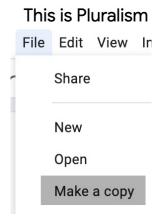
First, make this document yours.

Under FILE at the top of this document, click MAKE A COPY. I won't be granting folks commenting rights. Instead, do this:



Ideas are easy, execution is the hard part. If you'd like to take this project and run with it, I encourage you to do so. Fix the errors. Make it better. Please change the name of the project so it's yours, and I'm not asking for any participation or credit. Simply that you do work that matters for people who care.

This document is longer than it needs to be, but I wanted to explore many of the nooks and crannies as they presented themselves.

[**Find the others.** You can use hashtag <u>#pluralism2021</u> on Twitter or respond to my tweet about this project if you want others to find you looking for them and vice versa.]

Thanks for reading.



Let's vote on it

Voting with a capital "V" is fraught. It happens rarely, it's fairly permanent and thus momentous. We bring identity and media and politics into a swirl, spending billions of dollars to create something that feels both fruitless and participatory at the same time.

Voting uses a 5,000-year-old method to, in a tiny moment of time, have people raise their hands and make a choice.

These sorts of Votes are a ceremony that adorns the way we govern.

But Voting with a capital V actually confuses us about the power we each have to speak up in all sorts of informal ways. We vote (with a small v) every time we discuss who to invite over for dinner, what sort of car to buy, and particularly when it comes to work and commerce, how we'll accomplish anything as a team.

And technology, which has made it easier than ever for us to collide with other peoples' ideas (and to collude with them), hasn't done much to institute useful new ways to vote and to be heard. And when we feel heard, we're far more likely to connect and commit.

Instead, we rely on traditional status roles, on caste, on signals of strength. We rarely adequately reward wisdom or a good track record when making these decisions, and often the decisions that are confirmed create more team divisions instead of building connection and resilience.

What if we could build a voting layer into our teams and our culture? What if it were community-based, resilient and easy to use? And what if that voting layer allowed us to create new forms of value, new projects and better ways to connect and decide?

For the last year, I've been noodling on a plan for a DAO that creates the conditions for a new form of widespread tally. Dozens of really smart and passionate people helped me think about the tech and the implications. The plan I'm sharing below is filled with examples, traditional ideas, new

technologies, cultural shifts and a different way of changing the culture while building a layer of the internet.

But this is bigger than me. As I've written about before, describing the project and running it are very different things... It needs dedicated leaders ready to commit to building something for the long haul. So I'm publishing the idea here, giving it away and hoping that many people around the world will copy it, improve it, develop it, share it and make it work far beyond what I've described.

[Reading: Why the Blockchain Matters]

October 31, 2021

This is version 2.5

Many extraordinary people helped me think through the ideas in this doc, but all the errors are clearly mine. You should make it into something far better, noting that your mileage may vary and that I'm not going to be able to help, though I'm happy to hear an update now and then.

Thank you for taking the time.

Seth Godin

This is Pluralism ¶

Let's vote on it. Bringing informal, multi-layer and smart participation to places where it has been much needed but rarely seen.

Offering fairness, enrollment, clarity and speed in human interaction

SUMMARY: A protocol for fundamentally changing group decision dynamics using resilient, inexpensive and easy-to-understand digital tallies, agreements and referenda. A <u>DAO</u> that grows without a central controlling authority.

Optimized for informal but reliable votes among known parties. While it may eventually be scalable to much more formal and widespread voting, that is not the goal.

Many use cases, including new ways for people to be heard, to be held accountable and to get credit for insight.

An carbon-friendly, optimistic way to put open-source communities to work in building a decentralized but useful tool for connecting people and giving them a voice.

Please make a copy of this doc, invite colleagues and make this idea better!

We make group decisions constantly, and almost never use formal ballots to do so. And in the rare instances when we do, we do it inefficiently and with skewed outcomes. But often, pluralism gives hope.

There are three significant opportunities:

- To make it easier and more efficient to do reliable balloting better. Not in national or municipal elections (<u>Voatz</u> does this, and their problems are a useful warning for us), but just about everywhere else where they are used. Democracy depends on people believing in the validity of the vote, and democracy thrives when voters feel seen and heard.
 - Don't get confused into associating Pluralism with civic voting. **It's everything but that**, all the votes we've never been able to usefully organize.
- 2. To eliminate shame, historic status roles and unreasonable peer pressure from traditional informal group agreements. And to enable them to be far faster, more efficient and resilient.
- 3. To encourage new connections and projects by enabling group dynamics to function more effectively.

There's also a huge win when tallies can be held often, adjacent to the place where the actual work and decision-making is happening, as opposed to being reserved for rare and special occasions.

And unlike traditional voting, smart tallies enable votes to be adjusted over time, to use proxies, to reflect past behaviors and performance and to completely remake how we give people a voice.

