The Co-Cities Open Book

Transitioning from the Urban Commons to the City as a Commons

CO CITIES 2+2=5

LAB GOV.City | LUISS | GEORGETOWN UNIVERSITY

Transitioning from the Urban Commons to the City as a Commons[1]

The Co-Cities Project is the result of a 5-year project to investigate and experiment new forms of collaborative city-making that is pushing urban areas towards new frontiers of participatory urban governance, inclusive economic growth and social innovation. The case studies gathered here come from different kinds of cities located all around the world, and include groundbreaking experiments in Bologna (Italy), as well as in other Italian cities (e.g. Reggio Emilia, Rome, Milan, Turin etc.), and global cities such as Seoul (South Korea), San Francisco (California, USA), Barcelona (Spain), and Amsterdam (Netherlands). The project focuses on emerging urban innovations and evolutions which are reshaping urban (and peri-urban) development and land use, urban and local economic patterns, urban welfare systems and democratic and political processes, as well as governmental decision-making and organization. Among the better known recent examples are the FabCity transition plan towards re-localized and distributed manufacturing of Barcelona; the Bologna Regulation on Public-Civic Collaboration for the Urban Commons; the Turin Co-City policy; San Francisco, Seoul and Milan initiatives to transform themselves into "sharing cities"; and Edinburgh as a "cooperative city".

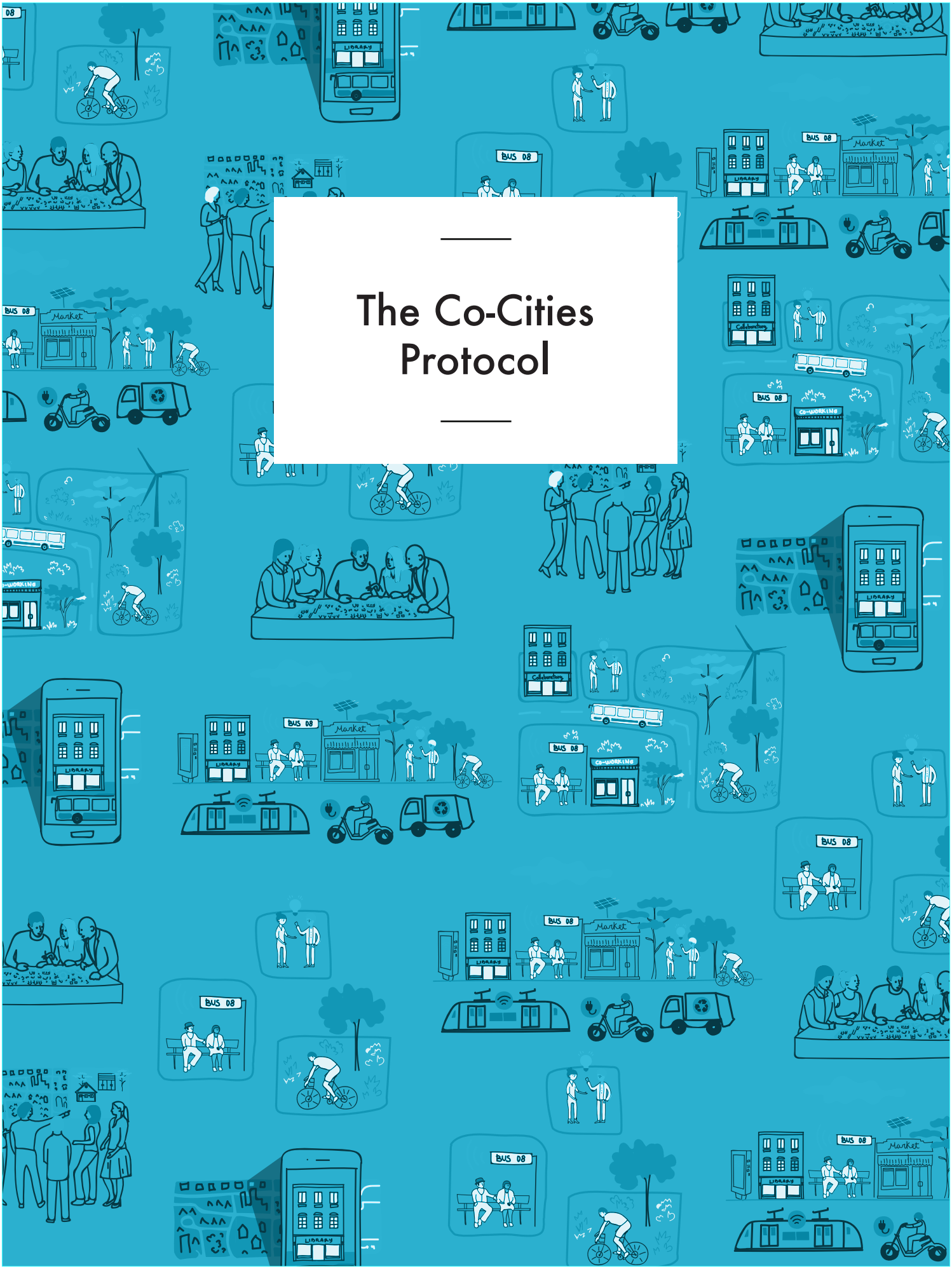
The Co-Cities project is rooted in the conceptual pillars of the urban commons[2]. The concept of the co-city situates the city as an infrastructure enabling sharing and collaboration, participatory decision-making and peer-to-peer production,

1 This report is the result of a wide collaborative effort. It benefitted from the close collaboration of Sheila Foster, Christian Iaione, and Elena De Nictolis with the P2P Foundation; the Transformative Actions Interdisciplinary Laboratory (TrailLab) of the Catholic University of Milan, in particular Professor Ivana Pais and Michela Bolis; the International Association for the Study of the Commons (IASC). Michel Bauwens and Vasilis Niaros contributed to the data selection and collection during the exploratory phase (November 2015 through August 2016). An analysis on the findings from the first 30 relevant case studies provided by Michel Bauwens will be made available on the Co-Cities Open Book, forthcoming on www.commoning.city. Constant supervision and guidance for the theoretical framework and the methodological approach was provided by Sheila Foster and Leonardo Morlino.
For case studies in Latin America we have leaned heavily on direct suggestions from Thamy Pogrebinschi. We also relied upon the invaluable data and analysis collected by her and her research team on LATINNO, Innovations for democracy in Latin America. For case studies on sharing cities worldwide we relied upon the "Shareable Sharing Cities: Activating the Urban Commons" and we are thankful to Neal Gorenflo for his support. We are grateful to Aaron Maniam and the team of Oxford Urbanists for their feedbacks and comments that enriched our work. The contribution of LabGov research associates for building the database and carrying out the empirical analysis was indispensable: Chiara De Angelis coordinated the data production team and provided support as lead research associate (2016/2018) and Cosima Malandrino supported the data analysis and communication strategy of the report, first as a graduate intern and later as research associate. Crucial was the research carried out by Chrystie Swiney, Sumedha Jalote and Zezhou Cai that contributed with data entry, data collection and detailed case studies' analysis in US, India and China under the supervision of Sheila Foster at LabGov Georgetown. Lucia Paz Errandonea provided critical support in data entry and graphic visualization during her curricular internship with the LabGov project (spring/summer 2017); Monica Bernardi provided support with data collection in Seoul and Boston.
We would like to express our deep appreciation to Alessia Palladino, Chiara Prevete, Benedetta Gillio, Anna Berti Suman, Sofia Croso Mazzuco, and Alessandro Antonelli for their contribution to the data entry and data collection tasks. The research and papers of graduate and undergradutate students of the course "Urban Law and Policy" in the Department of Political Science at LUISS University have been of help in a variety of ways. A special obligation goes to Gresia Bernardini Marino; Mattia Lupi; Paolo Marro; Serena Ragno; Giulia Balice; Federico Pieri; Elisa del Sordo; Martina Rotolo; Guglielmo Pilutti; Marina Gascòn; Marta Pietro Santi; Greta Bertolucci; Charlotte Poligone; Zita Kučerová. We would like to express our deep appreciation to Alessandra Pirera, Andrea Posada, Eduard Eldman and Danila D'Addazio, the team that designed the visual identity communication and dissemination strategy of the Co-Cities Open Book.
2 The theoretical background and literature of this project, and the conceptual pillars of the Co-city are based on the analytical framework developed in the following publications: Sheila Foster, The City as an Ecological Space: Social Capital and Urban Land Use, 82 NOTRE DAME L. REV. 527 (2006-2007); Sheila Foster, Collective action and the Urban Commons, 58 NOTRE DAME L. REV 57; Christian Iaione, Governing the Urban Commons, 1 IT. J. PUB. L. 170 (2015); Christian Iaione, The CO-city, 75 THE AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY, 2 (2016); Sheila Foster & Christian Iaione, The City as a Commons, 34 YALE L. & POL'Y REV 81 (2016); Christian Iaione, The Law and Policy of Pooling in the city, FORDHAM URBAN LAW JOURNAL 34:2 (2016) and Sheila Foster & Christian Iaione, OSTROM IN THE CITY: DESIGN PRINCIPLES FOR THE URBAN COMMONS, The Nature of cities, https:/www.thenatureofcities.com/2017/08/20/ostrom-city-design-principles-urban-commons/. (20 August 2017).

supported by open data and guided by principles of distributive justice. A co-city is based on urban shared, collaborative, polycentric governance of a variety of urban resources such as environmental, cultural, knowledge and digital goods which are co-managed through contractual or institutionalized public-private-community partnerships. Collaborative, polycentric urban governance involves different forms of resource pooling and cooperation between five possible actors—social innovators (i.e. active citizens, city makers, digital collaboratives, urban regenerators, community gardeners, etc.), public authorities, businesses, civil society organizations, and knowledge institutions (i.e. schools, universities, cultural institutions, museums, academies, etc.). These partnerships give birth to local peer-to-peer experimental, physical, digital and institutional platforms with three main aims: fostering social innovation in urban welfare provision, spurring collaborative economies as a driver of local economic development, and promoting inclusive urban regeneration of blighted areas. Public authorities play an important enabling role in creating and sustaining the co-city. The ultimate goal is the creation of a more just and democratic city.

The Co-Cities Open Book aims to develop a common framework and understanding for "urban (commons) transitions." These transitions include: patterns, processes, practices, and public policies that are community-driven and that position local communities as key political, economic and institutional actors in the delivery of services, production, and management of urban assets or local resources. It seeks to extract from on the ground examples recurrent design principles and common methodological tools employed across the globe and for different urban resources and phenomena. The book uses case studies to map where urban commons innovations are occurring, analyze the features of each individual case, and present the testimony of leaders or key participants in the case studies. One of the main goals in interviews with participants and leaders is to discern whether the projects captured here represent isolated projects or whether they represent a city that is experiencing a transition toward a Co-city. The ultimate objective of this book is to raise awareness about the commonalities among these case-studies and to serve as guidance for urban policy makers, researchers, urban communities interested in transitioning toward a Co-City.

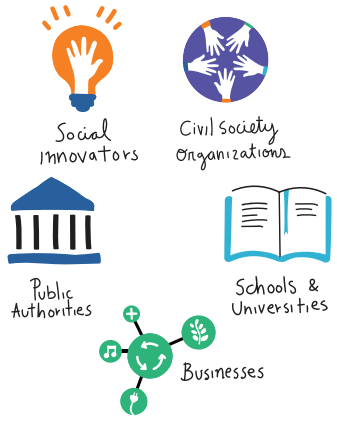
Table of contents



The Co-Cities Protocol

1. The Co-Cities Protocol

Based on the experiment in Bologna and other experiments conducted in Italian cities, an initial protocol of the Co-City[1] was developed, to be further developed and improved through application to other urban contexts (geographic and otherwise). This protocol also helps to make visible the conditions necessary to transition a city from the presence of particular, perhaps isolated, urban commons institutions to the operation of the city as a commons[2]. This protocol is constituted of three elements: the principles, the processes, and the tools. The protocol is designed to create the most favorable environment for innovation through urban commoning, by adopting the conceptual pillars of the urban commons: sharing, collaboration, and polycentrism. The key is to transform the entire city or some parts of it into a laboratory by creating the proper legal and political ecosystem for the installation of shared, collaborative, polycentric urban governance schemes. The protocol is composed of three elements: the design principles; the cycle; the tools. Those elements will be introduced and briefly described in the following paragraphs.



1 Veronica Olivotto, The beginning of the first Co-City: CO-Bologna, in Critical Turning Points-database, Transformative social innovation theory,http:/www.transitsocialinnovation.eu/sii/ctp/ctp4-the-beginning-of-the-first-co-city-co-bologna. (4 April 2016).
2 The theoretical background of the protocol is based on the research efforts on methodological approaches on the commons combined with research efforts on methodological approaches to analyze and design policies or governance experiments around urban assets, infrastructures and services in cities. See generally Amy Poteete, Marco Jannsen, & Elinor Ostrom Working together: collective action, the commons, and multiple methods in practice. (2010). See also Amy Poteete & Elinor Ostrom, In pursuit of comparable concepts and data about collective action, Agricultural Systems 82 (2004), at 215–232. For an overview on the adapted application of methods developed by the Chicago School of Urban Sociology to contemporary urban research, see May T., Perry B., Patrick Le Galès, Saskia Sassen S. & M. Savage. The Future of Urban Sociology. Sociology. 39 (2005) at 343. See also Wu C. Moving from Urban Sociology to the Sociology of the City The American Sociologist, 47, 1 (2016) at 102–114.

1.1 The Design Principles: measuring the transition from the Urban Commons to the City as a Commons.

The design principles

The design principles are the process dimensions which are able to demonstrate the transition from urban commons projects to the city as a commons. They were extracted from the Co-Bologna experience and from field experimentations in other Italian cities, as previously described. Based on the experience applying the Protocol 1.0 in the Italian context, and the observation of its elements at work in other cities in Europe and elsewhere, we have extracted a very preliminary set of basic design principles, or dimensions, that we believe characterize a "Co-City." They are the following: Collective Governance, the Enabling State, Social and Economic Pooling, Experimentalism, and Technological justice.

A. Co-governance

Co-governance refers to the presence or absence of a self-, shared, collaborative or polycentric organization for the governance of the commons in cities. Scholars refer to co-governance by various names or references. These include collective governance[3], shared governance, collaborative governance[4] and polycentrism[5]. Sheila Foster and Christian Iaione have applied these concepts in their work on the city as a commons to demonstrate its application to the urban commons[6]. As argued already by Christian Iaione, one way to imagine and to

3 Elinor Ostrom, Governing the commons (1990).
4 J. Freeman, Collaborative Governance in the Administrative State, UCLA Law Review 45(1): 1-98, 1997; Chris Ansell & Allison Gash, Collaborative Governance in Theory and Practice, Journal of Public Administration Research and Theory 18(4): 543-571, (2008); see also Lisa B. Bingham, Collaborative Governance: Emerging Practices and the Incomplete Legal Framework for Public and Stakeholder Voice, Journal of Dispute Resolution (2): 269-325, (2009) and Lisa B. Bingham, The next generation of administrative law: building the legal infrastructure for collaborative governance, Wisconsin Law Review, 297, (2010). Jan Kooiman, Governing as governance, SAGE, London (2003).
5 The application of the concept of polycentrism to the urban governance has been first proposed by Vincent Ostrom, Charles Tiebout & Robert Warren, The Organization of Government in Metropolitan Areas, in American Political Science Review 55(4): 831-842, 1961 and later applied to the governance of the shared resources by Elinor Ostrom, Beyond Markets and States: Polycentric Governance of Complex Economic System, American Economic Review 100(3): 641-672, (2010)
6 As argued in S. Foster e C. Iaione, supra note 2.

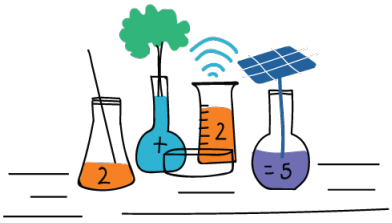
measure the presence of co-governance of a commons is to detect the presence of a quintuple helix system7 of urban innovation. This implies the involvement in urban governance of five actors: 1) active citizens, commoners social innovators, city makers, local communities; 2) public authorities; 3) private actors (national or local businesses; small and medium enterprises; social business) 4) civil society organizations and NGOs; 5) knowledge institutions.

B. Enabling State

Enabling State is the design principle that expresses the role of the public authority or the State[8] in the governance of the commons and identifies the characteristics of an enabling state that facilitates[9] collective actions for the commons. As highlighted by Sheila Foster in her first study on the urban commons, the presence of the State acting as an enabling platform for collective actions might represent a key factor for the success of community projects on the urban commons[10].

C. Social and Economic Pooling

Social and Economic Pooling is the dimension that helps understand the distinction between an urban governance scheme based on co-governance, where different neighborhood actors (i.e. public, private, knowledge, social, civic) share, co-manage, regenerate the urban commons, and an urban governance scheme based on urban pools, where the aforementioned actors coalesce to transform the neighborhoods into social and economic enabling platforms thereby creating self-standing collective institutions based on sustainable, social and solidarity, collaborative, cooperative and circular economic ventures.



D. Experimentalism

Approaches focused on the study of the city as a socio-ecological system have highlighted how the scientific approach to the commons inevitably results applied, experimental and local[11] and suggest the realization of multiple governance experiments that allow the observation of processes and direct work with the subject involved.

E. Tech justice

Finally, Tech Justice[12] highlights the potential of digital infrastructures and access to technology to facilitate collaboration, local development and social cohesion. As observed by Olivier Sylvain,[13] an open digital infrastructure might generate a virtuous cycle: openness generates innovation, that attracts interest from the users and other actors, and this will lead to more investments in technological urban infrastructures bringing benefits to vulnerable groups.

7 The model of the quintuple helix system of urban governance is available in Christian Iaione, The Co-city, The American Journal of Economics and Sociology (2016). See generally M. Ranga, H. Etzkowitz, Triple Helix systems: an analytical framework for innovation policy and practice in the Knowledge Society, 27 Industry & Higher Education 3 (2013), at 242. See also E. G. Carayannis, D.F.J. Campbell, Mode 3'and'Quadruple Helix': toward a 21st century fractal innovation ecosystem, International Journal of Technology Management, 46(3), at 201–234. See also V. E.G. Carayannis, T.D. Barth, D. Campbell, The Quintuple Helix innovation model: global warming as a challenge and driver for innovation, 1 Journal of Innovation and Entrepreneurship, 2 (2012).

8 Quentin R. Grafton, Governance of the commons: a new role for the state? In Land Economics, 504–517, (2001).

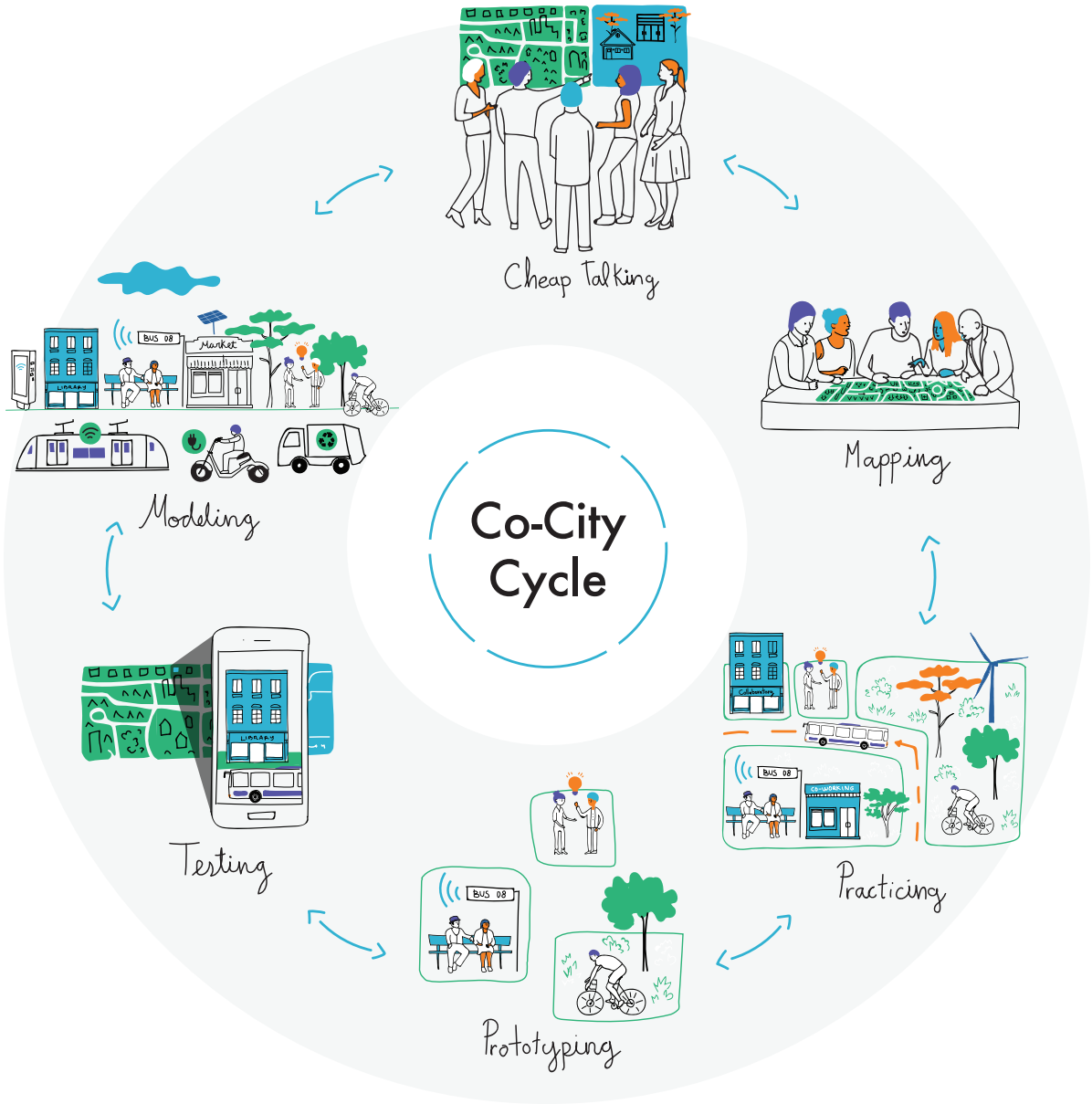
9 Christian Iaione, The platform state, in the Open Book on Urban (Commons) transitions (forthcoming on www.commoning.city).

10 Sheila Foster, Collective action and the Urban Commons, 58 Notre Dame L. Rev 57 (2011)

11 James evans, Resilience, ecology and adaptation in the experimental city, Transactions of the Institute of British Geographers, 230 (2011).

12 Christian Iaione, Elena De Nictolis & Anna Berti Suman, The Internet of Humans (IoH): Human Rights and Co-Governance to achieve Tech Justice in the city. Under review for The Law & Ethics of Human Rights.

13 Olivier Sylvain, Network Equality, Hastings Law Journal 67:(443) (2016).


Co-City
Cycle
Cheap Talking
Mapping
Practicing
Prototyping
Testing
Modeling
BUS 08
Market
Library
Co-working
BUS 08

1.2 The Co-Cities process (or policy cycle)

The Co-Cities process (or policy cycle) in its current version, is composed of six phases: cheap talking, mapping, practicing, prototyping, testing and modeling. The first phase of the protocol is the cheap talking phase. Cheap talking first emerged in game theory[1] and was adopted in the research on common pool resources[2]. It consists in organizing informal settings to allow for discussion on the identification of urban commons, existing or potential, in a certain neighborhood or city district. It is aimed at fostering the identification of potential urban commons and the fostering of an active community through dialogues with key interlocutors in the city (scholars, experts, practitioners). The act of listening and acquiring knowledge from local actors is key in this phase.

The second is the mapping phase which develops simultaneously in two directions: analog (or offline) and digital (online or e-mapping) . The main tools of this phase include fieldwork activities in the relevant area from which information gleaned in the cheap talking phase is employed to begin to map potential urban commons. This phase might also include the use of tools developed in previous applied and experimental research on the urban commons, such as ethnographic work, as well as active field observation and exploratory interviews or surveys. It can also include the creation of a collaborative digital platform as a tool for disseminating information and engaging the community. The mapping phase provides a visualization of urban commons through relevant civic initiatives and self-organization experiences. The aim of the mapping phase is also in part to understand the characteristics of the specific urban context in order to design and prototype appropriate governance tools later on in the process.

The third phase, the practicing phase, is experimental in nature. At the heart of this phase is a "collaboration camp" where synergies are created between emerging commons projects and local authorities. Collaborative actors are identified from various sectors — city residents, social innovators, knowledge based institutions, nonprofit organizations, small and medium local enterprises or CSR programs, other public authorities, etc. — who are willing to participate in co-working sessions organized to identify possible synergies and alignment between projects and relevant actors. These might culminate in a "collaboration day," which could take the form of placemaking events—e.g., an urban commons civic maintenance festival, temporary utilization of abandoned building or spaces, micro-regeneration interventions, the creation of community gardens, the cleaning, reopening and temporary use of abandoned spaces, micro-regeneration projects, or organization of cultural events. —to test, experiment and coordinate the ideas that arise out of the co-working sessions.

The fourth phase, the prototyping phase, focuses on governance innovation. In this phase, participants and policymakers reflect on the mapping and practicing phases to extract the specific characteristics and needs of the community served. Only then can participants undertake the co-design and / or implementation of governance or policy. The goal is to verify the conditions that promote the establishment of trust links within the community and with external actors. Finally, the hypothesis provided for the realization of co-design pathways, with the support of external expert professionals, to follow and accompany the self-organization processes for the construction of governance schemes for urban commons.

The penultimate phase is the testing phase. In this phase, the governance/policy prototype is tested through implementation. Implementation is monitored and objectively evaluated[3]. The evaluation has both qualitative and quantitative metrics to assess whether implementation of the policy is consistent with the design principles and objectives identified throughout the process by the different participants. Of course, evaluation methods cannot be copied and pasted uncritically. It is important to adopt the evaluation methods and techniques to the local conditions and the peculiarities of policy tools for urban co-governance.

Finally, the modeling phase, where the governance output prototyped and evaluated in light of the first implementation is adapted to the legal and institutional framework of the city in order to ensure the balance with the institutional and legal urban ecosystem. This phase is realized through the study of urban norms and relevant regulations and administrative acts and through dialogue with civil servants and policy makers. This is a very experimental phase involving perhaps the suspension of previous regulatory rules, the altering of bureaucratic processes, and the drafting of new policies which might also have a sunset clause and then re-evaluation period. It can also involve the establishment of external or internal offices or support infrastructure in the city to support the policies and the "commoning" across the city.

1. 3 The Tools

This section will summarize the recurring institutional, legal, learning, and financial mechanisms or tools that are employed to construct, govern, and sustain a variety of shared urban resources consistent with the principles above.

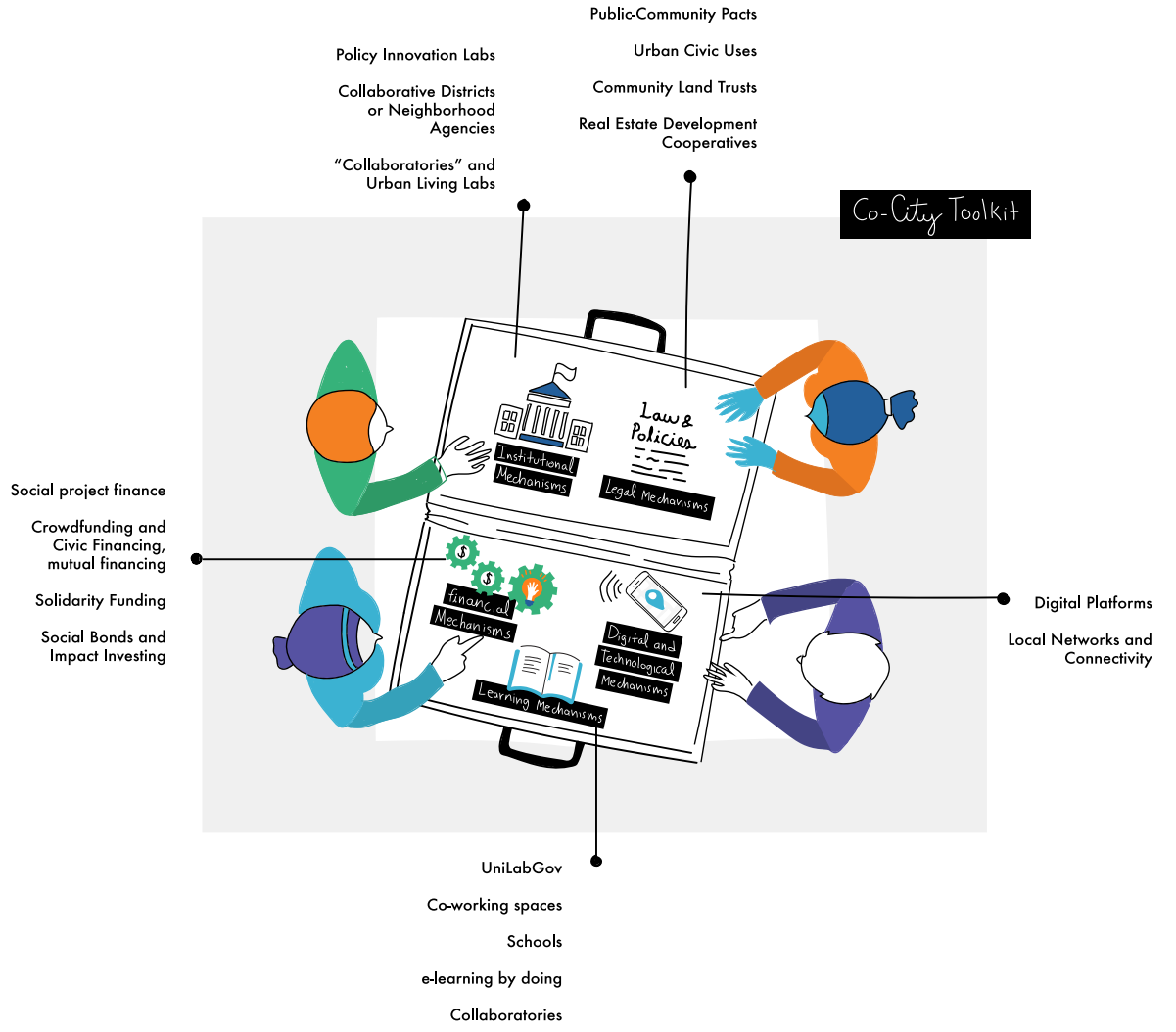
a. **Institutional Tools**

The meaning of the word commons goes beyond the idea of a shared resource, or the related community. The commons is the institutional arrangement that allows the coordination and sharing of those resources, and helps to ensure their accessibility and sustainability for a wide variety of users. Our empirical research has demonstrated that the institutional ecosystem of a co-city involves several forms of co-governance at different scales. Institutional tools are those physical and virtual spaces arranged within the city administration or in key areas for the City such as facilities, spaces, laboratories created to generate environments that facilitate co-creation of co-governance of different kinds of shared urban resources, assets and services. Examples of such institutional arrangements are Policy Innovation

1 J. Farrell, M. Rabin, Cheap Talk, 10 The Journal of Economic Perspectives, 3 103-118, (1996).

2 Amy Poteete, Marco Janssen & Elinor Ostrom, Working together: collective action, the commons, and multiple methods in practice, 29, (2010).

3 Michael P. Howlett, Scott Fritzen, M. Ramesh, Xun Wu, The Public Policy Primer: Managing the Policy Process, Routledge, New York (2010).



Labs and Collaborative Working Hubs, Neighborhood Agencies and "Collaboratories" or Urban Living Labs, that operate as a catalyst to foster mutual learning and co-creation (Ostrom & Hess, 2007, 13, 327).

a. Legal Tools

There are a wide range of legal instruments available to implement an urban co-governance scheme and to support the kinds of institutional tools showed above. The tools are designed to ensure that shared resources meet the needs of local communities, and often are focused on making those resources more available, accessible and affordable to a broader range of urban residents. Legal tools for governing the commons came into focus with the well-known Bologna Regulation on Collaboration for the Care and Regeneration of the Urban Commons. Other Examples of successful legal tools adopted by cities are urban Civic Uses and Community Land Trusts.

b. Economic and Financial Tools

There are also economic and financial tools that enable social and pooling economies and are created by attracting funding from different urban actors. These pooled sources of funding form around the collaborative economy and support the efforts of those city residents who partner with various stakeholders from other sectors to cooperate for the general interest. Some financial tools rely heavily on civic financing and crowdfunding, or solidarity funding through cooperative institutions. Social project finance tools, such as impact investing and social bonds, or the use of blended capital, are economic and financial strategies aimed at developing a social and community-based economy to support regeneration of blighted urban areas through economic development.

c. Digital and Technological Tools

Technological and digital tools can be both the ends and means of urban co-governance strategies. Access to technological infrastructures can be a means to social justice because many services and income opportunities depend on acces to high speed or broadband connection. In order to guarantee access to the technological and digital infrastructures in underserved areas, communities can self-organize for autonomous access, such through wireless community networks. Similarly in the energy area, many communities are beginning to self-produce or contribute to the management of energy distribution through tech innovations, such as microgrids or by creating energy communities.

1.4 The experimental phase in Italian cities: the Co-Cities experimentations

The principles and tools presented above have served as a conceptual background for the design of a process-based protocol for "collaborative cities" or "co-cities". The protocol was first applied and implemented in 2014 in the Italian cities of Mantua (the Co-Mantova project) and Bologna (the Co-Bologna project). Then Battipaglia (Co-Battipaglia), Reggio Emilia (Co-Reggio Emilia), Toscana (Collaborative Tuscany) and Roma (Co-Rome). The following section provides a brief overview of the experimental fieldwork conducted in Italian cities in which the main concepts and theories outlined above have been applied.

1.4.1 The Co-Bologna program

C-Bologna (https:/co-bologna.it/) was the first Co-Cities experimentation carried out by LabGov. It is the first applied research project aimed at applying, testing and adapting to the urban environment the design principles for the governance of the commons developed by Elinor Ostrom. The Co-Bologna program was developed within the context of a policy strategy carried out by the City of Bologna to implement a policy ecosystem supporting civic collaboration. In 2011, the City of Bologna initiated a policy process to introduce collaboration as a method for governing the city and many of its urban resources. After two years of field experimentation in three city neighborhoods, and in the context of the "City as a Commons" project supported by the Fondazione del Monte di Bologna and Ravenna[1], in February 2014 the City of Bologna adopted a regulatory framework, the Bologna Regulation on Civic Collaboration for the Urban Commons.

The central regulatory tool of the Bologna Regulation is the "pact of collaboration," through which city government and local residents and other actors (informal groups, NGO's, private entities) agree on interventions of care and regeneration of urban commons across the city (green space, abandoned buildings, squares, etc.). Since the approval of the Regulation, more than 400 pacts of collaboration have been signed[2]. The City of Bologna has been internationally recognized for this regulation and the successful implementation of these pacts to govern urban commons throughout the City.

The Co-Bologna project, initiated in 2015, aimed to apply the same design principles animating governance of the urban commons to other local public policies. Co-Bologna is an open pact of collaboration between the City of Bologna and the Foundation Del Monte of Bologna and Ravenna and operated under the scientific coordination of LabGov. The second phase involves the experimentation of co-designed governance institutions in three fieldwork sites which correspond to three city areas that characterize three main pillars of the Co-City. The neighborhoods each represent one of these pillars: Pilastro (making together, urban commons) Bolognina (living together, social innovation) and Croce del Biacco (growing together, collaborative economy district).

Another core aspect of the Co-Bologna process is the establishment of an Office for Civic Imagination. The Office for Civic Imagination is a policy innovation lab, structured as a co-working area internal to the municipal administration through which civil servants can work together in order to find innovative solutions to common urban problems and to implement those solutions in accordance with the principle of civic collaboration.

Finally, the Co-Bologna process also includes the evaluation of the Bologna Regulation, in order to understand the impact of the public policy on urban democracy and on the urban commons. This evaluation is one of the crucial phases of the Co-city "protocol," which describes the process of creating or designing a collaborative public policy to implement the city as a commons. The evaluation process is conceived as an intermediate phase between prototyping and modeling, intended to enrich the understanding of the evolving policy process and to introduce appropriate corrections.

The evaluation process consisted, in the first phase, of a qualitative desk analysis of the 280 collaboration pacts generated as a result of the Regulation, in order to verify what are the conditions in the city fostering collaboration between different actors and the choice of the objectives (micro-regeneration, management of a physical space, etc). The second phase consisted of a survey submitted to all the signers of the pacts, to gain deeper knowledge of the impact of the process. This methodology is coherent with the principles of experimentation and adaptation as crucial characteristic of an innovative collaborative policy making at the urban level.

The Co-Bologna process has helped us to conceive of, implement, and model the Co-City protocol, as well as to extract the design principles guiding the research and analysis contained in this open book. The experience of the Co-City protocol has guided further experimentation and testing in other Co-City sites around Italy: Co-Mantova, Co-Battipaglia, Co-Reggio Emilia, Collaborative Tuscany, Co-Rome.

1.4.2 Co-Mantova – culture as a commons

After the launch of the Co-Bologna project, Co-Mantova[3] was born. Like Bologna, this project began as an "institutional prototype" focused on the collaborative care and regeneration of cultural commons and included also collaboration pacts to activate local collaborative governance in the city. As in Bologna, the pacts are an institutional tool to promote and collect the energies of the 5 actors of the quintuple helix.

The first step of the process in the City of Mantova was "seeding social innovation" through a collaborative

1 Elinor Ostrom & Charlotte Hess (eds) Understanding knowledge as a commons, Cambridge, The MIT Press (2007) 13, 327.

2 The City of Bologna created a section of the City Institutional Platform dedicated exclusively to the implementation of the Regulation. On the Comunità_Iperbole Platform you will find the pacts' of collaboration proposals, the final text approved, news and updated about the Regulation and the public notice for pacts proposals and public discussions on the urban commons. Available at: http:/partecipa.comune.bologna.it/beni-comuni.

3 Co-Bologna materials are available at: http:/co-bologna.it/

call for ideas regarding "Culture as a Commons" and to bring forth social innovators. This call was promoted by the Province of Mantova, which identified 7 main projects by young people under the age of 29 years concerning the collective, shared management of cultural commons. In Mantova, both culture and cultural heritage involve material and immaterial resources and are considered the cornerstone on which to build local alliances among all local actors willing to interpret "culture as a commons." Cultural heritage became the driving force for a community-led, commons-oriented new development paradigm for the territory of Mantova as a way to revitalize Mantova by harnessing social innovation, creativity and digitalization.

The second step of the process was establishing the co-design laboratory, "Entrepreneurs for the Commons," which was promoted by the "Cooperatives and Civil Economy Entrepreneurs Group" – established within the Chamber of Commerce of Mantova—as an ideas camp where the seven projects from the call were cultivated and synergies created between projects and with the city. The Lab approach is based on the direct involvement of the actors of the project who participate in co-design and co-working. The Mantova Lab's goal was the development of innovative solutions for the shared management of cultural commons, supported by the use of ICT.

Another aspect of the Co-Mantova project was the digitalization of cultural heritage, a crucial element for the development of cultural economy, through fab labs. These fab labs are the incubators of the third industrial revolution, training for social innovation. The Mantova lab applies the method of co-design, participatory design, collaborative communication as a means to prototype and test practices involving the shared care of cultural commons. Project activities require testing of a living lab and Fab Lab and the creation of an incubator for cultural and creative enterprises and cooperative placemaking. The end result is the care and regeneration of the cultural heritage of Mantova, which can be cultivated, improved and finally become the engine of a "collaborative cultural and creative community interest enterprise". According to the project, local businesses and entrepreneurs play an essential role in the shared management of cultural commons, functioning as an intersection point among public administration, non-profit sector and citizens, following the idea of sharing resources and competences of each one to reach a common aim.

The third phase was the governance camp, a collaborative exercise in prototyping aimed at creating a long-term, sustainable form of commons management. This phase gave birth to Co-Mantova and led to the drafting of the Co-Mantova Collaborative Governance Pact, the Collaboration Toolkit and the Sustainability Plan, which was presented to the public during the Festival of Cooperation on November 27th 2015.

