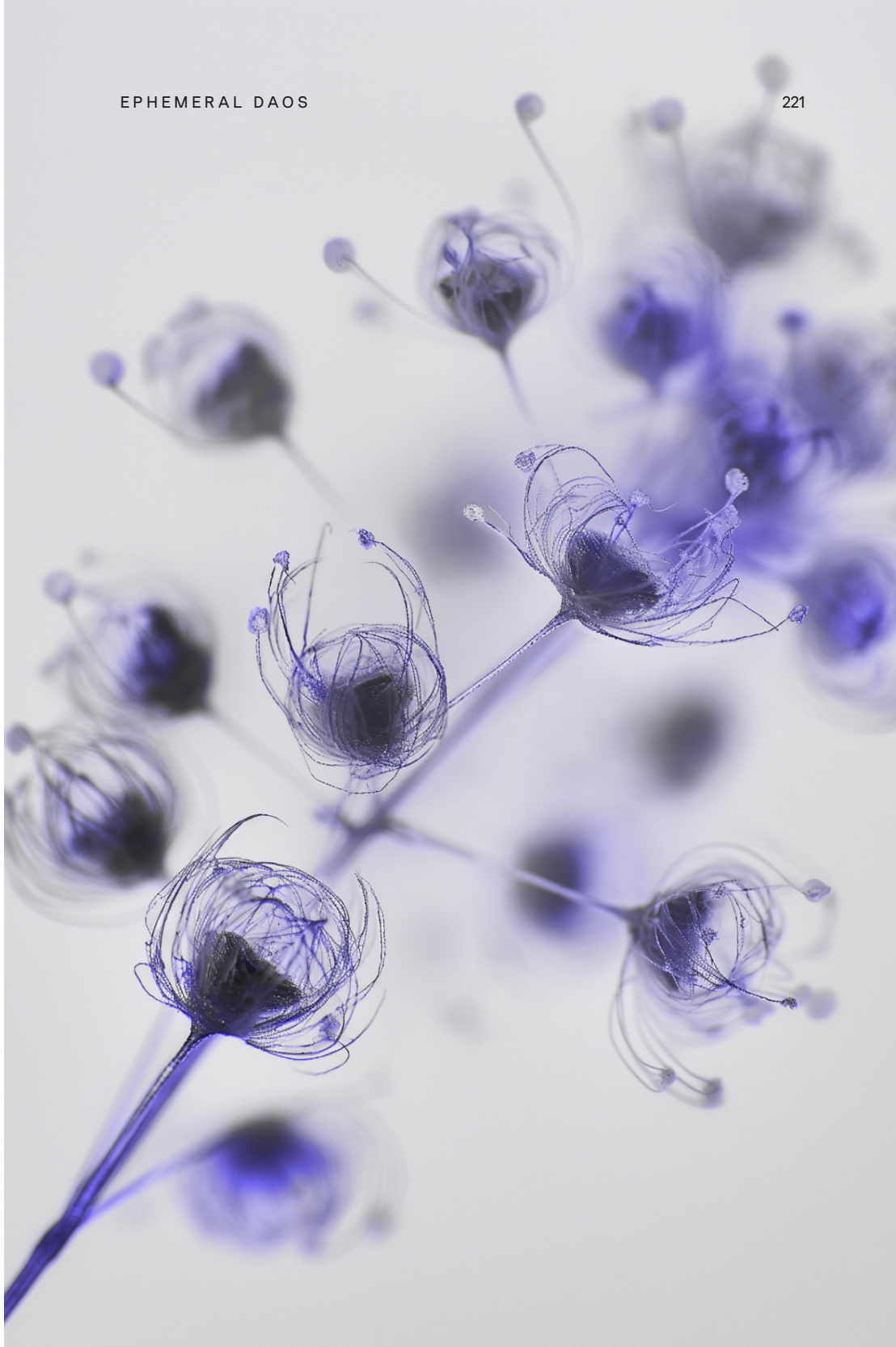
Ephemeral DAOs exemplify a transformative frontier in the realm of decentralized organizations, where the temporary nature of these entities not only promotes innovation but also allows for agile, purpose-driven engagements that dissolve upon goal completion.

This design strategy minimizes long-term commitments and facilitates rapid experimentation and learning, offering a fresh perspective on collaborative efforts and governance.

This design strategy relies on extituons (soft things like culture and relationships) over institutions (har things likesmart contracts) in some ways. Like other networked organisms, there is a symbiosis between the soft parts and the hard parts as the design space is traversed.

As this underexplored space continues to evolve, it holds the promise of reshaping our understanding of collective action and organizational life cycles in the digital age.

This chapter originally appeared on the Gitcoin gov forum. Read the whole thing @



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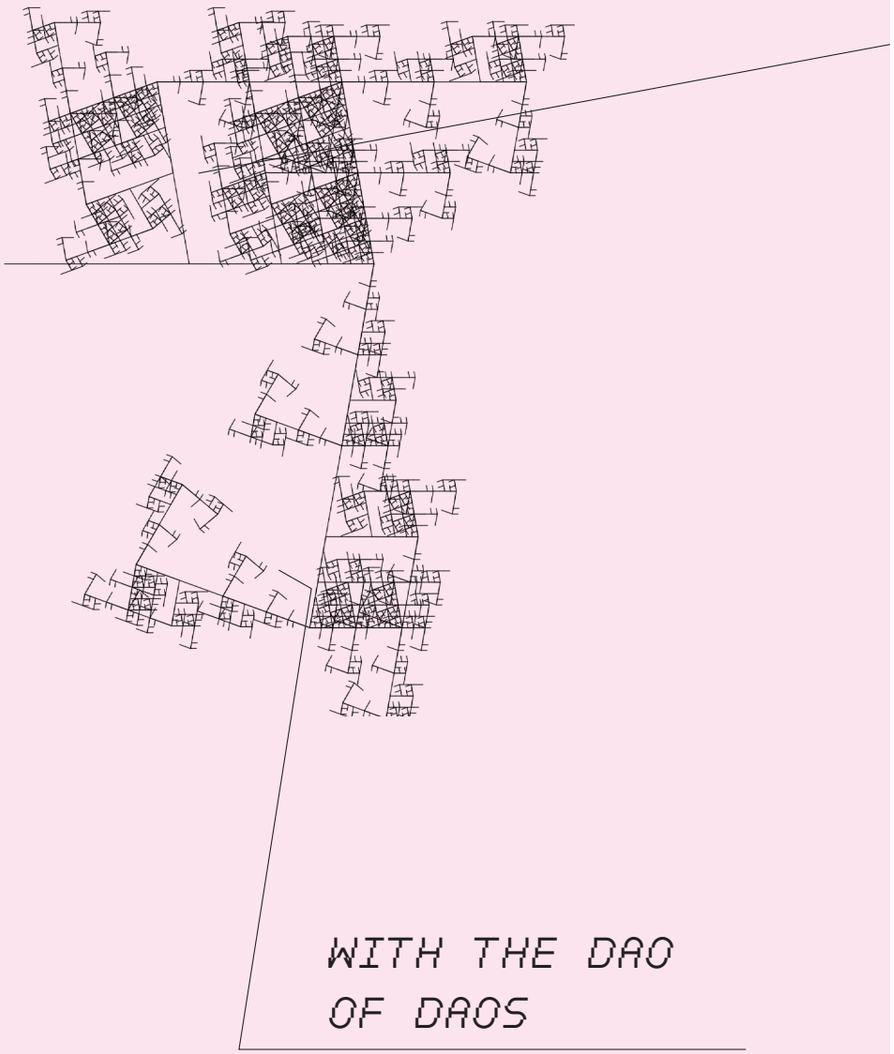
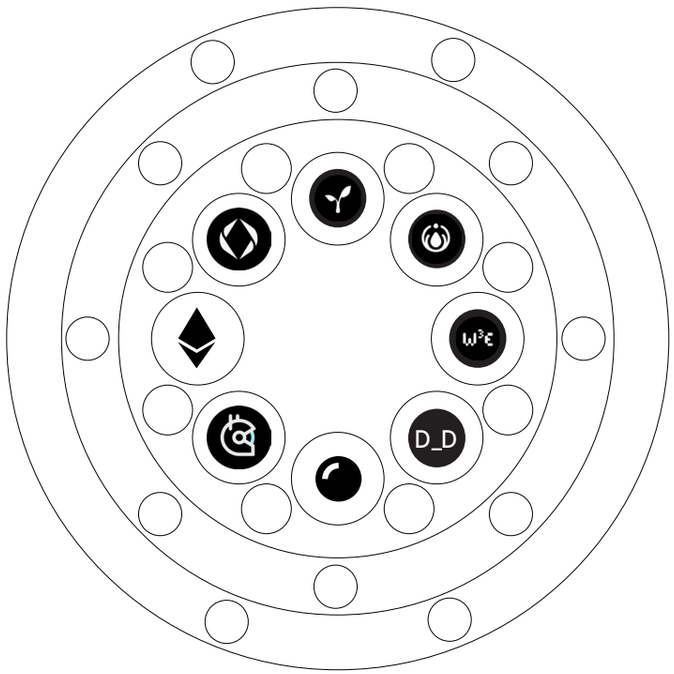


The DAO of DAOs is the structure that emerges as DAOs begin to interoperate with each other.

AN EXAMPLE (2020)

One example of DAO of DAOs is the structure of Gitcoin Grants Matching Pool sponsors from GR7-GR15. Each sponsorship of the matching pool that supports Ethereum public goods weaves the ecosystem together into a mesh network of relationships.

THE DAO OF DAOS



DAO OF DAOS WILL BE A THING

As DAOs begin to specialize and mature, there will be many opportunities for mutually beneficial DAO to DAO relationships to occur.

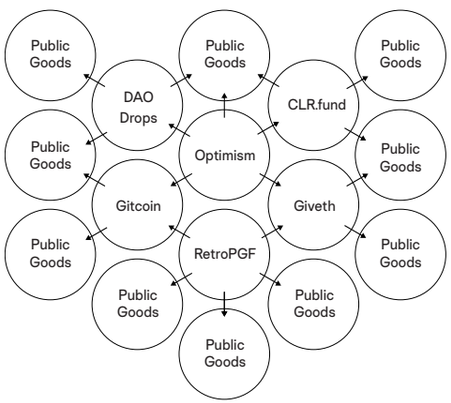
1. Token Swaps
2. Technology Swaps
3. Marketing Relationships

and so on..

A RECENT EXAMPLE (2023)

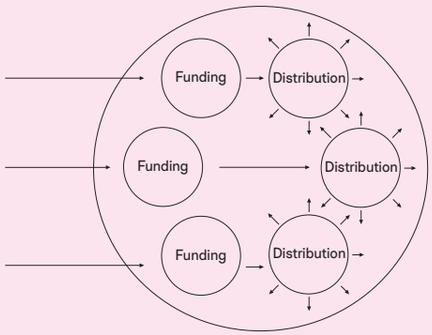
Another example of a DAO of DAOs is the network of public goods funding organizations that have evolved in order to fund public goods in the ethereum ecosystem. Together, these projects form a mesh network of different mechanisms, memes, and economics to support Ethereum ecosystem public goods. This is an example of "stacking mechanisms in practie!"

