

The Transformative Potential of Platform Cooperativism: The Case of CoopCycle

Vangelis Papadimitropoulos

Panteion University, Athens, Greece, vagpap78@hotmail.com

Haris Malamidis

National and Kapodistrian University of Athens, Greece, malamidish@soc.uoa.gr

Abstract: The paper sets out to dissolve a contrast between traditional coop sectoral enclosure, on the one hand, and platform coop diversity, on the other hand, which often resonates with precariousness, marginalisation, fragmentation, whitewashing and corporatisation. To tackle traditional and platform coop discordance, the paper draws on the model of open cooperativism introduced by Vasilis Kostakis and Michel Bauwens, passed through the lens of Ernesto Laclau and Chantal Mouffe's discourse theory of hegemony, to weave a narrative that seeks to unite and broaden the scope of the cooperative sector. In doing so, the paper reviews CoopCycle as an illustrative case study of platform cooperativism. CoopCycle is a global federation of bike delivery coops that deploys the digital commons to install workplace democracy in the bike delivery sector. The paper aims at contributing to the understanding of platform cooperativism, all the while embedding the model of platform cooperativism into the counter-hegemony of open cooperativism aiming to challenge the current hegemony of neoliberalism. The main argument here is that the model of open cooperativism bears comparative advantages vis-à-vis closed proprietary socio-economic models.

Keywords: platform capitalism, platform cooperativism, CoopCycle, the commons, open cooperativism

Acknowledgement: The authors acknowledge funding from the Hellenic Foundation for Research and Innovation under the number 139.

1. Introduction

The development of information and communication technologies (ICTs) in the last decades has given rise to a digital economy, encompassing a diversity of organisational models coupled with market-oriented institutional reforms driven by relevant state policies. There is a burgeoning literature on the so-called "sharing" and "gig" economy, elaborating on a wide range of definitions and conceptualisations (Belk 2009, 2014; Bock et al. 2016; Botsman and Rogers 2010; Codagnone et al. 2016a; 2016b; Frenken 2017; Frenken and Schor 2017; Papadimitropoulos 2020, 2022; Sundararajan 2016). Whereas the "sharing" economy refers to the deployment of online platforms to allow Internet users to rent or exchange idle assets such as cars, bikes, rooms, and so on, the "gig" economy represents the buying and selling of freelance labour both offline and online. Both the "gig" and the "sharing" economy are instances of peer production and the crowdsourcing model (Howe 2008) bootstrapped by digitisation and the Internet during the last decades.

Date of Acceptance: January 2, 2024 Date of Publication: January 4, 2024

Yet, the term "sharing economy" is a misnomer, since it is misappropriated and misleading (Graham and Anwar 2018; Olma 2014; Papadimitropoulos 2020; Scholz and Schneider 2016; Schor 2015; Slee 2015). The terms "sharing" and "gig" economy rather encapsulate an Internet-enabled market economy, in which the logic of "sharing" only loosely pertains to front-end users while the back-end remains under centralised corporate control (Scholz 2016). The so-called "sharing" and "gig" economy properly refer to a rent-based economy capitalising on commercial exchange. We adhere, instead, to the term "platform capitalism" coined by Nick Srnicek (2017) to denote a model of the digital economy that features Internet-specific affordances dating back to the post-war period when the original Internet was launched as a publicly-funded military service comprising a decentralised computer architecture, packet switching technology and networked computing to withstand a potential nuclear attack (Smyrnaios 2018, 16-17). Since then, the surge of digitisation alongside the economic crisis of the 1970s paved the way for industrial capitalism to mutate via post-Fordism (Fuchs 2008, 110) into platform capitalism backed by neoliberalism (Brown 2015) that has been attacking labour ever since, all the while employing digital labour on the Internet for free (Fuchs 2014; Papadimitropoulos 2020, 2022).

We review here the case study of CoopCycle to juxtapose the model of platform capitalism with the model of platform cooperativism (Scholz 2016) that reverses centralised algorithmic management in favour of a decentralised Internet-enabled cooperative economy built on traditional coop principles such as the communal ownership of the means of production, self-management, sustainability, and the equitable distribution of value. The main research question of this paper is the following: What is the transformative potential of platform cooperativism as illustrated through the case study of CoopCycle?

Admittedly, platform cooperativism as it currently stands faces significant obstacles in challenging platform capitalism (Frenken 2017; Fuchs 2014, 2021; Papadimitropoulos 2020, 2022; Sandoval 2020; Scholz 2016; Van Doorn 2017). We critically examine instead the scenario of platform cooperativism transforming into the model of open cooperativism introduced by Vasilis Kostakis and Michel Bauwens (2014).

The model of open cooperativism champions the mutual collaboration between civil society organisations producing commons, ethical market entities adding exchange value on top of the commons use value and a partner state enabling commons-based peer production. The main argument is that ethical market entities that co-produce or make use of the commons on conditions of reciprocity gain a competitive advantage vis-à-vis closed economic models such as platform capitalism. Yet, Kostakis and Bauwens' model of open cooperativism rests on thin conceptual and empirical foundations. It is still in a highly experimental phase encountering the same challenges with platform cooperativism. Kostakis and Bauwens introduce the model of open cooperativism as a counter-hegemonic impetus unfolding within, against and beyond neoliberalism. However, there is a lack of normative clarity when it comes to the political theorisation of the counter-hegemony of open cooperativism. We further read Kostakis and Bauwens' model of open cooperativism through the lens of Ernesto Laclau and Chantal Mouffe's (1985) discourse theory of hegemony to accentuate its political edge.

One major problem of the model of open cooperativism is the capitalist cooptation of the (digital) commons due to the openness of the licenses adopted by collectivities producing the commons (Bauwens and Kostakis 2014; Birkinbine 2020). CoopCycle introduces a version of a copyfair license, called CoopyLeft, that could potentially

address this problem. CoopyLeft limits the use of the software to cooperatives and collectives that pay membership dues and comply with the values of the social and solidarity economy. CoopCycle encourages the production and sharing of the digital commons solely among the members of the federation. It thus introduces a legal and organisational membrane that shields the digital commons from capitalist cooptation, the latter being one of the major obstacles in the sustainability of commons-based peer production. CoopCycle also helps articulate a chain of equivalence (Laclau and Mouffe 1985) between like-minded organisations, social enterprises, and municipalities that make use of the commons to support a broader collaborative economy. Thus, the case study of CoopCycle serves as an illustration of the potential transformation of platform cooperativism into open cooperativism passed through the political lens of Laclau and Mouffe's discourse theory of hegemony.

The paper is structured as follows: the second section introduces the CoopCycle case study. The third section provides the theoretical framework. The fourth section describes the methodology. The fifth section analyses the empirical findings. The sixth section discusses the transformative potential of CoopCycle. The seventh section concludes the paper.

2. CoopCycle: A Bike Delivery Platform Cooperative

The paper reviews CoopCycle as an illustrative case of platform cooperativism focusing on the bike delivery sector. Established in France in September 2017, CoopCycle carries a two-fold identity. It is a federation of more than 67 bike delivery cooperatives spanning the globe as well as a software developer (Spier 2022). As such, it provides the institutional backbone as well as the digital infrastructure for bike delivery e-logistics and services in the cooperative sector.

CoopCycle emerged as a response to mainstream platforms (Take Eat Easy, Deliveroo) going out of business or abruptly exiting the local market, sparking the mobilisations that took place across Europe in 2017 (Dorcadie 2018; Spier 2022). The founding team of CoopCycle consisted of a group of activists committed to fighting against the economic and political model of foodtech platforms (CoopCycle 2021). The initial idea came from the computer programmer behind CoopCycle, who cloned the proprietary software of foodtech platforms to design a digital commons deployed solely for cooperatives. The rationale was the repurposing of technology to serve a post-capitalist alternative, given that the Internet and social media can provide "all the ingredients necessary to build a better democracy, a better world, which are misused right now for profit" (Means TV 2020). As such, commons-based peer production aka the digital commons (Kostakis, Vragoteris and Acharja, 2021) fits the case of CoopCycle to prevent "the precarisation of the delivery profession and the capture of profits by platforms alone" (CoopCycle 2021).

Profit-driven foodtech platforms such as Deliveroo (Woodcock 2020) employ venture capital and algorithmic management to maximise shareholder value by monetising data and outsourcing employment risks to workers, the latter classified as independent contractors paid per drop. CoopCycle addresses the prohibitive cost of getting a bespoke delivery app designed by putting the digital commons in the service of an anti-capitalist model anchored on the collective ownership of the means of production, democratic decision-making, and the sharing of value among workers. Workers in the CoopCycle federation are paid per hour and enjoy the benefits of safe employment, including a minimum wage, unemployment benefit, paid holidays, sick leave, pension and health insurance. As they state: "Money should not make money."

All the benefits should go to workers. You need to ride a bike to earn money" (Riders Collective 2021).

