This is an **Accepted Manuscript** version of the following article, accepted for publication in *Journal of Urban Affairs* and published online by Taylor & Francis, on 19 April 2023:

Anaïs Varo, David Hamou, Ana Méndez de Andés, Edurne Bagué & Marco Aparicio Wilhelmi (2023): Commoning urban infrastructures: Lessons from energy, water and housing commons in Barcelona, Journal of Urban Affairs, DOI: 10.1080/07352166.2023.2190025

This Accepted Manuscript version is deposited under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License

(http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.



Commoning urban infrastructures: Lessons from energy, water and housing commons in Barcelona

Anaïs Varo, David Hamou, Ana Méndez de Andés, Edurne Bagué & Marco Aparicio Wilhelmi

ABSTRACT

In recent years, debates and contributions on urban commons have mush-roomed. At the same time, the recent and unprecedented health and social crisis has revived the relevance of the collective (often in the form of public) response to cover basic needs. The research objective in this paper is two-fold: firstly, we explore the potential and limits of the current scenario in the Barcelona region regarding political experimentation at the municipal level, analyzing different examples of commoning experiences in basic services. Secondly, we question and recast the classical commons theories applied to the urban infrastructures sector through three specific cases (water, energy, and housing). We build on a qualitative approach, using a comparative perspective, to study three experiences of commoning practices on basic urban infrastructures in the Metropolitan Region of Barcelona. The core of our contribution navigates between the discussion on the urban commons and their particularities compared to classical commons theories, and the role of infrastructures as commons in this new urban field. Our research also highlights how the commons offer useful guidelines to reformulate and reconfigure the relationship between subjects, needs, and power.

KEYWORDS: Commons; infrastructures; municipalism; democracy

Introduction

The COVID-19 pandemic has called into question all our socioeconomic certainties, unveiling the weaknesses and defects of the neoliberal system. This process has led to the emergence of many debates about our collective capacity to withstand this (new) crisis. One such debate is the role of the commons as a political horizon, which has been fueled by academic and political discussions on the topic. The recent and unprecedented health and social crisis has resulted in a scenario in which access to basic living resources and infrastructures, such as water, energy, or housing, plays a central role.

Analysis of claims by popular movements and new collaborative tools in the local sphere regarding basic services, such as water, energy, or housing, can be framed in the so called commons studies. This research contributes to the widening debate on the commons and, more specifically, the urban commons (Micciarelli, 2018; Stavrides, 2016) and commons as social organization (De Angelis, 2017). The research questions for this paper are: Can urban commoning, understood as grassroots "instituent practices," increase popular control over basic services such as housing, water and energy? To what extent do the experiences of common urban infrastructures in the Barcelona area challenge the classical definition of commons?

In order to answer these questions, the objective of this paper is twofold. On the one hand, the authors explore the potential and limits of the current scenario in Barcelona¹ regarding political experimentation at the municipal level, examining various commoning experiences in basic services. On the other hand, we question and recast the classical commons theories (Ostrom, 2015) applied to the urban infrastructures sector through three specific examples (water, energy, and housing). The core of our contribution is located in the overlap between the discussion on the urban commons and their particularities compared to the classical commons theories and the role of infrastructures as commons in this new urban field (Bollier, 2012; Frischmann, 2005). The research is grounded on a qualitative and inductive approach. This paper does not aim to analyze each of the cases in detail as a sole unit, but to unveil and structure some of the timelier debates on the urban and infrastructure commons in the literature, as well as to illustrate the potential and limits of some of these debates through actual experiences from each of the particular cases. In doing so, we have organized the paper as follows.

The first part of the paper focuses on the theoretical background of our research. First, we begin examining the most recent contributions to the urban commons. This section also frames the three thematic cases—water, energy, and housing—in the often neglected infrastructures commons discus- sion. We situate our cases in Barcelona's radical urban politics context, connecting it to the wave of "new municipalism." Next, the methods section outlines the main research steps for the investigation and details the data collection process and the analyzed research data. Following, we undertake the three case analyses in dense descriptions. The results are followed by a discussion section in which we connect our main findings with the theoretical propositions presented in the first part of the text. Finally, the article finishes with a conclusive section with political and theoretical lessons from the studied cases.

Commons and the city: A growing literature

Urban commons have recently been identified as an area of study that has come to the fore, both in academic literature as well as in the fields of social activism and institutional politics. Commons in urban environments share many of the characteristics of other types of commons that have been more extensively studied, in traditional (Ostrom, 1990), "new" (Hess, 2008), or digital (Benkler, 2006) environments. However, there are certain particularities of the urban element that make it worth asking why we talk about "urban" commons and how we could best describe them. Kratzwald (2015) underscores two literature trends that connect urban and commons theories. On the one hand, there is the idea, shared by authors like Linebaugh (2008) but also Huron (2015), Baibarac and Petrescu (2017), and Festa (2016), that cities are spaces of struggle that need to be commonized. By contrast, authors such as Harvey (2012) or Hardt and Negri (2009) underline that the city itself is a commons that should be reclaimed as such by its inhabitants. In the following section, we argue that commons should be considered a political hypothesis. We argue that this position rejects a merely descriptive approach to the commons, as well as its consideration as a "third category" complementary to the public (state) and the private (market).

The urban commons framework: Convergences and divergences

Academic literature on urban commons has been recently established and comprises different approaches. Some of them crystallize in the dichotomy between a neoinstitutionalist and a neo- Marxist approaches (Huron, 2017), while others elude this confrontation focusing on the spatial effects of the urban commoning process (Dellenbaugh et al., 2015). These sometimes-contradictory approaches make urban commons a deeply "ambivalent" concept with respect to capitalism and neoliberalism (Enright & Rossi, 2018).

The neo-institutionalist approach focuses its analysis on shared resources in the city, such as community gardens, social centers, or public squares, among others. This analysis builds on the classical economic distinction by types of goods, and focuses on the institutional rules defining the use of the resource (Ostrom, 2015), and not so much in the community involved. For example, Foster (2011) categorizes urban commons according to their economic characteristics of rivalry and exclu- sivity and identifies the different cases of "tragedy" (Cox, 1985).

As opposed to this vision, the neo-Marxist approach stresses the link between urban commons, social mobilization and the communities that embody them. The city appears then as a site of social conflict, where urban commons are the object of private and public "new

enclosures" (Blomley, 2008; Chatterton, 2010; Midnight Notes Collective, 1990) and a form of resistance toward the process of "dispossession by accumulation" (Harvey, 2012). From this perspective, urban commons are not considered a type of good but a social relationship (Stavrides, 2016). This perspective connects with De Angelis (2017) proposal to consider commons as systems of social organization and with

E. P. Thompson (1991) analysis on the generation of social relations and common rules by social groups that define and self-constitute themselves. Thus, commons are no longer identified according to the nature of the resource, but to the construction of a community that takes care of it and, more importantly, to the "commoning" activity² they deploy. In this paper, we follow this second approach, when we argue that energy, water and housing cannot be considered as commons only because of their characteristics, but rather because they are the object of commoning practices. From an epistemolo- gical point of view, the question is no longer whether the good in question is rival or exclusive, but rather to what extent these claims are able to de-privatize and de-statize the use of urban spaces.

In order to understand the power of bottom-up action in the commons framework we highlight the concept of "instituent praxis" (Castoriadis, 1983; Laval & Dardot, 2015) to define commoning practices. Following the authors' arguments, "instituent praxis" refers to emancipatory practices characterized by two main elements: firstly, praxis -as an instituent activity—never starts from nothing but always is conditioned by previous practices that constitute given conditions. Secondly, an "instituent praxis" permanently creates, at the same time, new immanent regulations that generate transformations in the community and the individuals (Laval & Dardot, 2014, p. 301). Commons have the potential to reactivate the "instituting power" that according to Castoriadis is the foundation of democracy, as the creative self-alteration of society by itself (Castoriadis, 1983). Therefore, "instituent praxis" is a valuable concept to understand and identify commoning practices as dynamic processes that avoid reification of existing institutional organizations.

Moreover, if urban commons are considered as social practices, and not as isolated resources appropriated by specific communities, the consideration of the city as a common in itself entails an excess of abstraction. Thus, Hardt and Negri (2009) description of the city as the receptacle of a common flow produced by collective labor, or Harvey definition of urban commons as "an unstable and malleable social relation" (2012, p. 73) are difficult to apply to concrete alternative modes of social organizations. Here, it seems there is a gap between the macro-level of the city as common in itself and the micro-level of specific examples of commoning. In this paper, we draw from water, energy and housing cases to demonstrate that, beyond their consideration as particular resources, urban com- mons are

wider political processes toward the "commoning" of urban government. That is, toward the democratic control over both urban resources and the decisions about those resources. The potential of such processes might require defining a "meso-level" in urban commoning (Méndez de Andés et al., 2020) that helps to understand and define the embodied collective "practice" (Schatzki et al., 2005) working toward the radical democratization of local governments and citizenry reappropriation of public institutions.

