



LiquidFeedback

Andreas Nitsche

The challenge of opinion formation in large groups

Binary relations of **one-on-one communication** grow quadratically with number of participants.

Group discussions are limited by the number of (active) participants and/or the ability of participants to speak as they see fit.

Online group discussions lack quantification (“50% impression”) and tend to become dysfunctional with real conflicts.

By definition **moderation** imposes democratic deficits.

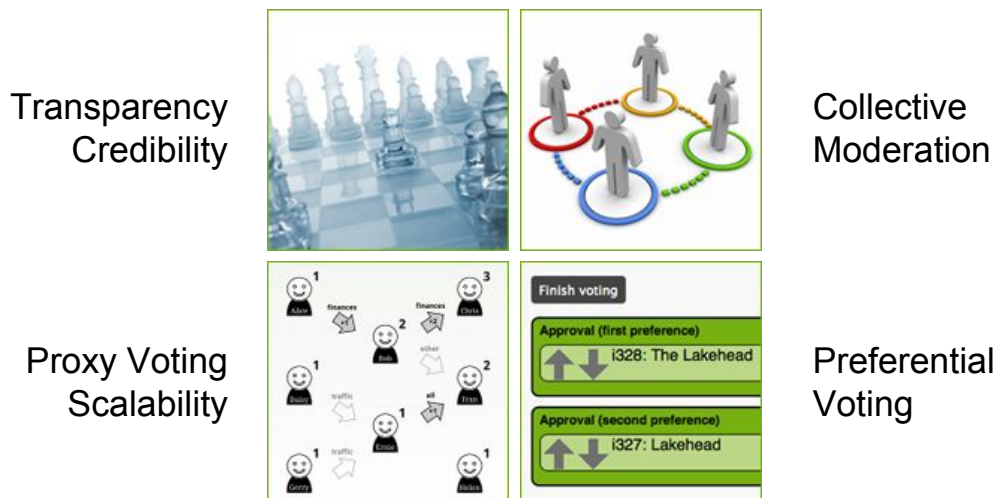
The challenge 1/2

- Democratic **self organization** of an **unlimited** number of participants.
- Applicable in organizations with **real conflicts**.
- **No moderator** or request commission.
- Bipartisan cooperation **must not** be a precondition.

The challenge 2/2

- Consider **pros, cons and alternatives** prior to voting.
- **Minority protection**.
- Protection against dominance of **noisy minorities**.
- No encouragement for **tactical voting**.
- **Credible** process with trustworthy and indisputable results.

LiquidFeedback: 4 Principles

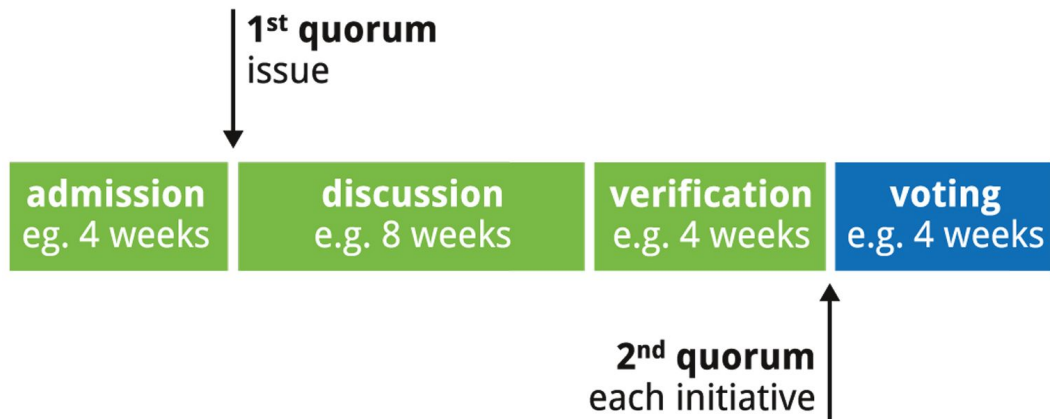


Transparency and Collective Moderation

- democratic self organization
- no moderator or request commission
- applicable in large organizations with real conflicts
- (bipartisan) cooperation must not be a precondition
- trustworthy and indisputable results

**Many drafts will still be created
by closed groups or even individuals.**

Transparency and Collective Moderation



Structured discussion process

- user driven, self organized process
- every member can start an initiative
- quantified constructive feedback
- initiators decide about adoption
- no fundamental opposition within an initiative
- every member can start an alternative initiative

The structured discussion is supplemented by a variety of unstructured discussion formats, both online and offline.