Here's how the funds flow between them:



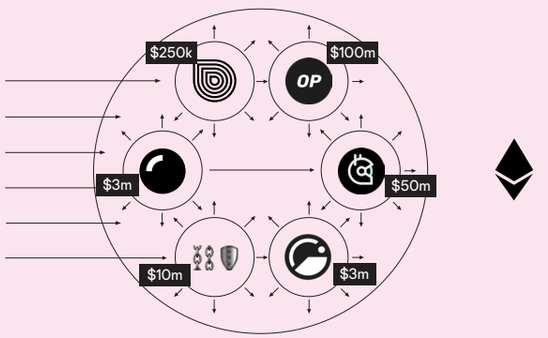
THESE PROJECTS COORDINATE TO SUPPORT THE ETHEREUM ECOSYSTEM

Each of these DAOs has a way of funding public goods, and a different way of distributing those funds.



The diversity in mechanisms and funding sources creates a more anti-fragile and rich source of funding for projects within the ecosystem.

Here is what the volume of these fund flows look like as of early 2024:



THREE LAYERS TO A DAO TO DAO PARTNERSHIP

There are three layers to a DAO to DAO partnership. In order from more casual to more serious (from less commitment to more commitment).

1. SOCIAL INTEROPERABILITY

In this stage, there are strong relationships being built between members of each DAO across DAO.

A Gitcoin example: DAO members might be invited to speak at Gitcoin events like Schelling Point or our Public Goods are Good Twitter spaces, or DAO Vibes. This is the relationship/rapport/trust building stage of of a DAO-to-DAO partnership.

2. PRODUCT/TECHNOLOGY INTEROPERABILITY

The product/technology interop stage is when the DAOs start to invest resources into seriously building protocol and tooling interop between the products of each system.

Examples of this I've seen at GitcoinDAO

1. Gitcoin leverages Proof of Humanity, BrightID or Idena for Gitcoin Grants.

2. Developers building on top of Allo Protocol or participating in the Capital Allocation Srategy Exchange.

3. Gitcoin launches a podcast on the Bankless network.

(I'm sure there are many others).

3. ECONOMIC INTEROP

Economic Interop occurs when DAOs begin to share economics with each other.

This can occur as a rev share or as a token swap between the entities.

Examples that we've seen or hope to see:

1. Gitcoin and Radicle doing a token swap.

2. Rev share agreements on Allo Protocol.

3. Stablecoins that fund public goods like gtcUSD.

IN CONCLUSION

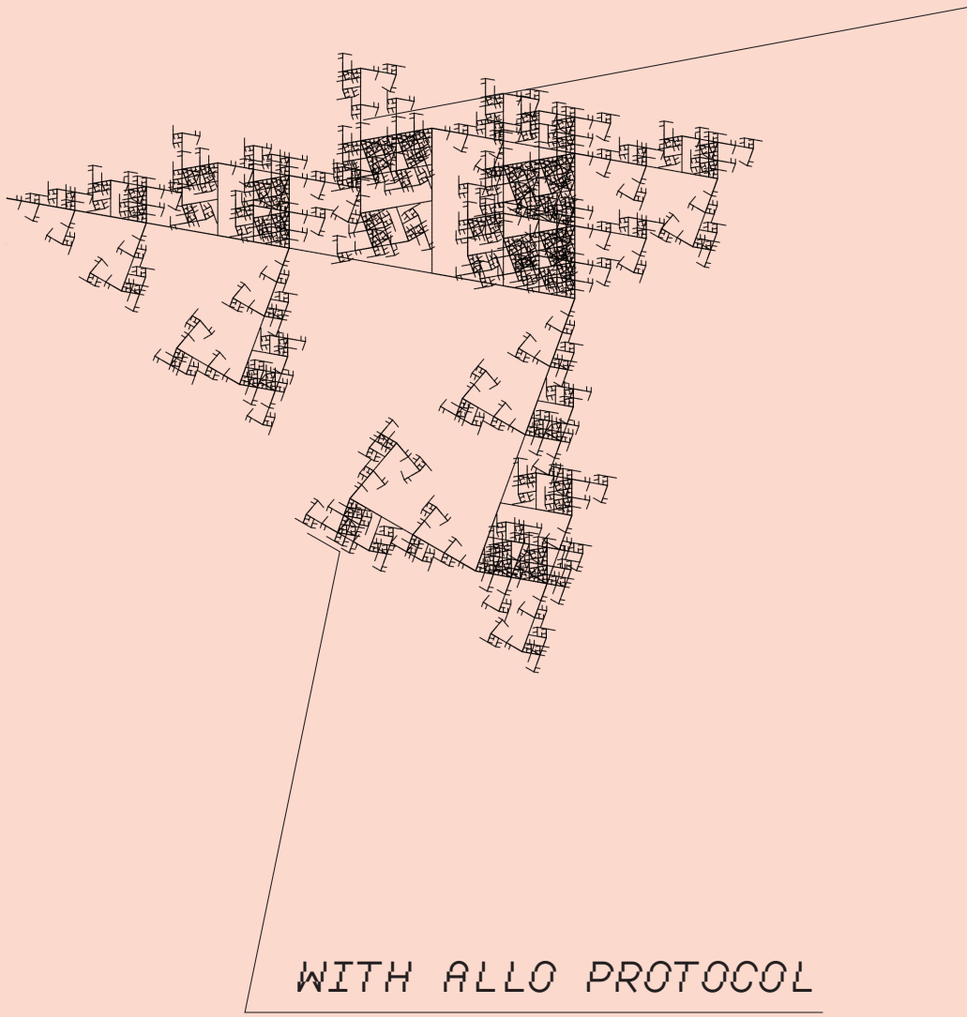
DAO to DAO partnerships are the atomic building block of a DAO of DAOS.

The DAO of DAOs is the harbringer of the transition from single ceullar to multi-cellullar life for the web3 ecosystem. By specializing and interoperating with others, we will build a mesh network of projects that rise and fall together - both by coordinating within themselves and between each other.

As Gitcoin evolves into becoming a capital allocation strategy exchange, the DAO of DAOs is an explicit part of the strategy. By allowing others to explore the design space and then finding a (3, 3) with them/Gitcoin, we strengthen Gitcoin as an attractor for the regen movement. This cycle could reflexively feed on itself and accelerate over time.

This essay was originally published on the Gitcoin gov forum. It has been edited and condensed. Read the original @

EXPLORING *THE DESIGN SPACE WITH ALLO PROTOCOL*



As of June 2024, Gitcoin has run 20 rounds of its Quadratic Funding grants program, and has distributed over $60M to early-stage builders and other grantees.

Gitcoin's capital allocation protocol, Allo Protocol, launched in early 2023 and has powered the Gitcoin Grants program ever since. In this chapter, we go in-depth into Allo, which marks a strategic cornerstone of Gitcoin's approach to facilitating more dynamic, pluralistic, and inclusive funding models. Allo's architecture is designed for extensibility, supporting a diverse array of allocation strategies such as Direct Grants, Retroactive Public Goods Funding, Quadratic Funding, and many future mechanisms.

By leveraging Gitcoin's momentum and by building and proliferating capital allocation strategies, we aim to surmount the limitations faced by traditional capital allocation practices - often hindered by a lack of transparency, democratic participation, and accessibility.

As tokenization eats the world, our ambition is to enhance our collective capability to finance critical endeavors and create collective action across various fields. We envision Allo Protocol as an engine of exploration of this space. By stewarding a core repository of the best allocation strategies, rigorously audited and well-documented smart contracts, best practices, a social movement that leverages these tools, and other supporting collateral - we position Allo as a pivotal player in the decentralized capital allocation space.

This chapter investigates the opportunities enabled by Allo, and articulates a pluralistic ecology of capital allocation tools, methodologies, and culture. We en-

vision a diversity of types of capital allocation which enable collective action for different combinations of peoples, cultures, and causes.

For web3 developers and participants, the advancement of Gitcoin and the rollout of Allo represent new opportunities in the pursuit of more equitable and effective capital distribution mechanisms.

We now have programmable money, so we can program our values into our money. We can build capital allocation systems that solve the problems of preciseness, scale, and remove gatekeepers. We can build democratic, accessible, transparent, and powerful capital allocation systems.

Gitcoin 2.0 is well positioned to help facilitate this vision. Throughout the distribution of $60M to builders through the Gitcoin Grants program, we've witnessed the immense impact of capital allocation in action. Organizations that are able to make effective funding decisions to invest in their ecosystem see higher builder activity, user onboarding, and transaction volumes – in short: grants create growth.

Driven by these learnings, we've recently launched Gitcoin 2.0. Gitcoin's transformation from 1.0 to 2.0 breaks down as the following:

Transformation from Ethereum-only to being deployed across many EVM-based networks (Optimism, Arbitrum, Base, Polygon, zkSync, Scroll, Avalanche, and more).

Transformation from only Quadratic Funding to many types of capital allocation mechanisms (Quadratic Funding, Direct Grants, Retroactive Public Goods Funding, and more).

Transformation from a centralized, Gitcoin-operated platform to a suite of modularized products and protocols that anyone can use and build on top of.

Gitcoin 1.0	1	centralized product
	2	just QF
	3	for Ethereum
Gitcoin 2.0	1	decentralized / modular protocols
	2	many mechanisms
	3	for any EVM-based community

DESIGN PHILOSOPHY

Throughout the design and development of Gitcoin's tech stack, we've adhered to a design philosophy grounded in key principles. These tenets are crucial for capturing our understanding of the broad spectrum of capital allocation design, yet they maintain the flexibility needed as we, along with others venturing into this domain, continue to learn and innovate.

1. SECURITY FIRST

Allo Protocol brings capital allocation onchain. We believe that this is a foundationally important step forward for the capital allocation ecosystem because it means we can now introduce credible neutrality,

censorship resistance, and democratic decision-making into capital allocation schemes.

