

What is wrong with representative democracy?

We live in a post-democratic era. The trust in our institutions is living at a remarkable low, and in traditional Western democratic systems, *the political* is being perceived as a distinct sphere from the citizens. The only chance to influence this sphere is through elections every couple of years' time. This produces a system of static representation, poor accountability and centralized power that is bound to the nation-state and their governments.

However, ordinary citizens do have the opportunity to make their voices and opinion heard. Referenda and petitions are common tools to organize citizen input but both of them have their flaws. Referenda are mostly top-down instruments that follow a binary logic, if people are or are not in favour of a certain policy. The Scotland referendum, Brexit and the infamous Colombia referendum are perfect showcases for the problem and dangers of design with referenda. Actually, they follow the same logic as candidate elections (the "old" logic), just issue (and not person) related. Petitions, on the other hand, although basically accessible by everyone, usually have to pass rigorous requirements in order to be implemented. Especially small and very specific proposals do not often have a chance to be considered because the general interest is low. Also petitions, in the end are designed according to the "old" logics of participation strategies, namely selecting from binary options: Yes or no.

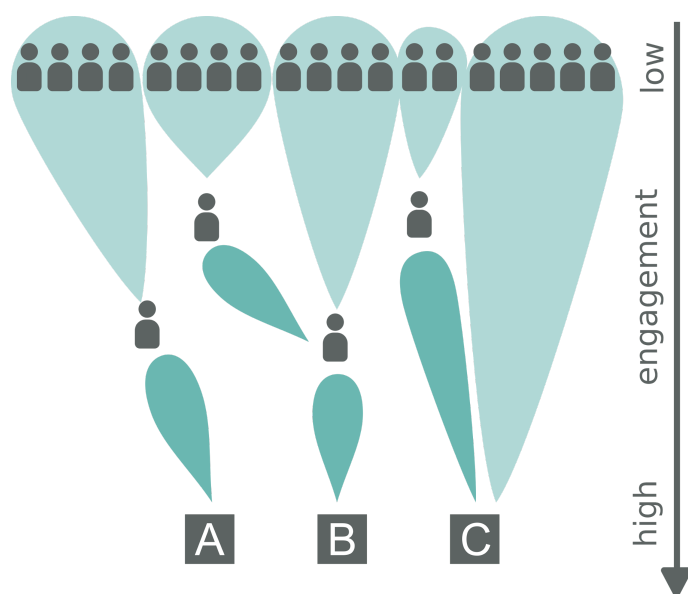
In the same time, social movements are gaining a new high, from single-issue campaigning to nation-wide demonstrations against the established systems such as the 15M Movement in Spain and the Occupy Movement worldwide. Opposed to the "old" logic these movements stand for a "new" political logic of doing politics that often is inspired by direct and deliberative democracy. This logic is built on the idea that "good" politics should be a bottom-up process, in which the people that are actually affected by the consequences of the decision have the ability to shape and the vote on it. Everyone has direct and equal impact on decision-making. The result should be consensus-based decisions resulting from horizontal, decentralized assemblies. This very idealistic and normative perception, however, has some serious issues regarding practicality. It would require an immense amount of time for citizens making informed decisions on daily political decisions to be made.

Starting from here, we ask the following question: How can we help citizens to elaborate solutions collaboratively avoiding centralized standards using a tool that overcomes centralized decision-making and is flexible enough for any group to use?

How Can Liquid Democracy Solve the Issue at Stake?

Where representative democracy fails, liquid democracy can ensure a fair, open debate and voting process. While in representative democracies, voting is bound to electing from a restricted list of candidates that can make promises during the campaign they no dot have to keep. A concentration of power also easily leads to corruption and abuse of the public resources. Liquid Democracy, on the other hand, a hybrid between direct and representative democracy introduces elements into the political process that would eventually avoid this handicap that representative democracy produces. There are many understandings of liquid democracy, from the more soft process of chained **answer recommendation** [1] to vote delegation. Answer recommendation refers to the process of requesting the decisions of the people you trust on a certain issue, you still would have to vote yourself but you receive information from your peers which you trust ideologically and issue-related.

The more prominent understanding of Liquid Democracy is related to **Delegative Democracy**. The idea is that the participants are constantly free to propose and vote on any topic that they want to. They can either do so directly with their vote or delegate their vote to someone else whom they trust to know more about the issue at stake. Instead of a centralized parliament consisting of representatives, this method creates **singular,**



decentralized and contingent parliaments formed around issues.

These parliaments share the same interests in topics, but they are not obligated to participate. On a technical level, Liquid Democracy does not require innovations, it is based on accounts, forums for discussion, comment functions, wikis and voting tools. Liquid Democracy seems to combine the best of both, the direct and the representative model, by encompassing four properties: direct democracy, flexible delegation, meta-delegation, and

instant recall. The values inert LD in its original formulation (Miller 1969) are: Transitivity of the votes, no specific target groups, transparency of the votes, scalability, accessibility, anonymity in voting habits, and easy usability.

