

## Central urban space as a hybrid common infrastructure

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### Abstract

We document and reflect on an ongoing process of co-creation of a brand new urban space by the name L200, designed as a hybrid urban node, located in a very central and precious location in the city of Zurich. On the one hand, L200 has the characteristics of an urban node at the confluence of many networks, a hub like railways stations provide these days, of course, at a different spatial scale, acting as a much needed infrastructure for various commoning activities in the city, but not only. On the other hand, the space is equipped with digital technology which is co-created as a commons itself through a long-term participatory process toward facilitating the self-management of the space, and contributing to its representation and prototyping. Run as a collective, based on commons' principles, L200 serves by construction as a living laboratory for neighborhood life experimenting with various spatial practices suitable for the contemporary hybrid condition, and with corresponding tools for infrastructuring the commons that include the space itself.

### 1. Introduction

A key location of Zurich's city center, at Langstrasse 200, has served as the meeting point of two different threads of action research.

The first thread is the co-creation of a storefront location into the L200 space, as a common infrastructure to be used by a wide variety of actors, implying small shops, neighbourhood associations, and commoning initiatives in different fields, that are underrepresented today in the city. Claiming their right to centrality, these actors co-founded a non-profit organization that rents the space at its market price but treats it as a commons, increasing the density of use and sharing its time-space in creative ways. This sharing strategy not only reduces dramatically the cost for each individual member, but at the same time makes available, again at low individual cost, a pool of resources necessary to run the space successfully and take advantage of its particularly high visibility.

Second, NetHood is a member of the L200 association, and has been contributing the last six years to research and action around the concept of the Organic Internet. Through NetHood this is a key component of the L200 hybrid space, by running its own ICT infrastructure, a local digital platform built on free software like NextCloud, OpenStreetMap, Etherpad, and more. It is also managed as a commons, bringing to the ground the concept of community networks, and making them part of the urban space toward a more democratic and organic Internet.<sup>1</sup>

To develop and experiment with these two commoning strategies --for the right to centrality both in the physical and digital space-- L200 is an ideal location in the city. The long-term goal is to prototype them in order to provide local groups and communities with a blueprint on how local actors can focus on the use value rather than on the exchange value of space, and transform it to a hybrid common

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<sup>1</sup> See <http://langstrasse200.ch/pub/digital>

infrastructure rented at its market price. This means that the successful application of the prototype does not depend on subsidies neither from local authorities nor from global digital platforms. This way, it may be easier to scale through replication, and reach a more mainstream audience, than today's exceptional urban and digital commoning projects.

Due to the special circumstances that led to its creation, L200 is also a candidate for experimentation on innovative ways that bring together research and action. Interestingly, the authors of this paper had conceived (part of) the idea of L200 through research carried out in various interdisciplinary and transdisciplinary projects over the last years (COMPARE, MAZI, netCommons, Heteropolitics), and at the same time had the chance to be among the actors contributing to its actual implementation, serving today as the general manager and vice-president of the board.

The paper reflects this dual position of its authors, trying to bring together both dimensions in the writing style combining the theoretical and practical aspects. More specifically, the paper is structured in three parts. First, we describe the L200 model as it has been co-created over time, since January 2018 and until its current status. Second, we highlight theoretical work from urban studies, Science and Technology Studies (STS), computer science, and political theory literature, as well as related case studies that support or differentiate the L200 vision. Finally, we bring the theoretical and practical perspectives together through an under-construction list of lessons learned and guidelines for creating places like L200.

## **2. L200: a hybrid urban node managed as a commons**

L200 is located at the heart of Zurich, in Kreis 5, in one of the busiest and most diverse streets of the city namely Langstrasse, which connects two districts (4 and 5) with high quality urban life. It is in close proximity to many active urban nodes including the newly built cultural center Kosmos, the art cinema Riffraff, and the convivial Josefstrasse and Limmatplatz. L200's main space has an area of 75 sqm that may be flexibly organized for various uses throughout the day. Given its location, the rent of L200 matches the market prices, and this requires careful organization to maintain the non-profit character of the initiatives that are part of it, while at the same time become a truly open and diverse hybrid space.

The L200 space was established through the collaboration of different activist groups in the city, often with overlapping members, after a successful competitive project competition run by the owner of the space, the City of Zurich. From the very first days of its operation L200 became home to the Forum 5im5i association, which is active in support of small shops in Zurich's Kreis 5 and against the impact of gentrification on neighborhood life, to the NeNa1 cooperative housing project that works toward imagining alternative and sustainable ways of living and working together, Transition Zurich that is active in maintaining a wide network of initiatives promoting sustainable and ecological lifestyles, and NetHood a transdisciplinary research organization developing a wide variety of tools for self-organization at the neighbourhood level.

Having started already with the involvement of such a diverse group of actors, which although like-minded had different audiences and methodologies, the general aim for diversity became fast one of the core characteristics of L200's identity. This was important both for political and social reasons but also for economic ones, since to be able to pay the very high rent it was necessary that the space is necessary and used by many different actors.

Since then, without external funding and support, the L200 association counting more than 100 members after the first year of operation has established a very diverse and vibrant community at Langstrasse 200.



Figure 1. The L200 local at Langstrasse 200 in Zurich and the motto: “also your space”

It has thus provided a proof-of-concept that the cost for running such a space can be effectively shared by its users, reducing significantly the individual costs, and at the same time activating various synergies and different levels that increase significantly the values of the space, not only for the users but also for the neighbourhood and the city.

Today L200 is the working place for seven organizations working on new cooperative housing and living models (NeNa1), networking of sustainability initiatives (Transition Zurich), tools for self-organization (NetHood), coaching on radical collaboration (Euforia), digital innovation (HoloChain), software solutions (rao GmbH), alternative food cultures (Boimig), and business development for starting artisans (Davide Negri).

L200 has also served as a venue for a wide range of activities (Figure 2) such as courses (AOZ German course), workshops (foodsharing, SGMK), film projections (NetHood, Linke People of Colour), General Assemblies (5im5i, NeNa1, GLP, SP5, Wandel.jetzt), showcasing of products (Kleihd), book presentations (HAZ), exhibitions (Sonja Kaegi), concerts (ReVision Ensemble), international workshops (INURA), debates (ETH Wohnforum, 5im5i), art performances (Linear Development), and more. Many of these events overlap since the space has three distinct parts of ~25m<sup>2</sup> each which are often used in parallel. For example, it happened that a pick-up session by Crowd Container in the front part overlapped with a participatory process by Kalkbreite in the main part, while people from various organizations were working in the 3rd part.



