

ETHNOGRAPHIC RESEARCH OF
PROOF OF HUMANITY DAO

FULL DOCUMENT OF FINDINGS

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I. EXECUTIVE SUMMARY

Context: The Proof of Humanity (PoH) registry and the PoH DAO, launched in early 2021, pushed the boundaries of blockchain-based digital identities and distributed governance by decentralized autonomous organizations (DAOs). The first Sybil-resistant registry of humans attracted more than 17,000 users and laid the foundations for the emergence of what was espoused to be the first democratically-governed DAO running on the Ethereum network. By moving beyond token-weighted voting mechanisms, which currently constitute the status quo of DAO governance and are wrought with plutocratic dynamics, the PoH DAO presented itself as an interesting case study to us as researchers exploring the opportunities, challenges and theoretical implications of blockchain governance systems. Yet, as time passed, the PoH DAO became immersed in a governance crisis, ultimately leading the community to vote in favor of forking in November 2022. Since its launch, the PoH DAO has attracted organizations and individuals from multiple backgrounds and seemingly colliding interests towards the project. Yet, heterogeneity need not lead to irreconcilability. That is why, in 2022, members of BlockchainGov carried out a research project to unveil the governance dynamics that led to the PoH DAO's governance crisis and the decision to fork.

Relevant literature: The academic literature that helped us conduct our research and draft our findings includes articles from disciplines such as political science, digital ethnography, legal theory, sociology, psychology, public administration theory, democratic theory, and studies on blockchain systems and blockchain-based governance. We particularly drew on literature conceptualizing Western liberal democracies to make sense of our empirical observations and findings.

Research Question: What governance dynamics led to the Proof of Humanity DAO's crisis and decision to fork?

Research Hypothesis: The PoH DAO's decision to fork in November 2022 resulted from a long-standing governance crisis fueled by the lack of robust democratic mechanisms, processes, rules, and bodies—inspired by the governance design of Western liberal democracies—that could have contributed to the coexistence of its very heterogenous community instead of its progressive and, ultimately, irreconcilable polarization.

Research Method: Ethnographic research was conducted via online participant observation, interviews, events, and institutional mapping exercises. After signing the appropriate community consent forms under BlockchainGov's research ethics approval (administered by EUI/ CERSA), all interviewees consented to the collection, utilization, and publication of data shared about the PoH DAO community for the purposes of this research project.

Findings: Our findings point out that while the PoH DAO was presented as “democratic,” many core components of traditional democratic systems, such as Western liberal democracies, were lacking in its governance design.

Since the start, the PoH DAO community has been quite heterogeneous. These missing democratic components prevented PoH DAO members from successfully reconciling their differences and choosing to work together for the betterment of the project. While “democratic” DAOs, as techno-political systems, cannot directly incorporate components of legal-political systems such as Western liberal democracies in state-nations, these components still serve as valuable references for democratic best practices. Together, these democratic components could have propelled enriching, constructive, and more stable governance dynamics by facilitating the community’s embracement of agreed-upon fundamental shared values, ensuring a higher degree of accountability towards poor or repudiable instances of political participation, and lessening the weight of divisive versus unifying community voices.

Among some the democratic mechanisms, processes, rules, and bodies missing in the PoH DAO are the following:

1. A “constitution” or fundamental agreement on the animating purpose of the PoH project alongside the shared values, rights, and responsibilities within the DAO and mechanisms for conflict resolution.
2. Clear “citizenship” rules or rules on who the members of the DAO are and what being a member means for governance.
3. Mechanisms and platforms to encourage “constructive political deliberation” and discourage counter-productive and abusive practices.
4. More clearly defined and transparent “laws” or governance rules to avoid “lawfare” weaponization by each faction.
5. A “government” comprising DAO workers, and impartial and fair body to adjudicate in internal DAO disputes, and a body with the mandate to enforce accountability for abuse of power.
6. More appropriate “governance sites” or governance platforms for deliberation and voting, “dogfooding” various technical solutions advanced by the PoH ecosystem.
7. A more complete “governance system” design complementing its 1-person-1 vote liquid democracy.

Inspired by the governance design of Western liberal democracies, our research looked at different layers of the PoH DAO governance and how the missing democratic components played against its diverse membership and the underlying informal power structures. Specifically, we found that:

1. Constituting a Democracy

1.a. Incomplete early governance design: While the PoH DAO launched as an innovative liquid democracy governance experiment with an ambitious mandate and some off-chain governance tools and mechanisms, it lacked some crucial governance structures. The incomplete governance design in the early PoH DAO allowed for fragmentation within the community to consolidate without providing clear tools and processes for reconciliation.

1.b. Two partnering organizations with colliding expectations: Despite initially collaborating for mutual benefit, the two organizations involved in the PoH DAO launch (Kleros and Democracy Earth

Foundation) had vastly different, and at times colliding, expectations for the PoH project as a whole. These expectations partially derived from the diverse backgrounds and visions each organization was pursuing independently.

2. Citizenship and The Demos

2.a. Heterogeneous members' backgrounds and interests: PoH DAO members actively participating in deliberations came from varied backgrounds and had very different interests in the project, which consolidated into polarized governance views.

2.b. Division of the minds and perceptions about factions: many community members perceived the PoH DAO as a split between two opposing factions and expressed so publicly on platforms and forums. This public portrayal of the community as polarized ultimately became self-fulfilling, feeding perceptions, attitudes, and actions of mistrusts toward the “other.”

3. Political Deliberation

3.a. Uncompromising or “convex” deliberation mindset: Many issues under debate about the PoH registry and the PoH DAO were framed as irreconcilable trade-offs and addressed with a confrontational and uncompromising mentality. This prevented the possibility of factions finding a common ground.

3.b. Counter-productive deliberation practices: The some of the most widespread deliberation practices within the PoH DAO exhibited problematic characteristics that impeded a constructive deliberation environment.

4. The Law

4.a. Incomplete and vague legislative framework and legislation: While innovative, the legislative framework and legislation adopted by the PoH DAO were not robust enough to prevent or minimize polarization. Some crucial legal provisions were missing, and the legal framework contained vague excerpts which facilitated it being “weaponized” by both factions.

5. The Government

5.a. Informal and partisan government bodies and officials: The governing bodies and officials of the PoH DAO carried out functions similar to a state's three branches of power. Yet, their nature reflected the implicit power structures of the PoH DAO emerging after the project's launch.

6. Governance System and Governance Sites or Surfaces

6.a. Inadequate Governance Sites or Surfaces: The technological nature and design of the off-chain platforms used for governance, including for deliberation and voting, made them inaccessible or inadequate for their performed function. PoH DAO also refrained from “dogfooding” various technical solutions advanced by the PoH ecosystem, such as implementing registry or token-gating on important deliberation platforms or utilizing more of Kleros’ dispute settlement technologies for the community itself.

6.b. Weaponizable Governance System Design: The PoH DAO governance system and voting mechanism design decayed into a Tyranny of the Majority and the monopolization of voting power by charismatic leaders of each perceived faction.

II. INTRODUCTION

Launched in 2021, the [Proof of Humanity \(PoH\) registry](#) was the first Sybil-resistant list of “unique and singular” humans operating on the Ethereum network. To give an economic incentive for humans to join PoH, the registry went live in collaboration with the Universal Basic Income (UBI) smart contract, which distributed \$UBI crypto tokens to all registered humans in a universal basic income fashion. If a user attempted to register more than once or a bot tried to impersonate a human—commonly referred to as “Sybils”—other users could challenge the submitted profiles, and the Kleros’ Humanity court would handle the challenges. Kleros is both the founding organization of the PoH registry and a service provider of a decentralized dispute resolution system.

In less than two years, the PoH registry pushed the boundaries in the blockchain-based digital identity space attracting over 17,000 registrants. Furthermore, drawing on the digital identity system it developed, the founding organization Kleros announced the launch of the PoH DAO, entrusted with tasks such as allocating funds from a common treasury and making decisions on how the PoH registry should evolve. The PoH DAO was the first in the Ethereum ecosystem to implement a 1-person-1-vote liquid democracy system. Throughout our observations and engagement with the community, many members highlighted that the project had pioneered the development of more democratic structures across the Internet: “It was a novel development in the Ethereum ecosystem, where most projects were plutocratic or token-weighted voting. PoH is probably one of the first and most legitimate democratic experiments with Ethereum.” This pride was consolidated by the active endorsement of many influential figures, such as Ethereum founder [Vitalik Buterin](#), who also joined the PoH registry. The project also received a [grant](#) through [Gitcoin](#) for being “the first democratic DAO on Ethereum, and the largest Universal Basic Income experiment using cryptocurrencies to date.”

By moving beyond token-weighted voting mechanisms, which currently constitute the status quo of DAO governance and are wrought with plutocratic dynamics, the PoH DAO presented itself as an exciting case study for us to explore the opportunities, challenges, and theoretical implications of blockchain governance systems. Beyond our initial interest, in the summer of 2022, different community members reached out to us. They communicated that the PoH DAO was undergoing what appeared to be a governance crisis. We felt well-positioned to support the community in overcoming its challenges for various reasons. Firstly, some of our team members were or had been involved with PoH stakeholders. Secondly, we were well aware of the series of events the PoH DAO community had been going through out of academic interest and alignment with the research subject of BlockchainGov. As such, our multi-disciplinary governance research initially focused on unveiling the underlying causes and potential solutions to the PoH DAO governance crisis.

Throughout our observations and interactions with the community, one feature of the PoH DAO kept coming up: Its role as the “first democratic DAO on Ethereum.” We began orienting our thinking along the principles underpinning the most popular democratic system: Western liberal democracies. The components



and features of Western liberal democracies inspired and guided our analysis of the PoH DAO governance, serving as a reference of best practices for containing heterogeneous *demos* without it becoming irreconcilably polarized. Indeed, the goal and strength of many state democratic systems today is to reconcile and govern across heterogeneous constituencies, enabling them to compromise and live together peacefully, despite fundamental differences and challenging external conditions. Yet, we kept in mind that automatically extrapolating the governance design from a legal-political system (state democracies) to a techno-political system (democratic DAOs) is, in fact, unfeasible.

Over the six months in which we actively engaged in research to better understand PoH, its people, and its governance, it became apparent that the community as a whole was facing challenges and that different parts were presenting long-term visions and solutions that seemed unreconcilable. Our intuition was quickly confirmed when the PoH DAO officially passed a binding proposal to fork ([HIP 74](#)) in November 2022. Consequently, and given PoH's intention to fork, we adapted our research question to gear our analysis towards understanding: **What governance dynamics led to the Proof of Humanity DAO's crisis and decision to fork?** Our study does not intend to deepen or revive the conflict or discredit the project's achievements. Instead, our goal is to constructively contribute to the community's understanding of how governance has evolved since the project's inception, the core drivers of the current crisis, and why the democratic governance system utilized by the PoH DAO was unable to negotiate compromises effectively. We hope these observations may serve as resources and points of reference for decision-making by the PoH community in its future endeavors.

III. RESEARCH DESIGN

RESEARCH QUESTION

What governance dynamics led to the Proof of Humanity DAO's crisis and decision to fork?

RESEARCH HYPOTHESIS

The PoH DAO's decision to fork in November 2022 resulted from a long-standing governance crisis fueled by the lack of robust democratic mechanisms, processes, rules, and bodies—inspired by the governance design of Western liberal democracies—that could have contributed to the coexistence of its very heterogenous community instead of its progressive and, ultimately, irreconcilable polarization.

METHODOLOGY, DATA COLLECTION, AND DATA SOURCES

The methodology of the conducted research is an ethnography reliant on participant observation in addition to desk research as the data collection method, with the primary data sources being:

1. Publicly available conversations held on PoH governance channels and tools, including the PoH DAO governance forum, Telegram groups, Tweets posted by PoH DAO members, and talks or articles authored by PoH DAO members and available online.
2. Publicly available documents and statistics dashboards.
3. Fourteen semi-structured interviews conducted with PoH DAO members that consented to participate.
4. Observations made by two members of the Blockchaingov research team based on their involvement with PoH DAO stakeholders:
 - a. Sofia Cossar was a researcher at Democracy Earth Foundation and applied to the position of Project Manager at PoH DAO alongside Paula Berman.
 - b. Jamilya Kamalova is a researcher at Kleros.

IV. THEORETICAL FRAMEWORK

With the [wide range of DAOs](#) that exist today, there is no one-size-fits-all recipe for organizing their governance. Because of the design of the underlying blockchain technology, [DAOs](#) are *architecturally* decentralized—the transaction data they generate is stored in the many nodes that comprise a distributed ledger. Yet, the degree to which they are *politically* decentralized—or the number of entities with the effective power to make governance decisions—is not predefined. By definition, DAOs rely on smart contracts to write, automate, and enforce some of their governance rules. In other words, to automate certain aspects of their decision-making. Anyone can start a DAO. However, the developers and founders of the technologies DAOs rely on usually retain a critical amount of political power. Over time, DAOs may tend towards [progressive \(political\) decentralization](#), whereby founding teams and core developers give control over the DAO governance away to the community, encouraging their participation and ownership. However, even when community members can vote on a wide array of issues, most DAOs remain [plutocratic](#) or “ruled by the richest.” Many DAOs allocate voting rights based on proportional token holdings. With the development of a concept called [“Proof-of-Personhood”](#) in 2017, verifying whether digital identities belonged to unique and singular individuals became feasible. This approach paved the way for the “democratization” of blockchain systems—including DAOs—through, for example, 1-person-1-vote participation mechanisms.

