

# ON THE FOUNDATIONS OF OPEN COOPERATIVISM

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## 1 Introduction

The last decades are witnessing the rise of commons-based peer production – aka the digital commons – enabled by Internet affordances such as decentralization, networked computing, cost reduction, modularity, and open-sourcing (Aigrain 2012; Bauwens et al. 2019; Griffiths 2008; Morell 2010; Stalder 2005). The commons consist of distributed or common property resources and infrastructures, self-managed by user communities in accordance with collectively established rules or norms (Bollier and Helfrich 2015; Ostrom 1990). The digital commons, in particular, refers to a non-market sector of information, knowledge, and cultural production, not treated as private property but as an ethic of sharing, self-management, and cooperation within peers who have access to the Internet and free/open-source software (Benkler 2006). The digital commons present an alternative to intellectual property by promoting open access, collaborative innovation, and knowledge sharing. In doing so, they alleviate barriers to information, encourage community ownership, and contribute to knowledge democratization, fostering more inclusive, sustainable digital ecosystems. Commons-based peer production spins around Internet-enabled grassroots organizational models such as open cooperatives (Bauwens et al. 2019; Kostakis and Bauwens 2014).

We elaborate here on commons-based peer production as it plugs into the model of open cooperativism to counter the current hegemony of neoliberalism. Neoliberalism is a contested term that we interpret to be the ideological application of neoclassical economics to politics, championing the expansion of the capitalist socio-economic model – hierarchical management, profit maximization, privatization, individualism, entrepreneurialism, and market-driven competition – into state management (Brown 2015).

We set forth, instead, the politics of open cooperativism (Bauwens et al. 2019; Kostakis and Bauwens 2014) as a counter-hegemonic socio-economic model vis-à-vis neoliberalism. The model of open cooperativism places commons-based peer production at the center of multi-stakeholder collaboration between: (1) civil society organizations (NGOs, cooperatives, associations, foundations, etc.) producing commons; (2) ethical market entities (social enterprises, for-benefit corporations, etc.) adding exchange value on top of the commons use value; and (3) a partner state enabling commons-based peer production through funding, education, legislation, and infrastructures. The

main argument is that multiple stakeholders such as user communities and ethical market entities that co-produce or gain access to common-pool resources benefit from knowledge diffusion and innovation spillovers, as well as from low production and transaction costs, thus gaining a competitive advantage compared with closed proprietary socio-economic models (cf. Chapter 1).

Yet, immaterial and, especially, material commons incur production and transaction costs coupled with coordination and search costs that are subject to “market imperfections” most prominent in the case of public goods dilemmas. Whereas public goods are administered by state governments, common goods are self-managed by user communities (Ostrom 1990). Commons-based peer production is poised to address many of these “market imperfections” but still suffers from corporate cooptation and the lack of sustainable business models to safeguard the commons and provide livelihoods for user communities producing the commons. Public policy is crucial to nurture cooperative culture, commons-based institutions, and positive agglomeration externalities (Arando et al. 2012) as well as prevent market failures that lurk at the capitalist crossroads of a post-capitalist transition (Dow 2018: cf. Chapter 4).

This chapter resonates with several similar approaches in the Handbook (cf. Chapters 1, 4, 6, 17, 18, 20), with the difference lying in offering here a more holistic approach that places the commons at the center of open social innovation as envisaged in the model of open cooperativism. Section 2 juxtaposes neoclassical economics with commons economics. Section 3 examines the political theorization of the commons, boiling down to the counter-hegemony of the model of open cooperativism. Section 4 breaks down the three-zoned model of open cooperativism into its constituent parts, namely, civil society, ethical market entities, and a partner state. This chapter thus lays out the economics and politics of the commons as the foundational stones of the counter-hegemony of open cooperativism vis-à-vis neoliberalism.

