

# TECHNO-SOCIAL INNOVATION IN THE COLLABORATIVE ECONOMY

Principal investigator:  
Vangelis Papadimitropoulos



**H.F.R.I.**  
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# RESEARCH OBJECT

The role of commons-based peer production in the creation of a collaborative economy.



# THE COMMONS

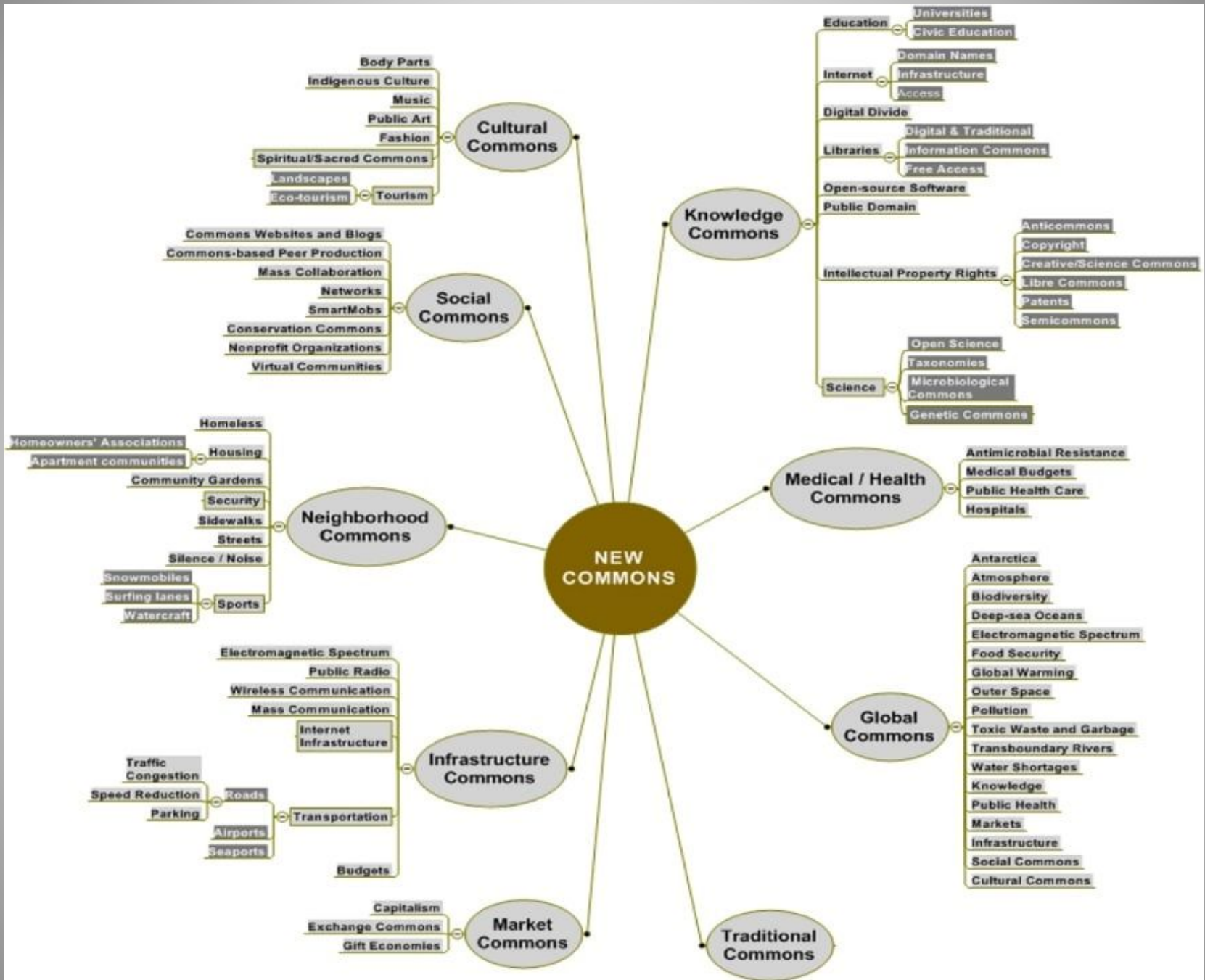
**Definition:** The commons consist of distributed or **common property** resources/infrastructures (natural resources, technology, knowledge, capital, culture), **self-managed** by user **communities** in accordance with collectively established rules or norms.