Figure 2. L200 activities (clockwise): a book launch, an art performance, LED sign and food workshops

It has also provided an affordable highly visible display for new artisans (Atelier Pnoe, Atelier Angela Siciliano), alternative shops (Kleihd, Crowd Container), publications (VoCHabular, Die Andere Stadt), or local artists (Roberto da Rapallo). Unlike other similar initiatives, L200 may be used as a space for commercial activities, the association neither interfering nor receiving any percentage from the profits, beside the cost-based common prices for the spatial use, being a window, an indoor area for a one time event or for longer periods of time.



Figure 3. L200 activities (clockwise): a critical panel discussion; co-working; an association's anniversary; broadcasting a local radio station.

At the same time, L200 is a non-commercial open space for the neighbourhood, acting as a venue for common activities (Figure 3) like the Tuesday's cooking group, for social events like anniversaries, celebrations or dinners with friends, and for numerous informal ad-hoc gatherings and interactions, especially during the opening hours (17:30-19:30) but also later at night when the daily activities slow down.

Maintaining a fixed opening hours schedule, although for now it is short, contributes slowly to the wider identification of L200 as an info point and a hub for alternative, local, sustainable initiatives at the neighbourhood or city level, resulting in an increasing number of subscribers to its newsletter (over 250 in July 2019).

Through a very simple cost-based pricing plan, based purely on the actual amount of space used over time, we have managed to fulfill our obligations toward the owner of the space (i.e., the City of Zurich), paying promptly the high market rent and all other running costs, while at the same time keeping the space affordable, most notably allowing access to centrality to organizations that are today under-represented in the city.

Acting as a complement to similar formal and informal spaces characterized as community, cultural or innovation centers, L200 has the potential to become a novel space of social innovation, neighbourhood revitalization, and diversity beyond the “silos” of political, social, economic, and other “circles”. Most importantly, it can serve as a prototype and inspiration, for the creation of similar spaces in other neighbourhoods in the city. An association to the initial idea of L200 could be done by just following the same naming convention, the initial and number of its postal address.

From the existence of such spaces in every neighbourhood, everyone gains: local businesses, start-ups, citizens, and the city who will have, at zero cost, an important ally to its objectives of sustainability, integration and social cohesion in the diverse city of the future. To this end, it is important to note that one of the core values and rules of the space’s concept is that no user should dominate, neither the space itself through extensive use nor its identity.

We are actually putting a lot of effort to enforce this rule, and make the space as inclusive as possible, open to always new and unexpected uses. The question “What is this?” (Was ist das?) is the first question people ask when they enter the space and a standard “internal joke” among L200 members. In the next theoretical section we note the critical importance of this rule in order to keep such a space as a commons (refer to Stavridis 2016).

But then the coordination of such a diverse set of groups and activities becomes a really challenging task requiring a lot of time and effort. Over time it showed that more specific rules or constraints were needed to make sure that the common vision is not compromised. For example, big organizations (e.g., with more than 30 employees, commercial activities, and national or international scope) are not allowed to use the space for co-working, but are welcome for individual events. Also, there are certain limits on the number of events per organization and per type, number of co-workers per organization, maximum duration of presence in one of the space’s windows. Access to the space is on a strictly First-Come-First-Serve policy subject to a few standard rules on respect, inclusion etc. Most importantly, after any event or installation, the space has to return to its previous, neutral state.

Still, avoiding the domination of the space’s identity not only by powerful actors but also by powerful types of usage (e.g., art, technology, politics, ecology) is a much more difficult task than it seems. We expect that it will be a continuous struggle to keep a balance over time. This is exactly the reason why this objective has become a main part of the overall communication strategy, including choosing a neutral name representing the actual location, using “also your place” as the main motto, and placing the question “What is this?” prominently in the space’s facade (Figure 4). Failing to keep the space neutral and open to all types of usages would be against its core identity, which is mainly defined by its name and location in the city.



Figure 4. L200 entrance showcasing two explanatory panels including the question “What is this?” (Was ist das?) and the main motto “Also your Space” (Auch Dein Raum)

It is important to note that all the defined rules and constraints are always under negotiation and not strict, in the sense that they are not self-enforceable but are only hints or guidelines in decision-making processes. In other words, if there are requests for the use of the space that do not break any existing rule, they are accepted “automatically”. Otherwise they could still be accepted but only after a proper decision-making process, which in the case of our association, it is during the two-monthly board meetings and/or the yearly general assembly.

Reducing the overhead for space management, and making it easy for anyone to contribute, has been a strategic choice that is actually part of an on-going action research process including the development of digital tools. They further facilitate the coordination and collective awareness among diverse activities that take place in a single location. Then the L200 goal is to become an easily replicable prototype of a hybrid urban living lab - showcasing the power of sharing in running successful central spaces in the city, simultaneously reducing their cost but also multiplying their reach for communication and interaction with the public.

The framing of L200 project as an urban lab provide a natural environment where researchers and activists not only meet, but also collaborate around the space itself and its governance and management tools as a “boundary object” (Antoniadis et al., 2015; Apostol, I. & Antoniadis P., 2016, 2017, 2018). The digital tools used to manage and represent the space, but also to engage members and visitors in digital interactions are an obvious candidate for participatory design processes, as those developed in the context of the MAZI EU Horizon2020 project. Indeed, the local WiFi network using the MAZI toolkit (<http://mazizone.eu>) was installed from the very first day and several experiments were tried out (Apostol, I.; Antoniadis, P. & Klaus P., 2018).



Figure 5. L200 is a hybrid urban space: window digital discussion pad

However, we soon realized that the technology-push approach that is inevitably adopted by a funded project for developing technology does not even make sense in a space where the community itself is under construction. So, the local network is left running without promotion to be used out of real needs that appear over time like, for example, what has been needed in L200, an exchange of a big file between co-workers or the need for collective note taking in a techy workshop.