## **2 Neoclassical economics vs commons economics**

Neoclassical economics portrays a model of the economy where economic agents interact through prices and quantities on conditions of scarcity and utility maximization (Bridel 2012). In neoclassical economics, capitalism (Braudel 1979) is considered the most optimal model for the allocation of scarce resources. A finite good is scarce and can be rivalrous if there are more users than goods. The use of a scarce good by one person subtracts from the total available, thereby excluding others. There are three types of goods: private, public, and commons (Table 26.1). Private goods are marked by high rivalry and exclusion, conditioned on private contract law, money, and the law of supply and demand. To consume a book, one needs to own money to buy it in the market. Public goods, on the other hand, exhibit low rivalry and exclusion. All citizens can access public education, parks, and highways. Common goods often blur with public goods. Some common goods can be excludable and rivalrous, while others can be non-excludable and non-rivalrous (Benkler 2006; Kostakis and Bauwens 2014; Ostrom 1990). Grazing lands, fisheries, and water can be rivalrous and excludable. Yet, nobody can be excluded from climbing a mountain, swimming in the sea, or breathing the air. Information, language, and knowledge – when not ‘enclosed’ by intellectual property rights – are both non-rivalrous and anti-rivalrous. While the production of a book or software may bear high fixed costs, the cost of reproducing an additional unit of an e-book or software is near zero, and their use by more people increases its value exponentially (Metcalf 1995). The anti-rivalry effects of information, knowledge, and culture translate into “network effects” most prominent on the Internet and digital platforms, but which have also been manifested elsewhere, such as with the spread of fax machines and telephones.

Table 26.1 Types of goods

		<i>Rivalry</i>	
		<b>High</b>	<b>Low</b>
Exclusion	<b>High</b>	Private goods	Club goods
	<b>Low</b>	Common goods	Public/common goods

Whereas public goods are managed by state governance, the commons are shared or distributed resources/infrastructures (natural resources, technology, knowledge, capital, culture) self-managed by user communities in accordance with collectively established rules and norms (Bollier and Helfrich 2015). As such, the commons consist of three constitutive components: (1) a common property resource; (2) a community; and (3) a “commoning” activity (De Angelis 2017: 119). By commoning, we refer here to the collective management of a commons. A commons can be, for example, a limited-access pasture or open-access software that can both be collectively managed by their users. Democracy, egalitarianism, consensus, openness, bottom-up social innovation, sustainability, and value distribution are all core features of the commons. Research so far (Ostrom 1990) has demonstrated a vast diversity of public–private–commons partnerships and institutional arrangements spanning the globe with regard to the governance of common-pool resources.

The digital commons, more specifically, refer to online information, culture, and knowledge, which are propertyless and, thus, free and open to everyone within the community to access, use, modify, and copy (Birkinbine 2020: 22). The digital commons are co-produced by the community in terms of commoning that reproduces information, culture, and knowledge. Commoning in the case of the digital commons comes with a number of ICTs affordances, such as networked computing, lower costs, and decentralization coupled with transparency, accountability, merit-based economies, and inclusivity. The digital commons differ from Ostrom’s ecological commons (1990) in that they expand in space and time: they are global and thus not confined in a specific location; the Internet works 24/7, and its basic code is open-sourced (end-to-end principle, see Lessig 2001, 2004). The digital commons can avoid the free-rider problem most prominent in physical space, since information is by essence non-rivalrous and, beyond this, anti-rivalrous. One of the core attributes of information is that it “always wished to be free” (Wagner 2003). An agent who transmits information can keep and consume the same information, granting a very low opportunity cost compared with the utility transferred to the receiver. Therefore, given the limits of saturation effects, a great number of agents can consume the same information simultaneously. One thus cannot easily create a market to sell information due to its near zero cost of reproduction (Arrow 1962). Hence the creation of copyright and intellectual property rights turning the inherent abundance of information into artificial scarcity to be sold or rented in the market as a product or service.

