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A Cultural-Historical Activity Theory Perspective on the Sustainability Challenges of Urban Commoning: Revisiting the Material Aspect of the (Re)Production of Urban Commons

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Abstract

Urban commoning theory gives priority to value that is reproduced in the patterns of collective use of urban resources. Its theoretical aim is to reclaim this value from capital, as a commons. Urban commoning is often recognized as an alternative to capitalist reproduction in the fields of art, culture, or housing - such as in autonomous cultural centers or housing cooperatives. However, one of the key empirical issues of urban commoning is its relative unsustainability. This typically manifests in the low participation of commoners in the everyday activities of commoning. The aim of this paper was to show that commoning theory lacks the analytical tools necessary to account for these challenges and to propose a pathway to a theoretical solution. A critical re-examination of some aspects of urban commoning theory is presented, in order to better understand its shortcomings. The argument takes into account the theoretical function of an established critique of Hardin and Ostrom in the setting of the grounds for commoning theory, as well as a particular historization of commoning that contextualizes it. I argue that these established ways of contextualizing commoning theory serve to obscure its relationship to public interest, as well as to remove the notion of economic interest from commoning. Instead of a widely spread focus on values and personal emancipation, central to commoning theory, a more structural approach to commoning is proposed. Based on Silvia Federici's notions of wages against housework and the Cultural-historical activity theory, commoning is discussed as a contradictory activity. I propose the notion of urban commoning as unpaid reproductive work that has an implicit opportunity cost for the commoners.

Keywords: urban commoning, CHAT, unpaid reproductive work, volunteering

Introduction

Urban commoning is often recognized as an alternative to capitalist reproduction in the fields of art, culture, or housing. Commoning refers to practices of collectively using resources, within a defined community that itself devises institutions for the regulation of those resources (Huron, 2017). *Urban commoning* refers to practices that happen within urban contexts, where "urban" does not solely mean that the practice is situated in a city. The urban is the place where mediation between everyday life and the demands of capital meet (Kip et al., 2015, as cited in Huron, 2017). Urban commoning is seen as the space of opposition to capital, where use value is prioritized over exchange value. Commoners claim the right to participate in the production and the governance of urban space on the basis of use, and not ownership rights (Fournier, 2013). The concept of urban commoning sees the localized relationality as that which produces value in urban contexts. Consuming, using space in urban commoning does not subtract, but adds to its value (Kornberger & Borch, 2015, as cited in Huron, 2017). Examples of urban commoning practices include cultural or social centers run by their users, cooperative housing initiatives, urban gardens, etc. (e.g. Bresnihan & Byrne, 2015; Chatterton, 2010; Eizenberg, 2012; Huron, 2015; Noterman, 2015; Vidović, Žuvela, & Mišković, 2018; Williams, 2018).

One of the key empirical issues of urban commoning has been recognized in literature as its sustainability. It has been noted in different urban commoning initiatives, that only few members of the community of commoners are active, while others only rarely participate (Huron, 2015; Noterman, 2015; Vidović, Žuvela & Mišković, 2018). This suggests that the empirical reality of urban commoning is more complex than theory suggests. While urban commoning has not been studied within psychology as such, similar phenomena have been. Bora Kuzmanović (1984) used the individual differences approach to explore workers' participation in self-management institutions in Yugoslavia. The author explored the relationship between participation and certain personal traits, such as motivation or belief structure. At the intersection of cognitive psychology and economics, the prisoner's dilemma paradigm is used to explore factors influencing cooperative versus non-cooperative behaviour in situations with a common or a public good. Here, both individual differences in personality traits, and structural situation (task) factors play an explanatory role (see Kopelman, Weber, & Messick, 2002). Limitations of both approaches are briefly discussed. In this paper, I propose Cultural-historical activity theory (CHAT) (Engestrom, 2015) as a framework for understanding the sustainability challenges of urban commoning. CHAT allows us to conceive urban commoning as a historically changing, contradictory work activity within capitalism. This activity both shapes and is shaped by the subjects who practice it by using and creating artifacts, rules and division of labour to sustain the commons (Engestrom, 2015).

The aim of this article is both to critically examine certain tendencies in the theorizing of urban commoning, and to offer a novel perspective - in order to adequately address the question of urban commoning sustainability.

This is done first by a critical reading of the theoretical development of the concept of urban commoning by thinkers such as De Angelis and Harvie (2013), Hardt and Negri (2009), Silvia Federici (2004), Valerie Fournier (2013), and Peter Linebaugh (2008). In the first section, I discuss the usual contextualization of commoning theory as the "critical successor" of Hardin's "tragedy of the commons" (1968) and of Ostrom's common pool resource management (1990). The section aims to show how a specific reading of the two authors, particularly of Hardin, serves to shift

commoning theory away from concepts of public and economic interest. In the second section, I address the question of political articulation (and of subjectivation) of commoning, as a question of "scaling up" (Dolenec & Žitko, 2013). The section further elaborates on the unclear theoretical relationship between the notions of urban commoning and public interest. This relationship is explored in the ways commoning theory establishes commoning as an activity that is emancipatory in itself (Lutz, 2015). The concept is further theoretically anchored in specific historizations of commoning, such as reference to the Magna Carta charter (Linebaugh, 2008). I suggest the limitation of autonomist thinkers' notions of commoning is the analytical "erasure" of the exchange value aspect of commoning.

In the second half of the paper, I introduce urban commoning as an object for psychological theory. I first give an overview of existing psychological approaches to phenomena adjacent to urban commoning. Subsequently, some elementary principles of CHAT are introduced. CHAT is proposed as a framework that can encompass urban commoning as a contradictory activity that reproduces both use and exchange value in urban contexts. I rely on the work of Silvia Federici (1975) to identify activities of commoning as unpaid reproductive work, dynamised by contradiction (Engestrom, 2015). The primary contradiction of urban commoning is that volunteer work for the urban commons has an implicit cost of a missed opportunity for waged work. Some examples from both literature and my own empirical research are used to demonstrate how this complicates participation for commoners in concrete ways. I conclude by proposing a notion of commoning as culturally mediated "sensuous human activity" (Marx, 1976, as cited by Engestrom, 2015). This implies a higher sensitivity towards material needs of commoners and the lack of social infrastructure urban commoning seeks to address.

Shifting away from the concepts of public and economic interest in theorizing urban commoning

In commoning theory it is customary to start from an established critical interpretation of Gerett Hardin's (1968) "tragedy of the commons". It is claimed Hardin views humans as inherently selfish or purely "rational economic agents". Purportedly, this prevents him from understanding humans are in fact capable of community and cooperation (see De Angelis & Harvie, 2013; Fournier, 2013).