It's easiest to demonstrate the range that's possible with a bunch of examples. They begin here. Feel free to skip to that, or read the pages below to understand the scope and goal of Pluralism.

Enabling a voting layer for society

At the base is the **blockchain**. This already exists, and it has spawned various tokens and hype and fortunes and scams. But the blockchain itself is a useful tool for two things: Building a reliable open database, and incentivizing people to coalesce into working teams without a central organization.

The next level is where Pluralism will build its assets. It's a widely-available, easy to use **diary** that keeps track of each person's votes. It's the center of a user's contributions and participation in projects online and off. **It's a wallet for votes.**

The next level is built using the Pluralism **API**. It enables third parties to build many of the voting examples in the next section, along with countless examples that we haven't described yet.

Just as you can build many projects on top of email or the cloud or Wordpress, it's possible to imagine many ways that entrepreneurs and organizations will plug Pluralism into their projects and communities.

The voting diary records and displays all the tallies that each user has been part of. It's a combination of dashboard, history, reputation, verification and communications center.

The network effect and the natural monopoly power that comes with being at the center of a network mean that once established, Pluralism will thrive as long as it serves those that use it.

Some thoughts on the system

Each user (call them a 'voter') has a wallet (but it needs a new name, since it's not about money. For now, let's call it a 'diary').

Each interaction (let's call it a 'tally' because 'referendum' has too many syllables and 'plebiscite' is hard to spell) is recorded in the diary.

The diary intermediates between your secure but anonymized votes and your identity.

You can have multiple identities, where you are known in various circles, and your diary can collate and connect all of them.

It's not hard to imagine that the tally sponsor also earns some level of permission to interact with you via your diary. In other words, there's a long-term benefit to getting people to vote because you can go back and interact with them again. And there's a long-term benefit to a voter keeping up with their diary, because that's where the action lies.

In a world with lots of tallies, the diary becomes a record of your participation and also a clearinghouse for where your insight is needed next.

It's also easy to see that as more and more tally sponsors verify the identity associated with a diary, the more likely it is that the diary's value as a participant's ID goes up.

Your diary becomes a sort of participatory inbox and ledger, keeping you up to date on the information you need to make new decisions as well as reminding you about your past contributions and votes.

And it becomes more indispensable and resilient as you use it in the other communities you belong to. Your reputation can come with you to a new setting, and over time, the practice effect will earn you more influence.

Some tallies are purely anonymous, but perhaps have a requirement that each voter can only vote once. Therefore, you'd need to log into your diary to be able to vote.

[proof of humanity might help here - proofofhumanity.id]

Some will make a vote permanent. To be sure your vote was counted, log into your diary and see that it arrived.

Some will allow a vote to be changed over time. To do that, log into your diary, see the vote and change it.

[Pia adds: you can also look at sovereign https://github.com/DemocracyEarth/paper for a smart contract over ethereum with a lot of this functionality built in. It is not optimized for humans though - so that's a challenge. Live example of a voting mechanism with the sovereign smart contract here: https://democracy.earth/#/]

This addition of a time axis to the previously binary and time-bounded idea of voting is a fundamental shift in how we can engage in culture.

[Some will require that votes are not anonymous. The name associated with your diary at the time you vote will be put on the vote. We need to think about what happens to past votes if you change your name. It may be that the database is keyed around a UID, not a name. It's not clear how or whether diaries can be transferred...]

Some will require funds. Either because you'll get paid to vote (or get a dividend later) or because you'll pay to vote. And some will involve an escrow, where your funds are returned to you based on performance. And some votes won't be one person one vote, but instead will be based on something you own or participate in, or on your history.

[To be clear, just about all the cases we're describing here are *not* related to sovereign governmental actions. Those may shift over time, but that's not our focus.]

Contents

(this is a work in progress, the order keeps changing!) Feel free to browse through the use cases quickly, because each of them will be refined by partners in the ecosystem. The goal here is to show the breadth and depth of what's possible with Pluralism.

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Thoughts on payouts to team members
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Acquisition of users

Token economics (thanks Sean)

Structure of an entity: Pluralism.io

IRRELEVANT ASIDES:

THE CURRENCY THING...

Examples and use cases

Each of these is predicated on a few assumptions:

- 1. There's some sort of smart contract in the background.
- 2. There's an API which enables many parties to build different sorts of UI and interactions, evolving into methods that we can't imagine and optimization for different sorts of audiences.
- 3. Some of them involve cash, but there are other methods that should be supportable.

After the list of implementations, I'll finish with a discussion of how an entity could make this work. (2, 3)

Examples of the power of tallies

I will if you will

"Will you be at the picnic this year?" used to be an easy question, because once the picnic became a key part of the community there wasn't much of a question about whether the other cool people would be part of it.