Commoning energy, water and housing through an infrastructure commons perspective

Classical conceptions of infrastructures tend to be omitted in commons' studies, as a whole, as they are considered too complex, both in terms of financing and managing (Bollier, 2012). As we argue later in this section, classical conceptions of infrastructures often focus on "hard" infrastructures. Although some authors have tried to expand the conception of infrastructures to network-based definitions, they still are somehow limited to the classical cases. For example, Neuman offers a broad definition on infrastructure, understood as "a physical network that channels a flux . . . through conduits . . . or a medium . . . with the purpose of supporting a human population, usually located in a settlement, for the general or common good" (Neuman, 2006, p. 6). Nevertheless, he still excludes elements such as housing, which we consider as an essential infrastructure. When infrastructures are included in commons' studies, they usually refer to a part or a fragment of the global infrastructure, such as experiences of remunicipalization of local-level utilities activities like energy provision, excluding the production and distribution dimension. For this same reason, the infrastructure sector has also been one of the most productive areas for privatization and enclosure processes in the contemporary age.3 There is scant literature linking infrastructures—in its classical definition—to commons' literature. One of the main references from a commons' perspective is Frischmann's (2005) contribution, based on traditional and economic theory. The author understands infrastructures as susceptible to being managed through commoning as a way to increase their [market] value. Along similar lines, Little (2005) defined public services as infrastructures, which are inherently interdependent, and affirmed that managing them as commons is economically functional and sustainable. Using Frischmann's argumentation, infrastructures (as a field in which "commoning practices" occur) are relevant because they are "intermediate resources." Infrastructures effectively structure in-system behavior at the micro-level by providing and shaping the available opportunities for many actors (Frischmann, 2012, p. 11). Following this logic, housing, together with energy and water services, should be considered interdependent basic infrastructures in the urban context. The inclusion of housing as a

basic urban infrastructure has been advocated by several authors stressing its essential character in shaping communities in terms of social, environmental and political development (Ponce, 2010; Steele & Legacy, 2017). From a political perspective, acknowledging housing as an urban infrastructure reinforces the community responsibility on it, as well as its collective dimension.

Infrastructures are—in a wider sense of the meaning—basic systems that support the human activities needed for social reproduction and are part of the urban "social metabolism" (Martinez- Alier, 2009). The urban social metabolism, understood as a multifaceted structure that sustains life4 (Toledo, 2013), helps us to re-situate commons infrastructures in the urban context, both regarding their characteristics and resources, but also the social relations built around them. Furthermore, to understand how these commons infrastructures deeply intersect with the particular contexts, we link them to the ecofeminist perspective (Pérez Orozco & Del Río, 2019) through the notion of "everyday infrastructures" (Quiroga Díaz & Gago, 2018). This concept was developed in the north of Europe during the 1970s by a body of literature that was crucial to interconnect the fields of gender, urban studies and urban planning (e.g., Booth et al., 1998; Horelli, 2000). This angle challenged the notion of neutrality in the city, particularly in regard to urban planning, spatial specialization and sexual division of labor. Quiroga Díaz and Gago (2018) re-read the concept under the light of the cycle of mobilizations against neoliberal politics in Latin America (in opposition to the classical European examples, in which the concept was incorporated as a feminist perspective for urban policies) that allows us to connect the general meaning of urban infrastructures through the lens of commons.

Urban and municipal government transformations: The case of Barcelona

The context of our empirical research has two dimensions. On the one hand, the processes studied took place in the context of the "new municipalism," i.e., the victory in the 2015 local elections of citizen platforms in and around Barcelona. On the other hand, they are also part of a European and global wave of "remunicipalization" of public services.

Although framed in the Barcelona Metropolitan Area, the cases explored in this paper are highly influenced by the social changes and radical transformations that have taken place in Barcelona after the window of opportunity caused by the financial crisis of late 2000.⁵ As Blanco et al. (2020) point out, the case of the institutionalization of radical urban politics in Barcelona is representative of a broader expansion of new urban political movements as a response to neoliberal and austerity policies. In the case of Barcelona, this process

materialized with the electoral win and the entry of social movements—organized in the electoral and political platform Barcelona en Comú, which translates as Barcelona in Common—to the city council in 2015.

Nevertheless, the case of Barcelona was not unique. However, it orbited the new institutional scenario of the "Cities of Change" in Spain, which included the entry of several alternatives and radical candidacies at the local level in cities like Madrid, Zaragoza, or Valencia (Blanco & Gomá, 2019).

Since then, there has been a growing interest in the "municipalist wager" (Observatorio Metropolitano, 2014) and the urban politics and policies of the so-called "fearless cities" (Barcelona En Comú, 2019). These have been characterized by their practitioners as "cooperative" (Akuno & Nangwaya, 2017), "democratic" (Roth et al., 2019), or "intersticial" (Pinto et al., 2022). Moreover, the term "new municipalism" serves to identify different municipalist experiences—in Rosario (Argentina), Zagreb (Croatia), Messina and Naples (Italy), Belgrade (Serbia) and different towns and cities in France and Spain—that embrace the ambition "to open up municipal state spaces to more radical and democratic practices of self-government" (Cumbers & Paul, 2020, p. 42). In the UK; these kinds of governments have been consistently framed in resonance or opposition to the municipal proposals of the 1980s, and the more recent "pragmatic municipalism" (Aldag et al., 2019).

In contrast to Bookchin's communalism (2005; Bookchin et al., 2015), Spanish municipalism does not aim to create new democratic institutions directly opposed to the nation-state, but rather to transform existing municipal institutions from within, in order to democratize them and open them up to citizens (Blanco et al., 2020; Subirats, 2016). This political project aims to transform the state and the entrepreneurial logic of public institutions, building on democratic practices that are very much aligned with principles and practices of urban commoning.

Urban Commons—as processes that are able to operate "in, against and beyond the State" (Bianchi, 2019)—have played an important role in the developments of the emerging municipalist experiences in Spain. This relation can be identified in: (a) the existence of shared values expressed by municipalist narratives (Blanco et al., 2018; Forné, 2020; Gomà, 2018; Rubio-Pueyo, 2017)⁶; (b) the adoption of the name "in common" as part of the electoral definition of the platform (Barcelona en Común, Zaragoza en Común, etc.); (c) the debates on commons that took place in strategic and urban policy gatherings organized by Barcelona in Común that gathered social movements, activists and researchers to discuss the state of the municipalist platforms and their relation with social movements at national and international level. Some of these meetings and debates include the seminar

"Strengthening the commons from municipalism" in March 2016, with five workshops reflecting the programmatic field of interest in urban commons: public services, cooperativism, housing, co-production of public policies and public space. The pathway dedicated to "Commons" in the first Municilab meeting in 2017⁷ included an array of issues from the metropolitan economy, and right to the city -including housing, mobility and public space—to water and energy infrastructures, but also not-so-obvious sites of commoning such as human rights and migration, community-based actions, and security. In Municilab 2018,8 the pathway "Policies in Common" focused as well on local policies on collaborative, productive and reproductive activities but tried to treat them in more detail and in relation with specific questions of relevance for the city government in Barcelona such as the harbor. sex workers, sport facilities or food sovereignty. The Fearless Cities International conference in 20179 included a presentation-debate on "The Commons," characterized as "the collective action used to govern resources . . . Municipalism provides us with an opportunity to play with different ways of being a public institution; with forms of governance that make a clear commitment to the public-community management of the urban commons" (Forné et al., 2019, pp. 105-106); d) the implementation of public policies tagged by the municipalist platforms as "commons" in their Atlas del Cambio, 10 among them, the remunicipalization of public services in Cádiz and Valladolid, municipal rent redistribution schemes in Santiago de Compostela, Badalona and A Coruña, or cultural projects in Valencia; and e) the inclusion of the "commons"—translated into Spanish as común, comunes or comunal—as a core concept in strategic plans, programs and policies developed by the municipalities such as the Citizen Patrimony in Barcelona, the Participatory Regulation in Madrid and Pamplona, or the proposal to create a "Commons District" in Coruña. The concept also appears as part of wider policies, as in the environmental plans in Móstoles and Alcalá de Henares.

Table 1. The incorporation of commons in public policies by municipalist platforms in cities with more than 100,000 inhabitant, following Monterde (2016).

| City | Seminars | Atlas of change | Public policy | Policy name | Policy year |
|------------|----------|-----------------|---------------|--|----------------|
| Madrid | X | Х | X | Public-Social Partnership Ordinance | 2018 |
| Barcelona | Х | | Х | Civic Patrimony Program | 2016 |
| Valencia | | Х | | | |
| Zaragoza | | х | Х | Toward a Culture as Common Good | 2015 |
| Palma | | | | | |
| Alicante | | | | | |
| Valladolid | | Х | | | |

| A Coruña | X | | Х | Commons District | 2016 |
|----------------------|---|---|---|---|------|
| Oviedo | | | | | |
| Terrassa | | Х | | | |
| Badalona | X | Х | | | |
| Sabadell | | | | | |
| Mostoles | | | Х | Ecosocial Implementation of Sustainable Development Goals | 2018 |
| Pamplona | Х | Х | Х | Citizen Participation Regulations | 2019 |
| Alcalá de Henares | е | | Х | Local Agroecology Plan | 2019 |
| Cádiz | Х | х | Х | Common Culture Strategic Plan | 2016 |

Source: Ana Méndez de Andés, doctoral research in progress.