One of the first projects to incorporate a Proof of Personhood Protocol was the PoH registry dApp, which the PoH DAO had the power to govern. Announced in 2021, early posts (i.e., [1](#), [2](#)) claimed the PoH DAO to be “the first ever truly democratic 1-person-1-vote governance system with open participation,” starting “a new chapter for the future of democracy.” Some social media accounts used for external communications of the PoH DAO still use the term “decentralized democracy” in the project’s description. One aspect of its innovative governance design was that voting took place on a platform called Snapshot, where only humans registered in the Proof of Humanity registry could vote directly or delegate their votes. This mechanism is called [liquid democracy](#), a hybrid of direct and representative democracy, which became popular in the 21st century thanks to digital innovations. In line with the argument in the book [“Democracy: The Unfinished Journey; 508 BC to AD 1993,”](#) co-authored and edited by John Dunn, to understand contemporary democracies, we must pay attention to the historical development of democratic ideals. As such, to comprehend how the PoH DAO designed its governance and bring clarity to its subsequent governance crisis, we decided to start by conceptualizing “democracy” or “democratic system” and observing historical examples of democratic systems.

So, what is “democracy”? The term comes from Ancient Greek *demos* (people) and *kratos* (rule), the reason why it usually refers to the “government of the people, by the people.” However, as the famous scholar Robert A. Dahl pointed out in [“On Democracy,”](#) the meaning of democracy changes depending on the people, time, and place. In this research, we use the term democracy two-fold, which encompasses the [conceptualizations](#) of “formal democracy” and “deeper democracy.” Firstly, it is a formal institutional arrangement based on a multilayered and complex bottom-up decision-making system. As such, democracy may include but is not

limited to a 1-person-1-vote. It encompasses many rules, mechanisms, and provisions to ensure the *demos* or the people are the ultimate sovereign political power. Secondly, it is an ethical ideal based on equality, freedom, dignity, respect for diversity, and unity. According to the concept of “deeper democracy,” these systems ought to ensure that heterogeneous populations coexist and unite while respecting their unique expressions.

What examples of democratic systems exist to date that can help us reflect on the PoH DAO governance, allegedly the first democratic DAO? Historically, the Ancient Greek Athens city appears to be the first example of a (direct) democracy. Yet, Western representative liberal democracies are the most popular modern examples. Historically, most modern democracies emerged during the so-called “[three waves of democracy](#)” through revolts and revolutions led by dissatisfied parts of the population. Almost unequivocally, one of the [first steps](#) towards “democratization” has been the adoption of a constitution or supreme law specifying the rights and obligations of the people and the design of new political institutions. Additionally, Western liberal democracies share some other common features.

- Firstly, they are decision-making systems governing *specific political units*: nation-states. So, they inherit nation-states’ [essential components](#), including
 1. They comprise a **population**.
 2. They are organized in a specific **territory** or geographical land.
 3. They have a **government** or a collection of bodies and officials who make binding decisions.
 4. They are **sovereign**, meaning they can enforce their decisions.
 5. They have a **body of law** or a set of enforceable rules that govern the behavior within the territory and among the state’s population.
 6. They have a **currency** or a medium of exchange, usually issued by the state.
- Secondly, they are *specific types of decision-making systems*: complex, multilayered and bottom-up. They are usually a blend of liberal and democratic principles, meaning they aim to protect individual rights and liberties (the “liberal” aspect) and effectively disseminate political power from *a few* to *the demos* (the “democratic” aspect). Consequently, Western liberal democracies usually have the [following](#) features:
 1. They have an identifiable *demos*, or a part of the population referred to as the **citizens**, meaning those individuals with the right and the responsibility to participate in political deliberation and voting.
 2. They count with a supreme law or **constitution** which informs about:
 - a) The core ideals and principles of the state, such as justice, fairness, equality, or prosperity.
 - b) The fundamental rights and obligations of the inhabitants of the state, which limit the power of the state's authorities, including the right to vote and freedom of assembly.
 - c) The government, where government bodies comprise an executive, a legislative, and a judiciary following the separation of powers and checks and balances.
 - d) The governance system, usually representative democracy, with decisions made by representatives elected by the people through transparent and fair elections and the exercise of the universal right to suffrage.

3. They abide by the principle of the **rule of law**, according to which no one is above the law, and the law applies equally and transparently to all citizens.

Unsurprisingly, since the blockchain technology was developed in 2009 and the first DAO (The DAO) emerged in 2016, many have [argued](#) that these organizations may be a new form of democracy, “more stable, less prone to erratic behavior, better able to meet the needs of its citizens, and which better uses the expertise of all its citizens to make high-quality decisions.” Yet, from the description above, it is evident that determining the extent to which DAOs are “democratic” and, even more so, *better* than other democratic systems is no easy task. Because of their fundamentally different nature, DAOs cannot directly emulate nor be compared against traditional democratic systems such as Western liberal democracies. For example, DAOs don't have a “population,” “territory,” “government,” and “sovereignty” in the same way nation-states do. However, if a DAO such as PoH claims to be “democratic,” it is still helpful to compare its governance design versus Western liberal democracies as conceptual and normative standards of reference. On the one hand, they give us criteria to observe *how* the PoH DAO governed itself. On the other hand, they help us explain *why* the PoH DAO suffered a governance crisis and ultimately decided to fork.

The findings described below make reference to some elements of Western liberal democracies and how these played out in the context of the PoH DAO, ultimately contributing to its governance crisis and decision to fork. Our research hypothesis poses that, despite portraying itself as democratic, the PoH DAO lacked some essential and robust democratic mechanisms, processes, rules, and bodies. In fact, we argue that these democratic components could have propelled enriching, constructive, and more stable governance dynamics by facilitating the community's embracement of agreed-upon fundamental shared values, ensuring a higher degree of accountability towards poor or repudiable instances of political participation, and lessening the weight of divisive versus unifying community voices.

V. TIMELINE OF EVENTS

It is important to stress that, while our team has taken all the necessary steps to ensure we understand the overall situation in great detail, it is unfeasible to cover the *entire* series of events that have influenced the governance of the PoH project and the PoH DAO crisis. Instead, we have selected the events most widely and publicly discussed by large parts of the community, as manifested in the governance platforms and the conducted interviews. Below, we list them in chronological order. The timeline begins with early attempts to conceptualize the idea of PoH and ends with the community’s binding decision to fork, as well as some other important events taking place right after the fork.

August 2014

- Ethereum founder Vitalik Buterin shared a [blog post](#) on “Hard problems in Cryptocurrencies” highlighting, among others, the pressing need of developing anti-spam and anti-Sybil attack algorithms. The blog post would become a source of inspiration for the development of the Proof of Humanity Sybil-resistant registry of humans.

July 2019

- Democracy Earth Foundation (DEF)’s founder Santiago Siri [participates](#) in Episode 2 of #HumansofEthereum on “reimagining democracy using tools like quantitative voting” and questions on “how to distinguish humans (Etherean or otherwise) from replicants.”

August 2019

- An [initial Proof of Humanity paper](#) is drafted and the development of the Proof of Humanity project kickstarts.

September 2019

- Kleros launches a “Proof of Humanity” Telegram group to discuss the creation of a Sybil-resistant registry for humans. Kleros’ CEO Federico Ast invites DEF’s founder Santiago Siri to join. The Telegram group starts to grow to attract new members curious about the underlying idea.

October 2019

- Kleros holds a [meetup](#) at the Ethereum Developer Conference (Devcon) 5 about “Proof of Humanity.”

February 2020

- Kleros' CEO Federico Ast gives a [presentation](#) at Ethereum London, mentioning the Proof of Humanity Telegram group and Proof of Humanity as one of Kleros' use cases.

March 2020

- Kleros' CTO Clément Lesaege gives a [talk](#) at Ethereum Community Conference (EthCC) on "Proof Of Humanity, a Sybil-resistant list of humans."

November 2020

- Kleros' "Proof of Humanity" project is mentioned in one of the first articles on Proof of Personhood Protocols to date, titled "[Who Watches the Watchmen: A Review of Subjective Approaches for Sybil-Resistance in Proof of Personhood Protocols](#)," co-authored by DEF's founder Santiago Siri.
- Kleros hosts a virtual [conference](#) on "Humans on The Blockchain," with Santiago Siri as an invited guest.

January 2021

- Kleros' team member Damjan Malbašić shares a [post](#) on Kleros' blog page on how to create unique human digital identities in order to enable social blockchains and democracy online. The post mentions Santiago Siri and DEF's work in the realm of voting technologies.

February 2021

- Kleros' CEO Federico Ast [posts](#) on Twitter that the final product review meeting prior to the launch of Proof of Humanity had been held.

March 2021

- Kleros and DEF members **announce the launch of the Proof of Humanity smart contract, the [Proof of Humanity web dApp](#), and the UBI smart contract** in a series of posts on the Kleros' blog ([here](#), [here](#), and [here](#)) and a series of Tweets from Kleros' CTO Clément Lesaege ([here](#)) and DEF's Founder Santiago Siri ([here](#)).
- The POH governance [forum](#) is launched. [Initial conversations](#) in the General Chat channel on the forum include topics such as the amount of ETH to be deposited during a profile submission and ways to **mitigate a possible price increase of ETH** as "one of the aspirations is to extend UBI universally."

April 2021

- Kleros' Operations Director Stuart James publicly announces **the launch of the Proof of Humanity DAO** in a [post](#) on the Kleros' blog. The DAO is introduced as the first “truly democratic 1-person-1-vote governance system with open participation,” “a truly egalitarian voting mechanism backed by on-chain transparency ensures no member can vote more than once.” The article argues that the DAO is expected to develop its governance processes through “HIP - Humanity Improvement Proposals” posted on the PoH DAO forum and voted on a [PoH Snapshot page](#). Approved proposals on on-chain governance are supposed to be “automatically translated into code enforcement by the Kleros governor.” Initially, the PoH DAO members are expected to deliberate and decide on: 1) The Proof of Humanity dApp (parameters such as submission deposits, and amount of vouches required for registration), 2) The UBI contract (UBI issuance rate), and 3) An allocation of 4,000,000 UBI.
- PoH founder and Kleros CTO Clément Lesaege submits two proposals ([HIP 2](#) and [HIP 3](#)) to recruit “**workers for the DAO**,” including a project manager and a software developer. Candidates ought to submit a proposal, be interviewed by volunteers of the DAO, complete one recruiting exercise drafted by volunteers of the DAO, receive feedback from the volunteers—first privately and then publicly—, and then have their proposals submitted to a vote. The proposals are adopted on Snapshot ([HIP 2](#) and [HIP 3](#)) and become binding.
- PoH DAO member Jrag submits a proposal ([HIP 5](#)) to “**adopt a proper PoH DAO Governance process to ensure HIP quality**.” The proposal presents a 3-phase process, in which each phase has a different duration and passing requirements for a proposal to be adopted and become binding. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO member Mads submits a proposal ([HIP 7](#)) to “**institute a management board**,” a governance body later on referred to as the “Mission Board,” in charge of “managing the DAO resources (employees, websites, money) in accordance with democratic decisions.” The proposal declares that the “informal managers” by that time, “4 Kleros members, and 2 Democracy.Earth members” become formalized as the management board for a “period of 1 year after adoption.” Elections for the positions are set to be held thereafter. PoH Founder and Kleros CTO Clément Lesaege, Kleros CEO Federico Ast, DEF Founder, and UBI Founder Santiago Siri, and DEF Co-Founder Herb Stephens become Mission Board members. The proposal is [adopted](#) on Snapshot and becomes binding.

May 2021

- PoH DAO member Ludoviko submits a proposal ([HIP 8](#)) to “**accept 352 as the minimum dimension in video submissions.**” The proposal emerges from a debate within the community after several profiles are challenged for inadvertently submitting the video proof with 352 pixels, instead of the required 360 pixels, after exporting the videos from WhatsApp. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO member Mads submits a proposal ([HIP 10](#)) to “**create a decision locking mechanism**” to make some decisions harder to reverse later and signal to the world they would remain untouched for some time. The proposal was [adopted](#) on Snapshot and became binding.

June 2021

- PoH DAO member Ludoviko submits a proposal ([HIP 16](#)) to “**make admin roles of communication platforms eligible.**” The community managed channels include, but are not limited to, the PoH governance forum website, Twitter, Facebook, Reddit, Discord, WhatsApp, Instagram, and Telegram. The proposal states that elections are to be held separately for each platform, using Tokenlog. The proposal explains the role of the administrator and the requisites for obtaining “community-managed” badges in communication channels. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH founder and Mission Board member Clément Lesaege submits a proposal ([HIP 18](#)) on “**communication roles**” to institute a mechanism to determine the position of administrator in the social communication tools that are recognized as official by the DAO, either social media (Twitter, Reddit) or communication channels (Telegram groups). [HIP 18](#) conflicts with some aspects of [HIP 16](#). The proposal passes to Phase 2 but it is not [adopted](#) on Snapshot.
- PoH DAO member Paula Berman submits a proposal ([HIP 19](#)) to establish a “**code of conduct for PoH Telegram channels.**” The code of conduct establishes threats, sexually explicit material, discriminatory jokes and language, personal insults, doxxing, among others, as reasons for being banned from the channel. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO member Mads submits a proposal ([HIP 21](#)) to “**amend the rules of the ‘Mission Board’**” which clarifies the scope of power and “adds two tie-breaking mechanisms – a 5th board member and a tie-breaking vote.” The Mission Board is intended to have a “broad power to interpret the rules of the DAO, including filling in details not specified in a proposal.” The proposal is [adopted](#) on Snapshot and becomes binding. [Justin Kalland](#) gets elected as the 5th Mission Board member one month later.

