Commonfare as Urban Digital Platform: 'Stories' from Milan and Amsterdam

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1. Introduction

Digital platforms are an urban phenomenon, both shaped by and shaping the cities in which they function. In this context, they have come to facilitate diverse forms of exchange, whether within the economy or beyond it (Hodson et al., 2020), such as the organisation of markets, work, patterns of consumption, local welfare (Kazepov et al., 2020), and citizen participation. Indeed, their growing significance has led increasingly large numbers of urban scholars to consider the "complex geographies of imbricated offline and online spaces within and across cities" (Boy & Uitermark, 2020, p. 5). The aim of this paper is to explore a new approach to this field of research, by engaging with the concept of "platform urbanism"[1] (Barns, 2019) and employing the lens of digital geography (Ash, Kitchin, & Leszczynski, 2019). Within these theoretical debates, the term "urban digital platform" (UDP) has recently been proposed to refer to a subset of platforms and their analytical dimensions that differ considerably from their corporate counterparts (Chiappini, 2020). UDPs are non-profit and bottom-up in terms of data ownership, and act as fora for public participation and citizen-driven initiatives. However, some important considerations remain underexplored in these nuanced discussions about digital platforms, platform urbanism, and the coexistence of diverse economies. These include the specific discourses, actors, and mechanisms that underpin UDPs, disintermediation, and redistribution (that is, their accessibility, openness, mutualism, and the internal democratic control available to their users), as well as the extent to which specific users and spaces are represented more than others.

The paper focuses on the inherent UDP Commonfare,[2] a bottom-up platform designed to provide complementary welfare measures and currently active in three major European cities: Milan, Amsterdam, and Zagreb. Complementary welfare measures include solidarity buying groups, cohabitation experiences, FabLabs, time banks, co-working spaces, self-managed crèches, social cooperatives, ethical banks, urban gardens, popular gyms, and campaigns for free and open-source

software. Commonfare is dedicated to supporting households and communities in more precarious positions than those with higher incomes as they face the erosion of government investment in the reproductive capacity of public life through welfare provision, healthcare, education, public space, and the environment. Feminist geographers have shown how a consideration of the spatial within social reproduction is particularly important to understanding the development of our cities (Katz, 2001). Indeed, cities have been particularly vulnerable to such erosions (Federici, 2012), and the geographically uneven impacts of austerity that followed are the result of significant cuts to public expenditure, tax changes, and welfare entitlements (James, 2020).

In light of the above, the practice of sharing material and immaterial goods and services is crucial to ensure a certain degree of social reproduction, via the use of digital platforms and other embedded digital tools such as social wallets and a given cryptocurrency. It is also the case, however, that Commonfare and initiatives similar to it may encounter obstacles to access as a result of techno biases, media literacy, low levels of participation, or the over-representation of certain users, as well as issues related to the availability of financial resources such as subsidies and grants.

This paper's principal contribution will be to identify the discourse surrounding this particular subset of platforms, and to examine their ability to produce and redistribute goods and services for urban communities. The aim is to analyse the functional mechanisms and spatial outcomes of Commonfare in two different contexts: Milan and Amsterdam. The focus on Commonfare allows a discussion not only of the platform and how it operates in these locations, but of a number of broader questions: what are the narratives and discourses built around it? Who are the main actors involved, and how are resources allocated? To what extent is Commonfare able to disintermediate and redistribute at an urban scale?

The paper addresses these questions via a number of different routes, ranging from conventional qualitative methods such as interviews and

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[1] The term "Platform Urbanism" has extended beyond the public debate, and was the central theme of the 2021 Venice Architecture Biennale.
[2] See the link to the website: https://commonfare.net.

participatory observations (Ritchie et al., 2013) in both cities, to digital ethnography (Hjorth et al., 2017; Caliandro, 2018). The discussion takes the form of a document analysis (newspapers, reports, deliverables), digital ethnography (observing practices such as posting photos, writing captions or comments, and exchanging cryptocurrency), and an analysis of digital content (websites, forums, and social media).[3] Moreover, thirty in-depth, face-to-face, and unstructured interviews were conducted, with five representing the two cities (consortium and software developers) and the rest divided between researchers, artists, activists, and policymakers (fifteen in Milan and ten in Amsterdam).

Unstructured interviews are appropriate here because they allow participants to build up their own narratives of different techno-political trends. The interviews reveal discourses, that is, the rhetoric used to describe Commonfare and its functions, as well as the mechanisms of and obstacles to launching and implementing the platform (in terms of both offline and online activities). The empirical material collected is part of the fieldwork conducted between 2015-2020.[4]

The paper is structured as follows: the first section addresses the theoretical debate surrounding platform urbanism, cooperativism, and UDPs, as well as their underlying discourses, mechanisms, and actors; the second presents the Commonfare project; the third contains an empirical analysis of the two urban contexts, Milan and Amsterdam; and the final section offers a discussion of the findings to conclude on potential avenues for future research.

2. Platform urbanism: discourses, mechanisms, and actors

The ways in which Airbnb, Uber, and Deliveroo mediate social relations and extract value from these transactions as they unfold predominately in (and as) the urban realm have been extensively documented and discussed (see Armano, Murgia, & Teli, 2017; Graham & Woodcock, 2018, p. 29). In general, all digital platforms have a clear impact on the distribution of services and goods, as well as on welfare. This is particularly true in urban contexts, where social relations are condensed as a result of greater physical proximity. Within the emerging research into platform urbanism (Barns, 2019), it is clear that all kinds of digital platform benefit from the population density and spatial proximity of users/workers in cities (Artioli, 2018). For example, food delivery platforms rely on providers (such as restaurants and cafés) and users mainly located in urban areas. The denser the space, in terms of users and amenities, the more profit can be extracted by the platform. The study of platform urbanism, however, implies more than simply applying an analysis of platform capitalism to the city space (Sadowski, 2020a). The discussion around platforms appears to be expanding to encompass new configurations of urban governance (Barns, 2018), "vignettes of resistance" against the exploitation of data and knowledge (Leszczynski, 2020), and other practices designed to counter the logic of algorithms and the power of "Silicon Valley unicorns" (Amore et al., 2020).