Transparency and Collective Moderation

support

potential support
based on suggestions

- must
- should
- should not
- must not

yes/no

multiple choice

open answer

searching for the question

Function of the process steps



search for the question, create set of answers (voting options)			decision
flow control	improvement	consolidation	voting

Searching for the Question

initiatives are possible answers
and define the **issue**

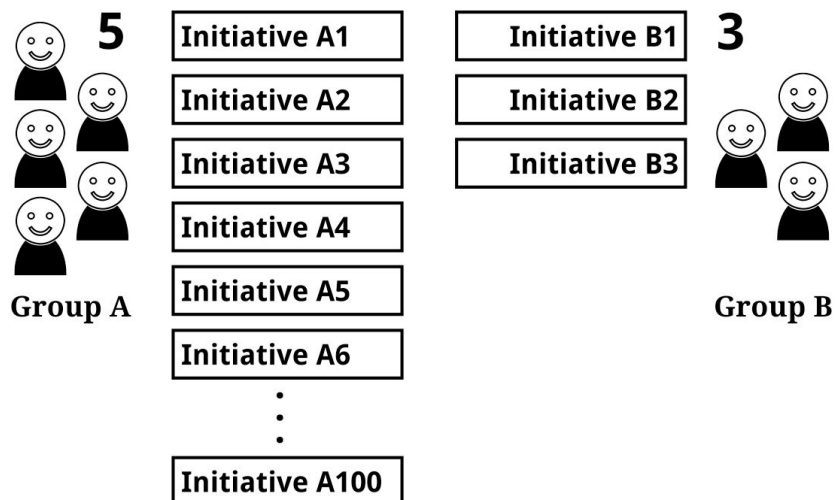
Minority protection

unalienable rights

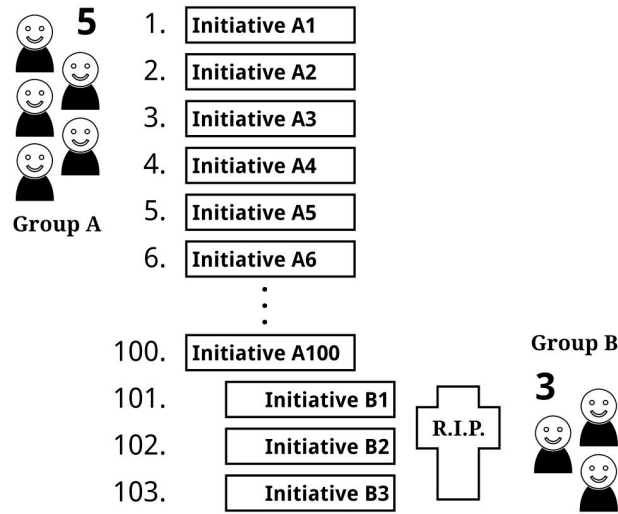
proportional representation

technical measures

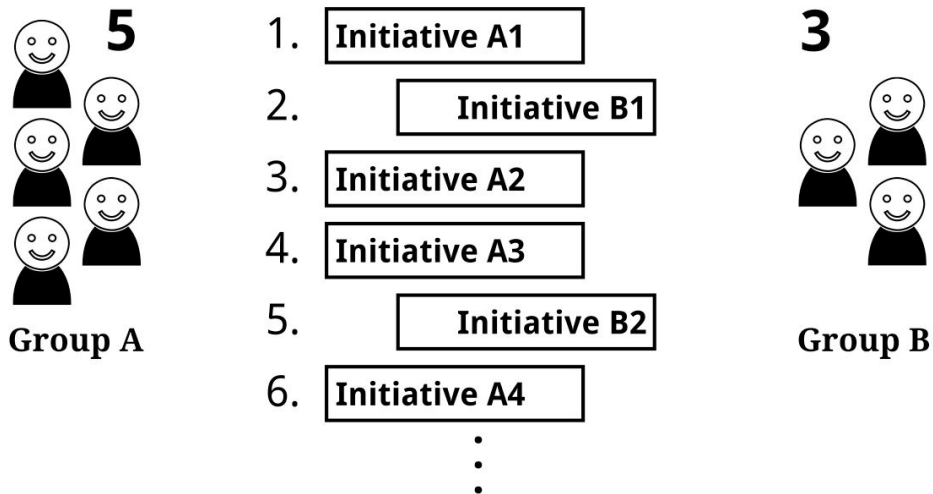
Display position



Display position



Harmonic weighting



Harmonic weighting

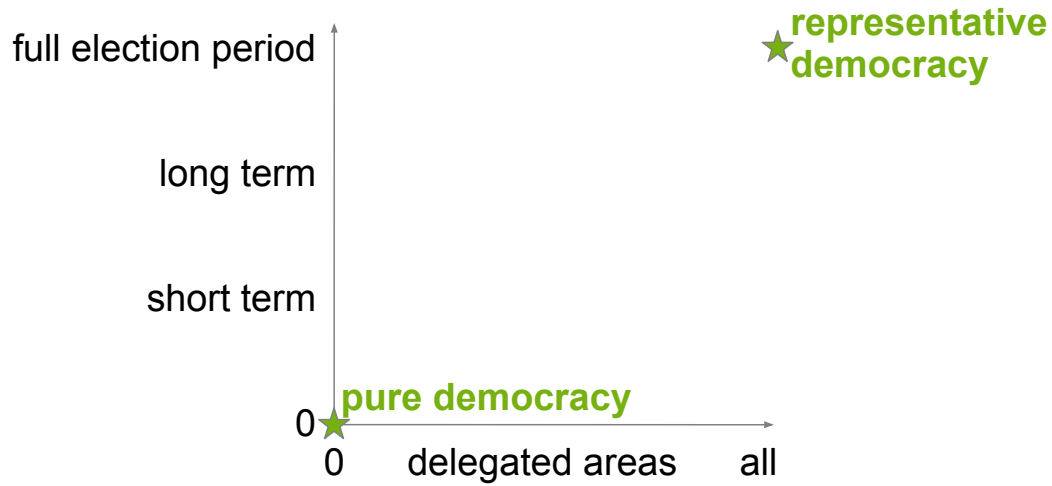