CoopCycle caters for "the creation of an anti-capitalist economic model based on the Commons, the development of the CoopCycle software (UI/UX, dev, trainings, docs, aso.), political lobbying, juridical toolbox, global coordination" (CoopCycle n.d.b). To this end, and unlike traditional and platform cooperatives that have trouble in scaling, CoopCycle has managed to scale globally as a federation. Early on from its outset, CoopCycle went international, with cooperatives from France, Belgium, Germany, and Spain becoming members of the federation (Democracy at Work 2021). The launch of CoopCycle Latinoamérica in 2021 (Kasparian 2022) as well as the links with NGOs, trade unions, financial institutions, local authorities, and other actors of the social and solidarity economy are significant milestones along the roadmap to establishing the counter-hegemony of a global anti-capitalist block.

3. Theoretical Framework

Platform capitalism deploys network effects on the Internet to launch multi-sided markets fuelled by venture capital and user-generated content aka digital labour (Fuchs 2014). Algorithmic management turns user-generated content into Big Data to engineer a rent-based economy based on advertising revenue (Papadimitropoulos 2020; 2022; Srnicek 2017; Stratford 2020). Neoliberalism is the political backbone of platform capitalism in that it promotes privatisation, market liberalisation, deregulation, financialisation, and micro-entrepreneurship (Brown 2015; Harvey 2005). The Californian ideology of hi-tech start-ups and the dot-com boom in the 1990s together with the state regulating the switch of the Internet from a public service to a marketplace allowed platform capitalism to take off (Barbrook and Cameron 1996; Smyrnaios 2018, 41-42). The 2008 financial crisis expanded precarisation into uberisation by incorporating swarms of the reserve army of unemployed into platform capitalism (Srnicek 2017). Uberisation extends precarisation into the so-called "gig" economy, where workers are classified as independent contractors to perform gigs both offline and online (Thépot 2023).

Platform capitalism employs a diversity of business models. Srnicek (2017) classifies them into the following types: (1) advertising platforms, such as Google and Facebook, which provide targeted advertising; (2) cloud platforms, such as Amazon, which rent out cloud infrastructure and computing services; (3) industrial platforms, most prominent in the Internet of Things sector, manufacturing and embedding sensors and trackers in the production process and logistics; and (4) product and lean platforms, such as Uber and Airbnb, acting as intermediaries for customers and companies selling, buying and renting out products and services. From a Marxist viewpoint, this classification seems to be arbitrary as it does not distinguish between particular commodity types. An alternative is a classification of digital capital accumulation models that is based on commodity types (Fuchs 2020, 54).

Platform capitalism has evolved into an Internet oligopoly, namely a few corporations (Google, Facebook, Amazon, Apple, Microsoft, Alibaba, Baidu, TikTok, etc.) that position themselves as gatekeepers and seek to monopolise the market and optimise through data extractivism (Smyrnaios 2018; Srnicek 2017). Others refer to digital labour to denote the exploitation of Internet user activity (Fuchs 2014). The hegemony of the digital behemoths owes to the enormous amount of money spent in R&D as well as in mergers and acquisitions (Smyrnaios 2018, 67). Corporations such as Google and Amazon adopt a "too big to fail" logic despite the lack of fixed

infrastructures in some cases. The intangibility of information allows software-intensive companies more easily to outsource and subcontract production and services.

On the institutional level, platform capitalism manages to circumvent lawsuits related to tax evasion, anti-competitive practices, and relevant economic scandals (Smyrnaios 2018, 69-72). On the market level, platform capitalism is associated with the violation of worker rights, job insecurity, discrimination, and uberisation (Scholz 2016; Schor et al. 2016; Rosenblat 2018; van Doorn 2017). In short, platform capitalism has been criticised for producing information and power asymmetries, exacerbating inequalities, dismantling the welfare state, eventually turning into an Internet oligopoly often described in terms of techno-feudalism and surveillance capitalism (Morozov 2018; Papadimitropoulos 2020, 2022; Scholz 2016; Srnicek 2017; Smyrnaios 2018; Varoufakis 2020; Zuboff 2019).

In some strands of literature (Fuchs 2020; de Rivera 2020), platform capitalism is not a stand-alone and all-encompassing model but is embedded in the larger socioeconomical order of digital capitalism that represents a new stage of capitalist development, deploying ICTs to reinforce value extraction and capital accumulation mostly through Big Tech, financial markets, rentier economy, and neoliberalism. Digital capitalism is a technologically updated version of industrial capitalism in which digitisation assumes a leading role but does not modify the system's basic class structure and power dynamics. On the one hand, digitisation transforms industrial capitalism into an algorithmic techno-feudalism or rentier capitalism radically altering the means and relations of production by means of the cooptation, algorithmisation, commodification, and colonisation of the general intellect across time and space, which Marx could have not imagined back in his days. Authors such as Yanis Varoufakis (2023) and Guy Standing (2016) use the terms techno-feudalism and rentier capitalism respectively to argue for the transformation of digital platforms into fiefdoms and rent acquisition spaces. Capitalist competition is not strictly defined in terms of lower costs and higher levels of exploitation, but in terms of the monopolisation of the general intellect. Even capitalists themselves now become serfs of digital capitalism, being obliged to pass through the cloud of techno-feudalism in order to operate (Varoufakis 2023). The same holds true for natural resources (e.g. oil, gas, etc.), the exploitation rate of which is set according to the rent paid to the owners of the resource relative to its scarcity. In techno-feudalism, rent migrates from land enclosures and industrial patents to high-tech digital algorithms driving e-commerce, cloud services, etc. Technological change, creative destruction, economic cycles, secular stagnation, overproduction, and the tendency of the rate of profit to fall, among others, have been the core drivers of constant capitalist restructuring, often employing accumulation by dispossession to evolve from industrial capitalism, monopoly capitalism and state capitalism to digital capitalism.

On the other hand, information economics and, in particular, open-source software/hardware and the digital commons update the contradictions of capitalism between capital and labour, exchange value and use value, etc. (Harvey 2014), by juxtaposing anew closed intellectual property rights with the inherent openness of the commons. Closeness and openness feature as poles of multi-class struggle between the hegemony of digital capitalism and the counter-hegemony of post-capitalism (Dardot and Laval 2014; Dean 2009; De Angelis 2017; Dyer-Witherford 1999; Gibson-Graham 1996; 2006; Hardt and Negri 2004). The very technical and socio-economic change that has forced capitalism to restructure and lower costs at the expense of labour has allowed the multiplication of labour resistance through autonomous modes of production. The very digital labour that is being co-opted by platform capitalism on

the Internet is being used to subvert digital capitalism through decentralised organisational models such as platform cooperatives, the digital commons, and peer production (Bauwens et al. 2019; Fuchs 2014; Papadimitropoulos 2020; 2022; Scholz 2016; Scholz and Schneider 2016).

Platform cooperativism, in particular, combines the principles of traditional cooperatives with algorithmic management to launch Internet-enabled worker-owned cooperatives that operate based on a logic opposed to platform capitalism (Scholz 2016; Scholz and Schneider 2016; Spier 2022; Zhu and Marjanovic 2021). Platform cooperatives apply the collective ownership of the means of production. They are run democratically on the basis of the "one member, one vote" principle. Their core principles extend to value distribution as opposed to profit maximisation. Platform cooperatives pursue social, ethical and ecological goals rather than strictly commercial ones.

There is often analytical confusion in the literature with regards to the exact definition of a platform cooperative and its relation to similar organisational models. This is part due to platform cooperativism being a nascent and under-examined organisational model, and part due to different theoretical approaches envisaging its transformative potential. A common definition of a platform cooperative is the following one:

"A platform cooperative, or platform co-op, is 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, 15) define a platform cooperative as "worker co-ops, data co-ops, multi-stakeholder co-ops, and producer co-ops for whom their digital business is central to their operation". They open up the definitional scope to render the centrality of the digital match-making business model a key distinguishing criterion of a platform cooperative, encompassing all ecosystem actors that support the formation and sustainability of platform cooperatives. 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, thereby portraying a diversity of organisational models.

Platform cooperatives have not escaped criticism. Not only do these Internetenabled organisational models have to overcome the shortcomings of traditional cooperatives (De Lautour and Cortese 2016; Malta et al. 2020; Mohamad et al. 2013; Puri and Walsh 2018; Restakis 2010; Simon 2019), they also encounter the overall tendency of platform capitalism towards monopoly formation (Srnicek 2017). Scholars often rehearse the classical Marxist argument that incumbents in the digital economy "would still have the weight of its existing data, network effects, and financial resources to fight off any coop rival" (Srnicek 2017, 69).

The literature commonly assigns to the cooperative economy a social and environmental function (Zaimakis and Nikolaidis 2022). Cooperatives are often considered part of the social and solidarity economy, operating mostly in sectors that are deemed unprofitable by capitalist enterprises. According to the EU 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 identified with the civil society operating in tandem with capitalism and the state.