Our “extreme diversity” approach, enforced through clear rules and constraints, and conflict minimization, might look like “avoiding” democratic processes and working against community building. However, one could also see this as an organic process starting from a clean slate where all interested individuals and organizations are given significant freedom to express their needs and views of the space. In the following theoretical section is explained that the accumulation of power may be guaranteed by providing a structure of “contestation and agreement about its use and character” (Stavridis 2016, p.106). Then inevitably all these “differences” will eventually meet each other without “commitments” through parallel events, displays, windows, and the digital space might also capture a large part of the diverse uses and groups inhabiting the space over time.

Through this osmosis it is not easy to predict how things will evolve. But as the use of the space fills and its location gains attention, the easier it will become to create a high turn-over of activities, which will help to avoid domination and provide a proof-of-concept about the power of sharing in claiming the right to centrality. It is exactly this very high visibility and centrality, in combination with the diversity of perspectives of the founding members, that make L200 a unique opportunity for bringing together the power of the commons with the right to the hybrid city.

There are many theories and similar initiatives that have inspired explicitly or implicitly this new project, and many that we think will be interested to study its evolution over time, and why not replicate some of its successful strategies. In the following section we select a few of them and discuss how L200 serves as an interesting case study.



### 3. The theoretical framework: infrastructuring the urban commons

#### 3.1 *Being in common and the right to centrality*

In his philosophical proposition of the 'inoperative community'<sup>2</sup> Jean-Luc Nancy (1983) defines community as 'being-in-common' with others, because 'at the foundation of Being' is the original plurality of beings in the world (Nancy 2000, p.12 cited in Kioupkiolis 2019). This ideal of community, as a pure co-presence of subjects to one another, receives political expression in a vision of political life that privileges local face-to-face democracy (Young 1990, p.232). It is a model relatively close to the Swiss direct democracy, which may offer the alternative to the bureaucratization of governance in existing mass societies. Political theorist Alexandros Kioupkiolis explains such 'politics', based on Nancy's understanding of community, in his recent book "The Common and Counter-Hegemonic Politics":

"...politics should not order the ends of the community; it should not be responsible for the identity and the destiny of the common (Nancy 2010a: 41). Politics should rather afford access to other, not properly political, spheres, which fashion meanings and forms of life in common, seeking indefinite ends-in-themselves: arts, language, thought, science, love. A non-totalising politics should only enable an indefinite multiplicity of creative activities in common, without subsuming their diversity under an all-encompassing figure or an overarching end: 'politics subsumes none of these registers; it only gives them their space and possibility' (Kioupkiolis 2019, p.16).

The process of urbanization may be shaped through policies that value and support diversity, acknowledging that "the city is where social differences collide and become productive" (Schmid 2006, p.172), and striving for an ideal of city life "as an openness to unassimilated otherness" (Young 1990, p. 227). To provide the necessary openness for imagining and acting for new possible spatialities, in the 1970 Differentialist Manifesto Henri Lefebvre draws attention to a world of difference, as an alternative to a closed world that the capitalist society is generating. Even more, differences are necessary to sustain life and in creating living space, and thus we have an ethical responsibility to provide for, and respect, the right to difference.

In the current state of political life in western democracies, grassroots groups are playing a critical role in shifting the political narrative to a political economy of cooperation, to an economics of solidarity and shared benefit, to a commons-based economy and society (see, e.g., Bauwens and Kostakis 2014; Bollier and Helfrich 2015; Restakis 2015). Thus the state functions as a partner, when public authorities sustain the direct creation of social value by civil society ([commonstransition.org](http://commonstransition.org)).

The 'partner state' concept was further developed to mean the state that 'enables autonomous social production', and that 'embraces win-win sustainable models for both civil society and market' (Bauwens and Kostakis 2014). In a commons-based society affirming differences, by devising policies that respond to citizens' ongoing struggle for this right, the partner state may enable a multitude of manifestations in the spatial fabric. It is extraordinary that currently there are initiatives in all domains of social value creation, including in the provision of strategic infrastructure like transportation or information and communication technologies.

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<sup>2</sup> "Community is given to us – or we are given and abandoned to the community: a gift to be renewed and communicated, it is not a work to be done or produced. But it is a task, which is different – an infinite task at the heart of finitude ['finitude' meaning here the lack of identity that we share in common]" (Nancy 1991, p.35).

In this context, centrality is an essential right, implying access to power and representation within the political spectrum. Renovating centrality means “regrouping of differences in relation to each other” (Lefebvre 1996, p.19). By allowing individuals to manifest their particular spatial experiences and urban aspirations in the production of lived space, our society can overcome its current predicament of consumerism and utilitarianism toward a more sustainable vision and a common purpose.

L200 advocates diversity and openness to all citizens, and our L200 collective works toward facilitating policies that support self-governed and self-organized common spaces. Being so centrally located, L200 is a rare case of such a self-managed space that has a great potential for communicating to a wider public its values and those of its members, often underrepresented in the urban space. That poses many opportunities and also challenges, which we wish to address in a transdisciplinary and action-oriented way, assuming the naturally agonistic nature of commoning as advocated by Kioupkiolis (2019).

Finally, there is a constantly growing literature on the (urban) commons as the third way to engage and emancipate citizens beyond the state and the market (e.g., Ramos, 2016; Borch & Kornberger, 2016; Dellenbaugh et al. 2015). Numerous inspiring projects on housing, energy, digital platforms, around the world are helping to build a knowledge base on best practices, typologies etc.

But no matter which is the common resource or process, commoning always requires structuring a process that implies deliberations, participatory practices, negotiations, conflict resolution and reaching consent. For all these to take place, a common space is required. Open and inclusive spaces are themselves among the most important infrastructures for commoning activities.

### *3.2 Common spaces*

Zurich showcases a variety of vibrant and well-functioning citizen associations, networks and clubs that experiment with new forms of cooperation. They are shaping a complex organization of the civil society in response to the liberal urban governance, to high real estate prices and rental prices determined by the open market. Instead of a City’s rent control policy, for instance, there are various forms of taking residential buildings out of the market to provide relatively affordable housing that can no longer become an object of commodification and speculation.

To achieve this overall objective, one of the strategies is to develop new residential buildings in the cooperative form. Within this pragmatic approach of grassroots housing and living developments, future visions for urban living become reality through spatial development shaped by a diversity of actors.