Minority	$M = 1$	$M = 2$	$M = 3$
40%	2	5	7
30%	3	6	10
25%	4	8	12
20%	5	10	15
15%	6	13	20
10%	10	20	30
5%	20	40	60
3%	33	66	100
1%	100	200	300
$p\%$	$\lfloor 100/p \rfloor$	$\lfloor 200/p \rfloor$	$\lfloor 300/p \rfloor$

guaranteed worst case display position

Proxy voting (Liquid Democracy)

area	representation
finances	→ Alice
health	→ Bob
town planning	self
traffic	self
all other areas	→ Charlie

Proxy voting (Liquid Democracy)

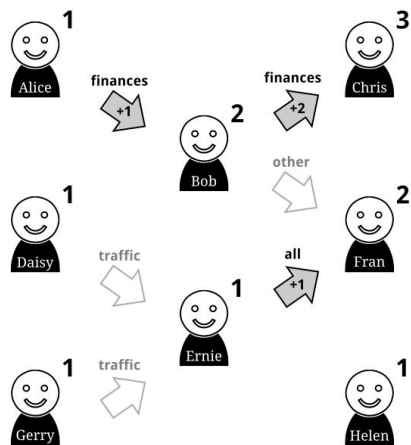


Liquid Democracy (proxy voting)

dynamic
division of labor

based on individual choice

Proxy voting in LiquidFeedback



- delegations are applied to both discussion and final voting
- are overruled by more fine graded delegations
- automatically suspended by activity for the given activity