Traditional coop sectoral enclosure, on the one hand, and emergent platform coop diversity, on the other, resonate with precariousness, marginalisation, fragmentation, whitewashing and corporatisation (Papadimitropoulos 2020; Restakis 2010). Platform cooperativism exhibits contradictions between politics and enterprise, democracy and the market, commons and commercialisation, as well as activism and entrepreneurship (Sandoval 2020).

"Platform cooperativism is proposing a bottom-up strategy of transforming platform capitalism. It seems promising as it offers an avenue for positive critique – a strategy of actively creating alternative realities instead of merely criticising existing ones. Such a bottom-up strategy is particularly appealing in times when many have lost confidence in neoliberal governments to regulate corporate power and support projects for social change. Many examples show that platform co-operatives can have positive impacts on their members and communities. However, thus far they have been unable to create large-scale structural change" (Sandoval 2020, 809).

Tensions and contradictions are detrimental to the overall transformative potential of the cooperative sector. Trebor Scholz (2016) himself oscillates between a moderate and a radical thesis when he contends that it is unrealistic to anticipate that platform co-ops will dominate capitalist markets, thus settling with a more diversified economy.

Overall, the literature has documented three basic normative approaches of the future of platform cooperativism vis-à-vis platform capitalism:

- 1. The liberal regulation towards an eco-friendly, social and human digital capitalism (Codagnone et al. 2016a, 2016b; Eurofound 2018; Frenken et al. 2020; Rani et al. 2021; UNCTAD 2019).
- 2. The reformist regulation of platform capitalism through democratisation and/or nationalisation (Dufresne and Leterme 2021; Fuchs 2014; Graham and Shaw 2017; Huws et al. 2017; Morozov 2018; Srnicek 2017; Stuart and Forde 2023; Varoufakis 2020).
- 3. The radical bottom-up replacement of platform capitalism with grassroots commons-based post-capitalist organisational models aided or not by the state (Bauwens et al. 2019; Fuster and Espelt 2018; Gibson-Graham 1996, 2006; Muldoon 2022; Papadimitropoulos 2020, 2022; Scholz 2016; van Doorn 2019; Woodcock 2020). This tendency often comes in terms of a radical reformism that seeks to create public service Internet platforms and platform coop/public service Internet hybrids that challenge the power of digital capitalism and aim at replacing it (Fuchs 2021).

The above classification covers only the most influential authors and is overly schematic. The paper subscribes to the third scenario, without excluding intersections with the first two projections converging around a post-capitalist trajectory. Currently, around 547 projects in 50 countries incorporate cooperative ownership of digital platforms¹. Platform coops are active in sectors as diverse as asset sharing, gig work, online markets, media and cultural services, financial services, agro-industry, data and

_

¹ https://directory.platform.coop/#1/31.1/-84.8, accessed on January 2, 2024.

software (Scholz 2016). Yet, platform coops on average are struggling to survive the competition with platform capitalism.

Scholars and practitioners advocate for law and policy reforms to support the flourishing of platform cooperatives (Pentzien 2020; Scholz et al. 2021; Schneider 2021). Law and policy recommendations, however, often do not touch upon the commonification of the means and relations of production. The paper suggests that the cooperative economy employs the commons to nurture an ecosystem of cooperatives capable of challenging (platform) capitalism. The literature often focuses on data commons and data cooperatives as vehicles of transformative change (Calzada 2020). Yet, this is not enough. Data commons and digital platforms of participatory democracy – i.e., Decidim² – need to link up with open sustainability standards for the production of material commons (Bauwens et al. 2019).

To tackle traditional and platform coop discordance, the paper draws on the model of open cooperativism introduced by Vasilis Kostakis and Michel Bauwens (2014) to align the commons with ethical market entities and a partner state. Open cooperatives are poised to improve on platform cooperatives, which operate on closed proprietary licenses and, therefore, do not produce commons. Open cooperatives apply instead open federated digital platforms, open protocols, open supply chains, and open contributory accounting to boost a networked collaborative economy anchored on common-pool resources from which a diverse set of agents can draw according to their needs and contribute back according to their capacities. The main argument here is that open cooperatives bear comparative advantages vis-à-vis closed proprietary business models. By accessing common-pool resources either through co-production or in exchange for a fee, ethical market entities benefit from knowledge diffusion and innovation spillovers as well as low production and transaction costs to produce scarcity for the market and abundance for civil society. In partnership with an enabling state, ethical market entities and civil society organizations make for a multistakeholder interface of open cooperativism to co-produce common goods, satisfy basic social needs, enhance social innovation, foster sustainability, and sustain a gift economy alongside a post-capitalist market (Bauwens et al. 2019). In short, the model of open cooperativism introduces an asymmetric coopetition vis-à-vis platform capitalism, aiming to set forth a post-capitalist ethical and sustainable economy.

The paper employs Ernesto Laclau and Chantal Mouffe's (1985) discourse theory of hegemony to analyse the model of open cooperativism through a chain of equivalence articulating the discourses of "commons-based peer production", "ethical market entities", "sustainability" and "the partner state" around the empty signifier of "post-capitalism". A chain of equivalence seeks to accommodate disparate demands of collective action as well as institutional diversity under the model of radical and plural democracy represented by a collective subject aiming to challenge the counter-hegemony of neoliberalism. The collective subject of radical and plural democracy juxtaposes the homo oeconomicus of neoliberalism with the homo cooperans of post-capitalism. The paper yet dissociates from the centralised and hierarchical tendencies of Laclau and Mouffe's discourse theory of hegemony. The goal, instead, is to introduce a post-hegemonic version of the model of open cooperativism with the aim to tilt centralisation towards commonification via decentralisation. To this end, the cooperative economy is not limited to a niche of socio-economic activity dedicated to generating social and environmental utility but is oriented towards the creation of a

CC-BY-NC-ND: Creative Commons License, 2024

² https://decidim.org/

broader post-capitalist economy aligned with the normative principles of radical and plural democracy.

Research on platform coops is relatively nascent. The paper's objective is to contribute to the understanding of platform cooperativism through the illustration of the CoopCycle case study, all the while embedding the latter into a counter-hegemonic political strategy aiming to challenge the current hegemony of platform capitalism.

4. Methodology

The paper adopts a case study approach (Yin 2004), since it is most suitable when exploring novel organisational models such as platform and open cooperatives. The paper has chosen, in particular, the CoopCycle case study, since CoopCycle comprises more than 65 bike delivery coops globally, and therefore prefigures a potential counter-hegemony of platform cooperativism in the bike delivery sector.

Data collection was based on literature review, digital ethnography, participatory observation, and in-depth interviews. The first author participated in the CoopCycle general assembly in September 2022 where he interviewed 10 CoopCycle volunteers. members and coop workers from the CoopCycle federation, including coops from the UK, Spain, Germany, Italy, and Belgium (Appendix I, Appendix II). The interviews lasted between 30 and 60 minutes. Some were recorded on Skype and some on mobile. All interviews were transcribed using Descript. The first author was given access to internal papers documenting CoopCycle's business strategy, legal entity, financial reports, etc. We employed Laclau and Mouffe's discourse analysis to analyse the empirical data (Appendix III). Laclau and Mouffe's discourse analysis is the methodological extension of their political theory of hegemony, applied to empirical research (Howarth 2005). Laclau and Mouffe's discourse analysis offers a matrix of theoretical categories such as floating signifiers, nodal points, and discourses that help explore novel organisational models such as platform and open cooperatives. Discourses are precarious articulations of floating signifiers into nodal points, the latter being privileged signifiers acting as "spider webs" of meaning. Discourses do not rest on linguistic utterances but identify with social practices that embody affects and articulate business models and technological artifacts. In the case of CoopCvcle. discourses, and practices were classified along four nodal points or coding themes: value proposition, governance model, economic policy, and tech/law policy (table 1).

