

## Curation Markets

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-Simon de la Rouviere. Engineer of Societies @ ConsenSys.

“Put your money where your mouth is.”

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Curation markets allows groups to coordinate around shared goals (and interests) and benefit from the value they collectively create. It does this by adding **tokenized, skin-in-the-game signals to information curation.**

Rules for tokenized value creation & curation are built into a smart contract that acts **as the schelling (focal) point for coordination.** It is built on Ethereum, a decentralized world computer.

Using this, the collaborators can curate information & share in the value that is communally created.

This solves 3 core problems:

- 1) **Owning the value you create:** Information creators & curators that is **not reaping the collective value extracted from platform.**
- 2) **Improving coordination:** The difficulty in **coordinating amorphous groups around shared goals:** including things like open source projects, to global warming.
- 3) **Increasing novelty of information shared:** Curating an increasing abundance of information with skin-in-the-game signals.

It is a new type of organisation & a new way to coordinate and share in the value created from information creation & curation.

### The Problem: Automation of Coordination.

(Referenced from Meme Markets Whitepaper, a previous derivative using similar designs -> <https://docs.google.com/document/d/1jm300CyrrAlbXtAopNhkYGqdmMdvUjdVDKcZU9VUdoQ/edit>)

In the face of a world changing rapidly due to automation: a core goal is to be able to monetize networks in such a way that we give new forms of agency to many people & increase the potential to economically coordinate on the internet without requiring the slow machinations of our pre-internet systems.

It's \*not\* easy to create an organization on the internet, and it's not even clear that coordinating on the internet needs to look like a traditional organisation. A lot of companies, for example, use odd legal hacks such as incorporating in Delaware, whilst the company is not even based in Delaware.

For the past few years, many have started experimenting with global, economic coordination that cryptocurrencies (like Bitcoin) have allowed. It is currently in a very experimental phase, where the organisations that are being created look relatively similar to what already have. This comes in the form of the rise of the so-called “appcoin”, “protocol tokens”, “token launch”, “DAO”, and so forth. These apps/organisations/ecosystems sell a token that is used for services in that network. A good example is Ethereum, that sold ~\$18 million of ether using Bitcoin (from participants all across the world), in order to create a protocol that allows one to spend this ether for computational costs in a distributed world computer.

Some reads for context:

<https://medium.com/the-coinbase-blog/app-coins-and-the-dawn-of-the-decentralized-business-model-8b8c951e734f#.qw8vky81g>

<https://medium.com/@SingularDTV/the-age-of-tokenized-ecosystems-27ad2dfb68d2#.qa3rx7i0n>

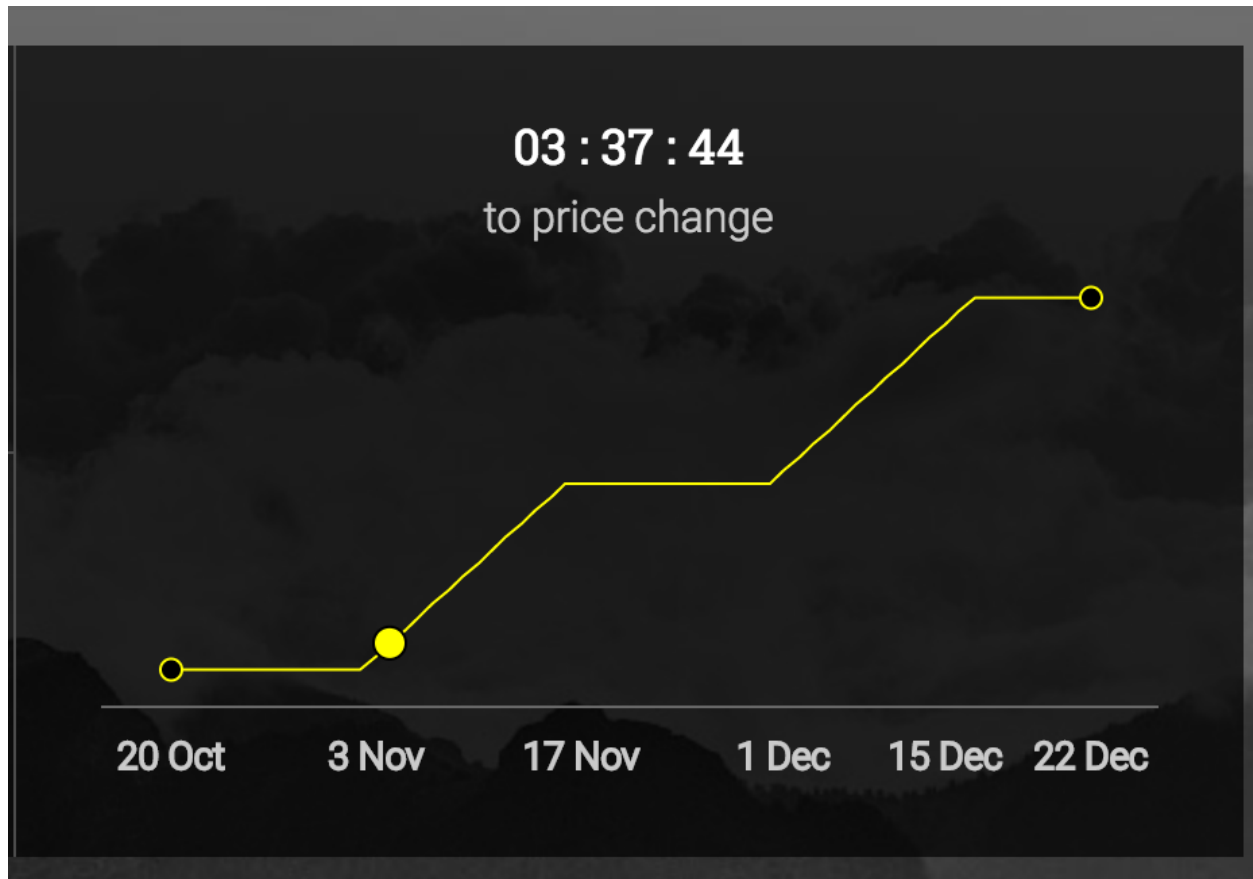
There's clear value in this. It allows the creation/birth of new ideas, and provides a schelling/focal point around an idea/concept. The Internet allowed global social groups to form around niche interests. Now, cryptocurrencies can allow people with shared ideas and beliefs to coordinate for economic, political & social gain.