July 2021

- PoH DAO members, including Santiago Siri, Clément Lesaege, RustyTheGamer, and fraserdscott submit a proposal to “**create a UBI DAO**” ([HIP 22](#)). The governance of the PoH smart contract and the UBI smart contract is now carried out in different Snapshot pages and governed following different voting principles. For PoH DAO, 1–person–1–vote. For UBI DAO, votes are based on the voting power of Thank \$UBI token holders following a quadratic voting scheme. The proposal is [adopted](#) on Snapshot and becomes binding.
- Kleros’ Integration Lead Jimmy Ragosa gives a [talk](#) at EthCC 4 dedicated to the issues of DAO Governance and the “Proof of Humanity DAO” experiment.

October 2021

- PoH Founder and Mission Board Member Clément Lesaege submits a proposal on “**Snapshot administration**” ([HIP 23](#)) to have Mission Board members put proposals to the vote on the Snapshot page while providing protection in case the Mission Board or Snapshot were to censor proposals. The proposal is not adopted.

December 2021

- PoH Founder and Mission Board Member Clément Lesaege submits a proposal ([HIP 31](#)) on “**Clarification on UBI DAO rules**” which states that the rules of the UBI DAO rules are the same as the POH DAO rules at the time of [HIP 22](#) unless stated otherwise in a UBI DAO proposal. This includes rules on the voting period, deposits on the Kleros Governor application, challenge period, delegations, and the process to pass proposals. The proposal was [adopted](#) on Snapshot and became binding.
- PoH DAO member Ludoviko submits a proposal ([HIP 33](#)) to kickstart a conversation about the importance of protecting the PoH registry against “**profile farming**,” whereby a person recruits humans to register to PoH, collect their accrued UBI, and potentially increase the person’s power over the DAO, and “**puppeteering**” or the action of one person taking control over another person’s account to perform attacks on the platform.

January 2022

- PoH DAO members Juanu and Mizu submit a proposal ([HIP 27](#)) to “**allow 1-character mistakes in displayed addresses**” due to the number of profiles getting challenges based on these grounds. The proposal gets [adopted](#) on Snapshot and becomes binding.
- PoH DAO member Ludoviko submits a proposal ([HIP XX](#)) to **remove Clément Lesaege from the Mission Board** due to “anti-dao and anti-democratic maneuvers,” including obstructing normal

governance procedures, attempting to remove a valid member from a Telegram group, disregarding serious security threats to the registering process, systematically obstaculizing any process that helps humans register, making Proof of Humanity a dispute-creating machine, stalling the hiring process of DAO workers, and concentration and dominance of a privileged few in the Kleros Humanity Court, among other cited reasons. The proposal is not adopted.

- PoH Founder and Mission Board Member Clément Lesaege submits a proposal ([HIP 34](#)) on “**Snapshot proposers**” specified as Mission Board members and their delegates, people employed by the DAO, and people elected through a proposal, who would have the ability to make and remove proposals on Snapshot to avoid spamming while refraining from giving the Mission Board power to censor views. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO members and Kleros staff members NingFid, Senryu, and Fnanni submit a proposal ([HIP 36](#)) on the “**registration validity extension and change of renewal period**” which addresses “the costs to register” in order “to maintain the momentum in registration and remain as the largest on-chain identity system.” The proposal is [adopted](#) on Snapshot and becomes binding.
- The TIME publishes an [article](#) on “How Blockchain Could Solve the Problem of Digital Identity.” The article initially features **Santiago Siri as a founder of PoH**. The TIME edited the article a few days later, stating Santiago Siri was not the founder of PoH.
- PoH DAO members Ludoviko, Juanumusic, and 0xjean.eth submit a proposal ([HIP 38](#)) to “**elect the first batch of Snapshot proposers.**” The proposal is [adopted](#) on Snapshot and becomes binding.

February 2022

- PoH DAO member Mads submits a proposal ([HIP 39](#)) on **election rules for officials to the Mission Board**, since most posts were to expire in June 2022. The proposal is [adopted](#) on Snapshot and becomes binding.

March 2022

- PoH DAO member nicoblinkis.eth submits a proposal ([HIP 41](#)) to **allow verbal confirmation for registering users** and thus make the registering process more accessible for humans, including people with movement or vision impairment. The proposal is [adopted](#) on Snapshot and becomes binding.
- UBI founder and PoH DAO Mission Board member Santiago Siri appears as an invited guest on the Bitcoin Founder Kevin Owocki’s podcast [episode](#). He is introduced and referred to as a founder of PoH.

May 2022

- From 21-28 May 2022, the PoH DAO conducts the first **Mission Board elections** through a binding [ballot](#) on Snapshot. Four members are elected: UBI founder Santiago Siri, Kleros' member Jean, PoH founder Clément Lesaege, and Juanu, a software developer and community member who had previously been involved with the development of the UBI token. Mission Board member Justin Kallard retains his position, which has not expired yet.
- PoH DAO members Lety and nicobilinkis.eth submit a proposal ([HIP 42](#)) to allow first-time registrants to the PoH registry, or those who renew it, to **say in Spanish the phrase required in the video submission**. The proposal is [adopted](#) on Snapshot and becomes binding.

June 2022

- PoH DAO member Ludoviko reintroduces the proposal ([HIP 48](#)) to **remove Clément Lesaege from the Mission Board** due to “anti-dao and anti-democratic maneuvers.” The proposal passes to Phase 2, but it is not [adopted](#).
- Approximately twenty PoH DAO members submit a proposal ([HIP 49](#)) to “**change the arbitrator**” that solves the disputes over challenged profiles at PoH to for a new one that better serves the interests of the PoH community. The proposal [passes](#) to Phase 2, but it is not adopted.
- PoH DAO member Ludoviko [reintroduces](#) the discussion on the importance of protecting the registry against “**puppets**” and “**farming attacks**” from [HIP 33](#).
- [Avraham Eisenberg](#) published on his Substack channel “DeepFiValue” titled “[The Kleros experiment has failed](#)”. The post criticizes Kleros as a blockchain arbitration system due to the alleged activities of “whales” or big holders of Kleros’ native token, PNK. He alleges that Kleros CTO Clément Lesaege was able to influence the decision of the so-called “**Unslashed case**” by having a disproportionately larger stake.
- PoH DAO members [ask](#) in the PoH Telegram group channels for Kleros’ to explain the situation behind the “**Unslashed case**”.
- PoH founder and Mission Board member Clément Lesaege replies to a Twitter thread published by FatManTerra on the “**Unslashed case**” on [how the jurors voted on the case](#) stating that Kleros is only a [judicial system](#) which applies the rules of the client and not a legislative system and also explains the [PNK distribution among jurors](#).

- Members get banned from the **Telegram Group @proofofhumanityenespanol** after allegations of toxicity, “trolling,” and inappropriate language. The banned members see this action as censorship of dissident voices. Clément Lesaege sends a [message](#) stating that the Telegram group belonged to the Kleros Cooperative from a legal and technical standpoint because Kleros CEO Federico Ast had [created](#) it as part of his job for the Cooperative. Santiago Siri [replies](#) that the Telegram Group belongs to the DAO, and his message is [supported](#) by other community members.
- PoH founder and Mission Board member Clément Lesaege and UBI founder and Mission Board member Santiago Siri agree on [4 points of consensus](#) to “be able to continue working together.”

July 2022

- After the events in the Telegram Group @proofofhumanityenespanol, PoH DAO members Ludoviko and Valen submit a proposal ([HIP 50](#)) to “clarify which Telegram group and Twitter accounts belong to PoH DAO.” The proposal suggests adopting two specific Telegram groups and two new Twitter accounts, one in Spanish and one in English for each platform, as the “official comms channels” belonging to the PoH DAO. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO and Kleros member NingFid submits a [post](#) on the **acceptable management of family member’s PoH accounts**, including those belonging to small children, adults, and old persons or parents. The community deliberates on whether to tighten or loosen the PoH registration policy.
- PoH DAO and Kleros member Greenlucid submits a proposal ([HIP 55](#)) against “puppeteers” to ensure **explicit Sybil resistance**. The member proposes to allow challenging puppeteered submissions as a duplicate. The proposal remains in Phase 1.
- PoH DAO member Ludoviko submits a proposal ([HIP 58](#)) on the **removal of “vouchallengers”** defined as the ones vouching for registered humans to challenge them right after. The proposal passes to Phase 3.
- Clément Lesaege publishes an on the “**recent drama**” in Proof of Humanity in [Spanish](#) and [English](#). The article mentions financial issues of Democracy Earth, Santiago Siri pretending to be a founder of Proof Of Humanity, the situation with the Telegram groups, and HIP 49 “aka protocol self-destruction.”
- On [Twitter](#), Santiago Siri argues that Clément Lesaege’s article is part of a “**smear campaign**.”
- PoH DAO and Mission Board member **Juanu** submits a [post](#) where he **resigns from his position**.
- PoH DAO member Ludoviko [opens](#) an election thread for the **Mission Board member vacancy**.

August 2022

- PoH DAO member Ludoviko submits proposal ([HIP 60](#)) for the “**removal of Justin Kalland of the Mission Board**” due to his inactivity. The proposal [passes](#) to Phase 2, but it is not adopted.
- Elections for the vacant Mission Board seat were held on Snapshot between candidates Valen and Green. Valen is [elected](#) as a member of the Mission Board.

September 2022

- Santiago Siri submits a [post](#) on the alleged “**farming of delegations**” or profiles created which were “automatically delegating voting power to Clément Lesaege.”
- Clément Lesaege submits a proposal ([HIP 62](#)) on “**explicitly forbidding the farming of profiles.**” The proposal is understood as being addressed by previously-submitted [HIP 55](#).
- Clément Lesaege starts a [conversation](#) in the PoH forum about **whether the PoH DAO should fork**, alongside a poll in which the majority of votes favor forking.
- Santiago Siri introduces a proposal on Snapshot to suspend delegations until “proper legislation” is adopted on the “**farming of delegations.**” The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO community submit a proposal ([HIP 63](#)) on **quadratic Delegations on the PoH DAO Snapshot** to help prevent clientelism and vote gerrymandering. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO member Arkayana submits a proposal ([HIP 68](#)) that provides an **implementation strategy and the requirements for a second arbitrator**. The proposal remains in Phase 1.

October 2022

- Santiago Siri gives a [presentation](#) at the **Ethereum-organized event DevCon** in Bogotá, Colombia, on UBI. The moderator introduces Santiago Siri as a “founder of Democracy.Earth Foundation (...) that has built UBI on Ethereum and launched the Proof of Humanity Protocol.” Clément Lesaege, in attendance, shouts “a liar,” claiming that he cannot be presented as a person who created Proof of Humanity.

- Avraham Eisenberg’s successful [attack](#) on [Mango Markets](#) sparks additional [discussions](#) on the previous “Unslashed Case” around the legitimacy of “whale” participation in Kleros courts that has prevented similar attacks.
- PoH DAO members submit a proposal ([HIP 71](#)) on the “election of moderators” of “official groups” and “community channels” of the DAO. HIP 71 establishes the responsibility, election, and implementation of election results of moderators and derogates [HIP 16](#). It is one of the only proposals on PoH DAO governance issues to be submitted solely in Spanish. The proposal is [adopted](#) on Snapshot and becomes binding.
- PoH DAO members reintroduce proposal ([HIP 72](#)) requesting the **removal of PoH founder Clément as Mission Board Member**, adding that the events taking place during Santiago Siri’s presentation at *DevCon* showed that Clément was not aligned with the democratization and decentralization and respect for the privacy of individuals being registered in the DAO. The proposal is [adopted](#) on Snapshot with 50.43% of the votes and becomes binding.
- Approximately 105 PoH DAO members finalize an [experiment](#) through [pol.is](#) in an attempt to **decide on the priorities for the project**. The results showed that 94% agreed that they should aim for Proof Of Humanity to be used by a lot of protocols, 91% considered that they needed a dispute resolution mechanism that is secure and reliable, and 95% coincided with the statement that responsibilities and expectations of a role should be clear and comprehensive before an individual is elected or hired.

November 2022

- Clément Lesaege, PoH founder, Santiago Siri, UBI founder, and Andrei, PoH DAO member, submit a proposal ([HIP 74](#)) on a “Peaceful Fork”. The proposal lists the resources that will remain in PoH v1 and not be modified. The proposal also lists the list of resources to be deployed in PoH v2, which will be forked into “PoH-Origin (Kleros Coop)” and “Open-PoH (UBI).” The proposal is [adopted](#) on Snapshot with 78.65% of the votes and becomes binding.
- PoH DAO members submit a proposal ([HIP 75](#)) to **remove the Mission Board member role**. The proposal is [adopted](#) on Snapshot and becomes binding.

VI. THE FINDINGS

Below, we provide the findings of our research on the evolution of the PoH DAO’s governance dynamics, including the reasons behind the crisis and the ultimate decision of the DAO to fork. The findings are based on our theoretical framework about what constituting and governing a “Democratic DAO” means, the timeline of events drafted based on information available on governance channels and platforms, and the insights provided during the 14 semi-structured interviews conducted with PoH DAO members.

1. Constituting a Democracy

Almost unequivocally, most modern democracies came to be through revolts or revolutions of dissatisfied parts of the population, which, as a first step, adopted a new constitution or supreme law. This section will explore how the PoH DAO was constituted and which aspects of its early governance design may have contributed to the subsequent crisis.

1.a. Incomplete Early Governance Design

Key takeaway: While the PoH DAO launched as an innovative liquid democracy governance experiment with an ambitious mandate and some off-chain governance tools and mechanisms, it lacked some crucial governance structures. The incomplete governance design in the early PoH DAO allowed for fragmentation within the community to consolidate without providing clear tools and processes for reconciliation.