1.4.3 Co-Battipaglia – collaborative urbanism

Co-Battipaglia (https:/co-battipaglia.commoning.city/) is the result of a co-design/co-planning Laboratory "Organized legality," which is open and collaborative. It has become a nursery of civic energy for growing the future of the territory. The Prefect, appointed in Battipaglia in 2014, after the dissolution of the Municipal Council due to Mafia infiltrations, commissioned a study from both architectural firm Alvisi-Kirimoto and LabGov in order to develop the strategic guidelines for the Municipal City Plan (PUC). The team strove to produce the guidelines for the realization of a collaborative territorial/local Pact for the care and regeneration of local commons. The Pact would create a stable public, private, community partnership, to be technically validated and shared between citizens and local institutions.

From February to March 2015 the team interacted with associations, active citizens, social innovators, enterprises, public administrations and city schools. The meetings have been held in the ex-Scuola De Amicis of Battipaglia. From the participatory process emerged four main themes, that served as the base for the definition of a urban collaborative strategy for the regeneration and redevelopment of the city:

1. Public Battipaglia: recovery and reuse of abandoned public spaces (green areas, meeting places, etc.);
2. Regenerated Battipaglia: reactivation of old industrial areas, masserie and cascine (typical farmhouses), and seized mafia assets as source of potential economic development;
3. Ecological Battipaglia: tackling geological risk and groundwater pollution, setting land use regulations (quarries and greenhouses), protecting coastline and redesigning urban transport;
4. Creative Battipaglia: turning sites such as the ex-Scuola De Amicis, the Castelluccio, and the Tabacchificio into culture, research, and science hubs.

1.4.4 Co-Reggio Emilia – a Collaboratory as an incubator for community-led economic development.

Co-Reggio Emilia is a process promoted by the City of Reggio Emilia in collaboration with the University of Modena and Reggio Emilia and the strategic support of Kilowatt, a social innovation platform based in Bologna. The Co-Reggio Emilia process began with CollaboratorioRe, a co-design process leading to the creation of the Open Laboratory of Reggio Emilia. #CollaboratorioRe aims at creating the first incubator of sharing and pooling economy of Reggio Emilia, a new urban actor which will revolutionize the way we think about the city and will emphasize the role that civic collaboration should play in the care and management of the urban commons.

The first phase, which came to conclusion in the beginning of November 2016, consisted of launching a public call to allow all the actors to express their interest in participating in the co-design process and to propose their ideas. Along with this, a series of thematic

workshops and presentations took place and involved the participation of hundreds of citizens. This step ended with two co-design sessions where the participants analyzed numerous projects (more than 60) that had already been proposed and tried to define together how to make their collaborative energies converge towards tangible actions.

The first phase saw the emergence of themes, values and suggestions to identify those elements that could become the foundations of the open laboratory. They included the creation of a cultural and creative enterprise, the construction of community cooperatives, new forms of welfare, the creation of programs to spread a form of "urban pedagogy" (starting from the already famous Reggio Approach), and the formation of a "community observatory" to measure and monitor the impact of the new initiatives.

Following the co-design sessions, a second phase began which involved the transformation of Reggio Emilia into a field of experimentation for collaboration. In this phase, multiple realities converged to prompt participants to work together to produce immediate solutions to the needs that had been identified. During the early winter months the participants organized into four different communities and worked on the development of four different prototypes:

1. a cultural and creative enterprise, as a model to design the governance of the collective enterprise that will have the task to manage the cultural and archeological heritage site "Chiostri di San Pietro" in Reggio Emilia;

2. a community cooperative, as a tool to create a public-private-community partnership using new technologies and spurring innovative forms of community welfare provision;

3. an observatory on the measurement of environmental, social, economic and cultural impacts and monitoring of the integration of services to the community

4. an urban pedagogy clinic to extend the "Reggio Approach" to the entire city as a way to spread a culture of collaboration and cooperativism and to foster the exchange of skills among inhabitants.

Building on what emerged from the whole process, in the third phase it was possible to define the guidelines for the Open Laboratory and to design the identity, the methods and the form of governance of the future actor.

The Open Laboratory has thus been imagined as a key instrument for the development of innovative socio-economic solutions for individual and community needs, through new forms of collaborative economy. The 'commons' will be at the center of the activity of the laboratory, highlighting how the shared and participatory governance of these resources can lead to generate social and economic benefits for the whole community.

Digital tools and technology will also serve as key enhancing factors for the development of innovative services, products, and innovative public policy solutions, further allowing the lab to become a true incubator of new ideas and sustainable projects, able to open up job opportunities and to link young generations to the job market.

1.4.5 Collaborative Tuscany – co-creating a public policy on the sharing economy.

CollaboraToscana or Collaborative Tuscany (Co-Tuscany) is a process activated by Presidency of the Tuscany Region (which holds the mandate to encourage innovation and participation) with the aim of creating a "Collaborative Tuscany Green Book", which is a policy paper outlining the Agenda for a regional policy on sharing and collaborative economy. The process is curated in terms of its methodology by other partners, including Sociolab with the support of Collaboriamo, a network of collaborative economy experiences in Italy. The green book on sharing and collaborative economy will contain a map of the regional public policies that need to be put into synergy and a proposition of goals, actions and measures, identified through the co-design process, that will have to be applied on different levels to maximize the opportunities while limiting the risks involved in the new practices that will develop in this field.

#CollaboraToscana represents a first experience on the regional, national and international level in terms of the co-creation of a public policy on the sharing economy through the involvement of local actors. The process is inspired by the principles and methods used in 2011-2014 for the development of the Bologna Regulation and by the experience with the drafting process of the Opinion on the local and regional dimension of the Sharing Economy produced by the Committee of the Regions of the European Union. #CollaboraToscana builds on the knowledge acquired through these previous experiences but also develops its peculiar features. First, it is important to take note of the choice to define the project around the four pillars of the local public economy: local infrastructures, common goods, collaborative services and local public governance. Particularly innovative is the governance aspect, as it implies the willingness to question and to rethink the role of the public sector. Another element of innovation lies in the choice of the green book as the outcome of the process. Such choice reflects an experimentalist and European approach, as the green book is an instrument that belongs to the European legislative practice and is not common in the Italian one.

The process of #CollaboraToscana opened with a first phase envisioning a series of thematic workshops and co-design sessions that took place between June and November 2016. These workshops saw the involvement of different components of the regional structure and of stakeholders coming from multiple realities (enterprises, start-ups, third sector, active citizenship). The process aimed at building a complete understanding of the concept of collaboration (meaning, opportunities and risks), at deepening the reflection on the themes around which the discourse on collaboration can be articulated (infrastructures, services, goods and governance) and at developing instruments (digital, political, regulative, etc) that could possibly build a policy on sharing and collaboration.

Drawing from the values, ideas and suggestions that have emerged from the workshops, the co-design community of #CollaboraToscana will proceed to define, together with members of the regional administration, the principles and the administrative, regulatory and public policy instrument needed to enable collective action and to improve local collective democracy. Through the process of #CollaboraToscana it will be possible to produce a green book on sharing and pooling economy that will present a map of regional public policies together with a proposal of objectives and measures to apply at different levels in order to maximize the opportunities of the newly emerging sharing and pooling practices.

1.4.6 Co-Rome social partnership. Experimenting co-governance at the district level.

During the academic year 2015/2016, the applied research and teaching platform run by LabGov at LUISS University of Rome started an applied research and experimentation process on co-governance at the district – level in a metropolitan city. The process was aimed at experimenting the Co-City protocol, applying the first four phases (knowing, mapping, practicing, prototyping) at the district-level in the biggest city in Italy, the City of Rome. The project started through a process that involved university students and local actors active in the field of the urban commons in the city of Rome: local associations, institutions, entrepreneurs and professionals.

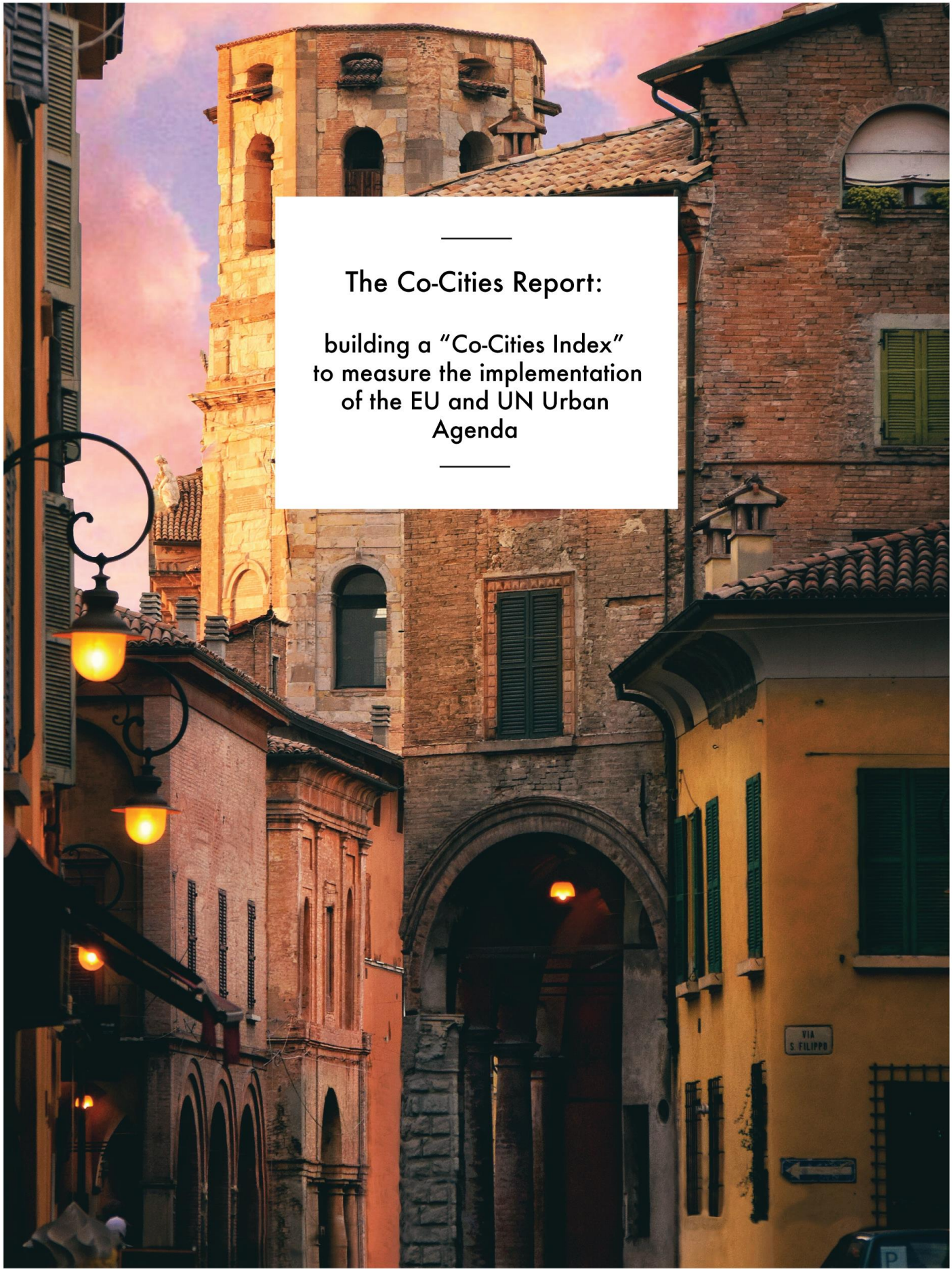
In the first phase, cheap talking, there were a series of preparatory meetings and discussions involving scholars, practitioners, experts and activist working on urban co-governance and representatives of collaborative communities active on the Roman territory. A mapping phase followed, consisting in activities in both analogue and digital mapping. As such, on-the-field explorations and dialogues with local actors were conducted alongside with the development of a digital platform (the Co-Roma platform) allowing for a collaborative and open discovery of the territory. The mapping phase allowed the location of different fields suitable for the activation of an experimental process, and a further assessment of the suitability of these areas a series of micro-experimentations were developed on the ground.

The knowing, mapping and practicing processes led to the identification of a "co-district" as the most suitable area in the city to experiment with urban co-governance. The co-district is composed of specific neighborhoods (Centocelle; Alessandrino; Torre Spaccata; Tor Sapienza) representing the lowest Human Development Index in the City of Rome as demonstrated by the presence of high or very high social and economic vulnerability indicators. At the same time, it is characterized by the presence of different actors that are active or are interested in being involved in a process to contribute to the care of the commons in the area, or to start up a project of urban co-governance of the commons.

Having identified the experimentation field within the City, the project has entered in the practicing and prototyping phase, and a co-design process was activated. One key objective of the prototyping phase was the creation of a local working group, which is collaboratively managed and committed to working together. During this phase, through several co-design workshops[1], it was possible to locate and bring together all the relevant stakeholders and to collectively define the future actions for the recovery of the Archeological Park. Using co-design techniques and instruments, the workshops guided the community in a complex process which, starting from self-reflection and from the identification of the group's strengths and objectives and of the community needs, allowed for the identification of priorities and of possible future actions.

The co-design path led to the creation of a community association (Comunità per il Parco Pubblico di Centocelle) for the care and regeneration of commons area. Since its creation the community has promoted several actions, facilitated and supported with technical expertise within the Co-Rome process. The kind of activities that the CPPC community carries out ranging from the opening of passages for pedestrians to the planting of trees, with the aim of making the park more accessible and livable, while at the same time creating the basis for further collaboration within the community and outside of it, with the local stakeholders and the municipality.

1 The digital storytelling of the fieldwork in the "Co-district" in Rome is available here: http://co-roma.it/co-roma-2/cantiere-co-distretto-roma-sud-est/.



The Co-Cities Report:

building a "Co-Cities Index" to measure the implementation of the EU and UN Urban Agenda

CO CITIES 2+2=5

LAB GOV.City

LUISS

GEORGETOWN UNIVERSITY

II. The Co–Cities Report: building a "Co–Cities Index" to measure the implementation of the EU and UN Urban Agenda

The second part of the open book is the Co-Cities Report, the culmination of a 5-year long research project seeking to investigate and experiment new forms of collaborative city-making which are pushing urban areas towards new frontiers of participatory urban governance, inclusive economic growth and social innovation. The case studies gathered here come from different kinds of cities located all around the world, and include groundbreaking experiments in Bologna (Italy), as well as in other Italian cities (e.g. Milan, Rome, Palermo, Bari, etc.), and global cities such as Seoul (South Korea), San Francisco (California, USA), Barcelona (Spain), and Amsterdam (Netherlands).

The report presents a dataset of 67 cities that we surveyed over 18 months (from December 2015 to June 2017). The dataset provides 74 brief case examples of urban commons projects and public policies from the cities mapped. The dataset consists of examples from cities located in different geopolitical contexts. In addition to presenting the case studies here, all the case studies are also published on the web platform commoning.city. Our intention is that commoning.city will become an international mapping platform for the urban commons and for cities that want to embrace a transition towards the commons paradigm.

The goal of this research project is to enhance our collective knowledge about the various ways to govern urban commons, and the city itself as a commons, in different geographic, social and economic contexts. The case studies, both community-led and those that are institutionalized in the local government, are important data points and empirical inputs into the larger effort to explicate the dynamic process (or transition) from a city where urban commons institutions are present to one where we see the emergence of networked urban commons. Where we are able to identify a network of urban commons, or some degree of polycentricism in the governance of urban resources, then we can confidently begin to see the transformation of the city into a commons — a collaborative space—supported and enabled by the state.

What are the conditions that foster the development and networking of these efforts, and allow us to identify the characteristics of a "Co-City Transition"? What are the constraints that impair the emergence of a Co-City, a city in which the ground is ripe for local actors to share and cooperate to generate and manage common goods? The dataset that we have collected is only a starting point, but it offers important examples from cities worldwide in which there are emerging community or city-level initiatives that are pushing urban areas towards new frontiers of collaborative urban governance, social and economic pooling, and inclusive and more just city-making. The analysis of the dataset aims to highlight common patterns and differences and to test empirically the relevant dimensions of the Co-City design principles.

Ultimately, thanks to the Co-cities report we were able to create the first index able to measure how cities are implementing the right to the city through co-governance. Thus, the Co-Cities index serves as a fundamental tool for the international community in order to measure the implementation of some of the objectives that have been set by the New Urban Agenda.

2.1 The Co–Cities Report: building a "Co–Cities Index" to measure the implementation of the EU and UN Urban Agenda

The theoretical framework presented in this report is a fresh analysis of the theories developed in previous research of the authors, updated through the lessons learned from concrete experimentation. Empirical knowledge is crucial in providing a complete understanding of the mechanisms that promote the transition from the urban commons to the city as a commons. The Co-Cities dimensions or design principles previously articulated need to be verified/tested

empirically through the observation of public policies and community-led practices around the commons in urban contexts. As such, the Co-Cities index presented here allows the categorization of cities according to the empirical manifestation and the degree of intensity of the five dimensions or design principles.

This research project also represents a significant contribution to the international urban community, as it ultimately proposes one of the first evaluation standards to measure the implementation of the Sustainable Development Goals as well as the New Urban Agenda and the European Urban Agenda in cities around the world. As previously mentioned, the empirical testing of the Co-Cities dimensions or design principles through the observation of public policies and community-led practices around the commons in urban context led to the building of a Co-City Index, a measuring instrument that can classify cities based on a gradient.

The value of this research therefore lies in the design of such an index – the Co-City index – that will serve as a powerful tool for cities and administrations around the world in order to measure the implementation of the principles listed in the SDGs and the New Urban Agenda. While widely shared, the SDGs and the principles included in the New Urban Agenda hardly ever suggest a clear policy design or implementation strategy in order to secure the success of public policies in our cities. Especially in the case of concepts like 'the right to the city', it becomes extremely difficult to establish whether a city has been able to implement such a principle, and in turn what kind of examples are to be followed in order to implement it.

The Co-Cities Open Book therefore aims to provide methodological principles, case study analysis, and quantitative tools that can help implement and measure the effective implementation of Sustainable Development Goals and the New Urban Agenda especially in Least Developed Countries. The Protocol presented in the Open Book has in fact already been tested in European and North American cities. Its application can further represent a useful opportunity for cities in Least Developed Countries as a tool to design urban justice and democracy and thereby also measure the implementation of some of the New Urban Agenda goals, such as goals 13 and 19, or the Sustainable Development goals 16 and 17, in particular the sub goals 16.7, 17.17 and 17.19.

Through our research and action we demonstrated that this protocol facilitates the achievement of sustainable urban development, through collaboration with local communities, contributing at the same time to the capacity building of local authorities, fostering the active inclusion of local stakeholders and the collaboration among civic, knowledge, public/private actors for the cooperative management of urban resources.

The Co-Cities Report presents a dataset of 67 cities that we surveyed over 18 months (from December 2015 to June 2017). The dataset provides 74 brief case examples of urban commons projects and public policies from the cities mapped. The dataset consists of examples from cities located in different geopolitical contexts. In addition to presenting the case studies here, all the case studies are also published on the web platform commoning.city, launched in August 2018.

Our intention is that commoning.city will become an international mapping platform for the urban commons and for cities that want to embrace a transition towards the commons paradigm. On this platform, local practitioners, local officials, engaged residents and others are able to "map" themselves by completing a simple questionnaire (available in the "Map Your Project" section of the website). Once mapped on the platform, the project promoter will then receive the text of the in-depth interview, allowing the project to be included on the site and as part of the research project.

We decided to strengthen the theoretical framework by analyzing case studies from different geographical context. We therefore started an exploratory research of case studies of urban commons project and public policies with the aim of building a dataset of cities in which relevant innovations of both community led and institutional designed processes are arising. We then applied the analytical tool presented in the first section of the report with the aim of testing the key dimensions of the Co-City that we theorized and experimented in Italy and then to construct a Co-City gradient. The next two sections will introduce a first version of the dataset of 100 cities and 165 case studies, and the in-depth analysis of 50 cities based on interviews with key case studies testimonials (policy makers and practitioners).

2.2 Methodology for data selection and data collection

The case studies have been extracted from different sources, including those listed below. The Co-Cities database, that will be soon available on commoning.city,

indicates detailed source information for each case study.

1. The papers presented at the The City as a Commons conference, mentioned earlier, contained many useful cases and examples of urban commons in different geographic contexts. These papers are available in the Digital Library of the Commons or published elsewhere and thus are fully accessible.

2. Scientific magazines covering the following themes: commons (i.e. The International journal of the commons); urban studies ("CITY – analysis of urban trends, culture, theory, policy, action"; "Policy studies"; "Urban policy and research"; "Urban, planning and transport research"; "Journal of Urbanism: International Research on Placemaking and Urban Sustainability"; "Journal of Urban Affairs").

3. Academic conferences on the commons and urban commons in particular, urban research, cities, policy studies. In addition to the City as a Commons conference in Bologna, also the 4th conference on good economy; relevant thematic events on the commons and city making (i.e the New Democracy workshops held by Pakhuis de Zwijger – Amsterdam; Sharitaly events in Italy; GSEF 2016 – Forum mondial de l'économie sociale; Urbanpromo conferences in Italy; Innovative City Development meeting in Madrid; the World Forum on urban violence and education for coexistence and peace held in Madrid; UNIVERSSE 2017 - the 4th European Congress for Social Solidarity Economy held in Athens; Verge New York City 2017 held at the New School.

4. Urban media (Shareable, Citiscope, CityLab, Cities in Transition, Guardian Cities, P2P Foundation,Remixthecommons, OnTheCommons).

5. Direct suggestions from key experts, scholars and practioners: David Bollier, Silke Helfrich, Anna Davies, Marie Dellenbaugh, Fabiana Bettini, Thamy Pogrebinschi, Ezio Manzini, Eduardo Staszowski, Martin Kornberger.

6. In order to reach geographical areas not covered through the above-mentioned samples, we also engaged in some internet data mining through established internet providers (Google, Bing) and scientific databases (Summon Discovery) using the following keywords: commons, urban commons, community land trust, wi-fi community network, collaborative neighborhood, collaborative district, collaborative governance, community-managed services.

The cities we have investigated were selected in order to endow us with sufficient knowledge of urban commons transition in different countries and contexts. The data collection protocol has been identical for all the case studies. We identified and included a group of case studies for every geographical area (i.e. Southern Europe, Central and Northern Europe, Eastern Europe, North America, Central America and Latin America, Northern Africa, Subsaharian Africa, Asia, Oceania), in order to capture diversity.

All cities has been collected in a dataset, which is going to be soon available on commoning.city, and for each of them a short record card has been produced and uploaded on the commons map, including the main information collected through the answers to the questionnaires and through online data mining, achieved via collection of information on scientific papers and sector magazines. The record card uploaded on the website is built as following:

City	
Name of the Project/Public Policy	
Catchment Area	
Date Initiated	
Shared or co-governance	
Relationship to State	
Pooling of Social and Economic Resources	
Experimentalism	
Digital Infrastructure, Open Data, Other Aspects	

Local Need(s) or Services Provided	
Comment	
References, sources, contact person(s)	

Hereafter, we present a view of the 135 cities mapped, for a total amount of 418 case studies.

The Co–Cities DATASET

Totals

REGION	CITIES	CASES
Europe	**66**	**302**
North America	**27**	**46**
Central and Latin America	**18**	**25**
Africa	**15**	**18**
Asia	**21**	**23**
Oceania	**4**	**4**
TOTAL	**151**	**418**

2.3 Coding Cities

The process for collecting the data contained in this report involved contacting and interviewing a representative for each case study mapped. Out of the 100 identified cities, we received answers from 80 of them so far. This report presents the graphic visualization of the results of the empirical analysis carried out on the case studies. The Codebook, methodology and analysis will be published on scientific journals and the link will be provided on the Co-Cities Open Book webpage as soon as they are published.

At this stage of analysis this work does not imply any comparison between the collected case studies, which is going to be carried in a second phase of the research, when a larger number of case studies will be collected in order to have good representation of all the geographical areas. In this report, the analysis of the 80 cities is strictly descriptive, and its aim is to start emphasizing the relevant aspects of each city and to build a classification criteria for the four dimensions.

2.3.1 Europe

The European continent has been divided, according to the classification used in the World Cities Report 2016, into the following geographical areas:

1. Southern Europe: Greece, Italy, Serbia, Spain;
2. Central and Northern Europe: Belgium, France, Netherlands, Germany, Czech Republic, Scotland, Sweden, Ireland, United Kingdom.

The European cities will be then presented according to this classification, and in the analysis the cities will be aggregated according to it. In order to increase the readability of the radar graphs, we have chosen to code a maximum of cities per graph: in geographical areas including more than 3 cities we have produced multiple graphs, using the geographical dimension as a criteria for the aggregation of cities.

Southern Europe

(Greece: Athens; Italy: Milan, Naples, Reggio Emilia, Rome, Turin, Bologna, Sassari, Messina; Serbia: Belgrade; Spain: Barcelona, Madrid, Zaragoza)

1) Athens, Greece

Summary

The city of Athens has been analyzed through the lens of SynAthina, which is an official project of the city, supported by the Mayor and managed by the Vice-Mayoral Office for Civil Society, to augment autonomous citizen initiatives that aim to improve the quality of life in Athens and help solve its social problems. The four-step process maps and collects, interconnects, and evaluates with the aim of supporting those initiatives, and to integrate successful projects in the city's regulatory framework. The project was funded philanthropically but aims to be autonomous after the external funding period ends in March 2018. The project aims at developing a 'toolkit of toolkits' for 'citymakers' everywhere, but especially with interconnected EU-based cities. Its two flagship initiatives are a revival of a local market and a citizen-supported anti-tagging effort. The project considers itself unique in its capacity to transform the regulatory framework of the city.

Analysis

- Catchment area: up to city level;
- Urban collective governance: supported by Mayor and managed by Vice Mayoral Office;
- The enabling State: the municipality fully supports the project up to integration in regulatory framework;
- Poolism: shared knowledge and interconnection of projects under leadership of city;
- Experimentalism: four-step methodology aimed at replicability in other cities which includes mapping, interconnecting, evaluating and supporting;
- Tech justice: the tool is a web platform

2) Barcelona, Spain

Summary

The city of Barcelona has been analyzed through interviews to referents of several urban policies that introduces radical and commons-oriented changes in the governance of urban assets, resources and local public services: the Social Procurement of the City, the Citizen Heritage Regulation, the Energetic Sovereignty Plan, Other Economies, B-Mincome and the case study of Fab City Barcelona. In 2015, Ada Colau, one of the founder members of this party was elected as a mayor of the city. With the "Pla d'Actuació Municipal 2016-2019" (PAM) the new government claimed that the goals of their administration would be economic and social development of the city with sustainability, and to reverse dynamics of polarization and inequality. Nevertheless, this document has not been approved by the Plenari del Consell de Ciutat (the City Council). With these guidelines, they have launched the first plans focusing on housing, energetic and digital sovereignty, mobility and citizen participation.

Analysis

- Geographical Dimension: City of Barcelona and bioregion;
- Catchment area: neighborhood by neighborhood, policies at city level;
- Urban collective governance: The city is strongly encouraging new forms of collective governance;

- The enabling State: strong support by City, in terms of funding, resources and structural changes in administration;
- Experimentalism: shared knowledge for circular economies and supply chains;
- Process: opportunistic methodology that looks at emerging practices to strengthen them in new framework;
- Tech justice: digital sovereignty provided in the program.

3) Madrid, Spain

Summary

The city of Madrid has been analyzed through the lens of the new policies on the assignment of urban spaces. IN particular, we looked at a regulation aiming at making the election process of associations to use public buildings more transparent and democratic, and at the ParticipaLab Prado, a space of interdisciplinary work orientated to the study and practice of participative processes willing to give new impulse to a direct, deliberative and distributed democracy.

Analysis

- Catchment area: city level;
- Urban collective governance: attention to the involvement of different actors in the processes;
- The enabling State: enabling role of the local government
- Poolism: strong
- Experimentalism: absent
- Tech justice: absent

4) Milan, Italy

Summary

Milan has been analyzed through the experience of "Milan Sharing City', which is part of a larger "Milan Smart City' project, the case study of Macao and the Open Government Policy. The public administration of the city launched Guidelines for the Sharing Economy in 2014, after intensive public consultation. The project is city-wide and involves many different processes which all aim to combine social innovation, up skilling of citizens, collaborative production through shared spaces and incubators, and sustainable businesses for job creation, aiming to be embedded in communities and neighborhoods. The public processes used for stimulating this are a public registry which recognizes for example co-working spaces or sharing economy actors, 'open calls for funding, support and access to unused spaces, matched 'civic crowd funding' and other means. Projects are often multi-year, multi-actor processes, often centered around shared spaces and incubators that aim to revive a resilient city economy and collaborative production. The context is a longer-term paradigm shift towards participating, sharing, resilience, sustainability and inclusion with the city as enabler. The city also organizes public events for deepening the self-reflection and collective learning of sharing economy actors.

Analysis

- Catchment area: neighborhood, collective spaces and incubators;
- Urban collective governance: the city as enabler to create public process through 'open calls', registries, matching civic crowd funding;
- The enabling State: enabling and facilitating role of the city;
- Poolism: strong orientation around shared spaces and incubators;
- Experimentalism: active listening by city; incubating collective processes;
- Tech justice: absent.

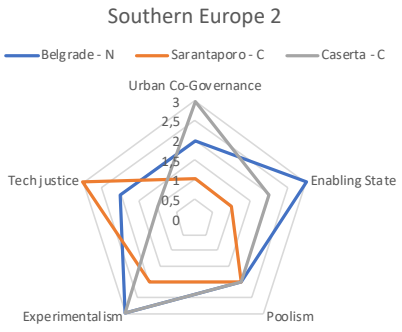
5) Belgrade, Serbia

Summary

Savamala is a district in the city of Belgrade that in the past 5 years has been experiencing a process of cultural revitalization thanks to local artists, entrepreneurs, and community members. Starting with the founding of the independent art center "KC Grad" in 2012, Savamala witnessed a wave of transformations that turned the district into one of the most active cultural, artistic and music hubs of the city. The many abandoned and decrepit warehouses in the area were renovated and transformed in bars, music venues, art centers and cultural associations. The future of the neighborhood has also been debated among the community thanks to workshops organized by the Goethe Institute, as part of the " Urban Incubator: Belgrade " project. Thanks to these discussions and to the input of artists and local community members, the neighborhood continues to go through a process of cultural improvement.

Analysis

- Catchment area: neighborhood;
- Urban collective governance: conglomerate of citizens' organizations;
- The enabling State: local administration supporting the organizations;
- Poolism: economy of social exchange;
- Experimentalism: there is a School of Urban Practices that develops strategic guidelines and fosters participative and collaborative design processes;
- Tech justice: Urban Cooks platform, created to design an exportable toolkit to support citizen initiatives that manage and create common space.



8) Rome, Italy

Summary

The city of Rome has been studied through the lens of the Co-Rome project run by LabGov, and two innovative experiences belonging to the same district, FusoLab and MAAM. The Co-Rome project is the result of the application of the Co-City protocol to Rome, aiming to creating a replicable model for governing the urban commons with a process involving all the actors of the quintuple helix approach. The process started focusing on the co-governance and requalification of the Archeological Park of Centocelle, a natural and cultural common in the outskirts of the city, and is now in the process of expanding the model to the district to meet the needs of the communities in terms of services.

Analysis

- Catchment area: district, city level;
- Urban collective governance: process involving all the actors oh the quintuple helix approach;
- The enabling State: roadblocks from the local government;
- Poolism: civic collaboration fundamental for the governance of urban commons;
- Experimentalism: innovative and experimental methodology (the Co-Cities Protocol);
- Tech justice: the project fosters the overcoming of digital divide and the empowerment of disadvantaged categories through acquisition of competences to be re-used in and entrepreneurial way.

Rome, Italy
Libera Repubblica di San Lorenzo

Summary

The "Libera Repubblica di San Lorenzo" is a free assembly of citizens, workers and students proclaimed in 2013. With regards to the membership, it is quite heterogeneous since it gathers people coming from different backgrounds, concerned for their neighborhood. The members –around 10 people– are all representatives of the associations ESC Atelier, Communia, Il Grande Cocomero or Nuovo Cinema Palazzo. They jointly fight against real estate speculative projects and advocate for the protection of historical buildings.

Analysis

- Catchment area: Neighborhood

- Urban collective governance (moderate 2): This kind of self-administration is a *sui-generis* one in that it is officially entrusted but has not claimed any official status. It can be seen as devolution of power by the State.
- The Enabling State (weak 1): Absence of financial contribution from the State. However, the municipality has always been present, not only passively in mere bureaucratic practices, but rather actively bringing up new ideas.
- Pooling economies (weak 1):
- Experimentalism (moderate 2): The Libera Repubblica wrote the "Charter of the Commons" referring to the art. 42-45 of the Italian Constitution. It can be seen as an innovative bottom-up lawmaking initiative.
- Tech justice (moderate 2): Tech equality is taken as given as most people own a mobile device and know how to use it. Hence no current program nor policy aiming at eroding digital gap has been implemented. ESC Atelier, one of the main associations through its "Info-Migrante" program offers free wifi access to refugees.

Rome, Italy
Tor Sapienza

Summary

Tor Sapienza Agency is a network of associations willing to cooperate with each other in order to address the problems of the neighborhood. It gathers 23 associations, most of which are non-profit, representing local communities, churches, schools and citizens. In a period of political and economic uncertainty, these organizations gathered with the aim of launching a community-led project and putting together different types of resources to promote urban regeneration.

Analysis

- Catchment area: Neighborhood
- Urban collective governance (moderate 2): The Agency has experienced several phases and involved different actors, but two moments have shown to be particularly relevant such as are the "ReBlock" project (URBACT) funded by the European Commission and the broadcasting of an inquiry conducted by the TV programme "Report". Moreover, after the activation of other players, such as the School "Giovanni XXIII" and the growing influence of the media due to unprecedented social unrests in the neighborhood, the process regained momentum and experienced acceleration.
- The Enabling State (absent 0): No funds are attributed from the State. The administration failed to manage even the European Funds that the Re-Block project had made available and therefore, in this phase the administration can be seen more as an obstacle rather than a facilitator.
- Pooling economies (absent 0): the project does not achieve a level where both public and private actors behave as enabling platforms towards the commons.
- Experimentalism (weak 1): It would be wrong to say that the methodology used is similar to other experiences although it cannot be judged as a truly innovative organization.
- Tech justice (weak 1): If, for a part of the project, the impact of technologies was low, the use of a crowd-sourcing platform to gather information on buildings and brownfield sites may allow citizens to map critical areas and build a useful dataset. This may also be used as leverage towards the administration.

Rome, Italy
M.A.AM

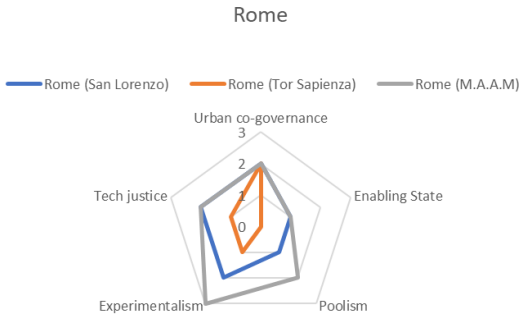
Summary

Il M.A.A.M, i.e Museo dell'Altro e dell'Altrove is a space located in a former slaughterhouse, in the Vth Municipio in South-Eastern Rome. According to the founder, the objectives of M.A.A.M are:
First to "create a mixture of arts out of this occupation", second "not to use money which is forbidden", third, "to create a connection between parts of the city that do not interact with each other", and " to purify this place".

Analysis

● Catchment area: neighborhood
● Urban collective governance (moderate 2): Activists take part in MAAM's activities. Artists from all over the world give their support through their pieces of art. And volunteer associations also get involved. However, neither private entities nor the local government participate in MAAM governance.

● The Enabling State (weak 1): MAAM does not receive neither financial nor administrative support from the State.
● Pooling economies (moderate 2): MAAM is autonomous and self-standing. There is strong cooperation, for which all actors get involved. But poolism remains low as private companies and State do not participate.
● Experimentalism (strong 3): The project is highly innovative but as Giorgio de Finis revealed: it "stems from another project which we realized in 2011 that was called Space Metropoliz". The idea of creating a place where art and the hardship of everyday life merge together is definitely experimental. Besides, there is no real obstacles to the reproduction of such project elsewhere.
● Tech justice (moderate 2): digital platforms play a moderate role in promoting the initiatives and the principles of M.A.A.M. They only have a Facebook page but no website.



9) Bologna, Italy

Summary.

The city of Bologna has been analyzed through seven years of on-field work conducted by the authors in the framework of the policy which was launched in 2011 to introduce collaboration as a method for governing the city and many of its resources. After two years of field experimentation in three city neighborhoods, and in the context of the "City as a Commons" project supported by the Fondazione del Monte di Bologna and Ravenna, in February 2014 the City of Bologna adopted a regulatory framework: the Bologna Regulation on Civic Collaboration for the Urban Commons. Since the approval of the Regulation, more than 280 pacts of collaboration have been signed. LabGov has been the scientific coordinator of the process, from the beginning until the end (evaluation process).

Analysis

- Catchment area: city level;
- Urban collective governance: the city as enabler to create public process through the Regulation for the governance of the urban commons and the deriving collaboration pacts;
- The enabling State: enabling and facilitating role of the city;
- Poolism: strong orientation around co-governance of urban spaces;
- Experimentalism: active listening by city, incubating collective processes;
- Tech justice: focused on transparency of the process.

10) Turin , Italy

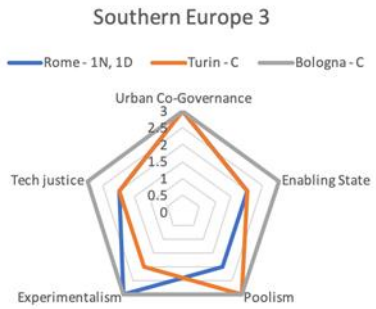
Summary

The city of Turin recently won the Urban Innovative Actions European contest with its project "Co-City Torino", fostering collaborative management of urban commons to counteract poverty and socio-spatial polarization. The project takes as its starting point the Regulation on the commons, and adopts the collaboration pacts as an instrument to foster collaboration between citizens and local administration. The project addresses the challenge of regenerating the most deprived city's neighborhood and fighting social exclusion. It aims at transforming abandoned buildings and vacant land into hubs of residents' participation, in order to foster community spirit and to create social enterprises, reducing in this way unemployment and urban poverty. The commons will be entrusted to the care and management of citizens through forms of active participation, supported by the Case di Quartiere (Neighborhood Houses) network. The project will adopt digital instruments such as First Life, a platform developed by the University with the aim of facilitating citizens' involvement and mapping community projects.

Analysis

- Catchment area: city level;
- Urban collective governance: the process envisages forms of collaboration between citizens and local collaboration;
- The enabling State: enabling local administration;
- Poolism: wireless infrastructure as open commons for all to use;

- Experimentalism: non-profit volunteers as stimulant for local engagement;
- Tech justice: adoption of digital tools.



Turin, Italy

Summary

Cantiere Barca, Turin is an artistic project of urban marginalized neighborhood regeneration. It was co-led by the Anthropologist Alessandra Giannandrea, the Architect Francesco Strocchio, as well as the Goethe-Institut in Turin, the Education Department of the "Fondazione per l'arte contemporanea" which managed to involve a school in the project. It is based on the idea that art has a transformative role. The project aims at promoting youth creativity in a place where the living conditions of the youth are difficult. The goal was to develop a process of re-appropriation and exploitation of urban space, using recycled materials.

Analysis

● Catchment area: city-level;

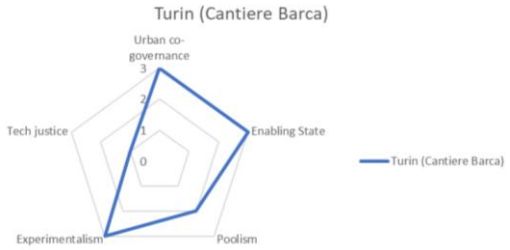
● Urban collective governance (strong 3): Although the main actors of the project are local residents, the project was supported in diverse ways by public institutions as well as private institutions.

● The Enabling State (strong 3): The State (Region Piemonte) allocated a large part of the funds as well as banks such as Compagnia di San Paolo, one of the two bank foundations from Turin. La Fondation de France of Paris also matched funding.

