Adam **POLKO**

ON THE NATURE OF THE URBAN COMMONS

Adam **Polko** (ORCID: 0000-0001-8553-5685) – *University of Economics in Katowice, Department of Spatial and Environmental Economics*

Correspondence address:
1 Maja Street 50, 40-287 Katowice, Poland
e-mail: adam.polko@uekat.pl

ABSTRACT: The aim of this theoretical article is to organise and systematise knowledge about urban commons by translating the concept of commons into the realm of urban studies. The article demonstrates that urban commons constitute a complex relationship between shared urban resources and urban communities, and that the key process in understanding urban commons initiatives is the process of commoning. In this paper, an attempt is made to advance the conceptualisation of the urban commons in order to better understand pathways of governing shared urban resources.

KEYWORDS: urban, commons, commoning, theory

Introduction

The idea of urban commons and wider the city as a commons is the subject of interest both academics and practitioners of urban studies (Garnett, 2012; Foster, 2013; Borch & Kornberger, 2015; Dellenbaugh et al., 2015; Foster & Iaione, 2015; Foster & Iaione, 2022; Polko, 2022). There are several reasons that make urban commons important and current issues.

The first reason refers to the reaction of citizens to the negative processes that take place nowadays in urban areas. It covers the following matters: appropriation of public spaces, unsatisfactory quality of local public goods, social exclusion as a result of unequal and unjust access to urban resources, environmental problems such as low quality of air, water, etc. Because of these problems, citizens start spontaneous, bottom-up initiatives which sometimes later evolve into so-called "urban movements". This group of citizens emphasise the need for more aware assumptions of responsibility for the city in order to obtain and enforce **the right to the city** (Mitchell, 2003; Marcuse, 2009; Attoh, 2011; Harvey, 2012; Mattei & Quarta, 2015; Iaione, 2017). The second reason refers to the reaction of urban stakeholders to technological innovations, which are seen as an opportunity for more efficient sharing of urban resources. This is primarily due to the development of the sharing economy, also known as a collaborative consumption (Botsman & Rogers, 2010; Rifkin, 2015). Citizens use the idling capacity of resources to gain benefits from sharing resources with other users. It causes the development of different types of sharing activities such as bike sharing, co-working or community gardens. In some cities we can observe a quite systematic approach to implementation of different forms of sharing economy, which leads to rising the idea of **sharing city** (McLaren & Agyeman, 2015; Cohen & Munoz, 2016; Smorto, 2016; Davidson & Infranca, 2016; Finck & Ranchordás, 2016). The third reason pertains to the environmental challenges associated with climate change and the energy transition. This is accompanied by a growing interest in concepts that treat the city as an ecological system. This idea promotes indirect solutions that are more focused on human-environment relationships than on market mechanisms. **The eco-city** concept involves not only environmental protection and the implementation of circular economy principles but also social inclusion and democratic decision-making by local communities (Roseland, 1997; Kenworthy, 2006).

All three contemporary concepts of urban development mentioned here represent an alternative to the previously dominant model of urban economics based on the dichotomy between the market and the state. These concepts are founded on the premise that citizens forming urban communities play a significant, proactive role in the urban development. The noticeable increase in civic awareness manifests in the collective actions of residents. This is accompanied by a gradual shift in the urban development approach of local authorities moving towards solutions based on participatory governance (Turnhout et al., 2010). This approach not only expands the scope and forms of public consultations but also enables residents to actively participate in decision-making regarding the ownership and management of shared urban resources.

The concept of urban commons aligns with the trend of moving beyond the market and the state. It is based on the premise that well-defined urban communities exhibit the willingness and ability to manage shared resources within the city. In contemporary cities, we can observe many such initiatives. Their scale and thematic scope are very diverse. Some have long-established experiences and well-developed management principles, while others are social innovations that have been recently tested and implemented. Activities considered part of the urban commons include community gardens (Eizenberg, 2012; Drake & Lawson, 2014; Fox-Kämper et al., 2018), park friends groups (Murray, 2010; Holifield & Williams, 2014), urban farming (Schmidt et al., 2015), repair cafes (Bradley & Persson, 2022), bike kitchens (Bradley, 2018; Zapata Campos et al., 2020), charity shops (Osterley & Williams, 2019), Community Land Trusts (Davis, 2010; Moore & McKee, 2012; Meehan, 2014), co-housing (Tummers, 2016), and many other more or less formal activities.

The most crucial aspect of urban commons seems to be understanding the process of commoning, that is, the initiation, creation, use, and maintenance of commons by urban communities. Research focused on the relational nature of commons and deepening the understanding of how strangers collaboratively participate in governing the commons is needed (Huron, 2015; Williams, 2018). It is also necessary to better recognise the differences between urban commons and so-called traditional commons, i.e., renewable resources, and to consider the urban context in identifying the principles of commons management. This will allow for an attempt to answer the question of what makes some

DOI: 10.34659/eis.2024.91.4.833

urban communities stable and able to co-create and co-use commons over the long term, while other urban communities disband or cease to engage in urban commons.

The aim of this theoretical article is to organise and systematise knowledge about urban commons by translating the concept of commons into the realm of urban studies. The article demonstrates that urban commons constitute a complex relationship between shared urban resources and urban communities, and that the key process in understanding urban commons initiatives is the process of commoning. In this paper, an attempt is made to advance the conceptualisation of the urban commons in order to better understand pathways of governing shared urban resources. The article consists of the following sections. The first section defines the most important concepts such as common-pool resources, commons, and commoning from an urban perspective. The second section explains the specific characteristics of urban commons that distinguish them from traditional commons. The third section presents an economic perspective, showing the functioning of urban commons through the lens of agglomeration economies and social dilemmas. The fourth section focuses on the perspective of governance, providing a synthetic overview of the principles guiding urban communities in co-creating and co-using commons. The article ends with conclusions and suggestions for further research on urban commons.

Defining urban commons

The concept of the commons is complex and evolves as a result of scientific research and the application of practical solutions. To understand what urban commons are, it is necessary to sequentially explain the following terms: common-pool resources, commons and commoning.