The first factor contributing to the PoH DAO governance crisis is connected to the incomplete governance structures present during the early stages, which allowed for fragmentation, mistrust, and conflict within the community to consolidate without providing clear tools for reconciliation. In March 2021, the PoH DAO was [announced](#) as a liquid democracy experiment with an ambitious mandate and some off-chain governance tools and mechanisms to propose, vote, and enforce decisions on-chain. For proponents of [governance minimization](#) in blockchain systems, the governance structures with which the PoH DAO launched may seem beyond sufficient. Moreover, according to some interviewees, the intention behind the initial setup was to encourage the community’s self-determination to democratically build legitimated governance structures over time. Indeed, during 2021 and 2022, community members passed more than 70 governance proposals. Nevertheless, in line with the opinion of many other interviewees, we consider that the initial governance structures were incomplete. Notably, [two important](#) components were missing: an agreement on the shared purpose animating the PoH DAO and mechanisms for conflict mitigation and resolution. These could have served as good deterrents against the growing misalignment and mistrust within the PoH DAO community.

- a. **The PoH DAO launched as an innovative liquid democracy governance experiment with an ambitious mandate and some off-chain governance tools and mechanisms.** The PoH DAO was

the first one in the Ethereum ecosystem to give one vote to each participant, which they could cast directly or delegate to other community members. The community also had an ambitious mandate: members could decide over i) the policies of the PoH registry dApp, ii) the rules and parameters of the UBI contract, and iii) the allocation of 4,000,000 UBI for expenses related to the operations of the DAO. Governance decisions were set to happen almost entirely *off-chain*, meaning decisions would be discussed and voted on non-blockchain digital platforms and then encoded into the protocol or smart contract by developers. Contrarily, in *on-chain governance*, votes are directly recorded as transactions on the blockchain system. The PoH DAO launched with a [governance forum page](#) for *anyone* (not only members of the PoH registry dApp) to submit and discuss Humanity Improvement Proposals (HIPs), a [Snapshot page](#) *only* for humans registered in the PoH registry dApp to vote off-chain on HIPs, and a [Kleros governor](#) contract to translate Snapshot votes into on-chain decisions in the respective smart-contracts.

b. This initial setup may seem sufficient for some proponents of **governance minimization**, and it has indeed encouraged the community members to elaborate new governance rules over time. Yet, two critical elements were missing that could have prevented or contained the community’s future irreconcilable conflict.

i. In [Governance as Conflict](#), Eric Alston argues that constituting a DAO requires establishing mechanisms to accommodate conflict. DAOs are examples of collective action. Collective action, even more so among a heterogeneous group, is costly. To ensure the resilience of a DAO, its organizational design ought to include an agreement on shared values and the animated purpose behind it, as well as mechanisms to mitigate and resolve future conflicts. If we made an analogy to Western liberal democracies, what the PoH DAO lacked upon the launch was the drafting of a “supreme law” or “constitution.” We will discuss this issue more in-depth in Finding 4. a.

ii. Firstly, the PoH DAO launched without an explicit agreement about its animating purpose and shared values, which later created two points of tension.

a) On the one hand, tension about how the PoH DAO should govern the PoH registry, an issue that we will further discuss in **Finding 2. b**. One point of disagreement was whether the PoH registry should prioritize “Sybil resistance” or “inclusion.” Put differently, whether the focus should be on integrating the PoH registry with other applications or on its first use case, UBI. In March 2021, a [blog post](#) on the Kleros website made clear that there were many potential use cases for the PoH registry, including better funding mechanisms, universal identifiers, self-sovereign identities, and certification and reputation systems, to name a few. Yet, the PoH registry was also [promoted](#) as the bedrock for income redistribution through UBI. As time passed by, community members began to express that pursuing both goals (Sybil resistance and inclusion) at the same time was unfeasible. With an explicit agreement missing, the community became progressively polarized. A [post](#) on the PoH DAO governance forum from July 2022 revealed the following: “Parts of the community [are]

focusing on UBI, others on Dapp integrations, and others on the security of the registry. I believe that a statement of principles from the [Mission Board] would set a precedent of reconciliation and direction for the future. What do we stand for? What do we want as a protocol? What does success look like?”

b) On the other hand, tension about how the PoH DAO should govern itself, an aspect we touch upon in **Finding 3.a**. Another point of disagreement that arose was on the nature and the speed of decentralization from the founding team towards the community. While community members were supposed to be able to vote on governance issues, the PoH DAO mandate was not clear enough about the scope of these powers. There were no mentions as to whether certain technical features of the PoH registry dApp could be debated or changed (*e.g.*, changing the PoH registry arbitrator) or whether certain tasks were reserved for the founding team or skilled professionals instead of any community member (*e.g.*, who has the right to ownership of PoH DAO communication channels, including Telegram groups, or who has the right and responsibility for enforcing *on-chain* the decisions made by the community).

ii. Secondly, the PoH DAO launched without mechanisms to mitigate and address future conflicts. As Eric Alston points out, even when a group agrees on a shared animating purpose, disagreement and disputes are inevitable, so institutionalized mechanisms to address these conflicts are crucial. For example, a community may *disagree* on their preferences and interests in pursuing the shared and animated purpose. Additionally, a community may enter into *disputes* following the transgression of established norms by certain members, including decision-makers. Indeed, even when an organization opts for a democratic governance system, collective action always entails a certain degree of delegation of decision-making power. In either case, mechanisms to mitigate and address conflict can be both *ex-ante* (minimizing the possibility of conflict emerging) or *ex-post* (resolving disagreement whenever it occurs). Assuming the PoH DAO had designated a series of governance bodies or officials, the community could have prevented future disputes by establishing a series of "constitutional constraints" or checks on its decision-makers, as well as precise mechanisms to address allegations of abuse of power. More about this point will be discussed in **Finding 5.a**. Additionally, to mitigate disagreement, the PoH DAO could have been launched with a succinct yet clear roadmap on *how* it would achieve its purpose, be it prioritizing integrations with other applications or focusing on strengthening its first use case, the distribution of UBI tokens.

c. **The incomplete governance design during the launch not only failed to prevent interest misalignments or mistrust among community members. It also paved the way for the emergence of implicit power structures due to a relative “Tyranny of Structurelessness.”**

i. The idea of the “tyranny of structurelessness” was introduced in a speech and subsequent [essay](#) by Jo Freeman in 1970, who identified some of the pitfalls experienced by the feminist movement aiming to resist the overstructuredness and institutional hierarchies of traditional society. The idea describes the

phenomenon that structures inevitably emerge when people come together as a group to raise awareness for a specific cause or work on a common task. A risk of relying on implicit structures is that they can both build and mask problematic power dynamics that are difficult to change and hold accountable. According to Freeman, structurelessness can work only if the group of people it applies is relatively small and homogenous, strongly aligned on a specific task at hand, communicates frequently, and has a low level of specialized skills requirements. This concept applies to Web3 and DAOs. In particular, DAOs attempt to decentralize governance by empowering community ownership and participation. When governance structures are not explicitly designed ex-ante, implicit structures inevitably emerge, which may erode DAOs decentralizing spirit by empowering certain groups more than others, including founding teams or token holders.

ii. Initially, the PoH DAO did not exhibit the features Freeman mentioned for structurelessness to work. a) The community grew rapidly and became quite heterogeneous. An [average of 744 humans per month](#) became a part of the PoH registry. At the same time, community members created more than ten Telegram groups in different languages in 2021 to discuss matters related to the PoH registry, the UBI token, and the PoH DAO. b) Given the size and diversity of the community as a whole, frequent and constructive communication amongst everyone became difficult very fast. We will discuss this point more in detail in **Finding 3.b**. b) Considering that the PoH registry, at its core, was a sophisticated technical project, the implementation of many tasks and decisions passed by the PoH DAO relied on a small subgroup with highly specialized technical abilities.

iii. As a result, implicit power structures emerged in the PoH DAO, which were hard to undo later and encouraged a lot of skepticism among different parts of the community. Notably, the PoH DAO relative structurelessness consolidated the influence of the partnering organizations, Kleros and Democracy Earth Foundation, and their leaders, Clément Lesaege and Santiago Siri. For example, attempts to institute more explicit governance processes, such as recruiting “workers for the DAO” ([HIP 2](#) and [HIP 3](#)), were never implemented. Efforts to create governance bodies such as the Mission Board ([HIP 7](#)) assigned Kleros and DEF representatives as interim members. The opinions of these organizations and their leading figures turned into points of reference for the community at large and contributed to fragmentation. More about this point will be discussed in **Finding 1.b**.

1.b. Two Partnering Organizations with Colliding Expectations

Key takeaway: Despite initially collaborating for mutual benefit, the two organizations involved in the launch of PoH and UBI (Kleros and Democracy Earth Foundation) had vastly different, and at times colliding, expectations for the PoH project as a whole. These expectations partially derived from the diverse backgrounds and visions each organization was pursuing independently.

Another factor we identified that contributed to the PoH DAO governance crisis is linked to the two organizations involved in launching the PoH and UBI projects: [Kleros](#) and [Democracy Earth Foundation \(DEF\)](#). While initially perceiving the collaboration as mutually beneficial, Kleros' CTO Clément Lesaege, and DEF's founder Santiago Siri soon started disagreeing on how the PoH registry should evolve and how the PoH DAO should be governed. Their disagreement was partly grounded in the different nature of their organizations. The colliding expectations of Clément Lesaege and Santiago Siri, and other Kleros' members and DEF's affiliates soon became points of reference for other members of the PoH DAO and laid the ground for the future polarization of the community.

- a. **The PoH and UBI projects were launched by two collaborating organizations.** The PoH smart contract, the PoH web app were developed by Kleros, while the UBI smart contract was a product of a collective effort by DEF and Kleros of implementing an idea originally conceived by DEF. Both of the organizations were actively involved in the discussions around the PoH project as well as its promotion since its launch in March 2021. Kleros and DEF have been devoted to “blockchain technology for social good,” meaning its application beyond financial transactions along to areas such as dispute resolution, decision-making, and wealth redistribution. According to [articles](#) and [statements](#), Kleros, led by its CTO Clément Lesaege, developed the concept of a Sybil-resistant decentralized registry of humans based on webs of trust, reverse Turing tests, and decentralized dispute resolution. The idea was inspired by Ethereum co-founder Vitalik Buterin’s 2014 [post](#) about “hard problems in cryptocurrency.” DEF’s 2017 [white paper](#) presented the idea of the distribution of tokens in a Universal Basic Income (UBI) fashion to verified human identities validated through a decentralized “Proof of Identity” protocol. In 2019, DEF founder Santiago Siri joined the Proof of Humanity Telegram group created by Kleros, where enthusiasts exchanged ideas about digital identity and a Sybil-resistant identity registry. A [paper](#) published in 2022 co-authored by Santiago Siri mentioned Kleros’ Proof of Humanity concept among other examples of Sybil-resistant protocols. Ultimately, Kleros and DEF decided to collaborate and launch the Proof of Humanity registry with UBI as the registry’s first use case and incentive mechanism. According to the [PoH](#) and [UBI](#) GitHub repositories, the Kleros team, under the leadership of the CTO Clément Lesaege, was responsible for designing and engineering the PoH smart contract. The UBI smart contract was developed under the leadership of DEF founder Santiago Siri and with assistance from some Kleros’ team members. In March 2021, the [PoH web app](#) went live, with both Kleros and DEF being featured on the home page as “trusted parties” and [Clément](#) and [Santiago](#) posting about the project on their Twitter accounts. The PoH DAO was [announced](#) a month later, giving the community of registered users control of the policy of the PoH registry and the UBI token issuance. This arrangement continued until July 2021, when a separate UBI DAO was formed ([HIP 22](#)).

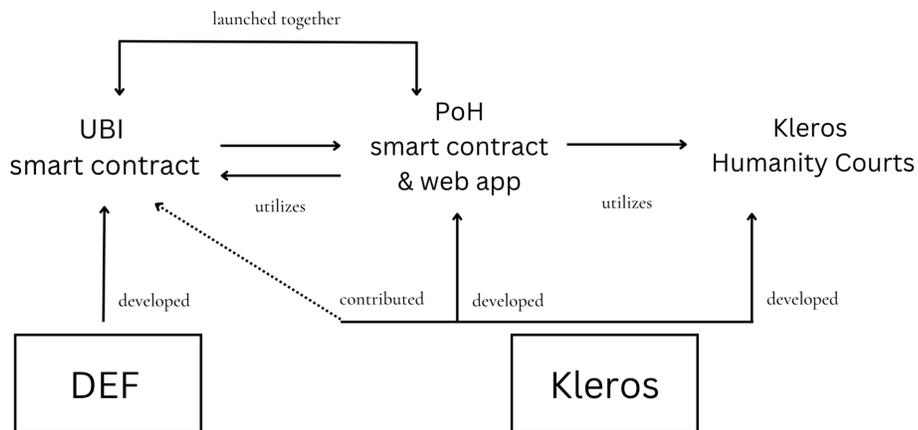


Figure 1: Institutional Ecosystem behind the launch of the PoH and UBI projects

- b. **The initial collaboration was based on a perceived mutual benefit.** According to our interviewees, launching the UBI smart contract as the PoH registry’s first use case was perceived as mutually beneficial for the project to gain traction and be adopted. The PoH registry used UBI as an economic incentive for users to join, and in return, UBI benefited from the Sybil-resistant mechanisms of the registry to ensure its fair distribution among “unique and singular” individuals. While the Kleros team appears to have provided most of the engineering and software development resources, DEF founder Santiago helped onboard many users to the PoH registry and increased its popularity.
- c. **Yet, the nature, values, and trajectories of the organizations were not entirely similar.** While Kleros and DEF have been dedicated to working on the realm of “blockchain for social good” and the application of blockchain technology beyond the realm of financial transactions, the organizations otherwise exhibit relatively different profiles.
- i. **Kleros** is a French Cooperative developing solutions for decentralized digital dispute arbitration. According to its [website](#), Kleros was founded in 2017 by French co-founder and CTO [Clément Lesaege](#) and Argentine co-founder and CEO [Federico Ast](#). Described as an open-source “justice protocol,” the project’s [vision](#) is to democratize access to justice in the digital world through a decentralized court system for the Internet Age. The project is managed by the Kleros Cooperative, incorporated in France—a commercial company with a social purpose where anyone interested can become a stakeholder by submitting an [application form](#). As of November 2022, the Kleros team consists of over 20 people worldwide with different skill sets. The team is responsible for developing the [Kleros dApp](#), used to arbitrate disputes in virtually every kind of smart contract, and is currently integrated with over a dozen other blockchain-based projects. Beyond the Kleros dApp, the broader Kleros ecosystem includes six other products: [Tokens](#), [Escrow](#), [Curate](#), [Linguo](#), [Dispute Resolver](#), and, of course, [Proof of Humanity](#).