5. Analysis of the Empirical Research's Findings

5.1. Value Proposition

The CoopCycle federation offers onboarding and training services that help new coop members familiarise with the software functions as well as with everyday coop operations. Software manuals and business plans help riders overcome obstacles and conflicts that come along with collective ownership. As an interviewee puts it: "The software is the flagship, in the sense that we invite coops to deploy it. But then we offer onboarding services, we help coops develop business models, find new restaurants, new customers [...] it is a whole package" (Interviewee 3)

Value proposition	Governance model	Economic policy	Tech/law policy
fleet management; the digital commons; anti-capitalist economy; sustainability; lobbying	direct democracy; assembly; centralisation vs decentralisation federation: 67 coops	contribution; fair pay; delivery fee; partnerships federation revenue	federation; association; multi-stakeholder cooperative; worker- owned cooperatives; Coopyleft license
problem: foodtech platform precarisation and uberisation	across 10 countries; 3 employees (2 developers, 1	streams: 2,5% of the added value of coops annual	legal entity: formally a French association,
solution: the digital provision of bike-delivery e-logistics and services	coordinator); a board of 8 administrators; working groups	turnover (500 euros minimum annual fee); donations; grants; awards;	informally a federation, a precursor to a multi- stakeholder cooperative
services: software development; onboarding and training; food	decision-making process: general annual assembly; monthly coop assembly;	consulting services coop revenue streams: delivery	software license: Coopyleft license
delivery; last mile	one coop, one vote; one member, one vote; consent-based decision;	fee 20-30% fair pay: replace	partnership agreement: associations and
sustainability: cost reduction; fair pay; the sharing of value	majority voting; sociocracy	volunteer work in the federation with paid work; couriers paid	collectives joining the federation commit to becoming a
social sustainability: local and ethical social economy; solidarity; care	decision-making tools: Slack, Loomio centralisation: hard	by the hour; annual profits distributed to workers	cooperative within 2 years APIs: external
environmental sustainability: less traffic	and heavy software development (back-end)	partnerships: MAIF; MACIF (insurance); FACTTIC Argentina;	integration with third- party software
and noise; reduced waste and CO ₂ emissions	decentralisation: software customisation; coop self-management; marketing, pricing strategy	ITDP Mexico: Programa Rodando Juntas; Maison des Coursiers / Riders' Shelter; CG SCOP	

Table 1: CoopCycle discourses and practices

Cooperatives in the bike delivery sector respect customs and support local economies, unlike the parasitic nature of platform capitalism manifested in gentrification and tax evasion (Interviewees 7 and 8). Compared to the stressful and insecure conditions that characterise capitalist platforms (Woodcock 2020), bike delivery coops adopt horizontal organisational models wherein riders are treated with care and dignity. Platform coops offer humane working conditions and help workers achieve work-life balance, something which according to our field research, encourages riders to adopt a friendly attitude towards customers without being forced by their employers as it is often the case in profit-driven enterprises.

By contrast to platforms such as Deliveroo, riders can deny tasks without implications for their income or contractual status (Spier 2022, 24-26). The CoopCycle

software does not implement dynamic pricing nor gamification/habit-forming design. The geo-tracking function is not (ab)used for worker surveillance and algorithmic management. CoopCycle also does not use a rating system. Coops rather follow an internal qualitative process to assess riders' performance. As a coop manager states:

"We prefer to discuss with them [...] If they think they are doing a good job, they will feel better about their job. What do you think is a good job for you? What are the things you are good at? What is the thing you are thinking you are doing so well? What is the thing you are not doing well at all? And what is the way to improve that? And we talk once or twice a year with third persons who are members in Citizen Cooperatives [...] They talk with the employees about the job and what is satisfying and unsatisfying" (Interviewee 5).

CoopCycle has been developed by volunteers but it has now passed on to "bike fanatics" (Interviewee 1), with many of the coop members being hard-liners against the use of electric bikes or motorbikes, which would enable them to serve longer distances. Opting for bikes, CoopCycle advocates for an ecological approach in the food delivery sector, which reduces carbon emissions. The federation has lately expanded its activities to include cargo bike last mile delivery within the city limits that coop members operate. Bike couriers are said to be faster in their way to navigate themselves in the city, while contributing to the reduction of traffic and noise pollution (Lowimpact TV 2020). In this respect, CoopCycle's environmental dimension feeds into its value proposition, establishing partnerships with City Councils and companies aiming to adopt a more ecological approach and no longer risk having their trucks stuck in traffic jams. Thus, CoopCycle fosters economic, social and environmental sustainability for coops and local economies.

Yet, the anti-capitalist mission of CoopCycle seemingly contradicts the collaboration with profit-driven companies (supermarkets, retailers, restaurants). Companies often use bike delivery services for "green washing" purposes (Borrits 2019a). But they are also forced by law to adhere to sustainability guidelines such as reducing carbon emissions as well as traffic and noise pollution (Interviewee 5). At the same time, CoopCycle's members seek to partner with companies that share the same values such as fairness and sustainability (Interviewees 7 and 8). Eco-friendly companies, zero-waste restaurants, family-run social enterprises, associations, hospitals and schools, all craft an entrepreneurial coalition in the local economy (Interviewee 8). Thus, the organisational melange of CoopCycle illustrates a diverse ecosystem of a social and solidarity economy. CoopCycle thus prefigures a chain of equivalence (Laclau and Mouffe 1985) linking up diverse actors of the social and solidarity economy around a post-capitalist counter-hegemony variously intersecting with neoliberalism and the capitalist economy (Interviewee 7).

CoopCycle's future vision is to further develop the software and specialise in lobbying to expand the cooperative economy in France and beyond (Interviewee 3). CoopCycle members do not suggest that they can overthrow the hegemony of foodtech behemoths overnight (Interviewees 1, 2, 3, 4). Rather, they envision occupying a niche of socio-economic activity that may prove sustainable in the long term, thus posing a threat for platform capitalism. They are cognizant that the establishment of a global anti-capitalist counter-hegemony presupposes the transformation of politics at a macro-institutional level (Borrits 2019a; 2019b).

5.2. Governance Model

CoopCycle departs from the centralised association of volunteers to decentralise via the federation (Interviewee 1). Centralisation zooms in the development of hard and heavy software (back-end), IT support, onboarding and training, collective bargaining (insurance, group purchasing), consultancy services sold to third-parties (Democracy at Work 2021), new partnerships for large commercial contracts (such as the NHS) (Lowimpact TV 2020), APIs connection and lobbying. Decentralisation zooms out to the autonomy of each member coop to self-organise, customise the software and decide on marketing and pricing strategies. Against the centralised control of users' data by capitalist platforms, the CoopCycle's software decentralised logic means that it is self-hosted and self-administered by the local bike delivery co-ops. The idea is to reduce the costs of the software by sharing development and services (Spier 2022).

"Put differently, in contrast to Deliveroo, UberEat, and Wolt, there is no central instance of the platform. Therefore, there is no (algorithmic) monitoring and control of how local co-ops organise their work or monitoring and control of the couriers themselves. A further implication is that the data that is generated by the platform's operation is hosted on the local co-op's platform instance (rather than on central servers). Thus, the local co-ops and their members (couriers) co-own the platform that they use to organise their work and the data that is generated in the process. The decentralised infrastructure is visible to the customers; it isn't opaque" (Spier 2022, 18).

Democratic decision-making rules both concentric centralised and decentralised governance. The cooperative principle of "one member, one vote" holds both for the annual assembly of the federation where each member coop has one vote irrespectively of size and turnover, and for the monthly assembly of each member coop. In the annual general assembly of the federation, coop members discuss major decisions and the roadmap both in terms of the software development and the institution (e.g., legal structures, finances, etc.). The federation also deploys Slack and Loomio to facilitate ongoing discussions and decision-making (Spier 2022, 21-22). In the monthly assembly of each coop, members deliberate on task distribution, shift planning, business model, funds allocation, points of conflict, paid and unpaid work, among others.

However, the expansion of CoopCycle into other countries has affected democratic processes. As an interviewee comments: "We are becoming too big to be fully democratic. Too many cities, too many projects, not enough time for people" (Interviewee 1). To tackle the problem, the federation has added an extra administrative layer, that is, a board of directors elected by the general assembly to represent member coops. Board members manage everyday workflow at the federation level, receiving a symbolic payment for their services.

5.3. Economic Policy

The main source of revenue for CoopCycle is the member coops' annual contribution (cotisation) of approximately 2-2,5% of their added value to the federation, which cannot be less than € 500 annually. Member coops' annual contribution approximates half of the federation's revenue, with the rest stemming from grants and services (Interviewee 1). The federation settled on that amount after discussing different proposals in the general assembly and on Slack until they finally cast a vote on Loomio. The rationale behind the low rate was to advance the political goal of the federation by

helping coops get off the ground (Interviewee 1). CoopCycle's recent expansion in other countries has increased workflow, which has led to the gradual replacement of the initial volunteer members of the federation with paid employees (CoopCycle 2022a).

CoopCycle specialises in food delivery, which is marked by increased competition, low prices and tight profit margin (Ahuja et al. 2021). During the pandemic, CoopCycle reported 100,000 deliveries and € 3.5 million turnover (Riders Collective 2021). Some restaurants steadily prefer bike delivery coops due to their lower rates (around 20%) compared to the 30% mark-up price of capitalist platforms (Atkinson 2021), as well as the quality of their delivery services such as swift replies to customer calls and the sustenance of interpersonal relationships (Interviewee 8). The lower rates of bike delivery coops drop the prices for both restaurants and customers, thereby laying the groundwork for democratising pricing (Interviewee 7). However, the competition is unfair: thanks to freelancing and fundraising money, profit-driven platforms can afford to charge extremely low prices with the only objective of completely killing the competition (Winner Takes All strategy). They can afford to hire more workers and capture a larger share of the market. Contrary to profit-driven platforms, platform coops bear additional costs since they pay taxes and workers' benefits such as social security, insurance, sick day and holiday leave pay. One should also add inflationary pressures where demand for fast delivery services is slowing amid the cost-of-living crisis.

To adjust, CoopCycle expands operations on last-mile delivery since many cities outsource to bike delivery coops for environmental reasons (Interviewee 1). CoopCycle can thus take advantage of decentralised networks in local commerce and attract new clients and member coops. CoopCycle can also sell decarbonating services to municipalities. CoopCycle, finally, intends to standardise prices for big clients, put forward a business plan as a central filter and develop a media strategy (CoopCycle 2022c; 2022d).