● Pooling economies (moderate 2): One of the project consisted in regeneration community bonds through the space revitalization, and involved people from the local neighborhood as well as children. A center for young people was also created.

● Experimentalism Strong (strong 3): The project has a strong experimentalism vocation.

● Tech justice (weak 1) : A platform for digital story-telling was created however it could now be considered as outdated.



11) *Zaragoza, Spain*

Summary

Zaragoza recently launched 'Zaragoza Activa', a municipal project designed as a learning and social innovation ecosystem composed by enterprises, public programs, social organizations and citizens. It applies a diverse range of innovative methodologies for each project, for example: *La Colaboradora* is a community of 200 entrepreneurs who share the workplace and form a time bank and collaborative environment, the Grupos Residentes de ThinkZAC Las Armas are an auto-learning collaborative space opened to citizens and focus on the procomùn theme. They affirm that their natural interaction space is the link between public private and social, and that their "playground" is the fourth sector: that is why they are also allied with social organizations, universities, administrations and big corporations. They designed their own social network "ZAC", hosting now 10.000 users. They have some interesting apps, as a virtual coin and CVZAC, and decided to implement their own social network in order to have sovereignty over data and communities' information. The next step is to open ZAC's code so that also other platforms can use the system.

Analysis

- Catchment area: city level;
- Urban collective governance: public-private-social partnership, allied with universities, big corporations, social organizations;
- The Enabling State: Zaragoza Activa depends on the Ayuntamiento;

- Poolism: it generates a SROI=3,14 in terms of creation of jobs, transfer of knowledge;
- Experimentalism: different innovative methodologies tailored on projects;
- Tech justice: they have their own social network to have possession of data, and they are going to open the code.

12) Naples, Italy

Summary

In the last years, the city of Naples has been the theatre of a series of experimentations and innovations in urban democracy through the commons. What makes the experience of this city particularly special is that the requests voiced by urban communities are being met by the efforts of a local administration committed to strengthening collective participation and supportive of citizens' claims to re-appropriate urban commons, in particular the so-called sleeping giants, buildings or complex structures located both in the center and in peripheral neighborhoods. The city of Naples embraced an enabling approach toward the commons. Since 2011, the city has been issuing a set of municipal ordinances that discipline the commons, adopting an approach deeply rooted in empirical reality, based on the practices of self-organization of the communities that co-govern the commons. The city also implemented institutional and organizational innovations to further improve its action in this field. In 2011, the city of Naples created the Assessor of the Commons and later a Specific Unit internal to the city administration that is committed to fostering and maintaining the dialogue with the civic realities involved and to finding innovative solutions to better deal with the commons.

Analysis:

- Catchment area: neighborhood, collective spaces and incubators;
- Urban collective governance: the urban commons are moderately collaborative. The partnership includes organized social actors; civic innovators; knowledge actors; public actors (only the city level).
- The enabling State: enabling and facilitating role of the city;
- Poolism: strong orientation around cultural space and co-creation; shared spaces.
- Experimentalism: active listening by city; incubating collective processes; iterative approach.
- Tech justice: technology is not used as a key tool in the urban commons governance schemes. There is no platform cooperativism.

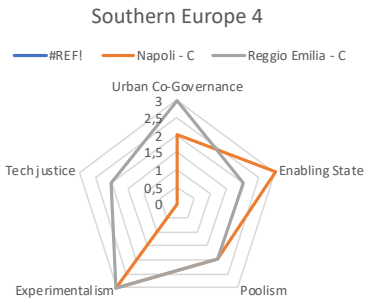
13) Reggio Emilia, Italy

Summary

The commitment of Reggio Emilia's municipality towards participation and collaboration in decision making processes and in city making is at the basis of the Co-Reggio Emilia project, that was promoted by the local administration in collaboration with the University of Modena and Reggio Emilia and with the scientific, strategic and organizational support of LabGov and Kilowatt.
The process began with the activation of the participatory path of #CollaboratorioRe, which brought together citizens, associations, private actors, cognitive institutions and members of the local administration (as envisaged by the quintuple helix approach of urban co-governance) and allowed them to collaboratively shape the future of the "Chiostri di San Pietro" area, a urban commons holding a particular relevance for the city and for its inhabitants. The process consisted in a series of participatory thematic workshops to collect the citizens' needs and some best practices, resulting in the drawing up of guidelines

Analysis:

- Catchment area: city level;
- Urban collective governance: participatory path involving all the actors oh the quintuple helix approach;
- The enabling State: enabling and facilitating role of the local government;
- Poolism: civic collaboration fundamental for the governance of urban commons;
- Experimentalism: innovative and experimental methodology (the co-cities protocol);
- Tech justice: social innovation as one of the focuses of the debate.



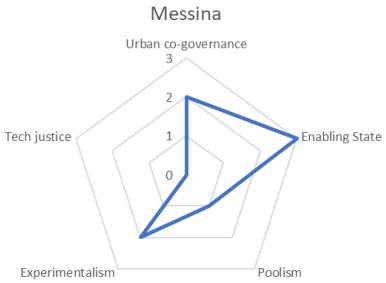
14) Messina, Italy

Summary

The Laboratory for the Commons of Messina was prompted by the Mayor who envisaged four areas of work in which the basic following resolutions have been adopted: the one on the management of commons, the one on the instruments of direct participation, the one on the participatory budget and the one on common gardens. The Laboratory for Commons and Participated Institutions has the ambitious objective of convincing and supporting citizens in participating to the decision-making processes of the city, as well as fostering the cooperation and collaboration among them.

Analysis

- Catchment area: City of Messina
- Urban collective governance (moderate 2): Governance involve City Councillors Ialacqua and Alagna, indicated as main actors the local administration and citizens as a whole, including associations, the local University and professional groups, as the architects' one, which designed projects in line with the Laboratory objectives. However the Laboratory has not yet found a way to really captivate and involve citizens.
- The Enabling State (strong 3): The Laboratory is a local government initiative in which the first and most motivated actor is said to be the local government.
- Pooling economies (weak 1): the Laboratory does not create any form of collaborative economy or co-production. The only drafts comes from the co-management of very few commons, as in the case of "Villa Paino" in the Giostra neighborhood, which involves citizens in sharing and using the common space, without any type of self-interest but that one of living in the same neighborhood.
- Experimentalism (moderate 2): The Laboratory has been designed and implemented to be adapted to the city's dynamics and complex and differentiated social structures as observable in the marginalized neighborhoods. It also needs to be adapted to citizens' necessities.
- Tech justice (absent): No form of on-line access nor on-line participation.



15) Sassari, Italy

Summary

TaMaLuCa is born as a research group in 2017 within the Architecture, Design and Urban Department of Sassari University in Italy. It turned into a Startup with the administrative support of the University. Following a methodology based on Tactical Urbanism and the " Right to the city" principles, the project aims at improving the living conditions of neighborhoods in Sardegna and developing the use of unconventional tools e.g playgrounds to stimulate people commitment.

Analysis

- Catchment area: neighborhood
- Urban collective governance (moderate 2): TaMaLaCa has partnered with street Plans, The Argentinian architect (Collectiu.6), the Italian National network SLURP, and other informal partners. Local citizens are being integrated for certain purposes but not systematically.

- The Enabling State (weak 1): The State has not been supportive neither in financial nor in administrative terms.

- Pooling economies : absent

- Experimentalism : absent

● Tech justice (moderate 2) : Technology is used to engage people: A game/app on urban exploration for children as well as for a project on autonomous mobility for people with autism. A platform was also created to diffuse to work of the startup.

Central and Northern Europe

(Belgium: Brussels, Ghent; France: Lille, Paris, Bordeaux, Colombes; Germany: Berlin; Netherlands: Amsterdam, Utrecht; Scotland: Edinburgh; UK: London; Ireland: Callan; Sweden: Malmo; Ostrava: Czech Republic)

16) Amsterdam, Netherlands

Summary

While many studies have focused on the experience of Amsterdam in becoming a Smart City, it is important to note that the city has been working in several other directions with the aim of improving their citizens' life. The government in fact is also committed to the promotion of new forms of economy based on sharing, collaboration and circularity. This is evident when we look at the Amsterdam Sharing City project and at the activities of Amsterdam Economic Board. - The Amsterdam Sharing City project saw two phases:
1) The platform ShareNL (http://www.sharenl.nl/) declared Amsterdam a Sharing City and in 2015, with the support of Amsterdam Economic Board, drafted a white paper on the potential of Amsterdam as a Sharing City
2) Mayor and Executive Board of the Municipality of Amsterdam have agreed on the Action Plan on Sharing Economy (https://www.slideshare.net/shareNL/amsterdam-actionplan-sharing-economy).
We also analyzed the case study of Civic Source, a neighborhood organization developed with facilitation of social innovator Aura de Klyn, which gains capital for the neighborhood in a sustainable way, with and for its inhabitants. This capital is used to support civic initiatives that can ameliorate the quality of life and environment in the neighborhood.

Analysis

- Catchment area: from neighborhoods to city level;
- Urban collective governance: Assembly of the Commons based on consensus-based decision-making;
- The Enabling State: minimal or no support from city or state;
- Poolism: very strong stress on sharing;
- Experimentalism: focus on collaborative culture and common social protocols;
- Tech justice : absent.

Summary

AKKA's involvement in different projects starts way before design; it starts with alignment and understanding of the different groups of people and their needs, namely the community of users of a building, including everyone somehow related to the project –be it the people using the building or those related to its wider urban context (the bus driver, the street cleaner, the passerby...). Also, before the architectural project is proposed, AKKA collects insights from people on the basis of which they can develop a project vision. The idea is that architecture –even if it could be a work of art -should not be approached like art, and that architects are serving people and should therefore create projects that add value to their lives. AKKA's projects are based on a methodology created by Stephany Akkaoui Hughes composed of 4 steps.
A-appreciated (aligned understanding)
K-Kernel (shared understanding)
K-Kickstart (learning by doing)
A-Adapt (observing behavior)

Analysis

● Catchment area: city
● Urban collective governance (moderate 2): The methodological process is a collaborative process that affirms that the users of a building are the experts on how space can benefit social exchanges. Consultation happens "actively" before the development of a project and "passively" i.e through spontaneous interactions when users are starting to live in the building and react on what should be adjusted. Collaborations between civil society (users of a space) and the private sector (AKKA) happen as part of the interplay of the AKKA's methodology used for every project. People living in the areas where the projects are designed are also involved in the project. AKKA is currently in conversation with universities and research parties to investigate research collaboration.

● The Enabling State (weak 1): No project was financed by public national funds.

● Pooling economies (moderate 2): The company's income comes from commissions and assignments. AKKA also promotes innovation and the sharing of knowledge for 'architecting interaction' through regular events, trainings, speeches and master classes hosted in Amsterdam and all over the world.

● Experimentalism (strong 3): AKKA has its own methodology based on three main layers: Vision (client or stakeholder must agree with it otherwise there is no right client match), Principles (although the principles are very thorough, there is a certain margin for adaptation always based on a bottom-up approach of architecture), and Application (adaptable based on input of users).
● Tech justice (moderate 2): AKKA is currently investigating how sensors and technology can be used to understand how people occupy a space and how they navigate around it. In the future we can imagine establishing face recognition of emotions to get an insight into not only what people say, but also the instinctive reaction they get. However it is facing problems such a privacy.

17) Berlin, Germany

Summary

The Social City Initiative was born as a national project in order to support and provide help to communities in disadvantaged neighborhoods. The Initiative has been implemented in Berlin through the Neighborhood Management (NM) program. The strategy that lies at the heart of the NM program is one of participatory decision-making used as a tool for community empowerment and socio-economic advancement. Involving residents in the decisions regarding their neighborhoods, the project set up "Neighborhood Councils", which serve as an organizational framework to allow for discussion and consultation to happen among citizens. Thus, the idea the program wants to promote is that local citizens are the "experts" to be consulted first in decision-making processes, the ones that know best what are the issues to be solved.
The program indeed wants to focus on communities' social capital, giving them a voice in their neighborhood's future, and a platform to exercise this voice together with their neighbors, in turn creating an opportunity for people to build a network. Thanks to this focus on community building and empowerment, the program approaches socio-economic issues in an innovative way, proving that a strong local community is key for economic advancement.
The Councils therefore tackle problems of segregation and discrimination, lack of educational and working opportunities, service inadequacies, housing support, and revaluation of urban areas.
The funding comes from different sources: namely, from 1999 to 2015, the national government, the European Union and Land Berlin have allocated a total of 364 million euros that have been spent in the neighborhood management areas.

- Catchment area: Neighborhood
- Urban collective governance: moderate
- The Enabling State: strong
- Poolism: moderate
- Experimentalism: strong
- Tech justice: weak.

18) London, UK

Summary

London CLT aims at providing permanently affordable homes, addressing in this way the growing gap in the housing market between people who qualify for social housing and those who can afford to buy a home on the open market. London CLT was born as the East London CLT in 2007, set up by London Citizens. It was the result of a long-lasting grassroots campaign led by Citizens UK, with its roots lying in the 2004 bid for the Olympic Games. In 2015, local community groups in Lewisham, Croydon and Southwark asked to work on the construction of CLT's in other areas. London CLT is an independent organization, governed by its own members according to the principles of community organizing. Anyone who lives or works in the area can buy a share for £1 and become a member. Each year, the members chose the components of the Board through an election process. Apartment's prices are set according to local wages, based on the idea that a person should not spend

on housing more than 1/3rd of his salary. Houses are allocated by an independent panel. The first CLT to be created is the St. Clement's CLT.

Analysis

- Catchment area: city level;
- Urban collective governance: independent organization, open governance;
- The Enabling State: local government acted as a mediator with the private owning the land;
- Poolism: anyone who lives and works in the area can buy a share for £1 and become a member;
- Experimentalism: classic CLT methodology;
- Tech justice: does not apply.

Loughborough Farm

Summary

The Loughborough Farm is a self-organized group supported by Loughborough Junction Action Group (local charity). Space is shared and everyone grows together sharing the harvest at the end of the bi-weekly volunteer growing session. The Farm has become a platform for individual creativity to flourish, as well as a place that brings people together across social and other divides. The focus on food (both in the farm and via one of the prospective tenants, a start-up kitchen facility and the addition of an on-site Anaerobic Digester) is a particularly strong factor in that it is demonstrating a closed loop food system (being something that brings people together enables education/ sharing knowledge about sustainable living and a way into the economy for lower-skilled people).

Analysis

● Catchment area: neighborhood;

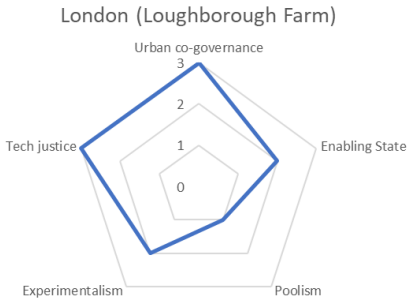
● Urban collective governance (strong 3): Decision-making happens at a monthly Farm meeting. The complexity for the farm comes with the introduction of the LJ Works project which brings more concrete governance structures and commercial or at least social-entrepreneurial expectations into the space in order to satisfy the Council requirement.

● The Enabling State (moderate 2): Loughborough Farm proposes to actively collaborate as a way to have more influence in the process. If councils can help secure long-term space (as apposed to temporary) for urban commons this would be a benefit though, due to political shifts councils are often reluctant to think long-term.

● Pooling economies (weak 1): As with many of these new 'public-private' or in this case 'public -common' partnerships there will be a profit share with Lambeth Council however the majority of any economic gain will be put into training schemes for Loughborough Junction residents and keeping the space accessible to as many as possible.

● Experimentalism (moderate 2): The project aims to demonstrate closed loop energy and food cycles through a small-scale anaerobic digester, a localized waste to energy system. This system replicates a cow's stomach taking in food waste from the on-site café, kitchen incubator and the local area and produces fertilizer and methane gas. The methane gas, in turn, powers LJ Works buildings and the fertilizer is used by the Loughborough Farm and other local growing projects to produce more food closing the waste loop.

● Tech justice (moderate 3): The project uses (yet it is still at a very early stage) Wikihouse, an open source project to reinvent the way homes are made. It is being developed by architects, designers, engineers, inventors, manufacturers and builders, collaborating to develop the best, most sustainable high performance building technologies, which anyone can use and improve. It is based on CNC technology so as files can be downloaded and printed at any local CNC operator. Its construction is likened to the assembly of a building sized 3Djigsaw puzzle and to be constructed by 2-3 unskilled people.



19) Paris, France

Summary

Urged by local associations already taking care of some urban gardens in Paris, the City of Paris passed in 2003 the "Main Verte" program which promotes the creation by citizens associations of urban community gardens,

enabling them with technical assistance, land use rights, and providing know-how.
Other than receiving requests for the creation of new gardens, a Resource Center for Urban Gardeners also assists citizens through the organization of meetings and workshops.
According to the "Convention et Charte Main Verte", the gardens are usually set up on the city's land but they can also grow on other land types. This chart and regulation is to be signed by the City and the association in charge of the garden, which established the rules and the allowed usages of the gardens.
The inhabitants who manage the gardens must commit to keep the gardens open to the community and the public and follow sustainable management methods.

Analysis

- Catchment area: city level;
- Urban collective governance: independent organization, open governance;
- The Enabling State: local government acted as a mediator with the private owning the land;
- Poolism: anyone who lives and works in the area can buy a share and become a member;
- Experimentalism: absent;
- Tech justice: does not apply.

20) Colombes, France

Summary

In terms of architecture, the initiator of R-Urban – *atelier d'architecture autogeree (aaa)* – has namely used participative architecture and self-managed architecture principles: a type of architecture that is co-created, used and long-term managed with and by the citizens themselves. The project has also been conceived following ecological principles: reversibility, zero carbon emission, use of recycled or reclaimed materials in construction (cradle to cradle), producing energy on site, reducing water and energy consumption by a number of ecological servicing devices: rain water collector, grey water phyto-filtering device, compost heating device. *R-Urban* in France, for example, consisted in the creation of multiple eco-sustainable places. The *AgroCité* -a unit of urban agriculture- is made of community gardens, permacultures, composting and rainwater recycling systems, as well as devices and systems for energy production and educational and cultural spaces. It is also composed of The *Animalab*, a domestic farm whose production is directly embedded in the local distribution network through its Agrocité shop. Eventually, the *Recylab* is made of urban waste recycling equipment, which enable the transformation into eco-construction materials.

Analysis

- Catchment area: neighborhood;
- Urban collective governance (strong 3): The R-Urban cooperative land was founded by a number of members of which aaa, La Nef and La Nef Gestion form a part. The partners include: Public Works (architectural practice in London), City of Colombes and EC Life, (European commission) as well as national and international universities.

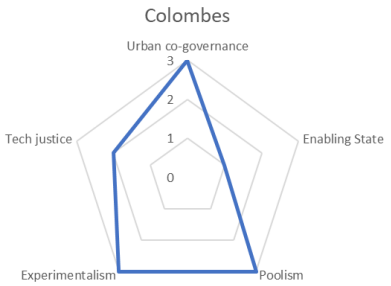
- The Enabling State (weak 1): The main roadblock to R-Urban was a new local election that completely changed the municipal team that was in place when the implementation of the project occurred, putting into power a new mayor from the real estate sector and from a family of developers claiming back the land where R-Urban was established. This has led to the demolition of R-Urban. There was a long process of citizens protesting, and a case that went to court but lost (there was no formal way to protect the land from development since city property is not formally protected by law).

- Pooling economies (strong 3): The community has a low skills threshold and is very inclusive. Thanks to local publicity campaigns, more and more people were attracted. The project is also embedded in local distribution networks who sell their product on local markets. It also featured a local cantine where local products are consumed and thus feed circular economy.

- Experimentalism (Strong 3): The project is very innovative as it tries to find a way to work towards a

more sustainable way of living. It made up many different prototypes of heating, composting, smart irrigation or lombric farm system. The project however is meant to be reproducible.

● Tech justice (moderate 2): The project created an online platform called EcoDA, which provide for methodology.



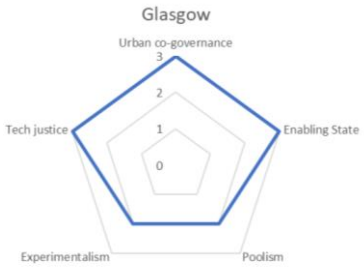
21) Glasgow, Scotland

Summary

Co-operative Glasgow is an urban communing initiative created to provide advice and support to individuals, businesses and social enterprises in developing co-operative business models within the city. Business Development grants are made available to encourage the creation of new co-operatives and grow existing co-operatives. Recent updates from the initiative show positive trends: since March 2017 a new city administration took the lead of the city. There were doubts whether the new administration would have supported Co-operative Glasgow. These concerns have been totally dismissed as the new administration promoted even further the initiative. Currently, there is a push for boosting the social enterprise strategy. Co-operative Glasgow grew substantially over the past 3 years. There are now 730 social enterprises that are active in Glasgow, of which 61 % are led by women. These enterprises mainly hire employees that were formerly unemployed and promote the growth of local businesses. They encourage social enterprises to take advantage of the 'community benefit clause' in order to win commercial contracts. Keeping money in the local economy is a challenge that is crucial for the future sustainability of Co-operative Glasgow.

Analysis

- Catchment area: City
- Urban collective governance (strong 3): Glasgow Cooperative is rooted in the interaction between civil society, (social) businesses and governmental institutions (in particular, Glasgow City Council). Beyond these three actors, schools and universities are also involved.
- The Enabling State (strong 3): The government acts as a primary initiator. It is hard to say whether specific legal changes have been influences, but a clear impact has been exercised on the Scottish Government, for example in regards to resources allocation. Moreover, "Glasgow continually identifies the most appropriate ways to encourage the incorporation of co-operative models and legal structures into day to day working".
- Pooling economies (moderate 2): Glasgow cooperative is enabling communities to be direct beneficiaries through the access of goods and services; the support of a more balanced distribution of wealth; and foster greater community based innovation and knowledge transfer. Co-operative Glasgow is based on social justice and tries to reach also the marginalized and unemployed people through grant allocation notably. Glasgow city council is particularly concerned in keeping the money within the city, reinvesting it. Another example is empowering a local group by facilitating ownership and lease of green spaces. With regard to tailor-made strategies for local conditions, it should be mentioned that Co-operative Glasgow allows cities to respond to their specific needs and those of its citizens, rather than a top down approach to service provision.
- Experimentalism (moderate 2): Glasgow has devised governance structures that include legal frameworks, memorandum of understanding models, partnership agreements and joint venture models that can all be adapted and utilized by other cities.
- Tech justice (strong 3): The use of digital tools was crucial to the success of the initiative. For example, it was mentioned the project 'Digital Glasgow' aimed at making technology available to people. Digital tools played a key role both in approaching the citizens, and in involving academia and industry.



22) Brussels, Belgium

Summary

The CLT Brussels was born as an initiative carried out by a local organization and "housing militants" as a reaction to the housing crisis in Brussels in the early 2000. After a trip to the US for visiting one of the most important CLTs, its founders organized a platform of organizations and convinced the Regional government to conduct a feasibility study; after that they earned subsidies to do the first pilot project. They apply the classic CLT methodology, but tailoring it to each case and project. Five members of the board are from Brussels Capital Region, who gives them yearly grants and subsidies. Every citizen who wants to buy a house has to be a member, with voting rights. They give priority to low income citizens and poorest neighborhoods, and adapt the price of the houses to everyone's income.

Analysis

- Catchment area: city level;
- Urban collective governance: independent organization, open governance;
- The Enabling State: local government acted as a mediator with the private owning the land;
- Poolism: anyone who lives and works in the area can buy a shareand become a member;
- Experimentalism: classic CLT methodology;
- Tech justice: does not apply.

23) Edinburgh, Scotland

Summary

Since 2012, the city administration is explicitly committed to community-led and cooperatives-based development, which includes a Community Plan 2015-2018, with annual evaluations and update. It has agreed to apply co-production methodologies across the board, but especially by involving citizens' users in service design, and promoting multi-stakeholder cooperation. For example, 17 'community coops' have already been created. Scottish legislation such as the Equalities Act and Community Empowerment Act are used as legal framework for such initiatives as well.

Analysis

- Geographical Dimension: city
- Catchment area: from neighborhood to city
- Urban collective governance: full city commitment to co-production and community-led cooperative model.
- The enabling State: Acts of Scottish Parliament as framework plus city regulatory frameworks.
- Poolism: support for community and cooperative models.
- Experimentalism: co-production and user-involvement in service design;
- Tech justice: does not apply.

24) Callan, Ireland

Summary

The Bridge street project is part of a long program of projects in Callan, Co. Kilkenny, Ireland looking at engaging local communities in participative planning and renewing a sense of civic pride in rural town centers. It evolved out of a series of participative research projects initiated by Callan based Curators looking at ways for encouraging active and creative citizenship. For instance, a series of coffee mornings where locals could swap a story or memory of Bridge Street for a cup of tea and a cake were organized.

Analysis

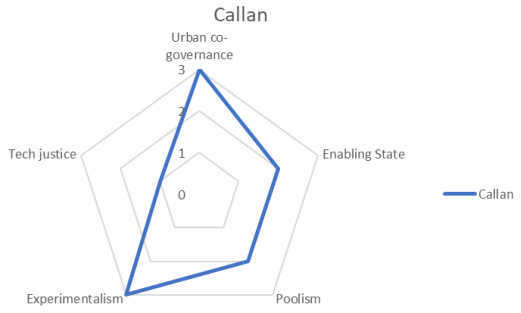
- Catchment area: neighborhood, city-level.
- Urban collective governance (strong 3): The project was realized through time, money and skilled labor donated by community volunteers and local businesses and pubs. Local art organizations and local primary schools also participated. A large proportion of the materials and infrastructure for the play and architectural interventions was received through local sponsorship.
- The Enabling State (moderate 2): In addition to providing match funding for some elements of the project the Local government has provided support

through advice and support on legal and logistical issues such as planning, permits and road closures for events.

● Pooling economies (moderate 2): Their inclusive, multi-disciplinary approach and close working relationship with consultants, local government and the community has meant that they have been able to apply and be eligible for a wide range of funding streams, bringing money and expertise to their small rural town and capitalizing on existing local capacities whilst striving to build further local capacity.

● Experimentalism (strong 3): The 'bridge street project' developed over a year long period as an interdisciplinary collaboration between the two disparate disciplines of theatre and architecture. Each discipline independently responded to the same challenges faced by the town center, with the common goal of a ground up re-imagining of the civic space within Callan. At the start of the project Equinox Theatre company took over an empty shop on the street for a weekend and offered a free cup of tea and cake in return for a story about the street –past or present. The community popped in over the week and a plethora of stories, memories and photos were collected and contacts were made and informed about the future plan of developing this material into a play the following year with a community cast.

● Tech justice (weak 1): The Communication strategy, which involved both digital and non digital elements was key in enabling a diverse cross section of the local population to take part and increase the outreach potential of the project. The strategy included accessing local community groups through existing Facebook networks and using twitter to disseminate project information more widely.



25) Utrecht, Netherlands

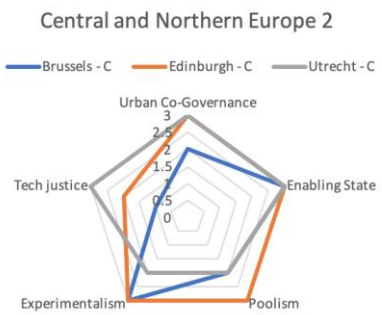
Summary

In 2010, the City of Utrecht adopted the universal standard of human rights to guarantee a high quality of life for all inhabitants. According to this aim, Utrecht has been working on promoting a human rights culture in the city, fitting the identity of an open, inclusive and social city. In 2013, a Local Human Rights Coalition was born, consisting of NGOs, local civil society organizations, businesses, politicians, policy officers and scientists. The Coalition's aim is to create awareness and ownership of local human rights in order to enhance the quality of life of citizens by translating global value(s) into the local practices. Although the initiative does focus on this local bottom-up governance approach, best practices are shared with other cities at the national and international level.

This innovative project involves a partnership, and actually the partnership itself is one of the innovative elements. The partnership has the structure public-community-private. So far, the leading partner, or better, the facilitator, is the City of Utrecht. However, the coalition is increasingly horizontally structured, with the city of Utrecht becoming more and more a member of the coalition like the others. Therefore, the 'leading' role can better be seen as 'facilitating' role. Since the coalition is unique in the Netherlands, several national organizations (ministries, Dutch association of Municipalities, the Ombudsman, researchers, the national human rights institute) are supporting the initiative, in addition to the local partners.

Analysis

- Catchment area: city level;
- Urban collective governance: public-community-private partnership;
- The enabling State: municipality as facilitator of the process;
- Poolism: the coalition comprehends civil society organizations and businesses;
- Experimentalism: best practices are shared with other cities at the national and international level;
- Tech justice: absent.



26) Ghent, Belgium

Summary

The analysis of the city of Ghent started from Oikos, a Belgian/Flemish 'social-ecological' think-thank, and the Ghent Community Land Trust. Oikos has observed and studied the fast growing number of such initiatives and examines the conditions of its further flourishing. These local initiatives are generally concerned by either social-ecological transition or issues of social justice and poverty. The municipality has moved from a classic reliance of setting up frameworks and criteria for funding, to more horizontal forms of co-production in which the outcome is uncertain at the beginning, and is looking at the initiatives from a framework of 'social innovation' and looking how to fund and support them in new ways, such as 'matching' crowdfunding campaigns with public money. Amongst the more successful projects supported by the city, the following are cited: 1) leefstraat, which creates climate-friend car free streets; 2) the use of a complementary currency to combat social exclusion ('Torrekens', in the Rabot neighBorhood); 3) supporting collective housing for less carbon output; 4) an active multi-stakeholder Food Council. These projects are also increasing networked in thematic federations such as networks of renewable energy. The city has committed itself to studying how to further support a commons-based collaborative economy.

Analysis

- Catchment area: mostly neighborhood based, city level;
- Urban collective governance: citizen-led but with support from City;
- The Enabling State: commitment to social innovation;
- Poolism: creation of thematic networks for knowledge exchange such as Food Council;
- Experimentalism: co-production between city and citizen groups;
- Tech justice: not a main factor.

27) Bordeaux, France

Summary

Darwin was created as an urban ecosystem inside of an old military barrack that was left abandoned in the city of Bordeaux.
The project includes small businesses, a co-working space, shared offices, cultural, artists, and residents' associations, apiculture activities and urban farms, cafés, bars and restaurants, sports areas, and a hostel among others. The whole system follows a governance model that is collaborative and participatory, thanks to the "Darwiniens" association. It is a sustainable structure as it hosts workshops for the recycling of various materials; it sets up spaces with the help of recycled furniture; it follows an advanced recycling system for the waste produced; and finally, it makes use of renewable energy and collects rainwater. The Darwin project is therefore an example of a sustainable renovation that remains inclusive and fosters community building in the city.

Analysis

- Catchment area: city level;
- Urban collective governance: initiative from local organization and housing "militant" citizens;
- The enabling State: the Brussels Capital Region Government is in the board, it provides subsidies and funds;
- Poolism: common land ownership, separation of ownership for land/buildings (typical CLT model); the inhabitants of the houses are members of the organization with voting rights;
- Experimentalism: for each project is used a diverse methodology, tailored on the neighborhood and on the future inhabitants of the house;
- Tech justice: does not apply.

28) Grenoble, France

Summary

The *Atelier Populaire d'Urbanisme de la Villeneuve* is an initiative launched in the Fall of 2012 by a citizens movement in order to build an alternative urban regeneration project in Villeneuve in the city of Grenoble.

Organized as a big working group that gathers the inhabitants of the neighborhood, it was created as a result of the refusal of the top-down planning practices of the City of Grenoble.
In 2013, many workshops have started to formulate a new democratic urban project. In the following years, the Ateliers have continued fighting to stop a certain number of contracts and deliberations passed by the old local administration and to design a new vision for the neighborhood.
Moreover, on an effort to co-build the neighborhood, the association has organized meetings every week in order to discuss about monthly thematic subjects concerning the new development (housing, environment, cultural and sport activities etc.). The Ateliers plays a central role still today in the fight for a more democratic urban planning. Through workshops, conferences, festivals, and mobilizations, it engages with citizens' demands and empowers neighborhoods in the face of big development projects that do not take into account the citizens' demands.

- Catchment area: City
- Urban collective governance: moderate (2)
- The Enabling State: weak (1)
- Poolism: weak (1)
- Experimentalism: moderate (2)
- Tech justice: moderate (2)

29) Lille, France

Summary

Lille has an expanding network of places for collaborative culture and commons-oriented initiatives that started with the Coroutine and Mutual coworking spaces, that aim for cheap accessibility so that collaborative projects have places to connect and cooperate. These places, groups and projects are also linked in an active Assembly of the Commons, that is actively thinking through the connection between commons, the private sector, and the public administration, in ways which protect the integrity and autonomy of such projects. This process has been ongoing but the interconnection is more recent. Cooperative decision-making is based on consensus and tools that favor it such as Loomio. With few exceptions, most of the projects are not supported nor funded by the public authorities, and commercial extraction of value is avoided through a focus on more cooperative or social-entrepreneurial forms of business. The Lille commons community is actively interconnected with other cities in France and networks such as Ouishare and the P2P Foundation.

Analysis

- Catchment area: thematic networks and localized projects;
- Urban collective governance: Assembly of the Commons based on consensus-based decision-making;
- The Enabling State: minimal or no support from city or state;
- Poolism: very strong stress on open documentation and shared protocols and search for forms of collective property (non-dominion, etc...);
- Experimentalism: Focus on collaborative culture and common social protocols;
- Tech justice:

30) Malmo, Sweden

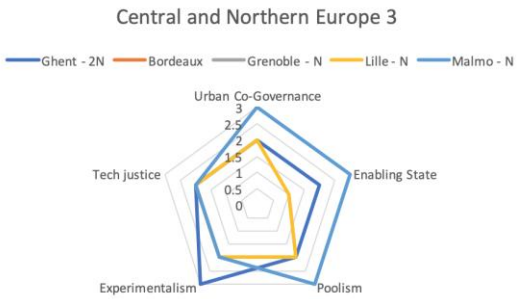
Summary

Malmo is a diverse city in Southern Sweden located very close to Copenhagen, in which a significant amount of city officials are committed to commons-based approaches to achieve both social (migration and refugees) and ecologically sustainable outcomes around infrastructural projects. The projects discussed involved a makerspace and an upcycling (waste management station) ReTuren. The approach is called 'infrastructural commoning' and is based on participation and co-ownership based on aligning diverse sets of infrastructures and social groups in exploratory processes that recognize conflict but recognize diversity as enrichment. One of the main lessons of this project is that user-management does not necessarily lead to inclusion because it reinforces cultural affinity of certain groups at the exclusion of others, and therefore, enabling and facilitating co-governance models are set up with a mandate to work specifically on achieving inclusion through mediating institutions such as a NGO for management. The project is funded through the public funds and with strong commitment of city officials.

Analysis

- Catchment area (block/neighborhood/district/city level): infrastructural commons in neighborhoods
- Urban collective governance: co-governance through mediating institutions rather than user governance

- The Enabling State: public funding and strong commons commitment of various city officials
- Poolism: focuses on infrastructures as commons, i.e. 'infrastructural commoning'; focus on diversity and inclusion.
- Experimentalism: mediation, not consensus;
- Tech justice:



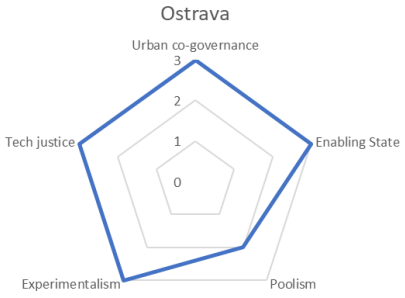
31) Ostrava, Czech Republic

Summary

FajnOva is the name of a brand created in the end of 2015 as a communication tool for the preparation and implementation phases of the big strategic developing plan of the City of Ostrava. Having a plan made for and by the citizens, ensures that the city vision lives in people's minds. It also ensures a sustainable long-term vision that would be less exposed to political change. The FajnOva brand covers dozens of projects on several areas such as 1) Building an interconnected city 2) Revitalizing the historical city center 3) Being a center for top quality education 4) Enhancing the business environment 5) Supporting communities and citizens' involvement in public life 6) Creating a great environment for all generations 7) Bringing the city closer to nature.

Analysis

● Catchment area: City
● Urban collective governance (strong 3): FajnOva comprises involvement of all five quintuple helix actors. The brand FajnOVA is owned and govern by city hall authorities. It has successfully involved 20.000 citizens from different social and age groups such as Hospitals, SMEs, Universities, cultural centers and NGOS, through different tools.
● The Enabling State (strong 3): FajnOVA was launched and is now collaborately-led by the state. The project is supported mainly by city budgets, European funds. Moreover, some projects were done with cooperation with other public actors i.e Universities, Libraries and financed by their grants. In FajnOVA, the State uses co-design as a tool for innovative, long-lasting, and independent of political changes decision-making.
● Pooling economies (moderate 2): FajnOVA has created a participatory budget of urban districts. The circuit will earmark the money. Residents can come up with project ideas. They vote and choose the project to be implemented but there is still space for improvement. Creating of a common space could be done also through subsidiary program for revising the public area in the town. Active citizens or NGOs can apply for their own project and receive 500.000 Kč (2.000E aprox.) for its realization. The projects done in 2017/2018 consisted mainly in revitalizations of common spaces.
● Experimentalism (strong 3): The project adopts an innovative methodology for its internal organization, for the governance of the common resource, for the provision of the service of public utility or for the production of goods and services. One issue is that not all documents are translated to English yet therefore the content and methodology is not accessible to all.
● Tech justice (strong 3): FajnOva relies mainly on citizens' cooperation and commitment. This engagement is mostly realized online. FajnOVA works at a very high level with all social media platforms. The leaders of the project are aware of omission of some groups which don´t have access to internet (elderly people, disadvantaged people) or which are not interested in participating in a such a project in the first place (children, teenagers), hence the participation was allowed by different means such as personal meetings of the city hall with citizens, urban café, paper questionnaires, message boards in the city districts, social media involvement etc. Thanks to this, vulnerable minorities and population without digital access were not left behind. The project also seeks to overcome ethnic and age minorities by providing Wi-Fi in the city and also in more than 600 city transportation wagons for free; therefore Tech Justice equality is preserved.



3.3.2 America

North America (USA)

32) Boston, USA

Summary

The Dudley Street Neighborhood Initiative (DSNI) is a nonprofit, community-run organization whose mission is "to empower Dudley residents to organize, plan for, create and control a vibrant, diverse and high-quality neighborhood in collaboration with community partners." It was first conceived by a group of residents living in the Dudley Street area located in the Roxbury and North Dorchester neighborhoods of Boston, an underdeveloped, underserved, low-income area dominated by minority groups. DSNI is now well known as the first community-run grassroots organization to gain the power of eminent domain, a powerful typically government-only tool, and as the largest community land trust (CLT) in the nation. It has served as the inspiration and model for other CLTs in the Boston area and elsewhere in the United States, and been the subject of many studies and reports.

Analysis

- Catchment area: city level;
- Urban collective governance: tripartite model of governance;
- The enabling State: relation with municipality, but independent from it;
- Poolism: community empowerment as crucial factor; creation of affordable housing
- Experimentalism: replicable innovative model;
- Tech justice: not an issue.

33) Chicago, USA

Summary

In Chicago we analyzed NeighborSpace, the only nonprofit urban land trust in the city that preserves and sustains gardens on behalf of dedicated community groups. They shoulder the responsibilities of property ownership — such as providing basic insurance, access to water, and links to support networks — so that community groups can focus on gardening. NeighborSpace's mission is to preserve and support the development of community managed gardens and open spaces throughout the City of Chicago. This mission is accomplished by acquiring land on behalf of communities to protect community established and managed gardens from development, supporting the long-term success of these community efforts, and building awareness of how these urban "Edens" contribute to an improved quality of life for residents.

Analysis

- Catchment area: city level;
- Urban collective governance: run by no-profit;
- The enabling State: not related;
- Poolism: the NGO shoulders responsibility for property ownership;
- Experimentalism: innovative model;
- Tech justice: not an issue.