On the flipside, open-sourcing was introduced with the creation of the GNU General Public License (“copyleft”) to combat various negative aspects of copyright. Copyleft allows the access, modification, and distribution of software code on conditions that it remains under the same license (Raymond 1999; Stallman 2002; Weber 2004). “Open-sourcing” has enabled the peer production of information, culture, and knowledge, which co-emerges with network effects generated in digital platforms on the Internet (Bauwens et al. 2019; Kioupiolis 2021, 2023). Yochai Benkler (2006) coined the term ‘commons-based peer production’ to describe a non-market sector of information, knowledge, and cultural production, not treated as private property, but as an ethic of sharing, self-management, and cooperation between peers who have free access to

Table 26.2 Neoclassical vs commons economics

<i>Neoclassical economics</i>	<i>Commons economics</i>
Self-interest, individualism, utility maximization for firms and households	Diversity of agents and motivations
Perfect knowledge, privacy	Open knowledge, sharing, transparency
Perfect competition (zero-sum game)	Cooperation (win-win game)
Private property	Bundle of rights (access, withdrawal, management, exclusion, alienation)
Optimal allocation of resources on conditions of scarcity	Scarcity (natural resources, hardware) combines with the abundance of the commons (knowledge, design, software)
Supply and demand equilibrium based on price signals	Open supply chains, circular economy
Exchange value, commodities	Use value, social needs
Green growth	Degrowth/postgrowth

online platforms running on open-source software. Commons-based peer production simulates the physical (Ostrom 1990) into the digital space to bring about a particular institutional form of structuring the right to access, use, and control resources, which differs significantly from managerial hierarchies and markets (Table 26.2). The distinctive features of the digital commons are: (1) decentralized self-governance through the utilization of participatory, meritocratic (do-ocracy), and charismatic rather than proprietary or contractual models; (2) the centrality of non-monetary motivations; and (3) the permeation of state and firm boundaries (Benkler 2006). Commons-based peer production introduces new and radical forms of ownership, governance, operation, and financialization in a mission to empower communities against the pervasive economic inequalities and power asymmetries of neoliberalism.

Commons-based peer production retrofits traditional manufacturing to install a new mode of production in the model of *cosmolocalism*, which combines open-source software with hardware, 3D printers, and computer numerical machines deployed in “fablabs” and makerspaces. What is “light” and easily transmissible (software, knowledge, design) is shared online globally and what is “heavy” (hardware) stays local. Hence, the digital commons connect to material production through hardware to democratize the means of production and sustain more ecological, equitable, and fairer socio-economic models.

Commons-based peer production plugs into the model of *cosmolocalism* to introduce a simple yet radical idea: great improvements in production and management could be achieved by sharing resources, knowledge, and power “glocally”. Meanwhile, strict intellectual property rights lead to the underutilization of information and an inefficient use of knowledge. Exclusive private property rights may combine with a bundle of common property rights, such as access, withdrawal, and co-management (Schlager and Ostrom 1992). Sharing, openness, transparency, and self-management arguably result in a constantly improving collective repository of knowledge, best ideas, practices, and resources from which a diverse set of agents can draw and contribute back according to their needs and capacities (Bauwens et al. 2019; Benkler 2006; Bollier and Helfrich 2015; Ostrom 1990). Market exchange value (scarcity) adds up on top of the commons use value (abundance) to satisfy social needs. Eventually, *cosmolocalism* diffuses knowledge spillovers from anti-rivalrous effects, decreases costs, reduces waste, and fosters resilience, resulting in higher levels of work quality, social innovation, inclusion, and sustainability. Thus, *cosmolocalism*

advances cooperation, openness, circular economies, and post/degrowth (Kallis et al. 2018) as opposed to competition, privacy, planned obsolescence, and green growth respectively.

However, immaterial and, in particular, material commons (hardware) incur considerable costs coupled with “market imperfections” such as free riding, free driving, and asymmetric impacts from absent and incomplete contracts, most prominent in cases of public goods dilemmas. Commons-based peer production (Benkler 2006) addresses many of these “market imperfections” but still suffers from corporate cooptation and the lack of sustainable business models to safeguard the commons and provide livelihoods for user communities producing the commons. The need thus for a political project of the commons springs naturally from “market imperfections” inherent in the commons. We elaborate next on the politics of the commons as envisaged in the model of open cooperativism to help secure the sustainability of the commons.