5.4. Tech/Law Policy

Although formally registered as a French association, CoopCycle operates in practice as a federation whose members are cooperatives and collectives scattered across the globe. Upon registration, each cooperative and collective signs an informal agreement that details the terms and conditions of membership (Riders Collective 2021). Membership is granted to cooperatives that hire workers as employees, as opposed to capitalist platforms that classify workers as independent contractors. Membership is also granted to collectives that comply with the national, EU or French criteria for the social and solidarity economy. By signing the agreement, collectives commit to becoming a cooperative within 2 years' time and have no less than 15% of turnover subcontracted by then (Democracy at Work 2021). Members get access to the entire suite of CoopCycle's services, including the software, onboarding, training, etc. (Interviewee 3).

The CoopCycle software's code is licenced under a restrictive version of the copyleft license named Coopyleft that limits the commercial use of the software to cooperatives in which workers are employees and/or to associations that match national, EU or French criteria for the social and solidarity economy (CoopCycle n.d.a). Coopyleft license prevents the appropriation of the digital commons by platform capitalism. The federation acts as the gatekeeper of the license that allows member coops to reduce costs by pooling resources, knowledge, and services on both technical

and organisational levels, such as the platform software, smartphone app, educational material, marketing, legal support, etc.

The federational structure of CoopCycle evinces both strengths and weaknesses. On the one hand, it builds collective bargaining power and broadens the institutional scope of platform cooperativism, thereby enabling the federation's social and economic sustainability. On the other hand, it causes limitations with respect to potential members that cannot acquire a proper regulatory fit or adhere to the principles of the federation (Democracy at Work 2021). For example, the federation reached a compromise lately between bicycle-oriented European co-ops and motorcycle-oriented South American co-ops (Spier 2022).

To tackle regulatory and cultural diversity, the federation is progressing into a multistakeholder cooperative (SCIC³), which allows members from other countries to participate. Members can include workers' cooperatives, citizens' co-operatives, retraining and employment schemes, CoopCycle employees, partners (CoopCycle volunteer association) and public authorities (CoopCycle 2022a).

"Within the multi-stakeholder cooperative some members will be the bike-delivery coops which are the beneficiaries of the activities of the federation, the second part is employees who work for the federation and in the third category we classify the CoopCycle volunteers' association which will be devoted on political lobbying establishing partnerships with organisations and public authorities" (Interviewee 2).

The general principles of the multi-stakeholder cooperative are the following: dual purpose (economic efficiency and social utility), democratic governance (one member, one vote), limited profit (variable capital, indivisible reserves) (CoopCycle 2022a).

6. Discussion: Prefiguring the Transformative Potential of CoopCycle

CoopCycle is a platform cooperative that prefigures the transformative potential of an open cooperative, since it showcases:

- 1. the application of the digital commons in establishing workplace democracy in the bike coop delivery sector.
- 2. the introduction of a copyfair license entitled CoopyLeft with the aim of empowering coops all the while preventing the capitalist cooptation of the digital commons.
- 3. the employment of innovative law to help coops scale globally in the model of a multi-stakeholder cooperative, bringing together ethical market entities, the commons and local authorities.

CoopCycle employs discourses such as "the digital commons", "self-management", "value distribution", "socialism", "sustainability", "lobbying" and "multi-stakeholder cooperative" to articulate the counter-hegemony (Laclau and Mouffe 1985) of a federated anti-capitalist socio-economic model.

However, it is not clear how CoopCycle's anti-capitalist model can challenge the hegemony of platform capitalism. Admittedly, the general assembly of 2022 stressed the need for devising a coherent strategy going forward and set out to propose some scenarios. As soon as the association switches into a multi-stakeholder cooperative,

³ SCIC (Société coopérative d'intérêt collectif) stands for "Cooperative company of public interest".

CoopCycle could turn into a political organisation specialised in lobbying. Alternatively, CoopCycle could focus on software development. Lastly, CoopCycle could combine both lobbying and software development. At the time of writing, the federation was discussing these scenarios on Slack (Interviewees 1, 6). Empirical research has thus far highlighted the strengths of CoopCycle, illustrated most prominently in the software development and the federal model that allows global scaling. It is then likely that the legal entity of a multi-stakeholder cooperative may render the federation more inclusive, flexible, and scalable.

CoopCycle's model of platform cooperativism resonates variously with Kostakis and Bauwen's model of open cooperativism. Just as Kostakis and Bauwens place commons-based peer production at the centre of the cooperation between ethical market entities and a partner state, CoopCycle employs the digital commons to establish links with multiple stakeholders (cooperatives, organisations, local authorities). Echoing Bauwens and Kostakis' (2014) argument for the creation of a copyfair license to help reverse the capitalist cooptation of open-source software, CoopCycle introduces a version of a copyfair license that limits the use of the software to worker-owned cooperatives and collectives that are members of the federation. CoopCycle thus represents a platform cooperative enclosure of the commons. Perhaps that makes sense for an experimental association which is currently evolving into a mature organisation aiming to establish an anti-capitalist block with protective boundaries. In the future, CoopCycle could progress into a cooperative incubator expanding from the food delivery sector into cross-sectoral supply chains to form a broader ecosystem of platform cooperativism. Interestingly, we are witnessing CoopCycle slowly moving into that direction by exploring partnerships with like-minded organisations in France (Interviewee 1). CoopCycle is also looking to join forces with Open Food Network (Papadimitropoulos and Malamidis 2023) and expand their operation in the Basque country.

The CoopCycle case study can be instructive as to how to address the lack of business knowledge and offer practical guidance on how platform cooperatives can be formed and governed so as to reconcile the occasionally competing interests of stakeholders in service of a cooperative's overarching purpose(s). The French legislative framework can be copied abroad to create multi-stakeholder cooperatives across the globe. Multi-stakeholder cooperatives could further align with ethical market entities and progressive local municipalities in the model of open cooperativism that puts forth a commons-oriented transition towards post-capitalism. Platform cooperatives could turn into open cooperatives by applying open protocols, open supply chains, open logistics and open value accounting to create a common pool of resources from which ethical market entities can draw and contribute according to their needs and capacities (Papadimitropoulos 2020, 95-96). Open cooperatives internalise negative externalities; adopt multi-stakeholder governance models; contribute to the creation of material and immaterial commons; and are oriented towards a global socioeconomic and political transformation, albeit locally based (Papadimitropoulos 2020, 95). Ethical market entities that align with open cooperatives and local authorities can access a vast pool of material and immaterial commons on conditions of reciprocity and thus obtain a competitive advantage over proprietary firms that rely solely on their private R&D (Papadimitropoulos 2020, 97). The hybrid of post-capitalist commons can advance a grassroots counter-hegemony that proceeds in-against-beyond capitalism, clearing ways towards a new ecological, more democratic and socially fair order (Kioupkiolis 2023). Platform cooperatives such as CoopCycle may offer a glimpse of this future vision.

CoopCycle prefigures a premature chain of equivalence (Laclau and Mouffe 1985) linking up the commons, ethical market entities and progressive local administration around the counter-hegemony of open cooperativism. Open cooperatives would fill in the empty signifier of "plural and radical democracy" with cross-sectoral value chains, inclusive governance models, sustainability economics and innovative law (copyfair licenses and multi-stakeholder coops). The collective subject of plural and radical democracy would represent a diversity of demands and institutions embedded into the model of open cooperativism that could help tilt the centralised, hierarchical and statist elements of Laclau and Mouffe's hegemony towards the decentralised post-hegemony of a commons-based post-capitalist economy. CoopCycle could thus contribute to the counter-hegemony of radical and plural democracy vis-à-vis the current hegemony of neoliberalism. As such, CoopCycle showcases a platform cooperative model of ecotechno-social innovation with transformative potential going forward.

That said, this paper offers only a glimpse of the transformative potential of open cooperativism passed through the political lens of Laclau and Mouffe's counter-hegemony of radical and plural democracy. Future research needs to dive deep into the three-zoned structure of the model of open cooperativism – ethical market entities, the civil society and partner state – and examine each component separately as well as their integration into an organic chain of equivalence that could ignite systemic change. Both theoretical and empirical work is sine qua non on all fronts.