34) New York City, USA

Summary

In New York City we analyzed several projects. 596 Acres is a community land access effort that wants to transform 'places' into 'spaces', focusing on identifying publicly-owned vacant land that can be used for community development in neighborhoods, under the leadership of the local community but with the organization as a support and advocacy platform. 596 Acres identifies land on a website, contextualizes it (LivingLotsNYC), and posts a physical sign alerting neighbors that they could claim the land from the city for common use. It then helps the engaged citizenry to navigate bureaucratic mazes. Municipal support is needed, but not always available, and depend much on speculative and economic cycles, i.e. more support is forthcoming during big cyclical downturns, such as after the fiscal crises or the 2008 meltdown. The project is also seen as part of restorative justice since access to green community spaces is often determined through poverty and race, and such spaces have proven public health outcomes. The project, founded in 2011, which has helped to claim 30+ places and protect 14 existing ones, is now moving to a next phase involving a Real Estate Investment Cooperative, to add locally-controlled commercial spaces. The model is spreading to several other US but also other global cities.

Analysis

- Catchment area: neighborhoods around transformed vacant public land;

- Urban collective governance: self-organized efforts by local community, facilitated by 596 acres as intermediary to city bureaucracy;
- The Enabling State: city support is needed, but not always forthcoming and depends on political/economic context;
- Poolism: public spaces seen as urban commons managed by local communities;
- Experimentalism: identifying vacant land, encouraging local engagement, ongoing support;
- Tech justice: absent.

35) Baltimore, USA

Charm CLT

Summary

The Charm City Land Trust, is a Maryland based non-profit organization whose slogan is "stewarding land in Baltimore." It has engaged in a variety of land renewal projects in Baltimore in coordination with community residents and groups, and in collaboration with the non-profit and private sectors, local churches, as well as the local and state government. They are run by a 15-member board, whose members come from the East Baltimore neighborhoods. The CCLT maintains close and strong ties with the communities they work in. For example, it has developed a long-term relationship with communities in East Baltimore, particularly McElderry Park, where it has partnered with the Amazing Grace Lutheran Church on a number of ventures. As such, the community, and its residents, are very involved in the work of the CCLT; they are consulted and invited to join the organization as a member, or to apply to be a board member. The CCLT's core goals include the stewardship, democratic inclusion, and community-control of land. One of their largest projects, creating the "Sacred Commons," involved creating an open space where all were welcome, where the community as a whole could meet, and have a say in how the space is used.

Analysis

● Catchment area: neighborhood
● Urban collective governance (strong 3): Engaged in a variety of land renewal projects in Baltimore in coordination with community residents and groups, and in collaboration with the non-profit and private sectors, local churches, as well as the local and state government. Strong community commitment.
● The Enabling State (moderate 2): State enabled CCLT to acquire, develop and maintain the land they now possess yet no funding has been deployed up till now.
● Pooling economies (strong 3): The Sacred Commons, a welcoming space for the community, is not exclusive nor private, anyone can come and benefit from its beauty, open and green spaces, artwork, and places for quiet reflection or play
● Experimentalism (strong 3): The CCLT provides access to shared, green urban spaces for communities in East Baltimore. It transformed dilapidated, vacant homes and land into beautiful open spaces full of art, playgrounds, and aims to protect spaces from gentrification, private development, or further deterioration. It also seeks to provide affordable permanent housing through its CLT program, which is still in its early stages.
● Tech justice (weak 1): N/A

NEHI CLT

Summary

The NEHI began as Catholic Church group into a much broader coalition of community members, religious groups, and activists of all backgrounds all of whom live in East Baltimore neighborhoods. They are dedicated to building change for Baltimore through community land trusts and personal ownership. NEHI's hope is to allow most of the control over homeownership and use of the land to reside with the homeowner, and therefore the community members: In this way, ownership and control of the land will be shared and co-governed. However, NEHI remains not only the owner of the land but also a "back stop" in the event that the homeowner comes into trouble and needs some help, including in the event of a mortgage default. By creating a CLT, NEHI also helps to control and monitor how their land is used, and therefore, can prevent gentrification or private development of community land. They have many partners and collaborators, which include local and state government actors, community associations, other non-profits, foundations, lending institutions, and community developers. Each has a role in the realization of NEHI's vision. Its board of directors is composed of individuals drawn from three sectors, all equally represented: 1/3 community residents, 1/3 lessees, and 1/3 community leaders. It has worked closely with local university and knowledge institutions, notably including the University of Maryland Law School Clinic, and has also consulted with local community developers and other community groups, who help with their advocacy and fundraising work.

Analysis

● Catchment area: North East Baltimore
● Urban collective governance: (weak 1) NEHI is still very undeveloped and in the very early stages; its not even clear if they are currently active).
● The Enabling State (weak 1):
● Pooling economies (weak 1): it will probably become strong because of its aim to be collectively owned, and it is a multi-actor project which implies the transfer of resources.
● Experimentalism (weak 1): absent.
● Tech justice (weak 1): N/A

36) Washington, DC

11th Street Park

Summary

In December 2013, the 11th Street Bridge Park officially became a project of BBAR and the intensive stakeholder engagement was finally translated "into a *bona fide* organization with a solid funding base and a significant early proof-of-concept win" (Bogle, Diby, Burnstein 2016: 7). Up to 2014, over $1 million in funds have been raised from public and primarily private sources to hire two full-time staff people (including Kratz as the new 11th Street Bridge Park project director) and build out the Bridge Park website. The project consists in creating an elevated park (privately operated and publicly owned), reconnecting Capitol Hill community to Anacostia community by enhancing equitable and inclusive growth
The design project maintains its main objective to make the river landscape accessible to the community. Hence the designed structure provides spaces for comfort, refreshment, gathering and relaxation, showcasing cultural and natural history, seasonal programmed events with strong roots in the adjacent communities, performance and cafés, and for playgrounds and accessing down the river.

Analysis

● Catchment area: DC's Capitol Hill/ Navy yard and Historic Anacostia/ Fairlawn Neighborhoods (ward 6,7,8)
● Urban collective governance (strong 3) A non-profit utility (Building Bridges Across the River i.e BBAR) manages the project, the DC government has the ultimate ownership right on the park (DC Housing Authority and DC Office of Planning), active citizens associations (Fairlawn Citizens Association), knowledge institutions (such as the Urban Institute, the Urban Land Institute, the DC Fiscal Policy Institute) and universities (such as University of the District of Columbia's College of Agriculture, Urban Sustainability and Environmental Sciences) are directly involved in meetings, task forces, planning, design competitions, the Anacostia Festival and volunteer activities. The project counts about 1,000 stakeholder meetings since 2014. Moreover, private foundations not only contribute through donations in order to finance the park, but also influence decision-making processes through their participation to meetings and task forces.
● The Enabling State (strong 3): The state role in facilitating and allowing the process has been strong throughout the Commoning process and has represented the first sponsor of the project. Since the idea to create an elevated park on the 11th Street Bridge has been proposed by Harriet Tregoning, the Director of City Planning and by the DC Department of Transportation. The state is also usually involved in meetings, task forces and design competitions.
● Pooling economies (moderate 2): the 11th Street Bridge Park's main goal is to envision equitable and inclusive growth by creating affordable housing, jobs and economic activities; by ensuring a healthy community and a safe place for residents. Thereby resembling a collaborative economy.
● Experimentalism (strong 3): The approach has not only followed experimental objective, but also a replicable method of engagement and co-design.
● Tech justice (weak 1): N/A So far it does not represent the main concern, although should be addressed in due course.

Solar United Neighbors

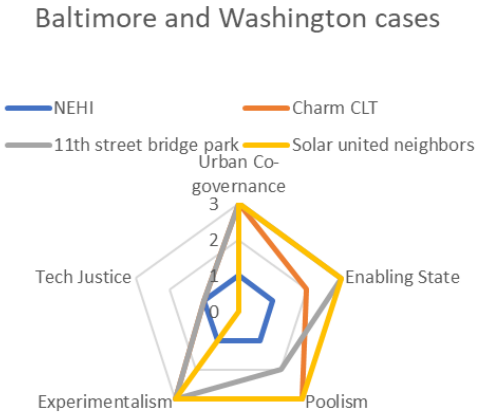
Summary

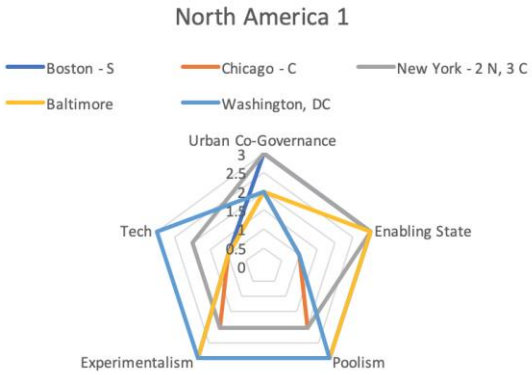
SUN is an example of a successful urban project that grew from a very small, neighborhood based idea into something much larger and more robust. Its original visionary and founder, Anya Schoolman, continues to be the key impetus and organizer behind the organization, which now has branches in nine states and its headquarters in Washington DC. Although SUN is now a national organization, it remains very committed to maintaining its emphasis on local communities and empowering individual solar owners to govern and own their own energy sources.
SUN, in addition to being an actual technical organization that facilitates the installation and maintenance of rooftop solar systems, is an advocacy organization, which purports to represent the interests of solar owners and clean energy supporters. It is committed to equitable accessibility of social energy, through pooling community resources together and making bulk purchases.

Eventually, the project relies on digital technology to accomplish its goals and disseminate its key messages. The project adopts an experimental approach and shapes its methodology thanks to its adaptability and responsiveness to changing needs and local contexts.

Analysis

● Catchment area: SUN has branches in 8 states (Florida, Maryland, Minnesota, New Jersey, Ohio, Pennsylvania, Virginia, West Virginia) and the District of Columbia. It is based in Washington DC.
● Urban collective governance (strong 3): The organization actively collaborates with many other non-profit organizations and other civil society actors, as well as universities and knowledge institutions.
● The Enabling State (strong 3): Although there is no direct funding from state, state participates through incentives and federal tax credit. However, its global relationship to the state is more antagonistic than collaborative.
● Pooling economies (strong 3): Solar United Neighbors is committed to making rooftop solar more affordable and accessible to all. The way it works is to form co-ops; co-op participants then pool their bulk purchasing power to select one installer through an open, competitive bidding process.
● Experimentalism (strong 3): The approach has not only followed experimental objective, but also a replicable method of engagement and co-design. It should be replicable in other context since it is also connected to other national similar projects such as the High Line Park in New York.
● Tech justice (0): N/A So far doesn't represent the main concern, although should be addressed in due course.





37) Cleveland, Ohio (USA)

Summary

In Cleveland we analyzed the Evergreen Cooperative project, whose aim is to create a revitalized local economy based on 'community wealth' by leveraging the spending power of anchor institutions such as the university, big hospitals etc. The idea is that their purchasing power is used to order from newly created for-profit cooperatives, in a internetworked system that is inspired by Mondragon. The support of the city is considered essential for its success, as is the right choice of industries to start from, which depends on local conditions.

Analysis

- Catchment area: Cities and neighborhoods around anchor institutions;
- Urban collective governance: Stakeholder approach involving city, anchor institutions and community groups;
- The Enabling State: role of city considered essential to convince anchor institutions, initial financing and land acquisition;
- Poolism: Cooperative but for-profit format; purchasing seen as public resource;
- Experimentalism: Multi-stakeholder cooperation;
- Tech justice: absent.

38) Detroit, USA

Summary

In Detroit we analyzed Live6, a non-profit planning and development organization whose mission is to enhance

quality of life and economic opportunity in Northwest Detroit. It was born in 2015 through a partnership of community, philanthropies and city stakeholders. The project strives for authentic and inclusive neighborhoods revitalization, and serves as a central convener and coordinator between the community, institutions and key stakeholders who contribute to positive change in the community.

Analysis

- Catchment area: from neighborhood to city;
- Urban collective governance: partnership between community, philanthropies and city stakeholders, and run by university;
- The enabling State: not enabling;
- Poolism: not an issue;
- Experimentalism: innovative model;
- Tech justice: not an issue.

39) Madison, USA

Summary

In Madison we analyzed MAN, a project led by Stephanie Rearick. The project sees itself as part of the 'restorative justice' movement and has focused on projects like creating a food coop in a food desert area. The project is connected to 16 other cities. Its ultimate aim is to create a sophisticated system of solidarity that people can rely on when they have economic and social difficulties. It aims to function largely outside of the logic of capitalism to the degree that this is possible.

Analysis

- Catchment area: focus on poorer neighborhoods;
- Urban collective governance: cooperative management;
- The Enabling State: occasional city grants;
- Poolism: focus on non-monetary exchanges and time-banks;
- Experimentalism: participatory process;
- Tech justice: not an issue.

40) Savannah, Georgia, USA

Summary

In Savannah we analyzed a project, Emergent Structures, which was inspired by Asset Based Community Development methodologies, and identifies waste material from construction and demolition for material repurposing and re-use for community development. The repurposed material helps municipalities deal with blight, it results in products for communities (park benches, community greenhouses), while the process re-dynamizes local crafts, skilled jobs, and community engagement. The project uses a tri-sector collaboration model (municipal agencies, for profit business, non-profit civil society organizations) under the lead of the Emergent Structures NGO, and in collaboration with already existing or newly created community organizations. Funding comes from a similar mix of municipal funding, private donations and crowdfunding. Since both the problems of waste, city blight, and community underdevelopment are huge, this project potentially deals with vast material streams that make it both socially, economically and ecologically beneficial. It sees itself as part of a post-growth, post-consumption paradigm, and uses a variety of empowering and participatory methodologies.

Analysis

- Catchment area: neighborhoods and communities;
- Urban collective governance: tri-sector collaboration (gov, bus, NGO) under lead NGO;
- The Enabling State: collaboration with municipal agencies;
- Poolism: waste as a common resource for material repurposing;
- Process: matchmaking, asset-based development, theory U, action research, community development;
- Tech justice: innovation part of the process.

41) Miami, USA

Summary

TU started when Tony Garcia realized that the large-scale and expensive projects he was working on did not bring progress. TU was created after the 2007-2008 economic recession, as a tool to address the many citizens' needs which the government was not responding to. Tactical Urbanism approach uses short term, low cost and scalable interventions to build long term change.

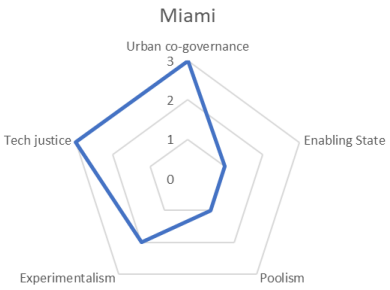
Analysis

● Catchment area: neighborhood, suburbs
● Urban collective governance (strong 3): More than three actors of the quintuple helix are part of the projects. Collaboration indeed occurs through schools and universities (architecture, business depending on the project), the public sector, NGOs, the private sector and civil society.
●The Enabling State (weak 1): TU did not start with the support of the State but rather through citizens advocating for more city care.

● Pooling economies (weak 1): Projects engage voluntary citizens in its process.

● Experimentalism (moderate 2): It does not involve a new methodology but draw inspiration from community-led urbanism, planning by doing, urban prototyping.

● Tech justice (strong 3): The beginning of TU was based on digital communication and blogging to advocate for the project. Digital tools are used as they represent powerful ways to reach many people with very little money. Besides, technology is also used for designing the e-newsletter and communicating with people. A free Tactical Urbanism open guide is displayed on the website.



Central and South America

(Bolivia, Costa Rica, Colombia, Argentina, Brazil, Mexico)

42) Medellin, Colombia

Summary

The Platohedro artistic and activist community sees itself as an urban commoning and transitioning project that does highly local and contextual projects that respond to local needs; It works actively with youths from deprived neighborhoods and the inhabitants of a neighborhood around a shared space to create new capacities starting with a reclaimed building. It does this through projects that use Post-Pedagogy, i.e. mostly un-learning conventional knowledge, learning by doing, and 'do it with others' process, based on active listening, and integrating self-work and rootedness in the body. The context is a war-torn country, with lots of deprivation, hurt and lack of trust and still opportunistic local government. However, Platohedro works intensely with local cultural institutions such as museums and universities, and with more global networks such as the Arts Collaboratory. Its activities often combine arts, technology and collaboration as key ingredients. It is inspired by the ideas around 'buen vivir/ buen conocer' as rooted in the Latin American context. Capacity building by counting on oneself and one's peers is a key priority. The government, city included, is seen as opportunistic towards urban commoning, and therefore not counted on, though occasional grants are received through city programs.

Analysis

- Catchment area: Neighborhood to City;
- Urban collective governance: Self-managed center but strong interconnection to neighborhood;
- The Enabling State: only opportunistic support from city and government; but strong links with cultural and academic institutions; occasional grants and prizes through city;
- Poolism: sharing/commoning/participation is at the heart of Platohedro processes;
- Experimentalism: Focuses on un-learning conventional anti-knowledge, on individual and collective learning together, on 'listening' to the desires of participants and inhabitants; creating trust in war-torn and deprived environments; participation in wider local and global networks;

rigorous self-evaluation; combining self-work and body-work for rootedness;
- Tech justice: absent.

43) Mexico City, Mexico

Summary

Mexico City implemented in 2013 a policy innovation lab at the urban level: the Laboratory for the City or "Laboratorio para la Ciudad". Ciudad Propuesta CDMX is a digital platform that aims at improving the visualization of ideas and proposals submitted to the participatory programs in the city: it serves as a mechanism for passing on ideas for urban and community revitalization within and across neighborhoods. It stands as a pool of ideas that can be replicated, adapted and reinvented between neighborhoods and capitalized via the Participatory Budgeting Programme or the Neighborhood Improvement Programme. The design of the project comprehends the development of a theory of change and a log frame, with a set of hypothesis and indicators; the methodology also envisioned a first piloted phase in a pilot neighborhood. The platform is implemented by LabCDMX, the innovation department of Mexico City, in cooperation with other public authorities such as the Social Development Department and with the support of volunteers from universities. Part of the innovation lays also in finding cooperation mechanisms that minimize costs, and on the other hand the participatory budgeting programs do facilitate collective decision-making and allocation of resources.

Analysis

- Catchment area: City level;
- Urban collective governance: run by the municipality in cooperation with universities and other actors;
- The enabling State: leading the process;
- Poolism: cooperation mechanisms and collective decision making;
- Experimentalism: strong innovative methodology, tailored for every single project;
- Tech justice: the tool is a collaborative platform; in the pilot project they furnished computers in the chosen areas, where citizens could upload their proposals.

44) Santiago, Chile

Summary

Santiago ciudad emergente gathers many initiatives amongst which 'Malon Urbano'. Malon in chileno means a dinner where every guest brings something to be shared, similarly to a potluck in English. This initiative was first launched at a neighborhood level; 'El Grande Malon' was then initiatited at the national level gathering on the same day 12 million chileans in 9 regions. The methodology is to implement short term projects which aim to become long-term innovations. Many tools are provided to people who want to participate: from legal help to close a road to organize a street-dinner or providing materials to decorate the streets.

Analysis

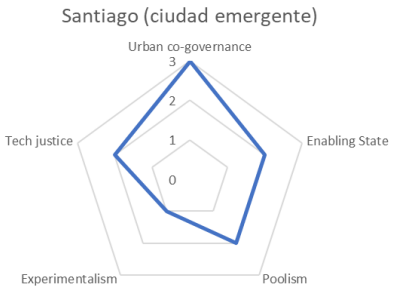
- Geographical Dimension: City
- Catchment area: Santiago ciudad emergente
- Urban collective governance (strong 3): Ciudad emergente governance is based on collaboration between public, private actors finance up to 40% of ciudad emergente, NGOS.

- The Enabling State (moderate 2): The State is the main actor in Ciudad emergente as it enables transformation of spaces. It contributed to 60% of funding.

- Pooling economies (moderate 2): The example of Okuplazas is an example of the pooling of goods and seeks to temporarily occupy underused places in the city transforming them into public places. One of the objectives is also recyling.

- Experimentalism (weak 1): Big events such as Bug street dinners are not new.

- Tech justice (moderate 2): Technological tools are used in the diffusion of the projects, interviews are carried out and posted.



45) Sao Paulo, Brazil

Summary

Minha Sampa is a campaign organization and a technological framework for self-organizing campaigns that reinforces public and civic demands: for example, a campaign to close the Paulista Avenue to cars on Sundays. The framework allows for different self-organized campaigns that respect the key values of the organization, but the core team also supports and leads particular campaigns, in association with engaged citizens and local activist organizations. No government funding is accepted, since the campaigns are directed 'against' the government to obtain policy changes through social pressure. Funding comes through donations and national foundations. The project started in 2014, inspired by a Rio de Janeiro project that started in 2011 and is part of a network of 9 cities with similar platforms. The 'commons' is a toolkit that all engaged citizens can use to strengthen their campaigns and make it easier to mobilize and pressure politicians.

Analysis

- Geographical Dimension: City of Sao Paulo;
- Catchment area: City level;
- Urban collective governance: decisions are made in the team of the campaign organization;
- The Enabling State: no funding and participation is accepted of governmental agencies, to maintain non-partisanship as campaign organization that fights for citizen initiatives;
- Poolism: the organization supports campaigns set up by citizens themselves, and has technological toolset that can be used by everyone;
- Experimentalism: the work is based on mostly limited campaigns for clearly defined objectives, aimed at creating an important impact;
- Tech justice: not major aspect.

46) Cochabamba, Bolivia

Summary

In Cochabamba we analyzed the experience of Hacklab. This project focuses on the creation of a community-based wireless network as a autonomous communication infrastructure, and attempts to build coalition of various expert groups and stakeholders, through a physical place, the mARTadero. The relation with government is said to be smooth and 'nonpartisan', but with a focus on remaining autonomous and promoting horizontal economies, for which a p2p infrastructure is considered essential. The methodologies for community integration are based on the prior experiences of altermundi.net and guifi.net; collective intelligence is balanced and integrated with individual 'passionate' contributions. Principles associated with a commons, such as open participation, shared management of a resource, are considered essential aspects of the project. This project has no funding from the city and relies therefore on aggregating non-economic resources, managed through the coordination of digital networks.

Analysis

- Catchment area: Municipal level;
- Urban collective governance: Strong cooperation and support from local municipal leadership; governance model of project under construction;
- The Enabling State: support at city level administration is strong;
- Poolism: focused on cooperation and mutual support, but centered around the creation of healthy exchange mechamism through complementary currency;
- Experimentalism: very strong participation methodology and capacity-buidling aspects;
- Tech justice: central role

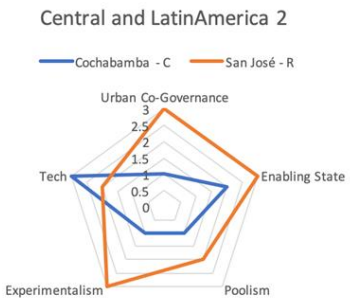
47) San José, Costa Rica

Summary

PIC initiative starts with a mapping project that has the target to gather information about urban commons in a digital platform. The first urban commons that they started collecting had been urban orchards, heritage buildings and recycling centers, all over the Costa Rica territory, among others commons that they are still mapping. PIC established a three-stage methodology that applies for all the urban commons, but depends on what they – and the community - want to achieve. PIC projects are mainly mid-term, like participation workshops and volunteer meetings, although they always keep updated their largest project of participation and mapping called ÁgoraPIC. The sustainability of the project is not a fact: open and collaborative processes are also organic, changing and this allows flexibility, but at the same time little organizational stability.

Analysis

- Catchment area: City level
- Urban collective governance: decisions are made in the team; facilitating team members vary according to their expertise
- The enabling State: support and promotion of projects; central government invited them to collaborate in work sessions in the Parliament or in the sub-committees of the Presidency for the Open Government project;
- Poolism: the goal through the social action is to create a growing number of urban projects - built or virtual - that improve the quality of life of the communities. They involve every "stakeholder" of the city;
- Experimentalism: strong participation methodology;
- Tech justice: N/A.



48) San Juan, Porto Rico

Summary

The CTL of Martín Peña Channel was created in 2004 in order to regularize land ownership and to avoid that a project of environmental justice that would have resulted in gentrification and displacement of previous residents in other lands. The interested communities are the ones located at the borders of the Martín Peña River, in the northern side of San Juan. The communities are eight: Barrio Obrero, Buena Vista Hato Rey, Buena Vista Santurce, Cantera, Israel/Bitumul, Las Monjas, Marina and Parada 27. The CLT's soul lies in three entities, which are Fideicomiso de la Tierra, ENLACE Corporation and G8. They are interconnected and each one holding its own function, but executing it for the good of the others. If one of them is prevented to work properly, the others will be prevented too because they are meant to work jointly. They have eventually been formalized through the Law 489-2004, which transformed them into legal entities. The goals of the CLT are incorporated in an integral development project (Proyecto ENLACE), that includes river sanitation, improvement of living conditions, achievement of an healthy relationship between communities and their urban and natural environment, boosting of education, tourism and recreation and encouragement of civic and democratic participation. Through this means, 2000 families of low-medium income possess today the collective ownership over 78.6 hectares of land.

Analysis

● Catchment area: neighborhood
● Urban collective governance (strong 3): The CLT of Martín Peña Channel shows an high intensity of collective governance. As a tripartite, it involves in the decision-making process (i) public actors (governmental agencies and the local government), (ii) private actors (Fideicomiso de la Tierra) and (iii) communities (G8 and other community associations). All those entities create bonds between communities and the government, and their complex interconnection makes somehow impossible to determine who is the prevalent decision-maker. However, communities play certainly a crucial role, as they are represented by their formal organization (G8) and within the Junta Fiduciaria of Fideicomiso de la Tierra, and are also involved in participatory processes by the ENLACE Corporation.
● The Enabling State (moderate 2): The local government gave the first input to the empowerment of residents in the process of setting up of the environmental works.

Moreover, The San Juan municipality acted as strong enabling state in 2004, when it granted by law the entities of the CLT with legal status. However, ambivalent positions have been held by the local administration in the following years. In 2009 the CLT was prevented to put in practice its theoretical developments due to the governmental decision to retire all the lands previously conceded to Fideicomiso de la Tierra. Since 2013, under the pressure of the mobilization of the communities translated into a legal demand of devolution, the San Juan municipality amended the 2009 law to devolve the lands to Fideicomiso. As a result, about 2.000 families have nowadays been granted a home, and new buildings are supposed to be constructed to satisfy the housing demand of low-income residents.

● Pooling economies: Strong (3) The CLT of San Juan is a good example of collaborative form of sharing resources because all the revenues of the sale of the buildings are reinvested for the good of the communities. The CLT wants to achieve sustainability and self-founding when it will be fully operational. Nowadays, it receives "funds from various sources, including donations, investments, income from rent of properties and development".

● Experimentalism Strong (3): If the formula of Community Land Trust is not innovative, as it has existed since the 1960s, the Martín Peña Channel CLT is the first example in the world of Community Land Trust born within an informal settlement. Trusteeship (Fideicomiso) is a pioneer instrument specified in the regulation of the land ownership, so applicable to all the informal settlements spread in the world.

● Tech justice (weak 1): The Community Land Trust of Martín Peña Channel until now has used basic tech tools – as web sites and social networks – to give details and information concerning the CLT. However, communities, through their representatives in the several entities and agencies, are working on a platform to share educative materials and other resources to local and international communities at risk of displacement. This platform will be also used to record the international exchange in process, as previously outlined

49) Buenos Aires, Argentina

Summary

Club Matienzo was initiated by 5 friends whose aim was to contribute to the development of the independent cultural scene of Buenos Aires and to do it by focusing on equal creative and economic conditions of the partners of the project. The Club Cultural Matienzo (CCM) is a space and a worker-managed cooperative (a hybrid between cooperative and private entrepreneurship) developed by the Matienzo team in the city of Buenos Aires in Argentina. The club has 3 main areas of work: it hosts artistic activities, it is a collective of creation and a movement for change and notably, it pursues justice in creative and economic conditions for all the actors involved in the project and aims to have a positive impact on cultural policies of the city. The club is related to (or has directly created) and support other similar projects, as the "Abogados Culturales" (the lawyers for the culture), an NGO composed by a team of 30 lawyers dedicated to cultural issues that provide pro-bono legal consulting for artist-run or independent cultural spaces and collective projects, or the environmental protection project "Yo Reciclo" (I recycle), a project that seeks to bridge the gap between neighbors and cooperatives devoted to waste recovery through the development of an app that connects them both and aims to improve the efficiency of the recollection of recyclable items and build a "green community".

Analysis

● Catchment area: neighborhood

● Urban collective governance (moderate 2): In legal terms Matienzo is a collective project of private capital (social business), supported by an NGO. The local community and many social innovators and active citizens are also involved in the governance of the Club.

● The Enabling State (weak 1) : The club is, according to one of the founders "in a continuous fight with the local government". This was certainly true at the beginning of their adventure, when the local government used to close down those centers. The Club, through the Abogados Culturales NGO, has promoted a law, that was passed but not applied by the government. The club derives the 5-8 % of its budget from the public funds.

● Pooling economies: Strong (3) The CCM is a cooperative enterprise and has characteristic from both the "collaborative economy" model and the "commoning economy" model. The CCM is collectively owned and managed, its governance is multi-actor and cross sectorial and it is autonomous but interdependent. The production is open because the public can contribute to the creation of the contents of Matienzo, by discussing and proposing ideas and/or by doing. Furthermore, the work and governance structure foster a peer-to-peer approach. In their networks the CCM act as a commoner, through a strong collaboration with other actors.

● Experimentalism Strong (3) : The club is born in a period that was not easy for the independent cultural scene of Buenos Aires but has managed to have success in a few years. The innovative model is represented by its open governance and work structure. The CCM has adopted

an innovative methodology for its internal organization and for the governance of the common resource. Indeed, if we analyze three well-known Argentine similar case studies of the City of Buenos Aires (that were created before the CCM) and that do not have a similar internal structure (cf. the Centro Cultural de la Cooperaciòn Floreal Gorini, to the Circuito Cultural Barracas and the Grupo de Teatro Catalinas Sur). Furthermore, the project has a view of connection at a regional and national level with similar cases. They create networks in order to learn best practices and share experiences.

● Tech justice (weak 1) : The club uses technological tools just to communicate its initiatives and has launched a workshop dedicated to the "Digital Tools for Personal Organization" although not for free.

3.3.3 Africa

Subsaharian Africa

(South Africa: Bergrivier; Senegal: Dakar; Togo: Lomé; Kenya: Mombasa, Nairobi).

50) Bergrivier, South Africa

Summary

Bergrivier is a region in South Africa marked by serious economic difficulties, especially under-employment and unemployment amongst youth. Cowen and Ziniades are coordinating a project to use a complementary currency to jumpstart a local economy and local value streams, based on prior experiences in Kenya with Will Ruddick's Bangla-Pesa project.

According to the project leaders, the higher levels of the state and government are neoliberal and seen as highly corrupt, making efforts at that level very problematic. Therefore, this is a locally focused project, based on the idea that there are always interstitial openings for social change, especially at the local level, and with a particularly willing local government in this particular context.

Ziniades and Cowen believe local adaptation, also in the use of language, is crucial; nevertheless, this project focuses on creating healthy exchange mechanisms, and focuses on young people and their training as community leaders. They stress: "one cannot assume bottom-up approaches will work without prior capacity building!"

This is done through an 'integrative' approach which aligns inner approaches (self-change), relational capacities (group work), and outer dimensions (engagement with friendly and unfriendly outer institutions).

Analysis

- Catchment area: Municipal;
- Urban collective governance: Strong cooperation and support from local municipal leadership; governance model of project under construction;
- The enabling State: support at city level administration is strong;
- Poolism: focused on cooperation and mutual support, but centered around the creation of healthy exchange mechanism through complementary currency;
- Experimentalism: very strong participation methodology and capacity-building aspects;
- Tech justice: not an issue.

51) Mombasa, Kenya

Summary

In Mombasa we analyzed Bangla Pesa, a project that uses a complementary currency approach based on a credit-commons, to stimulate trust-based local trading and resource flows, in deprived environments, especially informal settlements, and is spreading in other African countries and cities. The project initially met with the hostility of the Kenyan Central Bank, which accused the founders of forgery, but that attack was abandoned and replaced by indifference at the government level. Local government support is still exceptional, but growing. The project relies mostly on the local community of local traders, united in Business Networks which provide the collateral for the credit commons, and is managed by a non-profit association, Grassroots Economics. After a period of 3 months training, projects usually become

stable after 6 months. The projects are growing in size locally and in the number of locals. Ruddick also collaborated with the Bergrivier project for example.

Analysis

- Catchment area: neighborhoods, communities, local territories;
- Urban collective governance: Run by non-profit foundation, combined with SME-members in larger business network;
- The Enabling State: original hostility of Central Bank, indifference from government, occasional local administration support;
- Poolism: the key concept here is the credit-commons and creating trust-based local communities to promote local trade flows and income;
- Experimentalism: 3-month preparation with local business traders and surrounding community;
- Tech justice: not an issue.

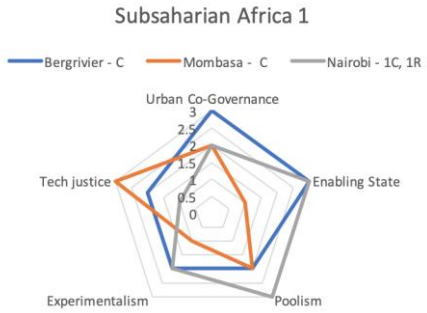
52) Nairobi, Kenya

Summary

In Nairobi we analyzed the Karura Forest Experience and the Mazingira Institute. The Karura Forest is a forest area that is under threat of land grabbing and urbanization, but is vital for the urban common. Using focus groups and key informant surveys the study will ascertain the governance and its difficulties; the Forest Act of 2005 frames multi-stakeholder governance; the City-based Forest Conservation Program, the county's environmental portfolio and the Kenyan Forest Service all have a stake, as have advocacy NGOs such as the Friends of the Karura Forest. The forest also allows for economic activity through smallholder businesses within its area. No conclusions yet, as study is only starting. The Mazingira Institute started in 1978, funded by foreign donors, to work on urban agriculture in the city and adjoining roads, and acts as a framework to stimulate collective action by self-organized communities in dialogue with city and governmental actors, which are quite supportive, through budgeting and legislative frameworks of urban farming. The Institute considers itself successful in these endeavors to stimulate the livelihoods, dignity and self-organization of urban farmers and has generally improved their situation over time.

Analysis

- Catchment area: county level;
- Urban collective governance: Forest Act of 2005 defines multi-stakeholder structures; involvement of forest NGO's such as Friends of the Karura Forest, East African Wildlife Society; NOO frames collaboration between urban farmers, respected in their autonomy, and public authorities;
- The Enabling State: City-based Forest Conservation Program, Nairobi County environment portfolio, Kenyan Forest Service all have stake, Nairobi City and Kenyan Urban Agriculture legislation offices are supportive of promotion of urban farming;
- Poolism: the forest is a shared resource for city dwellers, and allows for smallholder economic development, interdisciplinary research and action; self-organization of communities;
- Experimentalism: interdisciplinary research and action; self-organization of communities;
- Tech justice: not an issue.



53) Dakar, Senegal

Summary

In Dakar we analyzed the Ker Thiossane project, located in a now derelict 'modern' neighborhood in Dakar, within the context of lack of governmental and municipal support and an individualist culture marked by a lack of collaboration, and no taking of responsibility for local resources.
Against the grain, this project then focuses – through the joint creation of a beautiful park and associated fablab for material creation, and a School of the Commons, and with many artistic and cultural interventions – on the

recreation of a sense of the common good and shared resources. It is interdisciplinary combining open culture and technology, with activities around permaculture and making. The project entered in intensive dialogue with local population and institutions, but without active support or financing from the city (except for one cultural project). Instead, it has been successful in attracting support of foreign foundations, and has inserted itself in global cultural events such as Afropixels, based on connecting the local with the global, and to restore pride in local African traditions of cooperation. In two years, the project considers itself to be successful at the level of local integration, but further expansion would require substantial financing, which is far from being assured. Nevertheless, it seems that other neighborhoods have been looking at their success and are slowly emulating them through similar projects.

Analysis

- Catchment area: park and fablab in neighborhood;
- Urban collective governance: no financial support or collaboration from city; entirely self-governed by association;
- The Enabling State: no support, or very limited facilitation of administrative processes for project;
- Poolism: at the core of this project, creating a sense of the commons through inclusive and collective use of park and fablab;
- Experimentalism: interdisciplinary focus on art, open technologies, sustainable and local food production;
- Tech justice: central role in the project.

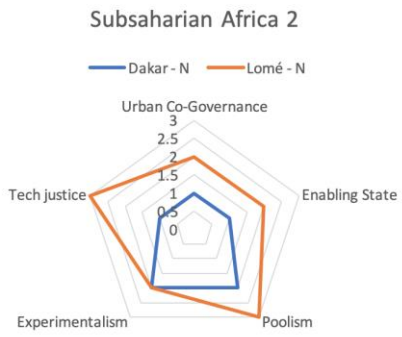
54) Lomé, Togo

Summary

In Lomé we interviewed a representative of Woelab, a project that rejects both the Sustainable City and Smart City paradigms, because of their elitist underpinnings (architects/urban-planners vs. technologists/engineers). Instead it opts for the Vernacular City, in which the citizens themselves shape their neighborhoods. The project does this by attempting to recreate the positive dynamics of the African village, but in the fragmented and individualistic neighborhoods, by combining place (the labs), events, and rituals. Projects coming from abroad are strongly (de-)selected for local conditions, the preference goes to low/high tech options and the philosophy of the Ethical Hacker. However, what is rejected is the idea of the lone inventor; thus, the labs are collectively managed through African village governance processes, and all the startups that are generated are collective owned by the members of the Labs, with membership deriving from do-ocracy. The idea is that each lab connects with the neighborhood, and remakes the city; all the labs together from the HubCity and are connected with micro-institutions within a 1 km radius. External financing is refused, self-financing is the rule and reality for the first four years. There is no support neither from government nor from the city and the project is entirely marginal. Instead, it revives vernacular energies with inhabitants creating gardens and communal infrastructures. The process aims to be fractal, with each hub inspiring and reconnecting neighborhoods, and this, throughout the city until the city is transformed entirely.

Analysis

- Catchment area: 1 km radius in neighborhood;
- Urban collective governance: collective management inspired by African village system; collective ownership of communal startups;
- The Enabling State: no support from city or government, but efforts towards micro-institutions in neighborhood;
- Poolism: collective owned labs and startups, up skilling through collective intelligence;
- Experimentalism: combining places, events, rituals, to emulate African village community dynamics which are missing in the fragmented and individualistic cities; refusal of external funding and strong selection/rejection of external input according to local African conditions (LowHighTech philosophy and theory, technological democracy);
- Tech justice: central role.



Northern Africa

(Morocco: Tanger)

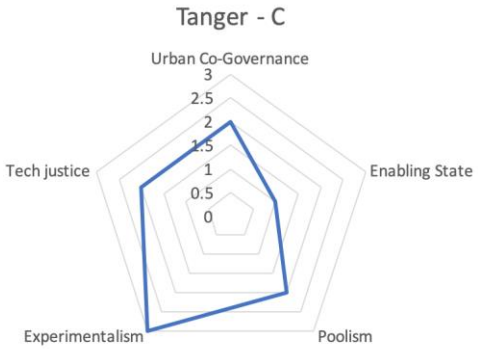
55) Tanger, Morocco

Summary

Think Tanger is based on the idea that art and culture are the key for the success of a city project. These are fundamental factors in order to encourage the encounter between inhabitants and to foster a territorial integration and social cohesion. Think Tanger is a platform of urban innovation that invites a variety of city actors to come and think together about a better urban future.
Since its establishment, Think Tanger organized 3 conferences, 6 lectures, 2 interventions in the public space, 2 training sessions for the elaboration of a cultural project, one exhibition, and it invited 8 artists in residence.
In 2017, through the "Proposal for a Metropolis" initiative, Think Tanger aims at continuing its work and transform itself into an urban laboratory where artists, architects, urbanists, researchers and other urban actors can work together to come up with innovative projects which attempt at giving a human and social dimension to the urbanization of Tanger.

Analysis

- Catchment area: Municipal level;
- Urban collective governance: Strong cooperation and support from local municipal leadership; governance model of project under construction;
- The enabling State: support at city level administration is strong;
- Poolism: focused on cooperation and mutual support, but centered around the creation of healthy exchange mechanism through complementary currency;
- Experimentalism: very strong participation methodology and capacity-buidling aspects;
- Tech justice: central role.



