# Mesh Cooperativism:

## Toward Mycorrhizal (Infra)structure for the Cooperative Movement

### Ethan Winn,
**Owner, Senior Strategist, CoLab Cooperative**

### Colin Clark
**Associate Director, Inclusive Design Research Centre**
**Adjunct Professor, OCAD University**

# Summary

- A work in progress to consider ecological frameworks for the design of complex socio-technical systems within the cooperative movement

- Informed by a series of interviews with members of the cooperative community, with a particular emphasis on experience bringing multiple cooperatives together to mutually support each other (e.g. SEWA Federation, Startin'Blox Cooperative, Obran, and you?)

- We're interested in growing a community of cooperatives/technologists/researchers to support the development of cooperative technologies

# Thinking Through Platforms

- The primary conceptualization of cooperative technology so far has centred on **the platform**.

- Capitalist platforms provide a dismally clear illustration of the need for worker-owned and directed alternatives

- Draws on collective ownership, democratic control, and participatory systems design

- But what are the implications of the platform as a design and infrastructuring concept?

- How do capitalist logics inhere in the platform's implications of scale, standardization, and consolidation?

# Platform Challenges

- Deeply ambiguous in terms of definition, technology, process
- Risk of homogeneity/conformance - "platforms are sources of lock-in" - software abstractions are often incompatible with diversity of ways of working
- Costly and complex to build, especially without capitalization mechanisms and design exclusions typical of conventional platform development
- Carry with them assumptions about what kind of **scale** is desireable (drawn from the platforms we know today)

# Decentralization's Complications

- Decentralization strategies attempt to avoid the constraints inherent in platform creation through technological approaches

- Decentralization projects can be vulnerable to the challenges of designing software architectures or interoperability standards a priori

- Like platforms, decentralization is an "incomplete ideology" - "rhetoric of decentralization thus … steers attention from where concentrations of power are operating"(Schneider 2019)
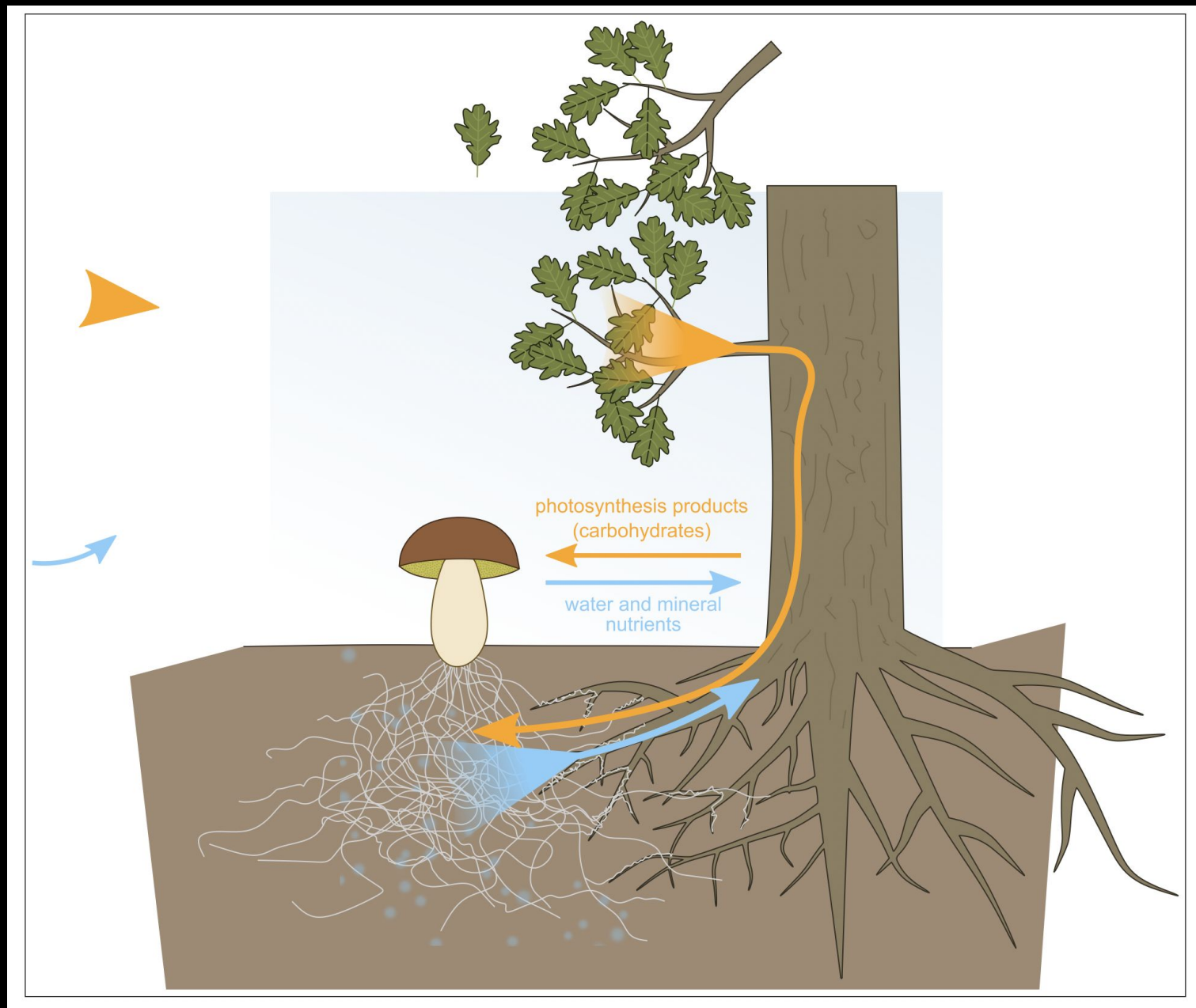
# Platforms imply…

• Centralized administrative structures, roles, and hierarchies
• Consensus on policies about data gathering, storage, and sharing
• Singular data storage infrastructure potentially containing data aggregated from diverse parties
• A single designed infrastructure (features, user interface, ontologies)
• Management, maintenance, growth, and sustainability responsibilities invested in one organization or body

None of these, in themselves, are undesirable (though they may appear to be, through a decentralized lens) **But where does diversity and difference fit?**

# Of Meshes and Mushrooms

- We propose *mesh cooperativism,* inspired by the highly distributed nodal interconnections of mycelial networks and autonomous symbiotics of mycorrhizal systems (Noë and Kiers 2018)

- An attempt to attend to both centralized and decentralized, local and global, technology concerns—to consider socio-technical *ecologies* rather than simply standalone platforms or decentralized nodes alone

- Encourage attending to alternate design domains: Discovery and visibility within distributed cooperative networks, Heterogeneous interoperability, value attribution methods, rapid information transfer.

- *Meshing*, creating economies "full of enduring negotiations" (Light and Miskelly 2019)

photosynthesis products (carbohydrates)

water and mineral nutrients

Nefronus (2007). "Mutualistic mycorrhiza." *Wikimedia Foundation.* https://commons.wikimedia.org/wiki/File:Mutualistic_mycorrhiza_en.svg.

# Next steps

We are interested in building a coalition that shares technical expertise, design practices, and funding to work on components of a cooperative mesh at the practical level.

- Are there mutual opportunities to share existing technical systems, now?
- Are there new design/development projects that could provide a useful starting point for participating together in a mesh?

# Efcharisto!

Ethan Winn,

CoLab Cooperative

colab.coop

ethan@colab.coop


Colin Clark

OCAD University

colinclark.org

cclark@ocadu.ca