How you design these systems are still an open problem. For example, with a more traditional token launch, we've seen designers simply \*guess\* at how to structure the value of the token over time during its sale.

Ethereum had a flat start to a linear scale for example.

The price of ether is initially set to a discounted price of **2000 ETH per BTC**, and will stay this way for **14 days** before linearly declining to a final rate of **1337 ETH per BTC**. The sale will last **42 days**, concluding at 23:59 Zug time September 2.

A recent one from ether.camp has a step scale.



There's no real research on what's the best way to do this. For launches with high demands, the sale lasts not even a few minutes. [For example, Golem recently raised more than ~\\$8m in 19 minutes.](#)

It puts forth that these things can be structured better, in order to express demand for it better. Gnosis, for example, experimented with a modified dutch auction, in order to reduce upfront guesswork and get the market to decide value of the tokens. Unfortunately, with these token launches, they are still rare, once-off events, leaving those who are interested in them at a later point in time to join only by buying a token from a previous holder.

Cryptocurrencies, the bare-metal ones, such as Bitcoin & Ethereum, have (basic) continuous issuance over time in order to pay for hashing power to secure the distributed ledgers. Thus, new participants \*can\* get in, in the future, by doing something else besides buying it from someone else.

Another issue with these token launches however is that it's still very much dependent on entities tied to current legal systems to birth it. There's no possible way to express natural interest and demand into a token for a new idea (eg -> click, deploy). In a way, we need to make it possible for organisations to [automatically create themselves when the market expresses](#)

[interest for it](#). Or rather, with extreme low barriers to entry. The legal system provides protection in various ways, and allows systems like joint-stock corporations to flourish. However, the legal system is distributed and caught up in the many sovereign states that exist in the world. They are systemically slow and burdensome. The market wants to have these tokens exist, but due to most of them currently created by specific entities, they have to go through expensive legal due diligence to protect themselves from potential securities issues. Again, it's not that these legal systems are inherently bad, it's just that it is slow and cumbersome, especially for these new kinds of coordination models that don't really fit into these paradigms anymore. Ethereum, for example, is a global, distributed world computer.

So, as a result, you want organisations and distributed interest groups to form organically and automatically without there being the requirement for a centralized party. You need to be able to harness that which the internet is great at: the long tail, weak links, serendipity & amorphous group coordination. Think: the value of joint stock corporations, but for the digital age: [a joint attention network if you will](#). Or a joint-stock "meme".

Curation Markets is a step towards this future: reducing the barriers to entry to coordinate and share in the valuable contributions we all make to the cultural commons.

### **Protocol Tokens vs Coordination of Amorphous Groups:**

For many of the current tokens being launched, their utility is primarily that of enabling a specific use case. For example, Ether in Ethereum is the token that's required to pay for gas to run computational state changes on the p2p computer.

