

Introduction

It is now a truism that we are an urbanized world. Today, a majority (55%) of the world lives in cities and their metropolitan areas, a trend that has been accelerating since the mid to late 20th century (UN DESA 2018). By 2050, it is estimated that almost 70% of the world will live in cities and their metropolitan areas. The impact of this urban agglomeration is significant for many reasons but perhaps the most consequential is that cities and their metropolitan areas have become the economic engines of the world. Consider that in the United States, the ten most productive metropolitan areas alone contribute about 40 percent of U.S. gross domestic product (GDP) and the top 20 metropolitan areas contribute over 50 percent of the U.S. GDP (Perry 2018). These areas include metropolitan areas surrounding major cities like New York, Los Angeles, San Francisco, Boston, and Chicago. The New York City metro area alone constitutes about ten percent of the US' total GDP and produces four percent more economic output than the entire country of Canada (Perry 2018). The Los Angeles metro area, the second largest US metro economy, produced just slightly less economic output than Mexico. Chicago's economy is the third largest metro economy in the US; its GDP is slightly higher than Switzerland's GDP. Outside of the U.S., the numbers are as stark, if not starker. Cities such as Toronto, Mexico City, Tokyo, London, Paris, Stockholm, Tel Aviv, and Seoul generate anywhere from eighteen (Toronto) to over fifty percent (Tel Aviv) of national GDP (Florida 2017a).

Cities are where the young, the wealthy, and highly educated populations increasingly want to live. These populations have agglomerated, or clustered, in the most successful cities around the world and live in close proximity to central business districts, urban centers, transit hubs (subway, cable car, and rail lines), universities, and natural amenities (waterfront locations). As the most highly educated and affluent populations agglomerate in cities, the working class and

low-income workers and their families are increasingly being pushed out of the urban core and further away from economic opportunities concentrated there (Ehrenhalt 2012). The spatial mismatch between where jobs are located and where the lowest income workers live, often on the periphery, is immense in some cities and metropolitan areas. This mismatch grows even deeper between urban and rural areas around the world. Prominent urbanist Richard Florida has recently sounded the alarm about this growing urban inequality or “new urban crisis” manifesting in American cities (Florida 2017b). Florida has tracked the geographic segregation of cities and their metropolitan regions. He found that stark class divisions throughout successful metro regions “form a patchwork of concentrated advantage and concentrated disadvantage that cuts across center city and suburb alike” (Florida 2017b, 7).

As urban peripheries grow and expand outward, so too do stark wealth and resource disparities between neighborhoods within a city and between cities (and towns) within metropolitan regions. This inequality is evidenced by the clustering of low-income and vulnerable populations on the periphery of the most economically successful cities, or out of those regions altogether. America’s inner ring suburbs, once a marker of suburban prosperity, are increasingly becoming home to poorer populations and immigrants as core cities become less affordable (Ehrenhalt 2012). Likewise, rural to urban migration into cities in the Global South fuel the expansion of informal occupations of peripheral urban areas and precarious urban settlements (Davis 2006). The result is high and worsening levels of income inequality, ethnic and economic segregation, increasingly unaffordable housing, and unequal access to amenities ranging from broadband networks to parks and recreational space.

While cities have become the heart of the growing problem of economic and spatial inequality, within them lies at least some of the solutions to this inequality. Many cities, for

example, are focused on building affordable housing, reforming land controls to allow for more density, and investing in critical infrastructure. However, too often these reforms and investments target downtown and core areas of the city and bypass the most disadvantaged and isolated neighborhoods and communities. Even when investment and development is earmarked for these neighborhoods, too frequently the result is that long-time residents are displaced from rising home prices and rents.

These questions are at the heart of many urban movements and policy debates emerging in cities around the world as city space and urban infrastructure have become highly contested. Among the most prominent sites of this contestation include efforts by city dwellers to claim vacant or abandoned urban land and structures for housing and other necessities in many American cities, the occupation and reclamation of formally public and private cultural institutions as part of the movement for *beni comuni* (“common goods”) in Italy, and the expansion of informal housing settlements on the periphery of many cities in the global south. In the U.S., for example, vacant and abandoned land is more ubiquitous than most people imagine. This is true whether we are talking about resurgent or declining cities, or their suburbs. Vacant land constitutes anywhere from 15-20% of older, so-called “legacy” cities such as Philadelphia and Detroit and consists of thousands of vacant lots which are often concentrated together in a pattern of “hyper-vacancy” (Mallach 2018). But even so-called “magnet” cities—like New York, Seattle, Los Angeles, San Francisco, Washington, D.C.—have their fair share of vacancy, with rates ranging from 5-15%, even as these cities experience unprecedented growth (Mallach 2018). In addition to vacant lots, vacant property that is abandoned by private owners includes homes, factories, and strip malls.