3.3.4 Oceania

Australia and New Zealand

(Australia: Adelaide and Melbourne; New Zealand: Christchurch)

56) Adelaide, Australia

Summary

An outgrowth of the eco-city movement, Christie Walk, started in 1999 and finished in 2006, aimed to create a living eco-city community that would not be an alien import into an existing neighborhood. The idea was not to compromise on any eco-city principles. The community is now successfully established, in a positive relation to its neighborhood, despite the early roadblocks by regulation and classic bank expectations. The commons paradigm was present through the emphasis on collective self-organization, intense participation, and community aspect of the design. While there was no effective support from the various 'uncomprehending' branches of government, they recognized the merits afterwards.

Analysis

- Geographical Dimension: community within neighborhood in Adelaide, South Australia;
- Catchment area: neighborhood;
- Urban collective governance: self-governed community;
- The Enabling State: no support;
- Poolism: community design and infrastructure;
- Experimentalism: rigorous adherence to ecocity principles at every stage of design;
- Tech justice:

57) Melbourne, Australia

Summary

Various members of the Melbourne branch of the Australian/NZ Commons Transition Coalition, which has a political vision on the commons transition, have initiated various projects in Melbourne, and particularly in the western suburban industrial city of Maribyrnong, which is marked by both high levels of industrial and consumer waste, and deep social needs to the lower economic status of its inhabitants, which count many migrants and refugees. The work centers around the Footscray coop, which is a collaborative makerspace and center in one of the neighborhoods, and its initiative for a deep participatory process around the craft of a collective Maribyrnong Maker Map, which has brought together many different makers, designers and citizens in need of engagement, around the collective intelligence needed to map the asset base in the region. The projects are entirely bootstrapped through self-funding (crowdfunding) and inspired by action research and other participatory methodologies. The projects combine answering the need for creative personal development, social engagement, answering issues of inclusion, poverty and diversity, and ecological sustainability.

Analysis

- Geographical Dimension: Melbourne;
- Catchment area: from neighborhood to city-wide;
- Urban collective governance: participatory grassroots initiatives;
- The enabling State: no support from public bodies;
- Poolism: collective intelligence of collaborative makermaps and collective physical resources;
- Experimentalism: participatory action research methodologies;
- Tech justice: N/A.

58) Sidney, Australia

Summary

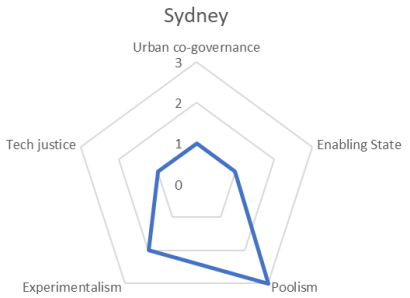
Born to help solving the issues associated with underused vehicles, Car Next Door was the first peer-to-peer car share network in Australia. They are located in the inner core of cities because car sharing services work better in big cities where people face commuting difficulties such as traffic congestion, and car sharing is a way to solve this problem. But car sharing also works best in metropolitan areas, where there are alternatives to car transport, for example good public transport, bike paths and Uber or taxis. The company addresses the lack of trust and lack of ease that would otherwise discourage people from sharing their cars with others, by: Providing an online forum where vehicle owners and borrowers are registered, vetted, and approved; Providing a feedback system to allow vehicle conditions and member behaviors to be rated and reported by other members; Providing in-car technology that enables keyless access to the car, and an automated, web-based booking platform; Providing in-car GPS technology that tracks the car's location, reducing the risk of theft and misuse of the vehicle; Providing insurance covering owners and borrowers; and Handling payments between owners and borrowers.

Analysis

● Catchment area: City
● Urban collective governance (weak 1): The project is a private initiative and Car next door would not be described as a multi -stakeholder governed organization as it only presents active collaboration with some actors of the private sector. The level of sharing is crucial for the optimal functioning therefore the community is even determinant for this project, since it is involved in the concrete possibility to rent and borrow the cars. The members are the ones who own, maintain, rent and borrow the cars.
● The Enabling State (weak 1): They have a limited collaboration with local governments in that Car Next Door may apply for reserved car parking spaces in some areas where parking is difficult on the street; however, the councils do not give these spaces for private cars and they have to lease cars to put them in. No public funds are provided.
● Poolism (strong 3): People sharing their cars participate to the pooling economy, and are part of a"collaborative economy" related to a peer-to-peer approach which follows the transformation of the clients/users into a community. This platform allows for the participation of the communities to the circular economy process. And helps avoiding the pollution generated by self-car use. The organization also enables car cost sharing, in terms of maintaining and renting it.
● Experimentalism (moderate 2): They were the first peer-to-peer car sharing in Australia, so they are pioneer in this sector. Their main innovation is in the way they provide unattended access to cars using the electronic lockbox, a product studied for resisting to thefts (you only have to instantly generate a password with the mobile app to open the lockbox and put/take the car's

key) and weather conditions. Most other peer-to-peer car share platforms require the owner to hand the keys to the borrower. Their project started in Sydney and then excellently spread in Brisbane and Melbourne, so it determines that following the same steps it can be replicable to similar context. Theoretically, the project could be absolutely scalable and replicable in every motorized community around the world with a non-necessary high population density (because it does not need the critical mass of users). However, in practice, they tried to adapt their project to different contexts from a big metropolis; for instance, they tried to launch Car Next Door in a small regional city, Newcastle, but there was not much uptake.

● Tech justice (weak 1): they don't explore any solution to fill the gap of digital divide. The access to the Car Next Door's service is guaranteed for anyone with a smartphone and a good connectivity.



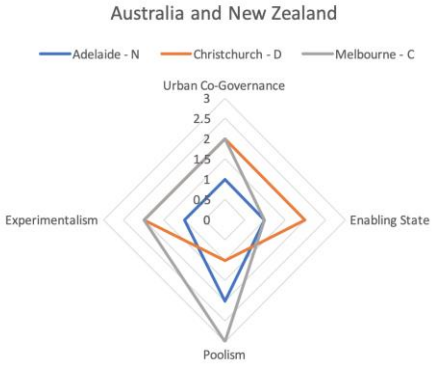
59) Christchurch, New Zealand

Summary

Gapfiller received a square of land for a zero dollar lease after the earthquake destroyed much of the city. The Commons, and its council of stakeholder, created a framework for community initiatives to be created on site, but in practice it needs to do a lot of initiatives through one paid staffer. The city government is sympathetic but there is no security of tenure. The success also depends on a number of NGO's providing volunteer and free services, on business support for specific activities, and on rents from food trucks and the like. With this support in mind, the project is break even. The Commons Council has a multi-stakeholder governance and has set up a charter with principles to filter the usage proposals on the site.

Analysis

- Geographical Dimension: one square in post-quake Christchurch;
- Catchment area: Square and surroundings;
- Urban collective governance: multi-stakeholder Commons Council;
- The Enabling State: city is supportive, zero-dollar lease, but no security of tenure;
- Poolism: creation of public space for community activities, self-managed;
- Experimentalism: no specific methodology, but broadly informed by Ostrom principles;
- Tech justice: N/A



3.3.5 Asia

Western Asia, Eastern Asia, Southern Asia

(Israel: Tel Aviv; South Korea: Seoul; India: Bangalore, Pune; Pakistan: Lahore; China: Flora Village, Riverside Village, Sugarcane Village)

60) Tel Aviv, Israel

Summary

"Urban Sustainability" is a project of the Jerusalem Institute for Policy Research, led from 2013 to 2016. It is the continuation of a previous project called "Sustainability Outlook 2030" – undertaken by the Institute and the Israeli Ministry of Environmental Protection – and focuses on the importance of cities as crucial contexts for human activities and environmental change, and on sociology-studies on human behavior as "soft" ways of effective change in urban lifestyles. Given these background's key-principles, the urban level has been individuated as the most suitable dimension in order to accommodate and foster initiatives aiming to achieve more sustainable lifestyles. During the research

"The Sustainable City" has been defined as "a city that enables people to lead fulfilling lives with a sense of dignity, within and outside the city. Its infrastructure and the material, natural, human and social resources at its disposal, offer fair and efficient opportunities for its users, and the city takes a responsible role in the management of global ecosystems. The city enhances a sense of responsibility among its inhabitants for its physical and cultural heritage and for future generations". The second part of the research consisted then in the evaluation of the background vision in practice, realized through the launch of several pilot projects and test-cases in different Urban Labs: targeted experiments designed to test principles' potential for effective change within the reality of life in Israel and the barriers impeding it, and then – in the third and last part of the research – translate them into operative tools and policy recommendations. The Labs were developed in collaboration with local authorities, policymakers and municipal representatives. The issues examined and the methodologies employed varied for each Lab but were all derived from the same theoretical background and the key-principles underpinning the vision of a sustainable city.

Analysis

- Geographical Dimension: Tel Aviv, Israel;
- Catchment area: City;
- Urban collective governance: shared co-governance, small-scale collaboration.
- The Enabling State: the State gave small support to the initiative in the form of small grants.
- Poolism: there are some "Sharing (Access/Gig) Economy" initiatives, entailing the temporary renting of goods or the creation of digital market platforms. Social barriers and the issue of trust turned out to be among the main obstacles in the achievement of Poolism in the real meaning of the term.
- Experimentalism: the case study is characterized not only by the presence of a very innovative methodology, but also by a process able to be adaptable, replicable and exportable in different contexts, connecting both micro and macro levels: local, regional, national and international.
- Tech justice: weak

61) Seoul, South Korea

Summary

Sharing City is unique in that it was initiated with full support of the Seoul Metropolitan Government, after a Sharing City declaration in 2012. After consultations with the public and advice from experts, the city set up a infrastructure for an ambitious program and supported 64 companies to develop various services. The project is based on a Sharing Ordinance, on a online Share Hub, and a public-private framework to fund sharing initiatives, but there is also a lot of work done on creating a sharing culture, even though the awareness of the general public is still too low. The project has generated a huge number of initiatives, massive usage, and several international awards.

Analysis

- Geographical Dimension: Seoul, South Korea;
- Catchment area: City;
- Urban collective governance: Led by city government, with legal framework for public-private partnerships;
- The Enabling State: Initiated and led by city itself;
- Poolism: Solving issues by promoting idle-sourcing and sharing culture;
- Experimentalism: Institutional and governance framework for continued support;
- Tech justice: N/A.

62) Bangalore, India

Summary

The city of Bangalore is is well known for being both a garden city and the Indian Silicon Valley. It embodies both temptations of being a global smart city, focused on tech-drive innovation with the needs of rapidly growing population and the environmental constraints. Bangalore is the fourth largest city of the Indian subcontinent with a population of more than eight million inhabitants. The city population increased progressively in the last ten years (in 2007, it was 7 million inhabitants) but it was already the most populated city of the state – Karnakata- at the end of the 19th Century. Greater Bangalore City Corporation (Bruhat Bengalooru Mahanagara Pa- like) is the key 'urban local body' (ULB), the local governmental structure representing and responsible to the citizens for the city and outlying areas. The main challenges of the urban governance of the city are related to the delivery of urban public services and infrastructure. The exemplary case is that of urban mobility: Bangalore has the higher rate of car per persons

of the whole urban network in India, and this leads to a high urban congestion, that the Bangalore Metropolitan Transport Corporation (BMTC) struggles to manage. The city blossomed as the tech-driven and innovative center of India, attracting the most innovative tech entrepreneurs and start-ups of the whole subcontinent, cloud-based software groups like Freshdesk or social analytics venture like Frrole and big tech corporations such as Twitter, that is planning a new research and development center in the city. The city is thus overcoming his past as a source of crowd sourced labor, although issues of urban poverty are still an urgent problem.

Analysis

- Geographical Dimension: Bangalore, India;
- Catchment area: City level;
- Urban collective governance: dialogue exists, but is limited in middle and upper class;
- The Enabling State: government moving away from participatory and collective decision making processes, and is diminishing the allocation of funds;
- Poolism: does not apply;
- Experimentalism: does not apply;
- Tech justice: N/A

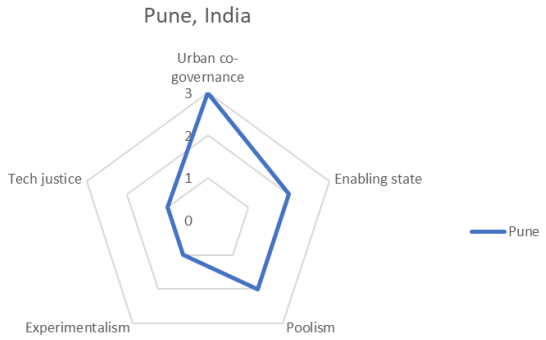
63) Pune, India

Summary

CHF India is a non-profit organization, active in India for about 11 years. CHF initiated the SHWAAS project in May 2012, to bring solutions to sanitation problems in urban slums in the city of Pune, India. CHF partnered with the local municipal corporation and received funding from the European Commission for the six-year project. SHWAAS intended to encourage collective ownership in the area of sanitation, both in terms of physical infrastructure (toilet blocks) and in concept (raising awareness to change community habits and increase community buy-in). The SHWAAS project had three main components: the renovation and construction of community toilets, community mobilization and involvement in sanitation issues, and capacity building of local government officials. In partnership with the Pune Municipal Corporation (PMC), CHF aimed to implement the project in 100 slums in Pune, though toilets rebuilding was not prioritized for all slums.

Analysis

- Catchment area: neighborhood
- Urban collective governance (strong 3): The project leaders are three of the five actors within the quintuple helix system – active citizens and community groups, non-governmental organizations, and public authorities.
- Enabling State (moderate 2): strong support by City. The project notably involved the State Government of local government officials were conducted by the All-India Institute of Local-Self Government, a state-level organization. However, state intervention slowed the process.
- Poolism (moderate 2): The concept of pooling is built into the theory of this project, but in practice, remains low to moderately implemented.
- Experimentalism (weak 1): The concept of community-led total sanitation has already been developed and applied in many different areas.
- Tech justice (weak 1): The project did not involve sharing of even basic technological tools among communities.



64) Lahore, Pakistan

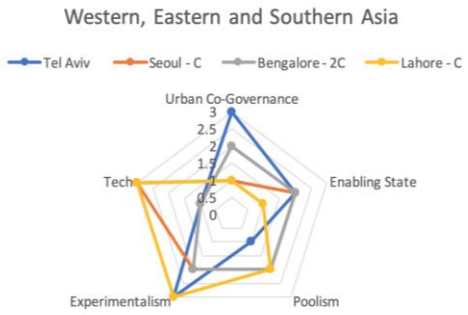
Summary

Code for Pakistan Civic Innovation Lab is a group of volunteers who meet regularly to collaborate with government, non-profits and media organization on technology, data, policy and design projects that strengthen their communities. Every lab is led by a lab Manager who is responsible for building the community and maintaining the relationship between the Lab and the local partners. Lab members meet at least monthly; most CIL meet with greater frequency and have a range of monthly programming. All Labs are connected through an online forum in order to share stories and support each other's work.

Labs are also closely coordinated with Code for Pakistan's other programs: the Fellowship, the Accelerator, and the Peer Network.

Analysis

- Catchment area: City
- Urban collective governance: weak
- The Enabling State: moderate
- Poolism: strong
- Experimentalism: strong
- Tech justice: strong.



Eastern Asia (China)

65) Flora Village, China

Summary

The Flora village shareholding company was set up in the face of the 1997 Land expropriations. One of its roles is renting out property to the villagers, enabling them to run restaurants, hairdressers, grocery stores, and internet cafes. It indeed manages the village's own industrial zone, which hosts three medium-sized factories and nearly 20 small workshops. The company also appears as a welfare redistribution entity -a quarter of its yearly expenses goes to infrastructure, policing and sanitation-. This entity also provides subsistence allowance as well as a monthly livelihood subsidy of 150 yuan to all villagers who have reached the age of 60 and ensures revenue to every shareholder. In addition, the company makes deals with new firms built on the village land to give priority to local villagers when filling job vacancies. Eventually, the company is seen as an authority which mediates conflicts between residents, and work towards safety improvement.

Analysis

- Catchment area: Neighborhood, village.
- Urban collective governance (strong 3): The share-holding company acts as a welfare entity at a village level, ensuring re-distribution and subsistence allowances.
- The Enabling State (strong 3): Strong support by City, granted urban administrative status in 2002.
- Poolism (moderate 2): Development of current economic industries, property assets.
- Experimentalism (weak 1): N/A
- Tech justice (weak 1): N/A

66) Riverside Village, China

Summary

The Riverside village shareholding company, was set up in 2005, the 1997 Land expropriations. Its first role was managing the compensation funds from land expropriation and investing in the retained land and buildings. Progressively, the company turned out to provide welfare for the shareholders and expanded to security and cleaning services. For instance, it started providing streets cleaning and security services for the new residential neighborhood and main roads outside the neighborhood. As well as subsidizing recreational activities organized by the residents' committee such as table tennis tournaments.

The company helps improving living conditions through dividend distribution. In 2011, it distributed 750 yuan per share (28 shares in total) and covers up to 60% of each shareholders' medical insurance. It also trains villagers for vocational jobs and hires villagers itself.

Eventually, the Riverside village shareholding company acts a mediator in conflicts.

Analysis

- Catchment area: neighborhood, village.
- Urban collective governance (strong 3): The share-holding company acts as a welfare entity at a village level, ensuring re-distribution, subsistence allowances. It is also the main actor in the creation of a collective governance process.
- Enabling State (moderate 2): The State provides compensation funds.
- Poolism (strong 3): Collectively owned, multi-actors and aims at transferring the resources from public to community at investing in economic development.
- Experimentalism (weak 1): N/A
- Tech justice (weak 1): N/A

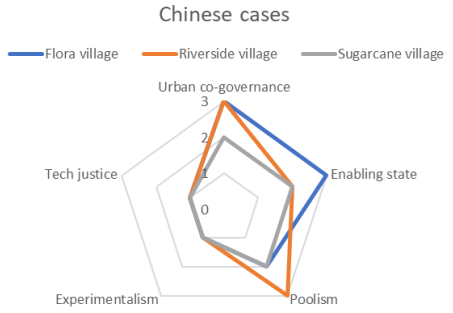
67) Sugarcane Village

Summary

The Sugarcane village shareholding company was set up in the face of the 1992-2012 Land expropriations. For the twenty years of expropriation and re-construction, its main role was managing unallocated compensation funds,
Acting now as a welfare entity, the company subsidizes 60% of the villagers' medical costs. Bonuses are also distributed, according to the amount of compensation funds received each year from the government.
Alike Flora village and Riverside village, Sugarcane village provides for cleaned streets and security services for the new neighborhood.
Recreational activities organized by the residents' committee are subsidized by the company at the height of 60%.
The company is not a common reference for conflict mediation but once in a while, through personal networks, board members happen to be asked to stand for intermediate person in conflict solving.

Analysis

- Catchment area: neighborhood, village
- Urban collective governance (moderate 2): The share-holding company acts as a welfare entity at a village level, ensuring re-distribution, subsistence allowances.
- Enabling State (moderate 2): The shareholding company receives compensation funds from State although no administrative support.
- Poolism (moderate 2): The company involves residents in the design of productive process through integrating them in the decision-making process or hiring them.
- Experimentalism (weak 1): N/A
- Tech justice (weak 1): N/A



Conclusions

The conclusions of this report are intended to extract from the analysis of the case studies guidelines for further research, teaching and policy experimentation.

The first phase of the research (January 2016 – January 2017) allowed us to identify a large variety of case studies, from both the Global North and Global South, of urban commons. The first phase of the research was carried out through an analysis of secondary data (scientific literature and specialized magazines) and the requested information sought from qualified interlocutors and experts. At the same time, 50 selected case studies were studied in depth through semi-structured interviews (conducted live or via e-mail) with representatives from the case study. The first phase aimed to improve the design of the research question, run a pre-test on the research methodology and tools such as the questionnaire, identify the variables, and select the leading variables in the urban commons transition process.

After collecting much of this data and extracting design principles, we organized a focus group as a test of the Co-City methodology. The Rockefeller Foundation Bellagio Conference Program hosted the focus group as a retreat, "Accelerating Citywide Civic Entrepreneurship: An Exercise in the Co-City Approach," from December 11–15, 2017. The retreat goal was in large part to provide a first methodological trans-geographical test of the Co-City algorithm, a new mode of civic entrepreneurship that empowers the public, private, and social sectors to govern urban commons collaboratively for the public good and better meet the needs of city residents through an experimentalist approach. The retreat brought together leaders in urban innovation and civic entrepreneurship, with representatives from:

- the City of Amsterdam (the Netherlands; urban innovation officer)
- the City of Barcelona (Regidoria de Participaciò i territorio)
- the City of Boulder (Colorado, Chief Resilience Officer (CRO)
- the City of Turin (Italy, the Co-City project funded by the EU Urban Innovative Actions program as part of the European Regional Development Fund)
- the City of Madison (Wisconsin, which dedicated capital funds to support a worker cooperative development initiative aimed at supporting people of color and others with barriers to formal employment to create worker cooperative businesses)
- the City of New York (NY, NYCx Co-labs program of the Mayor's office of New York City, participating via Skype)
- Habitat International Coalition
- the National Association of Italian Cities (ANCI) as National Contact Point of the EU Urbact program
- Cooperation Jackson (network of cooperatives and worker-owned enterprises)
- Archiafrika (NGO based in Accra, Ghana, that promotes both the built and cultural spaces on the African continent and aims at contributing to the understanding and development of design within the continent and encourage the investigation and education of African architectural history)
- the German Marshall Fund of the United States (the Urban and Regional Policy Unit)
- the Brookings Institution (the Project on 21st Century City Governance)
- the Laboratory for the City, Laboratorio para la Ciudad (experimental arm and creative think tank of the Mexico City government)
- SPUR (an NGO operating in the San Francisco Bay area)

The retreat was facilitated and co-chaired by Alicia Bonner Ness, Sheila Foster and Christian Iaione. During the five days in Bellagio, the participants were introduced to the last research output of LabGov, the Co-City process/cycle and the five design principles developed by Sheila Foster and Christian Iaione for the design and implementation of a Co-City. The participants were involved in a simulation of the Co-City process and engaged in an exchange of experiences and mutual learning exercises. As recalled by Simone D'Antonio in a recent article on the Rockefeller LabGov Bellagio retreat, the fruitful exchange of experiences showed the variety and richness of approaches embraced by cities in different parts of the world to develop an innovative way of implementing urban governance; from the case of Turin, which through the Co-City project funded by the EU program UIA is experimenting with urban commons as a platform to tackle the issue of urban poverty, to the case of Mexico City, where representatives of different urban stakeholders such as representatives of creative economy and urban planners are coming together to contribute to the re-design of the city, or the city of Wisconsin, which dedicated capital funds to support a worker cooperative development initiative aimed at supporting people of color and others with barriers to formal employment to create worker cooperative

businesses, or the experience of international public institutions such as UN Habitat with the Safer cities program, launched in 1996 at the request of African Mayors seeking to tackle urban crime and violence in their cities and has evolved towards time is an integrated, multi-level government and multi-sectoral approach to improving the livability of cities and quality of urban life.

The aim of the Rockefeller Bellagio Retreat was to gather representatives of different actors from the Quintuple Helix governance of urban innovation at the global level in order to explore potential applications of the Co-city/city as a commons model to co-create and sustain more just and inclusive cities. Among the potential outputs of a global experimental application of the Co-City process is the development a set of tools to design urban justice and democracy and thereby also measure the implementation of some of the New Urban Agenda goals, such as goals 13 and 91, or the Sustainable development goals (SDGs) 16 and 17, in particular the sub goals 16.7, 17.17 and 17.19.

The Lighthouse Co-Cities

We ran a deeper analysis of what we believe on the basis of the above-described assessment to be the "lighthouse Co-Cities", which are those cities on which a deeper and in depth analysis and eventually an experimentation should be carried out: a) Bologna; b) Barcelona where the role of the local government is crucial in this phase and is promoting a radical approach to the commons; c) Madrid, whose government issued legislations for the regeneration of public buildings for fostering civic activities, also on the model of the Bologna regulation for public governance of the Urban Commons; d) Amsterdam, where the local administration is putting serious efforts in institutional and legal innovations for the urban commons; e) Seoul, where we the approach is focused on the top-down promotion of sharing of key urban assets and in the fight against urban isolation through community building; e) Naples, which pioneered an urban policy on civic uses and recognized eight spaces informally managed as urban commons; f) Ghent, which implemented a whole City plan on transitioning towards the urban commons by enabling projects such as energy communities - both cities are enabling their action also through EU funds, with the Civic eState project; the New York City Mayor's Office with the NYCx Co-Lab challenges to solve urban challenges through bold and innovative ideas to be carried out in collaboration between city and civic actors; the Laboratorio para la ciudad, Laboratory for the City, an urban public policy innovation lab implemented by the Mexico City Government.

The first and most important understanding from this first phase of analysis is that cities where this vision of the urban commons transition is present are those where a really strong Enabling State is present. The Enabling State could be initiating, supporting or being pushed to adopt the co-governance attitude of city inhabitants and local communities. In cities like Bologna or Turin, where civic collaboration has always been a characteristic of the history of the city and where that urged policymakers to improve or redesign an already enabling administration, or cities like Amsterdam, Seoul, and Ghent, where the Mayor or some local policymakers initiated and induced this approach more than enabling and urged the administration to adopt this approach and organize accordingly. There are also cities like Barcelona, Madrid, Messina and Naples where this tradition was not present or was not as strong but city inhabitants and local communities have surged to power thanks to this approach and by organizing political movements to conquer City Hall.

The Co-City Index

Beyond the creation an international mapping platform for the urban commons, this research projects represents a significant contribution to the international urban community, as it ultimately proposes one of the first evaluation standards to measure the implementation of the Sustainable Development Goals as well as the New Urban Agenda and the European Urban Agenda in cities around the world. As previously mentioned, the empirical testing of the Co-Cities dimensions or design principles through the observation of public policies and community-led practices around the commons in urban context led to the building of a Co-City Index, a measuring instrument that can classify cities based on a gradient. The value of this research therefore lies in the design of such an index – the Co-City index – that will serve as a powerful tool for cities and administrations around the world in order to measure the implementation of the principles listed in the SDGs and the New Urban Agenda.

Indeed, while widely shared, the SDGs and the principles included in the New Urban Agenda hardly ever suggest a clear policy design or implementation strategy in order to secure the success of public policies in our cities. Especially in the case of concepts like 'the right to the city', it becomes extremely difficult to establish whether a city has been able to implement such a principle, and in

turn what kind of examples are to be followed in order to implement it.

The Co-Cities Open Book therefore aims at providing methodological principles, case studies analysis, and quantitative tools that can help implement and measure the effective implementation of Sustainable Development Goals and the New Urban Agenda especially in Least Developed Countries. The Protocol presented in the Open Book has in fact been already tested in European and North American cities. Its application can further represent a useful opportunity for cities in Least Developed Countries as a tool to design urban justice and democracy and thereby also measure the implementation of some of the New Urban Agenda goals, such as goals 13 and 19, or the Sustainable Development goals 16 and 17, in particular the sub goal 16.7, 17.17 and 17.19.

Through our research and action we demonstrated that this protocol facilitates the achievement of sustainable urban development, through collaboration with local communities, contributing at the same time to the capacity building of local authorities, fostering the active inclusion of local stakeholders and the collaboration among civic, knowledge, public/private actors for the cooperative management of urban resources.

The City as a Commons Papers:

The founding literature and inspirational speeches.

Co-Cities Open Book – ANNEX

The City as a Commons Papers:

The founding literature and inspirational speeches.

The last section of the Co-Cities Open Book presents a collection of articles of some of the most important researchers and practitioners studying the urban commons. These academic articles were conceived as part of "The City as a Commons" conference, the first IASC (International Association for the Study of the Commons) conference on urban commons, co-chaired by Christian Iaione and Sheila Foster that took place in Bologna on November 6/7 2015. A big step forward in the research and understanding of a commons-based approach to urban governance, the conference had an unprecedented turnout of researchers and practitioners in the field (more than 200 participants showed up). We decided to dedicate the last section of this open book to the work presented on this occasion because the conference has been able to produce a body of knowledge that has guided future research and policymaking on the commons in cities all over the world.

From a reconstruction of the history of the urban commons, to a legal account of urban commons theory and an institutional analysis of possible enablers of civic imagination and collaboration, experts like Tine De Moor, Sheila Foster, David Bollier, Christian Iaione, and Paola Cannavò present us with the current debates and provide us with an intellectual framework from which to apprehend the complexity of the Co-Cities model.

Recent Developments in Urban Commons Transitions

Michel Bauwens

The purpose of this essay is to summarize what we can learn from the 40 case studies of urban commons experiences that we have collated for this project[1].

We will start with some methodological reminders, and then analyze the case studies in two groups. The first group concerns nine experiences in the "Global South". These are 9 chosen out of the 20 from this 'geographical' region that are in areas marked by strong deprivation. Thus cities from Australia, New Zealand but also Seoul, we be treated in the category 'Global North', as they do not exhibit the same intensity of deprivation as the cases selected for this first category.

Based on the extensive series of questions we have asked the activists and organizers active in these projects, we have organized our findings in the following grid:

- Geographical Dimension: where is the project taking place
- Catchment area (block/neighborhood/district/city level): extent of the area covered, incl. administratively
- Urban collective governance: how are the projects managed, what stakeholders or participants have a stake in the governance
- The enabling State: to what degree is the project support by city, regional or state entities
- Poolism: what is the shared resource being created or protected by the project
- Process: what are the participative methodologies used in the project.

In order to understand the empirical and analytical basis of our conclusions, it is useful to start with Appendix X1 and X2, which respectively have narrative summaries of the projects, and the results from the above grid comparison. The full text of the case studies are available here.

1 This contribution is the result of a work that the LabGov team conducted in collaboration with Michel Bauwens with the support of Vasilis Niaros within the context of the Co-Cities research project (www.commoning.city). The contribution analyses data from the first 30 case studies collected for the Co-Cities database. A reworked excerpt of this contribution appears in a publication of the P2P Foundation by Michel Bauwens and Vasilis Niaros with the title:
Changing Societies through Urban Commons Transition, http:/commonstransition.org/wp-content/uploads/2017/12/Bau-wens-Niaros-Urban-Commons-Transitions.pdf.

Part One: Urban Commons Projects in the Global South

Here are some important conclusions about commonalities and divergences that can be found in the nine narratives that we analyze here.

Conclusion 1: The Problematic Role of the State and Local Administrations

One of the first conclusions from the 9 case studies is that cooperation with governmental institutions, especially at the national level, but not exclusively, and thus any practical instantation of polygovernance that include official entities, is problematic for nearly all projects, with few exceptions.

In the case of the Bergrivier project that is trying to stimulate local economic streams using a complementary credit-commons based currency, there is a clear distrust and rejection of the more central authorities, seen as corrupt and neoliberal in their orientation, though this project is exceptional in that it found active and benevolent support from city officials. Project leader and author of the case study Will Ruddick also stresses that however difficult at the institutional level, there are always 'interstitial' individuals, who can make a difference and create some level of cooperation even within indifferent and hostile governmental entities. The Ker Thiosane project leaders in Dakar specifically mention the indifference of the authorities, even as the success of the project to revitalize a poor neighborhood, is obvious. At issue here is the inability of governmental personnel to 'see' and understand the logic of commoning, especially when it is 'extra-institutional' i.e. happening outside the sphere of both government, business, as well as 'classic' NGO's. The Platohedro contributors of the cultural project in Medellin, Colombia say that see the city and regional governments as opportunistic towards urban commoning, and therefore cannot be counted on.

Other projects themselves reject governmental interference or even support. For example, the Hacklab project in Cochabamba tries to maintain smooth and non-partisan relations with the local government, but keeps them at distance in the context of maintaining the autonomy of the project. The MInha Sampa campaign organization in Sao Paolo, Brazil, similarly actively rejects government funding because their citizen-led campaigns are most often based on demands directed at the government. The Woelab project in Lome, Togo, actively rejects the mentality of seeking help from

donors, which is seen as a form of post-colonialism that disempowers personal and collective autonomy. The organizer states that "There is no support neither from government nor from the city and the project is entirely marginal".

On the other side of the polarity is the Karura Forest project near Nairobi, Kenya, which stresses the necessary role of the government as framer of the local cooperation, i.e. the the Forest Act of 2005 frames multi-stakeholder governance; the City-based Forest Conservation Program, the county's environmental portfolio and the Kenyan Forest Service all have a stake. Even more positive are the experiences of the Manzigira Institute, which works on the welfare of urban farmers, and claims a good response from the local governments in listening and taking into account its policy recommendations.

Conclusion 2: The projects are 'integrative' in their approach

Most if not all of the projects are 'integrative'. We mean by this that they are not 'one issue' projects that focus on one or few dimensions, but that they have holistic visions of both the problem and the methods needed to overcome them.

For example Cowen/Ziniades (Bergrivier) stress: "one cannot assume bottom-up approaches will work without prior capacity building!" and this is done through a 'integrative' approach which aligns inner approaches (self-change), relational capacities (group work), and outer dimensions (creating a confident engagement with friendly and unfriendly outer institutions). The Cochabamba Hacklab stresses that community integration and collective intelligence is balanced and integrated with individual 'passionate' contributions. Both Ker Thiossane in Dakar and Woelab in Lome, have a strong orientation towards integrating 'modernity', through the mastery of networked technology, with a re-adaption of African traditions of cooperation.

Platohedro in Medellin uses what they call 'Post-Pedagogy] techniques, i.e. mostly un-learning conventional knowledge, learning by doing, and 'do it with others' process, based on active listening, and integrating self-work and rootedness in the body.

Conclusion 3: The Civil Society orientation is combined with efforts towards more ethical and local economies

The connection between a focus on civil society's empowerment, but combined with the attempt to create generative livelihoods, is a recurrent theme in several projects.

The Bergrivier and Bangla-Pesa projects (South Africa and Kenya respectively), clearly combine a focus towards respectively young people and informal traders, but look to local economic value streams as a key part of the solution for their projects. The tool here is the complementary currency and positive cooperation between SME network members is crucial to the success of the Bangla-Pesa project.

The Woelab in Lome creates an incubator for social entreprises, which are collectively owned and governed by the contributing members of the Lab, using practices inspired by African village governance traditions. The Manzigira Institute in Kena explicitely focuses on the economic welfare of urban farmers and creating the framework conditions for this to happen.

It should be stressed that commons-project are civic-oriented, but they do not consider themselves as traditional NGO's, though they seek support and sometimes funding from the more traditional NGO's. Ker Thiossane says that it engages in intensive dialogue with local population and institutions, but it also connects with global cultural networks and NGO's, such as Afropixels, and has been successful in generating funding from sources abroad. Platohedro in Medellin is particularly strong in its emphasis of cooperation with local museums and cultural institutions. Minha Sampa empowers citizen-led campaigns with their collective toolkit for self-organisation, but gets funding from national foundations.

Conclusion 4: The commons is present as narrative and practice, but not hegemonic in the discourse

All the projects and case studies have pooled resources, and practice various aspects of commoning, but use different types of languages to express it.

The Cowen Zinaides Bergrivier projects explicitly uses commons language, but combines it with a focus on creating a local exchange system; The Woelab and Ker Thiossane have a very strong 'neo-traditional' outlook, with their focus on reviving traditional African forms of cooperation and governance in a new context, but even Platohedro is anchored in the 'buen vivir/buen conocer' narrative discourse that is used by both communities but also by the progressive governmental coalitions in the Andean and surrounding region. While Buen Vivir is strongly anchored in the cultural traditions of the Andean native people, 'buen conocer' is a more recent and commons-specific import of the FLOK project in Ecuador, which was a specific effort to create knowledge commons. Minha Sampa is an outlier, more rooted in the civil and human rights tradition.

Conclusion 5: Important roles for networked technology

The projects of Will Ruddick in Kenya and South Africa are centered around the use of complementary currency systems, but still analog. The Cochabamba, Ker Thiossane, and Woelab experiences have a strong

emphasis on digitally networked culture, most strongly linked to a specific technology itself only in Cochabamba (i.e. wireless networks). The two others mentioned here are closer to the philosophies of fabbing and the maker movement. Platohedro is more rooted in artistic and cultural practice, i.e. the p2p-driven 'Do It With Others' philosophy. Minha Sampa is focused around a online toolkit that facilitates political campaigning.

The two exceptions seem to be the Karura Forest and Manzingira experiments, that do not exhibit such a clear link to digital culture.

Part Two: Urban Commons Projects in the Global

1. The existence of sophisticated urban commons policies through 'partner city' approaches

One of the conclusions from comparing commons project in the Global North and those of the Global South, is that a number of cities in western/northern cities have taken sophisticated turns towards participatory, sharing and commons-oriented policies. Apart from the well known Bologna Regulation for the Care and Regeneration of the Urban Commons, not covered amongst the case studies in this report, are the examples of Seoul, centered on the creation of a citizen-led sharing economy, those of Milan, oriented towards embedding startups in the communities through collaborative spaces, Athens, where the mayor and vice-mayor directly support the programs, and Barcelona, with a 'common-good' inspired political coalition, which has nominated officials in charge of a 'commons-based collaborative economy'. Edinburgh has a official 'cooperative policy' with already 17 community-led cooperatives created in this framework. Naples, not covered here, as a Commisioner for the Commons. These public policies are complex arrays of regulations and institutions with financial and other forms of support, with multi-year orientations, multi-stakeholder governance, and leading to a flowering of civic and cooperative initiatives. Also of import, and cited explicitly by Dirk Holemans of Oikos for the experiences in Ghent, Belgium, is a change from framework-based competition for funding (still very much practiced by Milan for example), to more long-term co-production of public services and policies, that are open-ended since they depend on the collaboration with, and input from, citizens.

2. In-depth and long-term integrative strategies of grassroots urban commoners

Just as surprising perhaps, is the sophistication of integrated citizen-coalitions that operate in cities where there is little or no support from city officials. These projects are equally multi-year, multi-stakeholder, and integrative. The key example here is the city of Lille in Northern France, which has created a Assembly of the Commons (linked to 9 other similar initiatives in other French cities). They rely on 'open source third spaces' such as collaborative run coworking and makerspaces, to work on collaborative cultures (Mutualab/Coroutine in Lille ; the Footscray makerspace in Melbourne, etc ..), and they pay strong attention to constantly reworked social codes and social charters, which define their inner governance but also their relations with external third parties such as government and business, in order not to be coopted or captured by them. Lille is exemplary in that regard and its Assembly has developed sophisticated social charters to deal with these interactions. In Melbourne, the commoners have politicized even more through the creation of a Australian-wide Commons Transition Coalition. The Mutual Aid Network of Madison, Wisconsin is connected to 16 other cities and has developed sophisticated combinations of exchange and support mechanisms.

3. Combining social and ecological sustainability

The Footscray makerspace works in particular with migrant and refugee populations in poor neighborhoods in western Melbourne, and links it to waste and upcycling. The waste management project in Malmo, Sweden, similarly is focused on integrating its migrant population. The M.A.N. of Madison, WI's first project is creating a food cooperative for a food desert area in the city's poorest neighborhood. Oikos in Ghent is a social-ecological 'think and to thank', that similarly looks for projects which simultaneously solve these two aspects of urban reality. The Emergent Structures project in Savannah, Georgia is especially focused on the re-use of construction and demolition waste. The insight on which these projects are based is that ecological issues disproportionally affect the poor but that solving them also creates economic and social opportunities in terms of creating local economies, jobs, skills and income.

4. The tension between horizontalist expectations and institutional governance

Quite a few projects are struggling to adapt the 'right' governance model, somewhere in between horizontalist aspirations and 'vertical' needs for institutionalization, especially those that explicitly function without much public support. The most sophisticated attempts are probably by the Assembly of the Commons in Lille which has developed an array of social charters. Jose Ramos in his report on Melbourne initiatives mentions the difficulties in cooperative governance, and Anna Seravalli of Malmo reports explicitly that they had to abandon user-based governance because it self-reinforced cultural exclusion mechanisms (geeks attracting other geeks instead of a more diverse population). Most projects are moving to poly-centric governance models as already described by Elinor Ostrom. Whether bottom-up or top-down, all projects include fairly radical participatory processes as a matter of course, which points to a deep cultural shift which includes public officials.