However, like equity, these tokens also reduce the social transaction costs for people to coordinate around a shared goal. Like other forms of value: from beads, cowrie shells, yap-stones, to gold, to fiat, to equity, to Bitcoin: these tokens help the group who holds them coordinate amongst themselves. This is because the tokens aren't useful within a vacuum, and they represent a tokenized interest. In very crude terms: you holding a ticket to your favourite artist's gig, is immediately an ice-breaker when you see someone else also holding such a ticket.

In the same way, ETH, the token of Ethereum, represents a tokenised interest amongst an amorphous set of start-ups and users that all collectively want to share a decentralized computer. These tokens have immense power to coordinate amorphous groups.

Currently, there's the belief that these newly minted tokens need to represent a specific utility for a specific protocol or use case. However, with the lower barrier to entry to create curation markets, it's likely that we will see this feature of tokenised interest represent the largest portion of the value, because of the ease of unbundling and creating these network effects. Meaning, these tokens does not necessarily have to represent a specific utility beyond its ability to represent a network and the ability of it to facilitate coordination.

## More Reading:

There's great research and articles that inform these hypothesis:

Nick Szabo's Shelling Out paints a great picture on the value of collectibles in reducing social transaction costs. <http://nakamotoinstitute.org/shelling-out/>

Robin Dunbar's work on the social brain hypothesis, explains how after certain group sizes, we rely on other cues to coordinate, since we lose the ability accurately map strong social relationships due to the size of our prefrontal cortex.

[https://44984771-a-62cb3a1a-s-sites.googlegroups.com/site/dmobbs/relatedness\\_class/Dunbar\\_1998.pdf?attachauth=ANoY7cqL6sQmNAJ-vEqo-H33M2kYtChJIH9NFQE6Ni4H6rlFeBJoUtHr8\\_AOzEVsxSRg-MQd8u0W3mR9Ys8o9z27h9fkWIOXB14\\_X5eZrKwwnPYOuQBvrYG43ikYoUELzM0x9AnO9Ew9mKRwQICJrARLisS9vfhb1Z1dmG5jb71CgXXjS-4HVj59JrCB4SWvjME9\\_PG\\_xTNU-LzmnCgFVfhOeNqo3TsiOPqtIXlw49chmBEBD\\_tCYU%3D&attredirects=0](https://44984771-a-62cb3a1a-s-sites.googlegroups.com/site/dmobbs/relatedness_class/Dunbar_1998.pdf?attachauth=ANoY7cqL6sQmNAJ-vEqo-H33M2kYtChJIH9NFQE6Ni4H6rlFeBJoUtHr8_AOzEVsxSRg-MQd8u0W3mR9Ys8o9z27h9fkWIOXB14_X5eZrKwwnPYOuQBvrYG43ikYoUELzM0x9AnO9Ew9mKRwQICJrARLisS9vfhb1Z1dmG5jb71CgXXjS-4HVj59JrCB4SWvjME9_PG_xTNU-LzmnCgFVfhOeNqo3TsiOPqtIXlw49chmBEBD_tCYU%3D&attredirects=0)

Research on Stigmergy details how individually localised actions can lead to complex, large enterprises.

"The concept of stigmergy therefore provides an intuitive and easy-to-grasp theory for helping understand how disparate, distributed, ad hoc contributions could lead to the emergence of the largest collaborative enterprises the world has seen."

<http://journal.media-culture.org.au/0605/03-elliott.php>

<http://www.evolutionofcomputing.org/Multicellular/Stigmergy.html>

What's interesting about stigmergy is that it splits the communication tools into signals (real-time: eg an upvote) and cues (traces left, eg: pinned topics). This works really well with blockchain-based signalling because you both have access to real-time truth as well as historical truth (signals left intact forever, to be re-interpreted). The details will explained soon.

Brian Butler has an excellent resource-based model on online social structures (that was a big inspiration for this work). It explains how the design of an online communication medium deals with the marginal return of adding more members.

[https://www.researchgate.net/profile/Brian\\_Butler2/publication/220079834\\_Membership\\_Size\\_Communication\\_Activity\\_and\\_Sustainability\\_A\\_Resource-Based\\_Model\\_of\\_Online\\_Social\\_Structures/links/02e7e5183aa39c13b1000000.pdf](https://www.researchgate.net/profile/Brian_Butler2/publication/220079834_Membership_Size_Communication_Activity_and_Sustainability_A_Resource-Based_Model_of_Online_Social_Structures/links/02e7e5183aa39c13b1000000.pdf)

It lead to some deeper thinking around the usefulness of eustress in aiding social coordination:

<https://medium.com/@simondlr/eustress-complexity-social-systems-design-blockchain-tokenization-5c3e264dc258>. Eg, adding a barrier to entry (eg, proof of work of a collectible), results in

reducing social transaction costs. The concept of eustress is found in other disciplines as well (such as biological hormesis: introducing toxins into a system to make it stronger).