Indeed, there are platforms that do not necessarily extract value from physical density and exploit social relations. So-called urban digital platforms (UDPs) demonstrate a different approach, and are characterised by such features as a non-profit business model, principles of self-organisation, solidarity, and complementary welfare provision. What is more, they maintain an open, horizontal internal structure in which citizens are directly involved in the production of space (Chiappini,

2020). Within urban studies, and particularly from a policy perspective, self-organisation is useful as a means of problematising concepts such as access/accessibility, internal democratic control, and the capacity to redistribute goods and services within a given community. As Savini (2016) has commented, the self-organisation principle works in conjunction with collective or individual action to "inspire visions if an urbanism beyond the state" (Savini (2016): 1153). Gonzalez and Oosterlynck (2014) see self-organised practices as tactical, open-source, and alternative.

There is therefore an important subset of digital platforms that open up a debate about the ways in which such technologies might offer complementary welfare solutions and engage citizens in the allocation of goods and services at an urban scale. These welfare solutions vary widely, from childcare to the reinvigoration of solidarity and mutual support networks such as food swaps or time banks. The goods and services exchanged within the digital platform may be tangible or intangible, such as knowledge or cryptocurrency to be used within a community, self-organised initiatives, and grassroots practices (Marres, 2017). The self-organisation of socio-spatialised practices is understood here to describe a wide variety of governance arrangements where private actors autonomously pursue public or collective objectives, providing an alternative to both the market and the government in the allocation of goods and services in the city (Nash et al., 2017).

In order to distinguish Commonfare from better-known platforms, it is necessary to observe some of its specific features. These pertain to its horizontal internal structure (involving access, openness, participation, and the representation of its users); its conception of data and information as common goods (through the disintermediation of information); and its potential as a means for redistributing goods and services within a city (strengthening social reproduction through the provision of complementary welfare measures). A previous attempt to differentiate digital platforms that function according to solidaristic principles and offer social protection to precarious workers gave rise to the term coined by Trebor Scholz (Scholz, 2016) "platform cooperativism."

2.1. Platform cooperativism and UDPs

The definition of a UDP resonates with earlier debates around "commons-based peer production" (Benkler, 2006) and Scholz's notion of "platform cooperativism" (Scholz, 2016). Whilst the former is related to the design of UDPs, namely the production of tangible and intangible commons and their reappropriation through peer-to-peer (P2P) transactions, the latter resembles the cooperative business model, which is not corporate and is characterised by open accessibility, mutualism, and internal democratic control for users. According to Scholz (2018) all platform cooperatives are bottom-up and self-organised business networks; in other words, ownership and governance are shared between users and value production follows an alternative route, with revenues reinvested in the platform and distributed amongst members just as in traditional cooperative models. Yet, little knowledge and scarcely any empirical evidence exist about digital platforms when one restricts the focus to those non-profit platforms that function as urban arenas of public participation, or as alternative or complementary modes of welfare provision within local communities.

Platform cooperativism refers to an entire ecosystem of organisational models diametrically opposed to "platform capitalism" (Srnicek, 2017), those large, for-profit enterprises that thrive by controlling and exploiting networks and peer exchanges. There are several examples of platform cooperatives, such as Fairbnb.coop and GreenTaxi.coop, the latter also serving as a trade union for its workers. It should be noted that these are examples that function at a global scale and do not directly involve citizens, but rather operate as platforms owned by a group of people (i.e. the membership and salaried workers), applying conventional cooperative principles. The main difference between platform cooperatives and UDPs is the type of actor involved and the degree of direct engagement with urban space. Drivers and hosts do not

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[3] The author has been an observer of the project Commonfare; there is no relationship with the larger European Horizon 2020 funding programme in which Commonfare is embedded.

[4] All the interviews were conducted between 2017 and 2019, and were mostly in English, except when talking to Italian organisations and actors. For those interviews the transcripts are in Italian. The quotes reported in this paper have been translated by the author. 'Sic!' may occur due to the recording and consequent translation from the original Italian transcripts.

necessarily live where they provide their service, nor are they necessarily connected with new spatialities and the realisation of local initiatives. Those who participate in activities such as civic crowdfunding, meanwhile, tend to be citizens directly engaged in the provision of bottom-up goods and services, and are often involved in the development of certain urban spaces. Another distinct feature of UDPs is that they are non-profit, hence their disintermediation of both information (with data no longer conceived as a commodity but as a common good) and state and market, and their capacity to redistribute goods and services at an urban scale (such as complementary welfare provision). It is true that the state and the market can also provide some services and goods, but only given certain conditions (in the case of the state) or certain financial means (in the case of the market) that many cannot afford (Polizzi & Bassoli, 2019).

2.2. Disintermediation and redistribution

Within the debate around "urban commons" (Foster & Iaione, 2016; Sassen, 2014), urban activists experiment with spatial practices that simultaneously (re)claim the "right to the city" (Iveson, 2013), envision "post-capitalist urban commons" (Chatterton & Pusey, 2019), and posit "rebel cities" (Harvey, 2012). Behind these slogans, there is a desire for the ideal of a self-organised city, in which people are not directed by central authorities but cooperate voluntarily in communities and for the public good. This vision has empowered a range of initiatives, from urban gardening (Mattijssen et al., 2018) via technology hubs (Moisio & Rossi, 2019), to childcare facilities and makerspaces (Chiappini & Törnberg, 2018). These projects are explored to harness digital platform technology and enhance participative democracy, user-controlled data ownership, and the co-design of urban services. Crucially, they involve citizens in municipal decision-making and policy design (Lynch, 2020). A UDP's capacity to produce and redistribute goods and services for urban communities differs considerably from those platforms that are profit-oriented and global (Anselmi et al., 2021). Ultimately, the context in which such platforms operate may depend on the political discourses promoting the platform, the existing urban dynamics, any regulatory frameworks, governance arrangements, and the role of the local state.