ii. DEF is an NGO historically rooted in political activism in Argentina and powered by the work of many volunteers, championing the idea of decentralized digital democracy and wealth redistribution. The DEF’s [website](#) indicates that it was founded in 2015 by Argentine “code” leader [Santiago Siri](#), Italian “voice” leader [Pia Mancini](#), and American “finance” leader [Herb Stephens](#). According to its [white paper](#), DEF is an organization building free, open-source software for incorruptible blockchain-based decision-making for organizations of all kinds and sizes. The project’s [vision](#) is to give everyone, everywhere, the tools to contribute to a borderless democracy. [DEF](#) is a 501(c)3 not-for-profit foundation in California, United States, and has been backed by Silicon Valley [Y Combinator](#) and [Fast Forward](#) accelerators. Beyond its legal personhood, DEF [identified](#) itself as a “movement” that originated in Argentina when [DemocracyOS](#) founders Santiago Siri and Pia Mancini started the NET political party ([Partido de la Red](#)). By 2018, DEF comprised approximately 10 developers and “hacktivists” from different parts of the world and a vast network of volunteers, including DEF’s [Ambassadors](#). Since its inception, DEF has been involved in at least four digital decision-making [pilots](#) around the world, engaging different stakeholders such as civil society organizations, a blockchain startup, and elected members of parliament in the State of Colorado, United States. After the launch of the UBI smart contract, DEF developed a [dApp](#) for users to keep ETH or DAI in their Humanitarian Smart Contract Vaults and help burn UBI tokens using yield.

d. **As time passed by, the leaders and the members of the two organizations began disagreeing and their views were adopted by other PoH DAO members.** During our interviews, many PoH DAO members reflected on how Clément Lesaege and Santiago Siri became, either willingly or inadvertently, points of reference for two factions within the community. On the one hand, the Kleros side, whose main goal appears to have been rendering the PoH registry increasingly secure and Sybil resistant while encouraging integrations of the registry with other projects in the blockchain ecosystem. On the other hand, the DEF or UBI side, whose purpose seems to have been making the PoH registry inclusive and laying out a bedrock for the distribution of UBI. Both sides seemed to agree that the PoH DAO was a unique experiment on democratic decision-making in the space. Yet, members affiliated with DEF or UBI side considered this governance design and the need for the community to actively develop governance rules as a virtuous and positive aspect. In contrast, some members of the Kleros side saw this as a hindrance to other technical priorities, such as integrating the PoH registry with use cases other than UBI.

2. Citizenship and The Demos

Because modern liberal democracies operate on nation-states, one of their features is having a population. Additionally, within the population are the citizens or those with the rights and obligation to participate in governance. Citizens can also be referred to as the *demos*. In this section, we will explore the characteristics of the PoH DAO’s *demos* and how those may have furthered the community fractionalization as time passed by.

2.a. Heterogeneous Member Backgrounds and Interests

Key takeaway: PoH DAO members actively participating in deliberations came from varied backgrounds and had very different interests in the project, which consolidated into polarized governance views.

A significant factor playing a part in the PoH DAO governance crisis is linked to the community members' heterogeneous backgrounds and interests. This issue became more and more apparent as the community grew in size. While the rules for becoming a member of the PoH registry were clear, participation in the PoH DAO was not subject to strictly defined membership rules. Voting on Snapshot was only available for “unique and single humans” registered in the PoH registry. Yet, participation in other governance tools and platforms used for deliberation was *de facto* open to anyone interested in the project. This open participation policy attracted individuals from varied backgrounds and with very different interests in the project to discussions about the PoH DAO governance and the management of the PoH registry. Jointly with Kleros and DEF/UBI leaders voicing colliding expectations and the insufficient governance design upon the launch, the PoH DAO members' backgrounds and interests consolidated into polarized governance views.

- a. **Membership rules in the PoH DAO were not clear or strict, and deliberation was *de facto* open to anyone interested.** The rules for joining the PoH registry were clear, explicit, and publicized in the [web dApp](#) and multiple Kleros' [blog posts](#). One must be a ‘human’ and submit a series of information and biometric data in video and picture formats. However, the [rules for joining the PoH DAO](#) were less clearly and strictly defined. In theory, the PoH registry members are *also* PoH DAO members. They are the only ones allowed to vote on governance issues on the [PoH Snapshot page](#) under a 1-person-1-vote system. Yet, in practice, participation in deliberation on governance issues across different tools and platforms is open to anyone interested. For example, one need not be registered in the PoH registry to post on the [governance forum](#) or join the permissionless PoH DAO Telegram groups. In fact, our interviewees stressed that only a tiny percentage of humans registered in the PoH registry participate in the PoH DAO governance: “So many people registered. Sadly, they don't get involved.”
- b. **The PoH DAO active members come from different backgrounds and are interested in very different aspects of the project.**
 - i. There are two important differences in backgrounds among the PoH DAO active participants: a) Some have high-level technical skills, and others have no prior experience with the blockchain or Web3 industry. b) A critical mass of the most active PoH DAO members speak only Spanish and identify as Argentinean or from a neighboring Latin American country. The significance of this demographic group is reflected, for example, in the PoH DAO “official communications channels”

([HIP 50](#)), which are in English and Spanish, and the fact that humans can pronounce the phrase in the video proof in Spanish ([HIP 42](#)).

- ii. The motivations for participating in the PoH DAO vary and include at least the following ones:
 - a) Many care about discussing matters related to the UBI token exchange and token price since they say to have joined the PoH registry to accrue UBI and obtain a new source of income.
 - b) Others are interested in understanding and contributing either to the technical development of the Sybil-resistant decentralized registry of humans or to the UBI token economics or both.
 - c) Another group says to have joined inspired by the trajectory of Santiago Siri as the Argentinean political “Net Party” founder and his ideals about expanding digital democracy.
 - d) Some others joined because of working or interning for the PoH founding organization, Kleros.

- c. **Instead of a peaceful diverse coexistence, the members’ backgrounds and interests consolidated into polarized views whereby many important points of disagreement were addressed through a “convex” mindset.** More about this point will be addressed in **Finding 3.a**.

2.b. Division of the Minds and Perceptions about Factions

Key takeaway: Community members perceived the PoH DAO as a split between two opposing factions and expressed so publicly on platforms and forums. This public portrayal of the community as polarized ultimately became self-fulfilling, feeding perceptions, attitudes, and actions of mistrust toward the “other.”

Another factor that furthered the PoH DAO governance crisis concerned the perceptions about the existing warring factions. Firstly, community members perceived the DAO as a split between two opposing factions and expressed so publicly on platforms and forums. Publicly portraying a community as polarized often leads to self-fulfilling prophecies, given that these portrayals influence perceptions, attitudes, and actions which ultimately become polarized. Secondly, the majority of the PoH DAO community seems to have agreed on the existence of two factions. Yet, PoH DAO members disagreed on every other aspect of the perceived polarization. Finally, the more conciliatory and neutral voices (those who did not publicly identify with one or another faction) did not dominate the political debate since “being neutral” was perceived by the majority as untrustworthy.

- a. **Community members perceived the PoH DAO as a split between two opposing factions and expressed so publicly on platforms and forums, which led to further polarization and confrontational attitudes and actions.** This phenomenon is also referred to as “[self-Fulfilling misperceptions of public polarization](#),” whereby a community is over-portrayed in different media outlets as excessively polarized, which ultimately fosters attitudes and actions of dislike and mistrust towards the “other.” While there have been clear points of disagreement among community members,

the portrayal of an “us versus them” discourse on PoH DAO Telegram groups, Twitter threads, and the governance forum ultimately increased the antagonism.

b. Community members agreed on the existence of two competing factions but disagreed on all other aspects of the perceived polarization. The disagreement manifested itself regarding:

i. Their belonging to the factions: a) Most members actively involved in the governance of the PoH DAO identified as belonging to one or another faction, at least some point in time. b) Yet a relative minority of those actively involved in governance identified themselves as “neutral” or not aligning with either side.

ii. What the factions are: a) Some believed the factions to arise from the organizations and individuals involved in the launch of the PoH and UBI projects—“Kleros vs. UBI/Democracy Earth,” “Clement vs. Santiago Siri.” Within this group, some perceived one clear faction against a less organized opposing side—“Kleros vs. Anti-Kleros,” “Kleros vs. The Rest.” b) Others thought the factions represented different expectations about the PoH project—“Security and Sybil-Resistance vs. Inclusion and UBI,” “Sybil-resistance vs. Democratic Excellence,” “Economic and Technical Security vs. Community Ownership.” c) Another group argued the divide was due to the members’ backgrounds—“Technical People vs. Non-Technical People,” “English Speakers vs. Spanish Speakers,” “Latinamericans vs. Non-Latinamerican,” “Argentinians vs. Non-Argentinians,” “People who joined to get free money vs. People who joined for reasons other than the free money.”

iii. How the factions should be regarded: a) Some members (most neutral ones) thought each side had an equal moral standing and has something valid to say. b) Yet, many (most polarized ones) regarded one side as the morally or factually correct one—“More robotic side vs. More human,” “Stupid vs. Non-stupid,” “Malicious vs. Non-malicious,” “Pragmatists vs. Idealists,” “Focuses on facts vs. Focuses on feelings,” “Dictatorial and anti-democratic vs. Defending democratic views and ideals,” “Values creating a successful protocol vs. Values power.”

iv. How irreconcilable the factions’ views are: a) A minority (mostly neutrals) thought the factions’ views are not irreconcilable and that, in fact, all parts needed each other for the project to succeed. They believed the problem was not that each faction held irreconcilable views but that they attacked each other, engaged in continuous hostility, and failed to communicate their views properly and work together. b) A majority (mostly polarized ones) thought the faction views were irreconcilable either because they simply looked at things differently or because the other faction was malicious and held factually wrong views.

v. How the PoH DAO governance crisis should be addressed: a) Some members (mostly Kleros and Sybil-resistance leaning) thought that encouraging individuals from other geographic areas to join and participate in governance could break the two-faction perceived division. b) Others (mostly Kleros

and Sybil-resistance leaning) argued that the solution was to secure more integrations for the PoH registry other than UBI which would result in more varied expectations about the project. c) Another group (mostly UBI, inclusion, and anti-Kleros leaning) considered the solution to be reducing Kleros’ influence on the PoH DAO governance, including removing some members from the Mission Board or from the moderation and ownership of the most popular PoH DAO Telegram groups. d) Some proposed creating sub-DAOs within the main PoH DAO to focus on different governance tasks such as dealing with integrations versus dealing with community management. e) Finally, community members agreed that the desired path was forking the PoH DAO. A decision on choosing for a [“peaceful fork”](#) was adopted on 6 November 2022 with 372 votes (78.65%) against 101 votes (21.35%).

- c. **The more conciliatory and neutral voices did not dominate the political debate since “being neutral” was perceived as untrustworthy.** Not all members of the PoH DAO perceived themselves as part of one or another faction, nor did they think the factions’ views were irreconcilable. Yet, these views were not welcomed by the bulk of the active community and progressively lost strength: “When these problems between the two sides started to arise, I tried to take a middle ground, but the community took it as an attack on each side.”

3. Political Deliberation

All modern liberal democracies promote the citizens’ participation in governance, including political deliberation and voting. In order to achieve so, democracies not only install proper mechanisms but also foster a culture of civic engagement. In this section, we will observe how political deliberation took place within the PoH DAO, and which aspects of it may have created an irreconcilable divide instead of a diverse and peaceful coexistence.

3.a. Uncompromising or “[Convex](#)” Deliberation Mindset

Key takeaway: Many issues under debate about the PoH registry and the PoH DAO were framed as irreconcilable trade-offs and addressed with a confrontational and uncompromising mentality. This prevented the possibility of factions finding a common ground.