Maciej Olpinski describes a Google for the economic web:

<https://blog.userfeeds.io/building-google-for-the-economic-web-on-the-ethereum-blockchain-de27cb3d23b>

Finally, Meher Roy's, recent excellent work on incorporating signalling theory into upcoming, blockchain-based attention networks:

<https://docs.google.com/document/d/1eWF47g5UV0RF50GOCUNWh-R4DrKplrhjrJoKE6nyToU/pub>

As he eloquently puts it at the end:

“One key difference between the job market signalling game and attention networks is the code and the data-structure in the middle. Job Market Signalling did not have a central co-ordinating rule book while attention networks do. **I see this as the killer app of smart contract technology - the ability to build software rules that facilitate the creation of useful economic equilibria - attention networks being one of many to come. Ethereum, and other blockchain systems bring this power to developers, and no other financial system has anything analogous to it.** It's a difficult advantage to explain to the layperson.”

#### **Protocol -> In summary:**

A curation market is a smart contract on Ethereum that is deployed for a specific shared goal or topic that allows the minting of tokens set by a hard-coded algorithm. The cost (in ETH) to mint a token increases as the supply increases (as more tokens are minted). The cost decreases as the supply decreases (tokens are withdrawn (“burned”) from supply).

The minted tokens are bonded to specific curators chosen by the token holders per sub-topic. Using their proportional standing in the curation community (per topic), these curators then back certain information (equivalent to an “upvote”). They can also revoke their backing.

Depending on the design: the ETH that is used to mint the tokens are either kept in a communal deposit, or split towards a trusted beneficiary. These design considerations are dependent on what the shared goal is.

A user can opt to voluntarily leave without selling on the secondary market. When leaving, a user can take a portion of the communal pool with them as reward. This reduces the supply and the subsequent cost to enter is also thus decreased.

#### **In detail:**

There is no requirement for a token launch (a finite period in which entrants can purchase the token). The token can be minted at any time. This new model has been described as a continuous token model or a “safe” token model. The cost to mint the token however increases as demand for the token increases. The cost decreases if people opt to withdraw their token from the supply and retrieve their reward from the pool.

Thus, depending on the current supply, the cost to mint the token is based off a hard-coded algorithm set in the smart contract. This algorithm has a primarily linear curve, combined with a slow exponential curve.

Algorithm:

$$\text{costOfToken} = (\text{BaseCost} + \text{BaseCost} * (1.000001618^{\text{AvailableSupply}}) + \text{BaseCost} * \text{AvailableSupply} / 1000)$$

The BaseCost is currently set at: 1000000000000000 wei or 0.0001 ether. (This base cost was chosen to make sure it's relatively future proof, in terms of price. There's no deeper reasons why this base was cost was chosen).

Thus, at

1 000 supply, a token will cost: 0.01500809654 USD (at a price of \$50/ETH).

5 000 000 supply, a token will cost: 41.31333111 USD (at a price of \$50/ETH).

10 000 000 supply, a token will cost: 53242.33775 USD (at a price of \$50/ETH).

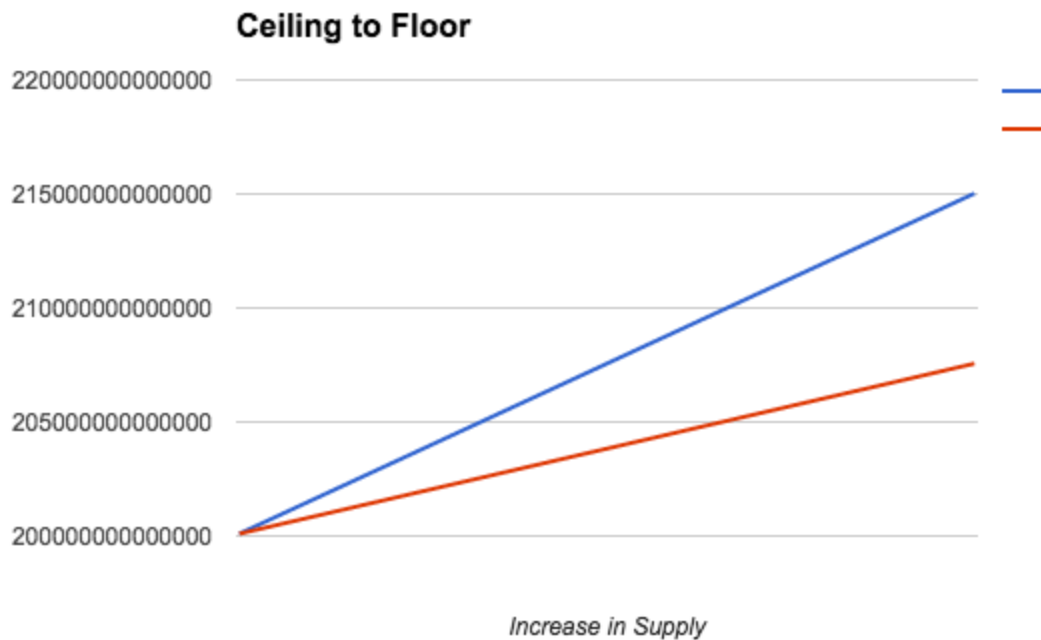
One token can be divided into 8 decimal places. Thus at 10 million supply, the lowest denomination will be worth \$0.05324233775 (0.000001 token).