### **3 The politics of the commons**

The significance of commons economics has to be examined in tandem with the political framing of the commons. The literature has documented three main contemporary normative approaches of the commons (Papadimitropoulos 2020): a liberal, a reformist, and an anti-capitalist.

Liberal scholars approach the commons as an alternative mode of production peacefully coexisting alongside state and market operation. Setting aside any anarchistic and libertarian threads in their work, Elinor Ostrom (1990, 2000), Lawrence Lessig (2001, 2004), and Yochai Benkler (2006, 2013) in general, do not challenge the state-capitalism nexus, suggesting that the commons develop most exclusively on the premises of civil society.

Reformist scholars consider the commons an alternative organizational model that does not oppose liberal democracy and the capitalist market, nor does it merely operate on the margins. Reformists such as David Bollier (2003, 2014) and Erik Olin Wright (2009), among others, seek to open up the state-capitalism nexus toward commons-based peer production in an increasingly less state or market-dependent manner.

Anti-capitalist thinkers posit the commons in terms of a radical opposition to capitalism and the state. Scholars such as Pierre Dardot and Christian Laval (2014, 2017), Massimo De Angelis (2017), George Caffentzis and Silvia Federici (2014), and Alexandros Kioupiolis (2017, 2021, 2023) confront capitalism head-on, aiming to render the commons autonomous vis-à-vis the state-capitalism nexus. Most anti-capitalist theorists stand in opposition to the concept of a “liberal-capitalist commons”, that is, a commons sympathetic to capitalism and the neoliberal state.

Yet, the political essence of the commons lies on a deeper ontological level. The commons seek to reverse capitalism’s ontological foundations and socio-political values such as individualism, profit maximization, competition, strict intellectual property rights, hierarchical management, etc. They suggest a relational (Bollier 2014; Bollier and Helfrich 2019) ontology that does not generate dualisms, such as individual-community and private-common. The relational ontology of the commons implies that every living organism relates to one another not hierarchically but in terms of need: humans depend on nature to survive; resources need humans to thrive. The moving away of traditional modern ontology toward a new relational ontology is called “ontoshift” (Bollier and Helfrich 2019). Digital commons suggest an ontoshift through everyday practices that alter dominant social meanings, thus transforming the way humans, nature, things, resources, cities, information, etc. are perceived.

Philosophers of technology such as Andrew Feenberg highlight the transformative potential of the digital commons. For Feenberg, alternative social values are being translated into differentiated technical artifacts that are biased toward diverse social interests (Feenberg 1999, 2002).

Technology is not a mere instrument that serves exogenous ends. It contains in-built values reflecting the interests of the actors participating in the design process of technical artifacts. In Feenberg (2010), the sum of the social values that are being translated into technical specifications creates a technical code that determines the technologies generated. Feenberg's theory aims at opening up the design process to include participants' values within the technical code in a manner that is not biased toward the interests of particular stakeholders, such as shareholders, and managers. In other words, he aims at democratizing technology and bringing about an alternative modernity through more inclusive technological infrastructures.

The digital commons echoes with Feenberg's aim of democratizing technology, since they generate values, meanings, and innovative technologies that reflect the interests of commoners, that is, user communities that co-produce commons in accordance with collectively agreed-upon rules and norms. Commons-based peer production (Bauwens et al. 2019) opens up the design space to include more people, interests, and values, thus opposing the model of technological determinism, along with the monopolistic power of corporations to determine technological designs at their will (Feenberg 2010).

Next, we aim to crystallize the work of thinkers as diverse as Ostrom, Bollier, Olin Wright, Kioupiolis, and Feenberg into Kostakis and Bauwens' model of open cooperativism that seeks to establish the counter-hegemony of a commons-based post-capitalist transition. Thus, the model of open cooperativism is conceived primarily as a political project moving along the lines of democratization, value distribution, and sustainability to challenge the current hegemony of neoliberalism.