In both resurgent cities like New York or “minimal” cities like Detroit (Anderson 2014), residents in communities that lack basic goods like affordable housing or internet access, and lack

adequate employment opportunities, want access to urban infrastructure - vacant and underutilized land and structures - to transform them into affordable housing units, urban farms, or spaces for local entrepreneurs or artists. The claim on this urban infrastructure by city residents is a response to what many view as a market failure and the result of an urban development approach that has failed to provide the goods and services necessary for human well-being and flourishing in the most neglected communities. For many of these communities, who are displaced by market forces and gentrification, the issue is how best to equitably “share” the finite resources of the city among a variety of users and uses—particularly those with few or no resources.

Local governments most often value these assets for their potential market exchange value. They view the divestment and sale of vacant public property as an economic necessity. Communities, on the other hand, often view abandoned, vacant land and structures as an open access resource, utilizing it in ways that add value to the surrounding community and/or which can produce goods for that community. These assets are valued by residents for their relationship to the community, whether on the scale of a block, neighborhood. The *use* value of these resources comes from their everyday use, the solidarity that it creates among its users, and its accessibility to surrounding residents. Communities living near these assets may endeavor to work with the public sector, and other actors, to construct new urban resources or goods to meet the needs of surrounding communities: housing, parks, urban farms, co-working spaces, etc.

The tension between exchange and use value has long existed in urban markets, as John Logan and Harvey Molotch famously noted (Logan and Molotch 1987). These tensions, they argued, most often are played out at the neighborhood level with residents defending the use of land to satisfy the essential needs of everyday life, to build informal support networks, establish security and trust, capture agglomeration benefits, and fortify shared identity (Logan and Molotch

1987, 103). The tension between use and exchange values exists today at an even more heightened level in large part because urban land values are at historic highs. The total value of America's urban land, for instance, is estimated to be \$25 billion, roughly more than double the nation's overall economic output or GDP (Albouy et al. 2018, 459). Nearly half the total value is packed into just five metro areas in the U.S.: New York, Los Angeles, San Francisco, Washington, D.C., and Chicago, with land in and around the urban center being the most valuable. These cities, and their international counterparts, have become what Wendell Pritchett and Shitong Qiao call "exclusionary megacities" that share a "property-centered approach" to urban growth which "prioritizes the maximization of existing property interests" and "is premised on the drive to maximize the value of land for current owners... against the interests of middle- and low-income populations" (Pritchett and Qiao 2018, 474).

The Urban Commons

The idea that urban land and infrastructure that are publicly controlled or owned are more than just assets for exchange on the real estate market, and more akin to a common resource that can be shared more with urban residents, brings into view the argument and ideas developed in this book. The efforts of communities to access and utilize vacant or underutilized property, and other public resources, particularly in structurally disadvantaged communities, has the potential to capture positive value to create goods (both tangible and intangible) that can be shared and stewarded by communities—including residents and local institutions. The recognition of the built environment as constituting a variety of potentially shared, collectively stewarded urban goods, or "urban commons" as we refer to it, is designed to open up access to, and to generate, essential resources for urban residents lacking those resources. For the past decade, our work has explored

whether the urban commons can provide a framework and set of tools to open up the possibility of more inclusive and equitable forms of “city-making” (Frug 2001).

Writers and commentators from many disciplines—economics, sociology, history, architecture, political science—have long wrestled with the problem of shared or common resources of various kinds (DeMoor 2012). The “commons” has a long historical and intellectual lineage ranging from the enclosure movement in England to the Nobel Prize winning work of Elinor Ostrom. In her groundbreaking work, Ostrom documented the success of human communities around the world that rely on natural resources—such as lakes, forests, and fisheries— to collectively govern those resources by creating “institutions resembling neither the state nor the market” and that have had reasonable degrees of success over long periods of time (Ostrom 1990, 1). Under certain conditions, Ostrom found, resource users collectively decide how to produce value from the resource, enforce rules and norms of use, and avoid overconsuming or depleting the resource over time. Ostrom notably found that the ability of communities to collectively govern, or steward, these resources was more likely in tight knit communities and in commonly held property systems. However, even larger scale resources with more diverse user communities could be collectively governed, or stewarded, with the support of state agencies and the private sector.