According to Bria (2015), recent experiments in digital platforms oriented towards citizen participation prioritise the co-creation of knowledge about and solutions to a wide range of social issues at an urban scale. The existing academic literature has also analysed digital platforms and technologies as tools for citizen engagement and participation in government activity (Gullino, Seetzen, & Cerulli, 2019). These experiments are often presented by policymakers and corporate actors alongside concepts such as collaborative/sharing economies, or as part of measures to "become" a smart city (Sadowski, 2020b). As a result, experiments that deploy digital platforms are expanding into urban realms, including transport and mobility, governance interfaces, resource allocation, and processes of decision-making. Policymaking in the field of digital platforms can be seen as part of a broader shift towards decentralised governance arrangements (Törnberg & Uitermark, 2020). Due to the fact that technical providers also come into play within the urban arena, as gatekeepers of information and data (Botto & Teli, 2017), citizen participation is all the more crucial to ensure a platform's vitality. On one hand, these platforms–hubs for meeting and coordination, disintermediated and leaderless, and designed to solve collective problems–uphold the processes of social reproduction in which citizens are involved. On the other, in terms of the production of urban space, they may also reshape the city as a terrain ripe for the dissemination of self-organised practices and solidaristic projects to a broader segment of society.

3. The Commonfare project

Commonfare was set up in 2015 as a consortium of different partners: University of Trento (Italy), Basic Income Network (Italy), Centre

for Peace Studies (Croatia), Bruno Kessler Foundation (Italy), Dyne.org (The Netherlands), Abertay University (United Kingdom), and Madeira Interactive Technologies Institute (Portugal) (Pieproject, 2018). In 2017, the project received three million euros from the European Union through the Horizon 2020 programme,[5] which was allocated equally between partners in the three pilot cities, Milan, Amsterdam, and Zagreb. The cities were chosen based on two criteria: their status as important metropolitan areas in their respective countries, and their different welfare regimes (Bassetti, 2019). Establishing the funding and selecting the local organisations was managed entirely by the consortium. A co-design approach to services and digital tools was adopted, and the consortium engaged with both existing and new local initiatives.

The composition of the actors involved included existing, public administrations, NGOs, and activists, who responded to the initial call by the Consortium in the three cities. One of the main partners in Commonfare is Dyne.org, a collective of hackers and software developers based in Amsterdam and responsible for the platform's digital tools (such as codes, technical support, data collection, social wallet API). The platform was designed by Dyne.org to an entirely non-profit business model, in which value is produced by users sharing information, content, and stories with either tags or geographically localised initiatives and projects. Commonfare is a digital platform designed to provide complementary welfare services in the three pilot cities. Its main goals are as follows: to share stories about social collaboration in neighbourhoods and cities that respond to social needs and desires; to support the sharing of knowledge, goods, services, and skills; to develop a complementary currency to support financial networks whose goal is the autonomous and free implementation of cooperative welfare practices; and to collect and share information about public benefits and services.[6]

The Commonfare model comprises four pillars, as outlined in their manifesto: unconditional basic income for communities provided by users (which means that the platform's users will pay the unconditional basic income of others within the Commonfare community); the management of common goods and commonwealth; the proposal of an alternative sharing economy; and the cryptocurrency (iv).[7] On the digital platform one can offer and ask for help, resources, skills, and knowledge. These can be provided for free, direct trades, or exchanged for the cryptocurrency CommonCoin. On the website, one reads: "Commonfare is a place to strengthen the common good, rather than a marketplace dedicated to financial transactions." Commonfare is, therefore, a bottom-up platform that supports collective actions and local initiatives, oriented to fulfilling social functions in urban communities. Those initiatives meet basic criteria to ascertain their public benefit, in terms of the redistribution of information, knowledge, goods, and services. For instance, Commonfare aggregates and provides useful information about available public benefits and welfare state provisions, such as how to apply for preschool benefits or housing allowances.

The content is entirely user-based, with users able to share stories about social collaboration in neighbourhoods and cities, and the platform supports the sharing of information about public benefits, services, knowledge, goods, and skills. Its main digital tool is the cryptocurrency system CommonCoin, which supports a financial network that strives toward autonomy and the implementation of cooperative welfare practices. The platform is open and accessible, requiring only a simple log-in, and its ultimate goal is to map the practices of collectives, such as

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[5] The PIE News/Commonfare project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 687922. Duration 1st July 2016–30th June 2019 (36 months). See Commonfare's official first delivery report.

[6] See Commonfare website: https://commonfare.net/en/pages/about.

[7] See also https://networkcultures.org/wp-content/uploads/2018/01/MONEYLABREADER2OVERCOMINGTHEHYPE.pdf for the complete version of the manifesto.

mutual care and solidarity, which respond to local needs and lie outside of the arena of institutional politics. Commonfare's main value is its self-organising capacity, in which individual citizens are invited to participate in the production of goods and services–in domains such as care, education, social security, and assistance–that the market and the state no longer provide.[8]

4. Analysis

Commonfare's goal is to facilitate social reproduction at an urban scale: as a self-organised and bottom-up service, it promotes information about social provision and benefits beyond the state and the market in what is a potentially significant act of disintermediation. The analytical approach of this paper aims to explore the extent to which Commonfare, as a UDP, is in fact successful at disintermediating and redistributing at an urban scale. In order to accommodate the empirical material and different pulls of the data, the analytical dimensions have been grouped as follows:

a) discourse and allocation: the capacity to produce and redistribute goods and services for urban communities;
b) governance: the level of accessibility, openness, mutualism, and internal democratic control for users;
c) urban actors and spatialities: the number of users and kinds of actor involved, representation, and location of allocated projects.