> "Hardin analyses commons; yet entirely absent from this analysis is any consideration of community or commoners, of commoning. To be more precise, Hardin's commons are populated by a collection of selfish, maximizing individuals. In other words, the problem with Hardin's model concerns the fact that its players are cast in a rationality and measuring process that is uniquely the type of subject portrayed by capital: Homo economicus – neo-liberal economic man." (De Angelis & Harvie, 2013)

The established critical claim, as can be seen from the above passage, is that the central argument of Hardin's seminal article is a pessimist account of human nature that serves to affirm neoliberal ideology. On this basis, it is typically proceeded to a reference to the work of Elinor Ostrom (1990). Ostrom is praised for having shown humans can, indeed, cooperate to maintain and manage a resource in common - thus apparently proving Hardin wrong.

> "Ostrom's work in particular has done much to show that Hardin's (1968) supposed 'tragedy of the commons', in which users eventually exhaust a common by competing to appropriate as much of it as possible for their own needs or interests, is far from inevitable. Users often develop institutional arrangements through which they allocate resources equitably and sustainably." (Fournier, 2013)

In a third step, Ostrom herself is criticized for focusing on resource *distribution* as a central organizational question. This implies the author has conceded to a market logic. Namely, Ostrom's commoners common the resource *pool*, but they individually appropriate resource *units.* With them, as *private appropriators,* they are free to do as they wish - even sell them for individual economic gain (De Angelis & Harvie, 2013; Fournier, 2013).

It might as well be true Hardin (1968) had little intention of questioning liberal institutions. However, it is unfair to conclude that the key takeaway from his seminal article on the commons is the affirmation of selfishness as human nature. First, it should be noted that Hardin (1968) considers the process of enclosure to largely have already been achieved in Western society.

> "First we abandoned the commons in food gathering, enclosing farm land and restricting pastures and hunting and fishing areas. These restrictions are still not complete throughout the world." (Hardin, 1968)

Additionally to his (conservative) interest in "overpopulation", Hardin is concerned with issues like the pollution of the ocean. The term "commons" refers to large scale (global) natural resources that have been left out from the largely completed process of enclosure and therefore - of regulation. We can say Hardin is actually focused on *public resources*, not common goods stricto sensu. Grazing on a common pasture refers to the historical category of common land during feudalism and designates an unregulated collective resource. It is well recognized that Hardin writes of a different type of *management regime* from Ostrom. While Hardin is concerned with an open access regime, Ostrom deals with regulated common pool resources (CPRs) (Ostrom, 1990; De Angelis & Harvie, 2013; Huron, 2015). It is misleading to interpret Hardin's paper as implying that communities are unable to self-organize to manage and use resources collectively (see De Angelis and Harvie, 2013; Fournier, 2013). His argument serves first and foremost to advise against insufficient regulation of resources. Absence of regulation leaves substantial room for individual decision-making, which is what Hardin sees as the source of volatility - or rather - of the certainty of "tragic" outcome. Hardin's focus is not on human nature (and whether it is selfish), but on the social institutions necessary for the reproduction of collective resources. He is not pessimistic when it comes to human capacities to act collectively. On the contrary, Hardin stresses the importance of collective recognition of necessity for regulation through social institutions. He writes:

> "The only kind of coercion I recommend is mutual coercion, mutually agreed upon by the majority of the people affected." (Hardin, 1968)

Hardin writes of the institution of public property as the legal category to regulate access to land resources. This might be the reason he is often cited to claim that both the state *and the market* are the mechanisms of choice to "avoid the tragedy of the commons". However, Hardin is quite explicit on that matter:

> "In economic affairs, The Wealth of Nations (1776) popularized the "invisible hand," the idea that an individual who "intends only his own gain," is, as it were, "led by an invisible hand to promote … the public interest". Adam Smith (...) contributed to a dominant tendency of thought that has ever since interfered with positive action based on rational analysis, namely, the tendency to assume that decisions reached individually will, in fact, be the best decisions for an entire society." (Hardin, 1968)

The implications of Hardin's argument are twofold. Firstly, he stresses the importance of institutional regulation of collective resources, as a form of collective, social rationality (*the mutually agreed upon coercion*). Secondly, *both* Hardin and Ostrom affirm the necessity of institutional arrangements. They merely focus on different levels of generality.

However, Ostrom does not escape criticism. Despite showing the institutional arrangements behind the collective reproduction of the resource system, Ostrom concedes to the individual resource *units* being left to be individually appropriated and sold on the market (De Angelis & Harvie, 2013; Fournier, 2013). De Angelis and Harvie (2013) and Fournier (2013) criticize both Hardin and Ostrom for analyzing commons as "rivalrous goods". This means that both see commoners as mutual competitors, which is reproductive of market/neoliberal ideology. Furthermore, Ostrom's conception of the institutional forms governing the commons only serves to *restrict* action - to protect the resources from overuse. They do not promote practices that also push back against commodity production and capital accumulation (De Angelis & Harvie, 2013). Ostrom is deemed to have ignored the creative potential of commoning - the aspect of the commons that is reproduced by *using* things in common (De Angelis & Harvie, 2013; Fournier, 2013). In this view, patterns of social relations unmediated by the market are achieved through collective use (not only production). Instead of individually appropriating fish from a pond, commoners would prepare it to eat together (De Angelis & Harvie, 2013). What De Angelis and Harvie describe is commoning as a kind of subsistence economy. This means that, apart from their own food, commoners would also need to produce all other means of subsistence in common (e.g. tools, housing, communal infrastructure, etc), in order to avoid market mediation. This is typically never the case with urban commoning, which most often represents forms of self-organizing around one aspect of the social reproduction of commoners (e.g. housing). In order to meet other needs, urban commoners still need to work for a wage. In the case of CPRs described by Elinor Ostrom (1990), the commons are economic means of production. By focusing on whether or not commoners appropriate and sell resource units for an exchange value, De Angelis and Harvie and Fournier sideline the actual political potential of commoning - the institutions of self-management that enable it.