Similarly to the housing cooperative model, in this paper we present a strategy, namely a set of choices, used toward providing non-commercial shared spaces for gatherings of individuals and organized groups. Gentrification and urban renewal put under enormous pressure such places in Zurich, mostly those centrally located. At the neighborhood level, where the assemblies provide ‘the basic unit of democratic participation’ (Jacobs 1961, Chapter 21: Governing and planning districts, pp. 405-427), the existence of spaces for information, negotiation and convergence are of critical importance. The governance of such spaces is also very important, and rather than citizens being ‘users’ of space provided by an authority, it is more suitable to shaping their own spaces according to common goals and collectively identified needs.

By creating the possibility for setting a relational space in common, the type of democracy that Nancy (2014) advocates is an opening toward the manifestation of being together, (even if the community exists before the imposition of a political organization; refer to Nancy 1991). This participatory practice is a form of empowerment of democratic publics, creating through common talk and work a 'common consciousness and political judgment' (Barber 1984, p.224). It generates over time also a 'community of practice' (Wenger 1998; Wenger-Trayner 2015), which is a broad concept implying frequent interactions between group members around a shared domain of interest or of action like improving their practice, or around learning how to do something. Nevertheless, there is a mutual relationship between shaping the group or community of practice, and shaping its common space.

In terms of specifics of shaping spaces as commons, Stavridis (2016) notes that in the co-creation process are developed the rules about how this sharing is to be performed, similarly to how the process evolved for L200 (refer to the section above). Likewise, to keep the space common "there must be developed forms of contestation and agreement about its use and character which explicitly prevent any accumulation of power. Especially, any accumulation of situated, space-bound power" (Stavridis 2016, p.106). Moreover, a necessary ingredient to which Stavridis draws attention is a more difficult one to program, namely "Generosity is the propelling force of sharing-as-commoning if the corresponding community indeed moves towards collective emancipation and equality" (2016, p.107). On the emancipatory role of common spaces that may be considered as 'in-between', Stavridis<sup>3</sup> makes use of Georg Simmel (1997) dialectical relation between connection and separation.

That relation is included in Simmel's definition of the stranger (1971), who is not 'the wanderer who comes today and goes tomorrow', but rather the one 'who comes today and stays tomorrow – the potential wanderer', the carrier of prospect innovative knowledge, who is at the same time attached and detached to a local group. Also Nancy (2014) argues that distance is necessary in shaping the possibility of a relation, and eventually of a relational space.

"This act of recognizing a division only to overcome it without, however, aiming to eliminate it, might become emblematic of an attitude that gives to differing identities the ground to negotiate and realize their interdependence. Emancipation may thus be conceived not as the establishing of a new collective identity but rather as the *establishing of the means to negotiate between emergent identities*. Difference thus is not connected to privilege but to potentiality" (Stavridis 2016, p.239, emphasis added).

In this sense, L200 is an emblematic case of a "common space" as defined by Stavridis and it is interesting to compare its initial approach to identity and governance with other similar initiatives. For example, the R-URBAN project in Paris has largely inspired our organic, with minimum intervention, participatory process with the difference that sustainability and learning processes are only one of the activities taking place at L200. Our main venue is a small space in the center of the city rather than a large area in the suburbs like the Agrocite<sup>4</sup>.

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<sup>3</sup> "[...] this experience of temporarily occupying an in-between territory as well as an in-between non-identity, can provide us with a glimpse of a spatiality of emancipation. Creating in-between spaces might mean creating spaces of encounter between identities instead of spaces characteristic of specific identities. When Simmel was elaborating on the character of door and bridge as characteristic human artifacts, he was pointing out that 'the human being is the connecting creature who must always separate and cannot connect without separating' (Simmel 1997:69)." (Stavridis 2016, p.239).

<sup>4</sup> <http://r-urban.net/en/projects/agrocite/>

Nevertheless, the main design principles are very similar. Indeed, Petcu & Petrescu (2012) describe the various initiated collective spaces under the R-URBAN framework as “places of permanent negotiation, places of learning by doing and bottom-up reconstruction of political fundamentals of democracy: equality of representation, general interest and common good, liberty and responsibility, collective governance, etc [...] open to reconfiguration, introducing in accordance to the involved persons, dynamics of self-management, of responsibility and a sense of initiative and negotiation.” In the same spirit, there are many self-organized urban gardens or parks like Prinzessinengarten in Berlin, Buurtcamping in Amsterdam, or Parkplatz in Zurich (see Commons Network (2018) for a summary of the first two case studies).

There are also many examples of more urban self-managed spaces focusing mostly on culture like Magacin in Belgrade<sup>5</sup> or Pogon in Zagreb (Žuvela, 2018) or politics like La Casa Invisible in Malaga<sup>6</sup> or L’Asilo in Napoli (Cozzolino, 2018). The main difference between L200 and these grassroots initiatives is that those spaces are very large (over 2000 sqm), and they are used without rent, either through a direct collaboration with the City (e.g., a public-civic partnership in the case of Pogon) or through permission (e.g., using the law on Civic use in the case of L’Asilo). Moreover, none of these initiatives is engaged explicitly with digital sovereignty as an integral part of the space’s governance and identity.

### *3.3 Infrastructuring the commons*

The concept of infrastructuring as a means for participation in design can be promoted through different strategies like design-in-use, DIY toolkits, configuring, design patterns, protocolling, LEGO block approach, and more, as analyzed by Ehn (2008) among others. Such strategies empower the users of technologies to appropriate them along the way, according to their actual needs that might change over time, but also according to the overall environment before the intervention of design. The term infrastructure highlights exactly the fact that “Design comes ‘from somewhere’ as opposed to being ‘from nowhere’” (Hakken et al, 2016, p.184).

In this context, the question of scale appears as critical (Lyle et al., 2018) and infrastructuring by itself, as defined in the STS literature, is only part of the solution. The flexibility of a software platform to be later configured and adapted to different situations, for example, need to be combined with the capability to fork (e.g., to copy the code to create variations of it) and replicate (e.g., to self-host), if scale is to be achieved without powerful, even if well-intended, intermediaries. This design culture promoting scaling through replication instead of growth resonates with the “Design Global Manufacture Local” concept introduced by Kostakis et al. (2015).

The ability to fork and self-host also allows thus for the combination of the strategies of opening-up and narrowing-down as nicely described by Le Dantec & Di Salvo (2013): “While design-for-future-use as infrastructuring and design-for-use as practical system design are different – one opens up questions and possibilities, while the other narrows possibilities through practical design moves – the two can complement each other and coexist as a means of expressing the attachments between publics. The first project provides an example of how a codesigned, practical system can also do the work of

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<sup>5</sup> <https://kcmagacin.org/>

<sup>6</sup> <http://lainvisible.net/>

infrastructuring by exposing attachments in different ways and providing affordances in the technology for responding to and shaping those attachments.”