## **4 The model of open cooperativism**

Research so far (Bauwens et al. 2019; Kostakis and Bauwens 2014) has identified a three-zoned model of open cooperativism that comprises: (1) the civil society producing material and immaterial commons; (2) ethical market entities adding exchange value on top of the commons use value to produce commodities for the market; and (3) a partner state enabling the collaboration between civil society and ethical market entities through funding, education, legislation, infrastructures, etc. We next describe each component of the model in detail.

### **4.1 Civil society**

Civil society operates alongside the state and the market to produce social value that is usually deemed unprofitable for profit-oriented firms and costly for governments. It is common in the literature to assign to the cooperative economy of civil society a social and environmental function (Zaimakis and Nikolaidis 2022). Cooperatives are often considered part of the social and solidarity economy. According to the European Union directive, social enterprises cater for the provision of cultural, health, educational, and environmental services (Varvarousis and Tsitsirigkos 2019: 98). As such, the social economy has been usually described as a "third sector" (besides the state and private sectors) identified with civil society.

Cooperatives differ from other forms of civil society organizations in that they seek to make profit just as profit-driven firms, the difference being that profit is equitably distributed among cooperative members in accordance with collectively established rules and goals. Cooperatives, in general, adopt the cooperative principles and values as defined by the International Cooperative Alliance.<sup>1</sup>

Platform cooperativism is a digital version of cooperativism that combines the principles of traditional cooperatives with algorithmic management to launch Internet-enabled worker-owned



cooperatives that operate on quite the opposite logic of platform capitalism (Scholz 2016). The most common definition of a platform cooperative is the following:

A cooperatively owned, democratically governed business that establishes a computing platform, and uses a website, mobile app or a protocol to facilitate the sale of goods and services.  
(Calzada 2020: 8)

Scholz et al. (2021) use the term “platform cooperative” to describe worker, data, multi-stakeholder, and producer cooperatives for whom a digital match-making business model is central to their operation. Another plausible definition of a platform cooperative would describe “an enterprise that operates primarily through digital platforms for interaction or the exchange of goods and/or services and is structured in line with the International Cooperative Alliance Statement on the Cooperative Identity” (Mayo 2019: 20). The term is thus used to cover a wide variety of cooperative types operating across a multitude of sectors in the platform and digital economy, portraying a diversity of organizational models.

Traditional and platform cooperatives cannot challenge capitalism for a plethora of reasons (Papadimitropoulos 2020; Papadimitropoulos and Malamidis 2024). To address this issue, Vasilis Kostakis and Michel Bauwens (2014) seek to infuse traditional and platform cooperatives with the principles of the commons. In contrast to traditional and platform cooperatives that adopt closed proprietary licenses, therefore, not producing commons, open cooperatives deploy open protocols, open logistics, open supply chains, and open value accounting to enable commons-based open social innovation. Open cooperatives bring together the community of all members, users and contributors who produce the commons, either for payment or as volunteers, with ethical market entities that co-produce or support the commons (Papadimitropoulos 2023b; Papadimitropoulos and Malamidis 2023).

#### **4.2 Ethical market entities**

The Internet has allowed innovation to become social, turning it into a coefficient of networks, rather than an internal feature of R&D confined to the premises of companies beholden to shareholder value. Social innovation (cf. Chapter 17) is now at the heart of industrial process, with companies opening up their lines of production to integrate wider user participation in their value chains, via network effects generated by peer production (Bauwens et al. 2019), user-led communities, and crowdsourcing (von Hippel 2005; Tapscott and Williams 2006). Peer production has become a competitive necessity and a new baseline for successful business operation. Entrepreneurship is gradually getting divorced from hierarchical and centralized managerial control over production, and edge competencies replace core competencies as key competitive quality. Peer production gives rise to asymmetric competition, meaning that any for-profit company that does not integrate peer production is at a competitive disadvantage (cf. Chapters 17–20).