## **Elements:**

- common property resource
- community
- self-management

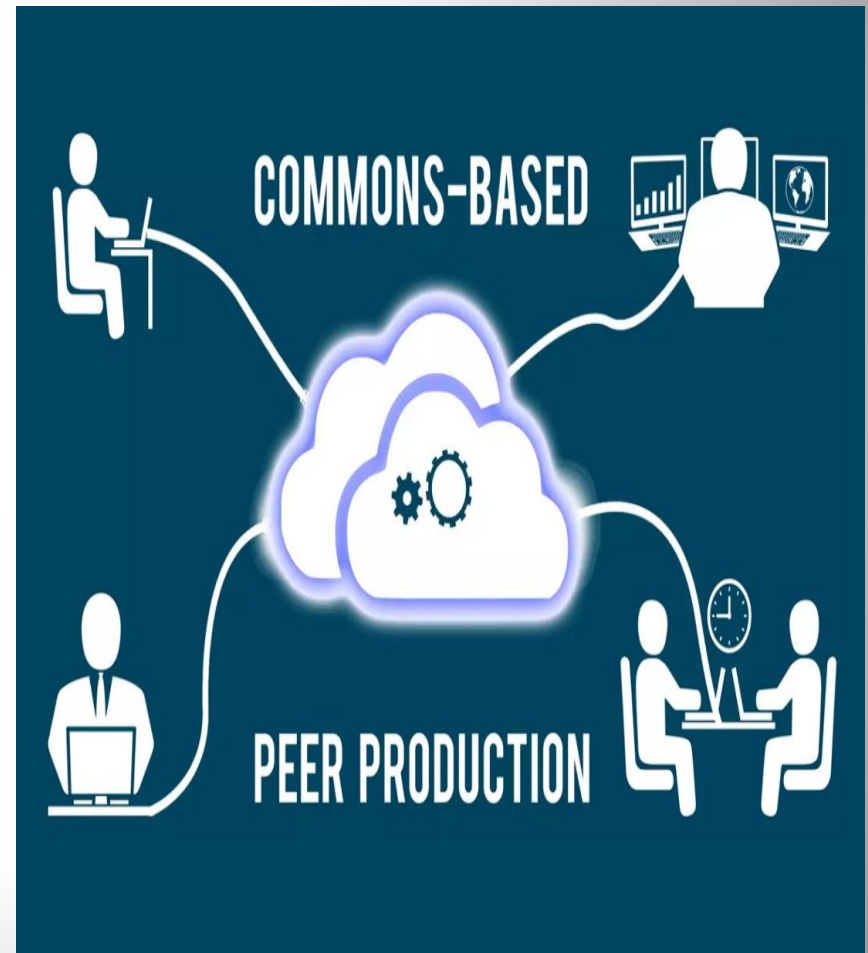
## **Types:**

- local: pastures, forests, irrigation fields, a farm, a building, a park
- global: science, knowledge, information, language, the digital commons, airwaves
- cosmological: the digital commons (design, knowledge and software) connecting to local commons via open-source code and hardware



