Platform Cooperativism Consortium

INSTITUTE FOR THE COOPERATIVE DIGITAL ECONOMY

FOOD COMMONS: NURTURE VS. CAPTURE

A Report by

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INTRODUCTION

Food Commons: Nurture vs. Capture
On the economic and political challenges of scaling local food systems through open source and cooperative platforms

Introduction: Food Systems, Platform Capitalism, and Crisis

Since 2021, Eurozone food prices have soared, with France for instance seeing a significant 14.9% hike by May 2023[1], prompting households to cut back on their food spending[2]. This surge, exacerbated by geopolitical and pandemic events, is largely attributed to the significant profit margins of major players in the agri-food sector[3], such as production and distribution giants[4]. This phenomenon, termed “sellers’ inflation,”[5] is also evident in the United States and results from the dominant market control exerted by a few large firms. This profit-driven approach, detrimental to both workers[6] and consumers, is characteristic of the capitalist model prevalent in agriculture and food industries.

Indeed, food production and distribution are exceptionally concentrated sectors, which increasingly take advantage of historically marginalized groups, such as women, immigrants[7], ethnic minorities and those of lower socioeconomic statuses[8]. In France and in the United States for instance, no more than 6 groups share the large majority of the distribution markets, thereby benefiting from quasi-monopolistic positions[9]. Like in the United-Kingdom and the Netherlands, these giants have seen a boom in their benefits and dividends during the Covid pandemic, while the revenues of women working in these supply chains stagnated, or even declined[10]. The inequalities that structure it can be highlighted by the fact that listed retailers have augmented the dividends distributed to their shareholders by 123% between 2019 and 2020[11], while only a small fraction of their revenues during the pandemic can be attributed to labor-related costs. Moreover, if the often invisibilized working conditions within the food industry keep deteriorating, its exploitative nature also has repercussions on small-scale producers, who try their best to survive outside the channels of industrial agriculture. In a global policy framework that encourages predatory competition and favors industrial or extractivist and productivist models, small-scale producers are often constrained to sell their products at prices lower than their production costs, which among other manifestations shows the incapacity of such a global food system to ensure the subsistence of all.

One of the promises held by the platform or "sharing" economy was to get around monopolies, by enabling, thanks to digital platforms and the Internet, decentralized or "disintermediated" economic exchanges.[12] Definitely naïve in hindsight, this idealistic promise has given way to the very concrete observation of a tech sector dominated by quasi-monopolistic platforms, whose exploitative and predatory nature has now been well-documented. What can be said about platforms in the already concentrated sector of agriculture and food distribution? As Nick Srnicek[13] points out, platforms, as a new model of the firm, have entered most sectors of the economy, such as technology (Google, Facebook, Amazon), mobility (Uber), housing (Airbnb), industry (General Electric, Siemens), but also agriculture (John Deere and Monsanto). Indeed, along the whole food chain, platform companies including tech giants as well as start-ups are becoming vectors for the organization of new forms of labor, the extension of the market sphere, as well as new relations of domination between labor and capital, people, and between them and nature. Connected objects such as sensors or high-resolution and satellite imagery tools are covering a growing share of the living[14] and the machines used in agriculture of all kinds. These allow for the extraction and analysis of data by the firms commercializing such tools, wielding discourses on a new type of (techno solutionist) agroecology whereby these could solve all kinds of problems related to the optimization of yields. Agtech is another example of this ambivalent agroecological movement. In the realm of distribution, food delivery platforms are most prominent, while platforms or online marketplaces that allow buying prepared meals or fresh, local, and sometimes organic, products are rapidly developing. Spanning the upstream and downstream parts of the food chain, we can also mention that Tesco, a British distribution giant, owns Dunnhumby, a firm specialized in the analysis of consumer behavior that it sells to clients such as Coca Cola and Macy's, and who has attempted to build its own platform based on a fidelity program that awards consumers and directs them towards Tesco supermarkets, while gathering more data on their behavior.[15] Another example pointed out by Srnicek[16] is that of the San Francisco-based "lean platform" Instacart, a platform for grocery delivery that externalizes its delivery cost to suppliers and retailers (such as Pepsi and Whole Foods), in exchange for advertisement space, which ultimately resulted, due to lack of profitability, in wage reductions.

These various digital transformations of the agriculture and food sectors do not come from the platform itself, as if it was itself determinant as a neutral technological product, but from the transformations of legal statuses, of work and employment, the balance of power, social struggles,[17] and social norms more broadly.[18] Indeed, the evolutions that we are witnessing in agriculture and food sectors (the rise of wage labor, the growing importance of big industry ownership of land, its financialization, as well as its digitalization) can be seen as part of the broader historical evolution of capitalist systems. While some see in these evolutions the potential of a “third agricultural revolution”[19], others, and namely those contributing to the food regime literature, see the emergence of a third food regime, where financial capital has an increased influence on agri-food systems,[20] typical of their neoliberal restructuring, bringing some to go further and call it a neoliberal food regime.[21] To cite the authors of an article on digitalization and the third food regime, “the broader economic restructuring of neoliberal capitalism towards digital capitalism is also making its way into the agri-food system”. Along with theoreticians of a third food regime, we pay attention to the alternatives and resistance spaces and movements [22] that nevertheless emerge in these trends of a neoliberalization of agri-food systems[23] in advanced capitalist countries. Bottom-up experimentations and networks are taking shape, including in the realm of platforms based on cooperative and commons models, at the local scales and beyond, that may constitute a counter-hegemonic movement to the dominant agri-food systems.

We aim to contribute to the study of such alternative and resistance movements in the agri-food systems at the crossroads with transformation in the digital economy, by focusing on one component of the food chain and of alternative food systems, namely that of “short food supply chains” [24], local food hubs or direct-to-consumer sales of certain products. On a certain scale indeed, digital platforms have impacted and been seized by “short food supply chain” organizations, namely those that directly sell food products (fresh or transformed) from producers to consumers, or via an intermediary at most, with possibly a small geographical distance separating them. In many advanced capitalist countries, and particularly in urban and peri-urban areas, proprietary and lucrative platforms allowing the sale and purchase of “local” products, such as La Ruche qui Dit Oui and La Fourche in France, or FreshDirect in New York City, are developing. Many “alternative” platforms are also appearing in this sector, whose models relate to those of the digital commons (free or open-source software platforms) and/or of cooperative platforms. Where do such alternative platforms stand in their attempts to cut-off the middlemen and offer more dignified and emancipated lives to workers and eaters? What is their transformative power of the dominant agri-food systems? What role do these platforms, interrelated to other institutions, play as a new intermediary between producers and consumers? With such questions in mind, the object of this report is to contribute, by the study of a particular case of digital platform, to the understanding of the dynamics of institutionalization of alternative forms of labor, production, and consumption, in a sector that is in dire need of radical transformation.