Similar concerns are raised also in the field of urban studies regarding the importance of bridging policy and grassroots initiatives and action. For example, in an interview by Kim Trogal with aaa (atelier d’architecture autogeree) founders Doina Petrescu and Constantin Petcou [Trogal and colleagues. 2019. Chapter 21. Commons-based urban resilience. pp. 259-273], from their practical, academic and research experience, they bring forward the critical “need for integrating top-down and bottom-up policies and complementing strategically public and civic initiative, particularly in relation to urban resilience governance” (p. 260).

But going back to the challenge at hand, what means infrastructuring for the commons? What type of commoning processes need to be facilitated by design (technological or not) and in what ways?<sup>7</sup>

One could say that the well-known commoning principles by Elinor Ostrom provide already a powerful "infrastructuring" approach toward commoning, offering a flexible framework that could be used as a basis for the self-management of common-pool resources. And of course technology has the potential to empower people in implementing some of these principles (e.g., accounting of the use of resources, defining limits, taking decisions).

Still the question of power on behalf of the institutions operating the digital platforms mediating a community’s online interactions, even if implemented with free software, remains critical and will be discussed in more detail in the following section.

Before that, there are a few more concepts that are useful from the STS literature, which aim to address complex power relationships between the different actors involved in a commoning project. As Hakken and colleagues explain “Designing artefacts which are susceptible to interpretation open up opportunities for reflection on what Latour (2005) defined as “matters of concern”: technology and knowledge are seen as something people are concerned about rather than something established on “matters of fact”, the declaration of absolute reality. [...] This example shows how identifying matters of concern as potential design themes implies tasks that are non-trivial: matters of concern are by definition controversial, and this opportunity to give rise to public disagreement makes the design process complicated. In our framing, matters of concern initiate a positive engagement towards digital commons, potentially promoting the construction of a recursive public that can question the surrounding context.”

Along these lines, to address the matters of concern through infrastructuring,, Korn & Volda (2015) promote the idea of “Design for friction” which resonates also with the idea of “agonistic commons” analysed by Kioupiolis (2019).

In the case of L200, we take a step back and simply “design for contact”, before deliberation, conflict or friction. The reason is that in our experience the most challenging task today is to create truly “in-between” spaces, which “might mean creating spaces of encounter between identities instead of

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<sup>7</sup> A comprehensive collection of successful commoning “patterns” is analyzed in Bollier and Helfrich, S. (2015) and various related projects produce online material. E.g., <https://ecodaplatform.hotglue.me/>, <http://creatingcommons.zhdk.ch/>, <http://designingtheurbancommons.org/details/resources/>, <https://www.ixdm.ch/portfolio/thinking-toys-for-commoning/>.

spaces characteristic of specific identities.” (Stavridis, 2016, p. 239), which is considered an ideal of city life as well, “as a vision of social relations affirming group difference without exclusion” (Young 1990, p.227).

Bringing different identities together is becoming more and more challenging in times of social media and filter bubbles. The attractiveness of L200’s location makes it a good candidate for such a strategy as explained above. Then technology could play a similar role, documenting and representing the different identities active in the space in a way that encourages their coexistence celebrating instead of suppressing diversity. It is conceivable that specialized applications could be designed for this purpose like the MAZI toolkit’s Guestbook and Interview archive.<sup>8</sup> But there are many challenges with designing and developing new software in the context of limited funded projects, as analyzed in depth for the case of another project in the same framework, Commonfare, see Lyle et al. (2018).

What is interesting in the case of L200 is that both MAZI, <http://mazizone.eu>, and netCommons, <http://netcommons.eu>, a second project in the CAPS framework that contributed to the L200 concept (see Apostol et al., 2018) are now finished. Away from deadlines and other constraints we can follow more closely our organic approach to infrastructuring for the commons, which includes tools in both the physical and digital domain as discussed in the following.

### *3.4 Digital commons*

The popular Internet platforms that mediate a significant portion of our everyday communications thus become more and more efficient at managing vast amounts of information. In turn, they also become more and more knowledgeable about user interaction design that increases dependency and addiction (or “stickiness” when described as a performance metric). This renders their users more and more addicted and dependent on them, subject to manipulation and exploitation for commercial and political objectives.

In the context of Illich’s analysis of the lifecycle of tools (Illich 1973), this could be characterized as the second watershed of the Internet. As in the case of medicine and education, the Internet at its early stages was extremely useful. It dramatically increased our access to knowledge and to people all over the world. However, to achieve this, it came to rely on big organizations offering efficient and reliable services. The survival of these services and platforms now depend more and more on the participation of people and on the exploitation of the data they produce. This creates a vicious cycle between addictive design practices and unfair competition which breach the principle of net neutrality, and unethical uses of privately owned knowledge of human behavior, generated through analyses of the data produced from our everyday online activities.

In their essay “Rethinking the smart city”, Morozov and Bria (2018) restate the question: “What does the ‘right to the city’ mean in a fully privatized, digital city, where access to resources is mediated by the swiping of a ‘smart card’ tied to our identity?”. They argue that “Without an accompanying struggle for technological sovereignty, the fight for the right to the city loses much of its power”, but warn that “The very idea of technological sovereignty will likely soon be twisted into something it is not”.

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<sup>8</sup> <https://github.com/mazi-project/guides/wiki/Applications>

Morozov and Bria also connect digital sovereignty with the urban dimension noticing that “The notion of “sovereignty”—whether of finances or energy—permeates the activities of many urban social movements, including those transitioning into leadership positions in their respective cities.” Their focus in terms of a concrete plan toward technological sovereignty focus on data, since “Changing the data ownership regime, ..., maybe the most affordable option.”. They claim that cities is the right place to fight toward data sovereignty, with the city of Barcelona as one of the leading cities in this direction.

Similarly to the platform cooperativism narrative, however, “taking the value of our data back” Bria (2018) is a good cause but it does not necessarily answer the question how much (big) data, blockchain, and Artificial Intelligence do we really need, independently on whether we are the owners and beneficiaries of their value.