Kickstarter, true to its name, uses 'I will if you will' at scale to create built-in customers for new products. Unless a bunch of people commit, it doesn't get made. And if it does get made, you have to pay for it.

I Will If You Will is a dynamic system in which the organizer identifies a group of people and a minimum threshold for the thing to get a greenlight.

Attendees/backers/participants simply agree that if X occurs, they're in.

Invite ten speakers to your online event, which is sure to be a hit if four of them agree to do it. I Will If You Will turns a weird dynamic into a simple one.

Or use it to invite 10 VCs to the next round of funding for your company, with three being sufficient to trigger a green light.

If all the cool kids skip school on Senior Skip Day, will you?

A bigwig says that they will do something, but first, 15 lesser but still big wigs have to agree to join in.

A union organizer asks, "if 80% of the crew wants to join, will you join in?"

A candidate can line up a list of endorsers, but none want to go first...

A charity fundraiser asks, "will you give the last \$1,000 to get us over the building fund goal?" because if the answer is yes, then 100 of those people means the thing is going to happen.

The identity of who has said they're in can be transparent before the tipping point or revealed, as desired by the organizer. We can see it's getting close on a

percentage basis, or see the names of those that are early supporters, or simply see who's on the target list.

Or consider the opportunities for weaker parties to <u>collude</u>. For example, 100 vendors for a giant company like Walmart could band together to get better terms. Or cities being hustled for an Amazon headquarters or an Olympics could find a reliable way to stand together for minimum viable standards.

All of sudden, game theory, Colonel Blotto and other sorts of strategies start to be applied to real life situations.

A key element is that there's the option for some sort of escrow. If you say you're going to do it, you have to do it. If you don't, you sacrifice the escrow.

The escrow might be reputation. It might be that a tweet is in the queue and you can't stop it. The escrow might be money. The money you sacrifice might go to the people who trusted you or to a worthy cause.

Proxy voting

Often, we don't speak up directly. We rely on a representative, formally or informally, to speak up for us.

But it's difficult and expensive to switch our representation.

Smart proxies mean that someone who cares can gain our trust and we can easily assign our vote to them, until we choose to switch it.

It also means that the proxy holder can repay the trust by sending back benefits to those who have loaned their proxy. And of course, those benefits don't have to take the form of easily described but often ineffective transfers of money.

This proxy can be assigned publicly or privately, it can be time-based, anonymous and/or compensated! You could be paid to give a proxy, or pay for the privilege.

Which means:
You can pay to vote
You can be paid to vote
You can make a living as a proxy
You can choose to pay others to act as their proxy
(And "pay" doesn't have to mean cash.)

All voices heard

Often, we're not in the room where it happens. Synchronicity is an artifact of the world before writing and the internet. But now, there's no reason to keep someone out of the conversation simply because they weren't at the table or if they've traditionally been ignored.

People can register their opinions (or even their votes) in advance... They can be anonymous or known.

There can be timers, or a quorum over time has to be reached in order for the conversation to advance.

There can be a way to ensure that every 'voter' has read every document and watched every video—or they don't get to vote...

The cutoff is probably accompanied by sniping-protection so that some people don't game the system.

Debates happen in lots of places, including Google docs or other online settings. And a tally can be embedded right where the debate occurs. Tallies can have start times and finish times, and they can be changed or leave a permanent trail. Tallies can represent the status and history of the voter, or not.

Minds changed

How do we organize as a community to shift ideas?

What if there's an easy way to register a preference, hear the arguments and then change your mind?

Are there rewards for that if it turns out that the change works out?

How do we overturn the dynamic of certainty with one of <u>persuadability</u>?

What if the state of the original ballot is known to the system, and so the arguments we see are individualized to match what is most likely to persuade us, as opposed to the filter bubble which exists to make it likely that we are reinforced in our beliefs?

Perhaps we can easily graph sentiment changing over time. And that graph itself could amplify the changes being made.

Soon, it becomes a much less formal version of I Will if You Will.

An open question, not yet answered

Danced around throughout—is there a way to do one person-one vote? That is, to prevent someone from having multiple accounts/wallets?

In a closed setting, it's pretty straightforward. I'm the boss, there are 20 people who have a say, we can associate each vote/diary with a person and then allow anonymous votes.

But in an open election, from a game show on TV to a representative election, the hurdles are significant. One method is to use a non-digital ledger item (like a passport or driver's license) as a proxy for an individual's status. In a situation like this, we could use the methods that some websites use to authenticate individuals. But those methods are optimized to keep bad actors out, not to ensure widespread adoption.

Determining how to verify "one person" might be too complex to solve for all use cases, and would be better solved in a distributed manner that could take into account local context.