1. A COMPARATIVE CASE STUDY

1. A Comparative Case Study: The Open Food Network in France and the US

Through an empirical study of the Open Food Network (OFN), an international network developing and distributing an open-source platform serving organizers of “short” food supply chains, we seek to shed light on the viability and desirability of so-called alternatives, as well as on their potential to transform institutional landscapes as a whole. **Our analysis contrasts the Open Food Network’s branches in the US and France, structured as nonprofit and cooperative entities respectively, focusing on: their financial sustainability, engagements with governmental entities, and their roles within both localized and expanded networks.** Claiming to offer an alternative to the monopolies of large-scale food distribution, the Open Food Network intends to change the scale of short circuits by developing “digital food commons” and in particular the interoperability of data between various existing platforms. We therefore also aim to contribute to the strategic debate on scaling, which we develop below.

In the scope of this report, a particular attention is paid to the economic viability and competitive environment in which both the French and US platforms of the Open Food Network evolve. We therefore delve relatively deep into the components and contexts of their respective economic models, putting forward their originalities as well as the challenges they face in terms of feasibility and viability in the long run. We open up this topic of economic viability and the nature of these particular alternative models to the question of scaling and of social inclusion. Throughout, we aim to develop an argument for the necessity of scaling for cooperative and commons models in the context of economic systems based on capitalist logics of production and exchange, while also contributing to a novel understanding of scaling, informed by notions of food justice and democracy, and putting an emphasis on its dimension related to social inclusion.

1.1. Concretely, what does the OFN platform bring to farmers (and their customers)?

What makes the “strength” of the platform, according to one CoopCircuits’ operational team member, is to allow local or geographically proximate producers to sell one another’s products on the same platform, or in other words to mutualize their online catalogs. Taking her real-life example, it allows an organic vegetable farmer of the Normandie region to sell, on his online catalog and then in his physical store, the Kombucha of a neighbor producer. In her words, CoopCircuits allows to “federate sales and create a social link around them”. As another interviewee from the OFN USA mentioned, such aggregation of producers allows some to sell produce that they would not have been able to sell alone: for very small-scale producers for instance, who only produce a small amount of vegetables that they could not sell at a farmers market, grouping with others small-scale producers through the platform allows them to sell, together, vegetable boxes. Moreover, for some producers, such as one interviewed user of CoopCircuits, the platform enables selling off the totality of one’s produce, by adding an online sales channel to wholesale and sales at the farm. Concretely, the platform enables, unlike the Excel spreadsheet alone used by this producer before, to put the extra produce on sale on the platform at the last minute, allowing him to sell-off all of it. As this producer explained, using such a platform also allows extending sales to populations that were not reached through other distribution channels, namely physical sales at the farm or at his shop. In the case of this producer, the populations in question are generally urban and middle-class, and comfortable with “ordering fresh products online from their couch”. [25]

These examples show different ways in which the Open Food Network’s platform enables small-scale producers to increase market shares, to sell-off their stock more efficiently, as well as to create or reinforce social links and networks with other local producers. More broadly, the open-source software of the platform allows it to be tailored to producers’ particular needs: they have decision power over whether to make their catalog public or not, payment methods and sales units, delivery methods, etc. For this, and depending on their own “tech competencies”, they can count on the OFN global and local operational teams for support. Another important aspect on which the OFN brings concrete advantages to small-scale farmers and organizers of local food hubs is that, by allowing them to sell their production in channels that are not captured by food distribution giants, it provides them with sovereignty or control on price-setting, and alleviates them from the pressures of negotiation and of value extraction by these giants.

1.2. The Open Food Network in France and the US: what scale and scope within the global food sector?

Of course, such “local” or short food chains remain marginal in terms of production, size, workforce and consumption, when considering the whole food system. As per the last available data, in France, almost one farm out of four (about 23% or 90,000 farms) sells its production through direct-to-consumer outlets, [26] representing around 10 to 15% of household food purchases, [27] and following an increasing tendency in 2020 [28] with a possible stagnation after the Covid pandemic. In the United States, farms that do direct-to-consumer sales represent 7,8% of all US farms (as of 2012) [29], or 163,675 farms, while such sales have seen an increase in value of 35% between 2019 and 2020 [30]. While difficulty comparable due to deviations in statistical categories and dates of data collection, we can hypothesize that the Open Food Network’s activities, both in France and in the US, follow similar trends, i.e. a marginal but growing proportion of direct-to-consumer sales of food with respect to the overall food sector. For comparison nonetheless, the US branch of the OFN, which exists since 2020, has since then recorded 59,153 food orders, aggregates 920 “producers” or farms[31] across 427 shops, and has served 5,291 consumers. [32] In France actually, CoopCircuits seems to continue seeing an increase in the volume of sales made through the platform even after 2020 [33] (it has 656 shops and 367,000 orders record as of today [34], which summed up to a total of 4,3 million euros worth of transactions as of 2022, as per a staff member of the French platform). Also reflecting the growth of the network at the global level, half of the currently active and developing instances of the OFN (currently amounting to 25 [35]) were developed in 2020, a time when a total of 170,000 orders that summed up to 3,5 million euros had been enabled since its creation in 2012 [36], and aggregated more than 7,000 producers.

1.3. Research Methodology

This ICDE report lays out the first findings of a case study that is conducted as part of a Ph.D. thesis in sociology, on the institutionalization of alternatives to platform capitalism in the food sector. This research takes a particular interest in the scaling of digital platforms based on the commons and cooperative principles, in the sector of local food hubs or direct-to-consumer sales of local food products. The research methodology is ethnographic and comparative. It is based on several monographies of non- or limited-profit and cooperative platforms, located in France and in the United States, among which the French and US branches of the Open Food Network. The qualitative data gathered comes from the conduct of semi-structured interviews, participatory and non-participatory observations, as well as research on archives (majorly online). This ethnographic study looks at food production and exchange as social practices and relations, with a particular focus on labor, its conditions and division, as well as a more macro focus on dynamics of social exclusion and inclusion. It is thus close to the literatures and methodological frameworks of food studies, economic sociology, and the sociology of labor. This methodology intends to contribute to the understanding of the digital transformation in the food sector by analyzing, from the viewpoint of different actors (i.e. OFN members and farmers), how these new technologies entered their daily practices, how they structure labor processes, the social networks in which these actors respectively operate and the relations of power within and between them, the organization of their practices as well as their work environment, their professional trajectories and social backgrounds, or again their day-to-day experiences with market and State institutions. Overall, this research aims to propose a sociology of the institutions and institutionalization of “alternative” modes of production and exchange at the crossroads of food and technology.