Another factor contributing to the PoH DAO governance crisis involves the framing of disagreements among community members. As the community grew in size, discussions about how the PoH registry should be managed and how the PoH DAO should be governed progressively began to be framed as *dilemmas* or zero-sum decisions to be made between two competing and mutually exclusive solutions. One of our interviewees pointed out that this framing stemmed from, in the words of Vitalik Buterin, a [“convex”](#) decision-making mentality: more confrontational and uncompromising. Below are some of the disagreements over which the PoH DAO community began to split into two relatively defined sides.

a. Several conversations revolved around the PoH registry. Community members presented views in support of “inclusion” and “fairness” versus “Sybil resistance” or “security” and “legality.” While there have been many, below are some of the most salient points of disagreement:

i. The PoH registry’s profile submission policy: The [PoH web app](#) includes a webpage specifying the steps and requirements to join the PoH registry. Some members of the PoH DAO community have advocated for making the rules more “inclusive” of other identities. To make the registry available for lower-income people, some discussed denominating the [security deposit](#) in a variable ETH value or a fixed value of a less volatile cryptocurrency. A proposal ([HIP 41](#)) was adopted for humans to submit the video giving a verbal confirmation of the Ethereum public address, making registration accessible for people with movement or visual impairment. Another proposal ([HIP 42](#)) was adopted for individuals to pronounce in Spanish the phrase required in the video submission. The community also discussed the concept of [family members’ accounts](#), whether these were desirable and how these should be managed. Those members fundamentally opposed to some or most of these initiatives argued that they could threaten the Sybil-resistance of the registry and make it less secure.

ii. The PoH registry’s challenge policy: The PoH web app also stipulated procedures to challenge profiles submitted to the PoH registry. Some PoH DAO members contended that the challenge policy was not fair nor compassionate enough towards submitters making “honest mistakes.” A proposal ([HIP 8](#)) was adopted accepting 352 pixels as the minimum dimension in video submissions. The motivation for the proposal was that many submitters were being challenged for inadvertently uploading videos smaller than the required 360 pixels, a consequence of exporting them from WhatsApp. Another example was an adopted proposal ([HIP 27](#)) to accept submissions with one character mistake in the Ethereum address displayed in the video proof. While these proposals received comparatively more support, some members antagonized them, arguing that they would make the registry less secure.

iii. Sybil attacks against the PoH registry: Sybil attacks refer to creating and utilizing “fake virtual personas” to undermine or exert more influence in a given system. These attacks are particularly severe when launched on peer-to-peer identity networks or dApps. The PoH registry has been said to suffer from [“profile farming”](#) and [“puppeteering,”](#) meaning malicious actors effectively controlling the account of one or more registered humans to, for example, accrue more UBI or gain more voting power. Most community members agreed that these Sybils were harmful and undesirable, but they disagreed on the best way to address them. For some expressed in favor of “security” and “Sybil resistance,” the solution was to edit the PoH registry profile submission rules and explicitly forbid Sybils ([HIP 55](#)) ([HIP 62](#)). For others expressed in favor of “inclusion” and “fairness,” these initiatives were seen as inadvertently penalizing non-malicious actors and potentially leading to a state of hyper-litigiousness.

iv. Dishonest behavior in the PoH registry: Dishonest behavior in the PoH registry is not necessarily a Sybil attack but a situation where a legitimate or “real” virtual persona behaves contrary to what is

expected from their role for their own benefit. Any registered human in the PoH registry can vouch for submitted profiles. Vouching is a benevolent act where one claims to know a submitter is a single and unique human. Yet, the PoH registry has been subject to “[vouchchallenges](#)” where one vouches for a profile not to help the submitter become registered but to challenge the profile right after. There is an economic incentive to challenge profiles, as challengers gain the submitters’ deposit if they win the challenge. Once again, community members agreed that vouchchallengers were undesirable. Yet, there were discrepancies over how to deal with such dishonest behavior. One point of [discussion](#) was whether vouchchallengers should be retroactively penalized or not. Some members self-identified with “inclusion” and “fairness” were in favor of it, while others self-identified with “security” and “legality” were not. One reason for not retroactively penalizing, members argued, was that vouchchallenging was not explicitly forbidden—not explicitly illegal—at that time.

v. The PoH registry’s use cases: The PoH [initial paper](#) and [blog posts](#) released by Kleros mention that the PoH registry has several potential applications. After launching together with the UBI token as its first application and economic incentive for users to join PoH, community members disagreed on the importance of working towards newer integrations. A [poll](#) conducted in October 2022 in which 105 members participated stated that integrating the PoH registry with other projects was a priority. Yet, based on our interviews, those in favor of “inclusion” and “fairness” tended to argue that UBI was, if not the only, the most critical application of the Sybil-resistant registry. These views also favored onboarding large numbers of humans to the PoH registry and thus increasing the utility of UBI tokens. Other members, usually in favor of “Sybil-resistance” and “security,” contended that the UBI token had no utility and was merely “free money” benefiting “early comers.” They held that the real value was promoting the integration of the PoH registry with different dApps for various use cases. According to them, the integrations were regrettably going way “slower than they thought.” These views saw relaxing the registering process policy and enlarging the size of the registry as a potential threat to its security and Sybil resistance.

b. Many other conversations involved the PoH DAO governance. Community members presented views in support of a more “bottom-up governance” and a “bigger state” versus a “top-down governance” and a “smaller state.” Usually, members aligning with “inclusion” and “fairness” preferred “bottom-up governance” and a “bigger state,” and vice-versa. Below are some of the most salient points of disagreement:

i. The “size of the state”: One point of disagreement was the number and kind of decisions that should be in the hands of the PoH DAO. The [post](#) announcing the PoH DAO launch had listed topics that the community could deliberate and vote on, including matters regarding the PoH dApp and the UBI contract, before the PoH DAO and the UBI DAO became different entities. In fact, DAO members have debated and voted on an extensive range of issues, from “the rule on how to make rules” or how HIPs should be adopted, to which should be the governance bodies and how they should work, how to manage the PoH registry, and the ultimate decision to fork. For some members in favor of a

“bigger state,” the strongest virtue of the PoH project as a whole is the extensive, open, and continuous democratic deliberation dynamic. For others in line with a “smaller state” vision, the preferred scenario included little to no governance at all. These members consider having a DAO—the “state” or “sovereign entity”—to decide on many aspects of the PoH project was a hindrance rather than a benefit, since the project could have worked “just fine with no governance at all.”

ii. The “governing bodies and officials”: While the PoH DAO was supposed to be in charge of deciding on issues about the project management, in reality, many decision-making positions were held by members of the founding organization, the Kleros cooperative. According to a [public comment](#) made by Clément Leseage, these included developers working on the smart contract and web applications, a manager working on integrations, moderators maintaining PoH Telegram channels, and Kleros’ co-founders helping other projects integrate with PoH. Two of the four members of the interim Mission Board were also the Kleros’ co-founders. Clément was also re-elected to the Mission Board in May 2022. Additionally, DEF members also had important power over the DAO decision-making process. It was alleged that UBI founder Santiago Siri was the largest holder of UBI tokens. Santiago Siri was also a member of the interim Mission Board and got re-elected in May 2022, just like Clément did. For community members in favor of a “bottom-up” approach to governance, the fact that members of the organizations behind the launch of PoH and UBI projects *de facto* occupied so many decision-making positions in the DAO—the governing officials and governing bodies—was illegitimate and anti-democratic and posed a severe conflict of interests. For others, usually in favor of a “top-down” approach and particularly aligned with Kleros, it was seen as positive since it implied a synergy of interests: members of the PoH founding organization want the project to succeed and thus will make decisions and manage it with that idea in mind.

iii. The state “agora”: Following [HIP 50](#), the officialization of the PoH platforms and tools for deliberation, such as Telegram groups was also subject to debate. The proposal showed disagreement on aspects about the ownership and nature of the “agora”, or the public space to deliberate about governance issues. On the one hand, members aligning with a “bottom-up” approach considered the ownership of deliberation tools and platforms by the founding organization, Kleros, as illegitimate. Members aligning with a “top-down” approach did not see it as problematic. On the other hand, members preferring a “bigger state” considered that the spaces where the PoH DAO members can gather to *officially* deliberate should be clearly defined to, for example, prevent future liabilities and accusations of commission of illegal activities. For others, usually in line with a “smaller state,” while the DAO may define rules of conduct, having official chat groups was seen as inherently coercive and against the principle of self-organization—DAO should have as many groups and chats as it wishes.

c. Finally, one particular debate revolved around an issue affecting both the PoH registry and the PoH DAO governance:

i. The PoH registry’s dispute resolution system: In June 2022, a proposal was submitted to “Change the Arbitrator” of the PoH registry ([HIP 49](#)). The PoH registry utilizes the [Kleros Humanity Court](#) to resolve disputes arising from challenges to submitted profiles that are pending registration. The reasons for challenging a profile include incorrect submission, being a duplicate, non-human (a bot), or a deceased person. Community members favoring “changing the arbitrator” align, for the most part, with views promoting “inclusion, fairness, a big state, and a bottom-up approach to governance.” Regardless of whether the proposal was technically feasible, this faction agreed on two points. Firstly, the design of Kleros’ dispute resolution system was far from perfect for two reasons: it abides by legal positivism—whereby disputes are resolved not based on moral principles but on what is explicitly established in positive norms or the smart contract rules—and it is money-driven, with economic incentives design leads to “hyper-litigation.” Secondly, they consider that utilizing Kleros as a dispute resolution service provider hinders the autonomy of the DAO and give Kleros’ jurors and Kleros Cooperative staff incentives and power to intervene in the PoH DAO governance to maintain the status quo. Community members against this vision are usually aligned with “security” and “Sybil resistance” visions and a “top-down approach” to governance. They consider the Kleros’ dispute resolution system to work as intended and to not exhibit any fundamental flaws. They also believe that Kleros jurors and Kleros Cooperative staff participating in the PoH DAO is positive, since the success of the DAO directly benefits them. They believe utilizing Kleros’ dispute resolution system does not lead to a “governance gridlock” but reinforces a principle of separation of powers—where the PoH DAO legislates, and Kleros adjudicates—and fair and impartial justice—since decisions were based on explicit rules instead of political factors.

3.b. Counter-Productive Deliberation Practices and Culture

Key takeaway: The deliberation practices and culture within the PoH DAO exhibited many problematic characteristics that impeded a constructive deliberation environment.

Another factor we analyzed was the deliberation practices and culture within the PoH DAO. Deliberation is a core component of any democratic decision-making process. In the case of blockchain-based DAOs, it involves the submission and public discussion of proposals on a wide array of issues—from the DAO’s mission and vision, the allocation of DAO-owned funds, the hiring of personnel, the election of governance roles and governance bodies, and the design of governance mechanisms. The organizational culture within a DAO refers to the shared values and beliefs that influence how members behave and relate to one another. In this respect, the PoH DAO exhibited many problematic characteristics that impeded a constructive deliberation environment.

- a. **The excessive fragmentation of the deliberation space led to confirmation bias and a lower participation engagement.** When the spaces for community deliberation break down, it is easier for them to turn into fragmented echo chambers. In other words, the lack of a single and clear

deliberation space facilitates the appearance of deliberation groups based not necessarily on shared discussion topics but on [confirmation bias](#). Additionally, excessive fragmentation of communication spaces may not increase but rather lower community engagement. Community members may become confused about which spaces they should be participating in and thus may refrain from participating. Public deliberation in the PoH DAO community seems to have occurred in very fragmented environments, including in many communication channels—forum website, Discord, Telegram, Reddit—and various groups within them—mainly on Telegram—. Participation in groups of some of these communication platforms, especially Telegram, appeared “open” to members with similar interests and opinions and progressively “restricted” to dissident voices through banning accounts. This environment seems to have furthered the already-existing polarization and hindered the participation of “newcomers” who may not understand which governance tool or platform they should engage with.

- b. The “implicit feudalism” in deliberation platforms was left rather unchecked.** To conduct deliberation, online communities such as DAOs necessarily rely on existing digital communications platforms whose design gives an outstanding amount of power to user-administrators and owners, a phenomenon usually referred to as “[implicit feudalism](#).” The nature of the spaces used by the online community for deliberation necessarily introduces new forms of hierarchies which themselves require democratic legitimation yet live entirely outside the blockchain-enabled DAO infrastructure. As such, defining and transparently enforcing rules on the ownership of the governance tools and platforms, the election of administrators and moderators, and the codes of conduct for deliberation are extremely important. From May 2021, PoH DAO members introduced several proposals to regulate and legitimize roles in communication channels, such as “moderator” and “admin,” and define a code of conduct for communication practice. These initiatives include [HIP 16](#), [HIP 18](#) (not adopted), [HIP 19](#), [HIP 50](#), and [HIP 71](#) (adopted in replacement of HIP-16). Despite these efforts, ownership and moderation of governance tools, groups, and platforms continued to be contentious issues. Firstly, the mentioned HIPs did not touch upon the issue of ownership of the communication channels, which led to discussions over legitimacy. This legal vacuum led to the crisis of June 2022, where the communication by members of the Kleros Cooperative that they “owned” the “original” PoH Telegram groups was perceived by a large part of the PoH DAO community as “illegitimate,” a conflict that culminated with the adoption of [HIP 50](#). Some PoH DAO members regarded the “official” Telegram groups created by [HIP 50](#) as “undesirable” or even “coercive.” Secondly, moderation had been associated with instances of abuse of power. Interviewees have manifested that the binding proposals on moderation and codes of conduct have not been fully or transparently enforced. Particularly, members of both factions have continuously accused each other of moderating and administering Telegram groups illegitimately, including silencing and removing members without warning or without a justified reason to limit “free speech” and “silence the opposition.” The lack of an impartial PoH DAO body to enforce or evaluate the enforcement of the deliberation moderation rules increased the recurrence of these accusations. This point will be discussed further in **Finding 5.a.**

- c. **Language barriers lead to miscommunication:** [Multilingualism](#), or a community integrated by native speakers of many languages, can be either a strength or a weakness, depending on how the community manages [language diversity](#). When a DAO does not adopt an explicit [language policy](#) nor adopts tools to integrate language minorities, multilingualism can hinder effective communication and lead to misunderstandings, confusion, and tension among community members. PoH DAO members speak various languages: a large proportion is Spanish native-speaker, while other languages spoken include Portuguese, Russian, and Chinese. However, the PoH DAO did not adopt clear rules on the language(s) used for deliberation and official communications across different platforms and did not officially devise mechanisms to integrate other language minorities, such as the hiring of translators and interpreters as DAO workers. Yet, communication and deliberation have *de facto* been conducted mainly in English and Spanish, which, in light of the lack of explicitly agreed-upon rules, seems to have increased the mistrust and misunderstanding among PoH DAO members, mostly Spanish vs. Non-Spanish speakers.
- d. **Pseudonymity turned into antisocial behavior.** [Anonymity and pseudonymity](#) in digital communications can lead to “prosocial” and “antisocial” behavior and thus facilitate or obstruct constructive deliberation. Because of their privacy-preserving quality, anonymity and pseudonymity can encourage participation in deliberation from individuals who fear or prefer not to disclose their identities. However, one can also use them to engage in aggressive or dishonest communications, be it spontaneously or in an organized manner. The PoH DAO governance tools and platforms, particularly Telegram, Discord, and the governance forum, allowed individuals to deliberate using various usernames, including pseudonymous ones. Many interviewees adhering to either faction have expressed having witnessed or suffered from systematic and widespread acts of misinformation, impersonation, trolling, doxing, personal threats, and harassment. Examples include the continuous use of discriminatory slurs and memes in Telegram groups—including groups dedicated to this purpose—the disclosure of personally identifiable information about community members in public fora, and the circulation of videos displaying fictional characters perpetrating acts of violence against particular community members. Given the pseudonymous nature of these practices and the lack of proper enforceability of codes of conduct and utilization of accountability mechanisms to address them, we cannot confirm whether these have been spontaneous or pre-arranged by specific factions or groups within them. However, these practices have evidently contributed to distrust and hostility within the community, thus furthering the governance crisis, while allowing perpetrators to remain behind the veil of their usernames. In contrast, we observed that moderated community calls might have smoothed the dangers of pseudonymity. Telegram groups, Twitter spaces, or any other platform that allows for calls where parties are forced to use their voices or see each other lead to more constructive deliberation, as communication becomes more personal and less hostile than in purely text-based engagements.