((todo: Factor in cost of gas and new ETH price rise))

Once one has a token, one can decide to withdraw the token from the supply and take a proportional representation of the communal pool with as a reward, allowing token holders to exit without selling on a secondary market if they wish to do so. Once this happens, the cost to mint decreases (as the available supply has been lowered). For example, if there are 10 tokens in supply, and say 20 ETH in the communal pool, and one leaves with one token (taking it out of supply), one can leave with 2 ETH as a reward ( $1/10 = 10\%$ ).

The algorithm is thus set up in a way that the early adopters of a curation market (those who bought tokens earlier) can leave with a bonus reward if the supply increased to the point where the floor is higher than the ceiling at the time of minting. The proportional stake will be lower (less percentage of the communal pool), but the overall value will be higher. There is thus an increasing floor on the price of the token.

As one can notice, there exists thus a ceiling and a floor, upon which one can enter and exit as one wishes. The value of the token will gravitate in this middle ground on secondary markets until it starts to touch either ceiling or floor.



The consideration of token holders thus continuously amount to the following question: **does the value of my token equate to the value I get from coordinating around the curation of information in this community?** Additionally, as Frederick Lutz put it: **“does the value of my token equate the expected average value that the community will be able to derive in the future from coordinating around the curation of information?”** If it has increased to the extent that the value derived from being a curator or backing other curators, and coordinating around a shared goal is less than the value of the token, it makes sense to sell the token on secondary market, or leave with a reward from the communal pool. An equilibrium will thus come to exist that reflects the value of token to coordinate this amorphous groups of actors around its shared goal.

### **Bonding, Coordination & Curation:**

In order to curate the information, one needs to bond one's tokens to a specific curator for a specific sub-topic. It can be oneself or another person. In some circumstances, one would wish to delegate one's stake to someone whom one regards to curate well. It is still your tokens, but you feel that there are better curators than yourself. It is sometimes in one's interest to do this, because a better curator than oneself will draw more attention and thus value to one's own tokens.



Given a certain community (such as #ethereum), one does not necessarily want the curators responsible for research to curate what's useful for traders.

Thus, the tokens are bonded to a specific curator, per sub-topic. For each sub-topic, there will be several curators. Each curator will have a percentage standing in their sub-topic based on their bonded tokens vs all the bonded tokens for that sub-topic. For example, if there are 100 tokens bonded to the topic #truffle.governance (#truffle being the core topic, with #governance as the sub-topic), and I have 10 tokens bonded to myself for the #truffle.governance topic, then I have a 10% standing for curating governance of Truffle. Similarly, if 1000 tokens are bonded to the #truffle.pullrequests topic, and I have 200 tokens bonded to myself for the #truffle.pullrequests topic, then I have a defacto %20 standing to curate on that topic. The percentage standing can be indirectly referred as one's reputation.

Once bonded, the curator can signal any information they wish in that topic. They can back any information & also withdraw their backing. The important signals are: the bond at the time of backing & also the current bond amount. Using filters, these signals can be interpreted to reveal information that have skin-in-the-game. This is where stigmergic research seems relevant, as these signals (real-time) and cues (past signals) can be re-interpreted.

For example, if there's a desire to coordinate on what new standards to adopt, then the #truffle.standards curators will signal for their desired standard. For example it would something like:

"25% (25/100) of #truffle.standards curators back the new web3.js"

Or, if you want to determine if a pull request needs to be merge:

"83% (8300/10000) of #truffle.pullrequests curators backs a merge of issue #431".

Topics are open. Anyone can create a sub-topic for whatever they want to curate around.

One's tokens can only be bonded towards one sub-topic and one curator at a time.

### **Spin-offs:**

Sub-topics for the most part allow a venn overlap between participants to curate on various topics within a bigger topic. However, those within the bigger topic, still have power to switch their bonds between sub-topics. Sometimes this is not efficient, because one is then implying that, for example, a person that curates #truffle.governance should have the same weight vs curating #truffle.pullrequests. Or more broadly, an example of an open music industry, curating #music.standards vs #music.discovery.dubstep shouldn't necessarily be the same people.