The first rubric focuses on an individual's capacity to participate in the public arena to protect specific interests and respond to social needs, disintermediating state apparatus and market in the provision and allocation of goods and services. In particular, it entails sharing information and knowledge, namely the content produced by users via stories, and other digital tools such as cryptocurrency. These tools contribute to the process of disintermediation, the capacity to redistribute goods and services that the market and state are no longer able to provide. The second refers to accessibility, which also affects access to urban space, and is measured in terms of co-creating knowledge, citizen engagement, and the more or less communal production of goods and services. The third pertains to the spatial outcomes of UDPs; the kinds of obstacles and limitations to social reproduction that actors face, and how they act together to shape spatialities in the city. These three dimensions are crucial to determining Commonfare's capacity of disintermediation, as well as the platform's specific features in relation to existing urban configurations that separate it from others.

a) Discourse; sharing stories and visibility on social media!

Commonfare is imbued with a principle of redistributing goods and services, and rooted in efforts to reappropriate the commons, social innovation, solidarity, and mutual help for more solidaristic ends (Fumagalli & Lucarelli, 2015). The two primary tools used to pursue this are a) the sharing of stories and information about welfare benefits and allowances in the three cities, and b) the use of cryptocurrency to allow communities a basic income. The digital ethnography shows that stories on Commonfare are very heterogeneous, and may be about a user who wants to share a service or is in search of skills to exchange. Examples of such might include babysitting, yoga lessons, English language revision, expert 3D printing workshops, or gender and technology discussions on coding. These services can be exchanged for free, or paid for with CommonCoin. Within the platform, practices of exchange may refer to ethical purchasing groups, free software communities, co-housing groups, revitalising old buildings, Fab-Labs, co-working spaces, time

banks, urban vegetable gardens, community-based self-organised gyms, mutual aid practices, and networks of artists and freelancers (see Picture 1 and Picture 2). CommonCoin can also be exchanged for these activities.[9]

The platform's bottom-up character is due to its promotion of stories and inter-user collaboration for sharing resources such as goods, knowledge, or skills. This can happen either through the exchange of content and information about welfare measures, or through a real exchange of services or goods between users[10]. Stories are promoted according to a belief that rhetoric and discourse are also a fundamental part of social change and social innovation.

The digital ethnography material shows examples of the dashboard and display a service's whereabouts, the provider, and the amount of cryptocurrency required for the service.

> "The visualisation of contents is relatively user-friendly. I am a commoner-voice, like a story-teller. I use hashtags in stories for other commoners." (Researcher)

The second most important digital tool is the CommonCoin and wallet, which is where users can store digital tokens. It works as a digital interface and allows forms of exchange between members of the community. As one of the software developers described:

> "A wallet is a common place to store value, which is shared and accessible for a number of people. This can, for instance, be a group or collective that have the same interests or work on the same project." (Software developer)

The cryptocurrency allows local communities to provide incentives for artists, such as a basic income, build up projects autonomously, and sustain their cultural events. When Dyne.org started to create the digital tools, at the beginning of the project, it was not clear how and where the cryptocurrency and the wallet could be used in the three selected cities, that is, which goods and services would be available to citizens and users. Three years later, the tools can be used effectively, and it is clear that they have been used most by two artist/activist communities already embedded in their respective cities and that also took part in co-designing the digital tools in the implementation phase: Macao in Milan and NDSM Treehouse in Amsterdam.

For instance, in Macao, the community has its own self-organised basic income (see Picture 3). They can then transform this from CommonCoin into euros through a monthly fund that they have established. As an autonomous organisation with a dedicated membership, they buy goods within the faircoop system, either using the digital token or euros:

> "There are projects and people who are the same, flexible enough. Every month, people engage with the space in a variety of functions, from ordinary maintenance to democratic participation in assemblies, and occasions for activism, such as demonstrations and networking with other movements. All these assets are remunerated in CommonCoin. Those who participate in all the activities in which productive capital is a feature has access to a basic income in euros. We built a fund, with a 20% withholding tax on each project." (Activist)

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[8] For instance, in the Netherlands they use *broodfonds*, a collective that allows independent entrepreneurs to provide each other with temporary sick leave. The recommended minimum is 25 people; the maximum is 50.

[9] For an example, see: https://commonfare.net/en/stories/commonplace-tutorial?fbclid=IwAR3KkbTQeAVINLHV6KzfNfIwuWoS98fHrouPG6MS usWuEwVk7X5CiazWphk (accessed October 2020).