> "But there are, in fact, also many examples of common property regimes which have not been based on common-pool resources, where the fish are cooked in a communal pot; here **resource units are pooled together** by a community of users, who then establish the governance rule of the common pool." (De Angelis & Harvie, 2013, emphasis added)

> "[M]oney income, personal belongings, literary texts, and even children have been communalized. Thus the 15th century Taborites' first act of forming their community was to **dump all their personal belongings** in large open chests and begin their communal relations on an even footing." (Federici 2004, as cited in De Angelis & Harvie, 2013, emphasis added)

De Angelis and Harvie sidestep the fact that in the case of CPRs, commoners manage and reproduce their own means of production collectively - by focusing on the fact that they earn money for their work. In the examples above, we see that money is equated with commodification of social relations and is by default "bad".[1] However, it is overlooked that self-management of the means of production effectively serves to eliminate or to mitigate *exploitation* of the commoners. Instead of production, the authors highlight collective use, as the commoning activity that has more political potential. What seems to be the main political aspect is the act of sharing itself. Commoners give up their personal belongings in order to pool them together, to be shared or collectively consumed. Here we can see that the means of production (what is typically considered capital in marxist theory) are treated on the same footing as any other individually owned commodity. In that sense, a collective means of production is effectively compared to a potluck - and has, in the process, fallen short in comparison. The analytic focus on collective use obscures the question of production. If urban commoners become "common subjects" in the act of sharing, this does not erase the property relations in which shared resources have been (initially) produced. Therefore, if a resource is shared, so are the relations that have produced the necessity to share: the fact that we cannot afford, or have not been afforded these resources in the first place. Consequently, the critique by De Angelis and Harvie, and by Fournier de-politicize commoning for fear that economic interest can only be articulated as personal greed. They are thus proposing urban commoning as a non-economic *(and anti-money)* activity that serves to promote certain kinds of (moral) values. In the following sections, I will try to show why this is both a theoretical simplification and counterproductive in practice.

The unclear relationship of urban commoning and public interest

Positioning themselves as explicitly anti-capitalist, De Angelis and Harvie (2013), Fournier (2013), Federici (2011), and others, view the state as indistinguishably linked to the market (i.e. to capital). For instance, Kratzwald's argument against the state (Kratzwald, 2015, as cited in Huron, 2017) is that the idea of the "commons" predates the idea of "the public". The main function of the modern state, according to Kratzwald, has always been to guarantee the functioning of capitalism. The concept of the commons should therefore be used to defend urban public space, providing emancipation for the idea of "public" (Kratzwald, 2015, as cited in Huron, 2017). The theoretical grounding of urban commoning in historical notions of the commons that we see in Kratzwald's argument is widely spread in literature. We first see this in Peter Linebaugh's (2008) "The Magna Carta manifesto: Liberties and commons for all". Linebaugh's project is to uncover the emancipatory effect of the charter, despite its apparent (and most obvious) function in the protection of property rights of the feudal lords with respect to the king. In a particularly illustrative

[1] Similarly, while citing the work of another author, De Angelis and Harvie point out that participants produce common resources "without recourse to monetary compensation as a key motivating factor".

passage, Linebaugh cites the philosopher David Hume, claiming that Magna Carta granted important liberties and privileges to "every order of men in the kingdom" - not only the barons and the clergy, but the people too. It was not only the king who "submitted to a necessity" with respect to the barons, but the latter did as well, with respect to the people.

> "They could not expect the concurrence of the people, without comprehending, together with their own, the interests of inferior ranks of men." (Hume, 1830, as cited in Linebaugh, 2008)

So, even though it was the barons who had received institutional protection of property rights, the people indirectly benefited. They were able to use the barons' land as a commons in order to reproduce themselves[2]. It was the subsequent enclosures that had ruined what was presumably an ideal realization of trickle down economy.

This particular historization of commoning in literature is congruent with the noted trend of absence of the historical heritage of socialist state projects, such as Yugoslav self-management (Tomašević, 2018; Kirn, 2016; Dolenec & Žitko, 2013). It seems as though a "silent" consensus has been reached in commoning theory, that socialist state projects we've known in (recent) history are nothing to learn from (or to aspire towards) (see Federici, 2011). As Gal Kirn (2016) notes, among "autonomist" thinkers (most notably, Hardt and Negri), socialism is described as a "historical failure". At the same time, the question of a more substantial political articulation of commons movements that could, in Krazwald's words, "provide emancipation for the idea of public" - is left without a clear answer. Federici (2011) states the need to bring together different commons so as to form "a cohesive whole" and provide a foundation for a new mode of production. However, Dolenec and Žitko (2013) suggest that many commoning projects - such as urban gardens, communal childcare, participating in local government, or developing workplace democracy - cannot address the underlying structural logic of capitalism. In spite of their potential for individual emancipation or for valuable grassroots organizing experiences, the authors characterize these projects as apolitical, fragmented actions. In their (Dolenec & Žitko, 2013) comparative analysis of Ostrom and Horvat, they pose this question as "the problem of scaling up".[3]

Huron (2017) brings up a further issue, contending that the left has yet to provide a retort to the right's libertarian claim on the commons as a mechanism to replace the state (and public interest). According to Huron, the left also needs to answer the question of the role of the state with respect to the commons. Commoners need to ask themselves if they are working to supply capital with cheap or even free resources (Huron, 2017). Jovana Timotijević (2018) and Manuel Lutz (2015) point out that commoning often implies taking on of state responsibilities of care for social needs by self-organized actors - representing a "neoliberal policy fix". This is an effective co-optation of the commons, which takes place at the expense of the actors involved (Timotijević, 2018).

Empirical literature accounts of commoning practice describe projects that address social needs, such as housing (Huron, 2015; Noterman, 2015) or culture (Bresnihan & Byrne, 2015; Chatterton,

[2] Even if they were obliged to labour for the feudal barons.

[3] In the case of Ostrom and Horvat, they suggest - polycentricity and the association of associations, respectively (Dolenec & Žitko, 2013).

2010; Williams, 2018). As a rule, authors stress the problem of sustainability of such initiatives, manifested in a lack of broader participation within the community of commoners (Huron, 2015; Noterman, 2015; Vidović, Žuvela & Mišković, 2018). Typically, only few members are consistently active and take on the responsibilities of commoning, while the participation of others is much less consistent. Authors point out the challenge of integrating commoning responsibilities with everyday obligations of participants, such as work, care for children or the elderly (Bresnihan & Byrne, 2015; Huron, 2015; Noterman, 2015).

In conclusion to his case study of tent cities in the Northwest US, Manuel Lutz (2015) astutely points out the academic tendency to focus on resistance and emancipation in theorizing urban commoning. The specific (and extreme) case of the "commoning of the poor" or the "poor commons" demonstrates that the situation is far more complex than the binary of co-optation v. emancipation. The homeless actually seek co-optation in order to sustain their dwellings (Lutz, 2015). Lutz is correct to claim that tent-city commoning is, first and foremost, survival:

> "But tent commons are not a way out; they do not solve homelessness but manage it differently. What they provide are user-driven forms of improved survival conditions – nothing more, nothing less. Tent cities remind us not only that homelessness persists but also that substantial change, much less a solution, is nowhere in sight." (Lutz, 2015)

The relationship of urban commoning to general social (public) interest needs a clearer political articulation. Otherwise, commoning remains a small-scale adaptation to a general lack of societal infrastructure for certain social needs. Commoning is not in itself emancipatory, as it drains the commoners' capacities, requiring them to fulfill the gap in the social infrastructure themselves.