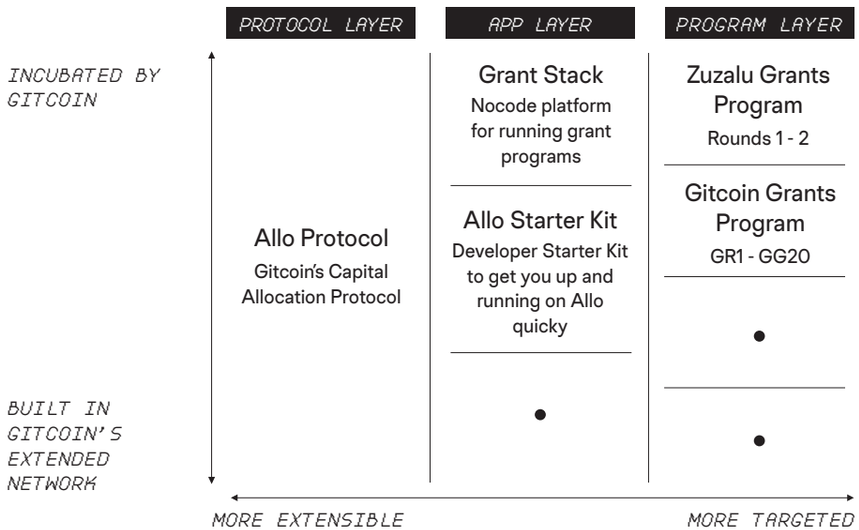
2. SIMPLE CORE, RICH PERIPHERY

This tenant of the Allo design philosophy is how we express the Unix philosophy in the protocol. The core of the protocol (Allo.sol) creates and funds pools and assigns them an allocation strategy ("make each program do one thing well").

We expect (and hope) that the output of an allocation strategy will be used for a variety of things, including potentially funding other pools in Allo ("expect the output of every program to become the input to another, as yet unknown, program").

3. LAYERED APPROACH

GITCOIN'S STACK IS SEPARATED INTO MULTIPLE LAYERS



We have designed Allo to have a simple, stable, and secure, core of four modules.

These modules follow the Unix Philosophy of doing one thing and doing it well, but being interoperable with each other. This has allowed us to effectively, precisely, and scalable allocate capital.

THE BASIC MODULES OF ALLO'S SIMPLE CORE ARE:

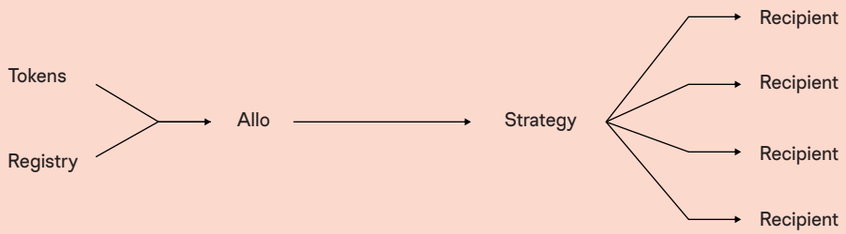
Strategy - how to distribute capital to the projects in the registry.

Registry - list of projects that could be funded.

Allo - the central nexus which coheres the above three elements together.

Tokens being ingested into Allo.

THE FLOW OF CAPITAL THROUGH ALLO



REGISTRY

Allo serves as a protocol for capital allocation tailored for tokenized communities, featuring a novel concept of a registry of projects.

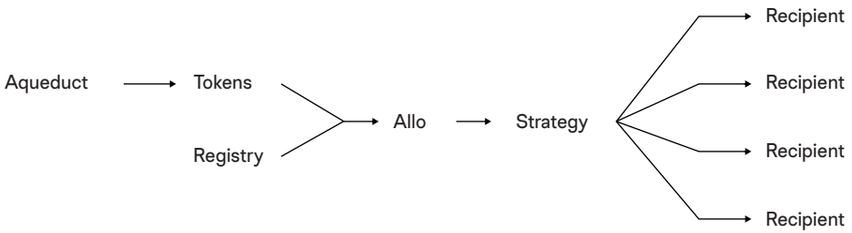
The registry stands as a core foundation of data intelligence regarding the activities of projects, individuals involved, their reputation, and attestations about their impact.

STRATEGY

Capital allocation strategies decide where tokens should go - often with the help of outside data, especially voting data.

The strategy is the core foundation of computation that takes data from the registry and other impact oracles, and computes a distribution of tokens. Which is then given to a seperate distribution contract.

Each of these modules is overridable. From this simple core, a rich periphery is enabled. We hope Allo eventually supports (and provides off-the-shelf to builders) many possible permutations of capital allocation registries, tokens, and strategies.



It is our belief that all permutations of this possibility space = (sum of all possible aqueducts) x (sum of all possible onchain assets) x (sum of all possible registries) x (sum of all strategies).

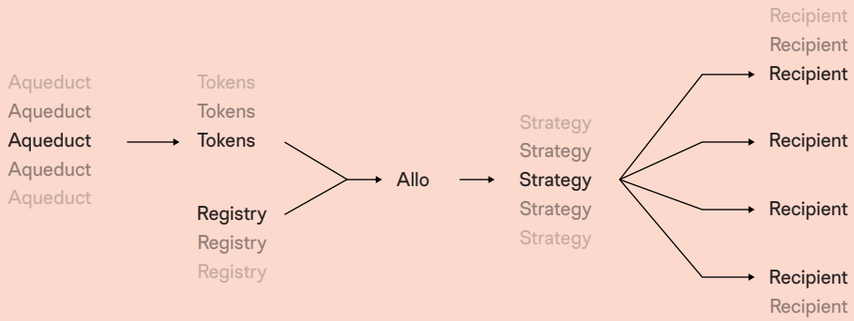
The design space here is vast. We anticipate that there will be many valuable configurations of Allo Protocol in the future.

THIS DESIGN SPACE INCLUDES:

INCLUDING..

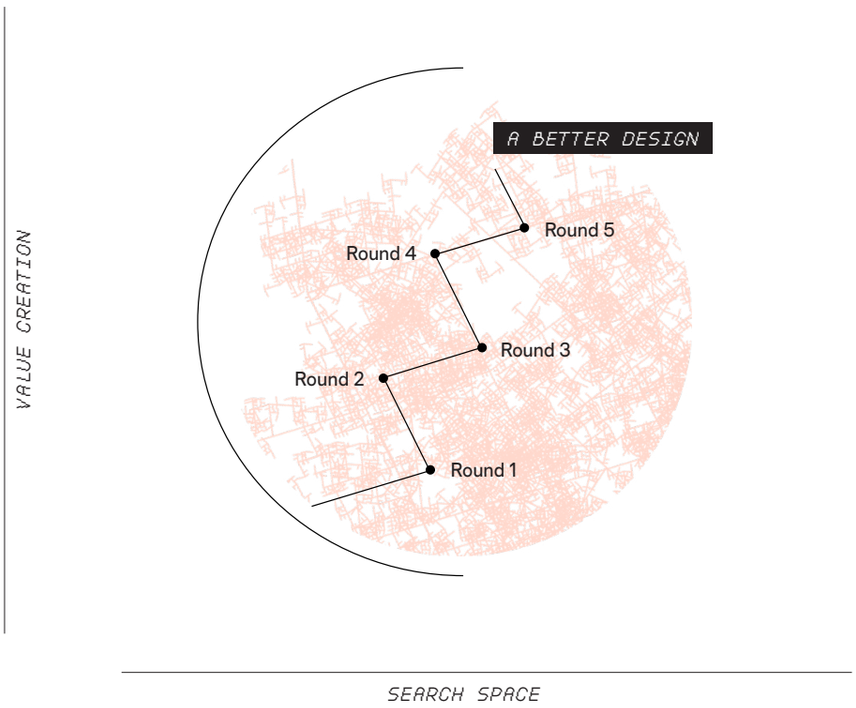
1. Strategies that Allo already supports (Direct Grants, RFPs, QF, RetroPGF).

2. Strategies that Allo could support (many of which are detailed in this book!)



Exploring the design space through brute force–testing every possible model permutation– is inefficient.

Instead, we refine our strategies by running Allo funding rounds and learning from the outcomes, employing an iterative OODA loop (Observe, Orient, Decide, Act) process that has previously matured Gitcoin Grants Stack and the Gitcoin Grants program.

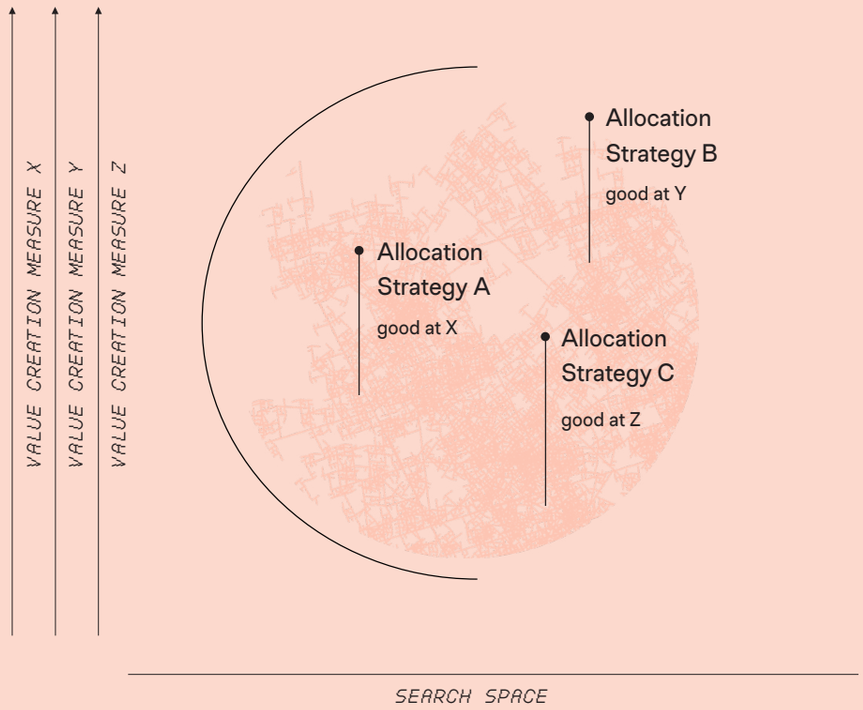


This essay originally appeared in the Gitcoin 2.0 Rainbowpaper. It has been edited and condensed to fit this book.

Read the whole thing @

While we endeavour to find the optimal designs for capital allocation strategies, we are mindful that there is not global optimal design. Instead, it is our belief that the design space is pluralistic. There will be many different capital allocaiton strategies that are good at differnet things.

We need a way to discover the most important capital allocation strategies, starting with the simpler ones and then progressing to the more complicated ones. This book is an early cartography of that design space.