As an alternative, the local Board of Elections could send each voter a one-time code. This dramatically decreases ongoing expenses for them, because once you have your diary, it's a much more secure way to vote going forward.

Or a combination of '<u>proof of humanity</u>' and local verification could bubble up to a larger network of verification.

If this is figured out in *any* use case, it can be figured out in all of them, since once your diary is associated with only you, that status can be transferred to other tallies.

Many of these proposed alternatives focus on how to motivate people to stick with one diary, or to prevent them from having more than one.

I don't have a clear answer for this use case.

Here's my hunch: We avoid it for as long as possible. Only when the other lower-stakes forms of voting catch on will this become feasible.

But, a reminder, we're not solving for civic democracy as currently practiced here. We're focusing on all the places people aren't currently able to have a voice.

Quadratic Voting

Even states, like <u>Colorado</u>, are exploring letting one 'pay' for additional votes. Or they can explore mechanisms where the more someone votes towards one measure the more expensive the votes get.

More on this here: https://vitalik.ca/general/2019/12/07/guadratic.html

And of course, the currency used doesn't have to be dollars. It could be past participation, or based on streaks. So that the more you (consistently) engage with an organizer's tally's, the more leverage you get.

Unanimous consent

This one is surprisingly rare, and surprisingly easy to do at the same time. The problem is that the UI hasn't been widely distributed before.

We don't go forward until everyone votes yes.

Or, perhaps, you need 3 of 5.

An example that's fairly prosaic: A father wants his password vault to be available to the family after his demise. Set up a 3 of 5 system, so if three kids agree, they can open the vault.

This is simply a multisig wallet, but it fits here conceptually in ways that a traditional wallet isn't seen as doing.

Ranked choice ballots

This is well-understood, but really hard to do in an organization or community.

What happens when it's a simple website or even a Slack plugin?

What happens when someone can vote on an issue via Twitter? They can register as a voter at a site, which generates their machine-readable 'vote' as a tweet. This makes it more likely that others will want to vote as well, etc. (This applies to more than only ranked choice voting, of course).

[Note: Chainlink (https://chain.link/ by far the largest Oracle network) have a Twitter API integration https://blog.chain.link/connect-smart-contract-to-twitter-api/

The Graph (https://thegraph.com/) are also doing some interesting things in this space.]

Instant runoffs become significantly easier. Which means that they'll happen more often.

Multiple ballots until fairness arrives

Similar to ranked-choice voting, as the cost of polling the group goes down, there's no reason not to have votes often.

If we determine what sort of quorum and majority we need, we can use this method to create alliances and conversations that lead to more engagement and agreement.

Add to this a programmatic way to change your vote as you see others changing their vote, which ties into the I Will If You Will model, but without a specific agreement in place.

The goal of this method is to create consensus where it's necessary, a more emotionally satisfying sort of compromise. The game theory here is complicated (it pushes some people to pretend to be recalcitrant) but my hunch is that this can be addressed over time.

The jury room might not be perfect, but in some settings, it's better than all the other alternatives.

Ballots over time, with increasing and decreasing rewards

Who wants to go first? There's currently a game theory advantage to speaking up late. Speaking last leaves an impression, and it also benefits from having information from how others have voted.

But this slows things down and leads to a lack of commitment from key players. If everyone is waiting until the last minute, real conversation is harder to find.

What if the system can be adjusted so that early commitment and responsibility is rewarded? Or if the opposite (thoughtful analysis) counts for more... Or what if it's possible to trade places in the voting line as the result of transactions between voters?

Perhaps there's a proxy tally to pick avatars for making the argument, and thus the community itself decides who goes first.

[Consider the initiative roll from D&D: https://dnd4.fandom.com/wiki/Initiative]

Un-secret ballots

Anonymous voting has some significant advantages, but also a huge number of drawbacks.

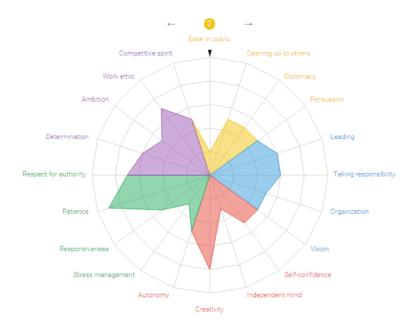
What if there were a reliable way to make either anonymous or non-anonymous votes easier to cast, to change, to scan, to make irrevocable, to perform over time... See the reference to Twitter voting, above.

What if everyone votes anonymously, and then gets a report from the system about whether their current vote would put them on the winning side, and at that moment reading the report the person has an opportunity to change their vote before the results are put on public record.

Persistence of position and prediction

Does the naysayer get remembered? How do we create a system that rewards the less verbal or less aggressive person who is often shown to be right once events unfold? Should their vote carry more weight in the future?