At the time of writing this report, interviews were conducted with a total of 16 people, including 2 members of the OFN USA team (including 1 who is also a user) and 1 user of the platform in the US, 4 members of the team of CoopCircuits (2 of which are also users of the platform) and 3 users of the platform in France. In addition, 2 members of the OFN UK team and 3 people working on the development of the OFN platform in India (as well as eventually in Serbia) were interviewed. These interviews were made in person, when possible, and otherwise by videoconference or phone call. Extensive notes were systematically taken, and recordings (with the consent of interviewees) were sometimes made, allowing for the transcription of (anonymized) interview data. Interviews usually took from approximately one to two hours, and I hereby thank those who have taken this time (on or in between their work hours) to share their everyday and work experiences. This allowed producing original qualitative data, which, in the form of this analytical report, can hopefully “return” to them and be of use to their practices as well as to a wider audience. This report has also widely benefited from interview data produced by peer researchers and made accessible (in the spirit of openness and digital commons promoted by the Open Food Network) on the OFN's website. In terms of archives, in addition to all the documents that are made accessible on the various branches' websites, I was also granted access to some of the discussions between members of the OFN community and documents shared among them in some of the network's Slack channels. At this stage of research, only one non-participatory observation was made, throughout a whole afternoon, during the food distribution[37] of one of CoopCircuits' users, a small-scale farmer and food hub manager of the Île-de-France region. As the cycle of distributions pick-up again in the spring and more interviews are carried out, further observations (participatory or non-participatory depending on the needs of the food hubs) will be planned and carried out.

Interviewees were chosen depending on several factors, the first being availability and (positive) response to my inquiry. During the exploratory phase, I started by reaching out to the teams of the Open Food Network in the US and in France, as well as in the UK, through the contacts made online. All of those that I reached out to or that I was subsequently put in contact with accepted to carry out an interview. These participants do not amount to the totality of the "workers" of the Open Food Network platforms in France and the US, so the data presented here should not be taken as exhaustive. In a secondary phase of research, users were contacted via the map and their contacts provided on the platform itself, selecting for those in the Île-de-France region and those of States on the East Coast of the United States (New York, New Jersey, Massachusetts, Pennsylvania), based on my own geographical position and travels. Out of the 19 contacted by email, only 4 responded, all of which provided explanations for actually not using the platform. Some had signed up by curiosity and ended up actually not needing the platform, while others faced struggles in organizing online payments. These reasons are anecdotal and should not be taken as generalizable reasons for a lack of use of the OFN platform. Anyhow, what can be hypothesized is that sometimes producers are listed on the map without necessarily having active shops on the platform, simply because they are listed there as potential producers whose products may be sold by others. Another hypothesis that can be posed here but that would require deeper exploration is that users are really active in locations where there are active pre-existing farmers networks or hubs, such as, in the United States, the Connecticut River Valley area in South Vermont, to take an example pointed out by one of my interlocutors. Without delving in a discussion on the more or less successful uptake of the platform in different geographical locations, the point is that there is a certain limit to the generalizability of the results presented here, in that they do not pertain to a representative sample of the users (active and non-active) of the platform. While such representativity is sought in the pursuit of making contacts and conducting more interviews in the future, these results are nonetheless interesting insofar as they enlighten particular and situated practices of certain users, which, with their conditions and determinations made explicit, can potentially apply to, and inform that of others.

The interviews were structured in a way that allowed for an open and free discussion around certain themes, depending on whether the interviewees were “workers” or “users” of the platform, or both. Generally, themes ranged from personal socio-professional trajectories, their labor conditions (employment status, rhythm, organization and environment of work), the structure of their organization (be it the Open Food Network itself, a farm or a local food hub, such as a farmers’ market, a joint-buying group, a drive, etc.), with a particular focus on their economic model and eventually models of social pricing, their relations at work and with other organizations and public institutions, their belonging to collectives or networks (such as cooperative ones or unions), their participation to the governance of the Open Food Network and their relations to its global community, the socio-demographic composition of their customers, their use of the platform (advantages and difficulties in this use) and eventually of other platforms, as well as different methods for the outreach of customers. A qualitative analysis of the interviews was started by manually labeling such themes and associated sub-themes across the interview data, and checking for consistent findings among the different interviews. A more systematic analysis is envisaged as the data set grows bigger, using tools such as Nvivo to make the data triangulation more robust. For the time being (with interviews still being undertaken at the moment of writing the report), particularities are pointed out while making the social and economic position of each interviewees explicit, while hypotheses are being drawn concerning the shared conditions and experiences of workers and users from our sample.

1.4. On the Variety and Declinations of Cooperatives, Platform Co-ops, and Their Institutions

Another contribution that this report intends to make regards the breadth of the notion of platform cooperativism and its associated variety of organizations and related activities. Different types of co-ops exist, from enterprises legally incorporated as cooperatives to other types of organizations that are committed to cooperative principles and values, or that are simply managed as coops. Our comparative case study focuses on a particular type of "formal" cooperative, i.e. one whose enterprise status is cooperative, as well as on a nonprofit that is more informally committed to cooperative principles. Both of them share a digital commons among a global network in which other formal cooperatives are present, such as in Catalonia for instance. Overall, cooperative values and principles, or values and principles not necessarily framed as cooperative ones but that might be discussed as more or less coherent to those, are shared among all members and circulate between them, be they formal cooperatives, nonprofits, foundations or NGOs (such as in Germany, where the platform is legally hosted by Oxfam), or other types of enterprises of the social and solidarity economy. "Farmers, Makers, Food Hubs, Markets: We All Own the Open Food Network"; such a rhetoric is that found on the OFN USA's website, and expresses its commitment to community, worker and user sovereignty on both their technology and food systems. Instead of thinking that these kinds of discourse and values are void because not incarnated by a cooperative that is legally incorporated as such, it invites us to look at the creative ways in which cooperative values effectively take form and come to life, from labor conditions to decision making processes, even if the organization in question is not a formal cooperative. From a strategic viewpoint as well, it is worthy to look at the different strategies actors put in place within and across their organizations to make place for cooperative values to be deeply rooted into practice, which in turn produces a certain dynamic within which more formal "cooperative institutions" are formed. As suggested by a member of the OFN interviewed, finding ways to institute cooperative practices in an economic, cultural and legal context which is little favorable to cooperatives can be challenging and requires strategizing around principles and values.

2.

EXPLORING ECONOMIC MODELS

2. Exploring Economic Models for the Viability and Scale of Cooperative Principles

The object of this section is the economic models sustaining the French and US platforms of the Open Food Network, with a particular focus on funding and labor. The comparison between these two platforms' economic models allows us to consider different factors that contribute to the economic viability and potential scaling of the activities they support. Inversely, we also pay attention to ways in which scaling can itself be a strategy to support the economic viability of platform co-ops. Issues such as accessibility, competition and resilience through federation and networks are explored.

2.1. The Economic Model of CoopCircuits: From Nonprofit to Cooperative, in the Search of Economic Viability and Autonomy

At the beginning of 2020, the OFN platform distributed by Open Food France became independent from the nonprofit to legally turn into a cooperative, which took the name of CoopCircuits. Among some of the reasons given for this shift from a nonprofit to a cooperative was the fact that a significant number of transactions were made on the platform, driving it away from its purposes and obligations as a nonprofit. On the other hand, this consequent commercial usage of the platform gave rise to hopes in the possibility of it becoming economically viable as an independent and autonomous enterprise, incorporated as a particular type of multi-stakeholder cooperative (a SCIC, or *Société Coopérative d'Intérêt Collectif*). Effectively, this shift from a nonprofit to a commercial, cooperative status means that the platform now has to rely on different and specific financial sources (e.g. adapted public or private grant programs, loans) and comply to different fiscal, market competition and labor regulations. [38] To put it in the words of an interviewed CoopCircuits member regarding the need to make it financially viable: "it had to be managed like a normal business".