Ostrom’s work sparked the study of a variety of user-governed, shared resources beyond natural resources that require thinking about the process of developing and enforcing rules, social norms and other legal or governance tools for sharing and sustainability utilizing those resources. Scholars have conceptualized and articulated new kinds of commons which involve “communities working together in self-governing ways to protect resources from enclosure or to build newly open-shared resources” (Hess 2008, 40). These include knowledge commons, cultural commons,

infrastructure commons, digital commons, among others (Hess 2008). Until recently, over the course of the last decade, there had not been a serious effort to apply the commons to the built environment in cities. Although the literature on natural resource “commons” and “common pool resources” is voluminous, virtually no scholars had endeavored to transpose Ostrom’s insights into the urban context in a way that captures the complexity of the “urban”—the way that density of an urban area, the proximity of its inhabitants, and the diversity of users interact with a host of tangible and intangible resources in cities and metropolitan areas.

Starting over ten years ago, we began to explore the idea that urban infrastructure and other resources within cities could be collectively or cooperatively governed by city residents, most often sharing this governance responsibility with other actors depending on the scale of the resource, much as in Ostrom’s examples. Our study of the “urban commons” began as separate bodies of study investigating individually how different kinds of urban assets such as community gardens, parks, neighborhoods (Foster 2006, 2011) and urban infrastructure such as urban roads (Iaione 2010) could be reconceived as common resources. We later joined our efforts to begin to conceive the whole city as a commons, employing a more pluralistic view of the commons than is reflected in the predominantly economically oriented view of commons by scholars like Ostrom (Foster and Iaione 2016).

Through our individual and joint work, it became clear to us that cities, and the many kinds of urban resources within them, differ in important ways from traditional, natural resources commons as well as other kinds of “new” commons. Moreover, our work raised larger social and economic issues related to broadscale urbanization than existing commons literature adequately accounted for. We realized that we needed a different approach to the commons and to the collective stewardship of urban resources, that bridged urban studies and commons studies, which

encompass multiple disciplines ranging from law and economics to political science and geography (Iaione 2015). We also needed to define a different set of design principles for the management of urban commons in the city, starting with Ostrom’s principles but acknowledging the limits of her framework and its applicability to the urban environment (Foster and Iaione 2019). The economic, regulatory, and political complexity of cities for us means that while it would be tempting to simply transpose Ostrom’s work and findings to the city, and to apply them to the stewardship and governance of many kinds of public and shared resources in the city, doing so would obscure rather than illuminate any concept of the urban commons.

Apart from our work, the urban commons has become an important conceptual framework across many disciplines for examining questions of resource access, sharing, governance, and distribution of a range of both tangible and intangible resources in cities (Borch and Kornberger 2016). Urban commons in this growing body of literature encompasses both material and immaterial resources—ranging from housing, urban infrastructure, and public spaces to culture, labor, and public services (Dellenbaugh et al. 2015). The language of the “commons” is deployed to disrupt the boundaries separating public and private goods and services in cities, and to open up those goods and services to public use in ways that do not depend on and are not controlled by a prevailing authority (Stavrides 2016).

Progressive scholars, and activists, also invoke the idea of the urban commons to bring under scrutiny the ways that capitalist power has resulted in the enclosure of urban space by economic elites (Harvey 2012). The literature on urban commons in part investigates the city as a site of capital production and surplus, and a place of contestation for resources (Stavrides 2016). For these scholars, the urban commons must be “wrenched” from the capitalist landscape of cities out of fear that collective or common resources are always susceptible to being co-opted by the

market (Huron 2015). The roots of progressive reformers' commons analysis is traceable to the work of Michael Hardt and Anthony Negri (2009), who refer to the "common" (rejecting the term "commons" as a reference to "pre-capitalist shared spaces that were destroyed by the advent of private property") as the product of shared efforts by city inhabitants. Cities are, as they argue, "to the multitude what the factory was to the industrial working class"; in other words, it is the "factory for the production of the common," a means of producing common wealth (Hardt and Negri 2009, 250).

