Delegation
Plan for today

- Background on representative democracy
- Liquid democracy
- Delegation in DAOs today
- In-class exercise on Uniswap delegation
- Future of delegation

Reminder: midterm essay due 5/15 at 11:59pm
Delegation

- Fallacy of direct democracy: if everyone is asked to vote on everything, that’s the most “democratic” a system can be…right?
- Problem: this requires everyone to become informed on every issue
- What if you don’t have time? Expertise? Resources?
- Representative democracy:
  - Elect representatives who reflect your interests
  - Let them invest in expertise and make decisions on your behalf
  - Fire them if they don’t do a good job
A representative historical anecdote

- In early American colonies, governors ruled.
- Settlers (white, male, property owners) were invited to participate in regular “councils” to discuss governors’ decisions.
- But the councils were far away and farms needed tending.
- So farmers would give their vote to a proxy who would go to the meeting in their stead.
- Over time, this proxying became regularized into elections for representatives.

For more, see Squire (2012)
Key goals of representative democracy

- **Functionality** – reduce total amount of human hours spent on governance, create realistic governing mechanisms
- **Representation** – the set of representatives should reflect the interests of their constituents
- **Accountability** – representatives should work hard on behalf of their constituents, and should be fired if they don’t
Accountability Flywheel

Better Representation

Stronger incentives for representatives to do a good job

More informed and engaged voters

More belief in the system
Liquid democracy: motivation

Hardt and Lopes (2015):

“Liquid democracy decision-making systems can scale to cover large groups by enabling voters to delegate their votes to other voters.”

Figure 2. Liquid Democracy
Potential pros and cons to liquid democracy
Potential pros and cons to liquid democracy

**Pros**

- Allow for better aggregation of diffuse information
- Finer-grained accountability over representatives who can be “fired” at any time
- Lower barriers to entry for representatives

**Cons**

- Asks a lot of voters: have to figure out who is expert on each issue and delegate to them; have to consider re-delegating at regular intervals
- Could encourage “pandering” by representatives
- If in practice redelegation is frequent, then representatives may not be able to plan for the future
- If redelegation is highly infrequent, delegates may be able to get away with a lot
### web3 delegation vs. physical-world delegation

<table>
<thead>
<tr>
<th>Physical world</th>
<th>web3</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Election outcomes are potentially high stakes</td>
<td>● Election outcomes may be high stakes for token holders</td>
</tr>
<tr>
<td>● Over time, people have demanded the right to vote and delegation is bottom up</td>
<td>● Demand for democracy online is low, and so far delegation is top down</td>
</tr>
<tr>
<td>● Delegates have known identities and you may have social connections to them</td>
<td>● Delegates may not have known identities and may be anonymous and distant</td>
</tr>
<tr>
<td>● Elections occur periodically and there is social coordination around voting</td>
<td>● While votes are periodic, delegation is continuous; there may be coordination</td>
</tr>
<tr>
<td>● Campaigns, interest groups, and parties make arguments for who should win</td>
<td>● Campaigns, interest groups, parties are nascent or non-existent</td>
</tr>
</tbody>
</table>
GovernorBravo delegation

Delegate

Delegate votes from the sender to the delegatee. Users can delegate to 1 address at a time, and the number of votes added to the delegatee’s vote count is equivalent to the balance of COMP in the user’s account. Votes are delegated from the current block and onward, until the sender delegates again, or transfers their COMP.

COMP

```javascript
function delegate(address delegatee)
```

- **delegatee**: The address in which the sender wishes to delegate their votes to.
- **msg.sender**: The address of the COMP token holder that is attempting to delegate their votes.
- **RETURN**: No return, reverts on error.
Hi all, Honn from the Uniswap Foundation here.

**TL;DR**

- Today we are announcing the launch of [Uniswap Agora](https://app.uniswap.org), which we are celebrating with Uniswap's first ever Delegate Race!
- [Uniswap Agora](https://app.uniswap.org) is a unified delegate and delegation portal built to improve the Uniswap governance experience.
- The goal of the Delegate Race is to set aside a specific time period during the year where new and existing delegates can focus on bootstrapping delegation, and token holders focus on reviewing and re-allocating their delegation. The Delegate Race will occur over the next 4 weeks.
- The Delegate Race includes 2 phases:
  1. **Delegate Setup**: New and existing delegates make delegate profiles on [Uniswap Agora](https://app.uniswap.org) by Friday, May 12th. Profiles will describe your goals and values for the Uniswap ecosystem.
  2. **Delegation**: UNI token holders review and allocate to delegates starting on Saturday, May 13th, and ending on Friday, May 26th. This delegation is anchored by a UNI allocation graciously allocated by some large UNI token holders.
Delegate statement