7. Conclusions

The paper set out to dissolve a contrast between traditional coop sectoral enclosure, on the one hand, and emergent platform coop diversity, on the other hand. The paper drew on the model of open cooperativism introduced by Kostakis and Bauwens and passed through the political lens of Laclau and Mouffe's discourse theory of hegemony to weave a narrative that seeks to unite and broaden the scope of the cooperative sector. In doing so, the paper reviewed CoopCycle as an illustrative case study of platform cooperativism operating in the bike delivery sector. We applied Laclau and Mouffe's discourse analysis to examine the discourses and practices of CoopCycle, classified along four nodal points/coding themes: value proposition, governance model, economic policy, tech/law policy. CoopCycle is a dynamic case of platform cooperativism, currently expanding across the globe both at institutional and operational level. CoopCycle bears a transformative potential that can enhance the counter-hegemony of post-capitalism against the current hegemony of neoliberalism. The paper suggests that platform cooperatives turn into open cooperatives by applying open protocols, open and cross-sectoral value chains, open logistics and open value accounting to create a common pool of resources from which actors can draw and contribute according to their needs and capacities. The hybrid of post-capitalist commons can challenge capitalism on the grounds of a more democratic, ecological, and fair socio-economic order. Platform cooperatives such as CoopCycle may offer a glimpse of this future vision.

References

Ahuja, Kabir, Vishwa Chandra, Victoria Lord, and Curtis Peens. 2021. Ordering in: The Rapid Evolution of Food Delivery. McKinsey & Company. Accessed March 29, 2023. https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ordering-in-the-rapid-evolution-of-food-delivery

Barbrook Richard and Andy Cameron. 1996. The Californian Ideology. *Science as Culture* 6(1): 44-72. DOI: http://doi.org/10.1080/09505439609526455

Bauwens, Michel and Vasilis Kostakis. 2014. From the Communism of Capital to Capital for the Commons: Towards an Open Co-operativism. *tripleC: Communication Capitalism & Critique* 12 (1): 356-361. DOI: https://doi.org/10.31269/triplec.v12i1.561

- Bauwens, Michel, Vasilis Kostakis and Alex Pazaitis. 2019. Peer to Peer: The Commons Manifesto. London: University of Westminster Press. DOI: https://doi.org/10.16997/book33
- Belk, Russell. 2014. Sharing Versus Pseudo-Sharing in Web 2.0. *Anthropologist* 18 (1): 7.23. DOI: http://doi.org10.1080/09720073.2014.11891518
- Belk, Russell. 2009. Sharing. *Journal of Consumer Research* 36 (5): 715-734. DOI: http://doi.org10.1086/612649
- Birkinbine, Benjamin. 2020. *Incorporating the Digital Commons. Corporate Involvement in Free and Open-Source Software*. UK: University of Westminster Press. DOI: http://doi.org/10.16997/book39
- Bock, Anne-Katrin, Laurent Bontoux, Susana Figueiredo do Nascimento, and Alice Szczepanikova. 2016. The Future of the EU Collaborative Economy Using Scenarios to Explore Future Implications for Employment. EUR 28051 EN. DOI: https://doi.org/10.2760/354417
- Boltanski, Luc and Ève Chiapello. (2005) *The New Spirit of Capitalism*. London and New York: Verso.
- Botsman, Rachel and Roo Rogers. 2010. What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live. New York: Harper Business.
- Brown, Wendy. 2015. *Undoing the Demos: Neoliberalism's Stealth Revolution*. New York: Zone Books.
- Calzada, Igor. 2020. Platform and Data Co-operatives Amidst European Pandemic Citizenship. Sustainability, 12 (20): 8309. DOI: https://doi.org/10.3390/su12208309
- Codagnone, Cristiano, Fabienne Abadie and Federico Biagi. 2016a. *The Future of Work in the 'Sharing Economy'. Market Efficiencies and Equitable Opportunities or Unfair Precarisation?* Joint Research Centre, Institute for Prospective Technological Studies. EUR 27913 EN. DOI: https://doi.org/10.2791/431485
- Codagnone, Cristiano, Federico Biagi and Fabienne Abadie. 2016b. *The Passions and the Interests: Unpacking the 'Sharing Economy'*. Joint Research Centre, Institute for Prospective Technological Studies. EUR 27914 EN. DOI: https://doi.org/10.2791/474555
- Dardot, Pierre and Christian Laval. 2014. *Commun: Essais sur la révolution au XXIe siècle*. Paris: La Découverte.
- De Angelis, Massimo. 2017. *Omnia Sunt Communia. On the Commons and the Transformation to Postcapitalism.* London: Zed Books.
- De Lautour, Vassili Joannidès, and Corinne Cortese. 2016. Cooperatives: Governance and Accountability Systems for a Better World? *Journal of Accounting and Organisational Change* 12 (1): 1-9. DOI: http://doi.org10.1108/JAOC-03-2015-0033
- De Rivera, Javier. 2020. A Guide to Understanding and Combatting Digital Capitalism. tripleC: Communication Capitalism & Critique 18 (2): 725-743. DOI: https://doi.org/10.31269/triplec.v18i2.1173
- Dean, Jodi. 2009. Democracy and Other Neoliberal Fantasies. Communicative Capitalism and Left Politics. Durham, NC: Duke University Press.
- Dufresne, Anne and Leterme Cédric. 2021. *App Workers United. The Struggle for Rights in the Gig Economy*. Brussels: GUE/NGL-The Left in the European Parliament. Accessed July 7, 2023. https://left.eu/content/uploads/2021/02/Study_EMPL2-v2-App.pdf
- Dyer-Witheford, Nick. 1999. *Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism*. Urbana, IL: University of Illinois Press.

- Frenken, Koen. (2017) Political Economies and Environmental Futures for the Sharing Economy. *Philosophical Transactions of the Royal Society*. A 375: 20160367. DOI: https://doi.org/10.1098/rsta.2016.0367
- Frenken, Koen and Juliet Schor. 2017. Putting the Sharing Economy into Perspective. *Environmental Innovation and Societal Transitions* 23: 3-10. DOI: https://doi.org/10.1016/j.eist.2017.01.003
- Frenken, Koen, Arnoud van Waes, Peter Pelzer, Magda Smink and Rinie van Est. 2020. Safeguarding Public Interests in the Platform Economy. *Policy & Internet* 12 (5): 400-425. DOI: https://doi.org/10.1002/poi3.217
- Fuchs, Christian. 2021. The Digital Commons and the Digital Public Sphere: How to Advance Digital Democracy Today. *Westminster Papers in Communication and Culture* 16 (1): 9-26. DOI: https://doi.org/10.16997/wpcc.917
- Fuchs, Christian. 2020. Marxism: *Karl Marx's Fifteen Key Concepts for Cultural and Communication Studies*. New York: Routledge.
- Fuchs, Christian. 2014. Digital Labour and Marx. Abingdon: Routledge.
- Fuchs, Christian. 2008. *Internet and Society: Social Theory in the Information Age.* New York: Routledge.
- Fuster, Mayo Moreli, Bruno Carballa Smichowski, Guido Smorto, Ricard Espelt, Paola Imperatore, Manel Rebordosa, Marc Rocas, Natalia Rodriguez, Enric Senabre and Marco Ciurcina. 2017. *Multidisciplinary Framework on Commons Collaborative Economy*. Report for DECODE project. Accessed July 7, 2023. https://decodeproject.eu/publications/multidisciplinary-framework-commons-collaborative-
- economy
- Gibson-Graham, Julie Katherine. 2006. *A Postcapitalist Politics*. Minneapolis, MN: University of Minnesota Press.
- Gibson-Graham, Julie Katherine. 1996. *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy*. Minneapolis, MN: University of Minnesota Press.
- Graham, Mark and Anwar Mohammad Amir. 2018. Two Models for a Fairer Sharing Economy. In *The Cambridge Handbook of the Law of the Sharing Economy*, edited by Nestor M. Davidson, Michèle Finck and John J. Infranca, 328-340. Cambridge: Cambridge University Press.
- Graham, Mark and Joe Shaw, eds. 2017. *Towards a Fairer Gig Economy*. Meatspace Press. Accessed July 7, 2023.
 - http://www.relats.org/documentos/FT.SIND.GU.UNIgigeconomy.pdf
- Hardt, Michael and Antonio Negri. 2004. *Multitude: War and Democracy in the Age of Em*pire. London: Penguin.
- Harvey, David. 2014. Seventeen Contradictions and the End of Capitalism. UK: Profile Books.
- Harvey, David. 2005. A Brief History of Neoliberalism. Oxford: Oxford.
- Howe, Jeff. 2008. *Crowdsourcing: Why the Power of the Crowd is Driving the Future of Business*. New York: Crown Business
- Huws, Ursula., Neil H. Spencer, Dag S. Syrdal, and Kaire Holts. 2018. Work in the European Gig Economy: Research Results from the UK, Sweden, Germany, Austria, The Netherlands, Switzerland and Italy. FEPS, UNI Europa, University of Hertfordshire. Accessed July 7, 2023.
 - https://uhra.herts.ac.uk/bitstream/handle/2299/19922/Huws_U._Spencer_N.H._Syrdal_D.S._Holt_K._2017_.pdf
- Kioupkiolis, Alexandros. 2023. Common Hegemony, Populism, and the New Municipalism. Democratic Alter-Politics and Transformative Strategies. New York: Routledge.
- Kostakis, Vasilis and Bauwens Michel. 2014. *Network Society and Future Scenarios for a Collaborative Economy*. Basingstoke: Palgrave Macmillan.
- Kostakis, Vasilis, Vangelis Vragoteris and Indra Lal Acharja. 2021. Can Peer Production Democratize Technology and Society? A Critical Review of the Critiques. *Futures* 131 (No Issue Available) 102760. DOI: https://doi.org/10.1016/j.futures.2021.102760

Laclau, Ernesto and Chantal Mouffe. 1985. *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. London: Verso.