Although most of the main municipalist platforms and governments participated in at least one of these factors (see, Table 1), the case of Barcelona represents the best scenario to examine the relations and interactions between this "new municipalism" and the rise of commoning practices.

In this context, the question of the (re)municipalization of basic services and infrastructures, such as water or energy, is framed as a social response to the effects of neoliberal policies (Castro, 2011; Hall, 2011) that alignes both with the "new municipalism" and as an expression of commoning practices. In the European context, these effects were also increased by the financial crisis of 2008, resulting in a substantial increase in remunicipalization experiences (Kishimoto & Petitjean, 2017) that, in Spain, strengthened the connections between new municipalism and the urban commons.

This literature identifies three important elements that define (re)remunicipalization, namely, ecological sustainability, the importance of the local institutional space, and democracy—that is, services with more participatory decision-making. Moreover, McDonald (2018) identifies different types of (re)municipalization of urban services according to their level of social transformation potential, and Lobina et al. (2019) goes further and argues that remunicipalization is concerned with social transformation.

Among the main effects of (re)municipalization processes, we underline the redefinition of public ownership, incorporating democratic participation and social control mechanisms; cost reduction and services improvement; human and social rights dimensions, along with public

health promotion and protection; and fostering local and social economies as well as ending worker insecurity (Kishimoto et al., 2020).

However, some caution is needed since, as Cumbers and Paul point out, (re)municipalization is a context-dependent strategy that could can lead both to a return of top-down decision making it functional to local elites or to a transformation toward a "more citizen-engaged forms of democratic public organisation" (2020, p. 46).

Methods

Our research focuses on three experiences of housing, water, and energy commoning. The choice of these sectors is not by chance since they are examples of what has been called "commons infrastruc- tures" in the literature of the "new commons" (Hess, 2008). As we have underlined in the previous section, even if the classical perspectives do not include housing as an infrastructure, our position is to consider housing as a basic system to support human life in the city and, therefore, consider it an essential urban infrastructure (Ponce, 2010; Steele & Legacy, 2017). From the authors' point of view, it is unthinkable to place energy and water infrastructures at the service of the community while ignoring that housing is a vital issue to guarantee rights.

This research applies a comparative approach and practice-based reflection11 on three specific cases in the Barcelona metropolitan region. First, Barcelona has become the setting for experimentation and innovation, particularly after the 2008 socioeconomic crisis, but also because of its history of social and emancipation movements (Buey, 1999). The results of the qualitative research process are used to illustrate the link between basic infrastructures and supplies, fundamental rights, and commoning practices in the urban context.

The qualitative data comes from two different types of data collection methods. First, direct data was gathered through qualitative interviews with key agents in the field and observable actions and interactions registered as field notes. Secondly, indirect data generated by social movements involved in each of the cases and policy documents from public administrations were also included as qualitative data to be analyzed. The direct or primary data collection process for each of the cases was shared with other side research projects. That implies that the interviews did not have a unique goal connected to this specific paper. However, the process aimed to compile valuable information for several projects with broader research objectives. About 40 non-structured interviews were performed with an unequal distribution among the cases. In the case of housing, the material comes from a field survey carried out between September 2016 and September 2019, with 12 semi-structured interviews with

members of the social movement PAH,12 as well as with representatives of Barcelona in Common coming from the PAH and officials of the Barcelona City Council. In the case of energy, eight interviews were conducted with key actors, including members of the Energy Sovereignty Network and technical staff of Barcelona Energia during 2018. Finally, for the water section, 22 interviews with key actors, including technicians from the public administration, political representatives and orga- nized citizens, were completed from 2016 to 2019 as a part of a broader doctoral investigation.

In addition, this research is grounded on activism research, first defined by Hale (2008) and later developed by other activist researchers such as Gutierrez and Lipman (2016). These authors define social activism research as engaged political and research work that enriches each other, which means that both theory production and analysis are grounded in social movement praxis and our involve- ment in it (Lipsitz, 2008). Recognizing here that all knowledge is situated (Haraway, 1988), this research is also grounded and enriched by the own experience of the activist researchers in the sense advanced by Chatterton et al. (2007). This active participation in the organizations part of the case studies has allowed us to analyze and incorporate knowledge from everyday practices. In all cases, the qualitative data obtained from the interviews were complemented with information and notes from the participant observation of the authors in different social movements involved in each of the cases (Plataforma de Afectados por la Hipoteca, Energy Sovereignty Network and the Taula de l'Aigua). Finally, this research draws from an interpretivist approach, meaning that it prioritizes the under- standing and deepening on the commoning experiences examined over the prediction and generalization of causes and effects (Macionis & Gerber, 2010).

Exploring three cases of commons infrastructures experiences in Barcelona

Housing

Most of the literature on housing commons evokes housing cooperatives (Carriou, 2019; Ferreri et al., 2019) and community land trusts (Aernouts & Ryckewaert, 2018; Davis, 2010). However, the cen- trality of housing in urban and social class conflicts has long been recognized (Engels, 1887), and there is a long tradition of struggle and self-organization around housing, from the popular housing self- construction (Turner, 1976) to the resurgence of the squatters' movement at the end of last century (Martínez, 2020). In the Spanish context, housing was one of the major issues in the "struggle for Barcelona" in the 1930s (Ealham, 2005), and the strong social unrest was reflected in huge rent strikes (Aisa

Pàmpols, 2015). Nonetheless, these historical social mobilizations for access to adequate housing are hardly ever qualified in terms of urban commons.

In contrast to these two tendencies, this case study highlights that the contemporary fight for the right to housing led by social movements in the municipality of Barcelona can be described as a process of commoning urban infrastructures, understood as basic systems sustaining life in urban context. Indeed, these movements have become lawmakers and co-creators of legal norms that promote the right of use and the de-commodification of housing at the municipal scale.

The Plataforma de Afectados por la Hipoteca (Platform of People Affected by the Mortgage Crisis [PAH]) is a self-organized social movement struggling for the right to adequate housing and the right to the city. It is one of the social movements created to struggle against the surge in family over- indebtedness and evictions created after the 2008 crisis, which had dramatic consequences on access to housing in Spain. The peculiarities of Spanish mortgage law, as well as the speculative dynamics of the real estate and construction sector that are fueled by the banking sector, triggered an "urbanizing tsunami" (Fernández Durán, 2009) that left "devastated landscapes" (Observatorio Metropolitano, 2014). The 2008 crisis produced a massive wave of evictions: more than 680,000 between 2008 and 2019 (Observatori DESC, 2020). Created in 2009 in Barcelona, the PAH—which now comprises more than 250 local platforms—has had a strong social and political impact through the empowerment of its members, the pooling of legal knowledge on the right to housing and a strategy based on "small big victories" that demonstrate that grassroots activists without resources can make a difference.

PAH's fundamental demands are to stop the evictions, provide 'dation in payment' and increase the public housing stock. To achieve these ends, the social movement combines civil disobedience campaigns with a collective elaboration of legislative proposals. The Stop Desahucios campaign organizes mass meetings in front of buildings threatened with eviction so as to physically stop them, while the Obra Social de la PAH¹⁵ campaign "reclaims"—that is, occupies—empty apartments owned by banks to relocate the most vulnerable families. But beyond these acts of civil disobedience, the PAH aspires as well to participate directly in legislative processes, overcoming a mere representative democracy. The PAH proposed their first ILP¹⁶ (Popular Legislative Initiative, that is a regulation proposal promoted directly by citizens) to the Spanish Parliament concerning the access to adequate housing, which was rejected in 2013. After a second ILP was approved in Catalonia in 2015,¹⁷ the PAH and other social movements mobilized at the local level in 2018, proposing the "30% motion." This measure aims to allocate 30% of all new housing construction and full rehabilitation to

social housing. Of interest here is that this legislative activity is primarily conducted in non-state institutions, and that the recipients of this law are its authors. If the PAH, by its intention to influence public policies, is in line with traditional social movements (Tilly & Tarrow, 2006), we believe that its approach to rights introduces a new dimension. Indeed, the lawmaking process itself is taken in charge by the social movement, thus questioning the state monopoly of legal production. In this sense, the PAH seems to us to be part of a process of urban commoning, understood as popular control of decision-making over urban resources. PAH has thus challenged the legitimacy of representative governments, affirming the legitimacy of social movements to make laws, as one PAH activist notes: "Of course a social movement is legitimate to change laws. Because there are the people who are suffering the violation of rights, and there is an accumulation of knowledge, in the sense of living and knowing the problem, but also of an effort at all levels to find tools to solve it."