The French platform, being incorporated as a cooperative, benefits from funding that comes from members, called "cooperators", buying social shares of the cooperative, set since its start at 100 euros each. The minimum number of shares that have to be bought to become a member depends on the category of membership one corresponds to. For example, direct regular beneficiaries of the platform (farmers and distributors) and those regularly engaged in the development of the platform and associated services, called the "daily builders" (*bâtisseurs du quotidien*) have to buy at least one share, whereas institutional and financial partners have to buy at least 10 [39]. As such, the funding of the platform comes in part from the shares bought by members, who can be a variety of stakeholders: farmers, local distributors, food hub managers (the direct regular beneficiaries), those who work for the maintenance of the platform and the delivery of its associated services (the “daily builders”), the institutional and financial partners, operational partners, and other support. The particularity of this type of multi-stakeholder cooperative is that public authorities, at the territorial level, can also buy shares of the cooperative. As of today however, no territorial collectivity has gotten involved as such, even if producers may have independent projects with them.

While becoming a cooperator through the buying of a social share of CoopCircuits is not an obligation to use the platform, all users, so farmers and distributors, have to pay a commission on the sales they make through the platform. Of course, being a member of the cooperative grants each of them a voice in the decisions such as those regarding the finances of the platform, including the level of this commission. As one of CoopCircuits’ “daily builders” said in a webinar on sales tools for farmers [40] in September 2023, one of the strengths of the platform is its governance model, which allows users to be involved in decisions related to price fixing. The effective participation by all members in those democratic decision processes is an issue whose scope exceeds that of this report, but it is sufficient to note here that such decisions are made on the digital cooperative platform Loomio, through which all members are invited to vote by consensus online. Aside from this “competitive advantage” in terms of democratic governance, CoopCircuits is also competitive on the economic level. Indeed, CoopCircuits, with a commission to pay on sales that used to be 1% but just recently increased to 3,5%, remains cheaper for farmers to use as compared to platforms in the same field such as Cagette or La Ruche Qui Dit Oui. In line with the cooperative’s values, this increase in its platform’s cost remains “caring”, to re-use a term of an interviewed “daily builder”, and was necessary for its financial balance. Referring to the “big family spirit” that unites all members and users of CoopCircuits, that interviewee mentioned that this increase in cost might nevertheless not be “sustainable” for all users, especially the smallest producers. On this aspect, namely offering a product and service for a price that is fair for all users, questions have been raised on the adequacy of the cooperative and thereby commercial model, with respect to the nonprofit one, in effectively serving the targeted users’ interests.

Overall, according to the members of CoopCircuits (i.e. workers involved in the development and diffusion of the platform in France and making the connections with the global community), the most pressing challenge remains finding a model that ensures the economic viability of the platform. In that direction, and as a staff member suggested, several options are being explored: raising funds from investors, crowdfunding among final consumers, raising massively the number of users and sales made on the platform, and developing other paid services associated with the platform. Other options that we can suggest exploring in the realm of alternative financing methods are cooperative bank loans and the buying of shares by local governments (eventually non-controlling ones). The latter seems the most plausible given that CoopCircuits is a multi-stakeholder cooperative that in principle allows such governments to buy shares of the cooperative, which has not been the case yet.

2.2. . The OFN USA Nonprofit Model: Finding the Balance Between Solidarity, Accessibility, and Economic Viability

In comparison, the US platform of the Open Food Network offers seasonal and yearly membership plans, whose prices differ depending on types of users (individual producers, groups, larger hubs, markets or co-ops), categorized by the number of producers they represent. As explicitly acknowledged on the OFN USA's website, sustaining the global commons that is the open-source platform has a monetary cost: that of servers, the compensation of developers that are part of the international team, as well as resources that go to communication and outreach (i.e. "spreading the word" and "connecting with new users" and supporters). This pricing model is flexible and thereby more accessible than that of CoopCircuits, but it does not necessarily make it more viable. Indeed, this is an issue that pertains to the general funding (membership fees, commission on sales, private and public grants, etc.) of the model and the labor on which it rests (wage-earners, independent contractors, volunteers), which will be explored further below. On the accessibility level however, one particularity of the OFN USA that we find interesting is that it offers "pay what you can" pricing options or accepts "reduced or alternative forms of contribution". In a spirit that aligns with that of nonprofits, the OFN USA's aim is to provide access to its product and services by reducing cost barriers for users as much as possible and leaving the economic cost to be borne by other private and/or public actors. Interestingly, this somewhat connects to what an interviewee from CoopCircuits told me regarding the fact that even with the (relatively low) sales commission, users/

cooperators do not pay the “real price” of the platform. Indeed, as another interviewee of CoopCircuits mentioned, there can be some confusion from members on the “real” cost of the platform, in line with broader common beliefs that the Internet is free to use. With regards to that, a lot of communication efforts are made, such as direct calls with every user to discuss the increase in sales commission. Without entering a debate on economic externalities, these claims draw us to consider the social value that is both a drive and a product of the activities undertaken through the OFN’s platforms.

Another interesting thing to note regarding access to the platform is that explicit solidarity is proposed to Black, Indigenous or other Persons of Color-led nonprofit or mutual aid enterprises, which is not the case in the French platform for instance. While reducing or suppressing cost barriers may be a way to favor access to marginalized communities, social, cultural and symbolic barriers that remain are likely to prevent effective use of the platform by such communities. As a matter of fact, very few requests to discuss lower fees or alternative contributions have been taken by the enterprises targeted by these “solidarity” measures, as mentioned by an interviewee of OFN USA. She further explained that such alternative contributions could come in the form of volunteering, for instance to do some outreach via social media, which itself is considered, with marketing more broadly, as a way to reach marginalized communities and increase the “diversity” of the OFN USA’s users and members. These “alternative contributions” or volunteering, which is in some ways a form of unpaid labor (not to stress the pejorative side of it but rather the actual need of human labor for a platform to deliver on its promises), are actually very welcomed from the OFN USA team. Aware that the targeted communities are likely to not afford to volunteer, at least for a sustainable timeframe, my interviewee also mentioned that, ideally, if more funding came in their way, it would be to pay people for working for the OFN. Here again, these concerns put into question the sustainability of the nonprofit model with respect to the cooperative one, in terms of channeling stable and fair pay for the labor that’s put into the platform and enabling it to achieve its objectives and reach its target users.

2.3. Competition: An Issue at the Heart of Platform Co-ops’ Survival

Competition with other cooperatives and with classical businesses in a certain sector, here direct-to-consumer food distribution, is a considerable issue with respect to the viability and scaling of platform co-ops. Indeed, the competition dynamics in which users of the OFN platform are involved all over the world are those that generally apply to the food sector, i.e. competition with production and distribution giants and competition for government subsidies. This means that for farmers that use the OFN platform, even if this one is often cheaper than others (due to its non-proprietary or open-source nature and its various incorporation forms at the local levels), they still have to compete against the prices offered by large exploitations and distribution giants. CoopCircuits, the OFN USA but also all the other platforms of the OFN network at the global level are thus impacted by competitive forces on two levels at least: that of the market of digital platforms for the organization of food hubs, which is a highly competitive one as per a user of the French platform, and that of the food market more broadly.