Urban commoning as unpaid reproductive work

Peter Linebaugh suggests thinking of the commons as an activity (a verb), rather than as a natural resource per se. This activity (commoning) is expressive of relationships in society and is inseparable from societal relations to nature (Linebaugh, 2008). Different organizational aspects of commoning thus reproduce not only the resource but the community that commons it as well (Fournier, 2013). In analogy to capital, which reproduces the power relations between owners of the means of production, on the one hand, and alienated workers, on the other (Marx, 1887) - the commons represent a collective means for reproduction. It should therefore reproduce the subjects of commoning as *common subjects* (Fournier, 2013). However, the activity of collective *use,* rather than production, has primacy in the reproduction of commoner subjectivity. Correspondingly, the right to govern over resources is based on who uses them, rather than who owns them (Fournier, 2013).

However, as I have previously pointed out, the analytical neglect of commodity relations does not actually erase them. For example, in an ethnographic study I conducted in a cultural center in Belgrade that operates as a common resource, property relations structured commoning practice in a particular way. The building that was used in common was squatted. However, as it was publicly owned, the commoners felt it was tactically risky to charge for the artistic work they did there. This is why activities such as open dance classes were donations-based. The fact that the artists didn't pay for the space also impeded them from charging for their work. The commoning

practice thus reproduced some structural aspects of the position of independent artists in Serbia (Popović, 2022).

The theoretical primacy of the reproductive value of *using* a resource in common also obscures the concrete material tasks necessary to reproduce social infrastructure. The idea that patterns of collective use and the social relations that occur therein, carry an inherent creative potential is best demonstrated in the example of gentrification.

> (...) poor artists move into a neighborhood with low property values because they cannot afford anything else, and in addition to producing their art they also produce a new cityscape. Property values rise as their activity makes the neighborhood more intellectually stimulating, culturally dynamic, and fashionable, with the result that, eventually, artists can no longer afford to live there and have to move out. Rich people move in, and slowly the neighborhood loses its intellectual and cultural character, becoming boring and sterile. Despite the fact that the commonwealth of the city is constantly being expropriated and privatized in real estate markets and speculation, the common still lives on there as a specter. (Hardt & Negri, 2009).

The above portrayal of gentrification is paradoxically affirmative of the speculative logic of rent. The value of housing is no longer found in its material production. Hardt and Negri (2009) suggest that artists add value to a neighbourhood's housing just by residing there. This value is then expropriated by capital on the basis of which prices rise. If patterns of social relations emergent in the consumption of urban space are commodifiable, just like the aspect of its material production, then there is an objective reason for the rise of housing prices. Instead of speculative value allegedly accrued by "interesting" uses of neighbourhood infrastructure, I propose an understanding of the value of commoning from the aspect of its material reproduction. The value of commoning in urban contexts should primarily be considered from the aspect of the collective work necessary to reproduce it. Amanda Huron (2017) points out how little has been done to theorize the labour inherent in commoning. Even though it is not waged labour, it is work that takes effort and time (Huron, 2017).

Even though volunteer work for the common takes a lot of time, this is rarely the object of analytical attention. For instance, a participant in the study by Bresnihan and Byrne (2015) worked 100 hour weeks at both their paying job and volunteering at the cultural centre they were studying. While the participant has called themselves "objectively crazy" for doing so, the authors praise their individual motivation:

> "While many participants complain about their "real" work, the voluntary work they do in the spaces was **performed out of a strong sense of care and commitment** for the project and for the other people involved." (Bresnihan & Byrne, 2015, emphasis added)

Bresnihan and Byrne explain away the effort (or indeed affirm it) with "care and commitment". By doing so, they pass on the opportunity to consider the labour intensiveness of commoning in relation to its sustainability. Here is a good place to remind ourselves of Silvia Federici's earlier work (1975), a well known essay "Wages against housework". Federici critiques the discourse of "love", used to account for the unpaid housework women do to serve capital.

> "But these women do not see that they [i.e. men] can expect so much from us precisely because we are not paid for our work, because they assume that it is 'a woman's thing' which does not cost us much effort. Men are able to accept our services and take pleasure in them because they presume that housework is easy for us, that we enjoy it because we do it for their love." (Federici, 1975)

Federici shows that a wage for housework allows us to recognize it as labour, instead of expression of feminine nature, something that requires no effort at all (Federici, 1975). She explains that denying wages for housework and transforming it into an act of love, serves capital both by reproducing the waged worker for free *and* by making sure that women seek out housework, instead of rebelling against it. Demanding wage for housework does not mean continuing to do it - for Federici (1975), it is precisely the basis for the *refusal* to keep doing it. Federici contends that the claim for wages for housework forces capital to restructure social relations in a way that is more favourable to women, and to the unity of the working class. At the same time, it represents a necessary precondition for the struggle for social services (Federici, 1975). The author is careful to note that getting a second job does not change the woman's role, it only deprives her further of time and energy to struggle against capital at both her unpaid and her waged work. Federici argues that the task is rather to expose what women are *already* doing, and what capital is doing to them and to their capacity to struggle against it (Federici, 1975).

We can connect Federici's feminist account of housework with urban commoning in several ways. First of all, it allows us to recognize commoning as reproductive work. As we have previously seen, urban commoning typically reproduces infrastructure necessary for the fulfilment of certain social needs (e.g. housing, culture). The reproduction of infrastructure (in the public interest) through commoning provides the bases for (capitalist) production. Urban commoners self-organize around a collective economic interest, that has otherwise not been provided for by the public infrastructure. In the case of housing, it allows for the reproduction of the underprivileged/working class and in the case of culture, it reproduces the basic working conditions for cultural work, for free.