The participation of social movements in lawmaking would thus be a form of "instituent praxis" as Dardot and Laval define this term: "both the activity that establishes a new system of rules and the activity that seeks to permanently relaunch this establishment in order to avoid the institution to be stuck in what is instituted" (Dardot & Laval, 2014, p. 445). In this sense, considering housing struggles as urban commons implies that not only the resources are managed collectively, but also the demo- cratic processes of "collective self-institution" (Castoriadis, 1983).

In summary, although housing social movements are not traditionally characterized in terms of commons, it is possible to see the PAH as a case of urban commoning in three ways. First, the PAH is a commons because of its collective mode of organization, based on assembly and consensus-building rather than voting. As the PAH spokesperson points out, this highly controlled role does not provide superior decision-making authority: "what you are saying is not because it is your opinion, but because you are carrying the voice of the assembly." The assembly is thus a space for pooling feelings and emotions previously individualized and privatized in the domestic sphere. While the housing crisis has made people feel individually guilty, the PAH reframes the situation as a primarily political and social problem. In a second sense, it is possible to characterize as "urban commons" the housing blocks "recovered" by the PAH to relocate evicted families. If the use of each apartment remains private, there is nevertheless a political community united in the management of the housing block. Finally, as we have seen, the legislative activity itself is commonized in the sense that precarious citizens reappropri- ate law-making in spaces of self-organization on the margins of the state and the market.

Water

We present the case of Terrassa, a city in the Metropolitan Region of Barcelona. The case's relevance lies in the capacity of the remunicipalization process to produce social and institutional transforma- tion based on urban commons logic. Thus, it represents an example of public service commoning experience, following the line of work proposed by Dardot and Laval (2014).

The implementation of the urban water supply service in the 19th century entailed the privatization of access to water and an enclosure of the decision-making space on this basic element for life. In the case of Spain, the implementation of the urban water supply paralleled the expansion of the liberal state. Consequently, it entailed substantial limitations in the sphere of the political power of munici- palities, which lost most of their competencies (Bagué, 2020).

In 2014 a group of residents of the city organized and created a citizen group called Taula de l'Aigua¹⁹ for the remunicipalization of the water service. During this process, it became clear that the decision- making space was closed and inaccessible to the public. For Taula de l'Aigua, the struggle was to regain the right to life by recovering the control of the water service by the people. This reasoning-reflecting- reasoning process was necessary to remove water from the market-based narrative and imaginary, that is, to de-commodify it, through community-based practices (de-commodification), guaranteeing the human right to water. Such was the meaning of "remunicipalization" for the Taula de l'Aigua. To that end, it was essential to start from the fact that water is a common good that should be governed through shared precepts, principles and provisions between citizens and institutions. In this way, a dual purpose was sought: to democratize decision-making on water and to recover part of the municipality as a common space through a process based on "instituting praxis" (Dardot & Laval, 2014).

As a result of this process, the Observatori de l'Aigua de Terrassa (OAT, Terrassa Water Observatory) was created, drawing inspiration from the previous experience L'Observatoire Parisien de l'Eau (OPE, Parisian Observatory of Water). The OAT²⁰ is an autonomous organization affiliated with the Terrassa City Council and its main functions are to consult, advise, deliberate and make proposals in regard to water management. Nowadays, the OAT advances by itself and it has the capacity for a co-government of the public service together with the capacity for "co-production" of public policies. Thus, the OAT is a space-tool created within the framework of the local public administration but promoted and governed by organized citizenship. For this reason, the OAT²¹ is an example of "instituting praxis" for the transformation of the public sphere to become common. During the remunicipalization

process there were many difficulties. Some of them still persist because they are related to the aforementioned instituting process and the changes that it entails (Bagué, 2020; McDonald and Swyngedouw, 2019).

Energy

Energy has become a focus of conflict in light of the ongoing socio-ecological crisis and the most recent events connected to the rise of the electricity process during 2021 and 2022. First, energy and energy services are imperative to modern human living conditions, as having become essential to fulfill very basic needs and are closely linked to fundamental human rights (Hesselman et al., 2019). Secondly, the energy system needs to be deeply transformed in terms of decarbonization and the transition to renewable energy sources. It is in this context where energy as infrastructure, in the form of the electricity grid, renewable energy production infrastructures or energy management structures, has gained major importance. An example of this trend is the increasing number of energy commu- nities, as well as (re)municipalization processes in the energy sector that try to conjugate elements of democracy, community-based projects, and sustainability (Kishimoto et al., 2020). Notwithstanding the increasing interest in the energy field, it has only been recently included in commons studies (Baker, 2017; Becker et al., 2017). Despite this, we can find a rich and growing body of literature on energy communities (Hoicka & MacArthur, 2018; McHarg, 2015; Seyfang et al., 2013) and energy democracy (Becker & Naumann, 2017; Burke & Stephens, 2017; Stephens, 2019; Van Veelen, 2018) that can also widen and feed our perspective.

Presented as an example of the municipalist platform Barcelona en Comú public policies, Barcelona Energia was launched in July 2018 as a local public supplier for public facilities. From January 2019 it offered electricity services for domestic consumption—up to 20,000 families at the beginning—within the municipality limits, and public facilities in the metropolitan area. Since then, its scope has increased and it currently reaches 36 municipalities from the Metropolitan Area of Barcelona and more than 10,000 supply points (including citizens, public entities and public facilities, as well as small and middle-size businesses). Although this project has been a flagship policy of the current government, it was the brainchild of the former right-wing local government. The initial plan aimed to exploit the energy generated by the municipal waste incineration plant. Following the 2015 local elections, the scheme was adopted by the new government for several reasons, such as the willingness of the local government to strengthen their role in the energy sector—mostly controlled by very few big energy companies—and the pressure from social movements.

The latter was connected both to the social problem of energy poverty (represented by the movement Alliance Against Energy Poverty) but also ecological movements such as the Energy Sovereignty Network.

Although the new public supplier was announced as an opportunity to advance toward energy democracy, at least at the municipal level, the developments in practice shows that the results are limited, as we will discuss in the next section. By way of illustration, social movements—such as the Energy Sovereignty Network—claimed for participatory spaces and processes to design and create the public company from the beginning. In practice, the process of creation of Barcelona Energia adopted a top-down approach²³ (meaning, the final proposal of the company structure and their governance bodies was proposed by the city council).

As Energy Sovereignty Network—among other social а response, the movements—promoted a participatory process including citizens and civil organizations. This process aimed to develop both a governance design as well as ethical and democratic guidelines to orient the governance of the new supplier. Through this process, elements such as the need for plural, binding and community- based decision-making spaces, control and transparency mechanisms,²⁴ as well as the conceptualiza- tion of the new public supplier as a transformative tool of the energy sector (at least at the local level) were reivindicated as central guidelines for the creation of the new public supplier. Irrespective of the value of the participatory process itself as a commoning practice, the new supplier did not consider any of these guidelines, creating a non-binding Users' Advisory Council.²⁵ In addition, the Users' Advisory Council can only debate on topics strictly connected to Barcelona Energia activity, that is the supply activity. That results in a quite narrow scope for the debate—not including key activities and topics, such as the grid ownership²⁶—that challenges the potential transformative character of the initiative.

Discussion: Grounding commons' theories in practice

We have presented three examples of "instituent praxis," with different levels of intensity. In this section, we will see how they share a number of elements, such as the social mobilization at the core of their potential, relation and interaction between social movements and public institutions to some extent, as well as being concerned with infrastructure in the city context. Although the three case studies differ, they all show that the collective re-appropriation of basic services is one of the most promising ways to redefine the local public sphere, by enhancing popular control over urban infra- structures, from their design to their daily management.

Housing, energy, and water as commons infrastructures

The first aspect to be analyzed is to what extent the three experiences constitute cases of (potential) "commons infrastructures." We suggest using the notion of everyday infrastructures to understand energy, water and housing as commons infrastructures that have been repeatedly identified as private and individual responsibilities. As Sánchez de Madariaga (2004) points out, the gender issue has been pivotal to allocate resources to certain infrastructures, as well as to regulate the housing market. This idea is particularly clear in the analysis of phenomena such as housing insecurity, energy poverty and their impacts on health, that in the case of Barcelona have incorporated the gender perspective. Similarly, these close connections are intertwined with the notion of the interdependence of commons infrastructures and the impossibility to consider them as partial and separated economic activities. Similarly, Quiroga Díaz and Gago (2018) connect the notion of the commons as an "urban-political horizon" orienting contemporary social movements. These mobilizations—in our examples, the PAH, the Taula de l'Aigua or the Energy Sovereignty Network—reclaim everyday infrastructures to trans- form and orient the urban economy toward life, thus contesting market enclosures and ensuring basic needs (both in the productive and reproductive dimension).

