# Sprouting technology otherwise, hospicing negative commons

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*Limits 2025*

# My research

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# Sprouting technology otherwise, hospicing negative commons - Starting point

- Current dominant paradigm in ICT in unsustainable
- Few tech otherwise perspectives
- Connecting them to the present
  - Tackling continuity and rupture together
- Main objective: contribute to the discussion on redirecting computing toward sustainability-oriented futures with a framework that draws from different disciplines at this intersection.

# Sprouting technology otherwise, hospicing negative commons - The Paper

- Creating a conversation between different fields of work:
  - Transition studies (Two Loop Model from Berkana Institute)
  - Negative commons (Monnin, 2023)
  - Commons beyond capitalism (Caffentzis and Federici, 2014)
  - + inspiration from Collapse Informatics (Tomlinson et al., 2013)
- Conceptual framework for thinking about the redirection of ICT toward sustainability-oriented futures
- Introduces four categories to examine material and cultural aspects of computing as they relate to sustainability transitions:
  - ruins
  - ghosts
  - seeds
  - visions

# The Two Loop Model

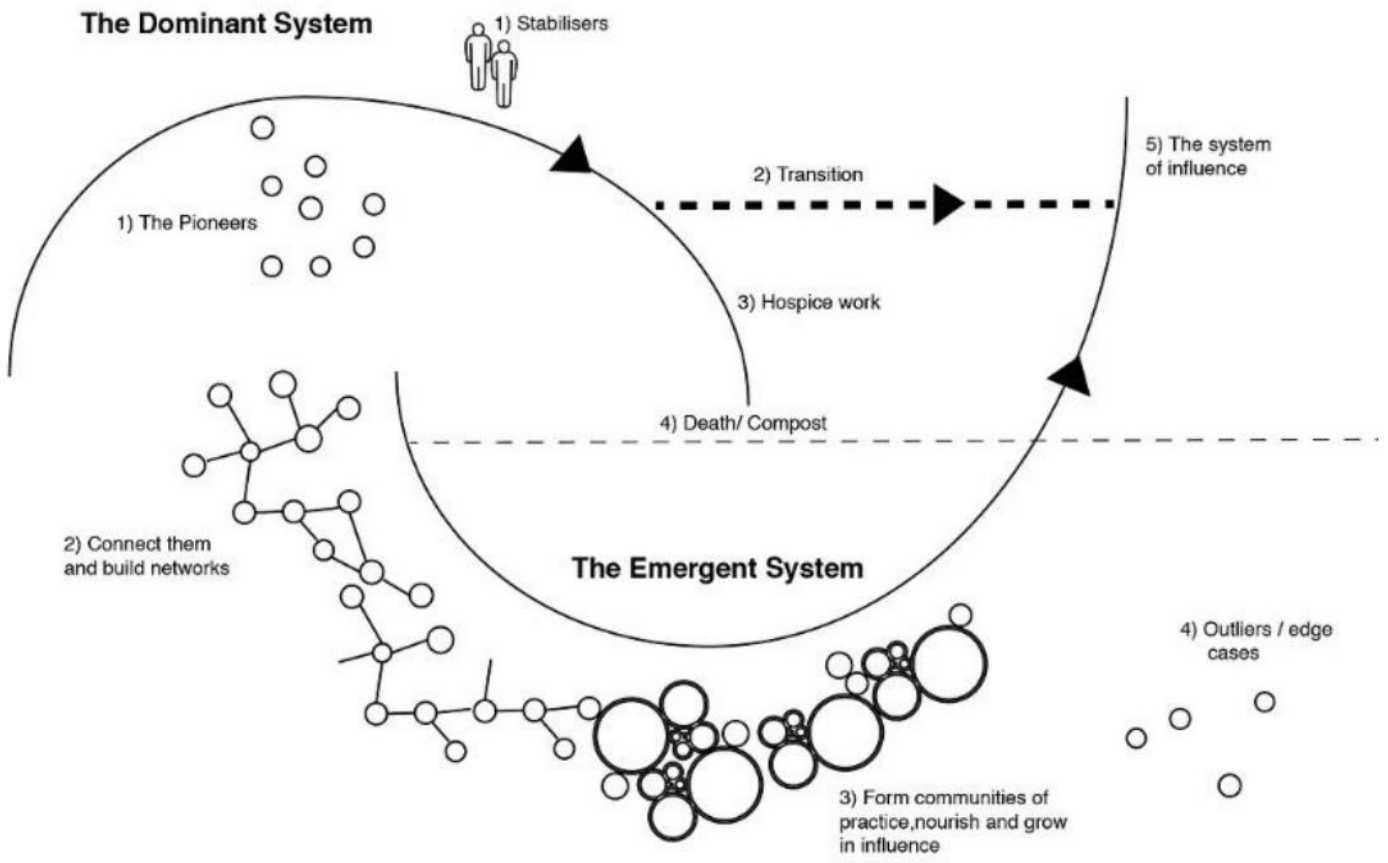


Figure 1 - Two Loop Model, Berkana Institute (2011), illustration by Robinson (2019)

# Conceptualizing ICT in sustainability transitions

- Digital ruins

Material elements (infrastructures, components, devices, exploitation sites) that are likely to persist as negative commons in sustainability-oriented futures. Physical realities that remain long after the socio-technical systems that created them have ended.
Ex: excavation sites, industrial buildings, obsolete network equipment. Potential ex: deteriorating telecommunication infrastructure vulnerable to extreme weather events, data centers in the context of prioritized access to resources etc., resource-intensive tech, certain technologies

- Digital ghosts

Cultural elements embedded in material histories that linger as negative commons. They are the shadows of the systems that created ruins: expectations, knowledge, values, aspirations etc. that continue to shape social life and imaginaries.
Exist through memories, stories, documents, norms etc. Can subtly reproduce the logics of the dominant paradigm.