Is there an easy way to go back and see who made the good arguments, and who changed their minds, and when? Can we score this? Not with a single number, as that will imply that expertise in one area applies to all, but perhaps with a matrix...



(Ignore the labels, but you get the idea)

What happens if you have status as someone who easily changes their mind and is almost always right in the end?

Right now, we award status to people who do precisely the opposite far too often.

Weighted ballots—human allocation

Should everyone have the same vote? I think we can agree, for example, that a corporation's internal workings are not a single vote democracy. Maybe more say goes to those with authority/responsibility. Maybe to those with ownership. Maybe to those with expertise. Maybe to those doing the dangerous or risky work.

By allocating the weighting, you can still discover useful community input.

What if every person on the flight deck has veto power about whether the plane is safe to taxi to the runway? Or if the customer service people get an outsized say on a new policy that will effect them the most?>

And to get meta for a second, we can imagine making the weighting itself something transparent or changeable or democratic or proxy-based.

It feels to me that mine safety ought to be weighted toward worker say, while large shareholders (or customers) should have more say over CEO pay...

Weighted ballots—performance allocation

Perhaps, instead of traditional weighting based on status and class and assets, we want to weight the voting on past performance! It could be in picking a stock portfolio or in making decisions about strategy or simply which friends are better at picking restaurants that the other friends like.

And perhaps there's a random roll built in for tiebreakers if the group agrees in advance to abide by this.

This weighting will need a way to store and sort the data after the fact.

Voting among known cohorts

While most voting that happens occurs in public settings, there are special approaches that are dictated among cohorts—committees, circles of friends, volunteer boards of directors, etc.

When the cohort is known, there are certainly different considerations re secession, contribution, longevity and influence.

We generally think of 'voting' as something rare, private and widespread. But among known cohorts, it can be common, public and focused.

Instead of companies breaking up with a lawsuit or a shotgun clause, persistent and consistent voting around certain issues could become an effective form of conflict resolution.

Voting games

This might be the adoption breakthrough.

Simple competitions based on votes and predictions.

"Vote for the picture you think will get the most votes."

Or, more cleverly:

"Vote for the picture you think will get the second-most votes."

Week after week, until there's one winner. Winner gets a prize. Voters might even pay to play.

Or, "vote for the idea you think is likely to get the most votes."

Which can lead to an additional feature inside the diary: you can earn votes from other people for various reasons, and then allocate those votes when you need them—sort of a proxy wallet.

I'm sure I'm just scratching the surface.

One big insight here: Pluralism enables, for the first time, the ability to record the outcomes of votes in the voter's diary.

What this means is that we can reward voters for picking a winner.

We can reward them for bravely supporting a lonely position.

We can reward them for picking an outcome that turns out to be right.

We can connect them into circles and tribes based on their votes.

And we can build a direct connection between the voter and the person they voted for.

Being active, being a participant, can be measured, assessed and celebrated (or censured...something we'd have to think about.)

Useful polling

The problem with wide-open internet polling is that it's very difficult to control for multiple votes and to ensure that a representative sample is voting.

A system of persistent identity would permit the polling place to discard votes that are from accounts that are brand new, for example, or from people who have voted before.

[Aside: Instead of knowing (fixed) that a vote is legit, the system could trust most every vote up until enough red flags had been raised to isolate it as a potentially untrustworthy vote.

Consider the kind of fraud protection triggers that banks and payment processors use. And of the kind of moderation tools Discourse and other online communities use.

- IP Addresses
- VPN Use
- Distance between the zip code where a credit card is registered and where the tally was engaged with.
- Distance between the current location of the device engaging with the tally and the most commonly used areas for that device (in past tallies).
- Number of total diaries in a binder
- Number of past tallies engaged with in the binder as a total (all diaries)
- Collective "trustworthy" score of other votes in this person's history
- Collective "trustworthy" score of the people in the other diaries this user engages with (i.e. if you try to create a group that votes on a lot of fake tallies

to boost your score, it actually hurts you because all of those community members have lower trustworthy scores and there's a composite score for you based on what known cohorts you interact with).]

In fact, this quickly becomes a useful way for a company to poll its customers, and also, with their eager cooperation, to offer different interactions to people who are in certain stages of their relationship with the organization.

A company could do a tally of its customers based on invoice number or serial number—one purchase, one vote.

And a simple and non-annoying captcha could be used to keep computers from voting, while proxies and permitted time-shifting automations could balance that.

Voting among people demonstrating stake

Should people with more at stake have a bigger say? What if the stake is voluntary? Does putting down money or other forms of scarce resources become a useful way to demonstrate your commitment?

One way is to simply let people put money up. More money gets you more votes.

Winning a tally could cost you the money you voted. Or losing a vote could.

Interestingly, winning a tally could also earn you all the money voted, etc.