Ethical market entities are for-benefit companies and social enterprises that cooperate with civil society organizations to either co-produce commons or access commons in exchange for a fee. The main argument here is that any for-profit entity that is faced with competition from a for-benefit entity will face difficulties surviving (Bauwens et al. 2019). A prominent example is open-source software and the emergence of Linux as a strong contender for the operating system of computers, and which is already an essential part of the Internet’s infrastructure. Exclusive proprietary software approaches are no longer viable vis-à-vis open-source competitors. Similarly, companies that adopt open business models and can profit from social innovation, co-creation, co-design, and

crowdsourcing mechanisms will tend to out-innovate those that do not. The main argument is that multiple stakeholders such as user communities and ethical market entities that co-produce or gain access to common-pool resources benefit from knowledge diffusion and innovation spillovers, as well as from low production and transaction costs, thus gaining a competitive advantage compared with closed proprietary socio-economic models (cf. Chapter 1).

Free and open-source software is the archetype of the large-scale communal production of information, knowledge, and culture (Bauwens et al. 2019; Benkler 2006: 5). IBM, RedHat, Oracle, Google, and Microsoft have focused their business strategy on supporting open-source software communities. The problem is the co-optation of the commons (Birkinbine 2020) by these and similar firms and the subsequent precarity of commoners, volunteers, software developers, etc. Copyleft and open-source licenses permit the free access, use, modification, and commercialization of code. This allows companies to profit disproportionately compared with user communities producing digital commons.

To tackle corporate cooptation, the model of open cooperativism introduces mechanisms for benefit-sharing between ethical market entities and commons-based peer production. Bauwens and Kostakis (2014) build on the Peer Production License, designed and proposed by Dimitri Kleiner (2010), to propose the *Copyfair* license that allows for commons commercialization, but on the basis of reciprocity. Ethical market entities are for-benefit companies that can either co-produce commons or access commons produced by civil society organizations and FLOSS communities in terms of reciprocity, that is, in exchange for a license fee. For example, multinationals can use the code if they contribute, as IBM does with Linux. However, companies that do not contribute would pay a license fee, in order to secure sustainable livelihoods for user communities producing the commons.

Open cooperatives adopt multi-stakeholder forms of governance that would include workers, users-consumers, investors, and the concerned communities. Today, peer producers are largely oriented toward the “start-up” model and are subsumed to profit maximization, while traditional and platform cooperatives remain closed, use exclusive intellectual property licenses, and, thus, do not create a commons (at least a knowledge commons). In the new model of open cooperativism, a merger should occur between the open peer production of the commons and the cooperative production of value (Table 26.3).

Open cooperatives adopt open protocols, open logistics, and open supply chains that provide transparency and real-time information feeding into a circular economy co-designed to internalize negative externalities, reduce material/energy use, and balance out thermodynamic flows of production inputs and outputs (Bauwens et al. 2019). Contrary to the strategy of companies to purposefully reduce the actual lifetime of products – termed “planned obsolescence” – open cooperatives value interoperability, repairability, resilience, and adaptability. They employ modularity, indirect coordination (stigmergy) and open value accounting that equitably distributes value among multiple stakeholders. They seek to regenerate value and engineer processes rather than products and commodities. They connect to material production via distributed micro-factories for (g) localized manufacturing on demand to satisfy local needs for basic goods and machinery (cf. Chapters 13, 19).

Open cooperatives aim, thus, to transform the mainstream commercial sector into a generative market, which serves the accumulation of the commons rather than the accumulation of capital. Shared incentives would further be co-designed in the context of for-benefit associations, aiming to converge the corporate and the cooperative economy as in the case of open-source software (Table 26.4).