[10] Every user receives a digital incentive of 1000 CommonCoins, which can be spent as "welfare cards" on the stories that have welfare provision as a tag (cf. tags: "misure di welfare," "socijalna zaštita," "sociale voorziening"). CommonCoins and tokens in general are automatically generated by the platform once a new user signs up and creates a profile. Tokens can be cryptographically generated once numbers are stored on a database or blockchain and are algorithmically validated (Saurs & Bonelli, 2020; Cila et al., 2020). Every month, each user receives a basic income of 1000 tokens to spend on the platform.
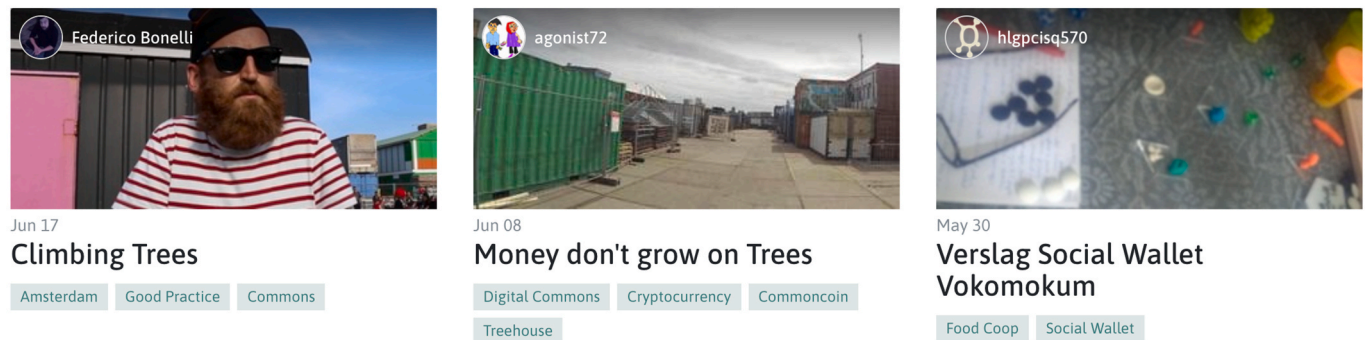
Tags with 'amsterdam'

amsterdam

Commoners Voices

A collection of stories for, with and by people.

Federico Bonelli

Jun 17
Climbing Trees
Amsterdam Good Practice Commons

agonist72

Jun 08
Money don't grow on Trees
Digital Commons Cryptocurrency Commoncoin
Treehouse

hlgpcisq570

May 30
Verslag Social Wallet Vokomokum
Food Coop Social Wallet

Picture 1. Exchange and CommonCoin use. **Source:** author.

Andrea looks for Ita- Eng translation
cc1,000.00 - cc4,000.00
📍 Milano
Jun 18, by Andrea Premarini
💬 0 Comments

Concorso "call for story" per partecipare al workshop del 13 Aprile 2019, dal titolo " Pratiche di ricostruzione del welfare dal basso"
cc0.00 - cc500.00
📍 Milano
Mar 27, by BIN Italia
💬 1 Comment

Picture 2. Examples of stories **Source:** author.

Moreover, the project is strongly promoted by the local government of Milan and by public figures within the urban governance of Amsterdam. In Milan, the municipality was heavily involved in promoting the project's website. In addition to this, the head of economic affairs in the municipality of Milan, Cristina Tajani, has been particularly active (both personally and through a think-tank that she manages) in promoting and sponsoring Commonfare on social media and in public speeches. In Amsterdam the local authorities were not visibly and explicitly involved, although Waag and one of its founders, Marleen Stikker, were the most prominent and best-known figures involved in Commonfare there. Waag is, indeed, a well-known arts, science, and technology organisation, involving citizens and policymakers in decisions about the city of Amsterdam. As Table 1 shows, the role of the local authority in Amsterdam and Milan diverges in terms of promoting the platform and visibility.

b) Governance: Disintermediation and Information on Welfare Measures

The initial purpose of the platform was to have a governance arrangement characterised by a decentralised network to disintermediate market and state in local welfare provision, relying entirely on the exchange of immaterial and material resources between users in a P2P model. Commonfare does not depend on tech multinationals for its digital infrastructure and domain. All users become a member of Commonfare and are the actual owners of data produced on the platform. To evaluate the accessibility of the platform, it is important to consider how open access is, or in other words, what data is required to have an account and be eligible to receive services relating to welfare provision and exchange goods. The platform is built on a discourse of disintermediated welfare, as information and data are created and shared by users. The content and information shared on the platform are considered common goods. From the empirical material collected as part of the digital ethnography, it appears that there are no admins, with every user entitled to share posts and stories, and what is more, pieces of information are not prioritised or hierarchically ordered via algorithms.

"This model differs from the capitalist one based on exploitation and accumulation, as it embeds tools of participatory welfare based on
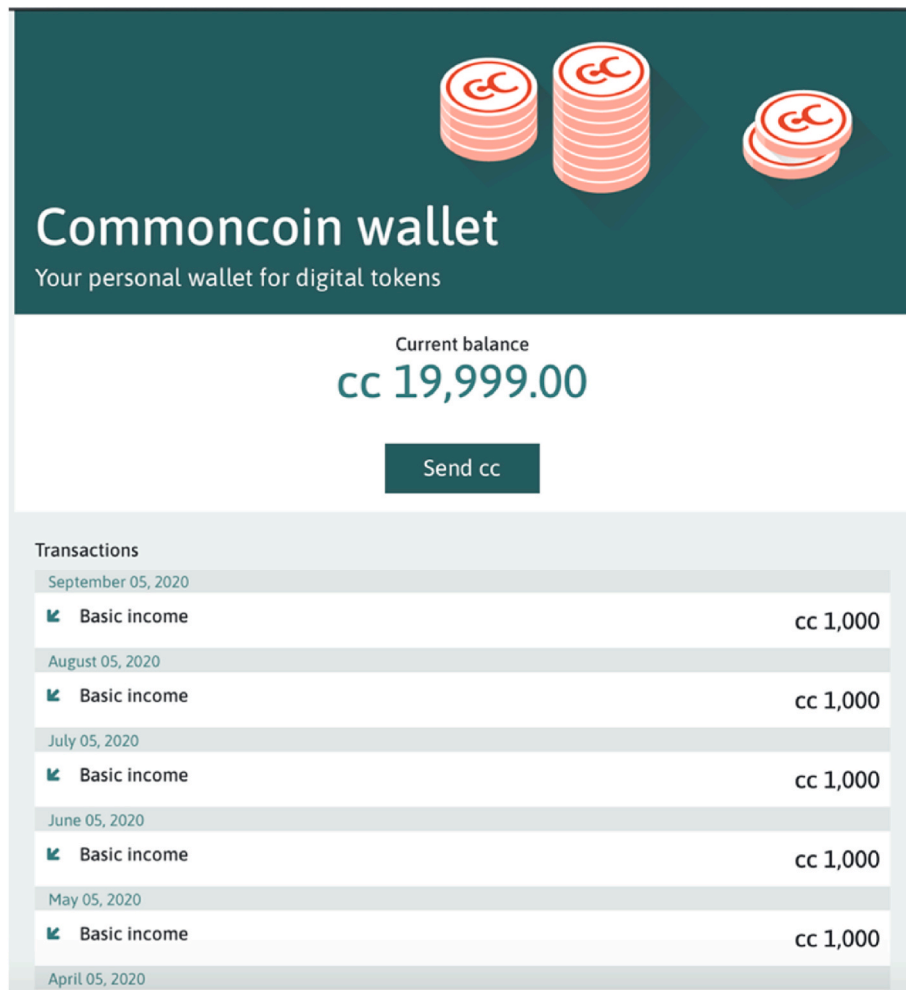
Picture 3. CommonCoin; wallet and basic income. **Source:** author.

