Plurality in Practice

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CONCEPT	Imagine a future where decision-making and resource allocation are driven by nuanced voting protocols that consider voter identity and expertise, moving beyond the limitations of traditional voting systems. Would this lead to diverse and surprising consensus and efficient results, or become mired in complexity?
TARGET PROTOCOL	Plural voting mechanisms build on traditional linear and quadratic voting mechanisms by considering the relationships between voters and weighting their preferences accordingly. The goal is to reward diverse group consensus, ensuring that decision-making reflects a broader range of perspectives while preventing dominance by heavily aligned voters. But do the results match the theory?
PHOTO/ SKETCH	

(Or, if we're allowed to be a bit cynical and scrappy with our memes:

CENTRAL TENSION

Plurality vs. Authority: Although plural mechanisms aim to reduce the influence of a powerful voting bloc, successfully implementing these mechanisms requires a lot of top-down judgments which can bias results. Even where implementers are well-intentioned, correct calibration of these mechanisms requires a deep and nuanced understanding of how they function. It's not clear that this shift in power always makes things more plural, and most are still eminently capturable without care.

LINKS

ARC Regenerative Communities: Approaches to governance evolution which eschew voting entirely may prove more successful than trying to tune current plural mechanisms to resist capture.

E2EE in Activity Pub: As elsewhere in the protocol space, nothing is fool-proof. There will be a lot of value in standards and guidelines for how to successfully calibrate and participate in plural voting mechanisms.

Fire protocols: Attention as Autopoietic Space: Plural voting mechanisms already have a good track record of defusing tensions in contexts where combative participants must reach consensus.

Protocols in (Emergency) Time: Most examples of real-world plural voting have used a snapshot of relational identity. Adding temporality to plural voting is complex, especially if participants themselves are in control of these changes.

The Caucus (Randy Lubin): Plural voting mechanisms don't necessarily play well with liquid democracy and other vote delegation systems, because these collapse some of the relational identity required for them to function.

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GitHub repository for the plural voting tool: https://github.com/lexicongovernance

WHAT WE HOPED TO DISCOVER	Our goal was to conduct an overview of plural voting mechanisms with a practical and empirical focus. The centerpiece was our own experiment into Connection-Oriented Cluster Match (COCM). We planned to use simulations and real-world tests to assess the protocol's effectiveness in diverse, practical scenarios.
WHAT ACTUALLY HAPPENED?	Our COCM analysis highlighted the challenges and risks in calibrating plural voting mechanisms, particularly the risk of increased complexity and admin effort for results little different from quadratic voting. We began work on a set of guidelines to help those running plural voting instances optimize for their particular implementation contexts. We also investigated extended voting / discussion tools such as Polis, which are already in widespread use at the local government level. In general, a lack of understanding of the machine-learning methods underpinning Polis and similar tools is producing suboptimal results.
WHAT WE LEARNED	1. There are many real-world examples where taking a plural approach has fostered collaboration and conversation in the face of deep tensions. This is the future. 2. However, much of this success may be due to factors such as novelty and the fact they add a distancing layer to defuse the conflict. These are still wonderful outcomes, but the actual mechanisms are often sub-optimally calibrated. 3. The consequences of this poor calibration are generally low, but this is often because they are plugged into low-stakes situations. It seems unlikely that current plural voting mechanisms are sufficient and safe for powering self-governed systems. 4. Implementation effort is high. In particular, plural approaches require careful consideration of the context. These are not one-size-fits-all solutions. 5. Relational identity is fraught. Grouping decisions can be contentious, and not all relational identity should be weighted equally. Poor choice of identity dimensions can significantly skew results. 6. Attempts to avoid top-down identity decisions, such as pairwise quadratic voting, are interesting but seem incompatible with real-world voting scenarios (particularly in DAOs). Various practical attacks are possible, and the value of this kind of correlation generation is unclear. 7. It is unclear how to handle relational identity over time. E.g., at what point should groupings newly generated by the mechanism be subject to the same anti-correlation modifiers.

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8. Simulations are effective for identifying bottlenecks, but real-world testing is essential for validating theoretical insights. Unfortunately, the number of parameters in play makes experimentation hard. Reliance on relational identity makes each instance unique and counterfactual simulation challenging.

9. Many real-world examples of plural approaches are already harnessing AI. However, the two don't play well out of the box: plurality often aims to surface surprising consensus, which LLM-based AI analysis stifles.

10. Although quadratic and plural funding mechanisms can be theoretically transformed into voting mechanisms, the difference in context between funding and voting decisions and participants complicates this considerably.

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