The first term is **common-pool resources (CPR)**. To explain what CPR is, it is best to cite the definition formulated by Elinor Ostrom, who states: *"The term 'common-pool resource' refers to a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use. To understand the processes of organising and governing CPRs, it is essential to distinguish between the resource system and the flow of resource units produced by the system, while still recognising the dependence of the one on the other"* (Ostrom, 1990). This means that the resource system is treated as an area where resource units are appropriated by people. An example of a resource system is a lake, and the resource units are fish, which are caught (appropriated) by fishermen.

Resource units are renewable as long as the average rate of use does not exceed the average rate of renewal. The resource system is similar to public goods, while the resource units have the characteristics of private goods, as their appropriation by one person limits consumption by others. These characteristics of CPRs can lead to problems such as overuse and overexploitation of the resource system, suggestively described by Hardin (1968) in his essay "The Tragedy of the Commons". Initially, scientific research aimed at overcoming these problems focused on the so-called 'big five,' which includes fisheries, forests, irrigation systems, water management, and animal husbandry (van Laerhoven & Ostrom, 2007). All of them may be described as natural CPRs.

Over time, and due to the success of Elinor Ostrom, who in 2009 received The Nobel Memorial Prize in Economic Sciences for her "analysis of economic governance, especially the commons", the concept of the commons began to permeate other scientific areas (Hess, 2008), such as knowledge commons (Hess & Ostrom, 2006; Frischmann et al., 2014), cultural commons (Bertacchini et al., 2012), infrastructure commons (Frischmann, 2004), global commons (Buck, 2017), and neighborhood commons (Oakerson & Clifton, 2017). This led to replacing the term CPR with the term commons, recognising that it more fully reflects the interdisciplinary nature of the research.

The commons are not the same as common-pool resources (CPR). Compared to CPR, which is shared resources, the commons appear to be a relationship between a part of the environment and a community that is aware of the nature and significance of its connections with the environment. Thus, the commons are presented as a construct comprising three parts: common-pool resources, communities, and institutions understood as a set of rules and norms (Kip et al., 2015). They can be described as a specific self-organising social system that serves the long-term governance of resources (Bollier, 2014). According to Harvey (2012), they are a kind of flexible and unstable relationship between a specific self-defined social group and certain aspects of its environment, which have been

DOI: 10.34659/eis.2024.91.4.833

recognised as crucial for the life of this social group. The process that ties the three elements together that make up commons is **commoning,** understood as the social practice of governing the commons for joint benefits (Bollier, 2014) or social process, understood as a way of collectively managing the resources needed to sustain life (Linebaugh, 2009). It is a set of often informal activities consisting of three elements: sharing, collaborating and pooling used by the community (Iaione & De Nictolis, 2017). The overview of definitions shows that CPR is defined in terms of resources, commons is a kind of relationship, and commoning is a process.

A literature review of definitions of urban commons allows for an understanding of their complexity and interdisciplinary nature:

- Urban commons are local tangible and intangible resources in which urban residents have a common stake. Up to a certain point, urban commons resemble public goods. This point is referred to as regulatory slippage (Foster, 2013). It occurs when the level of control or oversight by local authorities over the resource significantly decreases for some reason. This means that public urban resources begin to resemble traditional common-pool resources (CPR) if the public authority fails to manage them effectively.
- Urban commons is a system consisting of a resource, its users, the institutions binding them and the associated processes (Feinberg et al., 2021).
- Urban commons are goods managed by users in a pro-social and non-profit-oriented way. These are types of goods that are consciously created, distributed, and used without the utilisation of market mechanisms (Dellenbaugh-Losse et al., 2020).
- Urban commons are shared urban resources whereby urban communities consciously engage in a process of commoning to collectively develop and implement a set of values and norms (known as a social protocol) that ensure the stable, equitable, and fair sharing of resources for the common benefit of community members (Polko, 2022).

A review of the definitions of urban commons leads to the identification of two approaches. The first approach is close to the traditional understanding of commons as shared urban resources, i.e., common-pool resources (CPR). In this case, a variety of tangible and intangible shared urban resources are the central point of interest. This approach raises questions such as what constitutes a shared resource, why it emerged, and what social dilemmas are associated with managing this resource? From an objective point of view, any shared urban resource can be perceived and termed as urban commons. If it meets the CPR criteria, it is an urban CPR or, in short, urban commons.

The second approach is more complex, as it equally considers the urban community, a set of norms and rules, and commoning alongside shared resources. In this case, the strength of relationships and the dynamics of processes occurring between these elements create a mix referred to as urban commons. Urban commons is always the result of collective action and generates collective benefits that cannot be achieved individually. In this context, for example, urban commons is not just a community garden jointly nurtured by community members but also includes the shared exchange of knowledge and passion, and the joy of spending leisure time together (which is very important for the elderly and those experiencing loneliness, whose numbers are increasing in cities). Finally, strong neighborhood ties, such as neighborhood patrols (Bennett et al., 2008), should also be considered commons. The second approach, despite appearing more nebulous and harder to systematise, is more helpful in understanding the reasons why a group of initially unfamiliar people voluntarily decides to engage in collective action related to taking over or reclaiming shared resources, and then initiating, creating, using, and maintaining urban commons. Of course, the two approaches described above can intersect and complement each other, providing a broader view of the development of urban commons.

As Huron (2015) wrote: *"If a commons is socially generated, then the city – a socially constructed entity – might be the best place to look for a commons".* A city, with its diversity of functions and density of development, is essentially a place where citizens make daily use of many shared resources. These range from urban infrastructure, public spaces, environmental resources, and neighborhood spaces to intangible assets such as identity, culture, the city's reputation, and the local labor market. These shared resources are often considered public goods provided by public authorities. However, Harvey (2012) makes a clear distinction between urban public goods and urban commons. Public authorities are obligated to provide a set of urban public goods. These public goods can become urban commons if the city community takes responsibility for them, protects them, and enhances

DOI: 10.34659/eis.2024.91.4.833

them for mutual benefit. The concept of urban commons must therefore be inextricably linked with the process of commoning and a clearly defined urban community. It means that urban commons are not a "given" but, rather, are "made" (Gidwani & Baviskar, 2011). In a specific place and time, only under certain conditions can a given good be called an urban commons. Urban commons are never commons for everyone (Parker & Johansson, 2011). Certain urban resources are perceived and treated as urban commons only by some city users, most often those who are practically involved in the co-management of these goods.