While a typology of the users of the OFN based on their dependency to the platform (in terms of revenue) [41] is still in the making, we have already noticed that these implement a variety of sales strategies to ensure maximum income entries. For some, the totality of their sales are made via one platform, that of the OFN, while others use a variety of other platforms (sometimes in addition to a variety of sales channels, such as direct sales at the farm, sales via local shops, etc.). In that latter case, sales made on the OFN platform can represent from a minor to a significant portion of their turnover. For others, and for a variety of reasons, the OFN platforms might be only one of the many platforms used. A meat breeder and seller interviewed, who organizes the distributions of a dozen of other producers of his region through CoopCircuits, mentioned also using other platforms such as La Ruche qui Dit Oui, a VC-backed corporate platform. Certain actors of CoopCircuits themselves expressed being quite concerned about competing with start-ups, in particular when the growth measures – both qualitative and quantitative - between these and those of the cooperative, are so different. When one of the expressed objectives of the Open Food Network is to fight against monopolies in the food distribution and tech sectors, the question of how exactly it competes with them justifiably poses itself. In that regard, public powers would play a significant role in forging the policy environments that would (or not) contribute not only to the survival of cooperatives but to their ability to thrive, for instance through the implementation of stricter antitrust laws. Competition does not only take place among market actors, but also in the search or rather race for external funding, especially in the nonprofit world. Indeed, in the context of a neoliberalization of public policies and of the State in general, both in France and in the US, substantial social and economic activities such as the distribution of food are left to the responsibility of private actors or are externalized to them, with the provision of more or less direct public support and structure [42]. Nonprofits for instance, have to compete for grants with other nonprofits and some classical enterprises, such as those with a social mission or pertaining to the social and solidarity economy sector. Responding to these calls for grants requires mobilizing time, administrative resources and social capital, with which actors are unequally endowed. These competition processes have strong selective effects [43], whereby the nonprofits who are better disposed to mobilizing such capitals will “win” at the profit of other more marginalized ones, who can happen to represent and serve more marginalized communities. Whether this is the case for the Open Food Network in the USA, where the nonprofit structure of the platform makes it dependent on these competition processes for grants, is difficult to assess at this point. Put in perspective with the cooperative model however, it opens a reflection on the benefits of a more autonomous economic model, as well as on the costs of finding and gaining support from public authorities, from the local to the national level.

On a more theoretical level and with respect to an analysis of the cooperativism movement as a transformative or revolutionary one, we should also specify and contextualize what competition means and implies here. We are talking about competition in an economic system which is dominantly modeled by capitalism, which can be characterized by the fact that the production of exchange value dominates that of use value. When cooperatives play this game and according to its rules, namely that and those of competition, they somehow have to accommodate their production, be it “in the hands” of workers, to the competitive laws of exchange, or of the production of exchange value. This framework, inspired from the critique made by Rosa Luxemburg of cooperatives in *Reform or Revolution* [44], can help point to what is at stake when cooperatives or platform co-ops, such as those of the OFN, try to survive. Indeed, the platforms of the OFN are market-based, and are thereby entangled in a market economy that is dominantly moved by capitalist logics, namely the imperative to produce exchange value. As Luxembourg describes them, cooperatives, and production ones in particular, are a “hybrid form in the midst of capitalism”, i.e. “small units of socialized production within capitalist exchange” [45]. Such production cooperatives, since they operate in an economy in which “exchanges dominate production”, have “to stand up against [their] competitors in the market”, by intensifying labor. According to her, and putting aside her critique of the transformative power of cooperatives [46], the only way for such production cooperatives to survive within a capitalist economy is by “removing themselves artificially from the influence of the laws of free competition”, which they can succeed in doing by assuring themselves “a constant circle of consumers” or a “constant market”, which consumer cooperatives can offer.

The Open Food Network’s platform can be seen as a tool that allows for the intermediation of groups of producers and consumers, whose production and consumption can respectively be mutualized. Indeed, and as most OFN users interviewed stressed, using the platform opens up new market shares, across the variety of existing food hubs (mutualized sales of different producers or sales from a single producer, both to one or various groups of consumers). Whether these additional market shares correspond to a “constant circle of consumers” or “constant market” seems rather far from the current situation that our research allows to elucidate, but not impossible in principle. Indeed, some have stressed that consumer “outreach” or communication to maintain a stable volume of orders or extend sales to other groups of consumers were major issues. Besides, this, as well as the work of mutualizing the sales of different producers (logistics, stock management, outreach, etc.) is often not recognized as such and thereby not remunerated accordingly. Overall, if the platform (but not without human labor) can be seen as a technical tool that supports the integration of groups of producers and consumer in decentralized networks, in a form that resembles the functioning of coupled producer and consumer cooperatives as described by Luxemburg, even beyond the local scale, it cannot be said to be in itself sufficient to remove farm workers “from the influence of the laws of free competition”. This is in part related to the difficulties associated to building a constant consumer base and sufficient market share through the sales made onto the platform, but also to the fact that such workers’s lives (and those of all the other living organisms with which they work) depend on the laws of the market in many other aspects than sales (access to and use of land, seeds, machines, etc.). Moreover, if the platform can represent a solution towards a more dignified life for farm workers and food hub operators, it can be seen as only a partial, palliative or defensive one insofar as they are still at risk to face the predatory and disloyal competition of the giants of food production and distribution. Thus, the logic of emancipating food production and distribution from a capitalist market-based economy only begs to be pushed further, beyond the scope of the alternatives themselves. This drives us to consider scaling as a strategy, not only desirable but necessary, for an alternative food system to emerge and thrive.

3.

EXPLORING SCALING STRATEGIES

3. Exploring Scaling Strategies for Resilience and Emancipation

Scaling is an issue at the heart of debates in the academic and professional worlds of cooperatives and platform co-ops [47], as well as those of local food hubs and alternative food systems. The crux of the issue that interests us here concerns the need for such alternatives to attain a "critical size" (to be defined in quantitative but also qualitative terms; a topic that is in itself an object of the debate) in order to thrive (in a sense that can be compared but not reduced to economic viability), without reproducing the same (capitalist) logics that they intend to be an alternative to. Insofar as these alternatives operate in a global capitalist system, scaling can be considered as a strategy for these to emancipate themselves from its logics but also eventually transform it from the "outside" [48]. As previously mentioned, the Open Food Network intends to offer an alternative to the corporate food distribution industry by developing local food hubs through a "digital food commons" at scale. In order to empirically illustrate the debate on scaling, this section explores three aspects in which the Open Food Network does or attempts to scale an alternative food system, namely by 1) federating in local and global networks, 2) fostering a decentralized digital infrastructure for local food hubs through a data interoperability project, and 3) democratizing local food hubs.