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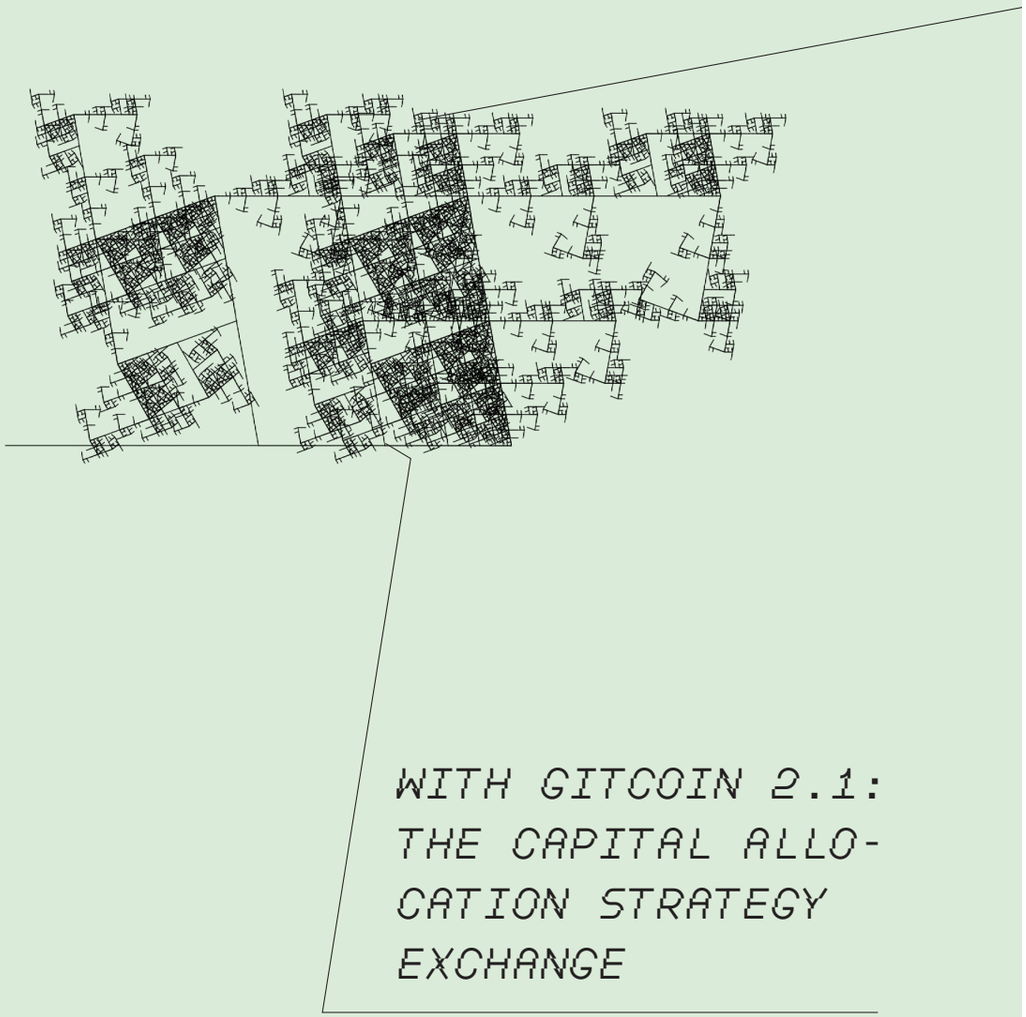


WITH GITCOIN 2.1: THE CAPITAL ALLOCATION STRATEGY EXCHANGE

2023 was the year that Gitcoin fell to 3rd place in the ETH public goods funding space. Measured by volume, Gitcoin's distribution ($7m) was surpassed by Protocol Guild ($10m) and Optimism ($100m).

In 2019-2020, Gitcoin was a darling of the Ethereum ecosystem. Powered by Quadratic Funding—a novel mechanism at the time—Gitcoin gained prominence as one of the top crowdfunding platforms in the Ethereum ecosystem.
But it was not meant to last. Gitcoin transitioned slowly from company to DAO, and the market moved on from QF to RetroPGF, Self Curated Registries, and more.

NETWORK	MECHANISM	GMV (2023)
Optimism	RetroPGF	$100m
Protocol Guild	Self Curated Registry	$10m
Gitcoin	QF (mostly)	$7m

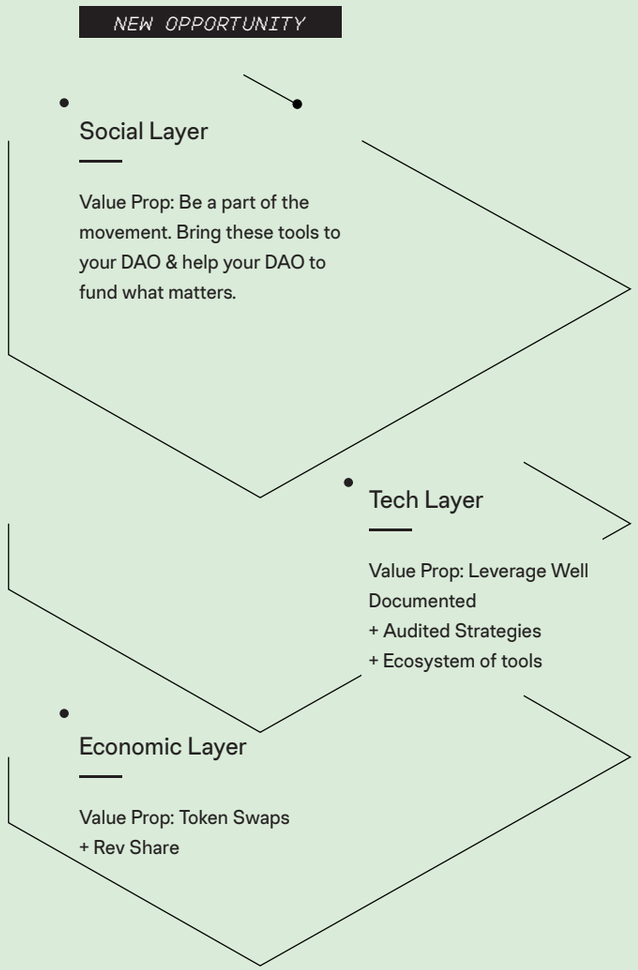
(To be clear, we <3 Protocol Guild and Optimism. Not only for their impact, but for their leadership in designing allocation strategies. They are our friends. This chapter is not about competing with them in a zero sum way, but learning from them and developing positive sum relationships with them).

About Making Gitcoin Lead Again: in this chapter, I propose a path towards catching up (and making sure we are uniquely positioned in a strategic way to deal with future competition). I propose that Gitcoin 2.0 facilitates a capital allocation strategy exchange.

A Capital Allocation Strategy Exchange (CASE) is a place where capital allocation strategies (CAS) are exchanged. It has three primary personas it attracts with distinct jobs to be done. I think that Gitcoin can add value to all three of these personas by giving each of them what they want.

PERSONA	HAS	JOB TO BE DONE	EXAMPLES
Mechanism Innovator	Innovative Mechanism	Get distribution for mechanism	Glen Weyl & Vitalik (QF)
		Advance mechanism design	Glen Weyl + Vitalik (RetroPGF)
			Tim Beiko & Trent Van Epps (Protocol Guild)
			Superfluid / Geoweb (Streaming QF)
			1Hive (Conviction Voting)
			Many more.
Program Manager	$$$$, Community, Roadmap	Wants to fund what matters in their community	Any of Gitcoin's current partners
		Wants growth	
Mechanism Developer	Development Skills	Wants to deploy the coolest new mechanisms in their community	Giveth
			Endaoment
	Often an app of their own		IDriss
			Gitcoin Grants Stack

Gitcoin is an attractor through its social layer, tech layer, and economic layer.



THE ATTRACTOR OPERATES ON 3 LEVELS

The weight of Gitcoin's intermingled social, technology, and economic layer provide a schelling point for Mechanism Innovators, Mechanism Devs, and Program Managers to rally around.

Within the Capital Allocation Strategy Exchange, each actor gets what they want

Mechanism Innovators

Get distribution of their mechanisms, and data about how their mechanisms operate in the wild. If all goes well, maybe even a rev share.

Program Managers

Get access to the latest capital allocation mechanisms, education training programs, and pilot cohorts about how they work.

Mechanism Devs

Get access to well documented, audited contracts, that do capital allocation well out of the box.

To juice the wheels, Gitcoin could provide value-add services, including:

Well-documented, consumable, audited contracts, integrated into Allo Protocol

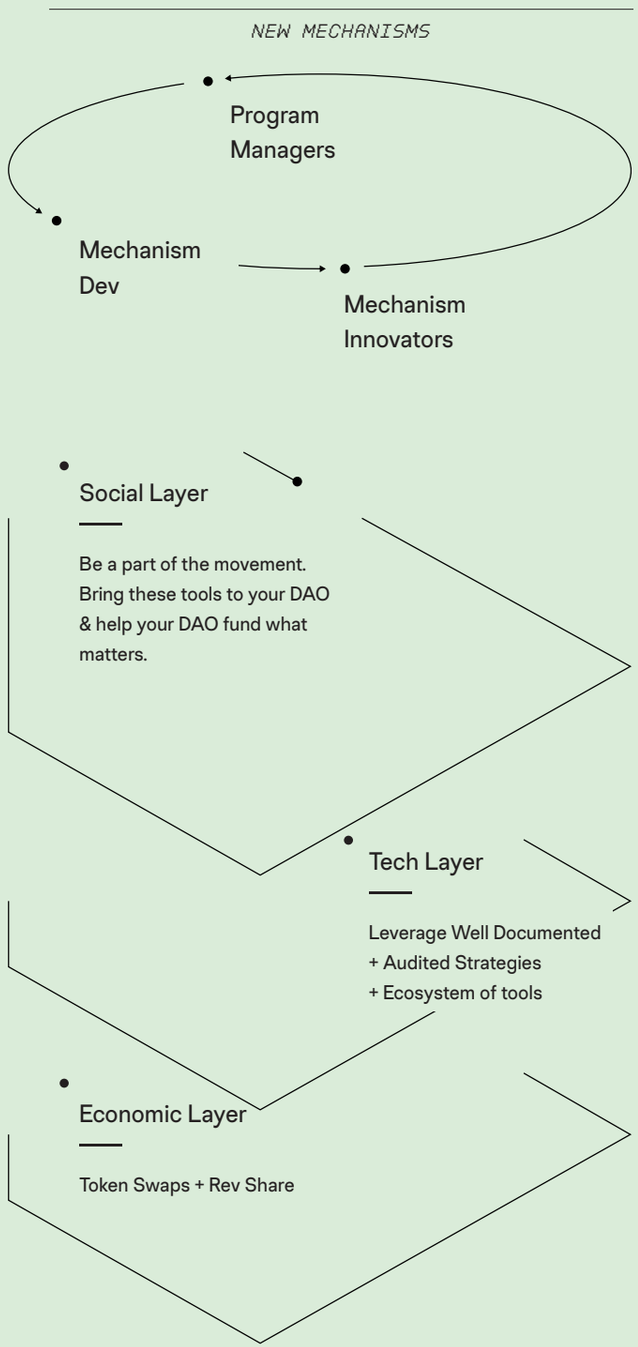
Marketing/distribution for new mechanisms

Education and training programs

Pilot cohort operations

Gitcoin Value Add:

1. Distribution
2. Education and training programs
3. Pilot cohorts
4. Well documented, consumable, audited contracts
5. Weaving



An example of this in practice is EasyRetroPGF. Here's how EasyRetroPGF went:

1. We identified a Mechanism Innovator and began building a relationship with them (Optimism)

2. We forked their software and created a well-documented, audited, tool for other people to use.

3. We ran educational and training programs and invited program managers.

4. We get $$$millions in Allo GMV

4. Devs built on top of it.

Other examples of mechanisms being built by 3rd parties in the ecosystem.