Another way is to allocate 'points' among all voters and let them use the points to vote on issues over time. This erodes the value of money in various settings, as the points could be allocated without a focus on success in industrial capitalism.

It could be that they can earn back points for being on the right of history in past votes, or trade points when they need to...

FOOTNOTES

Thoughts on revenue

Organizing a tally is free under some conditions.

It will be done with low involvement of the blockchain, perhaps simply in the cloud. It will not involve any transfer of funds.

It will be limited in the number of voters.

Then there are tallies that are larger in scale or involve transfers of cash. There's a fee for these.

And finally, there's a higher level of security that would involve the blockchain (perhaps in Flow) or a sidechain (like <u>Matic</u> or xDai), and cost a bit more. Nothing proposed here works on a \$10 gas charge, and I'm not comfortable with the carbon debt associated with proof of work chains.

Throughout, there can be actual micropayments. In which people pay to vote, or are paid to vote, or associated with escrows and outcomes.

In addition, the entity behind Pluralism could take a small percentage of any funds that change hands or take a small amount of the tokens minted by each community and build a treasury.

Thoughts on the system

The diary is the center of the system.

Every diary is free to own.

Pluralism has an API connection to the apps and users that want to access diaries.

The lowest-security, most-open diaries and ballots are free to use. (The 'security' that's low is the risk of bad actors hacking a high-profile tally. That's not really an issue when a team of 12 is voting on something in a Google doc.)

As we move up the chain, though, various parties will offer services—unique apps, secure data handling, transfer of funds, processing... and each party will be compensated by the users of the system.

When someone organizing a ballot sets it up, they will choose the vendors/parties that they'll use (based on some sort of ranking/escrow/reputation/price) and will fund it.

Just as the underlying layer of email, which has been around for fifty years and is free, has UI and security and features on top of it from various vendors, things that users are paying for every day.

And so it's easy to imagine that when \$1 flows into the system, various entities are paid out of that dollar.

Or, consider someone who would like to reach users who have opted in to be reached because of their voting history—the entity doing outreach would pay various entities to deliver that message, with the rest of the tokens being received by the diary holder in exchange for their attention or participation. This is something that Brave does, but it's not useful without the other elements described here.

Through various tasks and permissions, entities and individuals can earn ¶ tokens, which get a share of the core pricing on every transaction. This can be thought of as the underlying grid of the system.

Or you could run a processor, or you could build an app. There's an incentive for each player to be trustworthy, because better reputation gets you more votes to process. There's an incentive to price fairly, or you will be under priced by others.

The diary itself is a natural monopoly, and if it remains open (open as in an open door, and open to change, and open to input) and well maintained, it should only gather in community and network strength over time.

What I'm struggling with is the system architecture of the entity itself. The consumer/voter/vendor side seems pretty clear to me, but I need help on the economic incentives, governance and back-end tech.

Jobs to be done

- Technology System Architecture
 - What exactly needs to be built? What's the technology structure and how can it be built in small pieces, be scalable and also resilient?
- Github Librarian and Archivist
 - Where's the code, what's committed, who's writing what?
- Open Source Coordination
 - What is the development community like, who is in it, how does it become vibrant, resilient and self-sustaining?
- Token Economics
 - What is a token worth, why does it go up in value, what is its role? Is there a binding curve? A flow of cash?
- API Structure and Development
 - How does information flow into and out of the diaries and how do tokens play a role?
- Business Dev and Partnerships
 - Finding the organizations that will eagerly be part of this ecosystem and serve their needs as they serve the end users.
- Storytelling
 - What is this thing? What do I tell my friends? Who are the early users and what do they want and dream of? Where is the social ratchet and the culture-changing idea that leads to adoption and usage?
- Marketing Assets
 - A name, a logo, a look and feel and Ul...
- Legal
 - Pro-actively organizing to avoid problems later.
- Project and People Coordination
 - Can an ecosystem without obvious management and authority structures thrive? How to make it inclusive, open and powerful?

Thoughts on payouts to team members

There are protocol builders, evangelists and tabulators.

The tabulators are paid on an ongoing basis based on the computing power they provide (tied to a sort of token).

The protocol builders are paid a regular profit share, based on a different sort of token, one that is rewarded for making contributions to the ecosystem and the network.

There's room here for some sort of distributed and collaborative value setting process around features, bug fixes, etc. Where players in the system can upvote or award tokens in exchange for a job being done. Pluralism voting can be used to allocate tokens for contributions, which is pretty meta.

Evangelists get a share of the protocol building revenue in exchange for signing up significant numbers of active users.

Thoughts on kinds of ballots

One way to look at ballots is to consider the level of privacy and anonymity associated with them:

Public ballots have your real name on them, and someone can easily examine your history of votes. This is what happens in representative democracy—we can see how the representatives vote and hopefully choose better next time.