Authors of empirical accounts of urban commoning typically report that in cases of housing cooperatives, participants rarely have explicit political agendas. Their participation in the cooperative is mainly driven by the economic pressure for affordable housing (Huron, 2015). On the other hand, in the case of "autonomous" cultural or social centres or other cultural practices, actors are often driven by explicit anti-capitalist ideas (Chatterton, 2010; Bresnihan & Byrne, 2015; Vidović, Žuvela & Mišković, 2018). In such instances, participants typically strive towards shaping spaces where social relations are not mediated by money and the market. In the latter, work done for the common is almost exclusively volunteer work. The imperative not to take money, i.e. to volunteer for the common, obscures the fact that commoning entails work that could, in principle, be expressed by an exchange value (a wage). For instance, cleaning the floors of a communal space is an activity that could also be considered a paid service, in another context. Urban commoning never happens on the outside of state and market relations, but is, rather, embedded in them (Brenner and Theodore 2002, as cited in Noterman, 2015). This isn't just to say that capital "encloses" (the creative potential of) the commons (De Angelis, 2013). Apart from commoning activities, urban commoners usually also have to do paid work outside the commons

in order to make their living (Cleaver 2000, as cited in Noterman, 2015; Noterman, 2015). If we agree with Federici (1975), it is the explicitly anti-capitalist urban commoning projects that seem to, paradoxically, distance themselves from the potential for the political subjectivation of commoning. By refusing to acknowledge that the volunteer work for the common has, in fact, an exchange value, urban commoning practitioners and theorists alike paradoxically promote its enclosure.

The presented critical reading of urban commoning literature served to outline the main limitations of autonomist approaches to commoning. The critique of commodity production under capitalism is realized by the analytical favouring of collective use and the sidelining of production as a value creation process altogether. Commoning is usually portrayed as emancipatory in itself (Lutz, 2015). It is purportedly exempt from commodity relations by virtue of commoners refusing to take money for volunteer work. Money is conceptually equated with commodity relations despite merely mediating them. We will use this analysis as a starting point in the discussion of the appropriate ways to approach the questions around the sustainability of urban commoning from a psychological perspective.

Psychological approaches to similar phenomena: The individual differences and The game-theoretical approach

Urban commoning, as such, has not been the explicit object of any psychological theory. This is likely due to its complex interdisciplinary conception that escapes the mainstream psychological focus on individual experience. We can, however, consider the way in which similar phenomena have been addressed in psychology. For instance, Bora Kuzmanović (1984) has approached the issue of participation in self-management institutions in seven Yugoslav socialist enterprises by looking into factors related to personal motivation. This is a psychology of individual differences approach. It explains variation in participation as a function of certain personal characteristics - such as motivation, beliefs, values, etc. Interestingly, Kuzmanović reported low correlations between variables such as democratic beliefs, motivation - and actual participation. Personal variables held very little explanatory power with respect to actual participation of the workers. The author concluded that certain structural factors were more relevant in the explanation of the observed patterns of participation, than any of the individual characteristics of the respondents (Kuzmanović, 1984). Namely, Kuzmanović observed the existence of an elite in the enterprises' self-management bodies, consisting of highly educated members of the communist party (who were also of a higher socioeconomic background). However, Kuzmanović (1984) infers this from aspects of his study he deemed "non psychological" (socioeconomic/demographic variables), and anecdotal (his own and the observations of workers he had talked to informally). Nevertheless, it is evident that individual agency is embedded in - and is articulated by - the formal and the informal social structures that form the subjects' immediate context. The individual differences approach is limited to a given reality that merely states what is (allegedly) already there. It can be formulated in the form of a tautology: "Workers who are more motivated will act in a more motivated way". This approach gives us very little to engage with. It is essentially idealistic, and ignores both the practical and the social aspects of activity that imply agency and creativity.

Another approach is the area of research that explores behavior within a social dilemma paradigm. Two types of experimental protocol are typically used: the provision of the public good problem

and the commons dilemma. In the public goods problem, the individual decides whether to contribute to an open access collective resource. Whereas in the commons dilemma, the participant decides how much to take from an open access common resource (Brewer & Kramer, 1986). In urban commoning, both aspects are relevant to the practices of reproduction of the commons (see Fournier, 2013). Formally, social dilemmas are designed as "zero sum" games. In the commons dilemma and the public goods problem, the noncooperative choice is always more profitable to the individual than a cooperative one, a noncooperative choice is always harmful to others, and the aggregate amount of harm done by a noncooperative choice is greater than the profit to the individual (Dawes, 1980; Messick and Brewer, 1983; Yamagishi, 1986; as cited in Kopelman, Weber, & Messick, 2002). This line of research seeks to explain decision-making processes that lead to cooperative behaviour versus non cooperation or freeriding. It considers both individual differences in personality or gender, and situational factors. The latter comprise task structure and perceptual factors, such as: the payoff structure or the uncertainty involved in the task, the social structure and size of the group, possibility of communication, task framing and causal attribution (Kopelman, Weber, & Messick, 2002). In the conclusion of their literature review study, Kopelman, Weber and Messick (2002) stress the importance of developing institutions that govern the form and pattern of cooperation in order to make up for evolutionary tendencies to cooperate more in small egalitarian family groups and less in large hierarchical groups in order to make stable, efficient, and sustainable shared resources.

While acknowledging the role of both economic interest and structural aspects of the situation in determining behaviour, this approach has limitations. The social dilemma situation is focused on individual decision making - either solitary or in interaction with others. It does not permit the study of collective behaviour. Furthermore, it does not take into account the ongoing material and social practice involved in real life commoning. One instance of that is the presumption that one's gain is necessarily another's loss. Real-life urban commoning cannot be fully understood as a zero sum game. Sometimes, the apparent cost of a "free-rider's" non-participation is less than the collective benefit of their one off contribution. Elsa Noterman (2015) articulates this as an aspect of the phenomenon of "differential commoning". Differential commoning refers to different, unstructured ways in which commoners contribute to the common with respect to their particular experiences, skills, interests, availability, etc. The concept refers to practices that take place outside of formal structures, such as boards and committees, and on the margins of the main tasks of managing the commons. They are, in the author's view, nevertheless valuable and contribute towards a critique of the existing economic relations and to the creation of alternatives. The author illustrates this with examples, such as that of largely passive co-op members who once contributed their construction skills, access to building materials and time, when the co-op decided to build a community hall and a tool shed (Noterman, 2015). In game theory, cooperation is strictly conceived as rule-following. Noterman's insights help us realize that a broader *structural* setup for urban commoning (such as living in a cooperative) produces a general space of possibility to act in accordance with the objectives of commoning. Despite being unexpected or non-normative, such occasional contributions still add to the sustainability of urban commoning projects - in a non-linear way. Next, we will take a look at a theoretical framework that could contribute towards a more integrated psychological consideration of urban commoning activity.