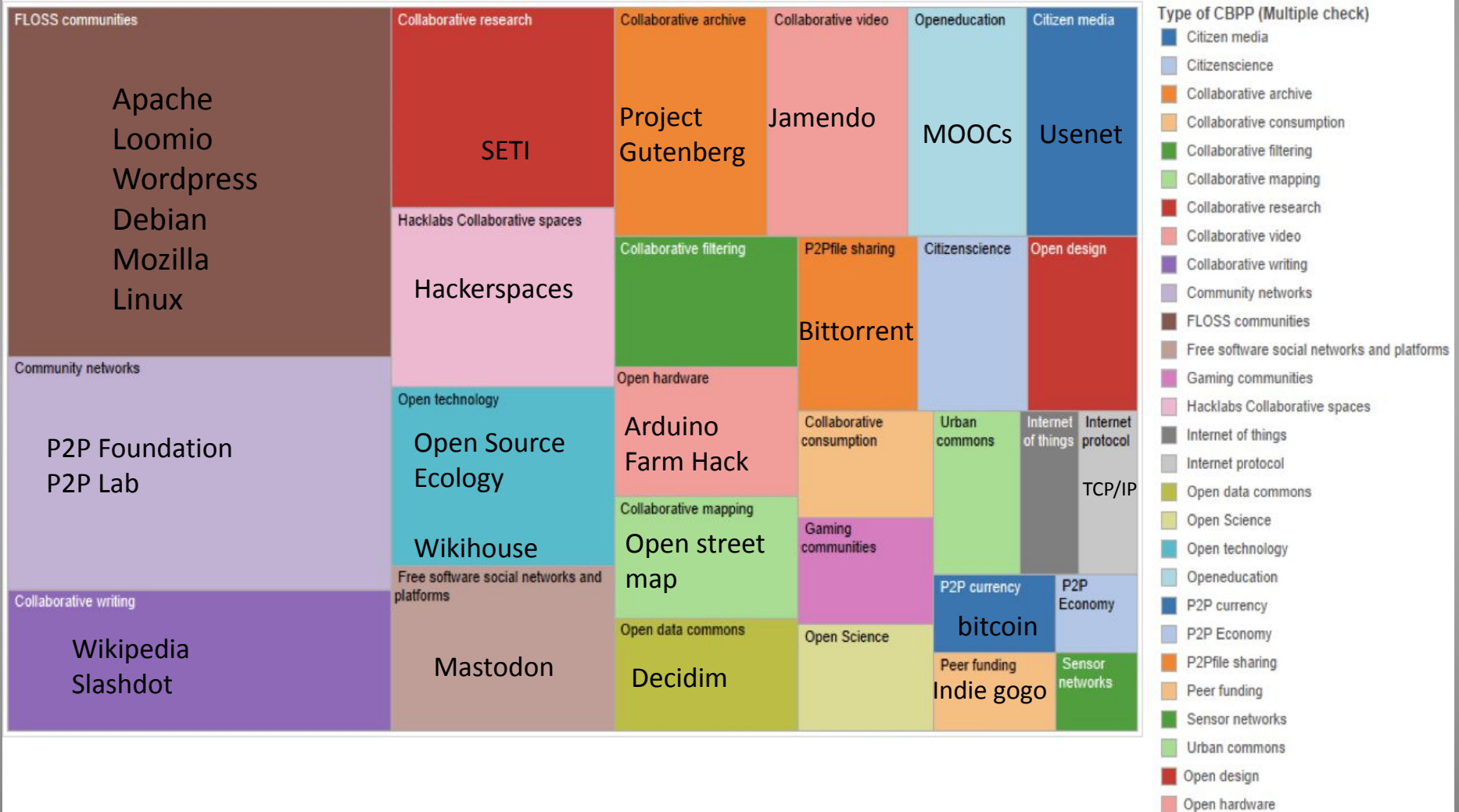
# THE FEATURES OF COMMONS-BASED PEER PRODUCTION

- decentralization
- self-governance
- meritocratic participation (do-ocracy)
- equitable distribution of value
- non-monetary motivations ↔ monetary motivations
- sharing, openness and transparency
- stigmergy = asynchronous, indirect collaboration/production
- modularity, granularity (small modules)
- peer review



# OPEN SOURCE SOFTWARE AND THE DIGITAL COMMONS

<Type of CBPP>



# DESIGN GLOBAL-MANUFACTURE LOCAL MODEL

Commons-based peer production.

The conjunction of open-source software with desktop manufacturing technologies (such as three-dimensional printing and computer numerical machines).