Pseudonymous ballots have a username or made up name on them, and the user can choose to link them together or to use (unique) different names in different

places. While one person can have many names, each name is associated with just one person. This is analogous to Reddit or Disqus.

Anonymous ballots are fungible, no identifying characteristics are used.

Private ballots are uniquely named with a hash and are all separate.

A user can share their pseudonym history with a trusted person (or publish it to the world). A user can choose to share their anonymous voting records as well.

It's possible to imagine scenarios where trust is earned by sharing a track record of voting between colleagues. And this shared trust is one of the features of the diary—how to expose it and how to conceal it.

The only way for someone else to see how you voted in private plebiscites is to share your password, which is deliberately risky.

Acquisition of users

Pluralism will do better as the 'diary' is adopted, because it has a significant quitting cost and a network effect as well. Once someone is set up with a diary, that's their preferred way to vote—no one wants two.

During the early days, key influencers that act as evangelists can be rewarded with tokens in proportion to how many of their followers install a diary. Beyond that, the tokens can be increased by how often the diaries are used and which ones turn into high value users.

1,000 influencers could easily lead to an installation of 10,000,000 free diaries in a month, simply by hosting votes of interesting sorts and offering benefits to those that vote.

In addition, there's inherent virality within the diary. Any time your life will get better because of a tally, you can introduce one to the conversation.

Token economics (thanks Sean)

Some thoughts on how to increase the value of Pluralism token:

[Note: smart people have pointed out that you could run much of what's envisioned here without a DAO, without a token, even without blockchain. You could sort of build a Facebook out of it. There's certainly money available to raise if you want to try. Not idea, in my estimation, because it doesn't become a valid layer of the Net, and it's not open enough to become a long-term natural central clearinghouse.]

- 1. Any community that launches on Pluralism must over mint their token and assign a percentage (1/3/5?) to the Pluralism DAO. As more communities become active, the treasury grows and the underlying token appreciates.
- 2. It could explore a bonding curve https://defiprime.com/bonding-curve-explained.
- 3. It could require payments in ETH and then have a crypto treasury operation set up to stake ETH and grow the yield of the treasury. And maybe it leverages that to pay out to token holders.

[From Shamir: https://pooltogether.com/ have a neat "no loss lottery" system that rewards holders.

The Algorand Foundation is committing a 2 Billion ALGOs (currently ~\$2.5B) development fund that will be governed by users who are willing to lock Algo for 3 months in a "governance" fund - allowing them to participate in deciding how this fund is allocated (1 Algo = 1 vote).

Anyone can pull their locked ALGO out at any time, but they then forego the reward. https://drive.google.com/file/d/1YCrKil62Kh-KugWaR2HrTh_J3RxE-ryg/view]

4. You could have a burning model for the token where anytime someone transacts with the protocol using the native token it burns that token — thereby reducing supply

5. It's worth noting that a token that is expensive is not always ideal, as Flow calls out in their white paper. https://www.onflow.org/flow-token-economics If the goal is a widely distributed product that is easy to use — does number need to go up?

Seth adds: The bonding curve is a fascinating way to think about this—that the entity can be designed to 'eat itself' as it approaches a certain value, with early players getting their tokens burned for more money as the entity meets its goals, until it becomes a self-governing, self-sustaining non-profit.

Shamir adds: There's a fascinating project in the NFT space exploring something similar with music samples - https://eulerbeats.com

There's no doubt that bonding curves can accelerate early adoption (via FOMO mostly). The challenge I'm seeing is that this model runs the risk of creating a perverse incentive for early players to "dump", move outside the system and consequently stall it's growth.

It's always a game of value/cost so utility must grow at a faster speed than cost.

If the curve established a final value of, say, \$8 bn, there's plenty of tokens to share to engage with many many people who can help the structure get built.

One approach, in this example, is to authorize a billion tokens. Each one has an ultimate value of \$8. You could organize a founding crew of 20 key players, offering each of them a million tokens for their successful contribution. That might get the right people to focus their attention and to create a coherent foundation for growth. And then, as the project unfolds, you could have smart contracts and bounties that offered new tokens for each contribution to the whole.

Structure of an entity: Pluralism.io

The blockchain has brought with it two semi-related ideas:

 The organization as a loosely-linked cultural institution as opposed to a company.

Much of it comes in the form of a market (see next point) but also has a porous and flat techno-status that uses culture and status roles to adjudicate decision-making.

2. A currency that goes up in value as the ecosystem succeeds. This creates cultural adhesion, and it also provides a way for early organizers to have a way to 'pay' contributors with a lucrative and emotionally-charged tool that reinforces scale.

Some of the projects listed above are easy to do without the blockchain. There's really no need for transparency, anonymity and decentralized control when one is organizing a dinner party for someone who is retiring.