3.1. Resilience Through Federation in Local and Global Networks

In various aspects, both the French and American platforms benefit from being integrated into a global network that fosters a digital commons. To phrase this in terms of scaling, the Open Food Network is a case of scaling (through the distribution of a digital commons among a global network) that provides direct economic support to local branches, which are either platform co-ops or organizations of other types who share similar principles. [49] This open-source software and all operational costs associated to it, from development to user support, are funded by the global community of the Open Food Network. While local teams may also contribute to the development and maintenance of the platform and be remunerated accordingly, every local branch of the network basically benefits from such activities being taken care of by a global team. As such, economies of scale are also realized in terms of labor, thanks to the combination of the open-source nature of the platform and it being managed as a digital commons in a global network. In terms of broader funding, while the French platform coop legally and economically "emancipated" itself from the Open Food France nonprofit and foundation, the US non-profit significantly benefits from the funding made available by the global OFN community.

On a relatively more local scale, namely that of the French branch of the OFN, CoopCircuits is also integrated in an inter-sectoral national network of cooperatives, les Licoornes, since 2022. The expressed objective of their association is the “radical transformation of the economy”, based on an “entirely cooperative economic model” [50]. Alongside cooperatives in sectors such as those of energy, railroad, telecommunications or again mobility, CoopCircuits materially benefits, as part of the Licoornes, from some funds to do certain activities. In particular, the development of this network was an occasion to collectively raise funds, which were then mutualized among the cooperatives that were its first members. Other than that material support, which is not directed to remunerating those who work for CoopCircuits, being part of this network gives some political visibility and strength to the platform. As expressed by an interviewee, being part of the Licoornes is a strength for CoopCircuits on the communication level in particular, and for mutualizing the respective social (and customer) networks of its members. In the same way, the support that CoopCircuits gains from la Coop des Communs takes the form of an amplification of the political standing of the cooperative, by mutualizing its voice with that of other organizations that share similar values. Unquestionably, the Platform Cooperativism Consortium also plays a role of support in these aspects, having worked with Open Food France, the Coop Communs as well as with the Catalonian branch of the OFN, Katuma, in the past.

OFN USA is also more or less formally integrated in networks aside from the global Open Food Network. One of them is GOAT, acronym for “Gathering for Open Agricultural Technology”, which is a community that advocates open-source hardware, software and data in food systems and for farmers. With members of the OFN USA being also involved in these networks, these types of integrations allow the sharing of immaterial resources, in the form of open documentation or training, as well as the building of social capital. [51]

3.2. Scaling Through Data Interoperability: Building a Digital Commons Infrastructure for Local Food Distribution

One of the principles of platform cooperativism pertains to offering cross-platform portability of data. As a matter of fact, data portability represents a significant problem for farmers and operators of short food supply chains. Pressured to generate sufficient and less risky revenue, sometimes just to barely survive, they are often brought to handle several commercial channels and therefore juggle between different digital platforms. In parallel to being time and energy costly for workers, this is also costly from a broader logistics perspective. Indeed, on the one hand, if farmers do not necessarily want to spend their time behind a computer (or do not have the time for that), they even less so have the capacity to bear extracting data from one platform to repeat importation in another, or check different ones and manually re-assemble orders coming from different places. On the other hand, when local food hubs operate in "silos", to re-use the terms of the OFN [52] they bear high opportunity costs in terms of sales and have significant negative externalities in terms of transport and associated carbon emission costs. In other words, data interoperability represents an opportunity for mutualizing logistics, or transport for food deliveries in particular, and extending the federation of small-scale producers around mutualized distribution channels. Ultimately, realizing such a data interoperability project also means making local food hubs more environment friendly, as mutualizing transport would reduce carbon emissions, known to be relatively high for the "last mile" of such distribution channels.

Although still in progress, these Data Food Consortium and Food Data Collaboration projects question the concrete possibilities of realizing a global, commons-based decentralized digital infrastructure for food distribution, and what would be at stake in such a project. Where would the current monopolies of food distribution and of digital infrastructure stand in such projects? How would value effectively be distributed and how much sovereignty will producers effectively reclaim on the digital and food distribution fronts? In the process through which such data interoperability projects will take shape, public powers will certainly play a determinant role. Obviously, policy approaches vary significantly between France and the US, which means that such a data interoperability project, which transcends national borders, will face different institutional support depending on the different political interests at stake at a given moment. There would definitely be oppositions between the European level and that of the United States, such as it has been the case with data protection laws. Here, the question is to pay attention to the role that a decentralized and trans-national network such as that of the OFN can play in pushing for such digital infrastructure projects at the global scale, against current and widely opposing regulatory forces. Actually, there is a regional initiative that is being developed since the summer of 2021 at the European level, aiming to become a regional branch of the OFN global network and working, among different things, for facilitating the launch of new instances in that region, becoming a “prototype of a Decentralized Organization”, participating in advocacy projects with European Union institutions, enhancing “interoperability and coordination between local instances under the Governance of Commons”, and achieving “economies of scale and scalability” with “shared funding activities” for “internal and external stakeholders” [53].

3.3. Scaling or Democratizing Local Food Hubs?

Useful notions such as scaling *up*, *out* and *deep* [54] have been developed to contribute to the debate on the scaling of cooperatives and platform co-ops.[55] These notions help precisely qualify what is meant by scaling in such a context, in particular to distinguish it from the notion of growth commonly associated with that of private corporate enterprises and capitalist market economies in general. In the context of local food systems or direct-to-consumer distribution channels, the question of scale has also been addressed by professionals, non-governmental organizations [56], and scholars in various fields within sociology [57] and food studies [58] for instance. While some concerns directly relate to scaling *out*, i.e. increasing the number of “eaters” whose food consumption goes through such “short” distribution channels, others relate to extending their access to populations or groups that are usually excluded from them, such as non-white, lower working classes or historically marginalized communities more broadly. The notion of scaling *out* is indeed useful to describe such an extension: a certain model of economic and social organizing is replicated and adapted to other contexts, and to “fit” different social and racial groups. This question is particularly important regarding the crossover of some forms of the “sharing economy” [59] and of local food hubs, being two fields which are particularly prone to the reproduction of the inequalities and domination relations of the conventional economy, especially those of race and class in our case.

A notion such as that of democratizing, as is more and more applied to local food hubs (by social actors themselves as well as researchers), puts a more evident accent on the capabilities and practices of appropriation of such distribution channels by the marginalized communities in question, and their autonomy in participating in and managing them. That is where the notion of scaling *deep* can also add to the apprehension of democratizing, in addition to scaling, local food hubs. Involving the creation of "value in a specific location through mindful, culturally aware, participatory practices that prioritize care and the deepening of relationships among stakeholders," [60] scaling *deep* is coherent with the notion of there being a right to food that citizens can claim which thereby motivates their re-appropriation of their food systems and distribution channels, starting at the local level. Such understanding of scaling could be further extended in our context by joining it to broader notion and movement of food justice, [61] which considers social and economic inequalities in food access as entangled in systemic relations of racial domination. In that respect, "democratic" scaling could be understood as a type of scaling that tackles food and social injustices more broadly, by giving effective equal rights to people regardless of race, gender and class, and addressing the material conditions for such rights to be respected.

