3. *Agency, materiality and politics:* The concept of DAOs is also speaking to contemporary questions of the agency of things. Political theorists such as Jane Bennett encourage us to consider 'a world populated by animate things rather than passive objects', and made up of webs of complex and relational forces (2010: i), where a variety of objects and assemblages shape the world alongside the conventionally imagined conscious human agent. We want to question how DAOs might fit into this relational more-than-human ontology of people, things, data and ecologies, and use them as a lens to further advance our understanding of the world as shaped by animate and lively things.

Overall, this workshop offered an opportunity both to collect the diverse range of current and emerging work from the design and research community in this field while offering a space for peer debate and critique surrounding the practices and developments of distributed ledgers, blockchain technology and smart contracts.

This sounds like a good idea. For educational purposes – should we be considering doing workshops such as these?

Tangible mapping of a distributed system

To explore this emerging field of distributed systems, its opportunities and challenges with a diverse range of researchers from varied backgrounds, we devised a set of tangible materials to collaboratively represent and discuss the entangled relationships between people, organizations, code and things. This material practice is building on an expanding field of research in design and HCI of participatory design (Björgvinsson et al. 2012), material engagement (Malafouris 2013) and data physicalization (Jansen et al. 2015; Hogan et al. 2017). In participatory activities, making has long played a key role in engaging lay audiences through hands-on, accessible and embodied interactions with abstract concepts or critical thinking (Ratto 2011). Moreover drawing on craft, design and making practices HCI has increasingly accepted the shared, performed and enacted nature of making and embraced its role for new ways of thinking through materials to embody data, complex systems or invisible technological concepts (Aguirre and Paulsen 2017). For example, in the context of blockchain technology Lego has been explored as a metaphor to represent the concept of storing transactions in blocks (Maxwell et al. 2015). This hands-on approach offers opportunities to physically visualize different understandings and perceptions of increasingly complex and abstract technological systems. In particular, tangible materials provide an accessible space for collaborative mapping and shared understanding of systems and their relationships. For example, tangible explorations for collaborative mapping of and designs include areas of healthcare services (Rygh 2018), perceptions of energy (Bowden et al. 2015), visitor engagement (Nissen et al. 2014) and experiences of social networks (Fass 2016).

check ref – c. systems as in: with emergent properties

Unfortunately hands-on, accessible + embodied activities are kind of difficult over the inter-webs

With the aim of this workshop to collaboratively and critically debate the design of such distributed autonomous systems, we used this method for tangibly mapping system structures as participatory activity and explorative design exercise to develop concepts for applied uses of distributed systems. In addition, a secondary aim of the workshop was to explore questions around the value of material qualities in the shared mapping and design processes – How important are the material choices and qualities in the mapping of diverse relationships? What is the value of material engagement for the shared mapping and collaborative design of distributed autonomous systems?