What is not scarce becomes global (i.e. global commons of knowledge, design, software), and what is scarce (i.e. hardware) stays local.

Global (digital) commons connect to local commons, communities and fablabs/maker-spaces powered by renewable energy systems.

Sustainability and resilience, circular economy, waste management, eco-efficiency, clean energy.

Cases: housing, robotics, biohacking, prosthetics, peer-to-peer farming, Covid-19 masks, etc.





# ADVANTAGES OF COSMOLOCALISM VIS-À-VIS EXTRACTIVE CAPITALISM

- democratization of the means of production
- equitable distribution of value
- innovation spill-overs from anti-rival network effects
- low-cost efficiency
- improved work quality
- sustainability

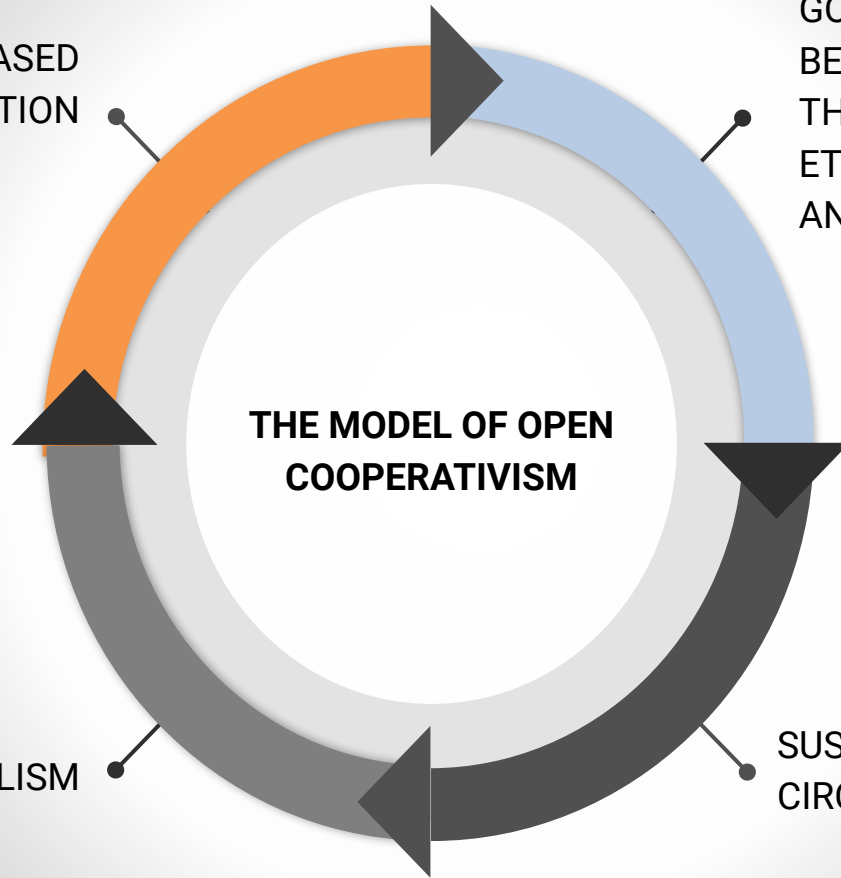
COMMONS-BASED  
PEER PRODUCTION

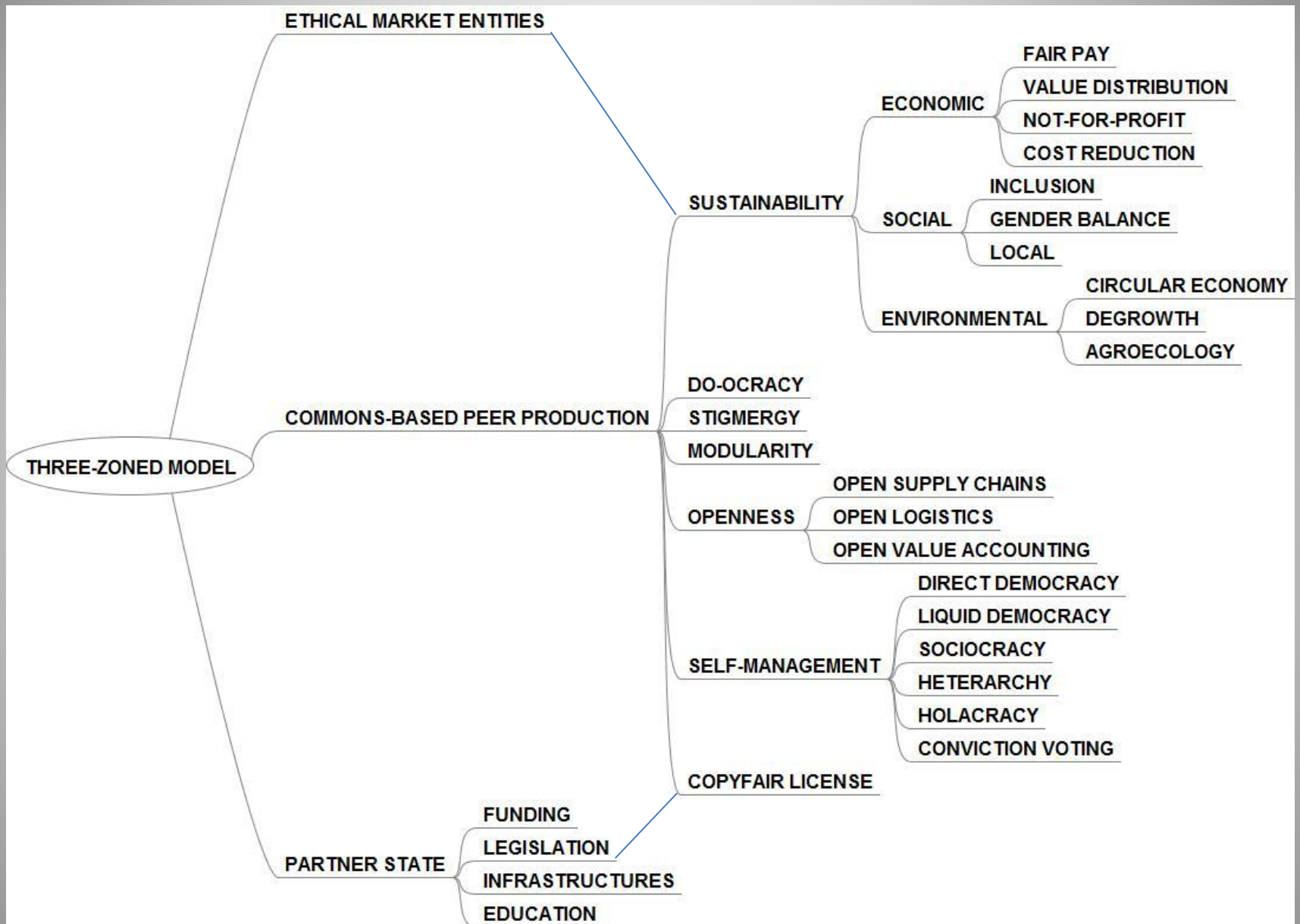
MULTISTAKEHOLDER  
GOVERNANCE  
BETWEEN  
THE COMMONS,  
ETHICAL MARKET ENTITIES  
AND A PARTNER STATE