The practice of urban commoning involves solidarity and cooperation, creating additional value for the community, democracy and inclusivity, and a culture of hacking (Dellenbough-Losse et al., 2020). Solidarity and cooperation are realised through voluntary participation and the application of the norm of reciprocity. Creating additional value for the community results from voluntary actions that are not profit-oriented, promoting collective benefits over individual ones. Democracy and inclusivity are manifested in the engagement of the broadest possible spectrum of urban community representatives, through the possibility of participation on democratic principles. The culture of hacking signifies the creative adaptation of urban resources, particularly spaces, to individual needs. A specific feature of the urban commoning process is experimentation, which is manifested in the continuous creation and subsequent testing of various methods of governing the urban commons. Thus, the idea of urban commoning will never constitute a complete set of solutions and should not be treated as a ready-made recipe for creating urban commons in every place and at all times (Ramos, 2016).

Idiosyncrasies of the urban commons

The idiosyncrasies of urban commons stem primarily from the characteristics of cities that distinguish them from rural areas. These characteristics include the built environment, the diversification of functions and land use, high population density, greater diversity and mobility of residents, and employment in non-agricultural sectors. The urban specificity ensures that urban commons are strongly connected to or even constitute elements or compilations of other new commons, as mapped out by Hess (2008). This refers to infrastructure commons, which cities are equipped with, cultural commons such as public art or urban landscapes, and knowledge commons related to universities, libraries, and spaces like fablabs, makerspaces, hackerspaces, and coworking places. Most importantly, it pertains to **neighbourhood commons**, which, under urban conditions characterised by proximity, density, and diversity of resources and people, can conceptually be compared to urban commons. Urban neighborhoods possess characteristics of both CPR and commons. Neighbors cannot exclude each other from being neighbors. Typically, we also have no control over who moves in or out of the immediate vicinity. Furthermore, neighbors, through their decisions, can either subtract from or add to the value of properties within the neighborhood (Oakerson & Clifton, 2017).

The urban specificity, characterised by a significant diversity of users and their varying property rights, necessitates the consideration of urban commons in terms of so-called semi-commons. **Semi-commons** refers to situations where private rights are combined with common rights, often in the form of co-ownership. It is crucial to note that both types of rights are important and can interact with each other (Smith, 2000). Therefore, Dellenbaugh-Losse et al. (2020) propose utilising the role of custodians and the concept of semi-commons as a practical solution to this issue. Custodians would be responsible for ensuring that individuals who are unable to participate in the process of commoning could still access urban commons under specific terms and conditions. In turn, semi-commons would represent a blend of private ownership with user accessibility, where private owners allow the execution of common projects on their property.

To best analyse the specifics of urban commons, it is useful to compare them with traditional commons. Many significant differences can be observed. Urban commons do not usually constitute renewable natural resources, although they can become quite fragile over time due to internal and external threats. They are so-called **constructed commons**, the result of emergent social processes and institutional design (Foster & Iaione, 2019). Urban commons must be created through a process of commoning by the urban community. Even if they include parks or urban forests, these areas are equipped with infrastructure that qualifies them as the built environment.

DOI: 10.34659/eis.2024.91.4.833

Urban commons are much more multifunctional compared to traditional commons. This is particularly true for open and widely accessible spaces such as parks and community gardens, where various urban communities (e.g., youth groups, elderly people, running enthusiasts) can operate simultaneously. In such situations, there is a risk of conflicts and the potential for certain user groups to appropriate urban space. Therefore, urban commons can sometimes become **contested resources** (Parker & Johnsson, 2011; Kip et al., 2015; Bresnihan & Byrne, 2015). Huron emphasises that: *"the urban commons is enacted in saturated space, which means space that is already densely packed with people, competing uses, and capitalist investment; and the urban commons is constituted by the coming together of strangers"* (Huron, 2015). This means, on one hand, the risk of significant pressure for the appropriation of public spaces by investors and competition for free spaces among different urban communities, and on the other hand, the considerable challenge of forming urban communities among previously unfamiliar people. Simultaneously, some authors point out that the boundaries of the urban commons are **porous** and not always as clearly defined as traditional commons (Parker & Johansson, 2011; Zapata Campos et al., 2020). This porosity is essential for attracting new community members and leveraging opportunities provided by relationships with the market and local authorities. Urban commons require sustainability and stability, which, in some cases, necessitates the use of specific forms of enclosure. Stavrides (2014) refers to common space as a **threshold space**. Thresholds create conditions for entry and exit, allowing for the permeation and penetration of commons by the market and the state. Simultaneously, they serve as a barrier, when necessary, at a given moment.

Another difference between urban commons and traditional commons lies in the understanding of the process of appropriation. In the case of traditional commons, any appropriation depletes the pool of resource units available to others. In contrast, in a city, it is much harder to talk about the classic mode of resource appropriation. This might be the case if we consider a municipal parking lot as a resource system, where appropriation involves occupying spaces with more cars. However, most often, the use of shared urban resources does not involve their exploitation or occupation. For example, people spending time in a park or community garden are not invasive towards each other and do not compete for space. Thus, urban commons are not subtractable. The use of urban space does not diminish its availability; instead, it often adds value (Kornberger & Borch, 2015). A bustling square, a community garden where friends can meet, or a fab lab full of enthusiasts is much more attractive than empty, unused spaces. Therefore, urban commons should experience a situation that Carol Rose termed **the comedy of the commons**. This involves achieving benefits from interactions with other participants in urban life under the principle of "the more, the merrier" (Rose, 1986).

Traditional commons are a primary source of income for cattle ranchers, foresters, and fishermen, who appropriate renewable resource units from the resource system (e.g., fish from a lake). In contrast, in cities, people create and use commons primarily to enhance their quality of life through enjoyable shared leisure activities or by reclaiming and preserving endangered spaces. However, sometimes urban commons can improve **livelihood support**, for example, through vegetable harvests in urban farming or community gardens, repairs at a repair café, or meeting housing needs through Community Land Trusts or co-housing (Feinberg et al., 2021). Livelihood support can be a very important reason for creating urban commons in developing countries and in neighborhoods inhabited by low-income households.

