

Keynote I



European
DAO Workshop



European DAO
Workshop (DAWO24)

*What is a
good DAO?*

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What is a good DAO? (and how can we know?)

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Excellence for Automated Decision-Making & Society

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DAOs can assist groups to coordinate internally and with each other.

As a result, the domain we call civil society/community/the third sector, can develop the capabilities that go beyond what firms can do today.

- an automated bureaucracy – the DAO component
- a system for an organisation to organise its knowledge and to collectively agree on the actions it hopes to achieve with that knowledge
- a contributions system
- a system for mutual support across entities that share a common interest/concern.

- 1) Locate DAOs further along an evolutionary timeline of knowledge technologies in general
- 2) In this context, consider how we can know whether a DAO has remained on course.

Evolution of knowledge technologies

	INDIVIDUAL	ORGANISATION
Private (to oneself)	Private thoughts	Limited organisations - mafia, closed communities
↓	Language Writing Print/publishing	Open access organisations (even with SAS, data etc) - conforming to state/public info requirements; ESG/CSR (annual reports)
Shareable with others	Social media	Artificial organisational intelligence? DAOs?

What is an organisation?

*organizations consist of specific groups of individuals pursuing a mix of common and individual goals through partially coordinated behavior. Organizations coordinate their members' actions, so an organization's actions are **more than the sum of the actions of the individuals**. Because they pursue a common purpose in an organization and because organizations are typically composed of individuals who deal with each other repeatedly, members of most organizations develop shared beliefs about the behavior of other members and about the norms or rules of their organization. As a result, **most organizations have their own internal institutional structure: the rules, norms, and shared beliefs that influence the way people behave within the organization** - North, Wallis and Weingast (2009), *Violence and Social Orders*, p15-16*

A regen entity

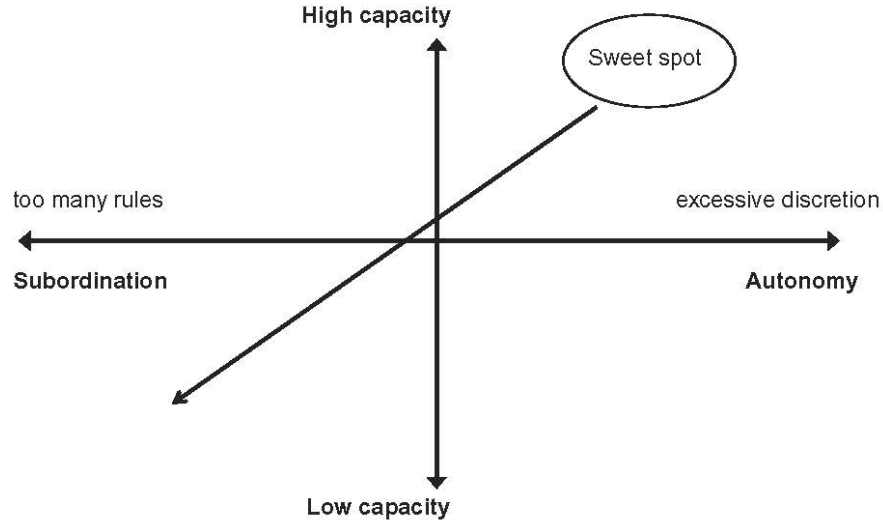
The institutional forms of the future must reflect a more whole world, populated by more subjects than human beings, leading to the emergence of novel eco-social assemblages which redefine concepts like rights, ownership, identity, privacy, responsibility, and politics beyond solely the human realm – [Austin Wade Smith \(2024\) for Regen Network and the Earth Law Centre](#)

See also [Ellie Rennie \(2024\), *Flume: A Sulfur Punk Story*](#)

*DAOs are **limited-programmability robots** where the limited programmability power is widely dispersed among users who can only adjust the program in accordance with hard-coded meta-programming rules – Gabriel Shapiro for Delphi Digital*