3.3.1. On the (Attempted) Democratization of Local Food Hubs Through Social Pricing

An interviewee of CoopCircuits expressed that there is an "increasing demand" for social pricing in the direct-to-consumer food distribution sector, and that the platform itself was very solicited to put social pricing systems in place. In some local food hubs operated through CoopCircuits in France, partnerships with charities such as the Secours Catholique in Lyon exist to increase the availability of local products at "social prices". This is a topic in which Open Food France has been involved in with the support of the Parisian municipality, who has funded a research project [62] on different social pricing models that are implemented in local food hubs all over France. On a more technical level, the Open Food Network platform is itself a tool in which social pricing or a "sliding scale" functionality can be encoded. Indeed, it can easily be practically implemented by allowing those who buy through the OFN platforms to choose different pricing levels by indicating the chosen one on the platform as they check-out, which they will then pay "offline" or not via the platform itself (as it is currently usually the case for the OFN platforms studied).

On a hypothetical note, one interviewee of CoopCircuits mentioned the possibility of linking the French Open Food platform with the online data and profiles of social minima recipients, such as those collected by La CAF (Caisse des Allocations Familiales). Our take on this subject is that these projects of coupling a food distribution and consumption platform with one that allows (the algorithmic) management of social minima recipients, extend the risks of

surveillance, control, paternalism and stigmatization of the poor, rather than going in the direction of respecting and enacting a universal right to food.
In our view, these ideas represent crucial issues regarding the surveillance and algorithmic governance of rights-holders of social benefits, making them susceptible to increased stigmatization and control rather than a genuine empowerment in accessing and managing their food. This goes against the recognition and implementation of a universal right to food. In the United States, these ideas materialize around current efforts by private and public actors to enable online payment (in short food supply chains) directly with these social assistance benefits. The aim is to make it possible to purchase products or food baskets through these channels with the "currency" allocated to beneficiaries of federal, state, and local food assistance programs (such as the federal Supplemental Nutrition Assistance Program and its derivatives administered by states or municipalities). In this case, the ability to accept electronic payments through these new "food stamps" via platforms depends on their own technical capabilities and permission that platforms must obtain from public authorities, which involves a significant administrative burden. While primordial, a further discussion on the desirability of social pricing as a method and the various (technical, economic, social and symbolic) factors at play in its realization exceeds the length of this report. Based on our empirical study of the Open Food Network's French and US instances as well as of other cases, this discussion will be furthered in subsequent research outputs.

CONCLUSION

Conclusion: On the Political Levers of Economic Emancipation Through the Commons

Our case study of the Open Food Network sheds light on the power dynamics at play, beyond the State and the market, in the governance of a “digital food commons” managed and supported, or nourished and nurtured so to say, by a global community. Our comparison of the French and US branches of the network highlights the various challenges faced by cooperative and nonprofit organizations in administering this global commons at national scales, particularly in terms of economic viability, digital infrastructure development, and democracy. We have examined the role played by public authorities at these different scales, interacting directly with these organizations and regulating the power dynamics in which they participate, especially those of economic competition and social inclusion.

In the context of neoliberalization of public policies, especially those related to food, we aim to initiate a reflection on the support that public authorities can provide to food, considered as a commons as a whole. This would involve considering each segment of the food chain (from production to consumption) as integral parts of a system, along with policies that collectively promote the development of commons in land, production tools, distribution locations, and even the food itself. Numerous initiatives exist in this direction (Terre de Liens, Fève, Incredible Edibles, projects for a social security of food in France, etc.), which do not necessarily claim strong connections with the state or public authorities at various levels but, in our opinion, cannot flourish without their consideration insofar as they remain somewhat contained in or dependent on conventional institutions. While a platform such as that of the Open Food Network can indeed help farmers build some form of bargaining power at the distribution level, by allowing them to mutualize sales and related services (such as deliveries in particular), they still face drastic and pressing issues related to the access and use of land, machines and other kinds of intrants, especially if considering models of production that are more respectful of their health and livelihoods as much as of the global environment. In other words, it is not only by allowing them to be more resilient through the sales of their products that the current problems of farmers around the globe and by extension those of eaters, will be solved. This brings us to consider cooperation among commons or cooperatives, as suggested by the sixth cooperative principle, across the components of the food chain and beyond, as an essential (but no less difficult to achieve) step in the radical transformation of our food systems, in the direction of food as a commons.

If treating, nurturing, living food as a commons implies removing it from the logic of the market-state couple, then a few obstacles have to be considered in this transformative path. Confining these considerations to the scope of this report, i.e. that pertaining to local food systems at scale, four major (interrelated and non-exhaustive) obstacles can be put forward :

1) Legislation

2) Funding

3) Democratization

4) Digital infrastructure

First and foremost, legislation can be seen as the most crucial factor for any change in food ecosystems, without omitting that this ultimately remains the product of political and social struggle. While legal frameworks will vary between one national context and another, our research points towards considering trans-national institutions, infrastructures and social movements as solutions to implementing alternative food systems at scale. Funding, democratization and digital infrastructure have to be considered as taking place within existing legal frameworks, but also as holding the potential to transform them. Funding relates to the means necessary to sustain economically viable food commons, and relates to finding a durable economic model as much as properly valuing human labor. The democratization of food hubs is primordial insofar as it politicizes food and confronts the exploitative and exclusionary dynamics of current systems. Lastly, a democratic and decentralized digital infrastructure for the scaling and resistance of local food hubs can and should be considered, if not in itself as a sufficient solution, as a desirable horizon, in which these four factors are entangled, towards the radical transformation of food systems.

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34 CoopCircuits "À propos", https://apropos.coopcircuits.fr/ (last accessed on February 19th, 2024).

35 An updated list of the currently active and developing instances of the Open Food Network, are available on its website, at "Find Your Local Open Food Network" https://openfoodnetwork.org/find-your-local-open-food-network/ (last accessed on February 19th, 2024).

36 Compain, Guillaume, Alexandre Guttmann, and Cynthia Srnec. "Monographie Open Food France." *TAPAS.* There Are Platforms As AlternativeS, Août 2021. p.8.

37 The term food distribution is used in the world of local food hubs to designate the moment where pre-ordered food baskets and products are being delivered, put in place, and distributed, or picked up, and sometimes paid for, by the members of a group involved in such a food hub, such as the producers themselves as well as consumers. While some similarities can be found with distributions in the context of charitable food aid or assistance, the term refers here to a market-based exchange of food.

38 Compain, Guillaume, Alexandre Guttmann, and Cynthia Srnec. "Monographie Open Food France." *TAPAS*. There Are Platforms As AlternativeS, Août 2021.

39 CoopCircuits, Statuts du 07/12/2022 : 12-13.

40 This webinar was hosted on September 27th by Feve (Fermes En ViE), a "mission enterprise" that helps the installation of new farmers through a solidary land trust and digital platform (La Grange).