We embrace the potentially disruptive role of the commons or "common" to highlight the privatization and enclosure of city space and to interrogate who has access to our shared resources in cities, and how they are allocated and distributed. The language of the commons is a powerful counterclaim to resources on behalf of city inhabitants subject to the dispossession and displacement that has resulted from unfettered capital accumulation. Making claims on urban resources and city space as a "commons" creates an opening, or space, to bring under scrutiny the character of particular urban resources in relationship to other social goods, to other urban inhabitants, and to the state. Thinking of some urban assets as resources to be collectively or collaboratively stewarded by an identified community or group of people requires us to move beyond the public/private and market/state binary choices to which we often default in thinking about resource use and control. It is in the space between public and private, market and state, that we locate a set of rich conceptual and practical possibilities.

As we explain in this book, it is possible to combine public, private, and community actors to steward resources that can be more widely shared and available to many kinds of urban communities. What we demonstrate in this book is an approach to urban resource governance that is rooted in a steward-based governance approach and is part of a larger rethinking of the city and

its infrastructure as a shared resource capable of being managed more collaboratively by multiple actors figuring out the best ways to utilize their collective asset, the city, and the best ways to distribute the resources generated by that asset. By “best” we mean in a manner which advances many of the goals that we see embedded in the United Nation’s New Urban Agenda: inclusive, shared, sustainable, resilient, innovative, democratically open, and responsive to its citizens’ needs.

As Ostrom herself noted, however, there are “no panaceas” for all resource management and governance. Not every resource problem can be addressed or solved through collective action, and it may not be possible to adopt or adapt local institutions to facilitate resource stewardship. This is especially true when dealing with shared resources embedded in thick or complex socioeconomic, political, and ecological settings (Ostrom 2007). Our research project, and our framework, heeds Ostrom’s wise advice. We do not believe there is one “model” or answer to creating cities that are inclusive, sustainable, more socially just, and responsive to their citizens’ needs. Rather, we agree with Ostrom that creating successful interventions and solutions to resource problems and challenges requires designing common property systems and collaborative governance arrangements that are attentive to relationships, interactions, and desired outcomes in each place, and at a given time. Ostrom also cautioned, rightly, that solutions may not work the same way over time. These institutions and arrangements need to be monitored, evaluated, and capable of adapting to challenges over time, and to account for shifts in technological, socioeconomic, and political environments (Ostrom 2007).

The Co-City

The framework that we propose in this book, the “Co-City,” emerges out of our decade-long investigation of the ways that urban commons—collectively shared and collaboratively stewarded resources—can be created and sustained in different political, social and economic environments. We began this investigation starting in Bologna and other Italian cities and continuing today in places as diverse as Amsterdam, Baton Rouge, Turin, New York, Sao Paulo, San Jose, and Costa Rica. In each of these cities we have witnessed the collective and collaborative governance of a variety of urban resources such as built, environmental, cultural, and digital goods which are co-created and co-managed through contractual or institutionalized public-community partnerships (PCPs) and public-community-private partnerships (PCPPs). The empirical observations from our involvement in the creation of various policies and projects in the above cities are now the cornerstone of a much larger and scientifically driven research project that we established, called the “Co-Cities Project.” To enhance our understanding of the various ways that communities and users are managing and governing shared urban resources in different geographic, social, and economic contexts, we have surveyed over 180 cities around the world and over 500 policies and projects within them as part of the Co-Cities Project.

The goal of this empirical aspect of our research project was to extract some of the characteristics of these diverse efforts and to develop a common framework and understanding of the patterns, processes, practices, and public policies that position local communities as key political, economic and institutional actors and stewards in the delivery of services, production, and management of urban assets or local resources. The project sought to obtain, from on-the-ground examples, recurrent design principles and common methodological tools employed across the globe and for different urban resources. The result of this research project is to offer design

principles that reflect the conditions and factors we observe as necessary to rethink the city as a “commons”—a shared infrastructure on which a variety of urban actors can cooperate and collaborate and where various initiatives of collective action can emerge, flourish and become sustainable. What kind of resources should be shared, collaboratively governed or held, and which actors can (or should) manage them, is in part an applied question that can only be answered by reference to the specific location and context of each city. For this reason, we conceptualize and frame the Co-City as a form of urban experimentalism guided by a set of design principles that can be adapted to local context.