- Malta, Mariana Curado, Ana Maria Bandeira, Rui Bertuzi, Conceição Castro, Deolinda Meira, Denise Pereira, Inês Pereira, Isabel Vieira and Brízida Tomé. 2020. *A Framework for Cooperatives' Transparency- A linked data approach*. Congreso Internacional de Investigadores en Economía Social y Cooperativa. Accessed July 7, 2023. http://ciriec.es/wp-content/uploads/2020/09/COMUN-087-T16-CURADO-BANDEIRA-et-al-ok.pdf
- Mayo, Ed. 2019. Digital Democracy? Options for the International Cooperative Alliance to Advance Platform Coops. International Co-operative Alliance. Accessed July 7, 2023. https://www.uk.coop/sites/default/files/2020-11/annex 1 digital_democracy_discussion_paper en.pdf
- Mohamad, Maslinawati, Intan Waheedah Othman, and Arun Mohamed. 2013. Accountability Issues and Challenges: The Scenario for Malaysian Cooperative Movement. *World Academy of Science, Engineering and Technology, International Journal of Economics and Management Engineering* 7 (6): 1503-1508. DOI: http://doi.org10.31580/jei.v6i4.1096
- Morozov, Evgeny. 2018. From Airbnb to City Bikes, the 'Sharing Economy' Has Been Seized by Big Money. *The Guardian*. Accessed July 7, 2023. https://www.theguardian.com/commentisfree/2018/nov/27/airbnb-city-bikes-sharing-economy-big-money
- Muldoon, James. 2022. Platform Socialism. London: Pluto Press.
- Olma, Sebastian. 2014. Never Mind the Sharing Economy: Here's Platform Capitalism. Institute of Network Cultures. Accessed July 7, 2023. http://networkcultures.org/mycreativity/2014/10/16/never-mind-the-sharing-economy-heres-platform-capitalism/
- Papadimitropoulos, Vangelis. 2022. *Blockchain and the Commons*. London: Routledge. Papadimitropoulos, Vangelis. 2020. *The Commons: Economic Alternatives in the Digital Age.*

London: Westminster Press. DOI: https://doi.org/10.16997/book46

- Papadimitropoulos, Vangelis and Haris Malamidis. 2023. Prefiguring the Counter-Hegemony of Open Cooperativism: the case of Open Food Network. *Journal of Rural Studies* Volume 101, 103067, ISSN 0743-0167. DOI: https://doi.org/10.1016/j.jrurstud.2023.103067
- Pentzien, Jonas. 2020. *The Politics of Platform Cooperativism. Institute for the Cooperative Digital Economy*. Accessed July 7, 2023. https://ia801701.us.archive.org/10/items/jonas-pentzien-single-web_202012/Jonas%20Pentzien_single_web.pdf
- Puri, Drona Lal and John Walsh. 2018. Impact of Good Governance on Performance of Cooperatives in Nepal. *Management and Marketing* XVI (2): 206-222. https://api.semanticscholar.org/CorpusID:169141022
- Rani, Uma, Rishabh Kumar Dhir, Marianne Furrer, Nóra Gőbel, Angeliki Moraiti, Sean Cooney, and Alberto Coddou Mc Manus. 2021. *World Employment and Social Outlook: the Role of Digital Labour Platforms in Transforming the World of Work*. Geneva: ILO. Accessed July 7, 2023. https://www.ilo.org/global/research/global-reports/weso/2021/WCMS_771749/lang--en/index.htm
- Restakis, John. 2010. *Humanising the Economy: Co-operatives in the Age of Capital*. Gabriola Island, Canada: New Society Publishers.
- Rosenblat, Alex. 2018. *Uberland: How Algorithms are Rewriting the Rules of Work*. Oakland, CA: University of California Press.
- Sandoval, Marisol. 2020. Entrepreneurial Activism? Platform Cooperativism Between Subversion and Co-optation. Critical Sociology Vol. 46(6) 801–817. DOI: http://doi.org10.1177/0896920519870577
- Schneider, Nathan. 2021. Enabling Community-Owned Platforms: A Proposal for a Tech New Deal. In *Regulating Big Tech: Policy Responses to Digital Dominance*, edited by Martin Moore and DamianTambini, 74-97. Oxford: Oxford University Press.

- Scholz, Trebor. 2016. *Platform Cooperativism. Challenging the Corporate Sharing Economy*. New York: Rosa Luxemburg Stiftung.
- Scholz, Trebor and Nathan Schneider, eds. 2016. Ours to Hack and to Own. The Rise of Platform Cooperativism, a New Vision for the Future of Work and a Fairer Internet. New York: Or Books.
- Scholz, Trebor, Morshed Mannan, Joans Pentzien, and Hal Plotkin. 2021. *Policies for Cooperative Ownership in the Digital Economy*. Los Angeles, CA: Berggruen Institute. Accessed July 7, 2023. https://www.berggruen.org/ideas/articles/policies-for-cooperative-ownership-in-the-digital-economy/
- Schor, B. Juliet 2015. Getting Sharing Right. *Contexts* 14 (1): 14-15. DOI: http://doi.org/10.1177/1536504214567860
- Schor, B. Juliet, Connor Fitzmaurice, Lindsey B. Carfagna, Will Attwood-Charles, and Emilie Dubois Poteat. 2016. *Paradoxes of Openness and Distinction in the Sharing Economy. Poetics*, 54: 66-81
- Sennett, Richard. 1998. The Corrosion of Character. The Personal Consequences of Work in the New Capitalism. New York: Norton
- Simon, H. William. 2019. Economic Democracy and Enterprise Form in Finance. *Politics & Society* 47 (4): 557-571. DOI: https://doi.org/10.1177/0032329219880372
- Simon, Joyce, Mark Stuart and Chris Forde. 2023. Theorising Labour Unrest and Trade Unionism in the Platform Economy. *New Technology, Work and Employment* 38 (1): 21-40. DOI: https://doi.org/10.1111/ntwe.12252
- Slee, Tom. 2015. What's Yours is Mine, Against the Sharing Economy. New York: Or Books. Smyrnaios, Nikos. 2018. Internet Oligopoly. The Corporate Takeover of Our Digital World. Bingley: Emerald Publishing.
- Spier, Shaked. 2022. *The Ethics and Politics of Platform Cooperatives*. Platform Cooperativism Consortium. New York: Institute for Digital Cooperative Economy. Accessed July 7, 2023. https://ia802203.us.archive.org/8/items/shaked-spier/Shaked%20Spier%20%28Mar%2014%29.pdf
- Srnicek, Nick. 2017. Platform Capitalism. Cambridge: Polity Press
- Standing, Guy. 2016. *The Corruption of Capitalism: Why Rentiers Thrive and Work Does Not Pay.* London, Biteback.
- Stratford, Beth. 2020. The Threat of Rent Extraction in a Resource-Constrained Future, *Ecological Economics*, Volume 169 (No Issue Available), 106524, ISSN 0921-8009. DOI: https://doi.org/10.1016/j.ecolecon.2019.106524.
- Sundararajan, Arun. 2016. The Sharing Economy. The End of Employment and the Rise of Crowd-based Capitalism. Cambridge, MA: MIT Press.
- Thépot, Stéphane. 2023. CoopCycle: L' Ubérisation N'est Pas Une Fatalité. Sesame. Accessed January 2, 2023. https://revue-sesame-inrae.fr/coopcycle-luberisation-nest-pas-une-fatalite/
- UNCTAD. 2019. Digital economy report 2019. Value Creation and Capture: Implications for Developing Countries. Geneva: United Nations. Accessed July 7, 2023. https://unctad.org/system/files/official-document/der2019_en.pdf
- Van Doorn, Niels. 2017. Platform Cooperativism and the Problem of the Outside. *Culture Digitally*. Accessed July 7, 2023. https://culturedigitally.org/2017/02/platform-cooperativism-and-the-problem-of-the-outside
- Varoufakis, Yanis. 2023. Technofeudalism. London: Bodley Head.
- Varoufakis, Yanis. 2020. *Another Now: Dispatches from an Alternative Present.* London: Bodley Head.
- Varvarousis, Angelos and Georgios Tsitsirigkos. 2019. Social Enterprises and their Ecosystems in Europe. Country Report: Greece. European Commission. Luxembourg: Publications Office of the European Union. Accessed July 7, 2023. https://ec.europa.eu/social/main.jsp?pager.offset=10&advSearchKey=socnteco&mode=ad

 $\frac{vancedSubmit\&catId=22\&doc_submit=\&policyArea=0\&policyAreaSub=0\&country=0\&year=0}{=0}$

Woodcock, Jamie. 2020. The Algorithmic Panopticon at Deliveroo: Measurement, Precarity, and the Illusion of Control. *Ephemera: Theory & Politics in Organisation* 20 (3): 67-95. Accessed July 7, 2023. https://ephemerajournal.org/contribution/algorithmic-panopticon-deliveroo-measurement-precarity-and-illusion-control-0

Zaimakis, Giannis and Evangelos Nikolaidis, eds. 2022. *Studies in Social and Solidarity Economy. Approaches, Challenges, Applications*. Irakleio: University of Crete. (in Greek)

Zhu, Jiang and Olivera Marjanovic. 2021. A Different Kind of Sharing Economy: A Literature Review of Platform Cooperatives. In *Proceedings of the 54th Hawaii International Conference on System Sciences*. 4128-4137. Accessed July 7, 2023. https://hdl.handle.net/10125/71119

Zuboff, Shoshana. 2019. The Age of Surveillance Capitalism. New York: Hachette.