DAO = automated bureaucracy

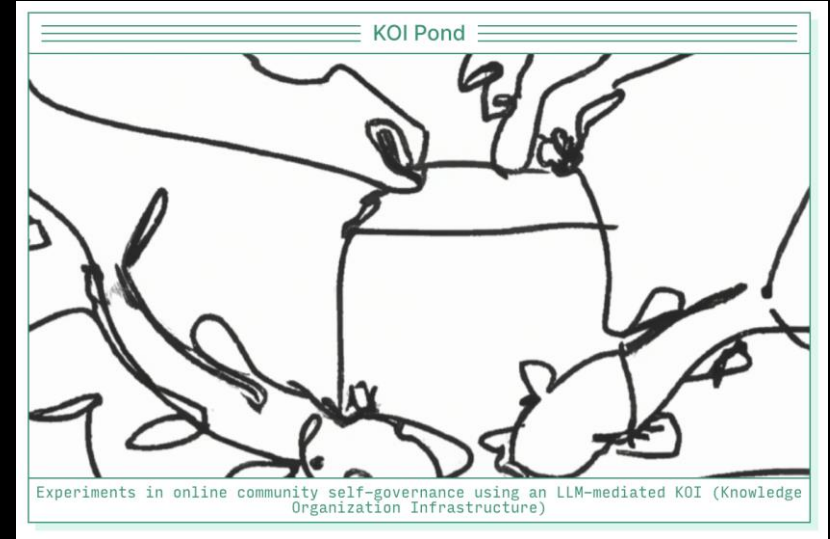
FIGURE 3
Autonomy and Capacity



The quality of government from Fukuyama, F. (2013), *What is Governance?* See [Ellie Rennie \(2021\), A DAO is a Bureaucrat](#)

Knowledge Organisation Infrastructure (KOI)

Our KOI Pond combines the technologies of a knowledge management system (KMS) and reference IDs (RID), resulting in a graph database to support relationships between knowledge objects, users and groups within Metagov. The KOI can be accessed by a large language model (LLM). Metagov's KOI is based on the KOI architecture initially developed by BlockScience. The intention for Metagov's KOI is for it to be guided by Metagov's community and over time embody its emergent priorities and self-governance patterns. The aim is for these priorities to surface themselves through intentionally devised practices for incorporating knowledge into our KOI.



metagov.org/projects/koi-pond

Contribution system

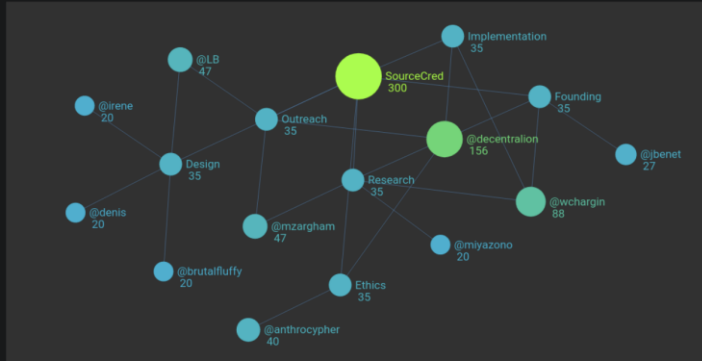
- A contribution system is an approach to addressing how an ensemble of people can cooperate under a rule system to achieve a common joint task that benefits from the participation of many, and who each seek to benefit from the joint production.
- We see this as a general class of problems with a broad class of mechanisms as solutions (not just 'work for a DAO').
- Differs from prevailing industrial economy model of production centered on reciprocal exchange agreements. Also different to commons-based peer production: people still have freedom to contribute what they think is valuable (optimizing use of local knowledge), but there is a pathway to reward. Value is manifested by how contributions are built upon by others.

See [Rennie & Potts 2024, Contribution Systems: A New Theory of Value](#)

A pure contribution good we therefore define as a good whose benefits are non-rival over contributors but that cannot be accessed by non-contributors – Kealey & Ricketts (2014), Modelling science as a contribution good

The Contribution Graph

The Contribution Graph is a data structure that tracks all of the contributions to a project. It's a [Graph](#), or a network of nodes and edges. In a Contribution Graph, every node represents either a contribution, a participant. Edges then represent connections between these objects. For example, suppose that this doc went through 10 different drafts before being published. Each draft would be represented by a node, and each draft would have an edge pointing to its author, and an edge pointing to the previous draft.