5. The Commons as a tool for economic development

The Edingburgh city council wants to stimulate a vibrant 'cooperative economy'; Seoul and Milan are focused on the creation of a 'sharing' and/or collaborative economy. Barcelona-based Fab City has the ambitious aim of relocalized 50% of food and industrial production back in the city and its bioregions, within 50 years, centered around the creation of fabrication labs; the Evergreen Cooperative model of Cleveland, Ohio aims to use the purchasing power of 'anchor institutions' such as hospitals and universities, to create a thriving local economy based on local coops in the disadvantaged inner city itself and has been successful in already creating a number of them in food and laundry services. The project in Savannah is an ambitious attempt to create an economy around the recycling of construction and demolition waste. 596 Acres in NYC is moving from public spaces to the creation of locally run commercial zones through Real Estates Investment Cooperatives, and the Santaporo wireless commons aim to move towards helping local farmers accessing agricultural information that is vital for their economic function.

The common aspect of these examples is that the commons/sharing/collaboration is not just seen as a 'nice thing to do', but seen as vital to the creation of a new and vibrant local economy that works for all inhabitants.

Vernacular Law and Complexity Science: Two Guides for Creating Urban Commons

By David Bollier*

In trying to imagine new ways in which citizens may govern themselves in urban settings, the ideas of "Vernacular law" and complexity science can provide indispensible guidance. Both fields study living social phenomena that tend to be ignored if not repressed by the modern state, scientific systems and the bureaucratic policy apparatus. Yet both Vernacular Law and complexity science provide significant insight into how to re-think urban design, governance, resource-management, social innovation and convivial urban life. This essay introduces these two ideas and suggests how they can help create more vital, resilient and stable cities.[1]

The Importance of Vernacular Law

Vernacular law refers to informal or unofficial "law" – the social norms and practices from "the street" that may or may not align with the dictates of formal state law. Vernacular law originates in the semi-private, unofficial zones of society and is a source of moral legitimacy and power in its own right. Legal scholars often use the words "informal," "customary," "grassroots," "indigenous," "common law" and "local" law to refer to social norms that, however tacit or informal, are essential elements of governance. It's important to understand Vernacular law as a kind of "living law." It is not codified in print or formal court rulings. It lives in the evolving practices and folkways of a given community.

My use of the term is inspired by the late Ivan Illich's essays on "Vernacular Values," first published in *CoEvolution Quarterly*, and the basis of his book *Shadow Work* (1981).[2] As a later commentator upon Illich's essays describes it, the "vernacular domain" evokes a "sensibility and rootedness . . . in which local life has been conducted throughout most of history and even today in a significant proportion of subsistence- and communitarian-oriented communities." The vernacular lives in the "places and spaces where people are struggling to achieve regeneration and social restoration against the forces of economic globalization."[3]

Legal scholar Michael Reisman has called this neglected legal realm "microlaw."[4] The seemingly trivial interpersonal relations of ordinary people matter because no body of macro-state law can really be effective without the support of social microlaw. Reisman has noted that when "assessments [of formally organized legal systems] yield discrepancies between what people want and what they can expect to achieve, macrolegal changes may not be effective. Microlegal adjustments may be the necessary instrument of change."[5] He continues: "In everyone's life, microlaw has not only not been superseded by state law but remains . . . the most important and continuous normative experience."

Vernacular law can be seen in the many social protocols that a community or culture develops for determining what is acceptable and unacceptable, what constitutes a sanction, and other rules for negotiating relationships. These social "rules" can be seen in how people queue up in lines (and object when someone tries to cut in), and in all sorts of public behaviors. Vernacular law plays an especially large role in governance for indigenous communities and peasant collectives, farmers' markets and coastal fisheries, and even in business, through "hand-shake deals" and "gentlemen's agreements."

There may be formal state laws that govern such domains, but all have an informal complement – rules that are socially negotiated, based on practical experience, and sometimes tacit. The many micro-judgments that people make and act upon, seen in the aggregate, constitute a powerful body of "law." The fugue of State and Vernacular law may be subtle, but it is a critical process for establishing the legitimacy of state law, its effective implementation, and its future adaptations to new circumstances. In this sense, Vernacular law constitutes a form of "cultural ballast" for any governance regime. It gives stability, self-confidence and legitimacy to the rules that govern people, especially in the absence of formal law.

The vitality of Vernacular law is on vivid display on the Internet, which is a great hosting infrastructure for countless digital commons. As the Internet has exploded in scope and become a pervasive cultural force around the world, so Vernacular law—self-organized, self-policing community governance—has become a default system of law in many spaces. There are, of course, many formal laws enacted by the state and "terms of service" licensing agreements for websites, but the real functionality of virtual communities depends upon

* David Bollier is Cofounder of the Commons Strategies Group, an independent scholar-activist who studies the commons, and a blogger at Bollier.org. He lives in Amherst, Massachusetts.

1 For a more extensive treatment of this topic, see Burns H. Weston and David Bollier, Green Governance: Ecological Survival, Human Rights and the Law of the Commons (New York, NY: Cambridge University Press, 2013).

2 Ivan Illich, Shadow Work (Boston, MA: Marion Boyars, 1981).

3 Trent Schroyer's Beyond Western Economics: Remembering Other Economic Cultures 69 (2009).

4 Michael W. Reisman, **Law in Brief Encounters** (New Haven, CT: Yale University Press, 1999).

5 Reisman, p. 4.

Vernacular law. Indeed, it lies at the heart of the success of the communities that create and maintain open source software, Wikipedia in dozens of languages, 10,000 open access scholarly journals, a variety of open science and open data networks, and hundreds of makerspaces and FabLabs. Such communities confirm the capacities of ordinary people to self-organize themselves and devise effective systems of self-governance, with only the most minimal elements of formal law.

This is not to say that state law or corporate-crafted contracts are unimportant, simply that such bodies of law can be gratuitous or secondary. But instead of seeing law mostly as a form of force – an invocation of power rather than an appeal to justice – Vernacular law looks to "the street" for guidance.

To be sure, there are troubling forms of Vernacular law such as black marketeers, inner-city gangs and Internet pirates. But even these problematic forms of Vernacular law cannot be summarily dismissed, despite their illegality, in the sense that they may point the failures of State Law to meet needs that may be entirely legitimate.[6] When state law fails to meet the needs, wants, and expectations of the peoples whom they are supposed to serve, then—in Reisman's words—"microlegal adjustments [e.g., assertions of Vernacular Law] may be the necessary instrument of change."

Revolutions often occur precisely because State law refuses to make necessary accommodations with Vernacular law. As David R. Johnson has noted, law must be understood as a living social organism, one that "causes its own form of order and persistence" and that rejects dysfunctional components from time to time.[7] As a living social system, Vernacular law does this. State law, by contrast, is more likely to be beholden to abstract logic and historic syllogisms that, over time, fail to evolve with shifting economic, technological, and other realities, not to mention social mores and practices. State Law can too easily become ossified and unresponsive, a captive of special interests that is made to serve narrow, private and short-term goals.

"In biology, if an organism becomes too complicated [or outmoded or corrupted] for its own good," writes Johnson, "it fails to mate and its line dies out—replaced by other systems, with other kinds of order. Because of the particular nature of law's meta-meta-story [that law is of, by, and for the people], its historical rooting of legitimacy in a particular geographic area, we've developed only one legal organism per country. We haven't had a real competition for survival among rule sets."[8] The very fixity of law, Johnson writes, is debilitating because, unlike most biological systems that adapt, "our current legal system lacks the most fundamental mechanism, used by more rapidly replicating and adapting biological organisms, to keep undesirable levels of complication under control."[9] As an abstract system unto itself, state law tends to become more complicated, outmoded and corrupted over time.

Hence the need to pay attention to Vernacular law, which may also be seen through the lens of *custom*. In her study of the history of property law, Yale law professor Carol Rose notes that custom is "a medium through which a seemingly 'unorganized' public may organize itself and act, and in a sense even 'speak' with the force of law. Over time, communities may develop strong emotional attachments to particular places and staging particular events in those places . . ."[10]. Medieval courts were known to elevate custom over other claims, as when they upheld the right of commoners to stage maypole dance celebrations on the medieval manor grounds even after they had been expelled from tenancy.

Courts have generally been hostile toward claims of traditional rights (or rights based on Vernacular law) because, as one court put it, they are "forms of community unknown in this state."[11] As Rose writes, citing *Delaplace v. Crenshaw & Fisher* (1860),[12] "a claim based on custom would permit a 'comparatively. . . few individuals' to make a law binding on the public at large, contrary to the rights of the people to be bound only by laws passed by their own 'proper representatives.' Indeed, if the customary acts of an unorganized community could vest some form of property rights in that community, then custom could displace orderly government."[13]

Courts have been uneasy with the idea of informal communities as a source of law because they are not formally organized or sanctioned by the state, and courts are, generally, themselves creatures of the state. But, as Rose notes, this is precisely why such law is so compelling and authoritative a substitute for government-made law; it reflects the people's will in direct, unmediated ways:

> It was a commonplace among British jurisprudes that a general custom, the "custom of the country," is none other than the common law itself. Looked at from this perspective, custom is the means by which an otherwise unorganized public can order its affairs, and even do so authoritatively.

Custom thus suggests a route by which a "commons" may be managed—a means different from ownership either by individuals or by organized governments. The intriguing aspect of customary rights is that they vest property rights in groups that are indefinite and

6 Eduardo Moisés Peñlver and Sonia K. Katyal, **Property Outlaws: How Squatters, Pirates and Protesters Improve the Law of Ownership** (New Haven, CT: Yale University Press, 2010).
8 David R. Johnson, **The Life of the Law Online**, 11 First Monday 8, No. (Feb. 6, 2006), **available at** http:/www.ucmp.berkeley.edu/cambrian/cambrian.php.
9 Johnson.
10 Johnson.
10 Carol M. Rose, *Comedy of the Commons: Custom, Commerce and Inherently Public Property*, *in* Carol M. Rose, Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership 134 (1994).
11 As quoted in Rose, **supra** note 400, at 157. Rose comments: "Certainly this remark reflected the general American hostility to the feudal and manorial basis of customary claims. But it also focused precisely on the informal character of the 'community' claiming the right; the remark suggested that if a community were going to make claims in a corporate capacity, then the residents would have to organize themselves in a way legally authorized by the state." **Id.** at 123-24.
12 56 Va. (15 Gratt.) 457 (1860).
13 **Id.** at 124.

informal yet nevertheless capable of self-management. Custom can be the medium through which such an informal group acts; indeed the community claiming customary rights was in some senses not an 'unorganized' public at all, even if it was not a formal government either.[1]

This sentiment – that the commons can be generative, self-managing and reflective of a broad social consensus – is what animates a growing movement to treat the "city as a commons." This conceptualization provides "a framework and set of tools to open up the possibility of more inclusive and equitable forms of 'city-making,'" write Sheila R. Foster and Christian Iaione. "The commons has the potential to highlight the question of how cities govern or manage resources to which city inhabitants can lay claim to as common goods, without privatizing them or exercising monopolistic public regulatory control over them."[2]

But what is the general process by which commons can be deliberately created and developed? The principles of complexity sciences, which study the deep dynamics of living systems, shed a great deal of light on this question.

Complex Adaptive Systems as Agents of Self-Organized Commons

While there is of course an important role for traditional "top-down" initiatives by government, "bottom-up" or grassroots-driven approaches hold great promise in our hyper-networked age, especially in building more inclusive, cross-sectoral cooperative regimes. This is not just a political opinion. Profound discoveries in the evolutionary sciences and the rise of complexity science over the past generation validate the power of bottom-up, self-actualizing forms of social organization and governance. Extensive empirical research shows that some of the most robust, stable forms of governance are distributed, self-organized, and collaborative. These scientific fields point to some very different frameworks for unleashing human agency, stimulating cooperation, and the organizing governance in networked environments – key structural challenges in the modern city.

Historically, the worldview that has prevailed for centuries sees humanity as separate from Nature, and sees the world as fairly static and mechanical. With enough scientific study, knowable causes can be identified to produce measurable effects in linear patterns. Hence the emphasis among scientists, business and governments on improving the rigor of instruments and empirical analysis as a way to identify cause and effort more clearly and then regulate and control isolated elements. This is an apt description of the bureaucratic project – to assemble objective expertise that can devise more reliable (usually bureaucratic) systems for achieving desired results.

Conventional forms of governance presume that they can reliably identify and control relevant boundaries, such as jurisdictional borders, and complex, distributed forces. But a terrestrial-based system of governance is not very capable of taking account of the transnational and mobile character of, say, the atmosphere, oceans, fish and wildlife. Nature does not respect political boundaries, and increasingly, neither do human populations. International treaty organizations and United Nations bodies may attempt to compensate for this failure by working in transnational fields, but their top-down governance structures tend to be brittle, inflexible and slow. They generally choose *not* to adapt and co-evolve because of the political and technical complexity. Indeed, politicians often shut down or punish vital feedback loops that could provide valuable information about the actual state of the environment, the efficacy of governance, and attractive adaptations.

Complexity science has opened the door to some very different frameworks for understanding human and ecological phenomena, and thus improving governance. The field draws upon the lessons of evolution, chemistry, and biology to identify fundamental principles governing what it calls "complex adaptive systems," which include such living phenomena as the brain, cells, ant colonies, the biosphere, the stock market, and Internet communities. Much of the pioneering work in complexity sciences has emerged from the Santa Fe Institute, a theoretical research institute that blends elements of physics, biology, chemistry, economics, mathematics, and the social sciences.[3] It turns out that remarkable parallels can be traced between the behaviors of living natural, physical systems ("Nature") and the social and economic systems that societies have invented ("civilization").

By the lights of complexity science, stable, successful systems cannot be constructed in advance by having brilliant minds devise sophisticated blueprints – the model of God as the absent watchmaker. Rather, successful systems must evolve organically through the self-organized, free interplay of adaptive agents which follow simple principles at the local level. No definitive big-picture knowledge or teleological goals can be known at the outset. Instead of presuming that an *a priori,* comprehensive design system should be followed to produce the best outcomes, complexity theory takes its cues from biophysical evolution and asserts that the best results will arise if intelligent, living agents are allowed to evolve over time toward optimum outcomes in supportive environments. The schemas or agents that survive and thrive will be the ones capable of prevailing against competitors and reproducing; less capable agents will be shunted to niches or die, according to principles of natural selection.

1 Id.

2 Sheila R. Foster and Christian Iaione, "The City as a Commons," **Yale Law & Policy Review** [add rest of citation]. See also Jose Ramos, "The City as Commons: A Policy Reader," July 2016, available at https://www.academia.edu/27143172/The_City_as_Commons_a_Policy_Reader.

3 As the Wikipedia entry for the Santa Fe Institute notes: "Recent research has included studies of the processes leading to the emergence of early life, evolutionary computation, metabolic and ecological scaling laws, the fundamental properties of cities, the evolutionary diversification of viral strains, the interactions and conflicts of primate social groups, the history of languages, the structure and dynamics of species interactions including food webs, the dynamics of financial markets, and the emergence of hierarchy and cooperation in the human species, and biological and technological innovation." *See* https://en.wikipedia.org/wiki/Santa_Fe_Institute.

Microbes, ants, humans, and diverse other organisms exhibit characteristics of complex adaptive systems. Each is nested within larger complex systems that are dynamic and constantly shifting; and yet each flourishes by embodying some highly predictive theories, as distilled in schema that are useful in exploring resources and regularities in a particular environment (the "fitness landscape"). The species with the most adaptive schema (e.g., DNA or culture) and the most refined feedback loops will be better equipped to learn from its environment and thus adapt, evolve, and grow. Evolutionary scientists increasingly believe that natural selection manifests itself more at the "group level" than through individual organisms.

These insights suggest that human communities can evolve into higher, more complex forms of organization without the directive control of a central sovereign or bureaucracy. Given a sufficiently hospitable fitness landscape, *self-organization* based on local circumstances can occur. Just as biological and chemical systems exhibit autocatalytic features that generate "order for free," so human communities have inborn capacities to create stable order. Indeed, this is one of the key insights of Nobel laureate Elinor Ostrom's empirical research of natural resource commons around the world. Countless Internet communities on the Internet also constitute a kind of existence-proof of our capacities for self-organization. Commons are fully capable of generating robust, flexible, and durable forms of management because their systems arise organically from the governed themselves in ways that are mindful of the particular resource, local conditions and cultural norms.

The 20th century mind may be convinced that governance and organization must be based on uniform, top-down expertise and command. It may see the system as a clockwork machine of modular, interchangeable parts, as legislation and regulation often seem to assume – but living systems tend to work in all sorts of unpredictable, creative and recalcitrant ways. The lessons of evolutionary sciences, complexity science and commons are how to craft governance that fully recognizes the *aliveness* of human subjects and the Earth. Complexity science shows us that new modes of bottom-up, diversified, locally appropriate governance are not just feasible, but already pervasive in functioning commons around the world.[4] Vernacular law is the expression of such communities: decentralized agents working in tandem with particular histories, traditions and local circumstances.

Complexity and evolutionary sciences confirm that the most efficient and flexible systems of governance will respect the natural proclivities of "lower-order" governance units in a large, complex system. The quest to impose coercive control from a centralized governance body, without the active participation and consent of the governed at the relevant scale, is ultimately futile. Subsidiarity matters. Complex, higher levels of organization are sustainable only if they take account of the inherent needs and dynamics of their constituent sub-systems and "members" at all scales.

This analysis leads directly to the door of the commons. Commons are based on the principles of bottom-up self-organization, the freedom of collective agency, polycentrism (multiple loci of governance) and subsidiarity (management at the lowest feasible level). Vital collaboration and innovation can emerge only if the governed at the most distributed scales are accorded basic rights of autonomy, human dignity, and intelligent agency. The creative agency and internalized norms of commoners functions as a kind of stabilizing flywheel and innovative force in governance. Governance is transformed. It is not simply a matter of political leaders, state law and credentialed experts imposing their supposedly superior knowledge and will. It is about providing sufficient open spaces and assistance to citizen-commoners to build their own city, in ways that are directly satisfying and practical to them.

What results through this process is a higher level of organization known as *emergence*. "Living systems always seem to emerge from the bottom up, from a population of much simpler systems," writes science journalist M. Mitchell Waldrop.[5] A mix of proteins, DNA, and other biomolecules coevolved to produce a cell. Neurons in the brain come together to produce cognition, emotions, and consciousness. A collection of ants self-organize themselves into a complex ant colony.

"In the simplest terms," complexity author Steven Johnson write, complex systems "solve problems by drawing on masses of relatively stupid elements, rather than a single, intelligent 'executive branch.' They are bottom-up systems, not top-down. They get their smarts from below."[6] Johnson continues: "In these systems, agents residing on one scale start producing behavior that lies one scale above them: ants create colonies, urbanites create neighborhoods; simple pattern-recognition software learns how to recommend new books. The movement from low-level rules to higher-level sophistication is what we call emergence."[7]

The agents within any complex adaptive system do not deliberately plan or create a higher, more sophisticated level of social organization; they are motivated chiefly by local circumstances and knowledge. And yet, when the micro-behaviors of agents relying on Vernacular law reach a critical stage of interconnection and intensity, they actualize new flows of energy and vision. An *emergent new system* arises in an almost mysterious fashion.

These are some of the lessons that mayors, city governments, urban planners and citizens should begin to absorb as they contemplate how to manage and improve cities in the 21st Century. As electronic networks become ubiquitous, the dynamics of complexity science

4 David Bollier and Silke Helfrich, editors, **Patterns of Commoning** (Amherst, MA: Off the Common Press, 2015), available at http:/www.patternsofcommoning.org.

5 M. Mitchell Waldrop, **Complexity: The Emerging Science at the Edge of Ordert and Chaos** (New York, NY: Simon & Schuster, 1992), p. 278.
20 Steven Johnson, Emergence: The Connected Lives of Ants, Brains, Cities and Software (New York, NY: Scribner, 2001), p. 18.
7 Ibid.

and Vernacular law are becoming more relevant than ever.[1] The question is, Can traditional city bureaucracies and politicians find to imagination and support to craft the new structures to enable cities to function as commons? Will they work with citizens to leverage the fantastic reservoirs of creativity, energy and responsibility that ordinary people are willing to contribute to improving their cities, given the proper enabling structures? These are key challenges facing cities around the world in coming years.

1 David Bollier, "The City as a Platform: How Digital Networks are Changing urban Life and Governance," (Washington, D.C.: The Aspen Institute, 2016), available at http:/csreports.aspeninstitute.org/documents/CityAsPlatform.pdf.

Urban Commons: A Reader

Tine De Moor

"In a world where markets and the state have started to reach the limit of their capacities to govern resources in a sustainable way, society is turning increasingly to "joint resource management"; more and more, collective initiatives of "stakeholders", trying to reach their economic and social goals via collective action, are popping up in the developed world. Examples of such initiatives are energy consumers' collectives, car-sharing, and the development of open-source software. Although they may seem rather marginal as yet, these forms of institutionalized collective action are nevertheless gaining momentum. Many of the initiatives use the concept of "the commons" to emphasize that they are indeed sharing a resource. The "Creative Commons initiative" is nowadays the most well-known example of this trend. Yet, few participants actually know the real historical back- ground of the commons."[2]

An Historical Framework for the Commons

The amount of research developed on the topic of commons and on the motives for cooperation or defection is wide, and engages scholars from different fields, ranging from experimental sociology, psychology and economics. Tine De Moor brings her enriching contribution to the field by applying an historical perspective to the study of the commons, allowing us to go beyond the negative understanding produced by Garret Hardin's "Tragedy of the Commons"[3] and to discover the existence of numerous examples of successful and long lasting commoning experiences in European history. De Moor explains that:

"During the late Middle Ages, European villagers and townsmen alike formed an unprecedented number of alliances with each other. These were not (primarily) based on kinship or blood ties, but on other common characteristics such as occupation. In the urban context, organizations such as guilds of merchants and craftsmen can serve as examples. For the countryside, this was the period when communal land tenure arrangements, or simply 'commons', were increasingly formed and institutionalized"[4].

While the emergence of different forms of collective action and their institutionalization is not without historical precedents (already in the Roman era merchants and craftsmen formed some guild-like institutions), the intensity of the new units of collective action makes this movement striking enough to be defined by De Moor a "silent revolution". As she explains, "It was a revolution in as much as this was a movement that started from below, among stakeholders with a common cause, and because it may have had important long-term consequences for the course of European history; it was 'silent' because this movement was primarily based on at first tacit and later explicit written agreements among powerful rulers and demanding subjects, villagers, and townsmen. These agreements were largely formed on a peaceful basis. The silent development of the forms of collective action described here has meant that for a long time the revolution remained unnoticed"[5].

De Moor claims that, even if silent, the commons revolution and the development of collective action institutions both in the urban and in the rural environment played a fundamental role in shaping the trajectory of the European economy from 1100 to 1800. In the middle of the 18th century things begin to change, and the functioning of common-property arrangements began to be questioned, as it was considered unsuitable to increase land productivity in order to feed a growing population. A privatization and enclosure process was activated, which brought to the substitution of common-based management of resources with private property arrangements. As Professor De Moor explains the new arrangements, rather than benefiting the entire population, worked to the advantage of few wealthy investors, while leaving most of the commoners empty-handed. Furthermore:

"They lost not only a means of income, but also part of their community and the invisible bonds that working together from generation to generation created among community members. Commons had, as will be explained, a primarily economic function, namely, that of sharing the risk of relying on a resource for which the production – and thus the income – was unreliable. Besides this, however, the commoners also found in the common a social welfare system – albeit not for everyone – and a source of social capital[6].

Defining the commons – A three-dimensional concept

Already before Hardin developed his "tragedy of the commons" framework, which strongly contributed to the diffusion of negative view of the commons, commons as governance regimes did not always have positive connotation. Already in the 19th century, commons came to be described more and more often

2 T. De Moor (2012) "What Do We Have in Common? A Comparative Framework for Old and New Literature on the Commons" The International Review of Social History, Volume 57, Issue 2, pp. 269-290
3 G. Hardin (1968) "The Tragedy of the Commons" Science, 162 (3859): 1243–1248.
4 T. De Moor (2008), "The silent revolution: a new perspective on the emergence of commons, guilds, and other forms of corporate collective action in Western Europe", The International Review of Social History, Volume 53 (Supplement 16, Special Issue on 'The Return of the Guilds'), pp. 175-208
5 Ibid.
6 T. De Moor (2015) "The dilemma of the commoners: Understanding the Use of Common Pool Resources in Long-Term Perspective", Cambridge, UK: Cambridge University Press

as an "archaic" and "inadequate" system for the management of resources, inevitably leading to over-exploitation.

It was thanks to the essential contribution of Elinor Ostrom[1], Nobel Prize for Economics in 2009, that the concept gained a more positive undertone and was brought to the attention of a wider audience, and that the concept itself became subject of serious academic work by hundreds of scholars worldwide. Elinor Ostrom contributed to the return to the original features of the concept, broadening it to other types of resources.

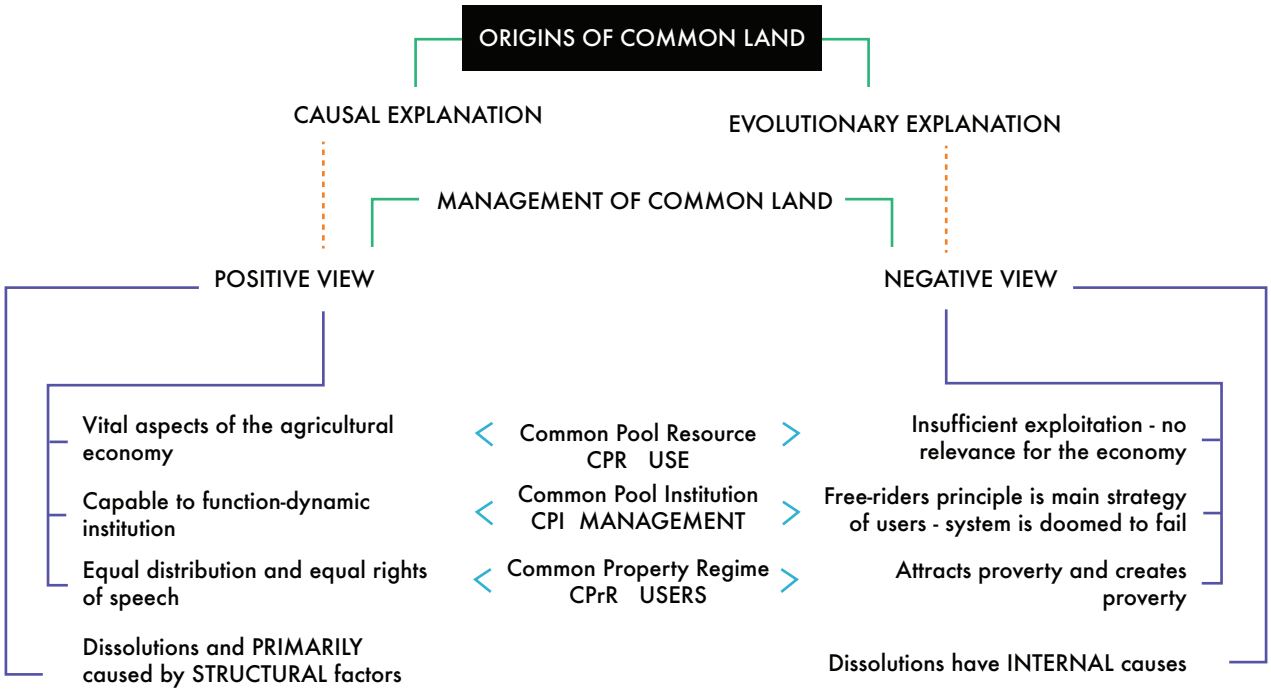


Figure 1. Overview of different opinions on commons, structured horizontally by the different dimensions (CPR, CPI and CPrR), and vertically by the associated positive or negative connotation in the literature. From T. De Moor, 2012 (see footnote n.1).

According to Professor De Moor, dealing with the commons means dealing with a complex reality, which can refer to three different dimensions: the natural resource itself, the property regime linked to it, and even the group of people that is entitled to use the resource. As explained by De Moor:

"The first-mentioned meaning (natural resources) corresponds with what generally falls under the heading of "common-pool resources" (CPR). Elinor Ostrom describes "common-pool resources" as "natural or man-made resources sufficiently large that it is costly to exclude users from obtaining substractable-resource units".[2] On the basis of this definition and further literature, one assumes that it takes two criteria to define a CPR. Firstly, there are the high costs of the physical exclusion of the natural resource (or excludability) [...] and secondly, there is the issue of the presence of "substractable resource units" (or substractability)."[3]

"The property regime of a common is a second dimension. The term common-property regime (CPrR) refers to a property regime "some- where" in between private property and public property."[4]

"The interaction between the first dimension – commons as natural resources – and the second dimension – the users of the commons – required a certain form of organization. The institution set up to make that organization possible – the common-pool institution (CPI) – can be considered as the third dimension of common land."[5]

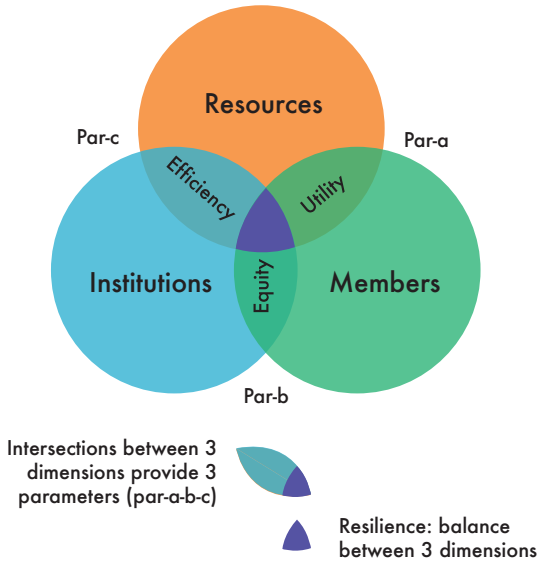
Basically, summarizing the above three dimensions, one can say that when using the term commons we

1 E. Ostrom (1990) "Governing the Commons: The Evolution of Institutions for Collective Action" Cambridge, UK: Cambridge University Press
2 E. Ostrom (1990) "Governing the Commons: The Evolution of Institutions for Collective Action" Cambridge, UK: Cambridge University Press, p. 30.
3 T. De Moor (2012) "What Do We Have in Common? A Comparative Framework for Old and New Literature on the Commons" Research Institute for History and Culture, Utrecht University
4 Ibid.
5 Ibid.

should not simply consider the resource, but a complete governance regime whereby a group of people create and/or hold a resource or a service together as a group but can only use the resources as individuals under jointly set conditions, which form the institution related to the common.

According to De Moor, commons can be a resilient, long-living governance regime, even under great societal stress, as long as the parameters at the intersection between the dimensions are taken into account. In the underneath so-called 3D-framework for the resilience study of commons De moor brings together the three dimensions of which self-governing institutions such as commons consist: **a. the RESOURCES**, **b. the INSTITUTION** (rules, social norms) and **c.** the collectivity of **MEMBERS** that has rights on the resources and collectively decides on changes of the rules. Behind the framework is the idea is that **resilience of an ICA as an organisation is the result of a continuous search for a balance between these three dimensions, whilst dealing with exogenous changes in demography, politics, and the economy.** Members must be kept content with what they receive in return for their membership, but if this leads to overharvesting of the available resources, this may create a "tragedy". Rules, therefore, must constantly be adapted to changing circumstances, while resource availability may fluctuate due to environmental and economic factors. The search for resilience by balancing resources, users and institution, will be different from case to case, depending on the local circumstances, and over time. Given the slow changes that characterize institutions in general, but also the delay in visible impacts of long-standing negative or positive natural resource use and management may have, a "longitudinal approach" is essential to understand how such institutions function. She captures the mechanisms that are key to in the search for resilience within any type of self-organising institutions in a number of parameters, that lay at the intersections between the 3 mentioned dimensions: **utility (Par-a)** as an expression of the individual usefulness of the members' participation in the collectivity; **equity (Par-b)**, as an expression of the involvement of members in decision-making processes; **efficiency (Par-c)** as a way to evaluate the efficiency of the rules for resource management and use.

For the members of a self-organizing institution like a common or a cooperative it is vital to keep all individuals willing to act in a reciprocal way. This in turn will depend on the degree to which they experience their involvement in the collective as "useful" and "equitable", which are two factors highly influenced by exogenous changes. For example: when the supply of resources is shrinking due to e.g. climate conditions or when membership is growing, a change in the distribution of the collective good might be necessary to avoid overharvesting of the resources. A potentially reduced share – and thus diminished **utility (Para-a)** – of the collective good for each individual member, may lead to (part of the) members starting to freeride (i.e., contribute less or extract more than one's share), or even petitioning for dissolution of the collective. Similarly, membership growth may also affect group cohesion and internal power balances as larger groups may make it harder to involve all members in the decision making process. An increasing group of members may have a positive influence on the total amount of capital available within a common, but may have a negative effect on the social control as large groups make it harder to recognize members of the group. In social science literature, it has been described that cooperative behavior is promoted if the other people can observe one's personal choice behavior, and that this 'social-control' mechanism may be responsible for the fact that people are more willing to work hard under conditions of high visibility than in more anonymous settings. A lack of balance between the group of active users of commoners (those harvesting resources, or performing labour or administrative tasks on the commons...) and passive users (those who merely became members because they had the right to do so) may lead to a change in governance and eventually also the dissolution of the common. For example, changes in the level of active membership (members who actively use the resources or fulfil tasks for the common) versus passive membership (members who registered as members but do not participate) may be used as an indicator for the utility-parameter, helping us to understand why certain governance decisions in the institutional design may have been made [14]. On the other hand, inclusion of all stakeholders in the decision making process may make the need to create costly and complex sanctioning mechanism superfluous.



Such lesser involvement in decision making processes might be perceived as a decrease in **equity (Para-b)**, which in turn may lead to less responsible behaviour and mutual control of individual behaviour, and freeriding. In these cases, an institutional response – i.e. a change of the rules -– would be required to avoid overharvesting, with a decrease in **efficiency (Para-c)** of the resource management. These examples of ways in which the interplay between resources, members and institution

might lead to problems within an ICA, demonstrate that achieving resilience is the result of a difficult and continuous balancing act (25). The study of resilience in this context thus demands that we do look at the evolution of all three dimensions AND at their constant interaction.

Contemporary Commons – A Paradigm Shift

Today we are observing a resurgence of the commons, therefore it becomes particularly important to realize that the notion of commons has evolved through time, and in its contemporary form has come to hold a much broader meaning. As De Moor explains:

"Commons (or "goods used and managed in common") are found in past as well as in the present. The original "historical" use of the notion "commons" was, however, limited to the "territorial" type: it meant land used in common to produce hay, wood, or peat, to provide pasture for the cattle of the local population, and to supply other natural resources for construction and housekeeping. [...]Outside the historical context, the term "commons" is being increasingly used, too, not just for the tangible physical forms of institutions at least similar the historical commons, but also for less tangible (or even virtual) forms of goods being shared among large groups of people. The term "commons" has also been "stretched" substantially, by applying it to resources which remain open-access goods, such as the oceans or clean air, despite a growing tendency to restrict access to them by establishing private property rights (e.g. the tradable "emission rights" which are part of the Kyoto Protocol)."[1]

A partial explanation of today's commons development is to be found in the historical changing context, which over the past few years has seen more and more examples of citizens uniting in collectivities to provide goods that until now were considered public. As Professor De Moor explains:

"In many cases privatization has not yielded the preferred and promised results: the market did not always bring about high-quality, affordable, and diversified offerings, as competition functions only when there is sufficient demand".

Furthermore: "It has become apparent that numerous social welfare provisions are becoming less accessible, either because they are increasingly becoming unaffordable in the often privatized form or because the government 'retreats' and no longer considers these services its responsibility. In many cases this 'decline of the welfare state' has resulted in a transfer of trust and responsibilities to a private partner, perhaps through a public-private partnership (PPP), but often at a high cost. Privatization of public goods and services limits accessibility for those who are not capable or willing to pay for such goods and services. In response, people are increasingly banding together to provide services that the government has left to the whims of the market economy, as the latter cannot always live up to the expectations to provide goods and services for the promised competitive prices, nor can it do so wherever these goods and services are needed, particularly in less- populated areas where demand is lower than elsewhere."[2]

What we are observing here is a "paradigm shift", that is bringing the commons to the center of the political and economic debate on how to manage scarce resources while also answering to the needs expressed by and ever-growing population. It is particularly important to note that this new wave of commoning is taking place in a completely new context, where communities are not isolated and almost self-sufficient groups, but instead act in a highly connected global world. This necessarily implies a series of characteristics that distinguish contemporary commons from their traditional counterparts.

Professor De Moor explains that:

"Contemporary consumer and producer collectives are aimed at overcoming problems similar to the institutions for collective action in the medieval and early modern period, but there cases this 'decline of the welfare state' has resulted in a transfer of trust and responsibilities to a private partner, perhaps through a public-private partnership (PPP), but often at a high cost. Privatization of public goods and services limits accessibility for those who are not capable or willing to pay for such goods and services. In response, people are increasingly banding together to provide services that the government has left to the whims of the market economy, as the latter cannot always live up to the expectations to provide goods and services for the promised competitive prices, nor can it do so wherever these goods and services are needed, particularly in less- populated areas where demand is lower than elsewhere."

"An important difference between the two is that institutions for collective action in the past offered solutions to both economic and social – and to some extent, such as with the commons, even ecological – problems, whereas the goals of the con- temporary citizens' cooperatives are usually focused on solving a single issue, such as producing renewable energy or providing qualitative care."

"In today society services are subdivided in separate organizations; this has certain advantages, but also disadvantages for collectives. Nowadays, if people misbehave in one domain, it does not necessarily affect other parts of their life directly. As previously described, reciprocity ensures that people are more willing to yield to the collective's norms, and when a system encompasses multiple parts of a person's life, this effect becomes cumulative. In the past, institutions for collective action were able to combine social and economic goals, and have a complementary system of monitoring and sanctioning. Present-day civil cooperatives cannot implement a similar arrangement."

"Another difference links up to this: the historical

1 Ibid.

2 T. De Moor (2015) "The dilemma of the commoners: Understanding the Use of Common Pool Resources in Long-Term Perspective", Cambridge University Press.

examples considered future generations in their own workings. Commoners aimed for a sustain- able use of their common resources by restricting them to the member- households' real needs."

"A further important difference between past and present is the mutual interaction of contemporary collectives with market and state. This inter- action with the market occurs in two forms, first by collective consumption [...] and secondly through collective production."[3]

Observing such a complex context, in which different actors are at play but too often fail to work together, it becomes evident that we need to find new models for future co-operation. The government plays a fundamental role in stimulating and managing this transformation, and, as explained by De Moor, it will necessarily have to face two major problems which characterize the current situation: "First of all, how to organize the provision of services that were previously considered public in a way that access to them remain feasible for all layers of society, not just those who can afford to "buy" these goods in the market; and secondly, how to ensure that this is done in a resilient, durable way, so that what is created today can also be enjoyed by future generations"[4].

To develop the collaborative ecosystem needed to deal with these and with many other pressing issues, the government needs to adopt a new paradigm and to contribute to the development of institutional diversity. This can be done "by breaking the predominance of state and market in fulfilling public services, by allowing more organizational forms and stimulating institutions, thereby allowing society to become more adaptable"[5].

3 Ibid.
4 T. De Moor (2014) "Co-operating for the future: inspiration from the European past to develop public-collective partnerships and inter-generational co-operatives", in "Protecting future generations through commons", Trends in social cohesion series, 26, eds. Saki Baily, Gilda Farrell, and Ugo Mattei, 81-104. Strasbourg Cedex: Council of Europe Publishing.
5 Ibid.

A pact for the territory: towards a collaborative governance of transformation processes

Paola Cannavò* and Massimo Zupi**

* Associate Professor in Urban and Regional Planning, University of Calabria, DIATIC.

** PhD, Research Fellow in Urban and Regional Planning, University of Calabria, DIATIC.

Premise

In accordance with one of the objects of this Open Book, i.e. the development of a shared frame of knowledge and comprehension of Urban Commons Transitions, in the following pages we intend to make a theoretical remark divided in two phases.