The difference between urban commons and traditional commons can also be related to the differing attitudes and behaviors of community members. City residents are more anonymous, mobile, and therefore often have more loose and less permanent relationships with others. Urban residents are mostly strangers to each other (Huron, 2015). Engagement in the commons is usually not part of their daily activities. City dwellers participate in such activities on a voluntary basis much more than in the case of traditional commons. Furthermore, urban residents often have limited awareness of the consequences of the functioning of large and complex urban ecosystems, which can also result in a reduced need to engage in urban commons (Kip et al., 2015).

Finally, it should be emphasised that urban commons always operate within a highly legally regulated environment and are influenced by local politics (Foster & Iaione, 2019). In practice, it is not possible to completely separate urban commons from the market and the state. The coexistence between these spheres must be taken into account. In urban settings, residents also have limited opportunities to create and provide urban commons that require significant investment. Therefore,

DOI: 10.34659/eis.2024.91.4.833

grassroots urban commons initiatives often take the form of small, localised endeavors. However, within the framework of the commons idea and the realisation of the right to the city, residents can participate in decisions regarding the type and level of public services provided by local authorities based on shared resources (Parker & Johnsson, 2011; Kip et al., 2015).

The economic perspectives

Describing urban commons from an economic perspective, we must first refer to the typology of goods based on two criteria: excludability and rivalry. According to these criteria, four types of goods can be distinguished: private goods, public goods, club goods, and common-pool resources (CPR). This is a theoretical classification, and in reality, individual goods may exhibit varying levels of excludability and rivalry at any given moment and may transition between different types over time. Therefore, in practice, a given urban space can, for example, transform from a public good to a club good during a process of transformation, such as when it becomes fenced off and accessible only to residents of a gated community. Alternatively, it can shift from a public good to a CPR when uncontrolled excessive appropriation of public space in the city occurs by specific individuals or groups (e.g., parking cars on squares, lawns, and sidewalks in the city center). Thus, the types of goods present in a city depend on the decisions made by local authorities and city users. Both the level of excludability and rivalry can therefore be treated as variables that can be managed by city users using appropriate means and tools (Frischmann, 2004). By controlling the level of excludability or rivalry, users de facto decide whether a given urban space evolves, transforming, for example, from a public good into a club good.

Urban commons, as a complex and flexible construct, can fall into different categories of goods depending on their type (Hofmkol, 2009; Marton-Gadoś, 2014). For instance, co-housing fits well into the category of club goods, while neighborhood patrols more closely resemble public goods. A more significant distinguishing criterion for urban commons appears to be the collective action in which goods are used. Consequently, it will depend on the particular urban community whether the commons will exhibit more characteristics of public goods, club goods, or CPR, as stated in the previous section that urban commons are often porous in terms of boundaries and constitute threshold spaces.

Drawing an analogy from Hardin's (1968) essay, the city can be treated as an open-access pasture shared by many users. Limited urban resources, compared to unlimited demand, can lead to congestion, degradation, and overuse of these resources.

In this context, it is worth considering the category of urban commons in relation to agglomeration economies, which can be seen as positive externalities. These occur in an economy when an activity (production or consumption) impacts a third party. In densely populated and built-up cities, externalities, or more precisely, **neighborhood externalities**, play a crucial role in shaping the quality of urban life. However, contributions to the co-creation of agglomeration economies and participation in their benefits are not evenly distributed. Some city users are significant beneficiaries of agglomeration economies while offering little in return to the city's shared resources. Others appropriate excessive resources, thereby exacerbating agglomeration diseconomies (negative externalities), such as excessive space consumption.

An interesting categorisation of city users based on agglomeration economies and congestion costs is offered by Fennell (2014). She identifies four categories of urban actors:

- "Buzz builders" who significantly contribute to agglomeration economies while generating minimal congestion costs. Examples include fablabs or high-tech companies that attract very creative workers without requiring much urban space.
- "Space-eating slugs" who contribute greatly to congestion costs and very little to agglomeration economies. An example is a large parking lot that is often underutilized.
- "Lackluster lites" who have little impact on either agglomeration economies or congestion. An example is residents of gated communities who rarely leave their enclave and do not integrate with the rest of the neighborhood.
- "Massive movers" who have large impacts on both agglomeration economies and congestion costs. Examples include large amusement parks, stadiums, and substantial industrial plants.

DOI: 10.34659/eis.2024.91.4.833

If urban planning is solely market-driven, it can lead to, and often does, situations where a vibrant area dominated by "buzz builders" is overtaken by "space-eating slugs." In contemporary cities, we frequently observe scenarios where larger financial players, such as major construction firms, residential investors, and huge business companies, have greater bargaining power. Local communities, small entrepreneurs, cultural, social, and educational institutions are at a disadvantage in this competition for urban space. The concept of urban commons might offer a solution to improve this situation, aiming to achieve a mix of urban actors in a given district or place that could generate more value if occupied by actors with a more favorable agglomeration-to-congestion ratio.

Urban commons based on the process of commoning are particularly susceptible to social dilemmas, also known as collective action problems. These situations create a conflict between individual interests and collective interests, such that individuals achieve better outcomes by following strategies that, over time, lead to suboptimal outcomes for the collective (Ostrom et al., 1994). Among the social dilemmas occurring in the context of urban commons, we can identify: the coordination and choice dilemma, the free rider and mutual assurance dilemma, and the problem of negative externalities associated with appropriation.

The coordination and choice dilemma most often arises during the creation stage of urban commons. Urban public spaces such as squares, parks and even wastelands can serve various functions, which, given the highly diverse urban actors, can cause difficulties in deciding which function to choose. Lack of coordination and the risk of failing to achieve collective action can lead to the temptation for a specific group to appropriate the area as soon as possible.

The free rider and mutual assurance dilemma can occur at any stage in the existence of an urban common. This issue is particularly significant in the case of neighborhood commons, where it is difficult to exclude neighbors who do not engage in collective action from using the common good. In a neighborhood, we can usually distinguish two groups of users who do not engage in the process of commoning. The first group can be called "holdouts," who oppose the actions of the community aimed at creating commons. The second group consists of "free-riders," residents who do not oppose community actions but do not participate in collective efforts, yet benefit from the work of others. Maintaining mutual assurance is more challenging due to the existence of "holdouts" than "free-riders" (Oakerson & Clifton, 2017). "Free-riders" seek benefits from the actions of others, somewhat ex-post, for example, by not keeping agreements or not adhering to previously established rules. On the other hand, "holdouts" undermine collective actions ex-ante, by refusing to participate and cooperate from the outset. "Holdouts" become "free-riders" if others, despite their opposition and reluctance, undertake collective action for the commons.