Let us borrow the following ground premises regarding equal sovereignty (Blum & Zuber, 2016). We assume that the members of a political community shape the welfare of their

community on the basis of their own subjective interests. And political decision-making procedures derive their legitimacy from allowing each member to assert their interests in an equal fashion. Because the participants would delegate their vote to a person who is likely to know better about the issue than the participants themselves, we enter both epistemic (based on the sovereignty premise) and egalitarian superiority (based on the equality premise) of LD compared to representative democracy. It is also assumed that provisional trust might create sense of responsibility for delegates. To maintain the trust received, they would eventually make the best decision for the group [2].

The Challenge Remains

Even though the discussion of Delegative Democracy is a recurring theme in democratic theory, it was not until recently that it was actually feasible. The idea of Liquid Democracy has gained prominence over recent years, but its implementation is still in the experimental phase. Two major foundations in Germany decided to dedicate themselves to the exploration of Liquid Democracy: **Liquid Democracy e.V.**, experimenting with the platform **Adhocracy**, and **Interaktive Demokratie e.V.**, observing the implementation process of **Liquid Feedback** in the Pirate Party in Germany. Its purpose was informing representatives what the base of the party decided upon. However, their organization was lacking in rules on accountability. Since the outcomes were not binding, the leadership acted against the will of the party basis in 2013 [3]. With the death of the Pirate Party, the Liquid Feedback platform is now more or less deactivated in Germany but has been successfully implemented in Italy, facilitating the projects **ProposteAmbrosoli** and **TuParlamento** [4].

Liquid Democracy e.V. is still advising on Adhocracy but they do not have projects that use the delegation function. Therefore, Adhocracy has effectively become a simple voting platform., Google has recently experimented internally with Liquid Democracy and has published their results online [5]. Other tools, such as **Votorola**, were experimented with but did not receive sufficient attention [6]. For a more detailed look on minor projects on how Liquid Democracy tools are being implemented, visit: <http://www.brynosaurus.com/deleg/>

These experiments show that the challenge remains to develop a tool that can be implemented into various communities on various scales. Furthermore, as every idea that incorporates e-voting, Liquid Democracy struggles with certain critical issues: How to keep protecting vote anonymity while enabling accountability, how to prevent changing public opinion from making governance chaos, how to sort information contests by any criteria other than popularity and finally, how to prevent corruption and insure security. To shed a little light on this issue, the next section introduces the variables of liquid governance.

Variables of Liquid Governance

Because every group is different, and has different needs, each should be able to set their own criteria and write the rules that guide their decision-making process.

Here are the variables that we think every collective should work with to design their own governance model:

Variable 1. Time and general procedure

First define the timeline: Which steps should be included and how much time do you want to spend on writing proposals, discussing them and voting for them? Depending on the topic and the size of the group, the procedure can vary from approving one topic in one day,

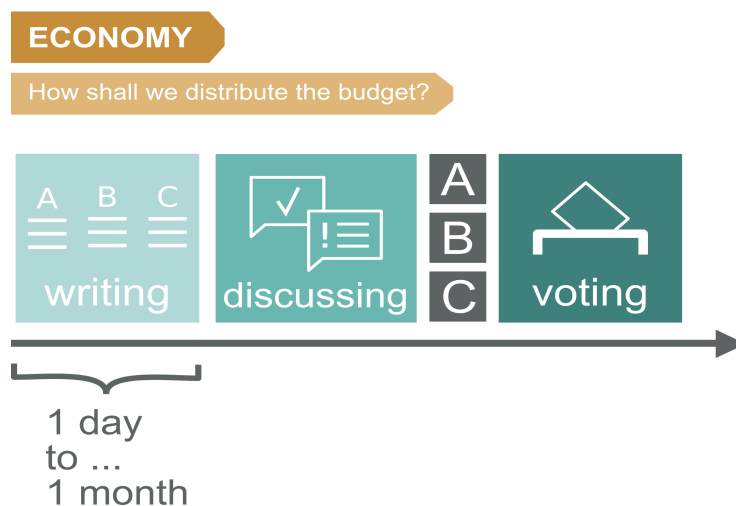
to proposing, discussing and voting on a diverse range of issues over a month or more. .

There is no one-size-fits-all scheme that is effective for every group.

Next is the question of how to group the proposals. It is important to keep the overview and there are there are two ways: Either individual tagging of proposals (use a tag, i.e.

economy, when writing your proposal), this tag appears for others as tag-option when writing their proposals, so the proposals can be grouped into tags. Or through a top-down decision which tags should be used (opening a category (tag) “economy” by the initiators)

Which strategy the group chooses depends on how you want to approach the decision-making process, either in an open way (good for proposal generation in groups without a very well defined question, i.e. “how should we distribute the budget in year x”?) or in a more structured way (good for taking precise decisions, i.e. “should we spend the budget on topic x (tag x) or topic y (tag y)”).