Liquid Democracy

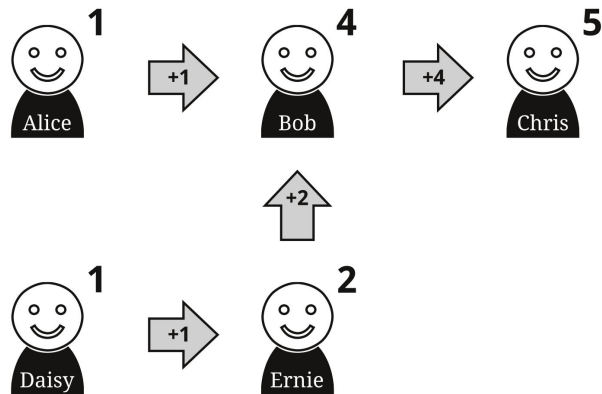
direct participation

- knowledge
- interested in
- importance
- affected by

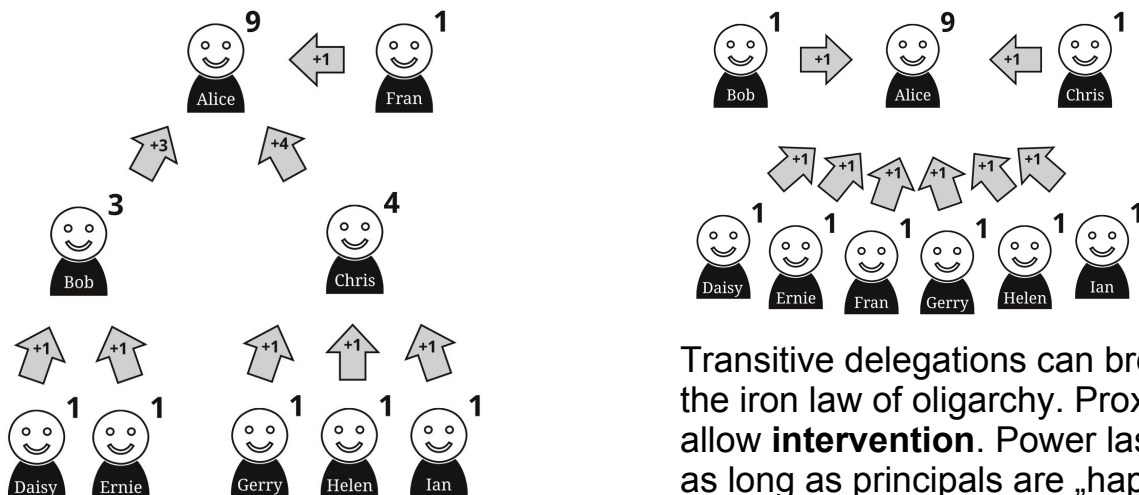
representation

- expertise
- reputation
- trust
- sympathy

Transitive delegations

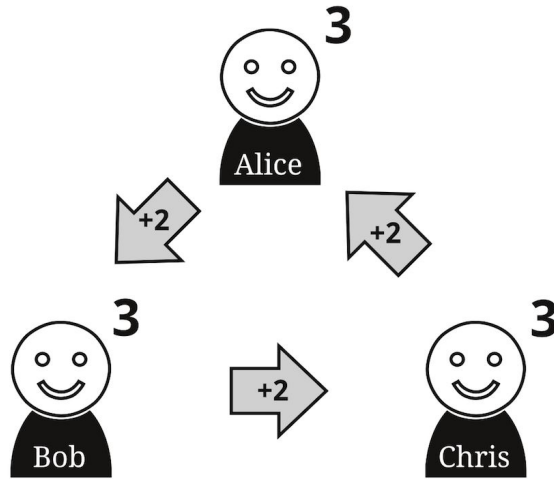


Dynamic accumulation and cancellation of power

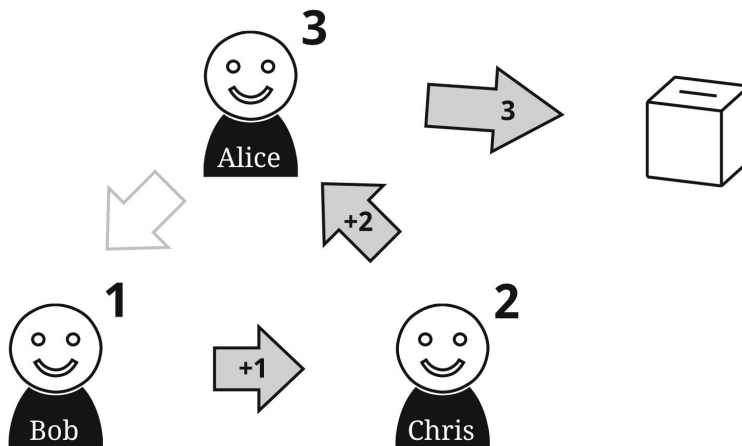


Transitive delegations can break the iron law of oligarchy. Proxies allow **intervention**. Power lasts as long as principals are „happy“.