Past Votes

Prop 37 - 19 days ago
Uniswap Deployments Accountability Committee
For with 8M votes

Prop 31 - 3 months ago
Deploy Uniswap V3 on BNB Chain
Against with 8M votes

Snapshot Vote - 5 months ago
Community Governance Process Changes
Yes - Enact changes with 8M votes
How common is delegation? Data from Uniswap:

(As of Sep 2022)

Table 1. Self Delegated Summary

<table>
<thead>
<tr>
<th></th>
<th>Address Count</th>
<th>Sum Balance</th>
<th>% Count</th>
<th>% Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Delegated</td>
<td>553</td>
<td>212,305,436</td>
<td>5.0%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Self Delegated</td>
<td>10,513</td>
<td>22,248,962</td>
<td>95.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Total</td>
<td>11,066</td>
<td>234,554,398</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: https://mirror.xyz/signal-corps.eth/ziVK92YwgyghThFQ67YL0BHfGniQFzQgOxCsw3N7hA
So far, is delegation more bottom up or top down?

(As of Sep 2022)

### Table 2. Self Delegated Summary, Segmented by Balance Category, Count of Unique Addresses

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Other Delegated</th>
<th>Self Delegated</th>
<th>% Self Delegated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>Less than 100 UNI</td>
<td>289</td>
<td>9,864</td>
<td>97%</td>
</tr>
<tr>
<td>Turtle</td>
<td>100 to 999 UNI</td>
<td>117</td>
<td>533</td>
<td>82%</td>
</tr>
<tr>
<td>Seal</td>
<td>1,000 to 99,999 UNI</td>
<td>38</td>
<td>106</td>
<td>74%</td>
</tr>
<tr>
<td>Dolphin</td>
<td>100,000 to 999,999 UNI</td>
<td>50</td>
<td>8</td>
<td>14%</td>
</tr>
<tr>
<td>Whale</td>
<td>1M or Greater UNI</td>
<td>59</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>553</strong></td>
<td><strong>10,513</strong></td>
<td></td>
<td><strong>95%</strong></td>
</tr>
</tbody>
</table>

Source: https://mirror.xyz/signal-corps.eth/ziVK92YwgyghThFQ67YLB0BHfGniQFzQgOxCsw3N7hA
## Uniswap Delegation Distribution

**Total voting power: 205.17M**

**Holders: 369.52K**

**Voters: 29.31K**

On the surface

<table>
<thead>
<tr>
<th>Top 42 delegates:</th>
<th>Of the 24 active delegates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 178M voting power</td>
<td>- 15 (62.5%) are delegated by a16z.</td>
</tr>
<tr>
<td>- 87% total voting power.</td>
<td>- 4 (16.7%) are not from a16z.</td>
</tr>
<tr>
<td>- 24 active* delegates</td>
<td></td>
</tr>
</tbody>
</table>

The 24 active delegates

<table>
<thead>
<tr>
<th>The 24 active delegates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Holds 107M (60%) voting power.</td>
<td></td>
</tr>
<tr>
<td>- 62M (58%) are delegated by a16z.</td>
<td></td>
</tr>
<tr>
<td>- 26M (24%) are not from a16z.</td>
<td></td>
</tr>
</tbody>
</table>

*active delegates are delegate who have voted in the last year.

Data: Tally.xyz, Etherscan, Kydo's analysis
Who become delegates?
Uniswap exercise: imagine you’re a delegate

- Read this proposal and discussion: https://gov.uniswap.org/t/rfc-update-deploy-uniswap-v3-1-0-3-0-05-0-01-on-bnb-chain-binance/1974
- If you were a delegate, how would you figure out the right decision?
- What if the people who delegated to you disagreed with you on the right way to vote? Would you vote the way you want to, or the way your delegators want you to?
- How do you think you would vote on this?
- What do you think could be done to make a delegation system that is well setup to make a decision like this one?
Can delegation increase participation?

Logic: by making voters’ task easier, delegation should encourage participation

But…

- Many token holders may not pay enough attention to know how/when/where to delegate, or whom to delegate to
- No easy way to reach token holders to inform them
- Delegation systems may be hard to use
- Delegation not appealing if you don’t know the delegates or the issues
Basic delegation may not move turnout: dydx experiment
Incentives to delegate seem to work, though
Future of delegation

Could we...

- create a system to get average tokenholders to delegate? how can we reach them?
- make delegation irreversible for some period of time?
- set periodic elections?
- compensate delegates based on the performance of the project?
- reserve certain delegates for certain constituency groups?