Variable 2. Delegation Rules

If you want to delegate your vote, there are several ways to do it, ranging from simple to complex delegation. You can either delegate all your voting power on one or more delegates or you can delegate your vote on a single proposal, meaning that your delegated vote is valid

for one decision (either all your votes or a share of your vote (x% of the vote)). You can also choose to delegate on single issues. In that case, your delegation contract is basically giving a x quantity of votes to be casted by the delegate on all proposals that include the tag specified by the contract. As a third option, you can split your vote regarding one proposal or issue onto different people: you can delegate x% of your vote to person a; and y% of your vote to person b.

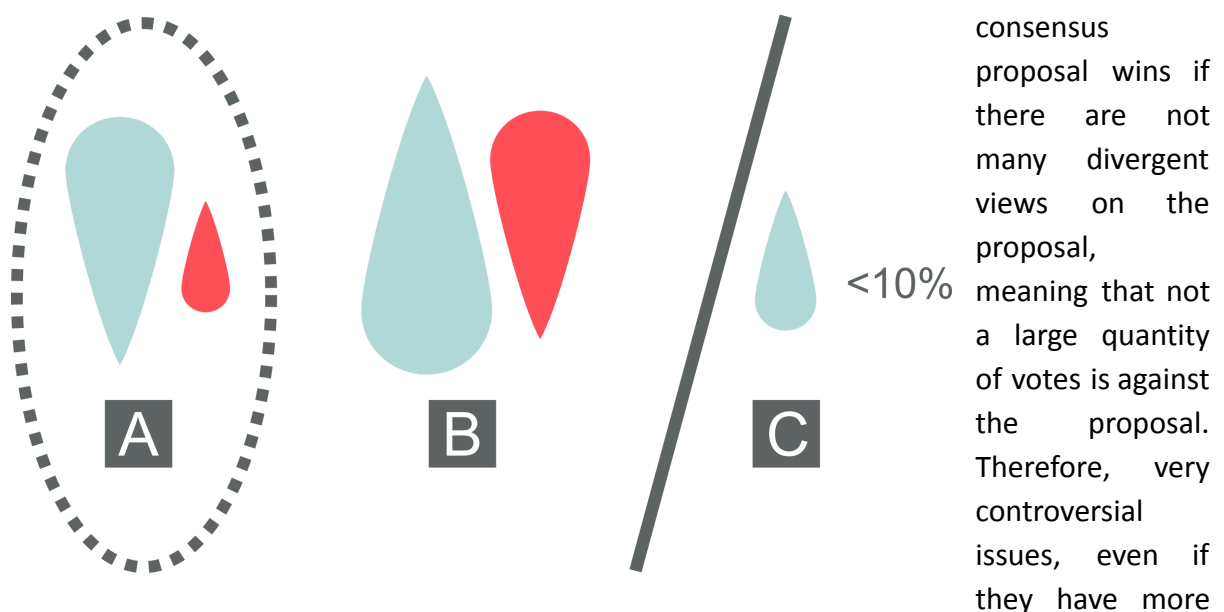
In Liquid Democracy, a major danger is vote dumping, which means that participants just leave their votes with other people and forget about them. This can lead to an accumulation of power and to a reproduction of power dynamics that LD attempts to oppose.

To ensure that this does not happen, delegation expiration strategies have to be considered in line with what to delegate. Either you just delegate once, i.e. regarding one proposal (either all your votes or a share of your vote (x% of the vote)) or decide to establish a contract on delegation on tags within a given time period, i.e. always if there is a decision to be made in a tag, the person who delegated his/her vote gets a notification with the question if he/she still wants to keep the delegation contract.

To reflect upon corruption and power abuse, the group needs to decide, if the delegators know about the amount of votes they have been delegated or if they remain in the dark regarding the power they actually have within the decision.

Variable 3. Rules for Decision

When does a decision have the legitimacy to be implemented? Here, there are a few things to consider, ranging from simple to more complex. The easiest rule is if the a proposal gets accepted when it reaches a quorum (i.e. 10%) and was voted on most (c).