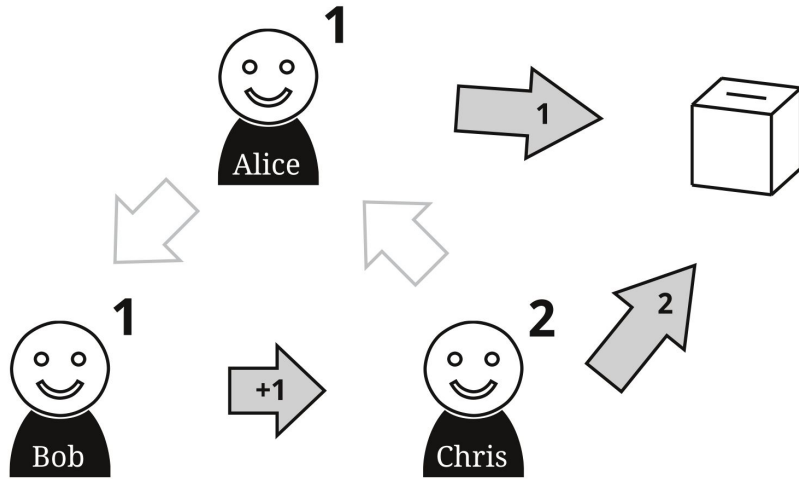
Circular delegations



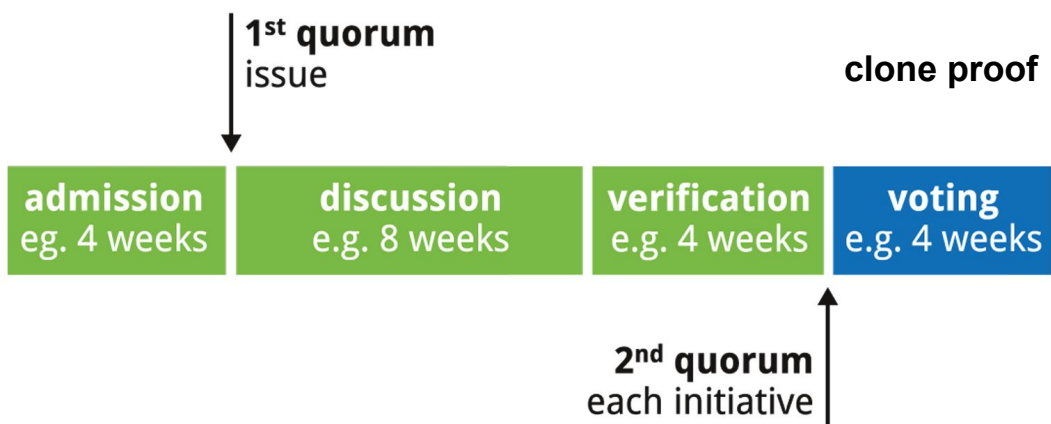
Circular delegations



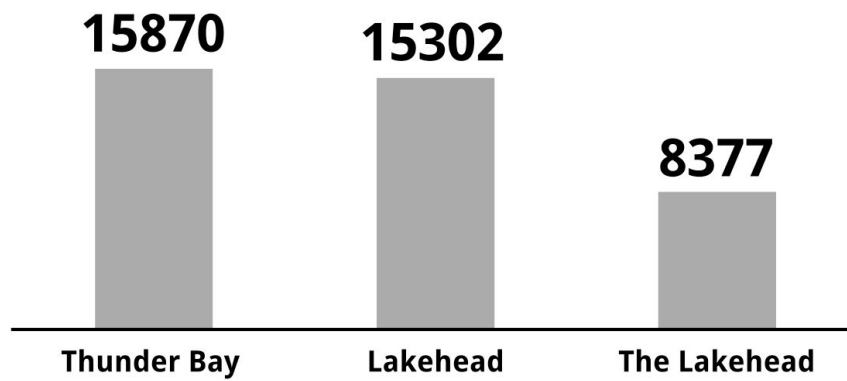
Circular delegations



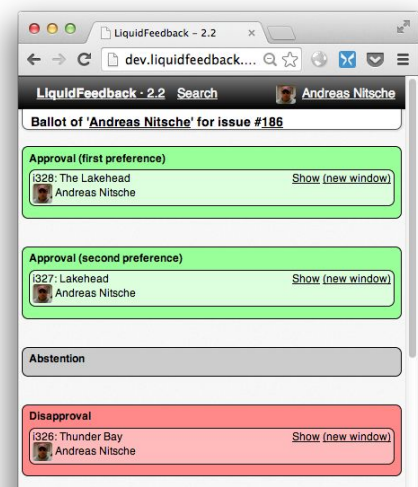
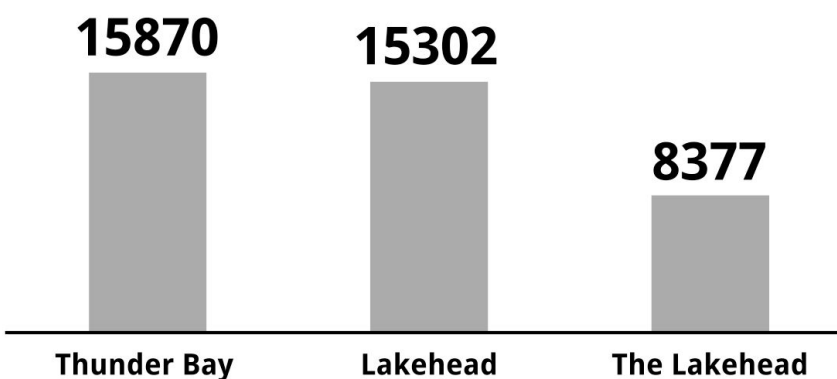
Preferential voting



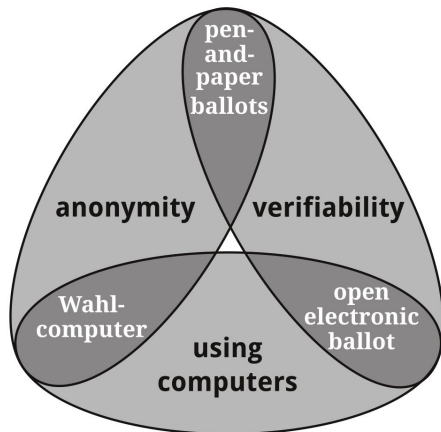
Thunder Bay, Ontario amalgamation referendum (1969)



Thunder Bay, Ontario amalgamation referendum (1969)



Anonymity and verifiability



...don't go together with computers,
...let alone secrecy and computers!

LiquidFeedback is no Black Box

correct function can be fully audited by the users

all process relevant data is available
both human and machine readable

snapshots of all decision relevant states

users can compare checksums
and avoid „alternative realities“

Application fields



political parties
associations
civic participation
constituency participation
corporations
cooperatives

participation quota

increasing factors

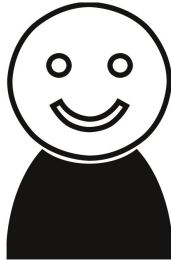
- binding results, commitment
- interest in issues
- personal assessment of importance

decreasing factors

- barriers
- trust in representatives
- satisfaction with administration

The participation quota does not qualify as a target function.

The five questions of participation



Who may participate?

What is the subject of participation?

Which instruments are used?

How are the instruments used?

Why to participate?

what it needs to be successful



- access control (accreditation)
- verifiability and transparency (recorded vote)
- serve a purpose (as binding as possible)
- avoid false expectations (be clear on limitations)

Publications

The Principles of LiquidFeedback

<http://principles.liquidfeedback.org/>

The Liquid Democracy Journal

on electronic participation, collective moderation, and voting systems

<http://www.liquid-democracy-journal.org/>



Copyright 2016 Interaktive Demokratie e. V.



Thank you!

liquidfeedback.org
interaktive-demokratie.org
twitter: @liquidfeedback



Copyright 2016 Interaktive Demokratie e. V.