Other examples:

Another example is Endaoment. They took our QF strategy off the shelf and built it into their app.

Another example is Impact Stream. They took Allo off the shelf and built it into their app and then ran a pilot.

Another example is GeoWeb/ Superfluid Streaming Quadratic Funding.

Examples in the works right now:

Another example is 1Hive/Conviction Voting (currently being built on Allo).

Another example I've got coming up is REDACTED, which will be announced soon.

Why do this?

Relieve the burden of exploring the design space alone. Enable our network of citizens to do it with us.

Repent for the past loss of market share, and create a path to making up that ground.

Build (3,3)s with other ecosystems.

Create exponential network utility.

As more and more people build on Allo, more network value accrues, in the form of:

Documented and audited strategies on the Allo Awesome List.

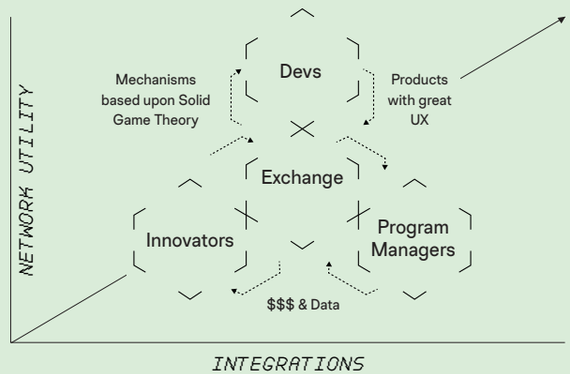
Social Momentum

Allo GMV

... which reflectively creates more demand for mechanisms.

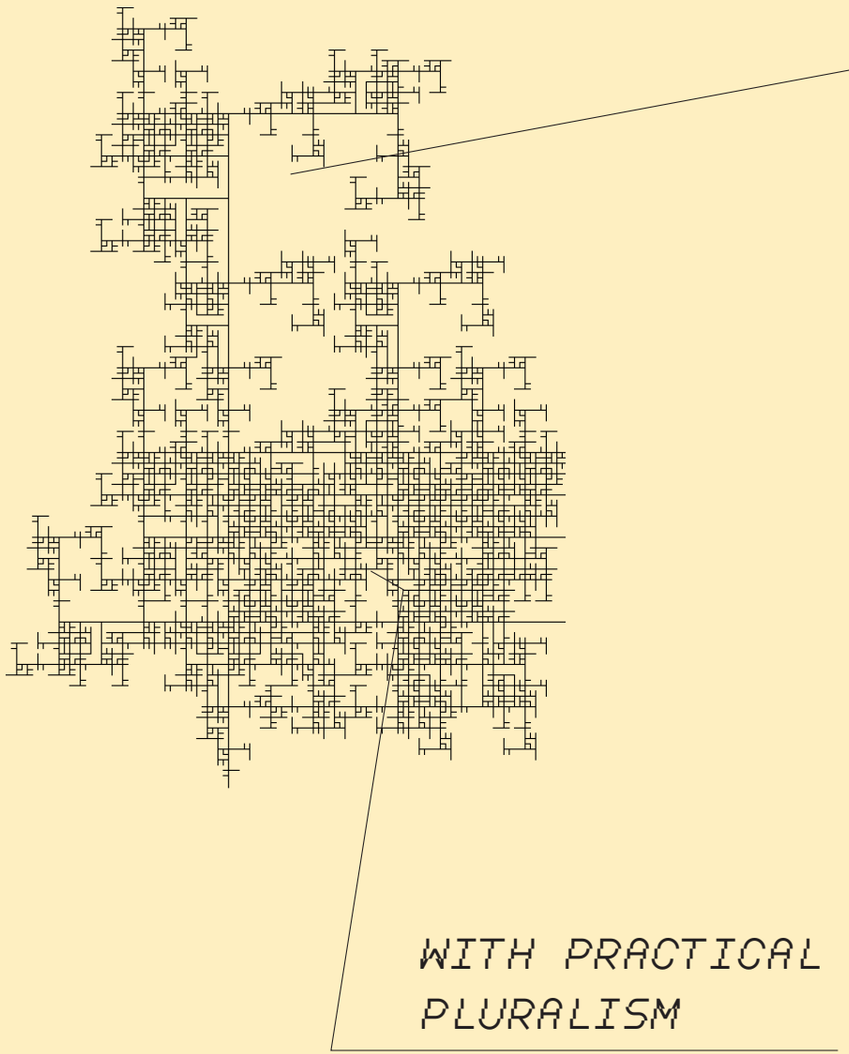
The coolest thing about this strategy is that it is reflective. Momentum begets momentum - and Metcalfe's Law kicks in. Reflexive growth cycles like this can create exponential growth in network utility due to Metcalfe's Law:

This essay originally appeared on the Gitcoin Gov forum. It has been edited and condensed. Read the original @



META

EXPLORING *THE DESIGN SPACE*



WITH PRACTICAL PLURALISM

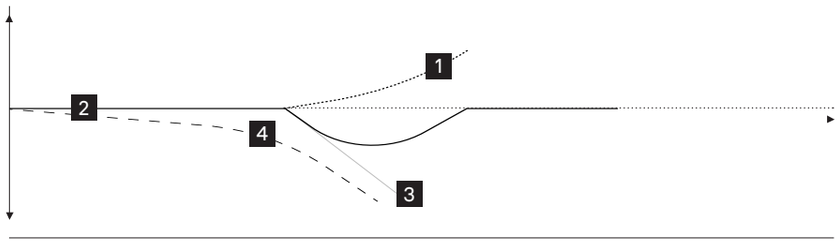
AN ESSAY BY AURYN MACMILLAN (CLRFUND) & KEVIN OWOCKI (GITCOIN)

The Ethereum network is secured by block producers (currently miners, soon to be replaced by validators). They are the foundation of consensus in the Ethereum network, upon which there are trillions of dollars of assets and untold untapped potential for human coordination.

Having well-designed, secure, and dependable block producers to protect this value is a great strategy to defend the network.

One of the key strategies employed by the Ethereum community to ensure secure and reliable block production is client diversity. This means, more than one implementation of the specification — they can be differentiated by language, architecture, features or which part of the network they specialize in. If a single client were used by 2/3rds (66%) of validators and it experienced a serious bug, there's a very real risk this could lead to chain instability for users and monetary loss for node operators. By treating client diversity as a public good and fostering an environment where many independent client teams are incentivized to implement the Ethereum protocol in disparate code bases, the Ethereum community bakes in a measure of anti-fragility and resilience against bugs in any one implementation.

Client Diversity is pluralism in practice (x axis — time, y axis — resource availability)



1. ANTIFRAGILE 2. RESILIENT 3. ROBUST 4. FRAGILE

Pluralism — the understanding that diversity of people, beliefs, opinions, mechanisms, approaches, implementations, etc., within a given context generally results in better outcomes than in the absence of such diversity. Nowhere is this more evident than in ecosystems with rich biodiversity; ecosystems where radically different flora and fauna work in a harmoniously competitive act of mutual regulation and perpetuation. This can be seen in how the success of one species feeds and is kept in check by the success of another species, and so on.

Pluralism itself is a primitive for antifragile, resilient, and regenerative systems. As an ecosystem, Ethereum has done a great job fostering diversity in its mining and validating clients. Similarly, we should insist on pluralism across the full stack of web3 technologies and culture. This includes discrete products like wallets, RPC nodes, DAO tooling, public goods funding mechanisms, AMMs, stablecoins, and developer tooling, as well as the intangibles influences like the people, groups, communities, and opinions which participate in and hold sway over our ecosystem.

We are writing this essay because we believe in client diversity. We believe in pluralism as a primitive. And we want you to join us in extending the ethos of client diversity and pluralism to other layers of the stack. By having pluralism as a core value of each vertical, we make it more likely the space tends towards capture-resistance — not fragility. Participants should be able to choose to use or not use any one of a number of options for any given need.

By having pluralism at the heart of each niche, we ensure the space is antifragile. If there is a major bug discovered in one system, the resulting cascading harm can only go so far because there will always be another dApp ready to pick up the slack. For web3 to truly express itself, diversity and pluralism must be core values.

To all those who would seek to build, enshrine, and defend moats in our shared virtual machine, to build systems incapable of composition, incapable of componentization, incapable of being permissionlessly replaced by some alternative:

We say this is a pattern of the past, an antipattern in web3. It's a pattern enabled by permissioned access to, and control of, data.

This pattern will be made redundant in our version of the internet, made redundant by our shared virtual machine.

The future will be dominated by much more emergent systems; organic compositions of many discrete and interchangeable components, built by disparate people, in combinations never dreamt of by their creators.

The future will be dominated by much more emergent systems; organic compositions of many discrete and interchangeable components, built by disparate people, in combinations never dreamt of by their creators.

It is through this diversity that we build anti-fragility, and a resilience to capture, censorship, and stagnation.

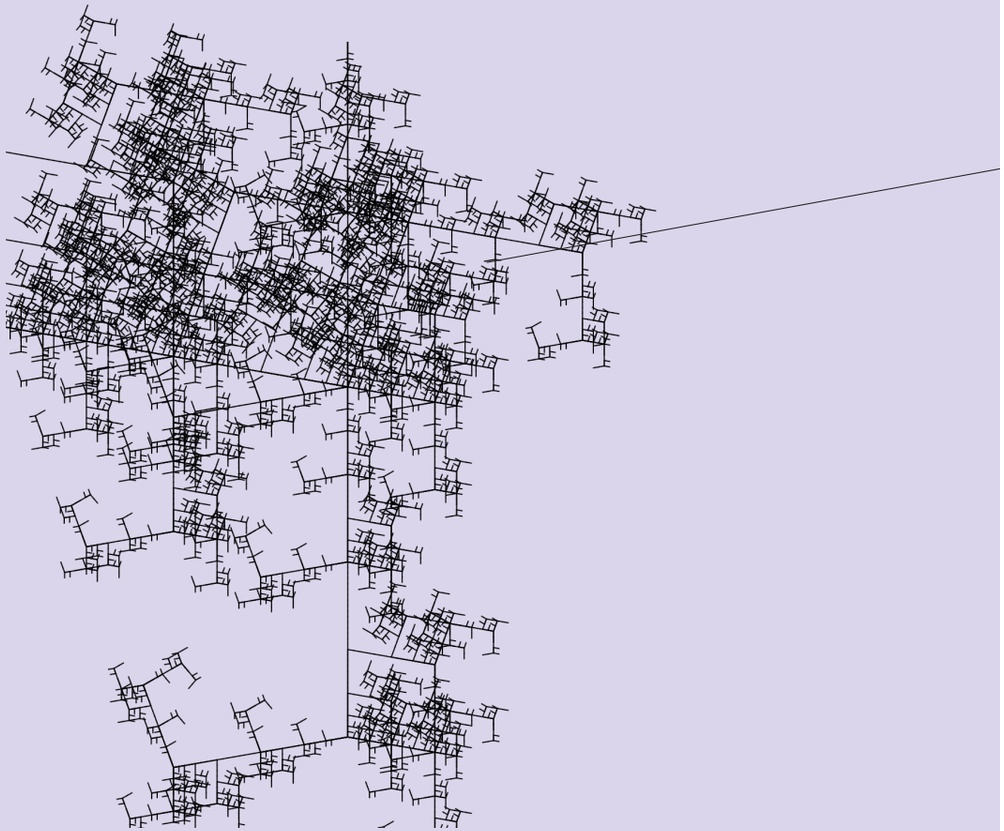
We challenge the protocols at the center of the NFT, DeFi, DAO Tooling ecosystems to adopt practical pluralism as part of their design philosophy & broader Ethos.