But, the power of the currency-driven cultural system as organization cannot be denied.

So the rest of this riff focuses on the entity through that lens.

Let's begin with this:

- It's inherently viral, in that the only way to use any of these tools is to invite others to use them as well
- There's a network effect on top of that, because as you use it, you want to use it more, and the network gets stronger
- There are high switching costs, because setup isn't trivial and your reputation as a voter is important to you
- There are a significant number of transactions, and the transaction rate should increase over time, because once these sorts of voting interactions become known, there will be pressure to have more of them.
- There's a protocol that will allow data to flow and be stored more effectively, but that protocol can be separate from the actual computing and UI work.

This is a DAO with all of the upsides and downsides that entails. Leading and managing this new kind of institution is paired with the enormous productivity and transparency it brings.

What are the jobs to be done:

System architecture

The protocol for how information is structured

The architecture of the players in the system

The most efficient and scalable way to actually perform the work

Vote adjudication on an ongoing basis

Maintenance of identity and histories

API structure and maintenance

Front end (owned and operated)

Front end (independent entities)

In some ways, it's similar to Wordpress, in that some parts are open source, and some parts are profitable and run by the people who built the open source.

In other ways, though, it's like Tezos or Flow or Uniswap or Maker, in that there's a currency that allows people to be part of the system so that corporate structure isn't necessary.

People get participation in whatever form for being part of the inception, for coding, for contributing parts of the system.

There's a special block of tokens reserved for founders, early contributors and people who helped build the team when the odds were especially long.

And then, once it's up and running, participation tokens and benefits flow from people using the system to those that built it and/or run it. Anyone can build a way to process votes and calls and etc, and charge people to use what they do. These folks would remit back to the core entity some compensation for using the network and the protocol.

See Also:

- DaoStack
- Aaragon
- Chia

Also! Proof of stake via or similar to Algorand is starting to look like a viable option. And now the time and space alternative from Chia—clearly, the ability to provide decentralized, efficient blockchain support is growing.

IRRELEVANT ASIDES:

THE CURRENCY THING...

The breakthrough I had in understanding BTC and ETH last week is this:

Someone establishes a protocol. They publish it.

Some people 'buy in' with labor or investment. (There could be a way to use money to count as labor when tokens are allocated).

All people who have bought in want the tokens/coins to go up in value.

If you've done a good job with your protocol, incentives are aligned. Things get built. People go to work and the market starts to form.

In a giant sense, this is 150 years of industrial capitalism. You don't have to ask Ayn Rand if you can open a factory, you simply do.

The invisible hand does fascinating things in this setting.

So, in the case of crypto and blockchain currencies, if you do it right, it becomes a self-fueling, scaling project without employees in the traditional sense. A commons without a tragedy, if designed well.

In the examples above, Pluralism doesn't have to build them. And they will be improved and adjusted and in some cases, used against good interests by people who aren't part of the core body.

Just as HTTP and web was.

The difference is that the original web didn't have a centralized token and the protocol didn't have a component that would go up in value. Nor was there enough in place to make it hard to be a bad actor.

Imagine, some ask, if domains were auctioned off regularly and the money spent for them went to make the web better?

In the case of Pluralism, what I'm searching for is the token 'game.' The bonding curve feels like part of it, but it's not quite there yet.

I could simply publish all of this as an article and walk away, but I believe there's a chance to create a few core components that become the foundation for a worldwide voting ecosystem that would get more and more valuable over time, while also creating dramatic and positive externalities.

But why would a ¶ token go up in value?

Why would someone want to be a protocol builder or a tabulator? What do they get? Why does it get more attractive over time? How does the scarcity balance abundance?

One article I read pointed out that the speculators that show up after the tech nerds are the key element in getting across the chasm...

So, if the offer to someone with a lot of followers is: "You'll get a ¶ for every person who signs up for a diary," it's super cheap to make that offer at the beginning, when ¶ s are cheap and easy to share. BUT

If this influencer believes that the 10,000 tokens they are going to get are going to be worth \$500 each one day, they'll push quite hard to get you to the 10,000 number.

And so an inflationary cycle kicks in, and people will do more and more work for fewer tokens, so that the system gets more efficient and others want to play as well.

Or consider: Votes are sold wholesale by the central entity. So perhaps you have to buy 100,000 votes at a time. This creates an entire subgroup of retailers who will package votes into useful individual or organizational-sized bunches.

But I still can't see the economy that's created for builders as clearly as I'd like. See below for an example.

From Sean: Check out how <u>Uniswap</u> and <u>Maker</u> use governance tokens to help drive the future of their platform. And Protocol Politicians have emerged to help shape the future of the platforms.

[And now, as they say, the proof is left to the reader. Have fun, make things better.]

Levels