The first part centers around the key terms that can define a new vocabulary of contemporary urban actions, and mostly on the relations that the latter establish. The interactions between complexity and conflict, conflict and social cohesion, social cohesion and commons, commons and creative communities, creative communities and collaborative organizations are simultaneously potential dichotomies and evolutionary sequences (form complexity towards the establishment of collaborative organizations).

Starting from these premises, the second part of the contribution investigates some of the ways through which urban planning is trying to take possess of the terms of this new discussion, in both an endogenous way, by innovating its technical instruments and criteria, and an exogenous way, by opening up to the comparison with other disciplines and knowledge.

The keywords

Beyond the obvious assonance, the binomial contemporaneity-complexity, represents the indispensable starting point for every line of thought around urban dynamics. Turning to the notion of complexity represents indeed the main *refugium peccatorum,* the universal reason to explain most of urban issues. On the extreme opposite of these standardised thoughts stands the concept of social cohesion. Besides complexity being used to explain the inadequacy of traditional approaches, the inefficacy of planning techniques, the obsolescence of regulatory instruments, social cohesion is seen as a panacea for every issue of society (generally) and of the city (more in particular).

In these simplified visions, however, social cohesion is perceived as the ultimate utopian state of harmony. Realistically, instead, it is more like a temporary and irretentive balance made by the composition of conflicts, negotiations, compromises and reciprocal commitment[1].

If simplifying the complexity of the city is something unimaginable, at the same time it is pointless to eliminate or resolve the conflicts within the city.

What we can do is manage urban conflicts, while aiming to forms of social cohesion able to guarantee "city rights" universally. This is what Diamond refers to when talking of the disintegration of social cohesion as one of the causes leading to the "break down" of a culture[2]: the progressive denial of "city rights" to a growing part of population, which represents the tragedy of commons and their indiscriminate withdrawal to their impoverishment and exhaustion[3].

By following this reasoning thread, another keyword has been identified: commons, and in particular social commons intended as the cluster of shared elements around which social cohesion can be built. In another part of this Open Book, Manzini identifies the generation of new social goods as the virtuous result of spontaneous reactions to the complexity and contradiction of contemporary societies. New ways of being, doing, living and using space; the rediscovering of collaboration; the reinvention of places are the result of "social innovation" initiatives fostered by a growing number of spontaneously self-organized people.

Manzini calls "creative communities" (a group of people who were able to imagine, develop and manage a new way of being and making) the starting phase of this process, while he uses the expression "collaborative organizations" to stress the moment of evolution essential for the success of these initiatives. A further reflection around this interesting distinction can be useful.

The concept of "creativity" applied to the city and to urban communities is characterized by the will to model one's spaces independently, the capability to adapt oneself, the disposition to doubt, uncertainty and unpredictable[4]. As a result, there is the generation of an attitude aimed to innovation, to promoting different lifestyles and ways of consumption, to reducing environmental impact,

1 Blecic I, Cecchini A. (2016), Verso una pianificazione antifragile. Come pensare al futuro senza prevederlo, Franco Angeli, Milano.
2 Diamond J. (2005), Collapse: How Societies Choose to Fail or Succeed, Viking Press, New York (ed. it. (2005) Collasso. Come le società scelgono di morire o vivere, Einaudi,Torino).
3 Hardin G. (1968), "The tragedy of the Commons" in Science Vol. 162, issue 3859, pp. 1243-1248.
4 Landry C. (2006), City Making. L'arte di fare la città, Codice Edizioni, Torino.

organizing different urban schedules, all preferring quality to quantity[5]. A creative community is nothing more than a group of normal citizens that do all types of things and originate a certain type of innovation that experts and planners are not able to predict. A creative town is able to fulfil its daily chords in remarkable ways[6]. Creativity does not need time, energy, money and other resources usually implicit in traditional investments. It rather expresses itself effectively by triggering actions and micro-actions on different scales and involving small groups of people that are usually left out form decision-making processes[7].

From all these different shades of the notion of creativity comes up an extemporary character, both intentional and prideful, irrational, ephemeral, that refuses regulation and standardization that could meddle with the free choice of each subject and community. This approach, while presenting undeniable virtues in the ability to trigger actions and processes, to spark attention and interest, to bring together and share, suffers from a tidal and transitional nature[8] due to the fact that the existence of these creative climates are not fixed and immutable, rather than variable and usually time limited.

Therefore, to make sure that the energies triggered by the creative practices can eventually develop, an action of reinforcement and structuring is needed to lead to more organized forms. Collaborative organizations represent one of these possible forms, characterized by the fact that the final result (the reason why the collaboration is started) and the way to pursue it (the collaboration itself), are equally important, because the people who cooperate are interested in the result, but also because they enjoy the way of pursuing it[9].

Form observing regulations to the choice of new rules

From time to time urban planning discipline investigates the efficacy of its traditional planning instruments, emphasizing in particular the reasons why these tools work better when planning to avoid rather than planning to achieve. This attitude, that has its daily application in municipal urban plans, has had the indirect result of giving to citizens the belief that urban planning is just an ensemble of rules to be observed and that usually limit the possibility to operate at the urban scale. While this type of regulation has been useful in contrasting speculation during urban expansion, nowadays, in the age of urban requalification and regeneration, it seems unable to give right direction and incentives to those forms of active citizenry that are spreading out.

The reaction to the inability of urban planning instruments to address effectively urban transformation has originated a series of experiences[10] that can be ascribable to the topics of informal, spontaneous, temporary use of urban spaces and territory, which outline innovative forms of "appropriation", transformation, use and management of commons. At the beginning, this type of activities have been identified as episodic, spontaneous and ephemeral phenomena; only later it has been made clear that it was an alternative way to give structure to contemporary urban space.

It is evident that we need to rethink the instruments and techniques, but also management and governance models of resources and commons, to achieve a new system of rules that should be proactive (more than just observed) and based on the collaboration between citizens and institutions.

In this way, we will be able to move on from the traditional planning logic, made of objectives (that include the results of participation processes often just made to gain consent) that appear blurry, unspecific and comprehensive, often too far from concrete situations, towards the direct practice on compromised and degraded fields, under pressure or undergoing transformation, through which to concentrate resources that can actually foster the "commons".

It's not about building collaborative organizations. It consists in defining a favourable environment in which they can live and act concretely on the territory.

Pacts and contracts

To foster the transition from a regulative form to a more interventionist one and to overtake the separation between planning instruments and planning levels, collaborative methods of territory management are becoming more influential. These methods are able to give sense of responsibility about the execution (efficacy) to the different actors and generate a diffused sense of belonging. Consent is reached through agreements that are voluntary or through real contracts, which finds in urban planning several examples, different for their application fields and objectives.

A first example, mostly performed in the Anglo-Saxon area, is represented by the forms of Public-Private Partnership (PPP) that substitute the traditional approach based on public investment, mostly in those fields able to give direct compensation to private investment (energy, transportation, health care, information and communication technologies, construction and local infrastructures). Although

5 Franz G. (2012), Smart City vs Città Creativa? Una via italiana all'innovazione della città, Lulu press, New York.
6 Thackara J. (2005), In the Bubble. Designing in a complex world, MIT Press; ed. it. (2008) In the Bubble. Design per un fururo sostenibile, Hoepli, Milano.
7 Yunus M. (2010), Si può fare. Come il business sociale può creare un capitalismo più umano, Feltrinelli, Milano.
8 Hall P. (1998), Cities in Civilization: Culture, Technology, and Urban Order, Weidenfeld & Nicolson, London.
9 Sennett R. (2012), Together: The Rituals, Pleasures, and Politics of Cooperation, Yale University Press, New Haven.

10 In particular, we refer to temporary projects that improve public space promoted by young urban planners all over North America between 2010 and 2011, recalling the tactical urbanism methodology (temporary and low cost interventions at the scale of the quarter). These ideas have also had a good response in Europe. Among the most representative experiences: the baL project (acronym for "buone azioni per Librino", literally good actions for Librino) promoted by the G124 group under the lead of Renzo Piano, in which a local Crowdfunding operation of administration, smaller and bigger enterprises, artisans, category associations, university and the research world and citizens made concrete a "collaborative pact". The Re-Gen Huesca project proposes a regeneration process of the historic quarter of Huesca by engaging citizens in the project of punctual and temporary interventions with a minimum impact on four empty and unused areas. The Stalled Spaces project in Glasgow considers a temporary usage of an area of about 22 hectares, but above all it creates a network of 200 volunteers to take care of these recovered spaces.

diffused mostly in the Anglo-Saxon world, where by tradition public intervention is less important and law system is more pragmatic, other Western Countries are enlarging these collaboration forms and also some developing Countries appreciate how these methods are able to fill the infrastructure gap more quickly and efficiently than the public could do on its own. In the United States for example these experiences of partnerships have different shapes and dimensions, built by tools continuously evolving and represent the starting point of many urban development and transformation initiatives[1]. What pools together all these experiences of public-private partnership devoted to urban planning is the position held by public initiative. Institutions orientate their investments, sometimes paltry, to arrange the best conditions for private investments, guaranteeing the realization and management of the intervention and of the sharing of responsibilities and benefits with a domino effect[2]. In the American scenario, a certain level of flexibility and versatility due to the different contexts, the selection of the actors and the balance between their different roles characterize these planning tools. In fact, application fields are several and go from the construction of infrastructures and entire new quarters (as predominantly happens in Europe) to the regeneration of degraded urban contexts in economic, physical and social terms, paying particular attention to employment growth[3].

In France next to traditional regulatory devices, **chartes paysagères** are used to promote agreement-based approaches in the fields of landscape safeguard and planning and are characterized by a more operative and contractual nature. **Chartes paysagères** aim at creating a local project to safeguard and enhance the landscape that is shared between all the actors involved in its management, therefore institutions but also other non-institutional actors. These procedures are voluntary and their editing depends on the strict collaboration between the initiative of a group of municipalities or regional natural parks with local communities, above all the farmers. From the operative point of view, once the key-objectives of the landscape enhancement have been defined, all the parts involved – for example local administrations (individually or as a group), the departments (similar to Italian Provinces), public or private supplier societies, farmers cooperatives – sign a contract with which they commit to respecting its contents, each one in its own field.

Above all the concrete actions in which the chartes paysagères translate into, the contrats d'agriculture durable (Cda) are conventions stipulated between State government and farmers who benefit from economic incentives to realize actions of landscape and environmental valorisation of a territory[4].

A direct offshoot of the French experiences is the River Contracts (**Contratti di Fiume, CdF**). Although not originated from a real law, River Contracts are gaining more solidity both in methodology and operatively in the Italian context. It is a tool to enhance the river's territory and landscape in a multidisciplinary way, by defining strategies at the scale of the whole basin but also through punctual project actions, all aiming to the fulfilment of the Basin's Plan. The River Contract has to be the outtake of a decision process shared between the different actors and integrated by the different topics that it pacts with[5]. In this way, it is possible to demolish traditional management forms based on hierarchic top-down relationships, and allows overtaking its strictly technical and sectorial character[6]. Starting from a voluntary agreement, RC allows the deployment of participation of all the principal actors involved in the river area to define and carry out a shared strategic framework. Therefore, the decision process should involve a heterogeneous group of participants, in social and economic terms of but also in their significance in decision-making arenas[7].

The objective is achieving an integrated territorial planning in terms of wide contents (safeguard of ground and water, environmental improvement, landscape enhancement, territorial development) and in funding forms (the PSE-Ecosystem Services Payments are mechanisms based on networks between private and public actors that express great potential), to address both the planning and programming processes.

Collaboration pacts, as defined by the Commons guidelines of the city of Bologna, are an instrument through which municipality and active citizens agree upon what is necessary to achieve operations of regeneration and looking after commons. Content of the Pacts vary according to the complexity of the arranged interventions and on the duration of the collaboration, defining in particular: the objectives of the collaboration and the planned actions; the duration of the collaboration; the intervention methods, roles and commitments of the parts involved; the ways the community can benefit of the common in question.

In particular, the collaborative pacts are used in operations of taking care of and regeneration of urban spaces, according to the following cases of point: shared management (timing, interventions and activities are predetermined in the pact), shared management of private spaces used by the public (by denying activities and interventions that contrasting with the public use or private property of the good), regeneration (only case that includes a partly or total economic contribution from citizens).

Conclusions

As a discipline, urban planning has started the transition form an exclusively regulative approach (based on the arrogance of predicting the transformation of the complex system city is) to a structural approach (based

1 Reuschke D. (2001), Public Private Partnership in urban development in the United States, NEURUS – Network of European and US Regional and Urban Studies.
2 Peirce N.R, Steinbach C.F. (1990), Enterprising communities: community based development in America, Council for Community Based Development, Washington DC.
3 Mariani M. (2015), Soluzioni contrattuali nella Pa tra vincoli di bilancio ed esigenze di crescita, Edizioni Il Sole24ore.
4 Gisotti M. R. (2008), "L'esperienza francese per il miglioramento (anche estetico) del paesaggio" in Contesti, vol. 3, pp. 78-84.
5 Carter J, Howe J. (2006), "Stakeholder participation and the Water Framework Directive: the case of the Ribble Pilot" in Local Environment, 11(2).
6 Eckerberg K, Joas M. (2004), "Multi-level Environmental Governance: a concept under stress?" in Local Environment, 9(5).
7 Bastiani M. (2011) (ed.), Contratti di fiume. Pianificazione strategica e partecipata dei bacini idrografici, Flaccovio Editore

on soft predictions, broadly and on the long term, able to create the conditions for the achievement of all the proposed objectives). By dismissing the role of decision makers and actuators, Public Administrations become facilitators of processes (transformations, regenerations, requalification, safeguard operations, valorisations, etc.) including a growing part of citizens. The contract forms (i.e. pacts) represent a management method that is effectual in the rationalization of these processes, defining time by time the engagement rules and above all identifying the responsibilities of the different parts involved. As evident by the examples quoted above, the contract, in its different forms and declinations, can easily be adapted to different scales (from the urban spaces of a quarter to the territorial and landscape level) and easily achieves different types of objectives (form regeneration, to safeguard and valorisation). The spread of governance forms based on the subscription of different types of "contracts" could represent the trigger to promote the birth of collaborative organizations (with different shapes) that can also overtake the specific purpose and become permanent structures of the dialogue in the development of a territory.

Law and the Urban Commons

Sheila Foster*

What do we mean from a legal point of view when we refer to the urban commons or characterize the city as a "commons?" I have written for the past 10 years about the idea of the urban commons[1] and, most recently, with my coauthor Christian Iaione about the idea of the city itself as a commons.[2] But the commons is not a simple concept in American law nor in American legal theory as it relates to property and resources that can be owned or managed collectively. We have many kinds of property arrangements in the law—jointly owned property, group owned property, publicly owned property, and property that is not owned but held in trust for a public purpose. Some of these forms of property are referred to as "common" property (to refer to property co-owned by a group of individuals), for example, and some referred to as simply a "commons" (to indicate property or a resource that is not owned by anyone but rather is maintained in stewardship on behalf of the public or some group of the public). In addition, even within the category of "commons," there are completely open access commons as well as more limited, user managed commons. Thus, to ask what it is we mean by the urban commons is to beg the question as a legal and policy matter, as well as to invite a bit of confusion both in legal theory and in practice.

One way to think about the commons is to think of it as the residual category of property that is neither privately owned nor state owned.[3] In this traditional sense, commons property is something in which everyone has rights of inclusion and no one has rights of exclusion. Indeed, this is the idea behind Garret Hardin's classic Tragedy of the Commons[4] in which "freedom in the commons" brings "ruin to all." Unlimited access to shared resources inevitably leads to overconsumption and complete destruction of the resource. Hardin's Tragedy occurs in the context of the quintessential open access commons—a pasture in which each herdsman is motivated by self-interest to continue adding cattle for grazing the land until the combined actions of the herdsmen results in overgrazing, depleting the shared resource for all. Traditionally, this kind of open access commons describes the natural world, the resources to which we all have access and can use or consume—including air, water, land, forests, and the like. These resources are open, often exhaustible, and thus are vulnerable to the tragedy of the commons.

One way that the law has protected natural resources from overconsumption or exploitation (from either state or private interests) is to allow them to be held in trust, or stewardship, by the state as a means to sustain the resource for future generations. Many years ago Joseph Sax, a renowned professor of environmental law, revived an ancient Roman law concept, the public trust, in which title to natural resources is vested in the state to hold in perpetuity for the public.[5] Sax is famous for establishing the "public trust doctrine" in American law which typically applies to ecologically sensitive lakes, beaches, rivers, forests, and wetlands. The public trust doctrine ensures that the public can access these common resources, and that such resources are sustained for use by future generations. The doctrine also gives legal "standing" to any member of the public to bring a lawsuit to prevent the government—the manager of the trust—from selling off or exploiting the resource for commercial profit or for strictly private gain. Sax argued that, in this sense, the most important aspect of the public trust doctrine is that it is an "instrument for democratization"— it allows for direct citizen participation over common resources and it holds the government accountable to the public in managing those resources.

Notably, the public trust doctrine's origins were not only in the protection of natural resources, but also in their urban equivalents—city streets, public squares, roadways and the like. Courts routinely protected shared urban resources against the pressure to legislatively appropriate or devote them to nonpublic purposes during an era of intense industrialization.[6] Thus, in the 19th century, either as a matter of statute or common law, courts allowed some urban resources to be protected under the public trust doctrine, with strict limits on its alienation and use for purposes other than those which were open and accessible to the public.[7] The public trust doctrine has since been limited by American courts and no longer routinely applies to city streets or public squares. Although there remain a small number of state courts that explicitly protect large urban parks under the public trust doctrine, courts no longer prohibit always the development or sale of public resources by the state even when the state appears to be acting in ways that benefit private developers, as in allowing

* Sheila R. Foster is a Professor of Law and Public Policy at Georgetown University (joint appointment with the McCourt School); LabGov co-director and member of the advisory committee of the Global Parliament of Mayors.

56 Sheila Foster, The City as an Ecological Space: Social Capital and Land Use, 82 NOTRE DAME L. REV. 527 (2006-2007), at 532; Sheila Foster, Collective Action and the Urban Commons, 58 NOTRE DAME L. REV 57.

2 Sheila Foster and Christian Iaione, The City as a Commons, 34 yale l. & pol'y rev 81 (2016).

58 Michael Heller, The Dynamic Analytics of Property Law, Theoretical Inquiries in Law 2.1 (2001)

4 Garret Hardin, 162 The Tragedy of the Commons, Science, 3859, 1243-1248 (1968) at 1244.

5 Joseph L. Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 MICH. L. REV. 471 (1970).

6 See, e.g., Molly Selvin, This Tender And Delicate Business: The Public Trust Doctrine In American Law And Economic Policy, 1789-1920 (Harold Hyman et al. eds., 1987)

7 Ivan Kaplan, Does the Privatization of Publicly Owned Infrastructure Implicate the Public Trust Doctrine? Illinois Central and the Chicago Parking Meter Concession Agreement, 7 NW. J. L. & SOC. POL'Y 136, 148-55 (2012)

large scale development in parks and other open public spaces.[8] Most modern courts and commentators consider the public trust doctrine to be effectively limited to protecting natural resources having some nexus or connection with navigable waters.

Nevertheless, one of the practical tools that has emerged out of the long history of applying the public trust doctrine to both natural and urban resources is the practice of putting shared resources into a "land trust." Both in the U.S. and in other parts of the world, private nonprofit organizations establish *conservation land trusts* for national and regional parks, and other exhaustible natural resources, to preserve them for long-term sustainability. Much like the public trust doctrine, conservation land trusts protect vulnerable natural resources from being overexploited by commercial or market interests. Similarly, in the urban context, *community land trusts* (CLTs) are often established to manage urban land for long-term accessibility and affordability. Community land trusts separate land ownership from land use. In the land trust model, the land itself is considered the common resource and access to it is controlled through leasing the land while maintaining restrictions on the land's use. The CLT thus acts as the permanent steward of the land and the land is utilized through long-term leases which provide for affordable housing, parks or recreational amenities, commercial space, or other uses responsive to the needs of the surrounding community. CLTs effectively take the land off the private speculative market, preventing the land from being sold to the highest bidder and instead utilized to meet the needs of the surrounding communities.

Legal scholars also distinguish between "open access" and "limited-access" commons. In contrast to the quintessential open access commons—a resource into which everyone can gain entrance and no one is excluded—there are also shared, common resources open only to a limited group of users. The primary examples of these kinds of limited access commons in the U.S. are referred to as "common interest communities"—such as condominium complexes or gated communities. In exchange for their association dues, owners in these common interest communities have access to shared common facilities—such as roads, streets, parks and other amenities. The rules of the community can be highly restrictive and are administered by the owners of the residential community or their elected representatives. These often resemble a traditional "commons on the inside" but "private property on the outside."[9] In other words, limited access commons are "open" for those who purchase property or property rights in the community. The purchase of property (e.g. a condominium or house in a gated community) is what grants these owners shared usage rights in the common resources of the community. At the same time, these shared resources are "closed" to non-owners, who can be completely excluded from community and its resources. In American law, the right to exclude is the *sine qua non* of private property rights. In most respects these "common" property arrangements follow the logic of, and operate like, private property by endowing collective owners with full rights of exclusion.

The other type of limited access commons are user-managed natural resources, as in the groundbreaking work of Elinor Ostrom[10], in which she identified groups of users able to cooperate to create and enforce rules for utilizing and sharing resources—such as grazing land, fisheries, forests and irrigation waters—without privatizing the resource. Because users establish rules for use of the resource and there exist membership constraints, these are limited access commons. However, unlike "common interest communities," none of these resources nor their management involve any kind of private property. They are not owned in any way by private individuals and thus there is no strong right of exclusion. These Ostrom commons institutions manage natural resources that are in fact not owned by anyone, and are in a real sense open and accessible, but are managed by a group of users who decide on the rules of usage. As such, these Ostrom limited access commons are distinguishable from collectively or commonly held private property regimes in which individuals have ownership rights (and thus rights of exclusion) in the collectively managed resource.

The distinction between "open" and "limited" access commons does obscure the fact that there are very few "open access" commons which exist today. The reality is that very few natural or urban resources are truly open in the sense that their use is unmanaged, unrestricted or unregulated. Many natural resources—the air, the water, national parks, etc.—are regulated by national and subnational environmental legislation and regulation which control and limit their access and use by a range of public and private actors. Environmental regulations control how much and what kind of pollution can be released into the natural environment. Similarly, urban land, streets, roads, infrastructure and other shared resources are heavily regulated by planning, zoning, and building regulations that control the location, density and kind of uses allowed. Even city parks and urban plazas and squares are regulated by rules limiting or controlling the uses allowed in them. Many cities even prohibit the homeless and other undesirable populations from using park benches and highway underpasses for sleeping and other activities.[11]

If completely open, unrestricted commons no longer (or rarely) exist anymore, how do we identify the contemporary commons as a matter of law (and legal theory)? Increasingly, legal scholars across the world (and some courts and legislatures) locate the commons even in heavily regulated spaces, public institutions, vacant and abandoned land or structures, and in privately owned but accessible resources that are customarily used by the public. These resources are more akin to what some scholars call "constructed" commons in the sense that "their creation, existence,

8 See e.g., Friends of Van Cortlandt Park v. City of New York, 750 N.E.2d 1050, 1053-54 (N.Y. 2001)

9 Carol M. Rose, The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems, 83 Minnesota Law Review 129 (1988)

10 Elinor Ostrom , Governing the commons, Cambridge University Press (1990).

11 Tobe v. City of Santa Ana, 9 Cal. 4th 1069, 892 P.2d 1145 (1995) (California Supreme Court validating as constitutional "anti-camping" law which prohibits sleeping or occupying public land within the city).

operation and persistence are matters not of pure accident or random chance, but instead of emergent social process and institutional design."[1] In constructing an urban commons, the institutional arrangement consists of some combination of law, social norms, customs, and formal instrumentalities and agreements. Commentators and scholars describe the process of constructing these institutional arrangements as "commoning," a powerful dynamic process that brings together a wide spectrum of agents that work together to co-design the governance of urban resources.[2] What emerges from this collaborative process is not only collaborative management of particular urban resources, but also the co-production or co-generation of community services at the city and neighborhood level. The recognition of the built environment as constituting a variety of urban commons is designed to open up access to, and to generate, essential resources for urban residents as well as to institutionalize the sharing of those resources.[3]

Urban commons thus resemble less the open grazing field depicted in Garret Hardin's "tragedy of the commons" and more of what property scholar Carol Rose refers to as the "comedy of the commons."[4] Instead of the potential for overconsumption and ruin, there exists instead the potential for solidarity and the generative potential of the urban commons to create other goods that sustain communities. Rose found that some British courts considered as "inherently public property" even privately owned resources where the public customarily used the space or land for gatherings or other activities valued by the community. These courts vested in the "unorganized" public the right to use property, or rather to open it up or keep it open and accessible, even over the private landowner's objection. Rather than tragedy in these spaces, we are more likely to find "comedy"—that is, the "more the merrier" is a better description of high consumption activities in the urban commons. The more that people come together to interact, the more they "reinforce the solidarity and well-being of the whole community." As she points out, the vesting of property rights by British courts in the "unorganized public" rather than in a "governmentally-organized public" also suggests the means by which a commons may be self-managed by groups of the public who use it and depend on it, as an alternative to exclusive ownership by either individuals or exclusive management by governments.

In previous work, I identified small- and large-scale urban resources—neighborhood streets, parks, gardens, open space, among other goods—which are being collaboratively managed by groups of heterogeneous users (and other stakeholders), with minimal involvement by the state (local government) and without granting those users private property rights in the resource. These include community gardens or urban farms, business improvement districts (BIDs) and community improvement districts (CIDs), neighborhood park groups and park conservancies, and neighborhood foot patrols. These examples illustrate, much like Elinor Ostrom's work on user-managed natural resources, the possibility and reality of collaborative governed and stewarded urban commons. In her case studies, common resources are managed not by privatizing the resource, nor by public authority monopoly over them. Instead, collaborative governance of common pool resources is designed using a rich mix of "public and private instrumentalities." These can include informal social norms and user-imposed sanctions as well as formal agreements, legislation, or policies enabling and facilitating the process. Ostrom highlights the importance in some contexts of a *nested* governance structure, in which users work cooperatively with government agencies and public officials to design, enforce and monitor the rules needed to manage shared resources. She noted the presence of some larger scale user managed resources, such as groundwater basins, which are nested within existing governance systems yet operate independently of those systems. Such nestedness might in fact be necessary in a complex resource system where large institutions (e.g. city government) govern through interdependencies of smaller units of governance or what she called "microinstitutions."[5]

The emergence of collaboratively managed urban resources demonstrate how local communities can employ a mix of public and private instrumentalities (e.g. legal and governance tools) to create institutions designed to share those resources. As mentioned, the use of community land trusts (CLTs) and other cooperative ownership structures that separate land *ownership* from land *use* transform what might otherwise be a collection of individuals owning property (in the typical cooperative ownership model) to a collaboratively governed shared urban resource regime. CLTs, for instance, are managed by a nonprofit board of directors—usually composed one-third of individuals who occupy the buildings on top of the land, one-third of people who reside within the local area, and one-third of members of the larger public. The CLT board maintains significant control over the property that sits on the land through ground leases. It is through these leases that the CLT can enforce guidelines and limits on how the land is used or developed. CLTs thus act more as land *stewards* than land *owners* and, as such, mimic more closely the kind of Ostrom-like "microinstitutions" that manage complex natural resources. Community land trusts have been used to manage housing, commercial real estate, green space, small businesses, and indeed an entire urban village.[6]

There is, of course, the potential for the "dark side" of these commons governance regimes. In previous writing, I have warned of some problematic institutions, like large (and wealthy) BIDs and Park Conservancies, which raise distributional justice concerns when they entrench

1 Madison, Michael J., Brett M. Frischmann and Katherine J. Strandburg. Constructing Commons in the Cultural Environment, Cornell Law Review 95:657-7 (2010).
2 See e.g. David Bollier & Silke Helfrich, Patterns of Commoning (2015)
3 See e.g. P. Bresnihan & M. Byrne, Escape Into the City: Everyday Practices of Commoning and the Production of Urban Space in Dublin' 47 Antipode 36 (2015); A. Huron, Working with Strangers in Saturated Space: Reclaiming and Maintaining the Urban Commons, 47 Antipode 963 (2015).
4 Carol Rose, The Comedy of the Commons: Commerce, Custom and Inherently Public Property, 53 University of Chicago Law Review 3 (1986).
5 Ostrom, Governing the Commons, 135-136.
6 Dudley Street Neighborhood Initiative is one of the most well-known examples in the U.S. See http://www.dsni.org/dsni-historic-timeline/

existing patterns of spatial and economic inequality. Depending on the legal and governance design, these institutions can also result in ossification of resource use by keeping it too closely managed by a small group of users and making it more difficult in the future to utilize the resource in different ways to meet future public needs. Some practices designed to promote collaborative governance of urban common resources might also lead to the exclusion of marginal individuals and groups from public spaces and from the process of collaborative design and governance. These concerns underscore the importance of keeping commons governance mechanisms flexible and accountable, and of including equity and distributive justice as core commitments within the urban commons framework. In other words, the urban commons must be more than a call for the devolution or decentralization of authority over shared urban resources. It must also stress the importance of commons governance that is accountable to the public and to public values. Moreover, at its core should be a vision to make truly accessible a range of urban assets to a broad class of city residents, particularly those whose needs are underserved by current urban development and revitalization strategies.

To address the democratic accountability and distributional problem that is lurking in the background of any conception of the commons, it is important to scale up the idea of the urban commons to the level of the city. In other words, we need to discuss the possibility of governing *the city as commons*. To think about the city as a commons is to think about it both as a shared resource and as a resource that can be managed in a more truly collaborative mode. That the city itself is a shared resource — open and accessible to many types of people—means that it does mimic some of the classic problems of a common pool resource. It is difficult to exclude people from entering it and from consuming its resources, raising the problem of scarcity, congestion and overconsumption. The city is also a resource system that is generative, in that it produces a variety of goods and services for its inhabitants and users. Much like many other kinds of open access resources—fisheries, forests, information, knowledge etc.—the issue is often the scale of production and renewability of the resource. Very few resources are infinite and at some point decisions have to be made as to how and, to whom, to allocate or distribute those resources and what kind of process that entails.

In our work at LabGov (Laboratory for the Governance of the Commons), we prioritize thinking about institutional design questions and processes for scaling up from the urban commons to the city as a commons. To address the democratic accountability and distributional issues, we must think about institutional design processes that are polycentric—in which there are many centers of decision making authority and decision making power is distributed throughout the city and shared to varying degrees with a variety of other actors.[7] This polycentric governance model is based on the idea of *pooling*, referring to a continuous experimentation process that brings together the five actors (public, private, cognitive, social, civic) of the "quintuple helix" for innovation, resulting in peer to peer production of goods, services and places and in the development of forms of "collaborative economy". In this process the State enables collaborative governance mechanisms through its public policies and laws, and facilitates user-generated and user-managed resources by leveraging or transferring its technical, financial, physical resources to allow the urban commons to emerge across the city. A fundamental task confronting the *enabling state* in this model is that it must change local administrative culture and norms. This means that local public authorities must increase local competencies and capabilities to incentivize and coordinate collaborative governance, change the infrastructure of the city (administrative, cognitive/professional, technological, financial, etc.), and design new legal and policy tools to facilitate collaboration and cooperation. Moreover, it is important that public authorities and public officials retain a presence and role for enforcing democratic values and being accountable to larger public interest and goals (distributive equity, transparency, non-discrimination, etc.) even as it facilitates the emergence of urban commons microinstitutions distributed around the city and metropolitan area.

This idea of the city as a commons is motivated by the ongoing experimentation process of establishing Bologna, Italy, as a collaborative city, or "co-city." As part of this process the city of Bologna adopted and implemented a regulation that empowers residents, and others, to collaborate with the city to undertake the "care and regeneration" of the "urban commons" across the city through "collaboration pacts" or agreements. The regulation provides for local authorities to transfer technical and monetary support to reinforce the pacts and contains norms and guidance on the importance of maintaining the inclusiveness and openness of the resource, of proportionality in protecting the public interest, and of directing the use of common resources towards the "differentiated" public. The specific applications of the Bologna regulation are just now undergoing implementation, as the City has recently signed over 250 pacts of collaboration, which are tools of shared governance. The regulation and other city public policies foresee other governance tools inspired by the collaborative and polycentric design principles underlying the Regulation.

The Bologna regulation, and the related co-city protocol, designed by my colleagues at LabGov, are illustrative of the kinds of experimentalist and adaptive policy tools which allow city inhabitants and various actors (i.e., social innovators, local entrepreneurs, civil society organizations, and knowledge institutions willing to work in the general interest) to enter into co-design processes with the public officials and which lead to local polycentric governance of an array of common goods in the city. This process of commons-based experimentalism re-conceptualizes urban governance along the same lines as the right to the city, creating a

7 Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. The Organization of Government in Metropolitan Areas: A Theoretical Inquiry American Political Science Review 55 (4):831–42 (1961, Reprinted McGinnis 1999)

juridical framework for city rights. Through collaborative, polycentric governance–based experiments we can see the right to the city framework be partially realized—e.g., the right to be part of the creation of the city, the right to be part of the decision-making processes shaping the lives of city inhabitants, and the right of inhabitants to shape decisions about the collective resources in which all urban inhabitants have a stake.

Imagining the (R)Urban Commons in 2040[1]

Silke Helfrich

In 2040, one generation from now, I will be more than 70 years old and hopefully surrounded by my first great-grandchildren. What I'd like to share with you here is how I imagine the Urban Commons will be by then – and how I'd like *my grand- and great-grandchildren* and me to enjoy them and care for. While pondering this topic, I realized that it might more appropriately be called the "Rurban Commons." This seems to be one of the most important patterns and pathways for us to understand – how to interconnect urban and rural spaces. The projects of so-called *urban agriculture* and *rural maker-spaces* like the OTELOs throughout Austria are pioneering examples of this growing interconnection.

So, to share how I imagine the future of the rurban commons, I'd like to invite you to take a collective walk with me – a walk through an environment that we can co-create, that in fact can only be co-created. Step by step and in each detail adapted to the local circumstances. Designing such an environment doesn't automatically ensure or guarantee „r/urban commons", but it can provide *the conditions and infrastructures for* commoning.

This is crucial for the insight that historian Peter Linebaugh brought to my attention: There is no commons without commoning, he noted, drawing upon medieval history. This is evident when we look at the idea of commons itself. It is impossible to think about the commons without wondering who is creating, managing and reproducing them. To come into existence commons need to be "enacted." This is why, when thinking about the commons, we also need to think about community, understood here in a broad and modern sense, ranging from local communities to global networks and to loosely connected networks of communities.[2] That is, communities as federations.

I believe that the most challenging and indispensable factors needed to enact commons are to (learn how to) *think like a commoner* and to practice "how to common" at the same time. This, in turn, requires a specific attitude -- an attitude based on the recognition of a simple truth: We are all related to each other!

"I am because you are", one might say. Or "I am through others." This idea is also known as ubuntu, which not coincidentally, is the name of a prominent version of the Linux open source computer operating system. Just have a closer look at the word "I." This does not really refer to an isolated entity; it is a relational term. Saying "I" doesn't make sense if there is no "You." This idea of relationality is at the very core of the paradigm shift that the commons debate contributes to. To put it differently: Human beings are *free in relatedness but never free from relationships*. That is the ontological bottom line. Relations *precede* the things that interrelate, i.e., the actual facts, objects, people, situations and circumstances. Just as physics and biology are coming to see that the more critical factors in their fields are relationships, not things, so it is with commons.

From this insight, we can then see that commoning can be conceived as a way of living. It is a lifeform that has the potential to enact freedom-in-relatedness – a sometimes hurtful, mostly bumpy and always complex social process. The process requires us to constantly swim upstream, against all odds, because in a capitalist society we are systematically discouraged from developing the capacities and skills we need for commoning.

In short, *commoning means, take collective action to enact the Commons*. The more consciously and self-consciously this happens, the better.

The modern commons debate differs from earlier discussions about the commons several decades ago, and certainly more than 150 years ago, in wanting to explore and understand how free cooperation (commoning) works among strangers, and how it can be made stable and durable. People also want to understand how commoning might work in nontraditional communities, such as in networks, in the digital world, in multiethnic contexts, and among "nomadic citizens" such as hackers and migrants. Contemporary commoners believe that commoning is perfectly possible even in these societal contexts if they have the space, infrastructures and support to self-govern themselves. They can thrive if...

- The *Patterns of Commoning* are as well understood as the famous "design principles for commons institutions" identified by the late Professor Elinor Ostrom;
- If they are cultivated and become an embodied experience; and
- If we have access to (free) communication tools to enable our coordination and cooperation.

Commoning is much more than just "being together" (more than *Geselligkeit*, as we would say in German). In

1 This contribution was originally published by Silke Helfrich on Commons Blog, on November 12, 2015. The text has been slightly modified for this publication. The original complete version is available at the following address: https://commonsblog.wordpress.com/2015/11/12/imagining-the-rurban-commons-in-2040/.

2 From "Commons: A frame to think beyond growth," an interview with Silke Helfrich published on the P2PFundation Blog on October 10, 2016. The full text is available at https://blog.p2pfoundation.net/commons-frame-thinking-beyond-growth/2016/10/10

fact, it may be the only way in which we can systemically confront the dysfunctions and corruptions of the *market/state* system that now governs us.

Earlier I said that I tried to imagine the Rurban Commons in the year 2040. Let's beam into that year and start our walk around the city.

Picture the city you live in or a city you know well. Focus on a certain neighbourhood and remember the bustle in the streets. Remember how this place sounds and smells like, and what people are doing there.

A city is fluid, which means that such a neighbourhood is changing constantly. People move in and out. Buildings are bought and sold, shops close down and others open up. Infrastructures change sometimes more quickly than we wish them to do. Once there was a factory. Now there is a cultural center. People disconnect from traditional workplaces; they work at their home office or in the co-working space next door. Each change of these kind of changes is also an opportunity to "commonify" the city.

If you find this an odd statement, have a closer look. First and foremost: The main focus is on rethinking use. Because there is often underuse of available buildings and spaces, a commons approach can make new constructions unnecessary. Everywhere. "Zwischennutzung" is a widespread concept in Germany – is only one of them.

Or apartments can be converted into *co-housing projects* (real co-housing, not just Airbnb-style micro-rentals). Co-housing means sharing basic housing infrastructures according to people's needs in a self-determined and ongoing way – not just making a flat available for rentals every now and then. This has two major effects: it helps people to become more independent from the (often expensive) housing market. And this in turn helps to "free up" the houses or apartments from concentrated market control, speculation and artificially high prices.

Of course, there is an endless number of legal forms from housing cooperatives to community land trusts. But the crucial point here is to make sure that once something is placed in the commons, it must remain in the commons and not fall back into the market. In Germany, there is a robust and growing institution called *Mietshäusersyndikat* (loosely translated, the Federation of Housing Commons). It has more than 25 years of experience in *co-facilitating the self-organization* of hundreds of housing units all over the country. It has co-created a solidarity and co-financing network among housing projects.

What makes these projects really special is the clever legal tweak that enables them to protect the buildings and houses themselves as shared resources. It has been done in such a way that it is very difficult to resell a co-housing project back into the market. What the federation of housing commons is basically doing is to elevate and protect the freedoms of commoners at the expense of market-oriented investors, speculators and often, governments. The legal provision protects the freedoms that money can't buy – the capacity to have access to secure, lower-cost housing. To me: *Mietshäusersyndikat* is a kind of the copyleft for housing projects.

Why is this important? Because doing this means widening the sphere of the commons with a long- term perspective. And widening the sphere of the commons is helpful in this case because it shrinks the sphere of extractive markets. So, remember: *Each Commons needs protection!*

Let's walk on.

Everybody needs not only shelter but also something to eat. And a decisive part of the reintegration of rural and urban functions is certainly greater food production in the city. In my great-grandchildren's Rurban Commons, there will be spaces for experimental gardening and "herb commons." You might already know the concept of an *edible city*.

There would be a bee and wild bird yard, the already-famous community gardens and intercultural gardens. There would be flower fields, fruit tree zones ... you name it. And, of course, CSAs as one of the most important ways of food provisioning. CSA means Community Supported Agriculture. This is crucial, because – as in the co-housing case – the functioning of many CSAs successfully disconnects food-production from the imperatives of the market and instead initiates a kind of *"pool & share"* approach. Pool & Share as opposed to Pool & Dividend as the only approach is an important pattern in the commons.