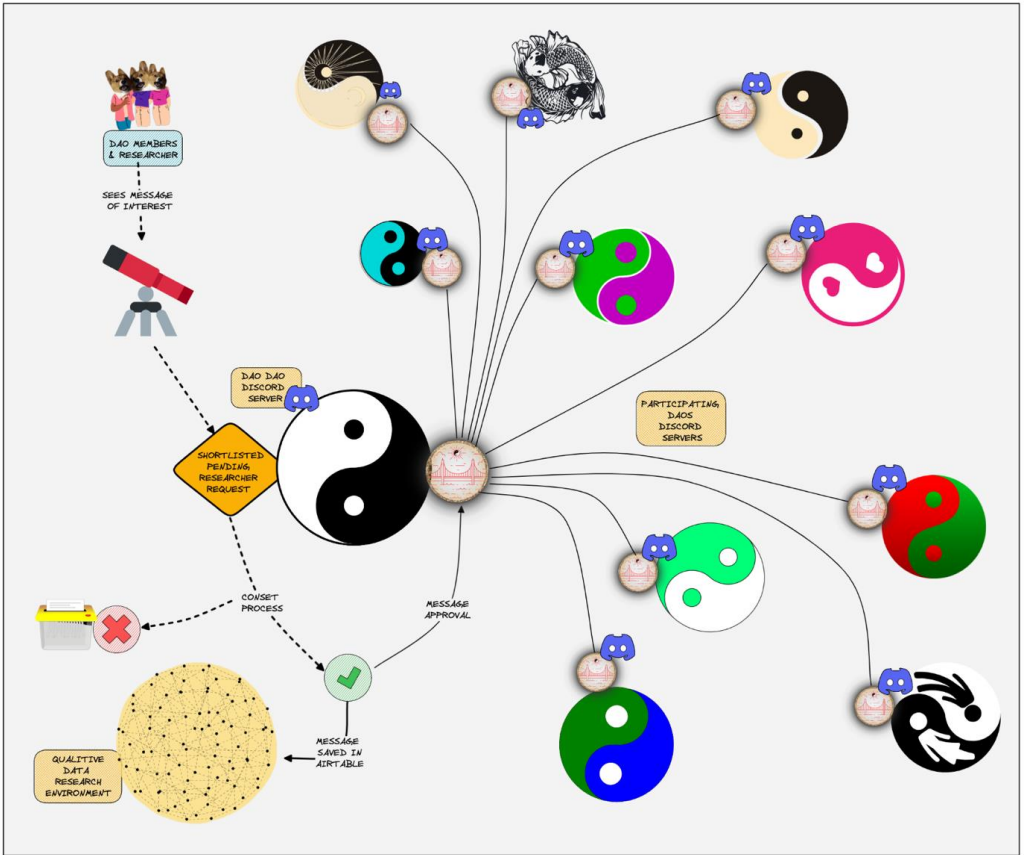


A stylized Contribution Graph. @-nodes represent participants.

[See Rennie \(2023\) The CredSperiment: An Ethnography of a Contributions System](#)

Source: <https://sourcecred.io/docs/beta/cred/>

Connections between DAOs



- “The critical difference to the regulatory notion of eco-compensation is that claiming green space for the human-built environment does not give something back to the ecosystem of equal value [...] A genuine reciprocal exchange must be enacted in the same ecosystem, matching with ritual obligations of mutual gifts flow” – Hermann-Pillath 2024

Evaluating the Ent/DAO

- Does the DAO's software bureaucrat minimise the administrative burden on the contributors?
- Is knowledge/data used in the way the group intends it to be used?
- Does it encourage **high-worth contributors**?
- Do **contributor rewards outweigh opportunistic speculation**?
- What else keeps people here (creativity, care, play etc) and is this also rewarded?
- Is routine and ritualistic work such as infrastructure maintenance rewarded?
- Are there effective membership boundaries in place that minimise extractive behaviour?
- Do the onboarding/offboarding processes, including through use of LLMs, assist in managing these membership boundaries?
- Can leadership be easily shared/rotated?
- Can the DAO create networks with other DAOs over shared concerns?