Cultural-historical activity theory as a framework for urban commoning: Concepts of mediation, unit of analysis, and the dialectics of development

Cultural-historical activity theory is an interdisciplinary field of theoretical and empirical inquiry into human activity that is founded on cultural-historical psychology. It particularly draws from the work of Vygotsky, Leontev and Luria (Engeström & Miettinen, 1999)[4]. Vygotsky's legacy is referred to as the unification of objective and subjective psychology (Blunden, 2021), and the overcoming of the Cartesian split in psychology, offering a dialectical link between the individual and the social structure (Engeström, 1999; Engeström, 2015). This body of work can be considered a psychological elaboration of marxist (and hegelian) notions of self-creation through labour. Therefore, cultural-historical psychology can and should be understood in the context of, and as a continuation of classical German philosophy (particularly Hegel), and the works of Marx and Engels (Engeström, 1999; Engeström & Miettinen, 1999). For Marx (1964, as cited by Engeström & Miettinen, 1999), the history of industry and its established objective existence in the form of alien useful objects (artifacts) represents a materialisation of human psychology. Vygotsky elaborates these ideas within psychology claiming that human beings are qualitatively transformed in the process of using artifacts. Hence, one of the central concepts of cultural-historical psychology is mediation (Engeström,1999; Engeström, 2015).

Mediation refers to a specific qualitative "restructuring" of the relationship between a problem situation and the subject's behaviour by the means of so-called psychological - symbolic - tools (Vygotsky, 1999). In contrast to practical tools that conduct the subject's influence onto external objects - psychological tools have the characteristic of "reverse action" on the subject (Vygotsky, 1978). Higher mental functions arise in the processes of cooperation and social intercourse. The psychologically most significant aspect is the developmental link established by Vygotsky, between speech and practical activity with tools. Small children (in contrast to chimpanzees) are able to use so-called egocentric speech to transform the object of their practical activity. They do so by transforming their own behaviour in relation to their goal. The use of speech allows the child to operate on a higher level of mental functioning, freeing themselves from the immediately perceivable aspects of the problem situation. Speech allows the child to plan and organize their actions and therefore solve the problem situation on a more abstract level (Vygotsky, 1999). Vygotsky (1930, as cited by Engeström, 2015) stresses that the individual must be actively engaged in establishing the link between mediating sign and their own behaviour in respect to the situation. The subject's action is always directed towards some goal, it is object-oriented (Engeström, 2015).

In phylogenesis, the merging of sign and tool is foundational for the development of work activity. The development of work in humans therefore has a *historical* basis that breaks away from biological foundations of practical activity. That is to say that the history of ways in which humans master nature (i.e. the activity of tool-based production) is also the history of the mastery of human behaviour (Vygotsky, 1999).

[4] Luria's contributions will not be discussed in this account for the sake of succinctness.

What follows from the insertion of cultural artifacts into human action is the methodological notion of "analysis by units". Instead of a simple stimulus-reaction (a popular object of psychological interest at the time), Vygotsky proposes "a complex mediated act" as the "basic unit of analysis". This concept is expressed as the three way relationship of subject, object and mediating artifact - indicating that the individual can no longer be understood without their cultural means (Engeström, 2015). The notion of *unit* is interchangeable with the concept of "germ cell". The latter accents the dialectical nature of the unit of analysis. Namely, a unit of analysis is a concrete, historically formed, manifestation of a contradictory relationship. The contradiction is present first in the form of an abstraction, a simple explanatory relationship - the "germ cell". This abstract model is gradually transformed into a concrete system. This dialectical movement is also called "ascending from the abstract to the concrete" (Engeström, 2015). It reflects the initial Vygotskian idea whereby the subject uses an arbitrary sign (an abstraction) as a sort of prism through which to grasp the object. The mediating sign is that which gives meaning to the object (Blunden, 2021). The notion of germ cell has a methodological implication. An activity must be studied from the point of view of the process of its formation. That is to say, objects of activity are not static but go through qualitative historical changes that have corresponding changes to psychological structures - the historical process of development of higher mental functions (Vygotsky, 1999). To understand an object, it is necessary to trace and theoretically reproduce the logic of its development as historical formation through the emergence and resolution of its inner contradictions (Engeström, 2015).

In cultural-historical activity theory, the basic unit of analysis is an activity system. The activity system is an elaboration of the initial unit - the complex mediated act - by Vygotsky's student and colleague, Leontev. In contemporary activity theory, this is a model of a work organization the structure of which includes the subject, the object, the mediating instruments (artifacts), the community of work, its rules and division of labour. The object of activity is considered its motive and is that which concretely distinguishes one activity from the other. It is the historically contingent artificially (re)produced social need. In Leontev's work, the motivational aspect of the object is found in the material determination of subjective actions with respect to it. The material qualities of the object necessitate certain kinds of actions, mirrored in the division of labour within the activity system. The meaning of individual actions is therefore uncovered in the context of the actions of others, and with respect to the object. In the well known example of the primeval collective hunt, Leontev explains the meaning of the actions of one of the hunters whose task is apparently paradoxical - to scare the game. This hunter is, in fact, sending the animals in the direction of other hunters waiting in ambush. The two actions make sense when considered together, with respect to the practical requirements of needing to catch animals for subsistence (Leontyev, 1981, as cited by Engeström, 2015). Engeström adds to this the notion of object as "problem space" (much like in Vygotsky's experiments with double stimulation), emphasizing the agentic capacities of subjects and communities in constantly reshaping their activity by creating new instruments and transforming the object of activity. In capitalism, in addition to the motivational aspect, all objects display the characteristics of a commodity - the contradictory relationship of use and exchange value. This is called the primary contradiction of capitalism, and it is present in any concrete activity system in a specific and historically contingent way. The contradictions manifest themselves in forms of long term tensions or disturbances that can take the shape of conflict or double bind. They are what dynamises the system and produces potential for change within (Engeström, 2015). This extends to all work activity under capitalism. On the one

hand, labour has a definite, concrete, useful character that satisfies a definite social want. On the other, it satisfies manifold wants of the individual worker insofar as it is mutually exchangeable with any other kind of individual labour (Marx, 1909, as cited in Engeström, 2015). In other words, work done by any individual has both a very specific use value (for example, cleaning produces a clean floor) - and an abstract, general, exchange value, expressed by the wage received for such work (i.e. the amount of money that can be used to buy other goods and services). As we have seen, urban commoning theory strives to overcome the contradiction of commodity production by simply "erasing" the exchange value aspect of commodity.