Table 1
Digital ethnography of social media platforms and accounts (December 2016 to December 2019. Table updated in August 2020).

Social Media Platforms & Websites	Accounts & Users	#Mentions and Tweets	Followers
Commonfare website	/	/	/
NDSM Treehouse Amsterdam – Website	/	/	/
Macao Milano Website	/	/	/
Twitter	Waag	4	18,6K
Twitter	Marleenstikker @marleenstikker	16	12,5K
Twitter	CommonerBeta @BetaCommoner	/	57
Facebook	Cristina Tajani (public profile)	13	6770
Facebook	*Milano Innovare per Includere* (private group)	3	1390

solidarity and practices of care within people and communities. [it is] a digital platform and a complementary currency–CommonCoin–with the aim of fostering the networking of people, and supporting initiatives of alternative welfare." (Consortium)

Besides the technical design of the platform, the governance arrangement shows a process characterised by a high degree of democratisation: issues of access and the agency of Commonfare are shared and discussed between the community, with data conceived as common rather than sold to third parties. As expressed in the manifesto, "by common goods we mean the governance of tangible and intangible goods which are the basis of human existence and survival." (p. 134)

> "We have created our own infrastructure; we are not talking about big data extraction or mining. This is key because the tech giants, via data and algorithms, affect our society. And the grounds on which these algorithms are designed is too ethically flawed to be treated acritically." (Researcher)

In line with the platform's openness, based as it is on democratic values and horizontal relations, the discourses and values voiced on the platform are also quite homogeneous. These quotes indicate the ideological and political values of Commonfare's users, who clearly share a strong commitment to protecting the artist communities facing eviction in Milan and Amsterdam.

c) Urban actors and spatialities: Initiatives for all users but benefits for a few!

Commonfare was initiated by activists, hackers, and a constellation of academics able to mobilise a network and find the resources to implement the platform in Milan and Amsterdam. Operating within the context of technology and media activism, Dyne.org is one of the primary actors to have participated in and animated the Commonfare platform. The empirical analysis reveals a high degree of homophily in user composition (i.e. age, education, involvement in activism for digital

rights). Moreover, similarities in terms of values and intentions can also be found between the two artist communities that have participated in the project. It can then be argued that the level of required media literacy is high, therefore limiting the practical application of the platform and its digital tools for regular users. Finally, the project's strong values of disintermediation, welfare as a common, the bottom-up structure, and so on, are an important factor in users' (self-)selection. Indeed, one of the interviewees claims that those who responded to the call were to some extent already part of networks around Dyne.org and the educational institutions that won the Horizon2020 grant, namely those involved in the consortium.

> "Our target audience was citizens and workers that are excluded and precarious. At the very beginning, we tried to create a critical mass around Commonfare. In 2017 a Gmail group called 'Precarious work costs us too much!' was created." (Consortium)

Considering the project's trajectory up to June 18th, 2019, the digital community represents around 5662 users, opening 9153 sessions and viewing 15,959 pages with a 69,52% bounce rate. The community is composed mainly of millennials and gen X individuals, often with an educational background in science and technology. However, sharing stories and using CommonCoin are not necessarily immediate, but require digital knowledge and skills comparable to a savvy se of a social media platform such as Twitter or Facebook. Based on the observations, it appears that those most active on the platform are artists, activists, and members of organised networks or non-profit organisations who have been involved in designing the platform since the beginning. Individual citizens, meanwhile, were poorly represented on the platform.

As the work of feminist geographers reminds us, it is crucial to observe the spatial component in production and social reproduction. As the two maps below demonstrate, Commonfare–like all UDPs–has a significant spatial outcome within the two cities, which has further established and reinforced the presence in the urban space of two existing and well-known artist communities: Macao in Milan and NDSM Treehouse in Amsterdam. Both venues are organised following a cooperative model (d'Ovidio & Cossu, 2017), and currently use the cryptocurrency and wallet for internal activities with a specific codebase adjusted for them. As one of the founders of Macao laid out:

> "As a self-organised community, the collective has chosen the digital tools for internal transparency, to exchange CommonCoins when we organise cultural events, and to distribute a basic income every month through the CommonCoin. […] We also gain extra coins when we take care of public spaces around Macao." (Activist)

As described above, Macao and NDSM Treehouse have, through Dyne.org, been involved in the project since the beginning. They have participated as main partners, and their projects have been financially supported both through the Horizon 2020 funds and by users of the platform. Furthermore, the communities of the two venues have been gaining visibility through public events organised in the two cities. During these events, stories of welfare provision via Commonfare were celebrated as best practices for offering a form of social protection to vulnerable segments of society.