The problem of negative externalities associated with appropriation arises when an individual disregards the impact of their own level of appropriation on the average level of appropriation by other community members. This issue relates to the typology of city users described earlier in this section, who generate varying levels of externalities considering agglomeration economies and congestion. Notably, different urban commons have varying capacities and abilities to create agglomeration economies (Iaione & DeNictolis, 2017). This can lead to situations where a small square or community garden created by neighborhood residents becomes overused by city dwellers. The most common and classic examples of such problems are cities or districts that are major tourist attractions. In these places, individual tourists aim to achieve their primary goal of sightseeing, without considering the negative effects on local communities, the natural environment, or even other tourists. The example of large cruise ships entering the Venetian lagoon is the best illustration of this problem.

It should be noted that in the case of urban commons, both the tragedy described by Hardin (1968) and the comedy described by Rose (1986) can occur. However, the boundary between these two states is very thin.

DOI: 10.34659/eis.2024.91.4.833

The governance perspective

The governance perspective appears to be the most crucial element in the creation and persistence of urban commons. The success or failure of the commons in a given urban community will depend on how the process of commoning unfolds. Elinor Ostrom conducted research on governing the commons using case studies from around the world and economic experiments. Based on this, she formulated eight design principles of long-enduring and self-governing CPR institutions. These principles are: (1) clearly defined boundaries, (2) congruence between appropriation and provision rules and local conditions, (3) collective-choice arrangements, (4) monitoring, (5) graduated sanctions, (6) conflict-resolution mechanisms, (7) minimal recognition of rights to organise, (8) nested enterprises (for CPRs that are part of larger systems) (Ostrom, 1990).

Ostrom developed her principles primarily based on best practices and experimental research related to traditional commons. The flourishing research on new commons, including urban commons, has led academics to explore the applicability of Ostrom's principles to urban settings (Parker & Johansson, 2011; Czornik, 2018; Foster & Iaione, 2019; Polko, 2022). Existing studies suggest that Ostrom's principles can be applied in urban areas to a certain extent and with some modifications. Additionally, scholars advocate for considering new, supplementary principles that may be necessary in urban environments. A brief analysis of Ostrom's principles in the urban context yields the following conclusions:

1) The principle of "clearly defined boundaries" applies only to certain urban commons, such as CLTs or co-housing. In other cases, common spaces are porous and osmotic (Stavrides, 2014) because urban communities seek to remain open to new members and guests who wish to use the urban commons occasionally.
2) The principle of "congruence between appropriation and provision rules and local conditions" should also apply in cities. Understanding and considering the local context is crucial for different types of urban commons and conditions. Czornik (2018) and Polko (2024) indicate that urban community members are pioneers in implementing social innovations, which consequently influence and modify local conditions, such as changing city residents' attitudes towards recycling and nature conservation.
3) The principle of "collective-choice arrangements" is applicable only to a certain extent, mainly in small neighborhood communities. In larger communities, rules are typically established by a few highly engaged individuals or a community leader. In some cases, local authorities also influence rule-making, such as leasing land for community gardens or providing spaces for fablabs. More formalised rules in the form of local laws pertain to urban commons such as Community Land Trusts, co-housing, or Business Improvement Districts (BIDs).
4) The principle of "monitoring" is also applicable to urban commons. Research indicates that the most common and effective form is daily observation (Polko, 2022). When a place is vibrant, participants ensure control and enhance public safety.
5) The principle of "graduated sanctions" is much less significant in cities than in traditional commons. Sanctions in urban commons are less effective. If someone breaks rules or fails to keep promises, they often leave the urban community or simply stop engaging in neighborhood commons. In voluntary urban communities, one can avoid consequences by leaving the group.
6) The principle of "conflict-resolution mechanisms," involving quick and inexpensive dispute resolution, is applicable to urban commons, especially in relatively small neighborhood communities. The best ways to avoid and resolve conflicts include dialogue, reaching a consensus, and frequent communication among community members.
7) The principle of "minimal recognition of rights to organize" must also apply in cities, as urban communities need to feel they have the right to self-organisation. However, the relationships between urban commons and local authorities are more complex than in traditional commons. Cooperation with local authorities involves financial support through grants, participatory budgeting, project implementation assistance, and aiding local authorities in delivering services. Local authorities can create special conditions for the development of urban commons, may be indifferent, or may be unsupportive. This aspect of governing urban commons is significantly different from traditional commons and is crucial for the development of urban commons.

DOI: 10.34659/eis.2024.91.4.833

8) The principle of "nested enterprises" is applicable in cities and is advisable for the comprehensive implementation of the city as a commons concept.

In addition to testing Ostrom's principles in urban commons, new, supplementary principles are proposed to enhance the sustainability and stability of urban communities. Foster and Iaione (2019) suggest five new principles, including:

- collective governance which allows urban commoners to be actors in local development,
- enabling state, as the role of the state should be to facilitate the emergence and existence of urban commons,
- social and economic pooling, referring to the pooling of resources and communities to create new opportunities,
- experimentalism, which is essential in designing innovative solutions and adapting according to the specific time and place of action,
- tech justice, enabling access to digital urban infrastructure to create new urban commons.

The following new principles are also proposed:

- openness and inclusiveness, as urban communities must continuously engage their members and strive to mitigate the negative effects of social exclusion,
- diversity, which allows for the fullest utilisation of both the potential of urban spaces and the knowledge, skills, and experiences of city residents,
- coexistence with the market and the state, as this coexistence appears inevitable in urban settings and should be wisely leveraged,
- experimentalism once again, because the trial-and-error method is appropriate, allowing the discovery of the best solutions through experience (Polko, 2022).