In our particular context, we have seen three cases that illustrate—in different ways—how these everyday infrastructures should be conceptualized when commoning practices arise as the basic strategy for their transformation. First, social movements in the housing sector have a crucial role to orient policy and specific decisions about everyday infrastructures. For instance, the "30% motion" promoted by the PAH aims to decide on new private real-estate developments, forcing them to include social housing stock. Therefore, commoning practices from social movements related to housing are establishing the uses of basic urban infrastructures such as buildings. In other words, commoning housing infrastructures means raising "dwelling"—considered as the way inhabitants actually use the city—above "building"—meaning hard urban planning by experts (Sennett, 2018).

Then, the case of the Taula de l'Aigua constitutes a unique example of institutionalizing practices promoted by citizens to democratize the public service of water. The OAT, as an autonomous citizens' participatory space, was born out of a remunicipalization process in 2018 that aimed to institutionalize a participatory decision-making public structure based on the commons, turning the water network and water supply into an "everyday infrastructure."

Finally, while the creation of Barcelona Energia was initially seen as an advance toward the democratization of the energy sector, the results are still far from this objective. Using Becker et al.'s (2016) distinction between coproduction of public services and commoning in the

energy sector, we can see that Barcelona Energia fits more in a co-production model, through forms such as consultation or codelivery (Bovaird, 2007), but it does not go beyond the idea of a public supplier as a complement to the existing market mechanisms. In this same line, Angel (2020) recently published a paper unfolding some of the key limitations that Barcelona Energia has faced. It is particularly interesting to understand the effects of the collision with the "prosaic practices" (Painter, 2006) of the state in this particular case. The results of our analysis suggest that one of the main limitations of Barcelona Energia would have been not envisioning energy as a common infrastructure, but as a one more alternative supplier in a free market context. In other words, the Barcelona Energia project, at the moment, is only proposed as a public energy utility without a production²⁷ and network management significant activity. This fragmented vision—caused by the restrictive market-based energy regulation in Spain, among other factors—forces the public utility to co-exist in a highly privatized and commodified sector, limiting its transformative potential.

Although a more detailed analysis of the difficulties and barriers faced by the analyzed examples is out of the scope of this paper, we can point to a few significant common traits. The first is the identification of so-called "technical limits" to the democratization of common infrastructures, reified as certain administrative and policy-makers habitus (Bourdieu, n.d.), expertise barriers as well as lack of willingness from municipal governments to engage in commoning processes. These limits can be materialized in diverse forms, such as the resistances to open the decision-making spaces to the community or the (limited) character of the decisions to be made in these spaces.

The second factor to be considered is the complexity of pro-market regulations and usually non- flexible codes of each infrastructure sector and, in particular, the historical privatization pathways as we have pointed out in previous sections. As an example, the liberalization and pro-market European regulations on the energy sector together with the private ownership of the distribution network generate significant difficulties.

Commoning the city: The role of urban commoning in the new municipalism

The three cases studies show that rather than isolated resources, cities' complex infrastructures such as housing, energy, and water can be part of a commoning process. These urban infrastructures—not basic physical systems, but also essential public services (Little, 2005)—are one of the main tenets sustaining life in urban environments. Returning to the idea of interdependence, the popular demand for creating structures to ensure the community's basic needs only makes sense in an interlinked manner. From this perspective, the objective is to reclaim the public sphere and public services in order to collectively

control their management. Urban commons, therefore, play a key role in the political project of "new" municipalism, by promoting the re-articulation of the social-community sphere and the political-institutional sphere.

Looking at the relation between commons and municipalism through the wave of global remuni- cipalizations—especially since the early 2000s—and to which degree they can be considered as a set of "actually existing municipalisms" (Cumbers & Paul, 2020), in line with the municipalist aim of "democratize society and socialize production" (Akuno & Nangwaya, 2017), the three cases presented above show that shifting from private to public ownership is not enough. If the struggles in areas where cities can lead change, such as housing, water, and energy, have the capacity to reclaim "everyday sovereignties" (García Agustín, 2020, p. 58) (re)municipalization cannot mean merely symbolic advances, such as a simple change in ownership structures, but also transformative processes through commoning practices.

This process is well exemplified by the water municipalization in Terrassa. Neither self-management of a resource by a community of users, nor delegation to the state and the market, the OAT is a citizens' initiative aiming to generate spaces within the public administration that are not controlled by technicians. It is both an autonomous arena, a place of bottom-up democracy, and a space that is part of the institution's structure. The OAT is therefore an experiment in commoning the public sphere and is part of the municipalist project to struggle for the reappropriation of spaces of government previously enclosed by the state.

However, the municipalist project to re-articulate the common sphere and the public sphere can sometimes face great obstacles. The example from Barcelona municipality shows us that the inertia of public institutions makes the municipalist "wager" (Observatorio Metropolitano, 2014) a perilous endeavor. Indeed, state sovereignty and entrepreneurial rationality are deeply rooted in the adminis- trative culture, and "occupying" institutions is not enough to radically transform them. The distribu- tion of sovereignty between the state and the municipalities often limits the scope for local action, in the context of austerity policies.

It is in this context of limited communal autonomy that a certain managerial drift regarding municipalism can be observed. This is illustrated by the analyzed case study concerning energy. The limited number of users²⁸ and a clear political project of Barcelona Energia made it flawed both from a material and an institutional point of view. In fact, despite popular pressure from social movements, the experience of energy municipalization was finally reduced to a classic liberal participatory policy. More than a step beyond representative democracy at the local level, this process is more like a one-off participation event that does

not call into question the institutional structures of social democracy. The example of Barcelona has been repeatedly identified as the flagship of the new municipalism. Despite this optimistic view, our research on the local management of critical urban infrastructures might reveal a shift in Barcelona from a citizen-led municipalism to a "managed" and "managerial" municipalism as a local response to neoliberal failure focused on the regeneration of the local economy with some elements of democratic innovation (Blanco et al., 2018; M. Thompson, 2020).

Aware of these limits, many municipalists actors both within and outside institutions have thought and put into practice a vision of municipalism that is not strictly governmental, where commoning practices understood as "instituent praxis" (Dardot & Laval, 2014) are about recovering control over everyday infrastructures (Quiroga Díaz & Gago, 2018). The objective is, therefore, to renew the relationship between institutions and organized citizenry, re-articulating the public through the commons. But if in the case of co-optation, social movements are subject to the rhythm and needs of the institution, this "social municipalism" (Calle and Vilaregut, 2015) would aim above all to put the institution at the service of citizens and social movements.

Overcoming the inertia of institutions, therefore, implies empowering those who are not part of them. For example, if the aforementioned "30% motion" had been proposed by the municipalist platform Barcelona en Comú, the other political parties would certainly have opposed it. In this case, the PAH and the other social movements that initiated the motion were not invited to give their opinion within the framework of a participatory institutional structure, but rather burst in to guarantee the right to housing themselves. The example of the PAH shows that beyond mere "participation," social movements are reappropriating the legislative activity and the elaboration of municipal laws. In doing so, they oppose the logic of a hierarchical and authoritarian sovereignty, which dictates that the state has a monopoly on normative activity and promote alternative social and bottom-up sovereignties over the different spheres of urban life.

Conclusions

In this article, we have argued that promoting the transformative potential of urban commons, and particularly urban common infrastructures, requires conceiving them on the intermediate scale of the collective "practice" that articulates isolated community resources with the whole city as a metabolism. The three cases analyzed herein are emerging experiences of democratization of the definition and satisfaction of collective needs that are not protected in the current binary division between the market and the state. For this

reason, a central challenge is to establish a core set of principles that gives body to the political hypothesis of urban commons. This should be understood as a collective and open process of definition and realization of said principles.²⁹

Moreover, the infrastructure commoning experiences analyzed share a political horizon of de- statization of political life and re-appropriation of public institutions through a power decentralization process. This de-statization process implies a transformation of the logic of public infrastructures. One of the key issues of the commoning proposal is not simply conceiving realities at the borders (i.e. commons infrastructures becoming an option outside the state and the market, as the classical conception would suggest) but creating transformative realities. Therefore, common urban infra- structure projects seek to destabilize the current rationale on public and private infrastructures incorporating commoning practices at the core of them.

Further research needs to examine more closely the links between commoning practices aimed at the democratization and control of public services in the city and the structural limits on infrastructures, imposed by both the market forces and the state. If the debate is to be moved forward, a better understanding of the context-dependent limitations and opportunities needs to be developed.

Notes

- 1. The three cases studied in this paper refer to different contexts (municipalities or areas) situated in the Metropolitan Region of Barcelona (originally in Catalan: Ambit Area Metropolitana de Barcelona). To enhance reading fluidity, we may use the term "Barcelona" in reference to the entire region. We will specify the municipality of Barcelona when we are only referring to the specific municipality in accordance with the administrative borders.
- 2. Linebaugh (2009) uses the verb commoning instead of the noun in order to emphasize that commons are above all a social practice.
- 3. See, as an example, the substantial privatization processes in the electricity sector in Europe during the late nineties. For an overview, see the EPSU report "Going Public: A Decarbonised, Affordable and Democratic Energy System for Europe" (Weghmann, 2019).
- 4. Toledo (2013) defines social metabolism as a multifaceted structure with a material part and an intangible part that are inextricably linked. Thus, it is the social metabolism, and the urban infrastructures as crucial tenets of this metabolism, that need to be transformed in light of the current socioecological crisis.
- 5. The authors acknowledge that the limited scope of this research, restricted to three cases in the Barcelona area, cannot imply a direct and non-discussed relation between the "new municipalism" and urban common practices to be extrapolated to other cities. Nevertheless, the cases exposed in this article explore how these connections are built in the particular Barcelona context.