We have distilled five basic design principles, or dimensions, extracted from our practice in the field and the cases that we identified as sharing similar approaches, values and methodologies. The five key design principles of the Co-City are:

- Principle 1: *Collective governance (or co-governance)* refers to the presence of a multi-stakeholder governance scheme whereby the community emerges as an actor and partners (through sharing, collaboration, cooperation, and coordination) with four other possible categories of urban actors to co-manage urban resources;
- Principle 2: *Enabling State* expresses the role of the State (usually local public authorities) in facilitating the creation of urban commons and supporting collective governance arrangements for the management and sustainability of the urban commons;
- Principle 3: *Social and economic pooling* refers to the presence of autonomous institutions (e.g. civic, financial, social, economic, etc.) that are transparent, collaborative, and accountable to local communities and operate within non-mainstream economic systems (e.g. cooperative, social, solidarity, circular,

cultural, or collaborative economies, etc.) that pool resources and stakeholders toward the creation of new opportunities (e.g. jobs, skills, education, etc.) and services (e.g. housing, care, utilities, etc.) in underserved areas of the city or for vulnerable inhabitants;

- Principle 4: *Experimentalism* is the presence of an adaptive, place-based and iterative approach to design legal and policy innovations that enable the urban commons;
- Principle 5: *Tech justice* highlights access, participation, co-management and/or co-ownership of technological and digital urban infrastructure and data as an enabling driver of cooperation and co-creation of urban commons.

These design principles articulate the types of conditions and factors that we observe are present in cities where various forms of urban commons not only emerge but are sustainable. We have observed the creation of a variety of kinds of civic, neighborhood, and infrastructure common goods designed to benefit all or most of the community even as they serve individual needs. These goods are produced and managed through different forms of “pooling” and cooperation with at least 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.). The kinds of collaborative regimes that we observe have given birth to local peer-to-peer experimental, physical, digital, and institutional platforms with three main aims: fostering social innovation in urban services provision, spurring collaborative economies as a driver of local economic development, and promoting inclusive urban regeneration of blighted

areas. Public authorities play an important role in facilitating a variety of distributed, co-management structures throughout its territory, enabling urban inhabitants to actively take part in the regeneration of their neighborhoods, creating shared goods that enable them to sustain themselves and flourish, while developing and nurturing the community they belong to. We describe these principles in more detail in Chapter 5.

The Right to the Co- City

In proposing the framework of the Co-City, we join other scholars and policymakers in offering innovative solutions to social and economic inequality, socio-spatial polarization, equitable access to technology, and environmental and climate justice. Many scholars have offered various frameworks—such as the Just City (Fainstein 2010), the Rebel City (Harvey 2012), and the Sharing City (Agyeman and McLaren 2015)—to intervene in efforts to address real on-the-ground challenges that cities face by promoting the incorporation of principles such as social equity, distributive justice, solidarity, and participatory democracy into city planning and development policies. These principles are reflected in the Co-City framework in that the core impetus to conceive the city as a common is to change the democratic and economic functioning of the city and to change the relationships of power and privilege that are implicated in patterns and practices of urban inequality. This change is necessary to create a city that better functions according to the needs of all of its citizens, but particularly the most vulnerable and marginalized.

From a normative perspective, the Co-City framework brings squarely into view questions of social and distributive justice. As a matter of distribution, the resources of the city should be shared more widely throughout its communities and on behalf of its inhabitants, particularly the most vulnerable and those subject to what Saskia Sassen calls “expulsions”—unprecedented displacement, evictions and eradication of living spaces and professional livelihoods. (Sassen

2014). Property scholar Nicholas Bromley has equated the commons, or common property, to the right of the poor “*not* to be excluded” from the property of the city (Blomley 2008, 320). He observes that “we can find many examples in cities across the world where state or private actors use the power to exclude, which is central to private property, to displace, evict and remove the poor” (Blomley 2008, 316). This is true even more today than it was at the time of his poignant call for recognition, on behalf of the poor, of a collective claim to neighborhoods and communities as a response to the appropriation and enclosure of those places through private property rights. This collective claim is a highly *localized* one which includes streets, parks, buildings, among other resources, over which the poor have legitimate interest as both a symbolic and practical matter (Blomley 2008, 316).