Taking into account all that we have established so far, we see that commoning produces definite, concrete values that directly benefit the commoners. For instance, maintenance of material resources. This is often taken to mean that such volunteer work puts commoning practice outside of market relations (e.g. Fournier, 2013). However, as we have seen from Federici's (1975) argument, such work can (and should) also be expressed as an exchange value, as unpaid reproductive work. That is to say that commoning does not (as is often conceived) only produce use value for the common. Urban commoning is almost never a self-sufficient, standalone subsistence economy - commoners are required to work outside of the commons. This means that the exchange value of volunteer work done for the commons is its *opportunity cost*. It is the price of waged work that could have been earned by the commoners in the amount of time dedicated to the unpaid work for the commons. Practically, urban commoners put themselves in that situation, against which Silvia Federici (1975) is careful to advise women - they have taken on *two jobs*. What should be done instead, if we listen to Federici, is to demand wages for commoning. In other words, participants of urban commoning should become aware that they are doing *work,* reproducing social infrastructure. Both the public interest *and* capital benefit from this work in specific ways.

Apart from the general aspect of commoning activity as labour that takes time and effort and that produces an exchange value, commoning also has a historically and materially specific aspect. The use value produced through commoning depends on the concrete actions commoners do everyday to reproduce the resource and the community. Issues related to sustainability of commoning often have to do with challenges to upkeep participation in the reproduction of the material resource, as well as the reproduction of necessary knowledge to do it. Elsa Noterman (2015) gives a detailed example of this in her study of a housing cooperative in New Hampshire, US. Noterman describes one of the members who took care of the cooperatives' water supply and waste management. This member was the one to know the location of all the septic tanks on the premises of the cooperative. She assisted in water testing, and did a lot of physical work - unclogging toilets, overseeing the water pump installation, etc. Since this member was one of the coop's more elderly members - and the sole one to take responsibility for this aspect of the resource - this posed a significant question of sustainability of future commoning practice. As can be seen from this example, an important aspect of the specific commoning activity therefore depends on the material specificity of the resource(s) being commoned. In Cultural-historical activity theory, this is expressed by the concept of object of activity. That which distinguishes one activity from another is its object (Engeström, 2015).

Besides other forms of collective activity, urban commoning consists of reproductive work that reproduces some kind of infrastructure - typically buildings. In its concrete, operational aspect, it very often comprises maintenance (handiwork). Since urban commoning often functions on a DIY

basis - whether as an explicit political guiding principle or out of necessity, this work is rarely outsourced. In the study I conducted in a cultural center in Belgrade, I found that technical maintenance skills played an important part in the reproduction of the common.

Specific (professional) knowledge and skills of urban commoners are distributed in a contingent fashion and can be considered an aspect of the multi-voicedness of the activity system. Multi-voicedness implies the different points of view of the subjects within an organization, constituted by their particular position in the division of labour, and by their personal histories. Multi-voicedness is also present in the history of the organization, contained in its artifacts, rules and conventions (Engeström, 2001). Elsa Noterman's (2015) term "differential commoning" can be connected to the concept of multi-voicedness in a broader sense. Understanding urban commoning as a contradictory activity, and a "second job" helps us account for ways in which multivoicedness complicates participation. In the context of an implicit division of labour, they can exacerbate the contradictory position of urban commoners. Technical skills (such as repairs, electrical work, plumbing, carpentry, or general maintenance), can be considered professional skills. As such, they are typically difficult and slow to disseminate. When only a few commoners dispose of such skills they represent both an asset and a vulnerability to the system's reproduction. They are an asset inasmuch as the system can reproduce itself without relying on money or external services. However, these commoners are also more prone to burnout or inclined to give up on participation, as the primary contradiction of commoning becomes more dire in the position they find themselves in, in the implicit division of labour. Specifically, the participants possessing rare technical skills have been complying to implicit rules about not taking explicit credit for work. This became a model for activity during a phase of the cultural center's historical development where such implicit norms were protective of the still emerging community. At a later phase, however, they obscured the fact that the community was relying on deficitary skills of individuals and not widely spread systemic knowledge. Paradoxically, new instruments for self-evaluation of invested time used to distribute compensation for volunteer work, hadn't helped. They instead further concealed vulnerability in the implicit division of labour, by leading participants to believe everyone was being fairly compensated for their efforts. In reality, a temporary grant funding opportunity had only allowed for symbolic compensation, far from eliminating the self-exploitation involved in urban commoning. Instead of making participation more even, the implicit norms and the devised instruments had merely reproduced the implicit division of labour - resulting in one of the participants abandoning the project altogether. Following their exit, the sustainability of the system was brought into question (Popović, 2022).

Conclusion

The aim of this paper was to elaborate a conceptual and theoretical framework to account for the empirical problem of sustainability of urban commoning practices (see Bresnihan & Byrne, 2015; Huron, 2015; Noterman, 2015; Vidović, et al, 2018). Autonomist approaches to commoning analytically tend to prioritize practices of collective use, rather than production (see De Angelis & Harvie, 2013; Fournier, 2013). In the process, notions of economic interest in commoning are theoretically sidelined. The relationship of commoning to public interest is unclear, despite indicators of co-optation of urban commoning (Timotijević, 2018), or it often serving as a "neoliberal policy fix" (Lutz, 2015). Urban commoning seems to be missing the mechanism for "scaling up" (Dolenec & Žitko, 2013; Federici, 2011; Huron, 2017). The theoretical

marginalization of economic and public interest is effected by an established critique of Hardin and Ostrom, as well as the historical grounding of commoning in feudalism instead of socialism (see Linebaugh, 2008). Additionally, it is achieved through the omission or the outright rejection of socialist state projects (see Tomašević, 2018; Kirn, 2016; Dolenec & Žitko, 2013). The argument presented in this paper is that the study of the practices of culturally mediated material (re)production of the commons is analytically indispensable for the understanding of the empirically observed challenges in the sustainability of urban commoning. Rather than criticize the structural sources of inequality, commoning theorists often praise those who find themselves in a position of inequality (e.g. Bresnihan and Byrne, 2015). Leaning on the early writings of Silvia Federici (1975), I proposed to view commoning as unpaid reproductive work. A psychological approach to commoning needs to take into account the complexity of urban commoning as contradictory social practice that produces both use and exchange value. I proposed Cultural-historical activity theory (Engeström, 2015). CHAT allows us to understand individual participation in urban commoning as mediated by the instruments, rules and division of labour in the community of commoners. Rather than offering an escape from capitalist relations, urban commoning complicates the position of urban commoners by burdening them with more work. The exchange value of urban commoning is the unpaid wage for reproductive work done for the common. Volunteering represents an opportunity cost. Leaning on my own research, I proposed an elaboration of Elsa Noterman's (2015) concept of differential commoning, using the idea of multi-voicedness (Engeström, 2015). I showed how historically evolving implicit rules around taking credit for work obscured the role of the skills commoners brought *into* commoning that have been incorporated into an implicit division of labour. When implicit, the deficitary skills can be overlooked as key resources in the reproduction of the common - rendering them both asset and vulnerability (Popović, 2022).