For-benefit associations as in the case of Linux or Mozilla foundation set consensus rules and incentives, fundraise and set the exchange rules within the commons and externally to other



Table 26.3 From capitalism to open cooperativism

<i>Capitalist enterprise</i>	<i>Traditional/platform cooperative</i>	<i>Open cooperative</i>
Information asymmetry, privacy	Information symmetry among coop members	Openness, sharing, transparency for multiple stakeholders
Profit maximization for shareholders	Value distribution among coop members	Value distribution among multiple stakeholders
Hierarchy, one dollar, one vote	Hierarchy and self-governance, one member, one vote	Self-governance, sociocracy, one member, one vote
Centralized proprietary R&D, patents, rent extraction	Closed proprietary licenses, not producing commons	Open protocols, open supply chains, decentralized coordination, commons
Planned obsolescence, negative externalities	Sustainability, internalization of externalities	Circular economy, repairability, adaptability, maintenance
Division of labor	Division of labor	Modularity, stigmergy
Salaries, surplus value extraction	Salaries	Open value accounting

Table 26.4 The three institutions that shape the model of open cooperativism

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

ecosystems, set the ownership/membership and sharing rules for the commons, define and enforce reputation, act as the interface to not-for-benefit entities, protect the commons through licenses, and manage conflicts (Bauwens et al. 2019). In short, they prefigure the role of a partner state at a macro-economic and political level.

### 4.3 The partner state

The concept of the partner state was first introduced by Cosma Orsi (2005, 2009) and then further developed by Kostakis and Bauwens (2014). A partner state ensures the stability of the macro-economic arrangement between contributory communities, for-benefit associations, and entrepreneurial coalitions. It enables the collaboration of civil society organizations with ethical market entities through infrastructural, financial, legal, and institutional support.

Scholars of various schools of thought have long emphasized the creative role of the state, on the one hand, to collectively produce value and bootstrap markets around publicly funded innovative technologies, and the predatory role of large, investor-controlled firms, on the other hand, to feed on collective innovation and value production (Mazzucato 2018). Companies have been free riding on prior public investment (i.e. share buybacks), with taxpayers, Internet users, and workers being stakeholders and key contributors to the innovation process.

A partner state moves away both from a distributionist welfare state and a neoliberal state by establishing mini-states of commons-based peer production ecosystems that implement direct

democratic procedures and practices. Likewise, developmentalist or neo-Keynesian versions of the state focusing solely on taxation, public investment, public ownership, and capital controls should be “updated” according to the principles of the commons. Representative democracy would be extended through participatory mechanisms (participatory legislation, participatory budgeting, online and offline deliberation mechanisms, liquid voting, real-time democratic consultations and procedures, proxy voting mechanisms, cf. Chapter 13). The state should be de-bureaucratized through the decentralization of public services via public–commons partnerships. Traditional and bureaucratic hierarchies should be transformed or replaced by poly-governance models of participation and deliberation that include user communities and other stakeholders (Bauwens et al. 2019).

Taxation of productive labor, entrepreneurship, and ethical investing, as well as taxation of the production of social and environmental goods should be minimized. On the other hand, taxation of speculative, unproductive investments, unproductive rental income, and of negative social and environmental externalities should be increased (Bauwens et al. 2019). In these ways, the partner state would sustain civic commons-oriented infrastructures and ethical commons-oriented market players, reforming the traditional corporate sector in order to minimize social and environmental externalities. The partner state would also engage in debt-free public monetary creation, while supporting complementary community currencies, digital public financial commons, and peer-to-peer lending.

A partner state would align education with the co-creation of productive knowledge in support of the social economy and the simultaneous open commons of productive knowledge. A partner state would distribute all publicly funded research and innovation under a commons-based license along with laws to enable municipal Wi-Fi and mesh-networks and “open data” regimes and resources that would allow local governments and multiple stakeholders to analyze Big Data from public sources to devise useful social policies and programs.

Big tech should recognize more actively the contribution of open-source software and the digital commons to their business models. A partner state should set transparent rules for the commercialization of the digital commons as well as for the participation of civil society groups and communities in a democratic dialogue over public goods, such as the Internet, Big Data, and Blockchain (Papadimitropoulos 2023a). Free and open-source software could become the default infrastructure in public administration and education (DeNardis 2011). State-endorsed open design protocols for information services, housing, ride-hailing services, and energy grids could foster open-source innovation and benefit local communities. A partner state should devise policies to support participatory governance and participatory budgeting of state-funded technological education, state-funded technologies of public utility and interest, such as open-source libraries, makerspaces, FabLabs, and technological parks hosting public–commons partnerships among multiple stakeholders, such as municipalities, civil society organizations, ethical market entities, freelancers, and digital nomads (Figure 26.1).