A final point can be made, showing how Commonfare relates to urban space. Indeed, policymakers at different levels in Milan and Amsterdam are involved in supporting the platform either explicitly (in Milan) or implicitly (in Amsterdam). Remarkably, during an interview, a policymaker claimed:

> "Digital communities need face-to-face relationships in order to build trust. The social wallet and Culto CommonCoin are digital tools that have a direct outcome in everyday activities. NDSM is a place in the city in which you can experiment with new digital solutions." (Policymaker)

Maps 1 and 2 show the location of the venues that have benefitted the most from Commonfare, two well-known artist communities involved since Commonfare's beginning in the decision-making process. The two communities have also proved the most active on the platform in the promotion of discourses about sharing and collaboration, as well as the use of cryptocurrency. The consortium, in which Dyne.org was the most prominent force in terms of providing the digital tools and their relational capital, was the one that engaged Macao and NDSM Treehouse. The constellation of these actors was critical in shaping the platform's homogeneous culture in terms of its discourses, practices, activities, and the final allocation of resources.
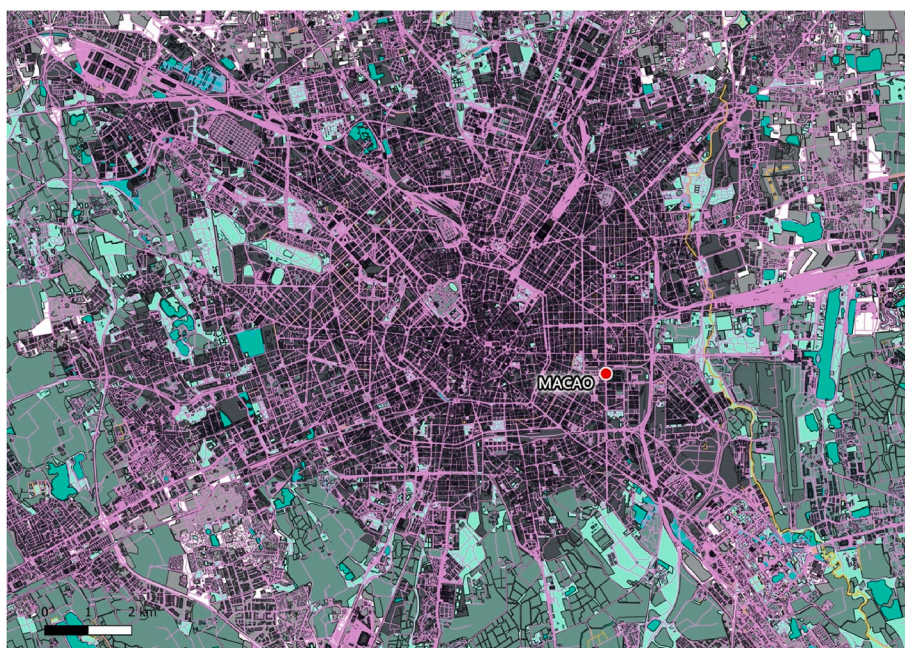
Map 1. Location of Macao, Milan. **Source:** author.
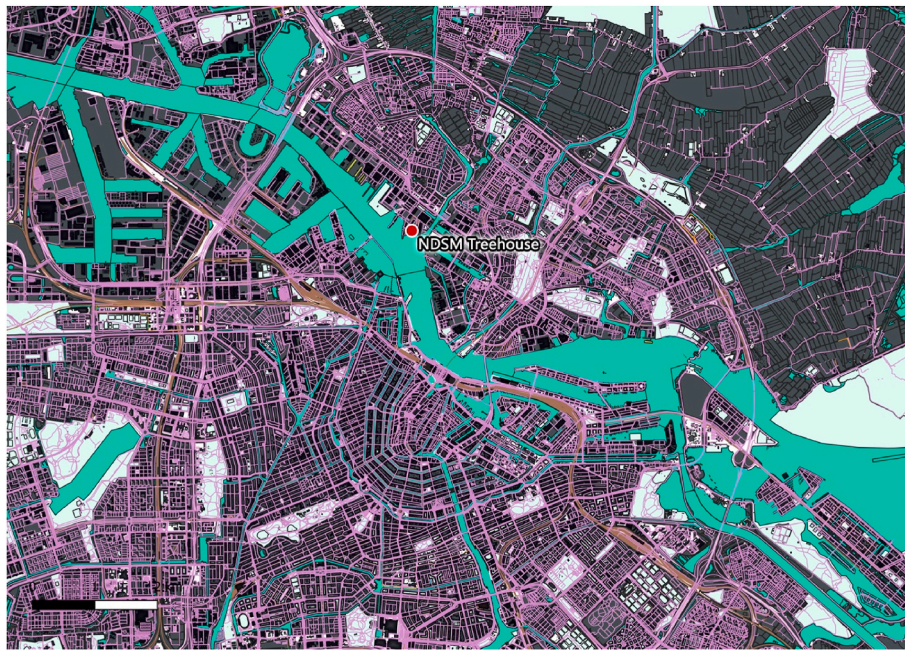
Map 2. Location of NDSM Treehouse, Amsterdam. **Source:** author.