The principles governing the urban commons discussed in this section should be regarded as very general guidelines, which was also Elinor Ostrom's intention when she formulated her 8 design principles. A review of the literature indicates that the conditions for the existence of urban commons vary significantly in different contexts. For instance, some studies suggest that the urban commons suffers from financial instability and a lack of institutional protection, with direct or indirect financial support being rare (Radywyl & Bigg, 2013), while other studies do not seem to confirm this (Polko, 2022). Therefore, it is necessary to continuously enrich research on the creation and development of various initiatives in the city that bear the characteristics of urban commons.

Conclusions

In cities around the world, we observe numerous grassroots initiatives undertaken by citizens. They form urban communities and engage in collective actions driven by various motivations. Sometimes it is the desire to reclaim neglected urban spaces, other times it is the wish to share common interests and passion. These initiatives take different forms, from less formal community gardens to more formal Community Land Trusts. Notably, the term "community" frequently appears and is a crucial component of what we call urban commons. This is a complex concept that is difficult to define, with unclear conceptual boundaries, often leading to the assertion that commons are anything that a given community considers to be commons. Practitioners, or commoners, rarely use this term, perhaps because they do not feel the need to elaborate on the concept.

Urban commons is an important and current concept because it breaks away from the still-dominant paradigm of urban economics, which is based on the dichotomy of market and state. It fits into the trend of seeking solutions that can meet the challenges faced by contemporary cities. It places the urban community at the center of consideration. The concept of urban commons is based on the assumption that city residents are equal stakeholders with a real influence on the directions of city development. They not only passively consult on local authorities' proposals but can also collectively act to manage shared urban resources.

Scientific research on urban commons is demanding as it encompasses interdisciplinary issues and is heavily dependent on the local context. The experiences of Elinor Ostrom and other researchers show that a good way to understand urban commons is through field research, i.e., observing urban communities in action. Social dilemmas and principles of governing the urban commons are mainly analysed based on case studies and field experiments. Besides delving into the process of

DOI: 10.34659/eis.2024.91.4.833

urban commoning, it is also worth developing research that provides insights into the inevitable relationships between urban commons, the market, and local authorities. This is perhaps the most distinguishing feature of urban commons compared to traditional commons, which can significantly impact the development of urban commons in practice and contribute to a scientific model that enriches urban studies with the theory of commons.

The topic of urban commons warrants further development through interdisciplinary research. Among the potential research directions, the following should be highlighted:

- Participatory governance and hybrid governance structures based on urban commons: Further research should focus on the dynamics of the processes occurring between local authorities and communities. Local governments, through the implementation of social innovations, can create conditions that foster the creation and stability of existing urban communities. In practice, this would also facilitate the development and testing of more inclusive forms of co-governance in cities.
- The role of urban commons in environmental sustainability and just transition: Further studies should explore how urban commons can be integrated into environmental policies, climate change resilience strategies, and the circular economy. In urban contexts, issues of reuse, recycling, and redistribution of urban resources—particularly energy—are pressing. The energy transition and efforts within the framework of a just transition should account for the body of research on urban commons, as this approach emphasises social justice and inclusion, and gives voice to marginalised communities often overlooked by policymakers.
- Technology and urban commons: Further research should investigate the role of urban commons in driving technological innovations in contemporary cities, such as the development of digital platforms and applications based on open-source software. Data on air quality, urban mobility, etc., can be collected and managed collectively, fostering a deeper understanding of urban dynamics and supporting the management of shared urban resources.

In summary, the topic of urban commons is inherently interdisciplinary, as it arises wherever strong, intentional relationships are formed between urban communities, the natural and the built environment, particularly where urban communities engage in the co-management of shared resources. It is always worth asking: Does the body of scholarly work on governing the commons offer valuable insights for addressing the environmental challenges faced by urbanised areas?

Acknowledgements

The paper presents results of research project titled "The Economics of Urban Commons" (No. 2015/19/B/HS4/01695) financed by Polish National Scientific Centre. Head of the project: Dr Adam Polko.

References

Attoh, K. A. (2011). What kind of right is the right to the city? Progress in Human Geography, 35(5), 669-685. https://doi.org/10.1177/0309132510394706

Bennett, T., Holloway, K., & Farrington, D. (2008). The effectiveness of neighborhood watch. Campbell Systematic Reviews, 4(1), 1-46. https://doi.org/10.4073/csr.2008.18

Bertacchini, E., Bravo, G., Marrelli, M., & Santagata, W. (Eds.). (2012). *Cultural commons. A new perspective on the production and evolution of cultures.*Cheltenham: Edward Elgar Publishing.

Bollier, D. (2014). *Think like a commoner. A short introduction to the life of the commons.* Gabriola Island: New Society Publishers.

Borch, C., & Kornberger, M. (Eds.). (2015). *Urban commons: Rethinking the city.* London: Routledge.

Botsman, R., & Rogers, R. (2010). *What's mine is yours: how collaborative consumption is changing the way we live.* London: Harper Business.

Bradley, K. (2018). Bike Kitchens–Spaces for convivial tools. Journal of Cleaner Production, 197, 1676-1683. https://doi.org/10.1016/j.jclepro.2016.09.208

Bradley, K., & Persson, O. (2022). Community repair in the circular economy–fixing more than stuff. Local Environment, 27(10-11), 1321-1337. https://doi.org/10.1080/13549839.2022.2041580

Bresnihan, P., & Byrne, M. (2015). Escape into the city: Everyday practices of commoning and the production of urban space in Dublin. Antipode, 47(1), 36-54. https://doi.org/10.1111/anti.12105

Buck, S. J. (2017). *The global commons: an introduction.* London: Routledge. https://doi.org/10.4324/9781315086415

Cohen, B., & Munoz, P. (2016). Sharing cities and sustainable consumption and production: towards an integrated framework. Journal of Cleaner Production, 134, 87-97. https://doi.org/10.1016/j.jclepro.2015.07.133

Czornik, M. (2018). Miejskość dóbr wspólnych. Refleksje nad adaptowaniem koncepcji Common-Pool Resources. Rozwój Regionalny i Polityka Regionalna, (43), 71-82. https://pressto.amu.edu.pl/index.php/rrpr/article/view/19290 (in Polish).