References

Blunden, A. (2021). *Hegel, Marx and Vygotsky: Essays on social philosophy*. Brill.

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

Brewer, M. B., & Kramer, R. M. (1986). Choice behavior in social dilemmas: Effects of social identity, group size, and decision framing. *Journal of Personality and Social Psychology, 50*(3), 543–549. https://doi.org/10.1037/0022-3514.50.3.543

Chatterton, P. (2010). So what does it mean to be anti-capitalist? Conversations with activists from urban social centres. *Urban studies, 47*(6), 1205–1224. https://doi.org/10.1177/0042098009360222

Dolenec, D., & Žitko, M. (2013). Ostrom and Horvat: Identifying Principles of a Socialist Governmentality. *Review of Radical Political Economics, 48*(1), 1–15. https://doi.org/10.1177/0486613415586986

De Angelis, M. & Harvie, D. (2013). The Commons. In M. Parker, G. Cheney, V. Fournier & C. Land (Eds.), *The Routledge Companion to Alternative Organisation* (pp. 280-294). Routledge. https://doi.org/10.4324/9780203725351

De Angelis, M. (2013). Does capital need a commons fix? *Ephemera, 13*(3), 603–615.

Eizenberg, E. (2012). Actually existing commons: Three moments of space of community gardens in New York City. *Antipode, 44*(3), 764–782. https://doi.org/10.1111/j.1467-8330.2011.00892.x

Engeström, Y. (1999). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 19–38). Cambridge University Press. https://doi.org/10.1017/CBO9780511812774.003

Engeström, Y., & Miettinen, R., (1999). Introduction. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.). *Perspectives on activity theory* (pp. 1–16). Cambridge University Press. https://doi.org/10.1017/cbo9780511812774

Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work, 14*(1), 133–156. https://doi.org/10.1080/13639080123238

Engeström, Y. (2015). *Learning by expanding: An activity-theoretical approach to developmental research* (2nd ed.). Cambridge University Press. https://doi.org/10.3868/s110-006-017-0011-8

Federici, S. (2011). Feminism and the politics of the commons. *The Commoner*. https://thecommoner.org/wp-content/uploads/2020/06/federici-feminism-and-the-politics-of-commons.pdf

Federici, S. (1975). Wages against housework. *The Commoner, 1*, 1–17. https://thecommoner.org/wp-content/uploads/2019/10/04-federici.pdf

Fournier, V. (2013). Commoning: On the social organisation of the commons. *M@n@gement, 16*(4), 433–453. https://doi.org/10.3917/mana.164.0433

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

Hardt, M., & Negri, A. (2004). *Multitude: War and democracy in the age of empire*. The Penguin Press.

Hardt, M., & Negri, A. (2009). *Commonwealth*. The Belknap Press of Harvard University Press. https://doi.org/10.2307/j.ctvjsf48h

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

Kirn, G. (2016). Forgotten history of the commons in socialist Yugoslavia: A case of self-managed cultural infrastructure in the period of 1960s and 1970s. In B. Cvejić, B. Kunst, & S. Hölscher (Eds.), *TkH Journal for performing arts theory, 23*, 63–71.

Kuzmanović, B. (1984). Motivaciono-vrednosna osnova odnosa prema samoupravljanju i učešća u samoupravljanju [The motivational and values foundations of attitudes toward self-management and participation in self-management]. *Psihološka istraživanja, 3*, 465–546.

Kopelman, S., Weber, J. M., & Messick, D. M. (2002). Factors influencing cooperation in commons dilemmas: A review of experimental psychological research. In E. Ostrom, T. Dietz, N. Dolšak, P. C. Stern, S. Stonich, & E. U. Weber (Eds.), *The drama of the commons* (pp. 113–156). National Academy Press.

Lefebvre, H. (1996). *Writings on cities*. Blackwell.

Linebaugh, P. (2008). *The Magna Carta manifesto: Liberties and commons for all*. University of California Press.

Lutz, M. (2015). Uncommon claims to the commons: Homeless tent cities in the US. In M. Dellenbaugh , M. Kip , M. Bieniok, A. Müller, & M. Schwegmann (Eds.), *Urban Commons: Moving Beyond State and Market* (pp. 101–116). Birkhäuser. https://doi.org/10.1515/9783038214953-007

Marx, K. (1867). *Capital: A critique of political economy (Vol. 1).* Marxists Internet Archive. https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf

Noterman, E. (2015). Beyond tragedy: Differential commoning in a manufactured housing cooperative. *Antipode, 48*(2), 433–452. https://doi.org/10.1111/anti.12182

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge university press. https://doi.org/10.1017/CBO9780511807763

Popović, I. (2022). *Praktikovanje zajedničkog iz perspektive kulturno-istorijske teorije delatnosti: Studija slučaja kulturnog centra Magacin* [*Practices of commoning from a Cultural-historical activity theory perspective: A case study of The Cultural center Magacin,* Unpublished master's thesis]. University of Belgrade.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. https://doi.org/10.2307/j.ctvjf9vz4

Vygotsky, L. S. (1999). Tool and sign in the development of the child. In R. W. Rieber & M. J. Hall (Eds.), *The collected works of L. S. Vygotsky, Volume 6: Scientific legacy* (pp. 39–285). Springer. (Original work published 1930)

Timotijević, J. (2018). Grad i prostorna zajednička dobra [The city and the spatial common goods]. In A. Matković (Ed.), *Zajednička dobra i granice kapitalizma* (pp. 66–75). https://zajednicko.org/wp-content/uploads/2018/05/Zajednicka-dobra-i-granice-kapitalizma.pdf

Vidović, D., Žuvela A., & Mišković, D. (2018). Sudioničko upravljanje u kulturi u Republici Hrvatskoj [Participatory management in culture in the Republic of Croatia]. In D. Vidović (Ed.), *Uradimo zajedno: Prakse i tendencije sudioničkoga upravljanja u kulturi u Republici Hrvatskoj* (pp. 44–95).

Volk, S., Thöni, C., & Ruigrok, W. (2012). Temporal stability and psychological foundations of cooperation preferences. *Journal of Economic Behavior & Organization, 81*(2), 664–676. https://doi.org/10.1016/j.jebo.2011.10.006

Wang, X., Lam, W. F., & Lorenzo, T. (2024). A synthesis of rational choice and critical urban commons debates. *International Journal of the Commons, 18*(1), 475–489. https://doi.org/10.5334/ijc.1277

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

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