- e. **The community polarization fueled unreasonable deliberation.** Democratic deliberation need not rely on consensus—expressions of dissent and disagreement are signs of a healthy democratic environment. Yet, the ideal of democratic deliberation needs that individuals engage in “[reasonable discussions despite disagreements](#).” This includes disagreeing in a respectful and constructive manner, as opposed to offensive and destructive, based on solid and informed arguments instead of merely [personal and subjective beliefs](#), ultimately seeking to work towards a [final consensus](#). Communities permeated by partisan polarization usually succumb to “[deliberative failures](#)” where the parties either don’t engage in cross-party deliberation or resort to attacks and provocations to the opposing party. In the PoH DAO, the most contentious HIP, including [HIP 49](#) or [HIP 72](#), led to attacks and provocations from members of both opposing factions. Some PoH DAO members, including those belonging to factions and neutral ones, perceived deliberation as becoming increasingly unreasonable: “They have started attacking each other and just making proposals that would just reverse whatever the other party cares most about.” Even when proposals were made in good faith and up until the fork, community members remarked: “Everything that is done by one faction is interpreted in the worst possible way by the other faction (...). They have no more trust in each other and don’t want to cooperate. Every time someone wants to reconcile, someone else out of that faction might do something that’s considered an attack, and then all attempts break down.” Succumbing to extreme partisan polarization and unreasonable deliberation undermines the legitimacy of the governance process as a whole and diminishes the chances of overcoming a governance crisis.
- f. **“Neutral” members succumbed to political apathy.** [Political apathy](#) is the decision or attitude to disengage or not participate in a political system, usually a democratic one. There are many reasons for community members to develop political apathy, including “[fatigue](#)” or feeling bothered by the inconvenience of having to participate in governance decision-making too often, and “[alienation](#)” or lack of identification with the political system. In the PoH DAO, while participation is qualitatively and quantitatively way higher than in other DAOs, it remains low when compared to the number of people registered in the PoH registry. Observations made by interviewees self-perceived as neutral and discussions over the governance forum and Telegram show “fatigue” and “alienation” as two of the causes leading to non-participation in governance. When neutral members become politically apathetic, the possibilities of dismantling extreme partisan polarization become lower, and so might the resolution of a governance crisis.

4. The Law

Modern liberal democracies have a body of law that is binding upon actions happening within their territory or among their nationals. These bodies of law include *primary rules* (duty-imposing or rules that regulate conduct), and *secondary rules* (power-conferring or rules on how rules might be created, amended, and repealed). In this section, we will focus on the PoH DAO legislative framework and pieces of legislation, and analyze why these were not robust enough to prevent the community polarization and governance crisis.

4.a. Incomplete and Vague Legislative Framework and Laws

Key takeaway: While innovative, the legislative framework and legislation adopted by the PoH DAO were not robust enough to prevent or minimize polarization. Some crucial legal provisions were missing, and others contained vague excerpts which facilitated it being “weaponized” by both factions.

An additional factor that fueled the PoH DAO governance crisis is linked to the “legislative framework” and “legislation” of the DAO. Up to November 2022, the PoH DAO had adopted approximately 75 binding decisions. If the PoH DAO were a state, the majority of those HIPs, jointly with the PoH registry policies, the rulings of the Kleros Humanity Court, and the decisions of the Mission Board, constitute the DAO’s “corpus iuris” or body of law: a collection of enforceable rules that regulate behavior within the PoH DAO’s jurisdiction. The PoH DAO’s body of law comprised *primary rules* (e.g., [HIP 41](#)) and *secondary rules* (e.g., [HIP 5](#)). Yet, the legal framework and body of law were not robust enough to prevent or minimize progressive polarization. Some crucial legal provisions were missing, and others contained vague excerpts which facilitated it being “weaponized” by both factions.

- a. **The PoH DAO did not adopt some crucial legal provisions lacking since the launch.** We argued that the DAO suffered from the Tyranny of Structurelessness. However, as time passed by, the DAO still left unaddressed important legal vacuums. It is clear the DAO did not count with a codified constitution (a constitution stipulated in one single “document”), yet some of the DAO’s binding decisions may be said to have “constitutional” character. These decisions addressed, at times inadvertently, aspects of separation of powers ([HIP 2](#), [HIP 3](#), [HIP 7](#), [HIP 16](#), [HIP 21](#), [HIP 23](#)) and the rule-making process ([HIP 5](#)). However, the DAO failed to establish provisions on the following aspects, which could have been solid deterrents to the community’s progressive polarization:
 - i. Firstly, what are the shared values and ideals of the PoH DAO: Following the spirit of the preamble of a constitution, the PoH DAO should have come to an agreement on what principles it is inspired by. Is it inclusion? Is it innovation? What other values are important?
 - ii. Secondly, who are the “citizens” of the DAO: The PoH DAO should have been clear on who has the right and obligation to participate in governance. Is it only humans registered in the registry? Can non-registered enthusiasts also be considered “citizens”?
 - iii. Thirdly, the “fundamental rights and obligations” of the members of the PoH DAO: Aspects such as the right (and obligation) to vote, the right to freedom of speech, the right to information, the right to renounce “citizenship” (to be removed from the registry, along with all metadata), the right to privacy, were left untreated. Many of these rights which exist in most modern liberal democracies could have been reinterpreted and adapted to cultivate a healthy culture of political participation and prevent most of the disputes that arose among PoH DAO members and the “government officials.”

iv. Fourthly, important aspects on “separation of powers and check-and-balances”: The PoH DAO failed to stipulate clear restraints on political power exercised by *a few* through widely-known democratic principles. What are the bodies and officials that can undertake legislative, executive, and judicial functions? What are their responsibilities and how are these responsibilities supposed to be exercised? How do these powers control each other? What happens if officials fail to meet their responsibilities or if they commit an abuse of power?

v. Fifthly, establishing a process for “constitutional amendments”: this point refers to a process to amend “constitutional” rules, which may be more stringent than the one stipulated for ordinary rules under [HIP 5](#), which was not officially implemented in the PoH DAO. The closest to a process of constitutional amendments was [HIP 10](#) which stipulated that some provisions ought to remain untouched for a period of time. However, it appears that [HIP 10](#) was not implemented in practice. Without this process, no rule gains any permanence and the body of law becomes victim to the agenda of the quantitatively-larger faction at any particular time.

- b. **HIP 5 contained vague language, potentially used for “lawfare” strategies.** According to [HIP 5](#), for proposals posted on the PoH DAO governance forum to pass from “phase 1: ideation” to “phase 2: specification,” there is no formal requirement other than the discussion “garnering momentum from the community.” For legal scholars, this may be regarded as a [vague legal provision](#) as it has an indefinite application to multiple cases—When is “momentum” garnered, exactly? After an X amount of people comment on the thread? How many of people? Which types of comments? [Vagueness](#) has multiple implications in law-making, legal interpretation, and legal adjudication. Vagueness may, for example, be leveraged for the purposes of [lawfare](#), or the strategy of “using - or misusing - law as a substitute for traditional military means to achieve an operational objective.” In the context of the polarized PoH DAO community, a faction can either unorganically “create momentum” or unilaterally interpret the level of interest around a proposal as “good enough” to make it pass from phase 1 to phase 2. Likewise, to prevent a proposal from passing from phase 1 to phase 2, an opposing faction can forcefully dismantle any “momentum” or unilaterally interpret the level of interest in the opposite way. In either case, the provision enables proposals to be passed not based on the merits of their content or genuine interest and needs of the PoH DAO, but the intention of one or another faction to impose their views and obstaculized their opponents’.

5. The Government

Modern liberal democracies have a government or a collection of bodies and officials who make binding decisions. For the most part, modern liberal democracies are representative democracies where the government relies on the separation of powers and checks and balances between an executive, a legislative, and a judicial branch. In this section, we will explore the “government” of the PoH DAO and how it may have contributed to the governance crisis.

5.a. Informal and Partisan Government Bodies and Officials

Key takeaway: The governing bodies and officials of the PoH DAO carried out functions similar to a state’s three branches of power. Yet, their nature reflected the implicit power structures of the PoH DAO emerging after the project’s launch.

Another factor that furthered the PoH DAO crisis had to do with the governing bodies and governing officials. While the PoH DAO lacked some explicit legal provisions on the separation of powers, governing bodies inadvertently arose and exercised functions similar to a state’s three branches of power. However, the bodies and officials represented the implicit power structures that emerged due to the “Tyranny of Structurelessness.” On top of that, the PoH DAO lacked some important governing bodies and officials that could have reconciled some faction-leaning views. All these factors drove the community further apart.

- a. **Without clear rules on the separation of powers, governing bodies inadvertently arose and exercised roles similar to the ones of a state’s three branches of power.**
 - i. A democratic nation-state comprises three branches of power. The legislative power (which makes the laws), the executive power (which enforces the law), and the judicial power (which interprets the law and adjudicates or resolves disputes). The legislative and executive branches are referred to as “political powers” since they are expected to represent different views on the desired direction of a community. The judiciary, on the contrary, is a “fair and impartial power” whereby judges must be able to exercise their roles without the influence of the political bodies and without responding to their political views. Some “political positions” are usually elected or appointed among and serve a fixed term. At the same time, “non-political positions” or judges are appointed, not elected, and serve until their death, retirement, or conviction.
 - ii. With this description in mind, it is fair to say that the PoH DAO governing bodies and officers that arose partly resembled a state's branches of power. The PoH DAO membership acted similarly to the legislative power. When [announced](#), the PoH DAO members were said to have the power to deliberate and decide (legislate) on issues such as the PoH registry dApp. The PoH DAO Mission Board acted similarly to a judiciary interpreting the law. According to [HIP 21](#), it is not a management body, but it has broad power to interpret the rules of the DAO. The Kleros Humanity Court, while a service provider, has been given the power to adjudicate on cases limited to challenges to profiles submitted to the PoH registry. Developers and members of the Kleros Cooperative and a Kleros governor contract that translates Snapshot votes into on-chain decisions takes on a role similar to the executive power. Volunteers and elected or appointed community members also took on administrative tasks such as managing communication channels and submitting proposals from the governance forum to Snapshot.

- b. **Most bodies and officials represented the implicit power structures emerging from the Tyranny of Structurelessness.** We explained that the PoH and UBI projects were launched after a collaboration between Kleros and DEF. We also stressed that one of the consequences of launching the PoH DAO with incomplete governance processes was that implicit power structures would inevitably emerge and be hard to remove. As such, most individuals in decision-making positions were either leaders or members of the Kleros Cooperative and DEF, or PoH DAO members aligning with the voiced expectations of these organizations. Even more, most of the PoH DAO votes were delegated to Kleros CTO Clément Lesaege and DEF founder Santiago Siri. The interim Mission Board ([HIP 7](#)) consisted of four members, two of which belonged to Kleros and two to DEF. According to a comment on the [HIP 49](#) thread, members of the Kleros Cooperative, including the co-founders, eight developers, one integration manager, two moderators or community managers, were in charge of the executive and administrative tasks such as helping with smart-contract reviews, working on integrations, and moderating and managing PoH DAO Telegram channels. The Kleros governor, a self-executing smart contract, was also developed by the Kleros cooperative. Finally, the Kleros Humanity Court belongs to the Kleros dispute resolution system developed by the Kleros Cooperative.
- c. **The PoH lacked crucial governing bodies and officials to help reconcile extreme faction-leaning views.**
- i. Firstly, the PoH DAO did not hire its “DAO workers.” The DAO workers were supposed to serve a function similar to the state’s civil servants, meaning they would be hired based on professional merit and take on administrative tasks within the three branches of power. The PoH DAO had announced the recruitment of “workers of the DAO,” including a project manager and a developer, in April 2021 ([HIP 2](#), [HIP 3](#), [HIP 13](#)). Despite several candidates having applied for the position, the process was stalled, and the positions were never filled. Instead, as mentioned above, the functions were implicitly exercised by leaders and members of Kleros and DEF or community members in line with their views.
 - ii. Secondly, the PoH DAO lacked an impartial and fair adjudication body. While the Kleros Humanity Court was in charge of resolving disputes about profiles submitted to the PoH registry, the PoH DAO did not have a fair and impartial governing body to intervene in any other disputes. During our interviewees, the most cited disputes include the alleged arbitrary application of the code of conduct for PoH Telegram channels ([HIP 19](#)), the alleged arbitrary application of the rules to elect administrators of communication channels ([HIP 16](#)), and Snapshot proposers ([HIP 34](#)), the failure to fulfill responsibilities as an elected member to the Mission Board ([HIP 60](#)). These disputes could have benefited from an impartial and independent governing body with the power and responsibility to adjudicate.
 - iii. Thirdly, the PoH DAO lacked a governing body and appropriate procedure to ensure accountability in cases of abuse of power. Through 2021 and 2022, there were several allegations of

abuse of power by Mission Board Members, which led to Clément Lesaege’s destitution ([HIP 72](#)) and the ultimate elimination of the governing body ([HIP 75](#)). An impartial and dedicated governing body should have dealt with these grave allegations with the power to impeach elected officials, similar to what happens within states.