Davidson, N. M., & Infranca, J. J. (2016). The sharing economy as an urban phenomenon. Yale Law & Policy Review, 34(2), 215-279. https://ssrn.com/abstract=2802907

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. https://www.termoterritorialcoletivo.org/biblioteca-termo-territorial-coletivo/the-favela-community-land-trust-a-sustainable-housing-model-for-the-global-south

Dellenbaugh, M., Kip, M., Bieniok, M., Müller, A., & Schwegmann, M. (Eds.). (2015). *Urban commons: moving beyond state and market*. Basel: Birkhäuser.

Dellenbaugh-Losse, M., Zimmermann, N. E., & de Vries, N. (2020). *The Urban Commons Cookbook: Strategies and Insights for Creating and Maintaining Urban Commons.* http://urbancommonscookbook.com/info-Urban-CommonsCookbookEN.pdf

Drake, L., & Lawson, L. J. (2014). Validating verdancy or vacancy? The relationship of community gardens and vacant lands in the US. Cities, 40, 133-142. https://doi.org/10.1016/j.cities.2013.07.008

Eizenberg, E. (2012). The changing meaning of community space: Two models of NGO management of community gardens in New York City. International Journal of Urban and Regional Research, 36(1), 106-120. https://doi.org/10.1111/j.1468-2427.2011.01065.x

Feinberg, A., Ghorbani, A., & Herder, P. M. (2021). Diversity and Challenges of the Urban Commons: A Comprehensive Review. International Journal of the Commons, 15(1), 1-20. https://doi.org/10.5334/ijc.1033

Fennell, L. A. (2014). Agglomerama. Brigham Young Univeristy Law Review, 17, 1373-1414. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1032&context=housing_law_and_policy

Finck, M., & Ranchordás, S. (2016). Sharing and the City. Vanderbilt Journal of Transnational Law, 49, 1299-1369. https://scholarship.law.vanderbilt.edu/vjtl/vol49/iss5/3

Foster, S. R. (2013). Collective action and the urban commons. Notre Dame Law Review, 87(1), 57-134. https://scholarship.law.nd.edu/ndlr/vol87/iss1/2

Foster, S. R., & Iaione, C. (2015). The city as a commons. Yale Law & Policy Review, 34, 281-349. https://dx.doi.org/10.2139/ssrn.2653084

Foster, S. R., & Iaione, C. (2019). Ostrom in the city: Design principles and practices for the urban commons. In B. Hudson, J. Rosenbloom & D. Cole (Eds.), *Routledge Handbook of the Study of the Commons* (pp. 235-255). New York: Routledge.

Foster, S. R., & Iaione, C. (2022). *Co-cities: Innovative transitions toward just and self-sustaining communities.* Cambridge: MIT Press.

Fox-Kämper, R., Wesener, A., Münderlein, D., Sondermann, M., McWilliam, W., & Kirk, N. (2018). Urban Community Gardens: An Evaluation of Governance Approaches and Related Enablers and Barriers at Different Development Stages. Landscape and Urban Planning, 170, 59-68. https://doi.org/10.1016/j.landurbplan.2017.06.023

Frischmann, B. M. (2004). An economic theory of infrastructure and commons management. Minnesota Law Review, 89, 917-1030. https://ssrn.com/abstract=588424

Frischmann, B. M., Madison, M. J., & Strandburg, K. J. (Eds.). (2014). *Governing knowledge commons.* Oxford: Oxford University Press.

Garnett, N. S. (2012). Managing the urban commons. University of Pennsylvania Law Review, 160, 1995-2027. https://scholarship.law.nd.edu/law_faculty_scholarship/438/

Gidwani, V., & Baviskar, A. (2011). Urban commons. Economic and Political Weekly, 46(50), 42-43. https://experts.umn.edu/en/publications/urban-commons

Hardin, G. (1968). The tragedy of the commons. Science, 162(3859), 1243-1248. https://doi.org/10.1126/science.162.3859.1243

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

Hess, C. (2008). *Mapping the new commons.* https://ssrn.com/abstract=1356835

Hess, C., & Ostrom, E. (Eds.). (2006). *Understanding knowledge as a commons: from theory to practice.* Cambridge: The MIT Press. https://doi.org/10.7551/mitpress/6980.001.0001

Hofmokl, J. (2009). *Internet jako nowe dobro wspólne.* Warszawa: Wydawnictwa Akademickie i Profesjonalne. (in Polish).

Holifield, R., & Williams, K. C. (2014). Urban parks, environmental justice, and voluntarism: The distribution of friends of the parks groups in Milwaukee county. Environmental Justice, 7(3), 70-76. https://doi.org/10.1089/env.2013.0043

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

Iaione, C. (2017). The Right to the Co-City. The Italian Journal of Public Law, 15(1), 80-142. https://ssrn.com/abstract=3017184

Iaione, C., & De Nictolis, E. (2017). Urban Pooling. Fordham Urban Law Journal, 44(3), 665-701. https://ir.lawnet.fordham.edu/ulj/vol44/iss3/3

Kenworthy, J. R. (2006). The eco-city: ten key transport and planning dimensions for sustainable city development. Environment and Urbanization, 18(1), 67-85. https://doi.org/10.1177/0956247806063947

Kip, M., Bieniok, M., Dellenbaugh, M., & Müller, A. K. (2015). Seizing the (Every) Day: Welcome to the Urban Commons! In M. Dellenbaugh, M. Kip, M. Bieniok, A.K. Müller & M. Schwegmann (Eds.), *Urban commons: moving beyond state and market* (pp. 9-25). Basel: Birkhäuser.

Kornberger, M., & Borch, C. (2015). Introduction: urban commons. In M. Kornberger & C. Borch (Eds.), *Urban commons. Rethinking the city* (pp. 1-21). London: Routledge.

Linebaugh, P. (2009). *The Magna Carta manifesto: Liberties and commons for all.* Berkeley: University of California Press.

Marcuse, P. (2009). From critical urban theory to the right to the city. City, 13(2-3), 185-197. https://doi.org/10.1080/13604810902982177

Marton-Gadoś, K. (2014). Dobra wspólne-metodologia badania zjawiska. Myśl Ekonomiczna i Polityczna, 47(4), 40-73. https://mysl.lazarski.pl/mysl/article/view/1772 (in Polish).