The case of Alphabet’s Sidewalk Labs project, Doctoroff (2016), in Toronto, Sidewalk Toronto is another good example on how the digital and urban struggles are more and more interconnected (Bliss, 2018; Carr and Hesse 2018; Wylie, 2018), and how mega-companies like Alphabet are very comfortable with the narrative of “data ownership” (Dawson, 2018).

In our view, it is very important to avoid digital platforms that facilitate commoning “from a distance”, owned and managed by external actors who, no matter their intentions, gain excessive power over the process. Of course, this situation is not compatible by any means with the values of democracy and self-determination to which commoning processes should adhere.

For example, Estrada-Grajales et al. (2018) report on the creation of a right to the city movement in Brisbane using Facebook as the main digital tool for communication and coordination. In this and other such cases around the world (e.g., the Arab spring movement) platforms like Facebook have been instrumental in facilitating the organization of the movements but at a very high cost (see Antoniadis, 2018 and Ippolita 2015).

Thus digital platforms aiming to facilitate commoning processes in the city and beyond, need to be managed themselves as commons, truly owned, designed, and governed by those concerned -- the local communities. This is an ideal scenario, nevertheless, and in reality such commons-based solutions could co-exist with global platforms.

Combining the concept of community networks and FLOSS software, one can imagine the design of digital tools run on community-owned network infrastructures as an infrastructuring process for hybrid urban spaces as a commons (Apostol & Antoniadis, 2014; Antoniadis, 2016; Antoniadis, 2018). L200 is conceived from its inception as a hybrid space of this type, with a local-only WiFi network used to engage visitors in digital potentially anonymous interactions, file sharing, and more focusing on well supported free software like NextCloud and Etherpad, as part of the MAZI toolkit. In addition, members of the association (rao GmbH and NetHood) are slowly developing free software tools for internal management like an open calendar, bookkeeping, and more, which will eventually become part of the L200 prototype for acquiring and running a central space as a commons. Finally, a small scale web hosting platform will be installed soon in the L200’s cellar that will be used for hosting web sites of small local artists and businesses etc.

In parallel, a collective learning process on the general topic of digital commons, branded as the “organic Internet” has been initiated through the Openki.net platform<sup>9</sup>, which is necessary given that the most important challenge toward engaging people in projects around this topic is the lack of awareness of the threats behind the use of centralized global Internet platforms but also on the existence of viable alternatives.

Without proper training and education, participation in design and governance of local digital platforms will be always an illusion. Moreover, spaces like L200 enable such education processes to take place in collaborative and social ways, contributing also to the neighbourhood life.

#### **4. Guidelines for co-creating a hybrid central space as a commons**

Toward a blueprint of developing a hybrid neighborhood node, this section explains the beginnings of the L200 project in the form of a set of guidelines for similar initiatives (see also Apostol, Antoniadis & Papageorgiou, 2018). The narrative presents the evolutionary process that shaped the current state of the L200 neighborhood space. The action moments presented in the following narrative are not necessarily subsequent as they have been following linear as well as cyclical rhythms. Their presentation below suggests more of a logical hierarchy rather than a chronology.

There is an integration phase of real needs with the formulation of political and design/development visions within a broader realm of possibility. This is the more conceptual moment of the overall process, yet derived from practical knowledge. Once the opportunity to materialize these visions appears, there is a structuring phase of a concrete project, called in the guidelines below as a) seizing an opportunity, b) formulating a project and c) organizing a plan for action. These actions configure the practical moment of the process.

A final phase described below in more detail is the lived or experiential moment of the process, with two different temporalities, one defining a temporary use, so to experiment with the possibilities in practice, and a long-term phase meant to establish a living laboratory.

##### *4.1 Integrating real needs*

One of the main challenges in collective processes is the integration of individual choices into shared decisions. However, this is a very important phase in the production of a collective project.

The first step is to proceed toward assembling and integrating needs in related participatory practices. To facilitate the expression of all choices, it shall be inclusive and promote active listening and decision making consent or ‘no objections’ (Buck and Villines, 2007), instead of being ambitious toward achieving consensus.

For example in Kreis 5 district in Zurich, it became obvious through neighborhood initiatives and engagement in several collective activities, that a location was necessary to provide a shared space. There was a critical need for a collective space for gatherings of neighbors, and of active organizations in the neighborhood like the Forum 5im5i <<http://5im5i.ch>>, or the housing cooperative NeNa1

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<sup>9</sup> <https://openki.net/course/uEGBuQRvcGq25w7ep/the-organic-internet-build-your-own-local-network>



<<http://nena1.ch>> among many others. Also there were voices asking for a co-working space run as a collective.

At the same time, in the last years the increase of prices of rental space in the neighborhood has been skyrocketing and some of the small shops had to move out of the locations where they have been in function for decades. It appeared absolutely necessary to create a coalition and to create a space of encounters, where the neighborhood entrepreneurs could gather and network.

So the question became, how to materialize this shared space out of a process of integrating expressed 'real' needs? From the open discussions and meetings in various neighborhood forums, it appeared obvious that the space will be shaped at the convergence between individual needs (e.g., co-working space, meeting space, networking of small shops), and collective needs (e.g., place of encounters and networking, of collective learning, of exposure of ideas and neighborhood initiatives), within a political economy of cooperation, of solidarity, and of mutual benefit.

#### *4.2 Defining a vision in a world of possibility*

Formulating a possibility for the future is a critical step in pursuing the materialization of any needs, wishes, dreams or desires. Yet the domain of possibility is subject to perpetual creation, which begins in language, it is slowly formulated until it turns into action, and eventually becomes a way of living.

In comparison with the previously described action of gathering and integrating real needs, most important in this case is that there are no constraints. The possibilities are infinite, leaving room for the imagination and creativity.

In the case of the L200 space, the vision in a world of possibility was formulated as creating a hybrid neighborhood node to be organized as a collective, to use its space as a commons, and to function as a stage for the neighborhood and a 'laboratory' for ongoing experimentation and collective learning. For that a neighborhood association was founded, for which a location was still needed, where the visions of the association could become reality through everyday practice.

#### *4.3 Seizing an opportunity*

The next step is the (re-)connection of the moment of integrating real needs and visions, with the practical reality by seizing the opportunity to materialize it. In this case, its materialization is in the form of shaping the neighborhood hybrid space in a central location of Zurich, as the street level floor of a building owned by the City was advertised for new tenants.