- 6. Moreover, three city councilors in Madrid were sworn into office adding to the official text the anabaptist motto "Omnia sunt communia" ("Everything belongs to everyone"; Gil, 2015).
- 7. See municilab.cat/es/programa/2017.
- 8. See municilab.cat/es/programa/2018.
- 9. See www.fearlesscities.com.
- 10. See www.ciudadesdelcambio.org.
- 11. The authors not only have developed fieldwork on each of the cases from an ethnographic approach, both through personal interviews to key actors as well as direct observation, but also are activists and members of social movements involved in commoning practices.
- 12. PAH (Plataforma de Afectados por la Hipoteca) is a self-managed social movement defending the right to housing.
- 13. See, Bagué (2020).
- 14. The "dation in payment" or "datio in solutum" ("dación en pago" in Spanish) is the retroactive debt cancellation upon the handover of the mortgaged home. One of the major issues of the housing crisis in Spain was that dation in payment was not enabled, provoking extensive family over-indebtedness.
- 15. The term Obra Social de la PAH ironically refers to the social program of the largest bank in Spain, Caixabank, which is known as Obra social de la Caixa (Social action of La Caixa).
- 16. In 2013, at the initiative of PAH, the Observatori DESC and other social movements, the Spanish Congress was seized and called upon to rule on a first ILP. Among the most urgent measures, this ILP included enabling dation in payment for primary residences, stopping evictions and increasing public housing stock.
- 17. The law that resulted from this ILP is known as the "Law 24/2015". That was a major popular victory since the new law now prohibits evicting citizens in execution of mortgages and forces financial entities to offer social rental housing to families in a situation of residential vulnerability.
- 18. Personal communication, April 11, 2019.
- 19. The group's members are mostly men (there is only one woman within its members) from 36 to 68 years old. One relevant characteristic of the social movement is that all its members participate at individuals (not as representatives of other organizations). This measure was applied to ensure the transversal character of the social movement, the neutrality from political parties as well as to enhance the legitimacy of the group. This character is emphasized by the members: "Taula must be independent from any political party. Members of parties can participate but not as representatives but on an individual level. The objective is not to distort that water is a cross-cutting concern that affects everyone and avoiding political parties' manipulation" (Personal interview, member of the Taula de l'Aigua, 2016). Another activist strengths: "[la Taula is] committed to people. Some members have their political parties and spaces, but it has always been clear that the Taula is one thing and the personal militancies are another thing and they are out." (Personal interview, member of the Taula de l'Aigua, 2016).
- 20. According to the OAT's Statute, The Plenary of the OAT, as the highest space for decision-making in the organization, is formed by representatives for each political group in the city council, a representative of the local government, and representatives of diverse social groups, including technical service staff, business, community groups, unions, and universities.

- 21. At the time of writing these lines, the research on the OAT has continued through different spaces and collaboration mechanisms with all key actors involved. The most recent results were publicly presented in September 2022 (not published). This last research period has focused on assessing the changes and transformations promoted by the commoning process.
- 22. Data provided in the Fourth General Assembly of the Users Council in June 2022.
- 23. Personal communication, 10th June 2018.
- 24. These principles and elements were captured in written and graphic outcomes from the participatory process (Internal documentation of the Energy Sovereignty Network).
- 25. In the Second General Assembly of the Users' Council, in November 2020, a Permanent Commission— composed of individuals and two social movements (the Alliance Against Energy Poverty and the Energy Sovereignty Network, both without vote rights)—was created. The Permanent Commission meets regularly, although it still maintains an advisory and non-binding character. The Users' Advisory Council is also present in the Digital Platform Decidim (a digital platform for citizen participation).
- 26. Note from participant observation in an internal meeting of the Energy Sovereignty Network.
- 27. More recently they are offering a new business service to promote self-production installations with solar panels in private buildings.
- 28. While the Supplier projected its capacity to supply up to 20,000 families (private users), according to the Barcelona Energia Annual Report 2021 presented in the General Assembly of the Users' Council in June 2022, the number of private clients in 2021 was 5,387.
- 29. These principles are mentioned in previous theoretical work, such as Méndez de Andés (2015). The author established four premises that should guide commoning practices: universality, sustainability, democracy and inalienability. Further research is needed to develop them in particular contexts and topics.

Acknowledgments

This paper and the research behind would not have been possible without the participation of all the social movements and organizations involved. We especially thank the members of "Xarxa per la Sobirania Energètica" (Energy Sovereignty Network), the "Plataforma de Afectados por la Hipoteca" (Platform of People Affected by the Mortgage Crisis), the "Taula de l'Aigua," the "Observatori de l'Aigua de Terrassa" (OAT, Terrassa Water Observatory) for their collaboration through the research process. We thank Dr. David Cassassas and Dr. Raúl Márquez for their participation in the online workshop on the 11th of November 2020, as well as for their expertise, help, and revision comments on an advanced draft version of the paper. The authors wish to thank the following organizations and individuals: La Hidra, the Association of Municipalities and Entities for Public Energy, the Association of Municipalities and Entities for Public Water, Xavi Martínez, Dr. Luis Lloredo and Dr. Iolanda Bianchi, for their participation in the same online workshop. The contents of the workshop resulted extremely helpful to improve and enrich the paper. Finally, we acknowledge the support of

Steven Kemp for proof-reading and revising the language of the manuscript. We also recognize the help and support of all the technical staff of the Observatori DESC to make this research possible. This paper is a result of a larger project "Vers noves eines de gestió col·laborativa en el món local: Aportacions des dels comuns" supported by the Secretaria de Transparència i Govern Obert del Departament d'Afers i Relacions Institucionals i Exteriors i Transparència. Anaïs Varo has developed part of this research in connection to her doctoral research "Energy precarity, intersectionality, and access to basic supplies" supported by the Ministerio de Ciencia, Innovación y Universidades under an FPU Doctoral Contract (FPU16/ 05526) and a Fulbright Predoctoral Scholarship for the academic year 2019/20. Ana Méndez de Andes has developed part of this research in connection to her doctoral research "Becoming-Common. Municipalist Discourses, Actors and Strategies for a commons based governance of public spaces', funded by the Economic and Social Research Council of the United Kingdom through a White Rose Social Sciences Doctoral Training Partnership. David Hamou is a fully-funded Ph.D. researcher at the Sophiapol Laboratory in the Department of Sociology at the Université Paris-Nanterre. Edurne Bagué has developed part of this research in connection to her doctoral research "The remunicipalisation of the Terrassa's water service. The Struggle of La Taula de l'Aigua for a common water management model (214-2019)" funded by the Mexican Consejo Nacional de Ciencia y Tecnología (CONACyT).

References

Aernouts, N., & Ryckewaert, M. (2018). Beyond housing: On the role of commoning in the establishment of a community land trust project. International Journal of Housing Policy, 18(4), 503–521. https://doi.org/10.1080/19491247.2017.1331592

Aisa Pámpols, M. (2015). La huelga de alquileres y el Comité de Defensa Económica : Barcelona, abril y diciembre de 1931, sindicato de la construcción de la CNT. Barcelona: Associació Cultural el Raval « El Lokal ».

Akuno, K., & Nangwaya, A. (2017). Jackson rising: The struggle for economic democracy and Black self-determination in Jackson, Mississippi. Daraja Press.

Aldag, A. M., Kim, Y., & Warner, M. E. (2019). Austerity urbanism or pragmatic municipalism? Local government responses to fiscal stress in New York State. Environment and Planning A: Economy and Space, 51(6), 1287–1305. https://doi.org/10.1177/0308518X19844794

Angel, J. (2020). New municipalism and the state: Remunicipalising energy in Barcelona, from Prosaics to Process.

Antipode, 53(2), 524–545. https://doi.org/10.1111/anti.12687

Bagué, E. (2020). La remunicipalización del agua en Terrassa (Catalunya). La lucha de la Taula de l'Aigua por un modelo en torno al común (2013-2019) [Unpublished doctoral dissertation]. Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS).

Baibarac, C., & Petrescu, D. (2017). Open-source resilience: A connected commons-based proposition for urban transformation. Procedia Engineering, 198, 227–239. https://doi.org/10.1016/j.proeng.2017.07.157

Baker, S. H. (2017). Unlocking the energy commons: Expanding community energy generation. In M. Scanlan (Ed.), Law and policy for a new economy (pp. 211–234). Edward Elgar Publishing. https://doi.org/10.4337/9781786434524. 00021

Barcelona En Comú. (2019). Fearless cities: A guide to the global municipalist movement.