**THE MODEL OF OPEN  
COOPERATIVISM**

COSMOLOCALISM

SUSTAINABILITY,  
CIRCULAR ECONOMY

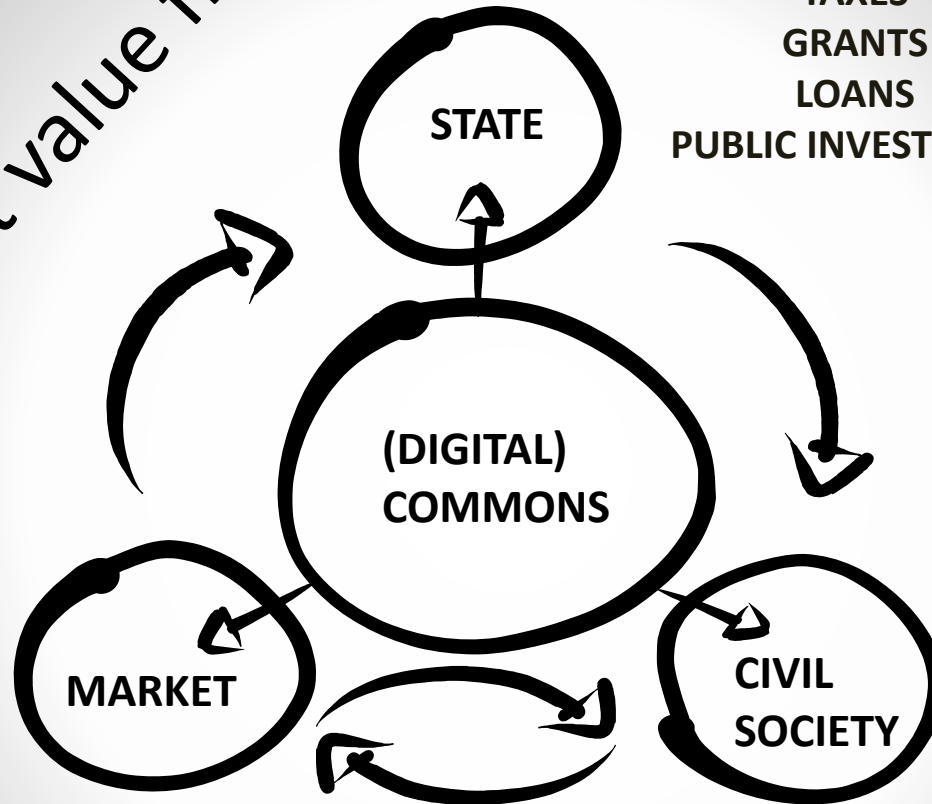




# THE MODEL OF OPEN COOPERATIVISM IN OPEN-SOURCE SOFTWARE

<b>Productive community</b>	Linux	Mozilla	GNU	Wikipedia	Wordpress
<b>Entrepreneurial coalition</b>	e.g. Linux Professional Institute, Canonical	e.g. Mozilla corporation	e.g. Red Hat, Endless, SUSE	e.g. Wikia company	e.g. Automatic company
<b>For-benefit association</b>	Linux Foundation	Mozilla Foundation	Free Software Foundation	Wikimedia Foundation	Wordpress Foundation

Post-capitalist value flow(s)



STATE  
TAXES  
GRANTS  
LOANS  
PUBLIC INVESTMENT

ETHICAL MARKET  
ENTITIES  
INVESTMENTS  
EXCHANGE VALUE  
INCOME

CIVIL SOCIETY  
COMMONS USE VALUE  
COOPERATIVES  
DAOs  
CROWDSOURCING

# COMMONS-ORIENTED TRANSITION IN THE HEALTH SECTOR

## NOW

- health as a private good
- oligopolies (corporations)
- outsourcing, networking, mergers, acquisitions
- monopsonies (states, insurance companies)
- intellectual property rights
- information asymmetries
- risks, market failure
- financialisation
- shareholder profit maximization
- lobbies
- expensive medicine



## FUTURE

- health as a public good
- open multi-stakeholder cosmological cooperatives (researchers, patients, investors, state-funding)
- open circular supply chains (ex. raw materials, manufacturing of insulin pumps, maintenance, services, etc.)
- copyfair licenses for software and hardware
- open logistics
- open science and R&D, open access
- open data
- open sustainability standards
- low production and transaction costs
- affordable health

# THANK YOU

<https://collabecon.gr/>

Vangelis Papadimitropoulos, *The Commons, Economic Alternatives in the Digital Age*, Westminster University Press, 2020

Vangelis Papadimitropoulos, *Blockchain and the Commons*, Routledge Editions, 2022