Special thanks to TJ Rush, Trent Van Epps, and members of GitcoinDAO, for reviewing drafts of this essay.

This essay was originally published in 2022. It has been edited and condensed. Read the original @

META

PARTING *THOUGHTS*



IT'S ALL COORDINATION

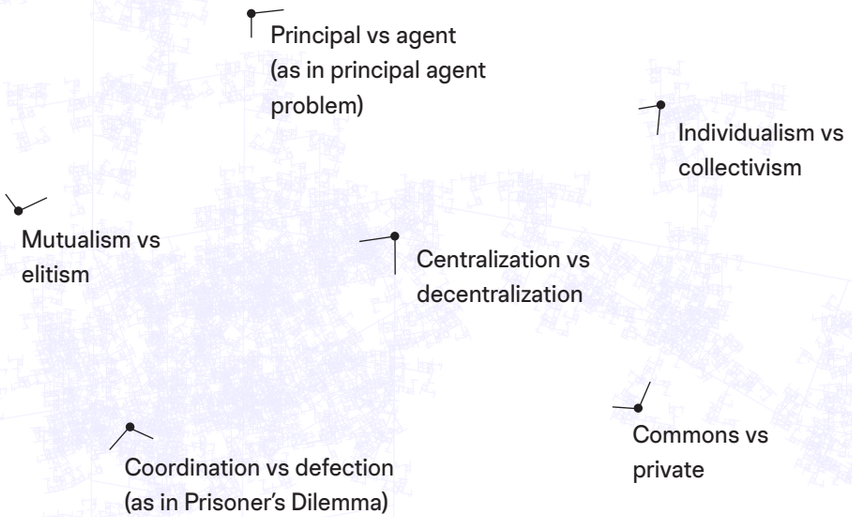
The Prisoner's Dilemma is a classic problem in game theory, illustrating why two rational individuals might not coordinate, even if it seems to be in their best interest. In the scenario, two prisoners are accused of a crime and must decide independently whether to confess or remain silent. If both remain silent, they receive light sentences. If one confesses while the other remains silent, the confessor gets a lenient sentence while the silent one gets a harsh sentence. If both confess, they receive moderate sentences. The dilemma highlights how individual incentives can lead to a worse collective outcome.

A/B	B STAYS SILENT	B BETRAYS
A stays silent	-1 / -1	-3 / 0
A betrays	0 / -3	-2 / -2

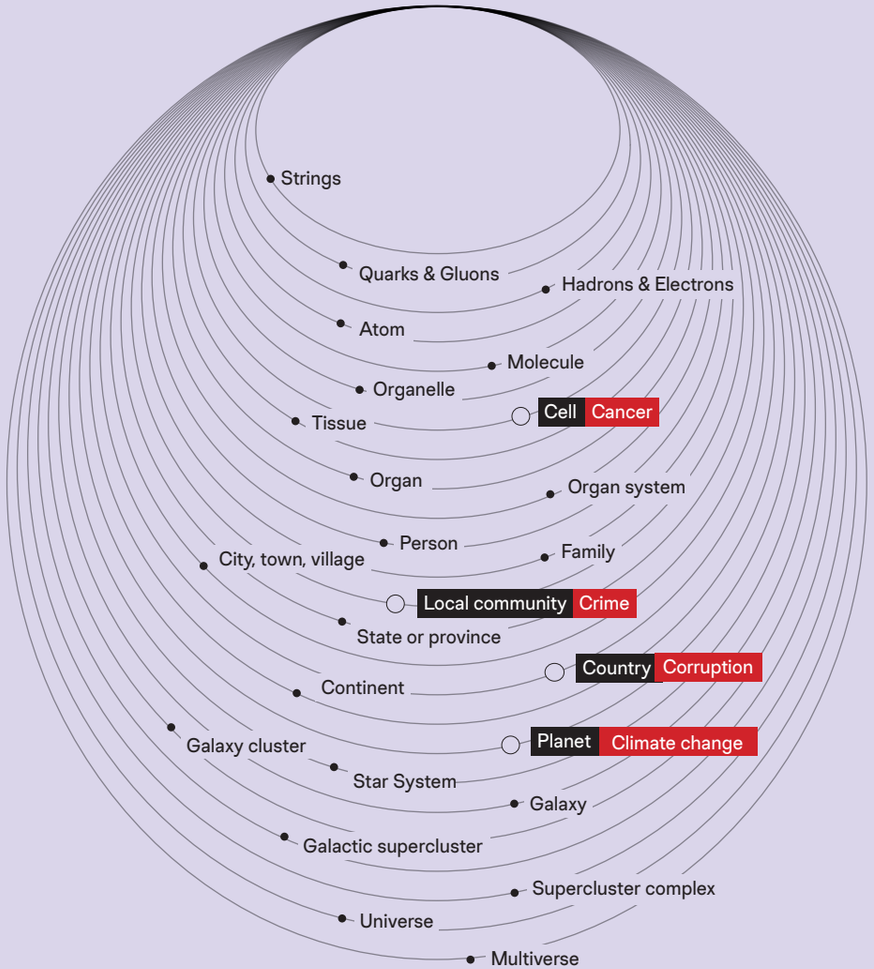
If we could solve the Prisoner's Dilemma by ensuring cooperation over self-interest, it could profoundly impact society by fostering greater trust and collaboration. This would lead to more efficient and mutually beneficial outcomes in various fields such as economics, politics, and social interactions. Enhanced cooperation could reduce conflicts, increase collective problem-solving, and create more equitable and sustainable systems, ultimately improving overall societal welfare and stability.

I think that each of the onchain coordination mechanisms in this book create new ways of solving the Prisoners Dilemna. Used together, they could provide overwhelming momentum for coordination and collective action (but without sacrificing sovereignty).

The capital allocation strategies denoted in this book are all working in the tradeoff space of:



This tradeoff space is active at many levels of the universe at different scales (cells, organs, organisms, families, organizations, companies, etc.), and in some spots it veers into coordination failure.



Let's reason about these varying levels of scale. But first, some vocabulary:

A holon is a system or entity that is both a whole in itself and a part of a larger system. Each of the capital allocation strategies that we've discussed in these pages are a way of ordering the relationship between holons - up and down the holarchy. A holarchy is a hierarchical structure where each level is composed of holons that are both whole entities and parts of a larger system.

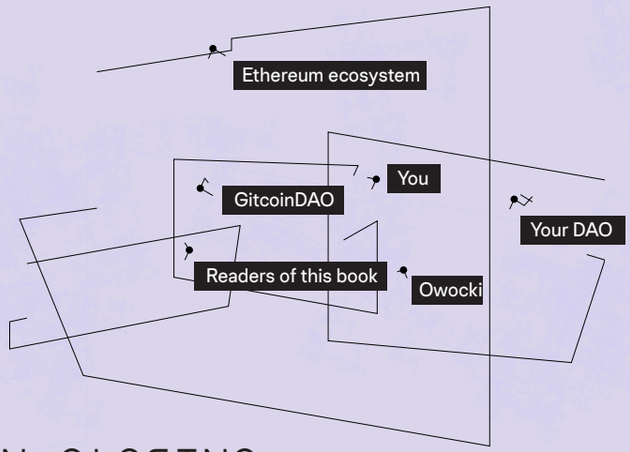
Now that we've got blockchains - a better substrate for human coordination - will we be able to create better systems for human coordination? Can we solve coordination failures in human families, communities, cities, states, countries, or globally?

This is my theory of change: blockchains offer an unprecedently effective medium for navigating coordination failures and experimenting in new ways to harmonize the individual within their collective and vice versa, between individual humans (and their bots), all of humanity, and every level of the stack between them.

What if we could offer better ways of coordinating groups, whilst still respecting the sovereignty of the individual? What if we could solve for these tradeoffs in one part of the stack and easily proliferate that to other parts of the stack? If we can't solve it, we could at least make forward progress to align incentives, rights, and privileges in new, more elegant ways.

If you consider all of the different holons you are a part of, you may notice how much of your relations between other humans are mediated by ineffective coordination.

INTERSECTIONAL IDENTITY



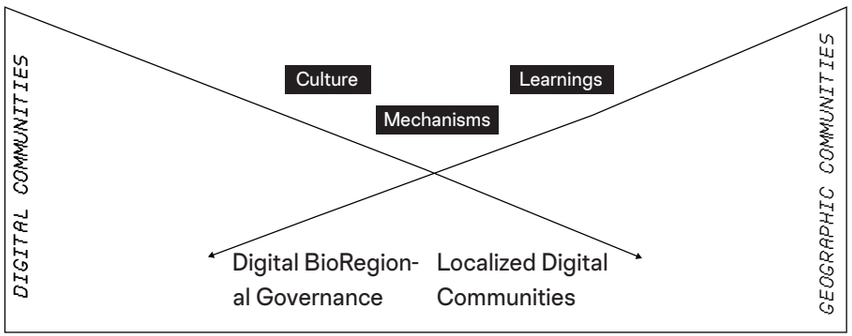
IN CLOSING

The greatest pleasure of writing this book was to showcase all of the powerful ways we are provoking a new social contract between the individual and the collective. Each of the onchain coordination networks in this book are embodiments of this potential.

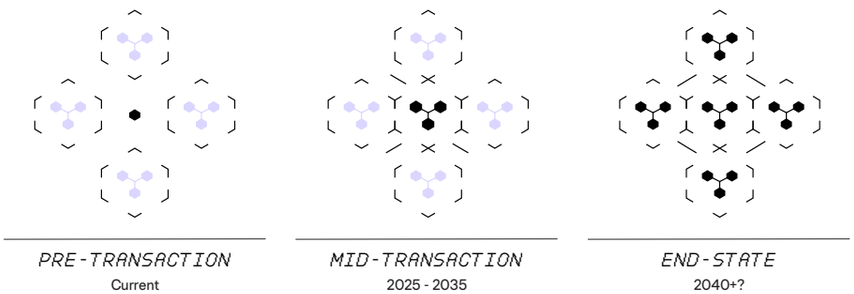
At the same time as we recognize this tradeoff space and work to solve for it, we must realize also individualism vs collectivism are a false dualism. You are both an individual human and a collective (of cells). When you realize that cancer and climate change are driven by the same phenomena—coordination failures (Moloch)—just at different parts of the stack, you will see this false dualism at work.