Bauman, Z. (2001). Consuming life. Journal of consumer culture, 1(1), 9-29. https://doi.org/10.1177/

146954050100100102

Becker, S. L., Blanchet, T., & Kunze, C. (2016). Social movements and urban energy policy: Assessing contexts, agency and outcomes of remunicipalisation processes in Hamburg and Berlin. Utilities Policy, 41, 228–236. https://doi.org/10.1016/j.jup.2016.02.001

Becker, S., & Naumann, M. (2017). Energy democracy: Mapping the debate on energy alternatives. Geography Compass, 11(8), e12321. https://doi.org/10.1111/gec3.12321

Becker, S., Naumann, M., & Moss, T. (2017). Between coproduction and commons: Understanding initiatives to reclaim urban energy provision in Berlin and Hamburg. Urban Research and Practice, 10(1), 63–85. https://doi.org/10.1080/17535069.2016.1156735

Benkler, Y. (2006). The wealth of networks: How social production transforms markets and freedom. Yale University Press. Bianchi, I. (2019). In, against, beyond and through the state. Limits and possibilities of urban commons in Barcelona. [Doctoral dissertation, Universitat Autònoma de Barcelona]. Tesis Doctorals en Xarxa. http://hdl.handle.net/10803/

<u>665636</u>

Blanco, I., & Gomá, R. (2019). Nuevo municipalismo, movimientos urbanos e impactos políticos. Desacatos: Revista de Ciencias Sociales, 61, 56–69.

Blanco, I., Gomà Carmona, R., & Subirats, J. (2018). El nuevo municipalismo: Derecho a la ciudad y comunes urbanos.

Gestión y Análisis de Políticas Públicas, 20, 14–28. https://doi.org/10.24965/gapp.v0i20.10491

Blanco, I., Salazar, Y., & Bianchi, I. (2020). Urban governance and political change under a radical left government: The case of Barcelona. Journal of Urban Affairs, 42(1), 18–38. https://doi.org/10.1080/07352166.2018.1559648

Blomley, N. (2008). Enclosure, common right and the property of the poor. Social & Legal Studies, 17(3), 311–331. https://doi.org/10.1177/0964663908093966

Bollier, D. (2012, June 18). Brett Frischmann on infrastructure as a commons. News and perspectives on the commons. http://www.bollier.org/blog/brett-frischmann-infrastructure-commons

Bookchin, M. (2005). The third revolution: Popular movements in the revolutionary era. Continuum.

Bookchin, M., Bookchin, D., Taylor, B., & Le Guin, U. K. (2015). The next revolution: Popular assemblies and the promise of direct democracy. Verso.

Booth, C., Darke, J., & Yeandle, S. (Eds.). (1998). La vida de las mujeres en las ciudades. La ciudad, un espacio para el cambio. Narcea.

Bourdieu, P. (n.d.). Pascalian meditations. Stanford University Press.

Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. Public Administration Review, 67(5), 846–860. https://doi.org/10.1111/j.1540-6210.2007.00773.x

Buey, F. (1999). Notas para un balance sobre la evolución y estado actual de los movimientos sociales. Revista Catalana de Sociologia, 8, 9–18.

Burke, M. J., & Stephens, J. C. (2017). Energy democracy: Goals and policy instruments for sociotechnical transitions.

Energy Research and Social Science, 33, 35-48. https://doi.org/10.1016/j.erss.2017.09.024

Calle, A., & Vilaregut, R. (2015). Territorios en democracia: El municipalismo a debate. Icaria Editorial.

Carriou, C. (2019). XIV. Communs et habitat: Quelques réflexions à partir de deux expériences d'habitat participatif. Dans: Christian Laval éd., L'alternative du commun (pp. 201–207). Paris: Hermann. https://doi.org/10.3917/herm. laval.2019.01.0203

Castoriadis, C. (1983). La institución imaginaria de la sociedad. Tusquets.

Castro, J. E. (2011). El proceso de democratización de la gestión de servicios públicos esenciales de agua y saneamiento. Hábitat y Sociedad, 2, 49–85.

Chatterton, P. (2010). Seeking the urban common: Furthering the debate on spatial justice. City City: Analysis of Urban Trends, Culture, Theory, Policy, Action, 14(6), 625–628. https://doi.org/10.1080/13604813.2010.525304

Chatterton, P., Fuller, D., & Routledge, P. (2007). Relating action to activism: Theoretical and methodological reflec- tions. In S. Kindon, R. Pain, & M. Kesby (Eds.), Participatory action research approaches and methods: Connecting people, participation and place. Routledge. https://doi.org/10.4324/9780203933671-38

Cox, S. J. B. (1985). No tragedy on the commons. Environmental Ethics, 7(1), 49–61. https://doi.org/10.5840/envir oethics1985716.

Cumbers, A., & Paul, F. (2020). Adapting to the political moment and diverse terrain of 'Actually Existing Municipalisms.' Soundings, 74(74), 40–53. https://doi.org/10.3898/SOUN.74.03.2020

Dardot, P., & Laval, C. (2014). Commun: Essai sur la révolution au XXIe siècle. La Découverte.

Davis, J. E. (2010). Origins and evolution of the community land trust in the United States. The Community Land Trust Reader, 1(4), 3–47.

De Angelis, M. (2017). Omnia Sunt Communia: On the commons and the transformation to postcapitalism. Zed Books. Dellenbaugh, M. (Ed.). (2015). Urban commons: Moving beyond state and market. Birkhäuser Verlag AG.

Ealham, C. (2005). La Lucha por Barcelona: Clase, cultura y conflicto, 1898–1937. Engels, F. (1887). The housing question. Lawrence; /z-wcorg/.

Enright, T., & Rossi, U. (2018). Ambivalence of the urban commons. In K. Ward, A. E. G. Jonas, B. Miller, & D. Wilson (Eds.), The Routledge handbook on spaces of urban politics (1st ed., pp. 35–46). Routledge. https://doi.org/10.4324/9781315712468-5

Fernández Durán, R. (2009). El tsunami urbanizador español y mundial: Sobre sus causas y repercusiones devastadoras, y la necesidad de prepararse para el previsible estallido de la burbuja inmobiliaria.

Ferreri, M., & Vasudevan, A. (2019). Vacancy at the edges of the precarious city. Geoforum, 101, 165–173. https://doi. org/10.1016/j.geoforum.2019.03.009

Festa, D. (2016). Les communs urbains. L'invention du commun. L'invention du commun. Revue Tracés, 16, 233–256. https://doi.org/10.4000/traces.6636

Forné, L. (2020). Public-community municipalism in defence of the commons—ENCO. In Cities versus Multinationals (pp. 174–182). Ritimo. https://corpwatchers.eu/IMG/pdf/passerelle20-en.pdf

Forné, L., Micciarelli, G., & Fresnillo, I. (2019). The Commons. In B. En Comú (Ed.), Fearless cities: A guide to the global municipalist movement (pp. 105–110). New Internationalist.

Foster, S. (2011). Collective action and the urban commons. Notre Dame Law Review, 87(1), 57. https://scholarship.law.nd.edu/ndlr/vol87/iss1/2

Frischmann, B. M. (2005). An economic theory of infrastructure and commons management. Minnesota Law Review, 89, 917–1030. https://ssrn.com/abstract=588424

Frischmann, B. M. (2012). Infrastructure: The social value of shared resources. Oxford University Press. https://doi.org/ 10.1093/acprof:oso/9780199895656.001.0001

García Agustín, Ó. (2020). New municipalism as space for solidarity. Soundings, 74(74), 54–67. https://doi.org/10.3898/ SOUN.74.04.2020

Gil, A. (2015, June 13). Qué significa el 'Omnia sunt communia!' con el que han prometido el cargo concejales de Carmena. El Diario. https://www.eldiario.es/politica/omnia-communia-investidura-manuela-carmena 1 2623960. html

Gomà, R. (2018). Políticas sociales y territorio: Municipalismo y derecho a la ciudad. Cuestión Urbana, (4), 4. http://cec.sociales.uba.ar/?page_id=1121

Gutierrez, R. R., & Lipman, P. (2016). Toward social movement activist research. International Journal of Qualitative Studies in Education, 29(10), 1241–1254. https://doi.org/10.1080/09518398.2016.1192696

Hale, C. (2008). Engaging contradictions: Theory, politics, and methods of activist scholarship. University of California Press.

Hall, D. (2011, August). Remunicipalisation of public services in Europe. EPSU. https://www.epsu.org/sites/default/files/ article/files/DH-Remunicipalisation_presentation-ppt.pdf

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective.

Feminist Studies, 14. https://doi.org/10.2307/3178066

Hardt, M., & Negri, A. (2009). Commonwealth. Harvard University Press.

Harvey, D. (2012). Rebel cities: From the right to the city to the urban revolution. Verso.