Ex: growth-based business models, technosolutionism, by default features, consumerism, universalism. Potential ex: control, surveillance

# Conceptualizing ICT in sustainability transitions

- Digital seeds

Material elements that already exist within the dominant paradigm but in embryonic forms of an alternative mode of production. They are concrete entry points for imagining sustainable transitions. Structures and practices that can be used as fertile ground for redirection trajectories.
Currently emerge in contexts of scarcity (frugal innovation) or in the form of intentional alternatives (permacomputing, windternet etc).
Ex: community-based infrastructures like repair cafés, localized mesh networks, fablabs etc. Potential ex:

- Digital visions

Cultural elements that anticipate, justify, and accompany the material emergence of seeds. They orient the formation of alternative futures. Emerge from within the dominant paradigm, often marginalized but hold transformative potential.
Ex: care, sufficiency, system resilience, conviviality, appropriate tech etc

# Conceptualizing ICT in sustainability transitions (speculative examples included)

| | Made taboo | Made conflictual | | Reinterpreted | Remains or reinforced |
|---|---|---|---|---|---|
| Ruins | Certain digital devices and uses<br>E-waste? | Non-repairable devices<br>Resource-intensive technologies<br>Data centers | Seeds | Localized production<br>Network infrastructure<br>Data centers<br>Older electronic components | Digital commons<br>Community hubs<br>Repair infrastructure<br>Modular electronics |
| Ghosts | Surveillance<br>Control | Growth-oriented business models and value systems<br>Techno-solutionism<br>Universalism<br>Consumerism | Ghosts | Innovation<br>Efficiency<br>Access | Care<br>Commoning<br>Conviviality<br>Sufficiency<br>Pluriversalism |

# Questions for the reverse panel discussions

- What specific elements come to mind for each of the four categories (ruins, ghosts, seeds and visions) based on your own experience, practice or general knowledge of ICT and its trajectories?

- Given that what is ultimately perceived as a ruin or a seed differs greatly depending on local contexts and perceptions of value, can we collectively identify criteria or guiding principles for what sustainability-oriented tech futures involve, from which a normative classification could be elaborated to distinguish ruins from seeds and ghosts from visions?