Our task is to integrate globally shared knowledge (like the mechanisms we invent in the Ethereum space) with localized trust networks (like our communities) to create sustainable and resilient communities. This is the vision of Cosmolocalism - a new movement that recognizes where globalization has failed and aims to combine the best parts of the global with the local.

What if we could cross-pollinate world-class capital allocation strategies (globalism) with the deep legitimacy, high lindy, and rich relationality of local communities (localism)?

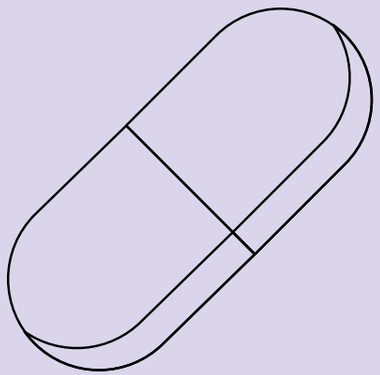


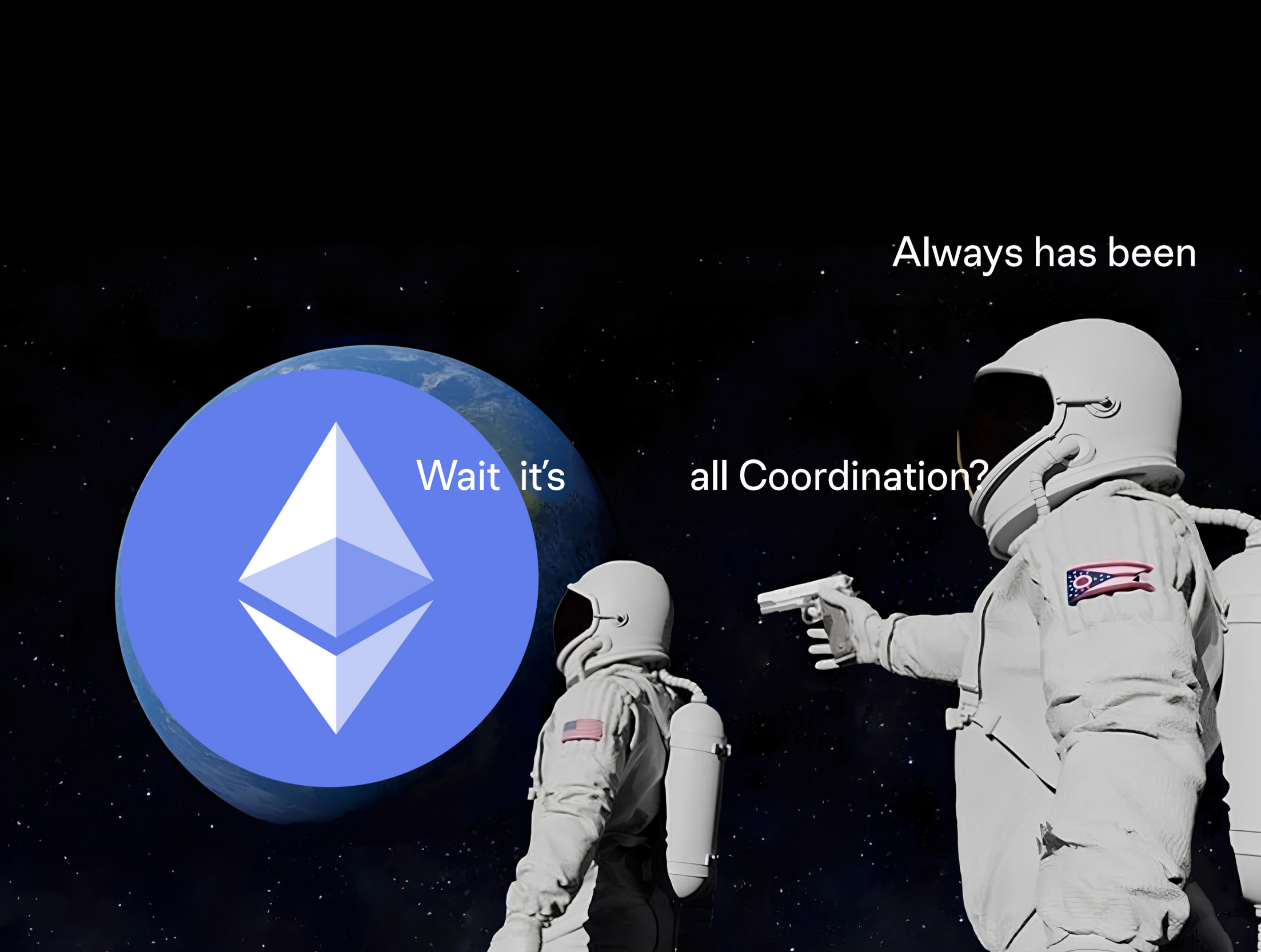
We are only in the beginning of the pre-transition era to a more coordinated world. This is our moment to accelerate the transition to a world that has solved coordination failures at scale.



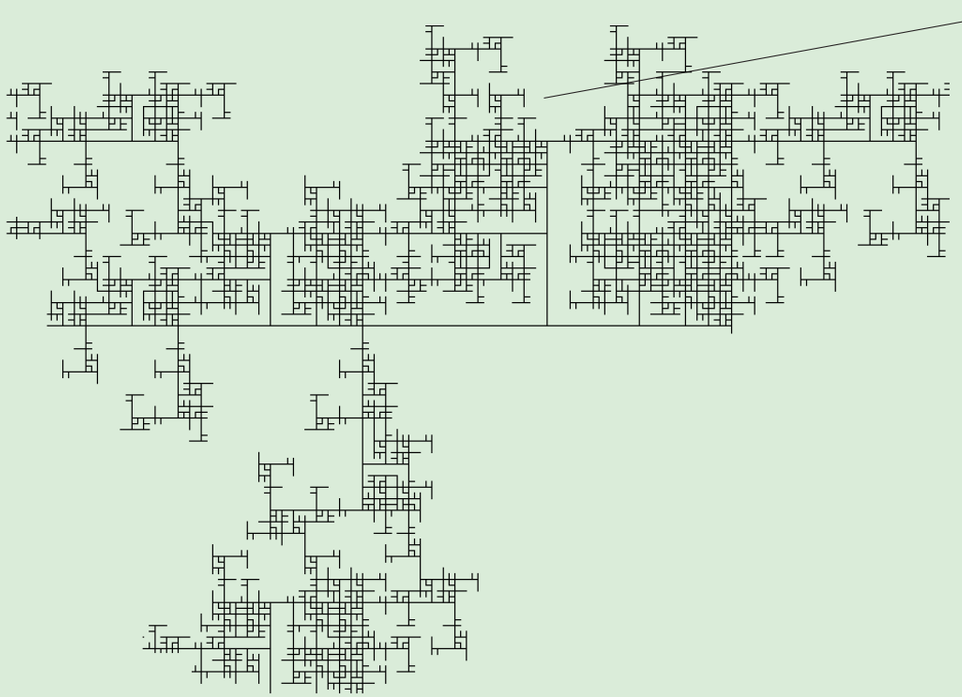
STAY BASED,
STAY GREENPILLED.

OWOCKI




Always has been
Wait it's
all Coordination?

CALL
TO ACTION



USE THESE MECHANISMS

Many of these mechanisms featured in this book are either available to use via Gitcoin, available via another organization, available via open source software, or on a roadmap somewhere within the Ethereum ecosystem.

WE'D LOVE TO HELP YOU GET ONBOARDED

Mechanism designer?

Get distribution for your latest mechanism via Gitcoin.

Developer?

Fork the mechanism and extend it, or build it into your app.

Grants program manager?

Use the latest and greatest coordination tech in your ecosystem.

DM Owocki

Join the telegram group to git involved.

FEEDBACK WELCOME

Notice a typo?

Did I forget a mechanism?

Did I miss something?

Are you an individualist who thinks collectivism is always bad?

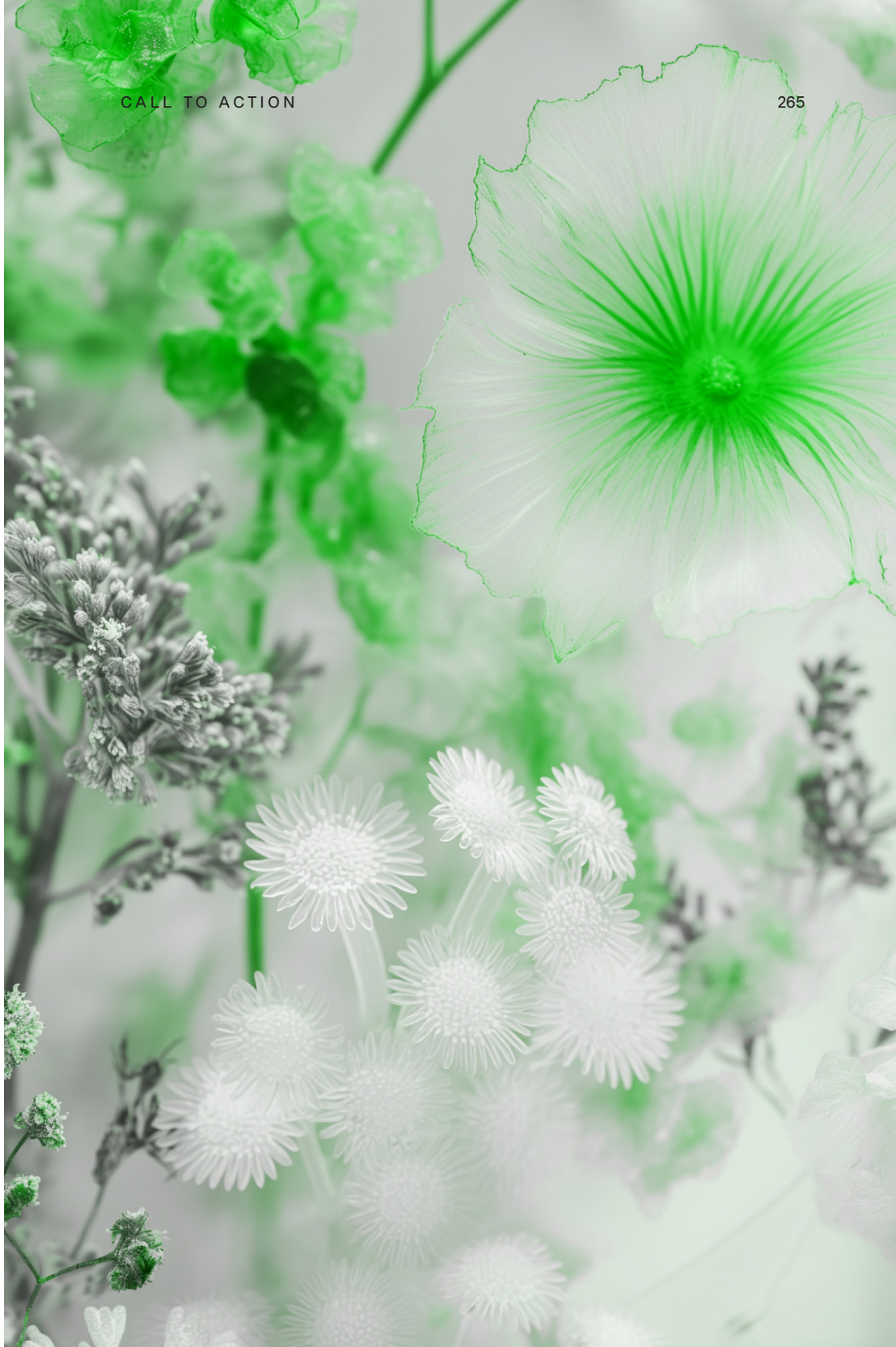
Are you an collectivist who thinks individualism is always bad?