41 This typology of users based on dependency on the platform is inspired by the one constructed by Juliet Schor and co-authors in *After the Gig*, pp. 49-50, 57-66, which classifies workers/users of platforms according to whether the earnings they make via the platform are their only source of revenue or a complementary one, allowing to analyze whether their economic subsistence more or less depends their activity on a given platform.

42 Paddeu, Flaminia. Sous Les Pavés, La Terre: Agricultures Urbaines et Résistances Dans Les Métropoles. *Anthropocène Seuil*. Paris XIXe: Éditions du Seuil, 2021. P. 296.

43 Paddeu, Flaminia. Sous Les Pavés, La Terre: Agricultures Urbaines et Résistances Dans Les Métropoles. *Anthropocène Seuil.* Paris XIXe: Éditions du Seuil, 2021.

44 Luxemburg, Rosa. *Reform or Revolution.* 1900 (revised second edition 1908). London: Militant Publications, 1986. https://www.marxists.org/archive/luxemburg/1900/reform-revolution/index.htm.

45 To fully understand the scope and context of this critique, a full citation can be useful to have here. Luxemburg actually explicitly mentions the food sector as one in which, even if some form of reform can in principle be achieved by the coupling of producer and consumer cooperatives, social transformation cannot be attained because that sector does not include the "most important branches of capital production": "If it is true that the possibilities of existence of producers'

cooperatives within capitalism are bound up with the possibilities of existence of consumers' cooperatives, then the scope of the former is limited, in the most favorable of cases, to the small local market and to the manufacture of articles serving immediate needs, especially food products. Consumers' and therefore producers' cooperatives, are excluded from the most important branches of capital production – the textile, mining, metallurgical and petroleum industries, machine construction, locomotive and ship-building. For this reason alone (forgetting for the moment their hybrid character), cooperatives in the field of production cannot be seriously considered as the instrument of a general social transformation. The establishment of producers' cooperatives on a wide scale would suppose, first of all, the suppression of the world market, the breaking up of the present world economy into small local spheres of production and exchange. The highly developed, wide-spread capitalism of our time is expected to fall back to the merchant economy of the Middle Ages." *Ibid.*

47 Seelos, Christian, and Johanna Mair. *Innovation and Scaling for Impact: How Effective Social Enterprises Do It. 1st edition. Stanford, California: Stanford University Press, 2017;* Scholz, R. Trebor. *Own This!: How Platform Cooperatives Help Workers Build a Democratic Internet.* Verso, 2023. pp.48-58 (the "Solidarity at Scale" chapter offers a summary of the history and current state of the debate surrounding scale in the realm of cooperatives and platform co-ops).

48 These alternatives are not fully outside of capitalist logics insofar as they depend on them (at various levels and in different aspects, principally economic). While the scope of this report does not allow for a significant engagement in the debate on the role of alternatives with respect to the capitalist system and anti-capitalist strategies in general, we can provide as reference for an analytic framework of the topic with Wright, Erik Olin. *How to Be an Anticapitalist in the Twenty-First Century*. London: Verso, 2019.

49 The values of the Open Food Network, to which every of its local branch abides, are the following: global commons, relationships, ecosystems, transparency, empowerment, subsidiarity, kindness, constant emergence, systemic change (https://openfoodnetwork.org/values/; last consulted on May 4th, 2023.) The principles of platform cooperativism, on the other hand, are the following : co-design, offer decent pay, guarantee transparency in the collection of personal data, offer cross-platform portability of data, offer portable worker profiles (Scholz, *Own This!*).

50 Webpage of Les Licoornes [https://www.licoornes.coop/; last accessed on September 18th 2023].

51 Other networks or communities that the OFN USA's members are part of and that could be worth exploring (but has not been done yet at this stage of research) are FarmOS and the Open Collective Foundation.

52 M. Bouré and OFN Global, Canada and UK articles and archives on data interoperability : OFN UK. "Introducing the Food Data Collaboration: A New Food Data Interoperability Project with Big Potential • Open Food Network." *Open Food Network* (blog), February 14, 2022. https://about.openfoodnetwork.org.uk/introducing-the-food-data-collaboration/; *Open Food Network Canada*. "Interoperability in the Digital Farmgate Sector, Part 1: Overview," June 15, 2023. https://about.openfoodnetwork.ca/interoperability-in-the-digital-farmgate-sector/.; "Interoperability in the Digital Farmgate Sector, Part 2: Field Research Report," June 19, 2023. https://about.openfoodnetwork.ca/interoperability-in-the-digital-farmgate-sector-part-2-field-research-report/.

53 The project is described on a dedicated webpage, "Open Food Network European Initiative" https://openfoodnetwork.org/ofn-europe/ (last accessed on February 19th, 2024).

54 Moore, Michele-Lee, Darcy Riddell, and Dana Vocisano. "Scaling Out, Scaling Up, Scaling Deep Strategies of Non-Profits in Advancing Systemic Social Innovation *." *Journal of Corporate Citizenship 2015* (December 30, 2015): 67–84.

55 Scholz, Trebor, and Jason Spicer. "Platform Co-Op Scaling Seminar." Platform Co-op Scaling Seminar, April 19th, 2023 (as part of *Platform Co-op School*), April 21, 2023. https://platform.coop/blog/key-points-from-the-lectures-by-jason-spicer-and-trebor-scholz-april-19th-2023/.

56 Lepiller, Olivier, and Élodie Valette. "Les innovations alimentaires urbaines face aux enjeux de changement d'échelle et d'inclusion sociale." So what? Chaire UNESCO Alimentations du Monde, 2021.

57 Bouchard, Marie J., Adalbert Evers, and Laurent Fraisse. "Concevoir l'innovation Sociale Dans Une Perspective de Transformation. Entretien Avec Marie J. Bouchard, Adalbert Evers, Laurent Fraisse." *Sociologies Pratiques 2*, no. 31 (2015). https://doi.org/10.3917/sopr.031.0009.

58 Johnston, Josée, and Lauren Baker. "Eating Outside the Box: FoodShare's Good Food Box and the Challenge of Scale." *Agriculture and Human Values 22*, no. 3 (September 1, 2005): 313–25. https://doi.org/10.1007/s10460-005-6048-y.

59 Schor, Juliet. *After the Gig: How the Sharing Economy Got Hijacked and How to Win It Back*, California: University of California Press, 2021. P.83.

60 Scholz, R. Trebor. *Own This!: How Platform Cooperatives Help Workers Build a Democratic Internet.* Verso, 2023.P.50.

61 Gottlieb, Robert, and Joshi Anupama. *Food Justice.* The MIT Press. Cambridge (Massachusetts), 2010.

62 Open Food France. "Les systèmes de tarification sociale dans les circuits courts alimentaires," November 4, 2022. https://www.openfoodfrance.org/2022/11/04/publication-du-rapport-sur-la-tarification-sociale-dans-les-circuits-courts-alimentaires-partenariat-avec-la-mairie-de-paris/.

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