Thus, a partner state would make use of open-source technologies to gain on efficiency, agility, and adaptability, save on public expenditures, reduce trade deficits, boost innovation and collaboration, equitably distribute value among multiple stakeholders, foster sustainability and circular economies, enhance democracy, reclaim technological sovereignty and autonomy, and promote open-source business models to transform sectors of the economy toward a fairer and freer society.

The ultimate goal would be to reimagine politics in the model of open cooperativism between the commons, ethical market entities, and a partner state, setting out to establish the counter-hegemony of a commons-based post-capitalist transition vis-à-vis the current hegemony of neoliberalism.

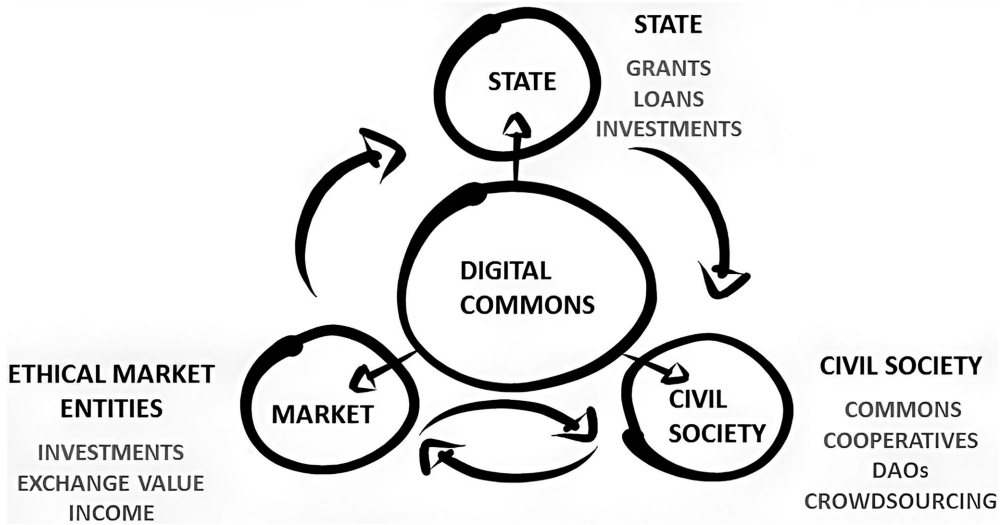


Figure 26.1 The partner state, ethical market entities and the commons.

## 5 Conclusion

The goal of the chapter was to elaborate on the model of open cooperativism. In doing so, the chapter juxtaposed neoclassical economics with commons economics, which lays the foundation for the model of open cooperativism. The chapter then went on to outline the politics of the commons as they set out to establish the counter-hegemony of open cooperativism vis-à-vis neoliberalism. Finally, we described in detail the model of open cooperativism as it breaks down into: (1) civil society organizations producing material and immaterial commons; (2) ethical market entities co-producing commons or accessing commons in terms of reciprocity; (3) and a partner state enabling the collaboration between civil society and ethical market entities. The core argument is that ethical market entities that co-produce or access commons in exchange for a fee gain a competitive advantage versus profit-driven firms adopting closed proprietary business models.

Eventually, a partner state incarnates the political project of the model of open cooperativism inasmuch as it diffuses knowledge and innovation across a chain of equivalence linking up the civil society, economics, and politics around a commons-based post-capitalist transition toward an ethical and sustainable economy. In doing so, a collective subject of the commons is necessary to embrace the model of open cooperativism in a mission to replace *homo oeconomicus* with *homo cooperans*.

## Note

1 <https://www.ica.coop/en/cooperatives/cooperative-identity>.

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