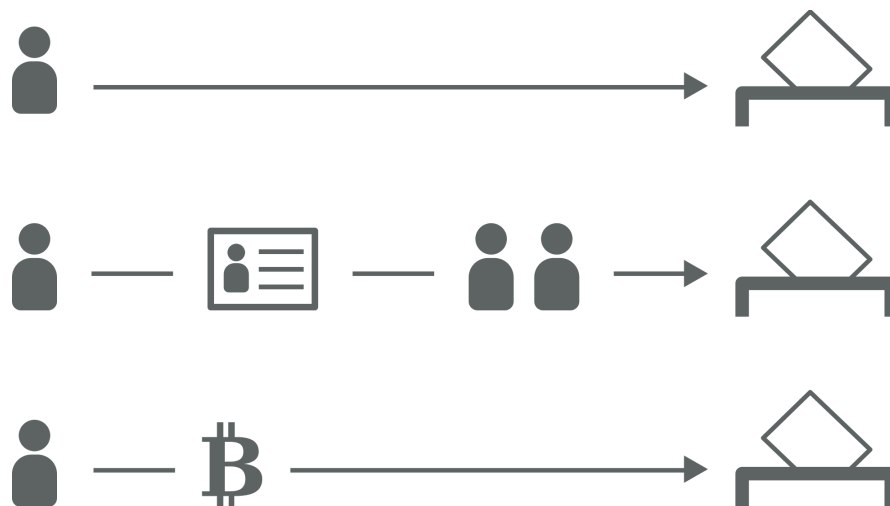


support than others, might not win because another proposal gained more balanced support (i.e. balanced between positive (support) and negative support (reject))

Variable 4. Authentication Process

A general problem in all e-democracy projects is the question on how to ensure the users do not have multiple or duplicate accounts. To the group can have different authentication processes, again ranging from simple to complex. Either opening the process to anyone who wants to register and vote, or restricting the access by collective whitelists user that can vote secure through two-factors authentication, ID providing etc.

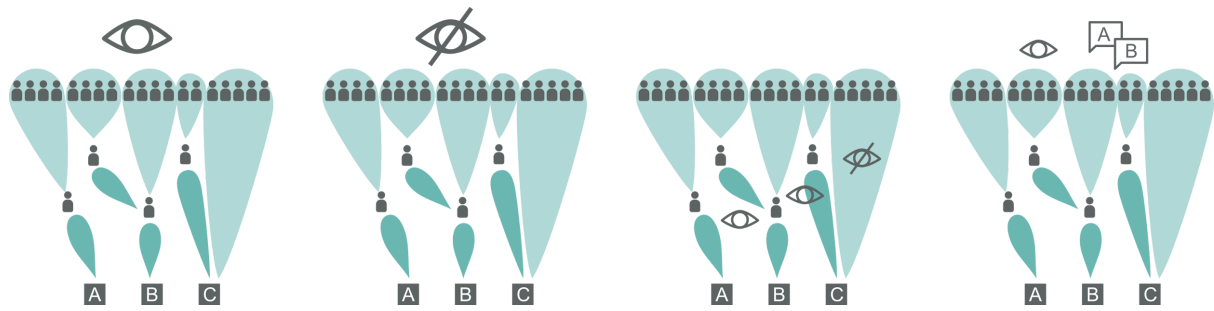
To strongly secure authentication processes, a decentralized process can be implemented, using bitcoin public and private keys. The user would be in control of his ID info, the collective would only see whitelist keys, so that participants are anonymous if they want to be.



All these processes would, however, not definitely ensure that the person who signed up is actually sitting behind the desk when voting, this could be avoided by adding another security process, i.e. sending a code to another channel (i.e. SMS) when opening an election process.

Variable 5. Transparency of Results

One serious question is how to keep protecting vote anonymity while enabling accountability within LD. A standard value within democracy is the protection of the voter by anonymizing his/her vote. But when you have delegations, you want to know the decision your delegator made for you to eventually recall your vote. Accordingly, depending on the goal or the sensitivity of the topic, each group needs to decide about the transparency about the results, assuming that clear names are used instead of pseudonyms.



You can either decide on making all votes visible, so that everyone knows what the others have been voting on or have a total anonymity of the ballots. Two other ways, depending on the group/collective are hybrids: Either person-related hybrids, that would mean that the decision of voters that use their vote directly is anonymous, but transparent for voters who have delegated their votes. Or time-related hybrids, for example, making votes during admission and pre-discussion transparent and the final voting anonymous.

More Literature:

<https://docs.google.com/spreadsheets/d/1YWfvm0QvzhaFi771d9Wf11UfR4nX362rSCKFonXL9qQ/edit#gid=0>

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- [1] <https://uniteddiversity.coop/2013/07/19/liquid-democracy-is-not-delegative-democracy/>
 - [2] <https://medium.com/@DomSchiener/liquid-democracy-true-democracy-for-the-21st-century-7c66f5e53b6f#.3c1ds4hh5>
 - [3] <https://www.openhub.net/p/votorola/links>
 - [4] http://research.apaulin.com/research/2014/cedem14-ld-snbg#zoap_C5QI5XZI
 - [5] http://www.tdcommons.org/cgi/viewcontent.cgi?article=1092&context=dpubs_series