Hess, C. (2008). Mapping the new commons. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1356835 Hesselman, M., Varo, A., & Laakso, S. (2019). The right to energy in the European Union. Agenda Co-Creation and

Knowledge Innovation (ENGAGER 2017-2021). http://www.engager-energy.net/wp-content/uploads/2019/06/
ENGAGER-Policy-Brief-No.-2-June-2019-The-Right-to-Energy-in-the-EU.pdf

Hoicka, C. E., & MacArthur, J. L. (2018). From tip to toes: Mapping community energy models in Canada and New Zealand. Energy Policy, 121, 162–174. https://doi.org/10.1016/j.enpol.2018.06.002

Horelli, L. (2000). Creating the infrastructure of everyday life in the context of European local and regional development. ESRC Seminar Series No. 5: The Interface between Public Policy and Gender Equality. CRESR (Centre for Regional Economic and Social Research), Sheffield Hallam University.

Huron, A. (2015). Working with strangers in saturated space: Reclaiming and maintaining the urban commons. Antipode, 47(4), 963–979. https://doi.org/10.1111/anti.12141

Huron, A. (2017). Theorising the urban commons: New thoughts, tensions and paths forward. Urban Studies, 54(4), 1062–1069. https://doi.org/10.1177/0042098016685528

Kishimoto, S., & Petitjean, O. (2017). Reclaiming public services: How cities and citizens are turning back privatisation. Transnational Institute.

Kishimoto, S., Steinfort, L., & Petitjean, O. (2020). The future is public: Towards democratic ownership of public services. Transnational Institute.

Kratzwald, B. (2015). Urban commons—dissident practices in emancipatory spaces. In M. Dellenbaugh, M. Kip,

M. Bieniok, A. Müller, & M. Schwegmann (Eds.), Urban commons (pp. 26–41). Birkhäuser. https://doi.org/10.1515/9783038214953-002

Laval, C., & Dardot, P. (2015). Común: ensayo sobre la revolución en el siglo XXI (Edición: 1). Gedisa. Linebaugh, P. (2008). The Magna Carta manifesto: Liberties and commons for all. University of California Press. Linebaugh, P. (2009). The Magna Carta manifesto: Liberties and commons for all. University of California Press.

Lipsitz, G. (2008). Breaking the chains and steering the ship: How activism can help change teaching and scholarship. In

C. Hale (Ed.), Engaging contradictions: Theory, politics, and methods of activist scholarship (pp. 88–113). California University Press. https://doi.org/10.1525/9780520916173-007

Little, R. G. (2005). Tending the infrastructure commons: Ensuring the sustainability of our vital public systems. Structure and Infrastructure Engineering, 1(4), 263–270. https://doi.org/10.1080/15732470500103708

Lobina, E., Weghmann, V., & Marwa, M. (2019). Water justice will not be televised: Moral advocacy and the struggle for transformative remunicipalisation in Jakarta. Water Alternatives, 12(2), 725–748. https://www.water-alternatives.org/index.php/alldoc/articles/vol12/v12issue3/534-a12-2-17/file

Macionis, J., & Gerber, L. (2010). Sociology (7th ed.). Pearson.

Martínez, M. A. (2020). Squatters in the capitalist city: Housing, justice, and urban politics. Routledge.

Martinez-Alier, J. (2009). Social metabolism, ecological distribution conflicts, and languages of valuation. Capitalism Nature Socialism, 20(1), 58–87. https://doi.org/10.1080/10455750902727378

McDonald, D. A. (2018). Remunicipalization: The future of water services? Geoforum, 91, 47–56. https://doi.org/10.1016/j.geoforum.2018.02.027

McDonald, D. A., & Swyngedouw, E. (2019). The new water wars: Struggles for remunicipalisation. Water Alternatives, 12(2), 322–333.

McHarg, A. (2015). Community benefit through community ownership of renewable generation in Scotland: Power to the people? In L. Barrera-Hernández, B. Barton, L. Godden, A. Lucas, & A. Rønne (Eds.), Sharing the costs and benefits of energy and resource activity: Legal change and impact on communities. Oxford University Press.

Méndez de Andés, A. (2015). Las Formas del Común. Dossieres EsF. El Procomún y Los Bienes Comunes, 16.

Méndez de Andés, A., Aparicio, M., & Hamou, D. (Eds.). (2020). Códigos Comunes Urbanos. Icaria.

Micciarelli, G. (2018). Commoning: Beni comuni urbani come nuove istituzioni : Materiali per una teoria dell'autorga- nizzazione. Editoriale scientifica.

Midnight Notes Collective. (1990). The New Enclosures.

Monterde, A. (2016). Mapa de las acampadas del 15M, candidaturas municipalistas y gobiernos emergentes en las ciudades de más de 100.000 habitantes.

Neuman, M. (2006). Infiltrating infrastructures: On the nature of networked infrastructure. Journal of Urban Technology, 13(1), 3–31. https://doi.org/10.1080/10630730600752728

Observatori DESC. (2020). L'evolució dels desnonaments 2008-2019: De l'emergència a la consolidació d'una crisi habitacional. Observatori de Drets Econòmics, Socials i Culturals.

Observatorio Metropolitano. (2014). La apuesta municipalista: La democracia empieza por lo cercano. Traficantes de Sueños.

Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge University Press.

Ostrom, E. (2015). Governing the commons: The evolution of institutions for collective action. Cambridge University Press.

Painter, J. (2006). Prosaic geographies of stateness. Political Geography, 25(7), 752–774. https://doi.org/10.1016/j.polgeo.2006.07.004

Pérez Orozco, A., & Del Río, S. (2019). Subversión feminista de la economía: Aportes para un debate sobre el conflicto capital-vida. Traficantes de Sueños.

Pinto, M., Recano, L., & Rossi, U. (2022). New institutions and the politics of the interstices. Experimenting with a face-to-face democracy in Naples. Urban Studies. https://doi.org/10.1177/00420980221091064

Ponce, J. (2010). Affordable housing as urban infrastructure: A comparative study from a European perspective. Urban Lawyer, 42–43(4–1). https://doi.org/10.2307/41307739

Quiroga Díaz, N., & Gago, V. (2018). Los comunes en la reinvención de la ciudad. In J. L. Coraggio & R. Muñoz (Eds.), Economía de las ciudades de América Latina hoy: Volumen I: Enfoques multidisciplinarios (pp. 307–330). Ediciones UNGS.

Roth, L., Monterde, A., & Calleja-López, A. (Eds.). (2019). Ciudades democráticas: La revuelta municipalista en el ciclo post-15M. Icaria.

Rubio-Pueyo, V. (2017). Municipalism in Spain. From Barcelona to Madrid, and Beyond. Rosa Luxemburg Stiftung. Sánchez de Madariaga, I. (2004). Urbanismo con perspectiva de género. Instituto Andaluz de la Mujer.

Schatzki, T. R., Cetina, K. K., & von Savigny, E. (2005). The practice turn in contemporary theory. https://doi.org/10.4324/9780203977453

Sennett, R. (2018). Building and Dwelling ethics for the City. Random House.

Seyfang, G., Park, J. J., & Smith, A. (2013). A thousand flowers blooming? An examination of community energy in the UK. Energy Policy, 61, 977–989. https://doi.org/10.1016/j.enpol.2013.06.030

Stavrides, S. (2016). Common space: The city as commons. Zed Books Ltd.

Steele, W., & Legacy, C. (2017). Critical urban infrastructure. Urban Policy and Research, 3(1), 1–6. https://doi.org/10.1080/08111146.2017.1283751

Stephens, J. C. (2019). Energy democracy: Redistributing power to the people through renewable transformation. Environment: Science and Policy for Sustainable Development, 61(2), 4–13. https://doi.org/10.1080/00139157.2019.1564212

Subirats, J. (2016). El poder de lo próximo: Las virtudes del municipalismo. Libros de la Catarata. Thompson, E. P. (1991). Customs in common. New Press.

Thompson, M. (2020). What's so new about New Municipalism? Progress in Human Geography, 45(2), 317–342. https://doi.org/10.1177/0309132520909480

Tilly, C., & Tarrow, S. G. (2006). Contentious politics. Paradigm Publishers.

Toledo, V. M. (2013). El metabolismo social: Una nueva teoría socioecológica. Relaciones. Estudios de historia y sociedad, 34(136), 41–71. https://doi.org/10.24901/rehs.v34i136.163

Turner, J. F. C. (1976). Housing by people: Towards autonomy in building and environments. Boyars.

Van Veelen, B. (2018). Negotiating energy democracy in practice: Governance processes in community energy projects. Environmental Politics, 27(4), 644–665. https://doi.org/10.1080/09644016.2018.1427824

Weghmann, V. (2019). Going public: A decarbonised, affordable and democratic energy system for Europe (p. 68). European Federation of Public Service Unions (EPSU). https://www.epsu.org/article/going-public-decarbonised-affordable-and-democratic-energy-system-europe-new-epsu-report