As you might have noticed, for me, the commons is much more than a concept of togetherness. It also describes a new mode of production of potentially everything – housing and food, software and hardware, furniture and machines, healthcare and education. The commons could truly stimulate a radical shift in production modes that focuses on the idea of predistribution instead of re-distribution. It would produce more commons and fewer commodities.

To give you an example, in a commons framework agricultural production – as in a CSA – is not mainly about the production of "goods" or "products" to be sold on the market. Instead it produces "shares" which are distributed according to pre-established rules determined by the participating community. This brings the community members to share not only the products but, most importantly, the risks of production, meaning that the burden of a bad harvest is shared by all members.[1] Nobody is left alone. Risks and costs are mutualized.

The commons framework requires us to also think about frameworks, infrastructures and production schemes at larger and even global levels. In general, the basic rule that we should apply is "What is heavy is local, what is

1 Ibid.

light is global."[2] This formula guides communities to produce and consume locally what they need for sustenance and for their everyday life (from food to clothes and machinery) while at the same time sharing globally what is "light," such as knowledge, data, codes and designs needed for production.

In this way, communities can produce locally things that they cannot produce in the current economic system (because it would be considered "uneconomic.") This would strongly reduce transportation costs and negative environmental effects. Such a framework envisages production to take place in a *distributed (not decentralized)* way. Decentralization is better than centralization, gradually, but structurally it is still a top-down approach. A distributed scheme of production, however, is different in essence. This is what we can learn from the P2P communities.

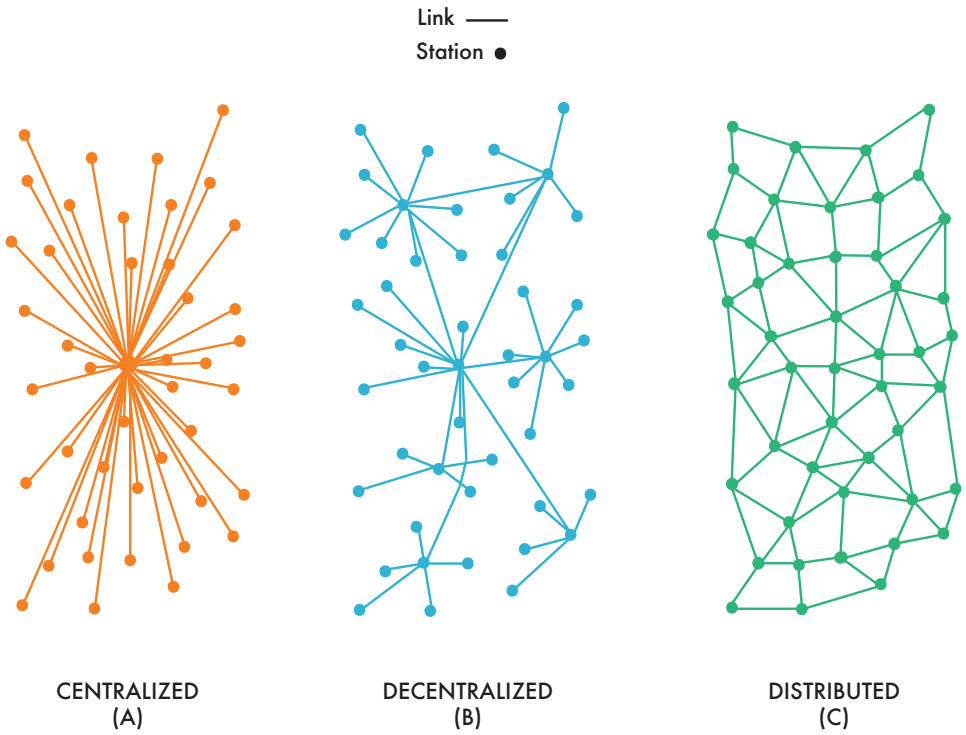


Figure 1 Centralized, Decentralized and Distributed Systems (Paul Baran, 1964)

One could say: We are witnessing a worldwide field trial, and an expansion of locally proven models of this new way of production. Open hardware projects are mushrooming, as CSAs are. However, because these projects often use different concepts and wordings to describe their experiments and practices, the common DNA , the patterns of commoning, often remain invisible.

So, let's make it visible.

In the place I will live in 2040, there will be a repair café, a laundry salon, outdoor workshops for whatever purpose, a tool-lending library, Fablabs a physics workshop, a hackerspace, and a fabric sharing and tailoring space.

The infrastructure will be controllable and controlled by the neighbourhood. There will be (distributed) renewable energy production, a sewage purification plant, open wifi and an open (infra)network. There will be fire brigades, health and first aid associations and much more. And after all, there is a common pattern. (I refer to the idea of "patterns" as used in the Patterns Theory and Pattern Language approach developed by the philosopher, architect and mathematician Christopher Alexander). I think of infrastructure platforms whose use is open to all, without discrimination. Such platforms are based on the principle that more money should not be able to command greater use rights. Comparing it to the Internet policy concept of net neutrality, you could call it "platform neutrality."

2 "Why the P2P and Commons Movement must act translocally and transnationally" by Michel Bawens, published on the P2PFundation blog on June the 16th 2016. The full text is available at the following link: https://blog.p2pfoundation.net/p2p-commons-movement-must-act-trans-locally-trans-nationally/2016/06/16

Let's continue strolling around the neighbourhood:

There are the cultural spaces for the unfolding of cultural activities, reading circles, an open theatre, a contemplation area, a library, land for open permaculture, a *commoning school* and so on. Many of these opportunities for commoning are simply open spaces for non-determined uses.

Finally, we need to get around within and beyond the neighbourhood. I imagine mobility in a rurban commons being based on the idea of shared space, i.e. a combination of infrastructures that privileges pedestrians and bikes and doubles the space through sharing with *p2p car-sharing* and good connectivity to public transportation.

Is this realistic? Or is it utopia, that is, a "non-place"?

It is probably something that the German philosopher *Ernst Bloch* calls: "Concrete Utopia." We can already grasp such a transformation, because the examples and many experiences are there, still scattered, and named in great many different ways. But they are there. The needs are there as well. And the commons is a needs-based approach more than a rights-based approach. They show that what is now considered "individual property" [and a *tragedy of the anticommons*, i.e. the fragmentation of property rights, and thus a social and economic paralysis] can be transformed into shared possession and individual use rights within the realm of shared possession, according to people's needs and decisions. Rethinking social organization through a commons lens implies rethinking property, that is, access and use rights. We can do so by remembering that, as stated by Vandana Shiva,[1] "each commons is somebody else's commons," therefore rethinking property also means rethinking our relationship with these "somebody else's."[2]

A commons framework for re/production in essence is a way to meet people's needs at all levels through a high degree of self-organization combined with commons-based infrastructures and governance principles at different scales. It's a way of provisioning that doesn't need to be achieved through individual property as default position, nor mediated through the so called „market mechanisms". (In fact, mechanistic metaphors are very misplaced when we try to understand and address the complexity of social relationships)

So, how do we get there?

First of all, we need to make all these experiments and examples more visible and connect them to each other, because they are connected. Yet many of these connections are invisible too. *Mapping tools*, intermapping the commons-transformation are indispensable to that purpose.

We need something like *Omni-Commons* everywhere. We need to discover the common patterns of the initiatives that experiment with a rurban commons approach and we need to help to connect them – not necessarily in physical terms, but mentally and politically. Because one thing is for sure: we are not just for dealing with "the leftovers," or in urban terms with "vacant terrain" – what used to be called "wastelands." It is not about the peripheral, undefined edges of the city. It's about rethinking and reshaping the rurban environment as a commons. Social and cultural realities are not facts; they are something we co-create.

So: connect commons confederate the hot spots of commoning create commons-neighbourhoods commonify the city.

Widening the space for the commons while shrinking the space of the market is feasible. It needs to be enabled, done and (politically and academically) supported. Of course, such an approach needs a consistent framework, so that people feel mirrored in it, so to speak. This is where commoners on the ground need the help of engaged scholars. Scholars who don't just study what commoners do or don't do, but who co-facilitate the co-creation of a free, fair and sustainable society. As Ezio Manzini has put it:

> *"Commons are fluid forms. To enact them we should focus on enabling conditions, not on fixed designs."*

That was precisely what I was trying to do: Take you on a walk through a non-fixed design that is meant to create the enabling conditions for commons in a rurban environment. A "design" that is open and allows for constant adaptation. This idea is called City of Workshops and was originated with two Austrian students, *Nikolas Kichler* and *David Steinwender.*

There is power in the rurban commons if there is power in the communities, which make, care for and protect them. Therefore: *Keep calm and Keep Commoning.*

1 Vandana Shiva is an Indian scholar, environmental activist and anti-globalization author. More information on her ideas and on her works are available at this address: http:/vandanashiva.com/?page_id=2

2 From "Commons, a frame to think beyond growth", an interview to Silke Helfrich published on the P2PFundation Blog on October the 10th, 2016. The full text is available at the following address: https:/blog.p2pfoundation.net/commons-frame-thinking-beyond-growth/2016/10/10

The Platform-State. Government as an enabler of Civic Imagination and Collaboration

Politics and Institutions in the CO-century

Christian Iaione*

The époque that saw Barak Obama as head of the State considered as the most efficient and worthy of emulation has come to an end. One of the few aspects I did not appreciate of Barak Obama's public policies is the idea of strongly rely on the nudge regulation trend, in some cases in an uncritical manner. Such approach entails an extreme and perhaps too brutal synthesis of law and of behavioral policies, consisting in an attempt to stimulate and orientate individuals' behavior from above, directing it towards customs and habits that would not be in conflict with a general interest outlined in the office of some director, minister or assessor, perhaps with the support of few experts and professors.

I must admit, at the time when I was studying and working in the United States, I was also subject to the charm of this idea. But any individual who is not afraid of illustrating his political culture and of studying and designing public policies able to change, innovate or, as I will later claim, re-imagine rather than reform, must look with fear and suspect at any policy treating and transforming people into a multitude of "hamsters", condemned to run in a wheel so well designed that the hamster himself is not aware of going around in circles. And the mechanism is already widespread, as it is clear that market economy is devised to transform citizens into consumers, and everything is constructed with the aim of stimulating the highest consumption possible from the citizen. Market and communication are used to orient people towards certain choices, which in the past where consumption choices, while today are presented through the nudge theory as choices made for the general interest. I want to clarify now that I do not oppose any view for ideological reasons. What I want to underline is that we need to treat the subject with great attention, as I do not want to find myself here in ten years fighting against a theorem as I had to do, as a student in the 90s and as a young scholar in the first years of the new century, against the theorem of privatizations at any cost. The private is always more efficient, because it is what Europe is asking us. I am between the few Italian scholars of public and administrative law to have warned against "privatization irrespective of anything", because it is not always the case that the private is better than the public and it is not always Europe who is asking us. Today we are aware of the groundlessness of that theorem, at least in the absolutistic forms under which it was proposed. I hope I will not find myself in some years in a situation where we realize that we have been too focused on the trend of "gently pushing" towards public policy objectives to remember that those public policy objectives must be clearly defined. This happens because those theories are born in an age of compassionate conservativism, in which citizens are treated as if they were "dumb" (Beota) and needed omniscient politicians and bureaucrats to show them the right path, providing them with the complete directions to prevent them from making mistakes. This could represent a simple update of those rationalistic models on which market economy has been built, whose functioning mechanisms were designed around the abstract figure of the homo oeconomicus, who based all his actions on an economic rationality. This model is not truthful, and a more valid approach would be to pay greater attention to models of real behavior, as I tried to do through in-depth analysis as a student. But I soon realized that in a similar approach lies a potential danger for democracy and most of all for individual freedoms. There is in fact the possibility for those who are in power to hide behind a general interest which is abstract, ideological and only presumed and towards which all behaviors are directed, while the general interest should instead be built together with the citizens.

What I tried to do in the last ten years of my activity as law and public policy scholar and practitioner was to try to understand in which manner I could be of help to the administrations and to the communities that intend to move their first steps to overcome the traditional State paradigm. I believe I understood that the gap through which it is possible to "hack" institutions lies in the capacity to enable innovative social practices (also known as social innovation) able to generate economic solutions, which result in an intense pressure on institutions. Faced with a pressure of this kind only the institutions which are more equipped to undertake a path of institutional innovation are positively reacting, while unfortunately the others until now are only attempting to fill the hole.

Today we speak about beauty economy, knowledge and culture economy, but also sharing and pooling economy, circular economy, social, ethical and civil economy and, furthermore, trust and happiness economy. All these "new" economy forms are based on social innovation, meaning that they revolve around the central figure of the citizen, who becomes protagonist, as he is not

* Christian Iaione is an Associate Professor of Urban Planning Law, Urban Law and Policy and Regulatory Innovation at LUISS Guido Carli and LabGov co-director

only author of consumption choices, but also author of answers of general interest. I believe we are not in a period of crisis but instead in a period of transition from one social, institutional, economic and juridical paradigm to another. I do insist on these passages because I want the logical consecutio to be clear. In this, LabGov[811]'s (the Laboratory for the Governance of the City as a Commons) payoff is crystal clear: "Society runs, economy follows, let's re-design law and institutions together!". Each innovation process is guided by an up-date, up-grade and transformation in social practices. Change always begins with a social change, which then guides the economic and technological paradigm change. It is never the opposite as technology, the one that truly works, is a social product and technological up-grade always grows from social change, as many scholars studying the development of technology also stated. In France the instrument designed for telephonic communication became almost immediately a relational instrument, a way to maintain and cultivate social relations. The same happened with the first real time messaging instrument at the time when Internet was being designed in the USA. There is nothing wrong with this, on the contrary these examples teach us that modernity and innovation are inescapably tied with relational processes.

Innovation is the "kind rupture" of a dominant paradigm. Here I would like to quote Edmond Burke, a great political analyst who states that innovation distinguishes itself from reform because of its discontinuity – and this shall help us re-think the role of reformism in the XXI century. A qualitative change with respect to the actual state of affairs stands out. This is innovation. Thus, in the XXI century the battle might not be between reformers and conservatives, but instead between collaborative and competitive actors, meaning with this that individuals but also economic, institutional, social and cognitive actors that enter in a relationship as equals to overcome social, economic and technological divides while challenging the existing paradigm to re-imagine it have to confront subjects that compete to protect their privileges and profits and pursue the maximization of their benefits. I am not sure this can be defined as conservativism, because conservativism has always been politically identified with the right, while today we observe a tendency to preserve privileges and incomes also on the left side of the political spectrum. Additionally, the theory of acquired rights that today prevents the new generations from creating a better country for the generations to come is the result of the short sightedness of the past generations which, in a moment where it was possible to afford certain rights, have consolidated and frozen those rights, that today are defined as acquired. This has been done through public debt by a narrow group of people, an oligarchy. Furthermore, these rights are not the instruments of mass emancipation that we imagined in the XX century, but are instead defense instruments used by oligarchies and by that portion of society that does not accept to share or downsize the wealth they have accumulated. Those are not the rights that our constituent fathers left us. What is more, it is not always easy to distinguish innovators from non-innovators and redditiers (income bearers), as they both frequently act under false pretenses.

Coming to the institutional paradigm change, that we are inheriting from the economic and social paradigm change, I believe it will be based on the concept of collaboration. Perhaps we are entering in the "CO-" era, where key words seem to be community, collaboration, cooperation, communication, commons, co-design, co-production, co-management, co-housing, sharing, knowledge etc.. These are all words characterized by a co- root, which recalls the making, living and growing together. This means that the administration has to re-think itself as an organization starting from the co-'s concept. Besides, even big organization are re-modelling themselves, as they understand that great part of their value comes from external energies, from the sharing of resources and knowledge and from the collaboration enabled by sharing. If we take Facebook as an example we observe that its value is not produced only by Zuckerberg and his engineers' algorithms and social communication experts, but it is also produced by us, users, through our relationships and exchanges, and through reciprocation, mutual trust and collective organization. Institutions must be re-thought from this viewpoint, with the aim of becoming relationships, circuits and relational ecosystems' administrators and of developing an answer which is public not just in a subjective but also in an objective way. In this new model, public, private, third sector, cultural institutions such as schools and universities, single citizens and social innovators work together to provide an answer to society's problems. I defined this a quintuple helix governance model, as it builds on the triple helix model (summarized in a public-private-community formula) created in Stanford to explain Silicon Valley's success. A minimum or maximum State, able to respond to citizens' needs, cannot exist anymore, as such needs have become more and more uneven. The administration conceived in the XIX century as an elitist body, a container able to answer to the needs of a community understood as unable, illiterate and lacking consciousness. Today the situation has changed, and the relationship has been inverted. Thanks to technology and public investment on knowledge and education, opportunities are now to be found outside rather than inside, therefore we are left with an unequipped administration, ill-suited to intercept, support and manage change. It is not those who work to serve the State and its citizens who are at fault and, regardless of all the training courses and rejuvenations that we attempt to launch, we will never be able to deliver to our society institutions able to have and give all the answers. For this reason, we need to re-think the organization and the culture of institutions in a framework of open-source and circularity: we need a State-Platform that does not want to guide the process but choses to act from below, supporting a circuit of relationship and allowing the above-mentioned actors to become

1 LabGov (Laboratory for the Governance of the Commons), is a training-intervention and research-action project on the civic re-imagination of institutions that I coordinate at Luiss Guido Carli University in Rome).

authors and actors of general interest. The State-Platform must break the monopoly of public care of the general interest, without withdrawing from the care of those interests which are inescapably public and becoming a system administrator, as it happens in the web. This means that that the Italian administrative law system should almost entirely be re-thought. The problem is that there is a strong unbalance between formal legality, administrative regularity defense, production of acts and measures and execution of orders (often deprived from critical thought) on one side and coordinated action and production of answers and results leading to a real, complete and measurable satisfaction of citizens on the other side. Part of the public law doctrine has called for a greater attention to "legality of result" but has eventually accepted its enchainment to bureaucratic measures and practices. Perhaps the legality commitment is not enough anymore, as all the sophisticated legal expedients characterized by great imaginative capacity which allow to bypass legality seems to show. Therefore what we need are not acts but actions. This means that, as we still are in a transition and paradigm-shift phase, we must accept that an ever-applicable and valid solution does not exist. There is no ready-made model. We took thirty or forty years to have the social state we inherited, which was born exactly as the contemporary collaborative state is emerging in the co-working spaces, in enterprises, in community cooperatives, in fab labs, in impact hubs, in cultural and creative collectives and enterprises, in the collective management of the commons and so on. I am talking about the thousands of people that are attempting to make not something new but something unique, something to take pride in as a country, because in Italy we are setting an excellency standard at international level: these people are reconstructing and regenerating the State starting from its foundations. If we look back into the history of the Social State and of its birth, we understand that it originated in society, in neighborhood associations, in self-managed mutual aid societies, in the world of cooperation and in workers' unions of first generation. From there the first mutual aid insurances against on-the-job injuries were generated, together with the first forms of income support. An old fox such as Otto Von Bismarck, who had foreseen what was happening, before being removed from power was able to build the Social State. He did so working from above, with a top-down approach, as he knew that hadn't he laid the foundations of the social state, the social state would have anyway emerged from the bottom-up action of these ante litteram innovators, that would definitely not have confirmed him in his role. This is when the first Social State was born. It is now a matter of understanding how contemporary institutions could build on the change that is currently taking place rather than being demolished by the flow, overwhelmed by what has happened in Spain, Greece and in the USA and that could also happen in France and Germany. We need to understand how to experiment, accepting that experimentation also involves the possibility of failure, that failing is allowed and that mistakes can result in occasions to improve, to better understand the new paradigm and to identify solutions that could implement it and could function as an activation of the following public policy cycles. But why is this needed? It is needed to change the State morphology, up to the architectonic design of its headquarters, for example through less bureaucratic counters and more administrative co-working spaces. Through less arrogance and without the presumption of knowing how things should be done and of being the guardians of a legal, economic and bureaucratic rationality forged in the Oligocene and ill-suited to adapt to the speed and power of the social innovation phenomena characterizing the new era of the Anthropocene, where the traditional rationality demonstrates to be the heir of what Graeber would call "structural stupidity". Through more humility and through an inclination to work around a table with those actors which are endowed with the capacity to imagine and re-imagine the paradigm, considering that is not rationality that distinguishes humans from all other species, but is instead its capacity to imagine how to defeat those exact rational mechanisms, that constantly and structurally reconnect logical conclusions to the evaluation of reality. Science and arts have constantly demonstrated that it is only by doubting the established, consolidated and uniform schemes that the human kind can progress, by relying on his creativity. It is then necessary to find a way to free the creativity of the numerous civic imaginators who are entangled in the structures of our bureaucracy and in our territorial and urban communities. We need to ask the legislators to stop for a minute and, before legislating, spending some time to forge the instruments to free the imagination of those members of the administration who are willing to experiment, as the administration is not a machine but is instead a community. This community is made by women and men who are willing to do and to devote their time, even outside of their working hours, to the general interest, but are instead forced to spend their days dealing with the doctrine of administrative infallibility and fighting with those colleagues who are experts in hiding behind norms and quibbles when it comes to avoiding the effort of helping citizens and who use those same norms and quibbles to avoid complying with their public ethic duties and sometimes even with norms of the penal code. Such people must have the opportunity to make mistakes and must be free from the administrative fear of making mistakes, because those who are not afraid are eventually those who hide behind perfect forms, perfect calls and competitions that might work with the TAR but not with the DA's office of the Republic.

There is a need to say things as they truly stand. We speak about digital administration when in many administrations e-mails are still being printed out, phonograms (fonogrammi) are still being sent "via motociclista" envelops and piles of documents are still transferred from one office to the other through "walkers" (camminatori). We must accept this experimental logic and this eco-systemic element, we cannot keep thinking only in terms of calls and competitions, as they function to exclude instead of including and collaborating, and are often launched to justify choices already made at

the top. We need the courage to enter this new logic and to counter-balance collaboration with maximum transparency, going beyond the Decree 33. If I have dinner with someone to discuss a problem I must be able to put the check online, this in the perspective of openly and transparently activating processes in the general interest and of spreading a collaborative and co-design viewpoint between the civic and entrepreneurial for the collectivity.

In Bologna as in Rome, in Reggio Emilia as in Battipaglia, in Tuscany as in Palermo or in Terni we understood that local entrepreneurial forces build their activity on the genius loci, on their territorial vocation. They cannot escape, they are not only entrepreneurs but also actors for the general interest who are active on the local dimension and are willing to have an open, clear and stable relationship with institutional and socially reliable partners. Such relationship does not require extreme actions from the public administration, but only asks it to be present, to be not the protagonist of change but its enabler, to not ask and insist but instead to offer to regenerate public spaces and to open private spaces to a more dynamic use. Public administrations should become incubators of collaborative enterprises, asking to be partners in the co-design processes and in public policies. This happened for example in Mantova, where it was possible to intercept the new ideas coming from schools and from young people living in the territory, or in Battipaglia, a municipality under compulsory administration for mafia activities, where peculiar conditions required us to develop peculiar answers. In Battipaglia it was impossible to create a collaboration pact as it was done in Bologna or in Mantova, but we had to decide what to do in the compulsory administration period, thus we worked through the article 145 of the local authority's TU. This allowed to propose a community pact for the future administration, bringing together in the process Libera, Legambiente, WWF, ARCI, Cittadinanza Attiva, the citizens who were taking care of the beach, of the public spaces, of the abandoned school and stimulating the coordination and organization of the civil society. Criminality is always capable of organizing itself, while legality is not. This is because each of the actors of legality moves on its own way, and it is for this reason that in Battipaglia I tried to suggest taking the path of constructing a "collaboration pact for organized legality". A similar path would be needed also in Rome, where through the platform co-roma.it we are attempting to support and to bring the attention to those actors who truly work for legality. One of the things we are doing as a laboratory is therefore to construct all around Italy projects who have the capacity to adapt and to iterate a process (adattivi e iterattivi), and to do so through the forces of civil society, of culture, of knowledge and of a healthy local enterprise willing to walk on this path while saying: In Italy a new government method, centered on collaboration is growing from the peripheries, a method that Obama, or better Betty Noveck, defined as open government. We are interpreting it and declining it in a less digital and technological way, while at the same time we are trying to fill the thought-gap on how to reorganize the administrative community depending on those technological innovations, that require innovations in organization. Collaborative forces are the best economic and social forces of the local civic society and the best political, bureaucratic and technical forces of the institutions, that come together and work side-by-side for the general interest. Not everyone has to fit, not everyone is needed. It is not about participation but about collaboration and concrete project-making to build new forms of occupation starting from the weaknesses and exclusions generated within the single territories, exclusions that result in loss of wealth, knowledge and capacity. Any territory has to find his own path towards collaboration and has to build on his own vocations, as there is no universal principle. The differentiation principle has to be applied and interpreted as an enabling principle for auto-differentiation or "institutional diversity" – as Elinor Ostrom, who won the Economics Nobel Prize in 2009 thanks to her studies on the commons, would say. Institutional diversity is necessarily implied in the principle of civic collaboration of the Constitution and is fundamental to imagine a new form of State, a State which is plural because distributed, because it can be found in the different worlds of society, economy and knowledge and not anymore confined to the offices and hallways our institutions. Thus, a program of large-scale experimentation is needed to regenerate institutions, a program able to strengthen administrations' institutional capacity to manage change without suffocating it nor attempting to direct it. The State should accompany, enable, monitor and value such change by becoming a platform. A State-Platform will be ready to make his time, competences, human, technical and logistic resources available in order to organize processes and territorial laboratories where things begin to happen regardless of the administration, but in a more controlled and legitimate way. It will grant everyone the possibility to experiment, allowing everyone to be informed on what projects others citizens are undertaking and perhaps to join them. Making sure that basic norms on security and inclusion are respected, it should provide a free license to experiment and imagine. The multitude of mistakes made and even more of lessons learnt should become the base from which we begin to re-think the State in the XXI century. There are resources available, which are called PON governance. Let us use them in the best way possible, as we will not get another chance.

A design strategy for social communing

Social commons, collaborative organizations, and relational goods: a virtuous circle

Ezio Manzini

This paper presents the relationship between *social commons* and *collaborative organizations*, and discusses a design strategy aiming at improving the first (the social commons) thanks to conceiving developing the seconds (the collaborative organizations). More precisely, the idea is to use design tools and ideas to trigger a virtuous circle thanks to which collaborative organizations reinforce social commons, and social commons create an environment where collaborative organizations may thrive. The crucial point to make this virtuous circle happen is the quality of collaborative services. And, in particular, their ability to establish between involved actors a sense of trust, empathy and friendship. That is, their capability to produce those relational goods that, added up and connected, can produce social commons.

This paper conclusion is that design for social commoning practically corresponds to the one for collaborative organizations, when this design activity succeeds in defining a good balance between the search for solution effectiveness and the one for relational goods

Social commons and collaborative organizations

Social commons are a set of socially shared ideas and values. They are the social glue that keep together and characterize a city, a region and a whole society. They are produced and cultivated by a mesh of interactions between people and between people and the place where they live. They are quite diverse, ranging from the sense of safety in a city or the mutual trust in a neighbourhood, to common views on human rights and democracy; or to open and inclusive attitudes newcomers. They may also be specifc competences, as creativity, design capability and entrepreneurship, when they are sufficiently spread in a society, becoming one of its characterizing aspects.

In the pre-modern societies, social commons had been created by the slow co-evolution of their social forms, their culture and their physical contexts. This co-evolution had a quasi-natural character, in the sense that it happened without being consciously designed.

When social and technological change accelerated and when, as it is happening now, this change becomes highly turbulent, this quasi-natural process doesn't work and social commons, not being regenerated, are disappearing. Against this dangerous process of social desertification, a new social commons regeneration process must be proposed. And, given that in turbulent time it cannot be any more the slow quasi-natural one of the past, it must necessarily be a design-based activity. I will refer to that with the expression *design for social commoning*.

Facing the present crises, and preparing for the foreseeable future ones, the urgency and importance of social commoning seems to be particularly clear.

Both theory and empirical experience[1] indicate that, in period of crisis, social commons are what makes people able to react and self-organize. And vice versa, when social commons are weak or absent people get lost and tend to totally depend on top-down help.

This is particularly evident after large catastrophs. However, it can also be recognized in everyday life events such as the ones related to the economic crisis or when big new social issue emerges (as for instance the migrant flow in Europe and worldwide). In all these cases, a lack of social commons appears in breakdowns at every level: from the micro-scale of personal interactions, to the macro-level of society as a whole.

This is why social commoning should be strongly enhanced world wide. But, unfortunately, the on-going main trends are not heading in this direction. And, as Richard Sennet writes, "modern society is de-skilling people in practicing cooperation." [2]

Nevertheless, looking attentively at the complexity and contradictoriness of contemporary societies, we

1 Guerrero, Bodin, McAllister, Wilson continue saying: *"Our study provides empirical support for the ability of collaborative forms of governance to address the problem of fit, but also suggests that in some cases the establishment of bottom-up collaborative arrangements would likely benefit from specific guidance to facilitate the establishment of collaborations that better align with the ways ecological resources are interconnected across the landscape"*
A.M. Guerrero, Ö. Bodin, R.R.J. McAllister, K.A. Wilson (2015). "Achieving social-ecological fit through bottom-up collaborative governance: and empirical investigation". Ecology and Society.
http:/www.ecologyandsociety.org/vol20/iss4/art41/
D. Curtis, *Coping with Crisis: The Resilience and Vulnerability of Pre-Industrial Settlements* (Farnham: Ashgate, 2014)

2 Richard Sennett, **Together: The Rituals, Pleasures, and Politics of Cooperation** (New Haven: Yale University Press, 2012).

also can see something else: a growing number of people who are moving against the mainstream trends, inventing new ways of being and doing, re-discovering collaboration and places[1]. And finally, generating also a new wave of social commons.

These initiatives are radical social innovations. They appear as *creative communities*[2] and, when successful, they evolve into *collaborative organizations*[3]: group of people who choose to collaborate with the aim of achieving specific results. Doing that, they can also produce, as a precious side effect, trust, friendliness, empathy, mutual attention and care. Considered as a whole, these values are defined *relational goods*: immaterial goods depending on the quality of human interactions[4].

A virtuous circle and the way to implement it

Collaborative organizations show us that, in contemporary societies, new forms of collaboration and relational quality are emerging. This paper hypothesis is that, moving from them, it is possible to implement a design-based strategy for social commoning. That is, to trigger and sustain a virtuous circle between *social commons, collaborative service* and *relational goods*.

Let's start form these interlinked observations (Figure 1): collaborative organizations, by their own nature, may produce, at the same time, practical results and relational goods >> Relational goods are produced by human interactions. When many interactions like these happen, relational goods add up and connect assuming a larger social value. That is, they become social commons >> In turn, these social commons create a favourable environment, where new collaborative organizations can emerge, last in time and thrive.

Figure 1. The virtuous circle between social commons, collaborative organizations and relational goods. Where collaborative organizations are social forms in which involved actors collaborate in achieving a result (as collaborative living; collaborative care; collaborative food networks; collaborative production): and relational goods are immaterial goods that depend on human interactions quality (as: trust, friendliness; empathy) and social commons are social values and practices that are collaboratively produced and cultivated by a community (as: sense of safety; diffuse attitude towards creativity, experimentation, collaboration, entrepreneurship; shared visions on what to do, at different scales).

Given that, the question is: can this virtuous circle be designed? Let's start from these three considerations:

- Social commons cannot be directly designed: being the results of multiple actions, they cannot be planned and realized by a single actor.

- Relational goods too cannot be directly designed: trust, empathy, friendliness are results of interactions that, as such, for their human nature, cannot be predefined by someone else.

- Collaborative organizations can be designed. Or better, what can be designed are the conditions to make their existence, and their ability to produce relational goods, more probable.

It comes that, to activate the virtuous circle, we must design for collaborative organizations capable to produce relational good that, in turn, may contribute to the social commons regeneration.

Summarizing, it can be said that a design strategy for social communing is articulated in two steps: (1) to conceive and enhance collaborative organizations endowed with their relational goods; and (2) to create the condition for transforming these relational goods

1 For instance: groups of families who decide to share some services to reduce the economic and environmental costs, but also to create new forms of neighborhoods (the corresponding solution ideas are: cohousing and a variety of forms of sharing and mutual help within a residential building or neighborhood); new forms of exchange and barter (from simple barter initiatives to time banks and local money); services where the young and the elderly help each other, promoting a new idea of welfare (collaborative social services); neighborhood gardens set up and managed by citizens who, by doing so, improve the quality of the city and of the social fabric (guerrilla gardens, community gardens, green roofs); systems of mobility in alternative to individual cars (car sharing, carpooling, the rediscovery of the possibilities offered by bicycles); new models of production based on local resources and engaging local communities (social enterprises); fair and direct trade between producers and consumers (fair trade initiatives.
Ezio Manzini, **Design,When Everybody Designs** (Cambridge, Massachusetts :MIT Press, 2015). Anna Meroni, **Creative Communities: People Inventing Sustainable Ways of Living** (Milan: Polidesign, 2007); François Jégou, Ezio Manzini, **Collaborative Services: Social Innovation and Design for Sustainability** (Milan: Polidesign, 2008).
In the past decade, a growing number of these initiatives merged with digital social networks creating unprecedented networks of people digitally **and** physically connected among them and with the place where they live. Joon Baeck, "A Socio-Technical Framework for Collaborative Services: Designing a Digital Platform for Collaborative Communities," doctoral thesis, Politecnico di Milano, February 2011

2 Anna Meroni defines creative communities as groups of people who have been able to imagine, develop, and manage a new way of being and doing.
Anna Meroni, *Creative Communities: People Inventing Sustainable Ways of Living* (Milan: Polidesign, 2007);

3 François Jégou, Ezio Manzini, **Collaborative Services: Social Innovation and Design for Sustainability** (Milan: Polidesign, 2008).Ezio Manzini, **Design,When Everybody Designs** (Cambridge, Massachusetts :MIT Press, 2015)

4 "Relational goods are non-material goods that can only be produced and consumed within groups, and which are intrinsically linked to relationships and interaction." Carole Jean Uhlaner, (1989-01-01). "Relational Goods" and Participation: Incorporating Sociability into a Theory of Rational Action". **Public Choice**. 62 (3): 253–285.
Luigino Bruni, "Relational Goods, A new tool for an old issue". **ECOS – Estudos Contemporâneos da Subjetividade**. 3 (2): 173–178; Becchetti L., Trovato, G., and Londono Bedoya, D.A. (2016-01-21). "Income, relational goods and happiness". **Applied Economics**. 43(3).

(that are originally limited to few involved actors) in social commons (that are ideas and values shared by the whole society).

Design for collaborative organizations

To conceive and enhance collaborative organizations requires, first of all, creative and viable ideas. In our case, creativity implies to reframe a given problem proposing a viable collaborative solution[5]. Where the viability of this solution is based the fact that, reframing the problem, new assets should become available and new actors should be activated – first of all, the directly interested ones. Examples of solutions emerging from reframed problems are, for instance: families who, facing the difficulties of everyday life, change their idea of privacy and decide to share some spaces and services (in order to reduce their economic and environmental costs and create new forms of friendly neighbourhoods). Another example could be the one of elderly people who, facing the welfare crisis, change the traditional notion of social service (based on the provider/user interactions) and develop collaborative organizations to support self and mutual help[6].

Each collaborative organization is based on a "solution idea" that someone has conceived and has been capable to enhance[7]. Considering the design processes, this creative reframing must be placed in the concept generation phase. But other important design capabilities must be used in other phases to make these ideas real and capable to last in time and thrive. To do so, dedicated *enabling systems* must be conceived and developed: an *infrastructuring* activity[8] aiming at enriching the existing socio-technical ecosystem with new material and immaterial elements (such as: appropriate products, places, services, norms and incentives).

These design activities, aiming at conceiving new solutions and their enabling systems, are important but, for the sake of our discussion on social commoning, are not enough. To trigger and support social communing it is also crucial to move on the qualitative side of the design process and verify if, how and when these collaborative organizations are producing *also* relational goods. That is, to parallel the discussion on collaborative organization effectiveness with the one the quality of the interactions on which these organizations are based. To do that, we must observe collaborative organizations more in depth.

5 Kees Dorst, Frame Innovation, Create New Thinking by Design (Cambridge, Massachusetts: MIT Press, 2015)
6 For other examples, see Note 3
7 All these people have been using their design capability. Some of them have had a specific preparation for that; other, the majority, not: they new kind of diffuse design that is spreading in contemporary societies–Ezio Manzini, Design, When Everybody Designs (Cambridge, Massachusetts :MIT Press, 2015).
8 Per Anders Hillgren, Anna Seravalli, and Anders Emilson, "Prototyping and Infrastructuring in Design of Social Innovation," Co-Design 7, nos. 3–4 (September–December 2011), 169–183. Available at http:/medea.mah.se/wp-content/uploads/2011/12/emilson-et-al-prototyping-in-frastructuring-design-social-innovation-2011.pdf.

Effectiveness and relational goods

Collaboration implies people doing something together in order to get a result of common interest. In doing that, both the final result and the way to achieve it are important. In fact, people collaborate because they are interested in the result but also because they like that way to get it"[9].

These observations tell us that, evaluating collaborative organizations, two dimensions must be considered: *effectiveness* and *relational goods production*. Where effectiveness indicates the involved actors' efforts requested to get the intended results (in other words, the height of the entry threshold). On the other side, the relational good production expresses the interaction characteristics and their ability to produce values as trust, empathy, friendliness.

Given that, because the relational goods production implies time and commitment a trade off between effectiveness and relational goods appears: the search for the maximum of effectiveness tends to reduce also the time and committment requested for the original relational goods. The result is that, moving in this direction, may generate solution capable to involve a large number of people, but doesn't produce relational goods. And, therefore, doesn't contribute in regenerating social commons.

Vice versa, if the relational goods are very high, collaboration results very demanding (in terms of time and commitment) and its effectiveness decrease (or, the entry threshold becomes higher). Therefore, not many people have the possibility and the will to participate. The result is that cases like this, even though very interesting by several points of view, do not contribute to the social commoning process because the relational goods they produce are confined in small number of highly committed actors (the "social heroes").

At this point the second step of the proposed design strategy for social commoning clearly appears: it is necessary to conceive and develop collaborative organizations capable to balance effectiveness and relational goods. That is, they have to be effective enough to reduce their entry threshold and be endowed with enough relational goods to collaborate in the social commoning process. When this balance is successfully found, the relational goods spread with the related collaborative organizations. And, as it has been already said, doing so, they add up, connect and become social commons.

Collaborative organizations trajectories

Successful collaborative organizations move from a heroic beginning to a phase of maturity, where they become "the new normality". Empirical observation tells us that, during this journey, the evolution of initial ideas and practices can follow different trajectories. In particular, it can maintain or lose, or even entirely betray, initial motivations in terms of relational goods production.

9 Richard Sennett, Together: The Rituals, Pleasures, and Politics of Cooperation (New Haven: Yale University Press, 2012).

A well known example of how initial motivations and social qualities can be lost is Uber: an emblematic case resulting from a trajectory started decades ago with a few heroic car-pooling initiatives, and arrived today to a highly economically successful platform-based solution in which, in the name of the search for effectiveness, the original disruptive idea of peer-to-peer collaboration in sharing a given asset (the car and the ability to drive) has been lost, while the overall solution became an up-dated interpretation of the main stream economy and culture (the most debated issue of the bad working conditions it generates for drivers is another aspect of this same issue).

But this kind of trajectory is not the only one. Even though they are far less well known, there are several other possibilities. A well known case is the evolution from the original, quite demanding experiences of co-housing, to the present advanced forms of collaborative living. A practical application of this possibility is the one proposed by the Social Housing Foundation, in Milan. It clearly indicates that it is possible to improve effectiveness of living with shared spaces and services, while maintaining social quality and producing original relational goods.

Trajectories as this one are, of course, the ones to be chosen when designing for social commoning. To make this choice real, appropriate enabling systems are required. And a multiplicity of design activities, at different scale and with different aims, are to be performed. The crucial design action here is to define, case by case, the best balance between effectiveness and relational goods production. To do that is the most difficult and delicate part of the whole proposed design strategy. The one where a design culture could and should bring an important contribution.

www.commoning.city