At some point, however the coordination fitness function will lead to a community splitting to its own curation market. This occurs when the shared overlap has deteriorated enough that it doesn't make sense to share any curators anymore.

This is a natural modus operandi of curation markets. As curation markets will grow, it's likely that spin-offs can occur. An example is r/bitcoin & r/btc. Although they share a goal, their interests have diverged to the point where they do not want to share curators, and would rather empower separate communities. Another example are the prevalence of "true" sub-reddits, which focuses more on having stronger process to increase novelty when the previous version of the sub-reddit became overloaded with low-quality content.

### **Signalling Commitment:**

In order to signal commitment to the curation market, bonds for curators can be chosen to be locked up for a defined time. This further reduces shocks and coordinates intent for the curation market. A locking period can say, be: 1 month (when bonded to a curator per sub-topic).

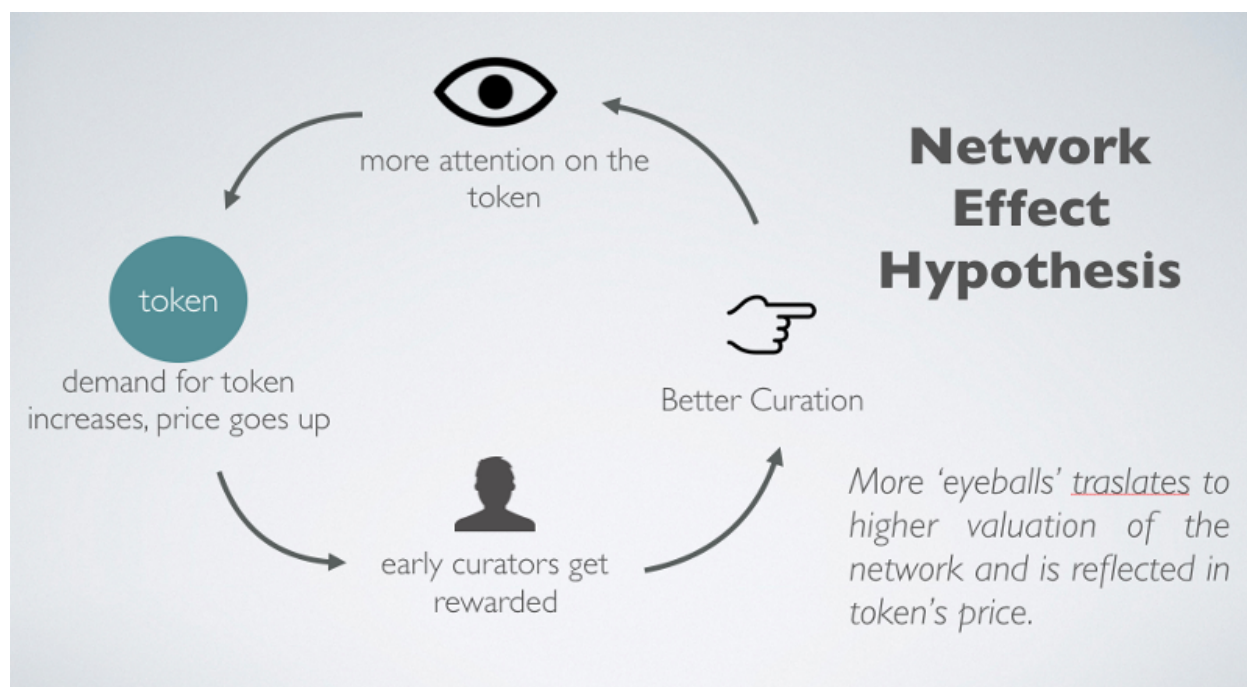
There's room here for more design explorations around rewarding those who bond besides the benefits of curation. There *is* a value to bond, because bonding results in curation occurring, which results in attention and attraction to the curation market, which results in value being generated for the token holder (because more people will be joining if they also wish to join the market of coordination).

This is where there could be still some interesting design variations. One could say that if one wants to remove a bond prematurely, then one forfeits part of the bond.

### **Feedback Loops & Value:**

As previously described: in order to increase value for the token, the community needs to curate information in such a way that it attracts attention from stakeholders who want to form part of that community & coordinate together. There is thus a feedback loop that will keep going until the curation & coordination generated from the usage of the token approaches a zero marginal return. In order to increase the value, more (& better) curation needs to occur that results in facilitating coordination.

This an excellent graphic from Maciej Olpinski that describes these feedback loops. Much of the current design of curation markets have been heavily inspired by Maciej's work on Userfeeds.



### Cost Curves: linear vs step/batch.

As shown, the curves are primarily linear and adjust per the token supply. One of the features of these continuous models is that it decreases the FOMO of capital that enters during a token launch. To use crypto trading parlance: there's more of a pump and a dump if supply is restricted.