Got an idea to accelerate the regen movement?

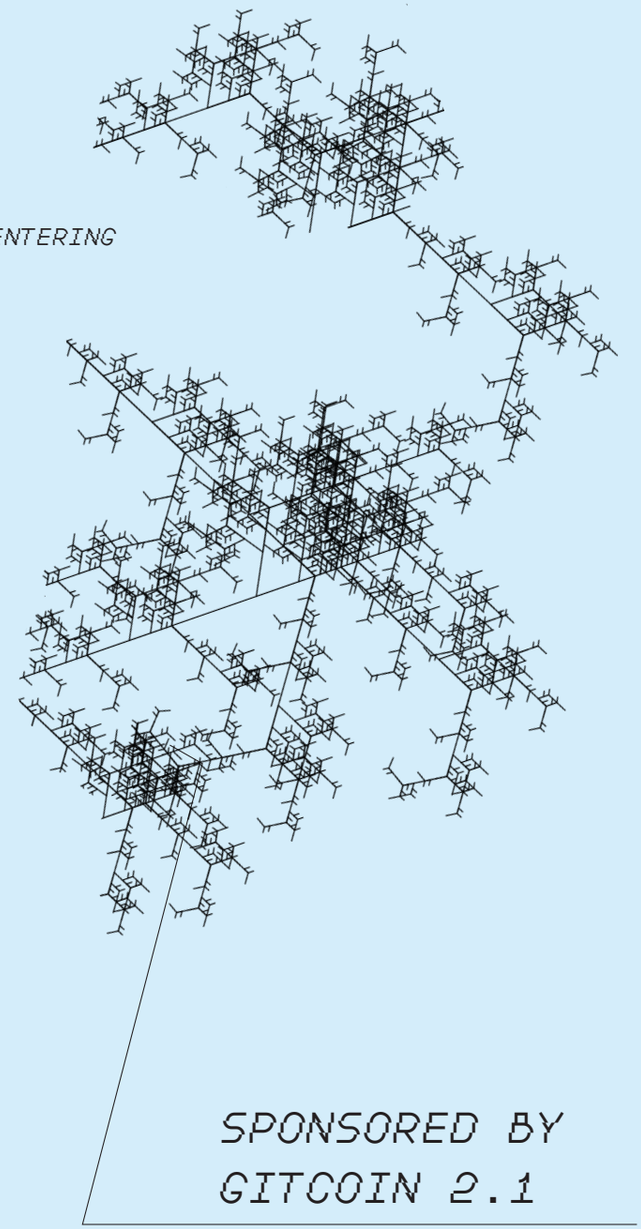
Did I do something differently than you would, and did it ruin your whole day?

Let me know
DM Owocki

Join the telegram group to git involved.



SHILL ZONE



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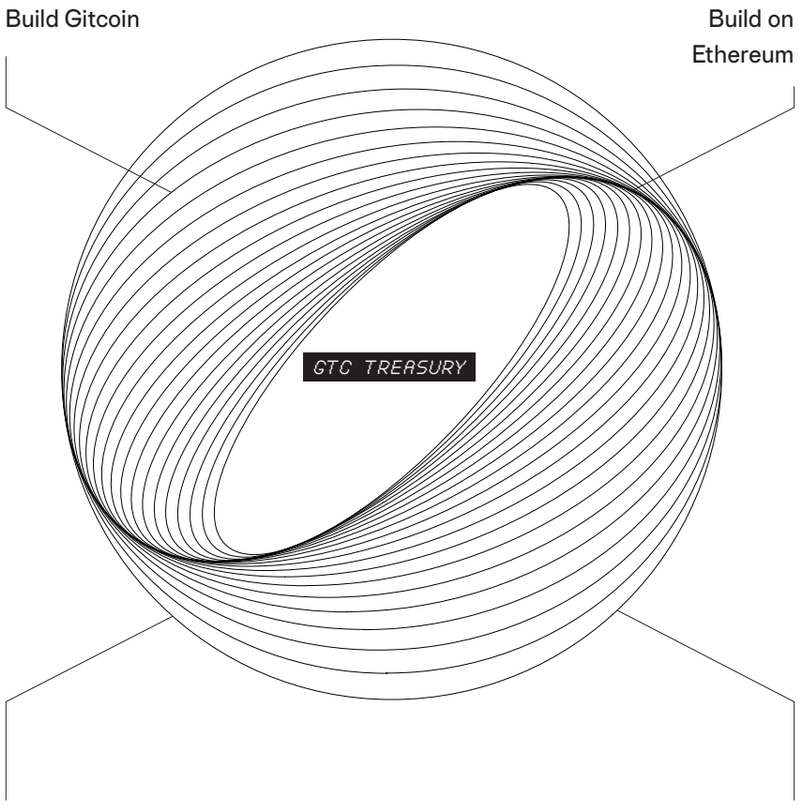
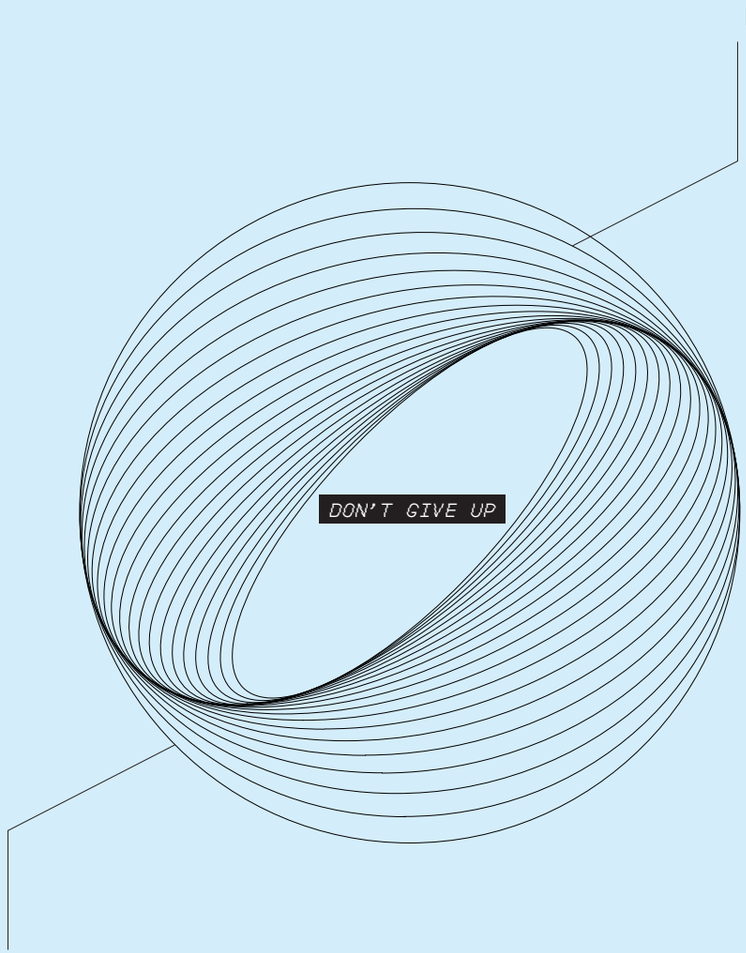
OF RETROACTIVE
FUNDING

GITCOIN IS A STRANGE LOOP



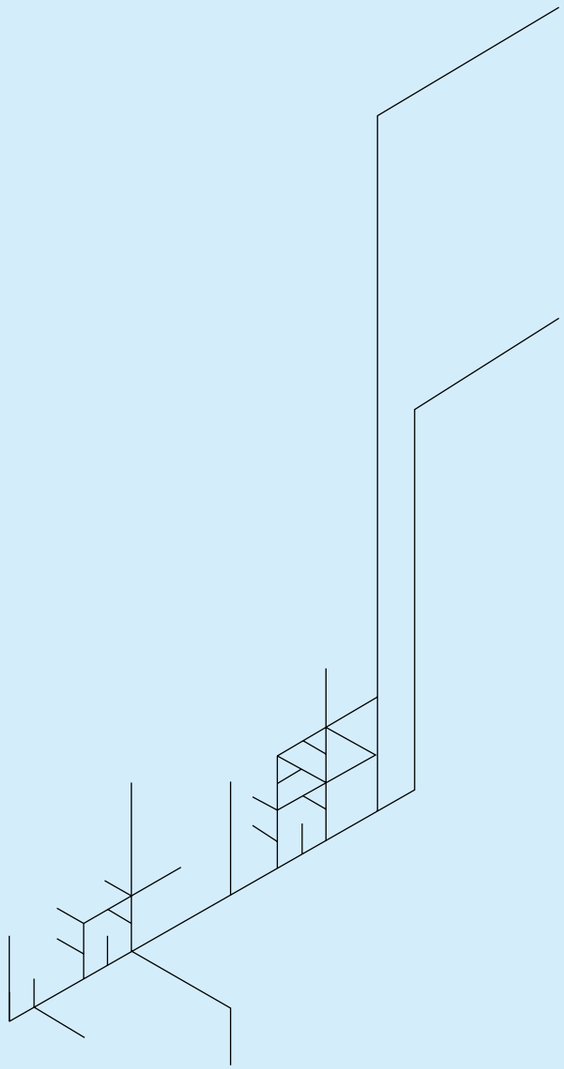


This BOOK is your invitation to build this vision & help shape/accelerate Gitcoin 2.1

Grants Stack by GITCOIN

A. LET YOUR PLAN GATHER DUST

A. BUILD YOUR PROGRAM WITH GITCOIN GRANTS STACK



NICE PLAN, NOW WHAT?

Book a demo