Mattei, U., & Quarta, A. (2015). Right to the City or Urban Commoning: Thoughts on the Generative Transformation of Property Law. The Italian Law Journal, 1, 303-325. https://repository.uclawsf.edu/faculty_scholarship/1287/

McLaren, D., & Agyeman, J. (2015). *Sharing cities: a case for truly smart and sustainable cities*. Cambridge: MIT Press.

Meehan, J. (2014). Reinventing real estate: The community land trust as a social invention in affordable housing. Journal of Applied Social Science, 8(2), 113-133. https://doi.org/10.1177/1936724413497480

Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space.* New York: Guilford Press.

Moore, T., & McKee, K. (2012). Empowering local communities? An international review of community land trusts. Housing Studies, 27(2), 280-290. https://doi.org/10.1080/02673037.2012.647306

Murray, M. (2010). Private management of public spaces: Nonprofit organizations and urban parks. Harvard Environmental Law Review, 34, 179-255. https://ssrn.com/abstract=1338583

O'Brien, D. T. (2012). Managing the urban commons: The relative influence of individual and social incentives on the treatment of public space. Human Nature, 23(4), 467-489. https://psycnet.apa.org/doi/10.1007/s12110-012-9156-6

Oakerson, R. J., & Clifton, J. D. (2017). The Neighborhood as commons: reframing neighborhood decline. Fordham Urban Law Journal, 44, 411-450. https://ir.lawnet.fordham.edu/ulj/vol44/iss2/5/

Ohmer, M. L. (2007). Citizen participation in neighborhood organizations and its relationship to volunteers' self- and collective efficacy and sense of community. Social Work Research, 31(2), 109-120. https://doi.org/10.1093/swr/31.2.109

Osterley, R., & Williams, I. D. (2019). The social, environmental and economic benefits of reuse by charity shops. Detritus, 7, 29-35. https://doi.org/10.31025/2611-4135/2019.13849

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

Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, Games, & Common-Pool Resources.* Ann Arbor: The University of Michigan Press.

Parker, P., & Johansson, M. (2011). The uses and abuses of Elinor Ostrom's concept of commons in urban theorizing. *Proccedings of the International Conference of the European Urban Research Association,* Copenhagen, Denmark, 1-17. https://mau.diva-portal.org/smash/record.jsf?pid=diva2%3A1407968&dswid=3629

Polko, A. (2024). Governing the urban commons: Lessons from Ostrom's work and commoning practice in cities. Cities, 155, 105476. https://doi.org/10.1016/j.cities.2024.105476

Polko, A. (2022). *Ekonomia miejskich dóbr wspólnych.* Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach. (in Polish).

Radywyl, N., & Biggs, C. (2013). Reclaiming the commons for urban transformation. Journal of Cleaner Production, 50, 159-170. https://doi.org/10.1016/j.jclepro.2012.12.020

Ramos, J. (2016). The City as a Commons: Policy Reader. In J. Ramos (Ed.), *The City as a Commons: Policy Reader* (pp. 1-16). Melbourne: The Commons Transition Coalition.

Rifkin, J. (2015). *The zero marginal cost society: The internet of things, the collaborative commons, and the eclipse of capitalism.* New York: St. Martin's Griffin.

Rose, C. (1986). The comedy of the commons: custom, commerce, and inherently public property. The University of Chicago Law Review, 53(3), 711-781. https://doi.org/10.2307/1599583

Roseland, M. (1997). Dimensions of the eco-city. Cities, 14(4), 197-202. https://doi.org/10.1016/S0264-2751(97)00003-6

Schmidt, S., Magigi, W., & Godfrey, B. (2015). The organization of urban agriculture: Farmer associations and urbanization in Tanzania. Cities, 42, 153-159. https://doi.org/10.1016/j.cities.2014.05.013

Smith, H. E. (2000). Semicommon property rights and scattering in the open fields. The Journal of Legal Studies, 29(1), 131-169. https://doi.org/10.1086/468066

Smorto, G. (2016). The Sharing Economy as a Means to Urban Commoning. Comparative Law Review, 7(1), 1-22. https://comparativelawreview.giurisprudenza.unipg.it/index.php/comparative/article/view/88

Stavrides, S. (2014). Emerging common spaces as a challenge to the city of crisis. City, 18(4-5), 546-550. https://doi.org/10.1080/13604813.2014.939476

Tummers, L. (2016). The re-emergence of self-managed co-housing in Europe: A critical review of co-housing research. Urban Studies, 53(10), 2023-2040. https://doi.org/10.1177/0042098015586696

Turnhout, E., Van Bommel, S., & Aarts, N. (2010). How participation creates citizens: participatory governance as performative practice. Ecology and Society, 15(4), 26. https://www.jstor.org/stable/26268213

Van Laerhoven, F., & Ostrom, E. (2007). Traditions and Trends in the Study of the Commons. International Journal of the Commons, 1(1), 3-28. https://www.jstor.org/stable/26522979

Williams, M. J. (2018). Urban commons are more-than-property. Geographical Research, 56(1), 16-25. https://doi.org/10.1111/1745-5871.12262

Zapata Campos, M. J., Zapata, P., & Ordoñez, I. (2020). Urban commoning practices in the repair movement: Frontstaging the backstage. Environment and planning A: Economy and Space, 52(6), 1150-1170. https://doi.org/10.1177/0308518X19896800

Adam POLKO

NAD NATURĄ MIEJSKICH DÓBR WSPÓLNYCH

STRESZCZENIE: Celem teoretycznego artykułu jest uporządkowanie i systematyzacja wiedzy na temat miejskich dóbr wspólnych poprzez przeniesienie koncepcji dóbr wspólnych na grunt studiów miejskich. W artykule wskazano, że miejskie dobra wspólne stanowią złożoną relację między współdzielonymi zasobami miejskimi a wspólnotami miejskimi oraz że kluczowym procesem w zrozumieniu inicjatyw miejskich dóbr wspólnych jest proces uwspólniania. W niniejszej pracy podjęto próbę rozwinięcia konceptualizacji miejskich dóbr wspólnych, aby lepiej zrozumieć ścieżki współzarządzania dobrami wspólnymi przez wspólnoty miejskie.

SŁOWA KLUCZOWE: miejski, dobro wspólne, uwspólnianie, teoria

DOI: 10.34659/eis.2024.91.4.833