The linear curve model tries to fit the cost continuously. However, whilst it is still linear, it might still introduce volatility. The rise and drop of the value of the token is useful and required to induce the incentives for coordination. But, there could be ways to mitigate and rate limit it so that participants do not "run for the doors", or "pile in". One such alternative proposed by Juan Blanco is step curves or batch periods.

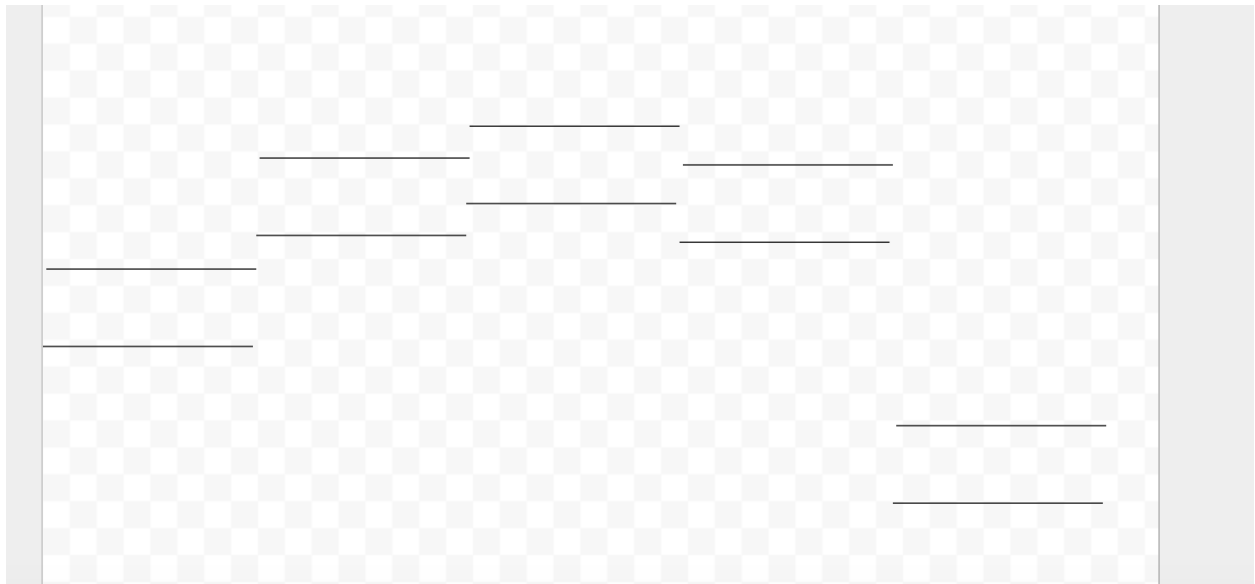
### Step/Batch Cost Curves.

Instead of per-token adjustment, the ceiling & floor remains at a certain level for a period of time in order to absorb shocks (both up and down). This is similar to batch auctions, frequently cited as an alternative to combat high frequency trading. This also reduces the impact of miners that front-run the token [which is an inherent obstacle with public blockchains].

<https://faculty.chicagobooth.edu/eric.budish/research/HFT-FrequentBatchAuctions.pdf>

Batch Auctions in the context of Ethereum: <http://cdetr.io/smart-markets/>

This should definitely be explored as an alternative model for the cost curves.



Here's a crude example over time of the ceiling and floor of the token. Demand (those who entered vs those who left), will shift it up or down.

### **Curation Markets with beneficiaries.**

The default state is the usage of curation markets without beneficiaries. There's less complexity involved and it only serves to coordinate a group of people around a shared topic. Curation markets, however, can be used to spawn & create "curation organisations", but in other circumstances it's only about curation of shared information, not necessarily towards a specific goal that requires interacting with the rest of market. For example, the topic #gaming doesn't necessarily need a beneficiary to aid it.

In some circumstances, a curation market can independently fund a beneficiary through the minting process by letting a hardcoded protocol split the tokens that are created, towards a hardcoded beneficiary. So, in other words, when minting, the person buying the tokens with ETH gets 10 tokens, and a hardcoded beneficiary gets, say, 1 token. For any purchase the beneficiary gets a bit of the tokens.

In some circumstances an independent beneficiary is important for the fostering of the shared goal. This beneficiary can then decide to curate with their tokens as they see fit (as they are an important part of the curation market's functioning), or they can choose to sell their tokens in order to foster development of the shared goal.

An example is the use of personal curation markets: using this setup to curate the attention of an individual. In order for the individual to sustain themselves, they need funds. And such, this

specific iteration of a curation market turns into a personal attention market. This is thus a more direct way for the topic of the curation market (a person) to earn from it, rather than them having to directly participate in it.