6. Governance System and Governance Sites or Surfaces

As opposed to ancient Greek direct democracies, the governance system of most Western nation-states is a representative democracy. Governance also occurs in sites or “[surfaces](#),” including physical polling places and governmental areas such as legislative assemblies. This section will investigate how the PoH DAO governance system and sites or surfaces were designed and their influence on community polarization and conflict.

6.a Inadequate Governance Sites or Surfaces

Key takeaway: The technological nature and design of the off-chain platforms used for governance, including deliberation and voting, made them relatively inaccessible or inadequate for their performed function. PoH DAO also refrained from “dogfooding” its blockchain solutions for deliberation and resolution of its internal disputes.

Another factor that furthered the PoH DAO crisis was the governance platforms. The PoH DAO heavily relied on off-chain governance, where governance decisions were not automatically transposed into the PoH smart contract. As such, the governance platforms used by the PoH DAO were not necessarily blockchain-based. Among the most popular ones is the [PoH governance forum](#) where members would submit and debate on proposals referred to as “HIPS”; more than a dozen Telegram groups, including “official” and “non-official ones,” thematic groups, and groups for certain language speakers, where the community communicates on an ongoing basis; and the [PoH Snapshot page](#) where proposals were voted on by DAO members registered in the PoH registry. Yet, these tools' technological nature and design may have also contributed to the community's polarization. Firstly, some of them were not entirely accessible to some members. Secondly, others were designed in ways detrimental to their purpose. Finally, the PoH DAO failed to “dogfood” its own tools by leveraging its own blockchain solutions.

- a. **Some governance platforms were not entirely accessible to some members.** During our interviews, PoH DAO members mentioned that some platforms used to deliberate and vote were difficult to navigate. “Snapshot has always been difficult for me. I could never get used to entering, reading, and following the discussion in the forum [either].” Some interviewees were concerned that most of the community was unaware that voting on Snapshot was gas fees-free. When digital platforms used for governance are relatively hard to utilize, it is mostly neutral members who lack hard incentives to participate in decision-making in an already highly polarized community who become discouraged the most from deliberating and voting.

b. **Some governance platforms were designed in ways that were detrimental to their intended purpose.** Both Telegram and Snapshot are designed in ways that may hinder their intended purpose.

i. Telegram, when used for deliberation, does not have a robust default design to conduct a mass-scale organized debate. The Telegram platform focuses on instant messaging, communication, group messaging, and internet calls. Its user interface is clean and simple. However, as the participants in a Telegram group chat grow in size, it is harder to moderate conversations among them. By default, a Telegram group is one chat room where all participants can pseudonymously send instant messages. As such, “avatars” or fake virtual personas can participate in these groups and send spam messages or contain offensive, violent content or misinformation. While one can install bots to remove users who behave inappropriately and create subgroups within Telegram groups (similarly to having channels), Telegram is less suitable than platforms such as Discord, Slack, or even the PoH governance forum webpage.

ii. Telegram, when used for binding polls, does not ensure a 1-person-1-vote. While the issue of polls held in PoH DAO Telegram groups and their results being considered binding is problematic in and of itself, another issue is that, unless the Telegram group was integrated with the PoH registry, there is no way to ensure each unique and single person can vote on the poll only once. Based on the democratic spirit of the PoH DAO, even if Telegram polls were used for sentiment-gathering, it is not the most appropriate tool for the task at hand. Strong faction-leaning individuals can create many avatars to stir public sentiment or affect poll results.

iii. Snapshot, used for voting, does not ensure voters’ anonymity. One of the features of voting on Snapshot is that it ties each Ethereum public address to the option they have chosen. While this is not directly “doxing” a person, in the context of the PoH DAO, one can match the Ethereum address to the appropriate profile listed in the PoH registry, which displays a profile picture and a bio description, among other biometric data. Ensuring voters’ anonymity is another crucial feature of a democratic environment the PoH Snapshot page does not provide. Again, neutral community members or members who don’t want to vote following “party lines” may refrain from doing fearing facing retaliation.

c. **The PoH DAO did not “dogfood” its own tools leveraging on its own blockchain solutions.** Most of the platforms used for the governance of the PoH DAO were off-chain or not blockchain-based. Yet, considering how innovative the project was, it could have benefited from using its own products.

i. The PoH DAO did not have communication channels exclusive to only registered profiles. This led to issues associated with the legitimacy of voted decisions, particularly in platforms open to anyone to join, such as Telegram groups, as described in the previous section. It also fostered a lack of trust

among the users, where participants could question the nature of each other’s intentions. Deliberation could have benefited from token-gated deliberation spaces linked to registered and verified identities. Token-gating deliberation restricts participation to blockchain token holders. Suppose the PoH DAO was to design a space for UBI token holders registered in the PoH registry instead of having merely acquired them in an exchange. In that case, governance deliberations could have ensured participants had “real stakes” and wished for the best possible outcome for the project, including the PoH DAO itself. This could have led to a less polarized environment or, at least, to one where polarization was genuinely organic.

ii. Disputes related to internal PoH DAO governance issues lacked decentralized resolution mechanisms. While one faction of the PoH DAO was clear enough about their discontent with the Kleros dispute resolution system, internal DAO disputes (including issues such as the application of moderation rules or alleged abuse of power) were resolved in an entirely off-chain and unstructured manner. These disputes were addressed by recommendation and interpretation of a highly political governance body, such as the Mission Board. Unfortunately, the founding organization, Kleros, with its expertise in decentralized dispute resolutions, did not consider proposing any solutions to give this process a higher sense of fairness and transparency. A solid dispute-resolution solution could have helped prevent community polarization.

6.b. Governance System Design Weaponizable by Factions

Key takeaway: In many instances, the PoH DAO governance system and voting mechanism designs fell prey to the Tyranny of the Majority and the monopolization of voting power by charismatic leaders of each perceived faction.

A final factor contributing to the PoH DAO governance crisis was its governance system and voting mechanism. The PoH DAO launched as the first DAO in the Ethereum ecosystem to implement a liquid democracy governance system based on a voting mechanism of 1-person-1-vote. In September 2022, delegations became quadratic instead of direct. Most proposals subject to ballot on the [PoH Snapshot page](#) were mostly tailored as single choice and adopted under a simple majority rule. The design of Snapshot meant that voting was an open and transparent process. In other words, the voters’ identities were not anonymous, as one could trace how the Ethereum addresses voted and pair them up with the Ethereum addresses of the profiles registered in the PoH registry. These elements combined did little to prevent the liquid democracy governance system from decaying into a Tyranny of the Majority and the monopolization of voting power by charismatic leaders of each of the perceived factions. As a result, the PoH DAO governance system and voting mechanism, at least up until September 2022, may have amplified the existing community polarization instead of helping breach it.

- a. Liquid democracy as a legitimate governance system faces two inherent dangers.** Broadly speaking, liquid democracy is a hybrid governance model combining aspects of representative and direct democracy. The members of a given organization can decide whether to vote directly on an issue, abstain from voting, or delegate their votes to a representative. Depending on its actual configurations, members can also withdraw their votes from the representatives they have delegated to. This governance system faces two dangers, partly inherited from its democratic predecessors. Firstly, the [Tyranny of the Majority](#): Classic and modern political thinkers, including James Madison, Alexis de Tocqueville, and John Stuart Mill, have warned that democracies may decline in a Tyranny of the Majority, or situations where a quantitatively larger group continues to “win” the decision-making instances, thus suppressing the voices of minorities. Secondly, the [monopolization of voting power in the hands of few](#): Since directly voting on issues costs time and expertise, liquid democracies may suffer from an “abundance of delegations” towards a few based on perceived qualities such as charisma or knowledge.
- b. These dangers are not inevitable.** The Tyranny of the majority can be mitigated with higher thresholds for adopting decisions such as [supermajority](#) requirements. In replacement of 1-person-1-vote, it can also resort to [quadratic voting](#), where members can allocate a number of votes according to the degree or intensity of their preference and thus win a ballot even if they are quantitatively a minority. The monopolization of voting power in the hands of a few can also be avoided. Instead of direct delegations, a DAO can utilize [quadratic delegations](#), which penalize delegating many votes to the same person. A DAO can also offer tools for members to easily inform themselves about a specific ballot, reducing the time and expertise they need to directly vote on issues.
- c. Yet, the design of the PoH DAO governance system and voting mechanisms may have actually amplified these dangers, with them, the community polarization.** Beyond implementing quadratic delegations in September 2022 ([HIP 63](#)), the PoH DAO did not take other measures to contain the Tyranny of the Majority nor the monopolization of voting power. On the one hand, many debates framed as dilemmas and approached with a “convex” mentality led to proposals being passed with a little more than 50% of the votes. Some members expressed: “The Argentinean community has way too many votes. It worries me a bit because, ideally, you would have at least 4 or 5 factions and not one single community that would be able to win every election.” On the other hand, interviewees pointed out that the Kleros CTO Clément Lesaege and DEF founder Santiago Siri monopolized most of the voting power by garnering the most significant amounts of delegated votes each. Even more, the fact that votes on the PoH Snapshot page were not anonymous by design may have amplified these dangers. Members wishing to vote differently than their faction may have refrained from doing so, fearing retaliations.

VII. CONCLUSION

Proof of Humanity remains a leading project in the blockchain-based digital identity space and a pioneer in advancing new forms of governance in the DAO ecosystem. In this report, we present our findings from 6 months of ethnographic research conducted via online participant observation, interviews, events, and institutional mapping exercises. Given the increasing tensions that unfolded within the project's community and the overall emphasis placed on the concept of "democratic governance" within the PoH project, our research was guided by the question: **What governance dynamics led to the Proof of Humanity DAO's crisis and decision to fork?**

As such, we structured our observations to refer to significant themes prevalent throughout democratic theory: (1) constituting a democracy, (2) citizenship and the demos, (3) political deliberation, (4) the law, (5) the government, and (6) governance system and governance sites or surfaces. Our main findings can be summarized as follows:

1. **Constituting a democracy:** PoH DAO was launched by two collaborating organizations that, upon closer inspection, had vastly different, and at times colliding, expectations for the PoH project. The minimal governance structures and lack of common agreement on the animating purpose of the project, as well as mechanisms to prevent and mitigate conflict, allowed Kleros; and DEF's points of view to become rallying points for the PoH DAO community at large and contributed to its polarization.
2. **Citizenship and the demos:** The members of PoH come from very diverse backgrounds, have many different interests and hopes for the project, and often strongly opposing opinions regarding the governance and future of PoH. Members of the PoH community converged in perceiving a factionalization of the community, although they didn't seem to agree on what the factions were and many other related aspects. The perception itself of the existence of factions and the public manifestation of these perceptions, nonetheless, seems to have further created and reinforced divisions within the community.
3. **Political deliberation:** Many issues debated about the PoH registry and the PoH DAO were framed as dilemmas and addressed with a confrontational and uncompromising mentality, which made it difficult to find common ground between different community members and factions. An, at times, unconstructive and problematic deliberation culture further increased the difficulty to compromise observed throughout the community. The deliberation culture also fell prey to many unconstructive practices, including the excessive fragmentation of deliberation spaces, the lack of trust among members due to the reliance on anonymity or pseudonymity when interacting in some deliberation platforms, an unchecked "implicit feudalism" of administrators and owners of communication groups, language barriers, and miscommunication, and political apathy.
4. **The law:** The PoH DAOs legislative framework and legislation adopted were not robust enough to prevent polarization, and over time particularly vague formulations came to be weaponized by both factions. Mainly, the DAO failed to pass legislation on four fundamental issues: a) defining membership in the DAO, b) defining the fundamental rights and obligations of DAO members, c)

clarifying the separation of powers between various governing bodies, and d) establishing a process of constitutional amendments.

5. **The government:** The governing bodies and officials of the PoH DAO carried out functions similar to a state's three branches of power. Yet, their nature reflected the implicit power structures of the PoH DAO emerging after the project's launch.
6. **Governance system and governance sites or surfaces:** The technological nature and design of the off-chain platforms used for governance, including for deliberation and voting, made them relatively inaccessible or inadequate for their performed function. Furthermore, the liquid democracy governance system and the voting mechanism were not robust enough to prevent a tyranny of the majority or the monopolization of voting power in the hands of charismatic leaders.

Overall, our findings point to the fact that many core features of traditional democratic governance were lacking within the PoH DAO, preventing the community from reconciling the underlying differences that persisted since the project's inception. In the future, the BlockchainGov team would like to extend our invitation to discuss our findings and their implications for the constitution of the new PoH forks to all community members. We want to offer our support in constituting and designing appropriate governance mechanisms for both sides of the upcoming PoH v2.