Appendix I: Interviewees' Roles and Organisations

Interviewee	Role	Organisation	Country
1	Coordinator, employee	CoopCycle	France
2	Founding member, employee	CoopCycle	France
3	Volunteer	CoopCycle	France
4	Volunteer	CoopCycle	France
5	Core member	CoopCycle/Rayon9	Belgium
6	Core member	CoopCycle/Eraman	Spain
7	Member, coop worker	CoopCycle/York collective	UK
8	Member, coop worker	CoopCycle/Colibri	Italy
9	Member, coop worker	CoopCycle/Naofood	France
10	Member, coop worker	CoopCycle/Mensakas	Spain

Appendix II: Interview Questions

For CoopCycle members, volunteers

- 1) What is the mission of CoopCycle?
- 2) What is the strategy to achieve your mission?
- 3) How did you reach a decision on the contribution rate?
- 4) What will be the role of CoopCycle within the multi-stakeholder cooperative?

- 5) Do CoopCycle and the coops in the federation use the same servers? How do you protect the data? How do you protect the licence?
- 6) What do you consider a correct balance between centralisation and decentralisation in the federation?
- 7) What is your relation to trade unions and social movements?
- 8) Most of the clients you work with are capitalist enterprises? Is it a contradiction? Is there any "green washing" on behalf of these clients?
- 9) Are you planning to connect to other supply chains in the future?

For coop managers, workers

- 1) What are the motivations for riders joining a bike delivery coop?
- 2) What types of deliveries do you handle?
- 3) Do you assess work performance? If so, how?
- 4) How many women work as a rider?
- 5) How does self-management work?
- 6) Do you have riders in your cooperative employed as freelancers, subcontractors?
- 7) How are riders getting paid? What is considered a well-paying salary for a rider in your country?
- 8) What problems do you face? How do you address these problems?
- 9) Most of the clients you work with are capitalist enterprises? Is it a contradiction? Is there perhaps any "green washing" on behalf of these clients?

Appendix III: Empirical Material

Press and Blog Articles

- Atkinson, Sophie. 2021. EU: 'More than a Job': the Food Delivery Co-ops Putting Fairness into the Gig Economy. Global Dialogue. Accessed July 7, 2023.
 - https://globaldialogue.online/ally-en/2021/eu-more-than-a-job-the-food-delivery-co-ops-putting-fairness-into-the-gig-economy/
- Borrits, Benoît. 2019a. Coopcycle: Construire la Qualification du Métier Contre le Dumping Social. Association Autogestion. Accessed July 7, 2023.
 - https://autogestion.asso.fr/coopcycle-construire-la-qualification-du-metier-contre-le-dumping-social/
- Borrits, Benoît. 2019b. Nous Sommes une Start-up Anarcho-Communiste»: Coopcycle Autoorganise les Coursiers à Vélo. Alternatives. Accessed July 7, 2023. https://basta.media/Nous-sommes-une-start-up-multinationale-anarcho-communiste-
 - <u>nttps://basta.media/Nous-sommes-une-start-up-multinationale-anarcho-communiste-Coopcycle-auto</u>
- Carnegie, Megan. 2022. Worker-Owned Apps Are Redefining the Sharing Economy. Wired. Accessed July 7, 2023. https://www.wired.co.uk/article/gig-economy-worker-owned-apps
- Cruz, Laura. 2020. Núria Soto: "A Deliveroo no le Interesa que Digamos que nos Tuvo que Contratar". El Salto. Accessed July 7, 2023.
 - https://www.elsaltodiario.com/precariedad/nuria-soto-a-deliveroo-no-le-interesa-que-digamos-que-nos-tuvo-que-contratar
- Dorcadie, Mathilde. 2018. Face aux Plateformes Numériques, les Livreurs à Vélo Européens S'organisent. Basta!. Accessed July 7, 2023. https://basta.media/Face-aux-plates-formes-numeriques-les-livreurs-a-velo-europeens-s-organisent
- Framasoft. 2017. CoopCycle, le Projet Coopératif qui Roule Social. Framablog. Accessed July 7, 2023. https://framablog.org/2017/10/28/coopcycle-le-projet-cooperatif-qui-roule-social/

Hayes, Ryan. 2019. Worker-Owned Apps Are Trying to Fix the Gig Economy's Exploitation. Vice. Accessed July 7, 2023. https://www.vice.com/en/article/pa75a8/worker-owned-apps-are-trying-to-fix-the-gig-economys-exploitation

Kasparian, Denise. 2022. CoopCycle in Argentina. Grassroots Economic Organising. Accessed July 7, 2023. https://geo.coop/articles/coopcycle-argentina

Le Club de Mediapart. n.d. Le blog de CoopCycle. Accessed July 7, 2023. https://blogs.mediapart.fr/coopcycle/blog

Souteyrat, Mathias. 2022. Saint-Étienne: Face à Uber Eats et Deliveroo, quel Avenir pour Les Coursiers Stéphanois? Actu Saint-Étienne. Accessed July 7, 2023. https://actu.fr/auvergne-rhone-alpes/saint-etienne_42218/saint-etienne-face-a-uber-eats-et-deliveroo-quel-avenir-pour-les-coursiers-stephanois_48966070.html

Websites

CoopCycle. n.d.a. Licence. Accessed July 7, 2023. https://wiki.coopcycle.org/en:licence

CoopCycle. n.d.b. Home. Accessed July 7, 2023. https://coopcycle.org/en/

Cyclome. n.d.a. Accueil. Accessed July 7, 2023. https://www.cyclome.fr/

Cyclome. n.d.b. Nos articles. Découvrez Toutes les Actualités de Cyclope! Accessed July 7, 2023. https://www.cyclome.fr/blog/

International Cooperative Alliance (n.d.) France. Accessed July 7, 2023.

https://coops4dev.coop/en/4deveurope/france

Le Monde Nouveau. 2020. Les Coursiers Montpelliérains. Accessed July 7, 2023. https://www.lemondenouveau.fr/2020/12/les-coursiers-montpellierains/

Les Coursiers Stéphanois. Coopérative de Cyclo-logistique. n.d. Nous découvrir. Accessed July 7, 2023. https://www.coursiers-stephanois.fr/

Les Ecossolies. n.d. Home. Accessed July 7, 2023. https://www.ecossolies.fr/

Open Collective. n.d. CoopCycle. Accessed July 7, 2023.

https://opencollective.com/coopcycle

Youtube Videos

Democracy at Work. 2021. All Things Co-op: CoopCycle [Video]. Accessed July 7, 2023. https://www.youtube.com/watch?v=26qCKUjS9go&t=21s

Lowimpact TV. 2020. CoopCycle Federation: a Bicycle Courier Co-op in Every Town [Video]. Accessed July 7, 2023. https://www.youtube.com/watch?v=Q6hzXcLda-U&t=671s

Means TV. 2020. Reclaiming Work: The Story of Coop Cycle | Official Trailer | Means TV [Video] Accessed July 7, 2023. https://www.youtube.com/watch?v=RCnHH3N8pVA

Riders Collective. 2021. Cooperatives - HOW TO? - The CoopCycle Model [Video] Accessed July 7, 2023. https://www.youtube.com/watch?v=OGYoyB-rrig

Internal Documents

CoopCycle. 2021. Activity Report 2019-2020.

CoopCycle. 2022a. SCIC project-1.

CoopCycle. 2022b. 2021-2022 Reports.

CoopCycle 2022c. Intro in Business Strategy.

CoopCycle 2022d. How to Make a Cooperative Business Plan.

About the Authors

Vangelis Papadimitropoulos

Vangelis Papadimitropoulos is a post doc researcher affiliated with the Panteion University of Athens. Currently he is the principal investigator in the research project entitled "Techno-Social Innovation in the Collaborative Economy". He holds a PhD in the political philosophy of

Cornelius Castoriadis and has written extensively on democratic political theory, political economy, platform coops and the commons.

Haris Malamidis

Haris Malamidis is an Assistant Professor in the Department of Sociology at the National and Kapodistrian University of Athens. His research interests focus on social movements, social and solidarity economy, the commons, migration, integration and social care.