The relative power of a beneficiary can also be weaned off over time, in circumstances where the beneficiary is only important for bootstrapping an ecosystem (such as building an open music industry). This can also be hard-coded algorithmically. The more successful the curation market then becomes, the less the beneficiary earns as it is an indirect measure that it is succeeding in its goal. It thus goes to the point where the curation market takes off its “training wheels” over time.

### **Token-earning vs ETH-earning beneficiaries.**

An alternative to a token-earning beneficiary is an ETH-earning beneficiary. Instead of the tokens being split, the ETH is split between the communal pool and the beneficiary (as if the beneficiary would receive the tokens and immediately sell them).

This gives the beneficiary more direct agency as they don't have to sell their tokens through the communal deposit in order to enact themselves against the rest of the market.

However, a misaligned incentive with ETH-earning beneficiaries, is that although the beneficiary receives ETH to fund their operations (and fostering the shared goal), they do not gain any influence in the curation market itself. If the curation market wants to curate/signal how the beneficiary needs to spend its funds, the beneficiary then does not have a say over it. Additionally, the beneficiary has slightly warped incentives in that it can take the ETH, buy tokens, get more ETH (it just used), buy tokens, etc in a feedback loop and take over control of the curation market. This is not efficient. The curation market community needs to then fully trust their beneficiary.

A token-earning beneficiary is more closely aligned to the success of the curation market at the cost of additional complexity (needs to sell tokens to get ETH if it's required).

### **Bootstrapping with a token launch.**

In some circumstances, creating a curation market with a beneficiary around a shared goal can only work with a large initial capital allocation. For example, if a curation community wants to co-develop shared, open source hardware, in order to go into production, you need economies of scale, and thus the initial development & deployment of it requires a bootstrapping phase.

In this example, the curation market can still function normally, but it has a large, initial batch auction. With the funds in the hands of the beneficiary they can develop the hardware using the economies of scale, whilst still participating in the prospects of curation.

## **Ranking Curation Markets**

Curation Markets have an interesting emergent property. If curation markets use the same hardcoded algorithm, they can be ranked against each other, showing relative clout of certain curation communities. This is especially pertinent when there are duplicate curation markets per topic (for whatever reason).

## **Risk of ETH as collateral.**

A risk of curation markets are that it keeps ETH as collateral in the communal deposit. Thus, the considerations of token holders also need to weigh up the value of the ETH in the deposit. There could be scenarios of volatility, in which trading of ETH is more valuable, and thus there's more incentive to keep the token liquid, rather than bonding it for curation. Ideally, once stable tokens are prolific, then curation markets can be created that keeps that as the collateral, which result in a more stable curation market.

## **Emergence: Trading anything for tokens.**

Ultimately, if one wishes this system to succeed in broader society, requiring participants to gain ETH in order to participate is a barrier to entry. It also means that indirectly one states that whomever holds ETH are great curators, since they can most easily enter curation markets and back information. The different cost curves per topic mitigate the issue of ETH "whales" manipulating curation, by allowing early adopters of topics more strength in curation. However, it is not fully removed. Thus, ideally, the ability to mint tokens should hopefully in the future not be restricted to having pre-existing capital (per se).

Some commitment, and pledge system as found in apps like Benefactory could be used. Users within the curation market can for example back the risk of new users entering.

## **Grand Curation Market. Curates curation markets.**

Many curation markets will hopefully exist that uses different monetary and schelling point experiments. This will hopefully lead to efficient designs of curation. The core system would likely remain the same -> mint tokens according to a shared algorithm. These tokens are then used to back information in order to add skin-in-the-game signals to them and curate.

Thus, for some topics, there might be several curation markets.

Eg: #truffle has curation markets at addresses:

0x42...

0x12...

0x45...

Etc

Thus, one then still need to determine what curation market is the best curation market? Thus, a grand curation market would be useful in its ability to help disambiguate the relative clout of various curation markets. As previously stated, curation markets might have innate ranking based on the algorithm used. This can help signal the relative power of each curation market per topic, but there might still be some information asymmetry that exists.

And thus a curation market that curates curation markets would be useful.

If it succeeds we could hopefully end up back to the original concept of meme markets, which included a global, shared namespace to coordinate around. Curation markets help mitigate some of the issues of having a global namespace, because squatting a topic is not possible anymore.

All memes then (in the Dawkins sense of the word) will have a resulting, monetizable network effect. Every and anything that has an effect on the world (deep into the long tail) will have a tokenized value.

The internet of value of all things. ;)

#### **Code:**

Alpha code is available here: <https://github.com/ConsenSys/curationmarkets>

API spec coming soon.

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