Within the constellation of imminent needs, conceptual plans, wishes and desires, practical reality may show that there is a relatively limited collection of suitable options. Moreover, out of the potentially suitable options, some may be more appropriate to other initiatives. Although these conditions are referred to in 'classical economics' as limited resources with the consequence of inevitable competition, there are other models that deal with the given conditions in different manners, promoting cooperation and mutual benefit.

A model proposed here is the integration of everyday life needs into collective enterprises, organized from the grassroots to structure and manifest their provision. Just like the movement of cooperative housing and living in Zurich (Apostol, 2015) has been responding over time to citizen choices for alternative forms of living and sustainable life in the city, similar is the case of other grassroots initiatives based on real life needs identified during long-term participatory processes. Note that a necessary condition is, the participatory practices to filter out, during reiterative sessions, non-suitable choices for the particular conditions, and certainly to engage a variety of actors who find value both in the outcomes and in the action process as well. Such principles are at the basis of cooperative enterprises and solidarity economy.

#### *4.4 Formulating a project*

In the process of structuring a concrete project, the particular call for tenants of the City of Zurich was a chance to match the City's need to allocate the use of that space, with the integrated needs that the association identified. Once the opportunity appeared to materialize the formulated visions, and to fulfill the imminent and more long-term needs of the association, some of its members (the initiating group) visited the available space.

Then they formulated an adapted project proposal for the L200 space, to become a hybrid neighborhood node in the digital city, a neighborhood stage for the local shops, studios, and initiatives. In the context of commodification of most of the similar spaces in the neighborhood, this is an expression of the struggle for the right to difference and to centrality, and a forward looking project, proposing the creation of a hybrid space from its inception.

The City of Zurich acted as a partner state (Kostakis 2011), as it sensed the critical value of such an enterprise in acting aligned with the City's policies for diversity and social integration, to preserve local (small) businesses, and to shape a digital city that favors conviviality and face-to-face encounters.

Thus the application was evaluated favorably instead of a commercial use of the space, and the association was selected as the future tenant. A more concrete world of possibilities opened up for the L200 project, and a possible budget was planned.

Now having the main structure of this project written down, with clearer goals and directions for development, another phase for the association began by inviting new members to join. During numerous meetings, the project has been discussed with many of the current members, and all in all the structure of a long-term process of collective learning started to shape naturally, toward configuring a community of practice.

#### *4.5 Organizing a plan for action*

The project that was initially formulated in more generic terms is transformed then into a chronology of feasible actions. In the particular case of the L200 space, the potential uses have been checked against reality, and a plan for action was structured, in detail for the first month and more flexibly for the next six months.

Much of the work was accomplished within the core group of initiators that include also the members of the L200 association's board, meeting once per week, while keeping the communication with the other members of the association through various media.

For instance, the communication with members used both digital (i.e., public website, facebook page, telegram, email, association wiki, and the MAZI zone installed at L200), and during face-to-face meetings, during members 'plenary' gatherings and in planned working meetings. For public communication and advertising for ongoing membership applications were used so far, besides from direct face-to-face communication, an online newsletter, distributed through the website and also through typical social networks like Facebook, as well as projections in the L200 space, printed material like posters and a flyer explaining the concept, which are displayed on the windows and in the room at L200.

#### *4.6 Defining a temporary use*

A very dynamic and complex project requires a preparatory phase. In this initial phase, a six-months temporary use became critical, due to the experimental and 'cumulative' nature of the project. That means that there was not an already organized group of people who rented a new location, but the collective is being shaped while organizing also a novel use of this hybrid space. The first six months benefited of a more exploratory framing at a lower rental price. Moreover, in the difficult commercial environment in which it is placed, because of the high rental prices such an enterprise requires careful administration and coordination of activities.

#### *4.7 Establishing a living lab*

The L200 space aims to create a hybrid urban living lab in a central neighborhood of Zurich, by responding to several local needs such as a) to meet fellow neighbors in a common space, b) to promote local shops, ateliers and initiatives, c) to network people, activities and places in both analogue and digital forms, and d) to facilitate collective learning processes on various topics.

From the first days of its operation there are several types of activities already ready to bootstrap that include participatory processes (project PARLA), self-organized learning (project Openki.net), cooperative housing and sustainable urban living principles (project NeNa1.ch), hands-on DIY networking workshops (project MAZI), and more. The role of technology is central not only for the challenging coordination needs, due to the flexible and shared use of the space, but also for building L200's identity and memory, and for encoding some key design choices at different levels, to facilitate the replication of this model in different locations.

##### *4.7.1 L200 - a hybrid urban node*

An ambition of the L200 space project is to experiment with a hybrid urban node, which is set as a dynamic urban laboratory, an urban living lab, that provides a meeting room for neighbors, a place for discussions and deliberations, as well as a stage and exhibition space for the local shops, ateliers, initiatives, and the like.

Contemporary urban space has both physical and digital manifestations. By means of urban policy or even as independent initiatives, however, there are few spaces that are conceived and designed from their inception as hybrid nodes at the crossings of manifold urban networks of paths and spaces for social life, of trade, of communication, information, deliberation and social learning, etc. In the direct democracy exercised in Switzerland, L200 hybrid urban living lab represents a manifestation of the ongoing struggle for the right to difference.

In addition to the online presence of the place at <https://langstrasse200.ch> at L200, a local network is deployed and selected content is projected in the room or in the windows (see Figure 5). Through its spatial and temporal flexibility, L200 is likely to shape a new culture of neighborhood conviviality.

#### *4.7.2 L200 - a central place*

Several urban studies note the effect of centrality on the quality of space (e.g., Kretz and Kueng, 2016), and the Kreis 5 and Langstrasse in Zurich have drawn for many years the attention of researchers for undertaking field studies here. From a rather theoretical perspective, let us note Christopher Alexander's reflections on the living system that such centers create. "At each place in the world [...] there is, at any instant, some given wholeness; that is, some definite, well defined system of centers that creates the organization of that part of the world" (Alexander 2002, p.106). He calls a "living structure," the complex structure resulting from the interaction of living centers that allows life to evolve. That is along with the differential spaces advanced by Henri Lefebvre (1970), who argued that creating differences is necessary to sustain life.

Regarding social space, in a democratic society the right to centrality is an essential right. As an alternative to the current society, a world of difference is capable to provide the necessary openness for imagining and acting for new possible spatialities, for shifting the meaning of diversity from otherness and exclusion, to variation and specificity, for affirming group differences without exclusion (Young 1990), and nevertheless, by providing access to power and representation within the political spectrum to various groups and social actors.