5. Discussion and conclusions

Commonfare offers an illustrative example when it comes to empirically testing the concept of UDPs further. For three years, the Commonfare project has been set on promoting a digital platform as an alternative and sustainable socio-economic model, capable of meeting the needs of vulnerable social groups with little or no access to information about public benefits and welfare. Today, Commonfare has emerged as an impressive container of different stories and a site of "good practice" to be replicable in other contexts. The settings of Milan and Amsterdam have been essential in offering a range of mundane activities, a real-world social fabric, and a political milieu in which to transform digital incentives into physical outcomes, as they are both socially and physically dense urban areas with a significant proportion of creative workers, freelancers, and cultural capital (d'Ovidio, 2016; Kloosterman, 2018). As concerns the digital layer of the platform, networks appear accessible, open, and self-organised, although their capacity to produce and redistribute goods and services for a larger segment of society is debatable.

On one hand, the capacity to produce and redistribute goods and services for urban communities depends to a great extent on users' media literacy, their ability to navigate the platform, share stories, and use CommonCoin and the social wallet. On the other hand, despite a required minimum of media literacy, the homogeneity of users, content, values, and political and ideological views shared on the platform demonstrate a high degree of homophily which makes the Commonfare project ineffective for a broader segment of society. This is due to two interconnected factors: 1) The ethical motivations underlying the project, which are very pronounced and seem to produce a sort of ideological adhesion within the communities involved; 2) The fact that the project is physically situated in two cities with well-defined networks in each. More than ten participatory observations revealed that the same groups were attending such events (members of Macao, Dyne.org, and NDSM Treehouse), which might indicate a closed and restricted network of actors with a large stock of social and relational capital even outside of the platform. More broadly speaking, the rise of UDPs such as Commonfare reveals a growing awareness of the unsustainability of current forms of capitalism via global digital platforms, in favour of more equitable, alternative economies (Gibson-Graham, 2014). In both cities,

the ideological, political, and ethical motives behind Commonfare are oriented to ideas of a digital right to the city, as exists in discussions around urban commons. Commonfare supplements a critique of techno-optimism with principles of solidarity and mutual aid, and is inscribed in wider efforts to revive public participation and community-building.

This paper has investigated the extent to which Commonfare, as a UDP, is able to disintermediate and redistribute welfare provision at an urban scale, following on from Trebor Scholz's claim that contemporary digital tools and platforms contain an emancipatory and even revolutionary potential. However, the main difference between platform coops, for example, and UDPs is that Commonfare was created to attract communities based primarily around practices, although in the end, the aim of those promoting the narrative (the same group of like-minded people, mostly hackers and makers, who established the consortium) is to attract a growing number of stakeholders. Cooperative platforms, meanwhile, are an alternative to venture capital-funded platforms insofar as they are owned and run by those who depend on them most: workers, users, and others. They propose cooperative solutions in sectors such as transportation, on-demand labour, and other marketplaces. In short, the two models are similar in their principles, both are rooted in a criticism of the sharing economy, and both strive to carve out a fairer and more equitable social economy against well-known platforms such as Airbnb and Uber, but differ in how they support their users and stakeholders. Commonfare is more of a tech proposal that aims to implement basic income policies, as well as other subsidies and forms of support for artist communities, such as via alternative currencies.

On one hand, the growth in mutualistic initiatives can be read as a response to the decline in welfare measures at the urban scale, plus urban communities' desire to participate in society. This fits the thinking behind socially innovative practices and forms of participatory society which, in cities such as Amsterdam (Savini, 2017) and Milan, see citizens identify resources that could be redistributed as common goods among their communities (Vicari & Mulaert, 2009). These resources may include information, knowledge, or involve the reappropriation of primary public goods and the reclaiming of urban spaces for local communities. However, as far as Commonfare is concerned, the platform's capacity to effectively support mutualism and empower vulnerable social groups is disputable. Indeed, Commonfare appears to be

particularly ineffective at reaching marginalised, excluded, or vulnerable individuals who either struggle to connect to the platform or do not necessarily hold the same values as the communities already dominant there.

On the other hand, the platform does play an important role in disseminating a narrative of alternative, bottom-up, community-based welfare actions. Notwithstanding the relative homogeneity of its users, Commonfare manages to attract those interested in discourses related to welfare provision, the importance of narrative and, although to a lesser extent, to reach people who would not otherwise hear those stories. Since a large part of the sharing experience is to tell stories and inform others about existing welfare services (mainly but not only public services), the platform also plays an important function in helping people to approach welfare measures, as well as even promoting advocacy to make citizens' rights more visible.

Also important, of course, is the location of those projects and how they relate to existing urban spatialities. This also reflects where and how resources have been allocated: Macao in Milan and NDSM Treehouse in Amsterdam, as we have seen. Macao is located in the outskirts of Milan to the southeast, in an area that lies outside of the municipality's broader urban regeneration plan (Map 1). Likewise, NDSM is a neighbourhood in Amsterdam, located on the grounds of what was once the *Nederlandsche Dok en Scheepsbouw Maatschappij* (NDSM) shipbuilding company. Amsterdam Noord is a hip and cool neighbourhood characterised by an active community of artists and a vibrant clubbing scene (Map 2). This type of spatiality is the product of both content shared on online platforms and existing networks of like-minded actors, all contributing to a co-creation of place in physical space on an urban scale.

By way of conclusion, Commonfare and other UDPs cannot be the only tools available when it comes to a community's capacity for self-organisation in the development of complementary welfare solutions. A question that remains to be answered is how these platforms can prevent the precarity and expulsions perpetrated by platform capitalism. There are, however, phenomena that seem to offer promising options when it comes to reviving social ties and creating a more inclusive society, most notably decentralised networks and P2P exchange. These may prove transformative in an era in which the unicorns of the sharing economy can no longer be tamed, our data is hoovered up and sold to third parties, and our digital futures and urban space remain contested.

CRediT authorship contribution statement

Letizia Chiappini: Conceptualization, Data curation, Formal analysis, Writing – original draft, Conception or design of the work. Data collection., Data analysis and interpretation., Drafting the article. Critical revision of the article. Final approval of the version to be published.

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