#### *4.7.3 L200 - the organization*

The L200 space is located on the first floor of a City owned building, at 200 Langstrasse, in Zurich's Kreis 5 neighborhood. The main tenant is an association of neighborhood shops and enterprises, by the name L200, that took on the mission to create a central stage for the small local shops and initiatives struggling to keep their presence in the neighborhood because of increased rental prices and higher value of real estate in Kreis 5.

From NetHood's perspective L200 is a spin-off of the MAZI and netCommons projects, recognizing the need of a permanent public, and centrally located space that can host a wide variety of participatory processes around technology, housing, collective learning, and more becoming in essence a reference point and real-life testbed for NetHood's current and future projects.

#### *4.7.4 L200 - a local shops network*

The L200 project offers opportunities for networking, on the one hand, of local shops, with the possibility in the long term to create the 'Made on Langstrasse' brand, and on the other hand, of neighbors and neighborhood places. Links between Zurich and other cities, and between research and practice are to be shaped by creating an urban laboratory, networking with related university and research institutes.

These activities could be interesting for a) small shops and artistic production studios that need visibility in a central location, b) local businesses that could provide the interior design and the necessary equipment, lighting and furniture for the space, c) the municipality if succeeding to produce a local brand, d) Kreis 4 and Kreis 5 districts that are connected through the Langstrasse; e) interested cooperatives to be featured in the space; f) higher education and research institutes etc.

#### *4.7.5 L200 - a simple concept for a complex space*

After the first months it was made clear the initial focus on small shops was too restrictive for the range of actors already included, many of which are activist organizations whose work is much more widespread. In parallel, explaining "What is this?" using the initial frame was becoming more and more difficult.

The solution came organically, and it was the definition of the space's identity through a very simple and clear rule. All activities are welcome as soon as they leave the space as they found it, and its identity defined only by its location in the city; all members have to contribute to the cost of the space in a way that is fair and transparent.

This change of narrative made the communication with visitors much simpler and the need for decision-making very limited. Documenting all different events and highlighting the diversity of uses both online and offline, proved very helpful and the fact that passers by always ask "What is this?" is reassuring that we are succeeding in creating a complex hybrid space that is both attractive and undefined.

#### *4.7.6 L200 - toward becoming a living lab*

At the beginning of the 1990s the term 'living lab' has emerged in parallel in the field of operations research focused on urban communities dealing with community-driven technology and social tools, (e.g., Bajgier, et al. 1991), and at the MIT Living Labs (refer to the work of William Mitchell, Kent Larson, and Alex Pentland) based on the concept of user experience and ambient intelligence. Presently a network exists by the name European Network of Living Labs that defines living labs as "user-centered, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings".<sup>10</sup>

The concept is based on a spiral-type process, refer to Rittel (1972), following as main activities co-creation, exploration, experimentation and evaluation, during which negotiations take place between a wide range of stakeholders, and thus 'living labs' may be involved in the various phases of the design process. In a recent attempt to define the term 'urban living labs' and establish their characteristics,

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<sup>10</sup> Available online at <http://www.openlivinglabs.eu>

from related literature and a large sample of sustainable urban innovation projects in Amsterdam, Steen and van Bueren (2017) note that it refers to “a variety of local experimental projects of a participatory nature. It is often used interchangeably with the terms “testing ground”, “hatchery”, “incubator”, “making space”, “testbed”, “hub”, “city laboratory”, “urban lab”, or “field lab”” (p.22).

A key principle of participatory practices is to bring in the design process, together with experts those who are going to make use of its outcomes, whether they are residents of a neighborhood or people engaging with technology. Nevertheless, there are various degrees of engagement in the process, noted from early experiences with participatory practice by Arnstein (1969), for instance, in her article on the ‘ladder of citizen participation’. At the lower rungs of the ladder are categories of action like manipulation, informing or consulting, while at the higher rungs these actions become either partnership, delegated power or even citizen control.

By creating opportunities and establishing partnerships between designers and those who are actually ‘experts’ in understanding their own ways of living and working, the ‘living labs’ are capable to operate at the higher rungs of the ladder of citizen participation during the design process. The thorough analyses of Steen and van Bueren (2017) show that most of the projects kept the participation at the lower rungs of either informing or testing with users, and out of ninety projects, only twelve have engaged ‘users’ in the development process, reaching the co-creation phase, which is an essential characteristic of the ‘living labs’.

A critical point has to be made here regarding the term ‘urban living labs’, as in their definition innovation is a key characteristic, together with co-creation. Social innovations are distinct from technological innovations, and the ‘urban living labs’ always deal to a certain extent with social issues or address social needs. And although there is little agreement on what may be truly named ‘social innovation’, whether or not “all innovations that tackle social problems or meet social needs” can be considered as such (Bornstein, Pabst, and Sigrist, 2014, p.4), it is important to take into consideration the complexity that the social dimensions bring in the design process. Establishing a new product in the market is not the main focus of social innovations, rather they explicitly pursue changes to societal practices.

## **5. Instead of conclusion: collective leadership**

There are some successful practices that can be transformed into guidelines, infrastructures, and tools, and others that cannot, by construction.

If one asks people that are identified as community builders, place makers, movement leaders, and the like, what is their secret for bringing people together, and how one can learn from their experiences, they often cannot provide a simple answer. It resides within a realm of art, intuitive knowledge and social skills. When one insists, they often answer that candidates for leading commoning processes need to simply like and believe in what they are doing.

The difficulty in “infrastructuring” leadership and facilitation lies in the high complexity behind the task. Being truly engaged in observing all the important details that need to be taken into account in a long-term organic participatory process requires a lot of effort and continuous attention that cannot be “designed for”. Adding the question of power inequalities that arise through leadership (see Stavridis,

2016), makes leadership one of the most delicate and critical aspects of commoning and/or participatory design projects.

In L200 we have been fortunate to rely from the very beginning on many different people's key contributions, for the initiation of the project in the first place. At the same time, for all these people the engagement with the place has been both an "unexpected" and "voluntary" effort leaving a lot of space and need for a collective leadership approach.

The fact that no actual research or other project was tightly connected to the space itself, allows us to follow a very slow approach in the overall design of the space and its governance, allowing for other complementary required learning processes to become effective.

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