The Co-City framework ultimately shares significant conceptual and practical ground with efforts to instantiate “the right to the city” in urban policy. The language and claiming of the right to the city has been taken up by activists, state and local policymakers, and progressive thinkers and scholars around the world to intervene in what many consider the excessive commodification and privatization of urban space. First articulated by French philosopher Henri Lefebvre (1968), the right to the city is a framework through which citizens can reclaim or re-appropriate city space, inhabit and share its spaces, and actively participate in formation and stewardship of city space. For Lefebvre, the right to the city is about the struggle between exchange value and use value, between the city as a site of accumulation and the city as an inhabited place that nurtures the use value and needs of its inhabitants. (Purcell 2002, 150). More recent scholars, such as David Harvey, consider the right to the city as a fundamental but neglected human right to “make and remake the world that we live in” and the “right to change and reinvent the city” by those whose labors produce and reproduce the city. (Harvey 2012, 4, 137). The right to the city has found

practical application in some European and Latin American contexts. Most notably, in 2001, Brazil incorporated the right the city into its “City Statute,” a federal law regulating urban development under Brazil's 1988 Constitution. The City Statute sets out general guidelines that must be followed by federal, state, and local governments to ensure “democratic city management” and establishes that the development of urban land (either in the formal or informal sector) and buildings should be determined first and foremost by its social “use value” over its commercial “exchange value” (Fernandes 2007).

Conceiving the Co-City through the lens of the right to the city requires re-conceptualizing urban governance along the same lines as the right to the city—the right to be part of the creation of the city by participating in the stewardship, or governing, of urban resources. As progressive property scholars have argued, recognition of the right of communities to property and resources is also essential to human flourishing in those communities (Alexander 2009). Building on Amartya Sen’s capabilities approach to human flourishing, progressive property scholars such as Greg Alexander argue that it is *communities*, including the state, that are the mediating vehicles through which people acquire the resources they need to foster the capabilities necessary to function and flourish. In other words, human flourishing requires resources, although ownership of those resources are not always required for all kinds of capabilities; use and access may be enough (Alexander 2020). We agree with progressive property theorists that “however the details are conceived, attention to human beings’ social needs pushes strongly in the direction of a state obligation to take steps to provide substantial and realistic opportunities for people to obtain the property required for them to be able to participate at some minimally acceptable level in the social life of the community” (Alexander and Peñalver 2009, 148). This might require an obligation to share property, or at least to share surplus resources, with those lacking them.

The Co-City framework stakes out claims to a host of urban resources—from city streets to parks and neighborhood infrastructure, to vacant and abandoned land and buildings—and even to the city itself as constituting resources that should be shared and/or more accessible to a broad range of urban inhabitants and users. Constructing urban commons is thus as much about how resources as diverse as housing, urban planning, energy provision and other services are institutionally governed as a common good as it is about activating urban inhabitants to participate in the collective stewardship of urban life and to manage the production of urban space, that Lefebvre indicates is at the heart of the “right to the city.” These practices also reflect the idea that the urban commons can be part of human flourishing and the development of the kind of capabilities often mentioned as necessary for flourishing: such as sociability, personal security, and autonomy.

The urban commons are socially produced in that they are created, used, preserved, and managed by some collection of the urban public and urban communities (Dellenbaugh and Kip 2015; Bresnihan and Byrne 2015). The examples throughout the book of communities constructing new urban commons – which range from affordable housing to urban gardens or farms to wireless networks – demonstrate the ways that different urban actors collectively and collaboratively create and then govern them. These actors and sectors include the non-profit sector, local businesses, and anchor neighborhood institutions such as churches, universities and knowledge institutions. The role of the State becomes enabling or facilitating collective action to generate and sustain resources as urban commons, as well as providing the various actors with the some of the tools and resources to enable them to do that. This builds on Lefebvre’s vision of “urban” as a process, rather than fixed space or set of resources. The participation and active urban citizenship manifested in the right to the city describes what historian Peter Linebaugh has called “commoning”— social

practices of users in the course of managing shared resources and reclaiming the commons (Linebaugh 2008). The term “commoning” captures the relationship between physical resources and the communities that live near them, utilize, and depend upon them for essential human needs. It also captures the collaborative process of bringing together a wide spectrum of actors that work together to co-design and co-produce shared common goods and serves at different scales.

The Chapters

The structure of the book is designed to offer the reader a theoretical and conceptual map beginning with an understanding of the urban commons, including real world examples of how shared goods are constructed from available and accessible urban infrastructure, and then introducing and analysing the emergence of pioneering legal and policy responses that facilitate urban commons, and the city as a commons, in different kinds of cities around the world. We situate these innovative practices and policies within the context of other types of participatory, deliberative, and inclusive processes in cities designed to empower urban citizens in a range of decisions that shape their lives. We distinguish those processes from the “urban co-governance” reflected in policies and in settings in which communities interact with the state and other actors to co-create and co-govern urban resources like land, buildings, and even utilities and wireless networks. We conclude the book by describing the co-city framework which is rooted in the conceptual pillars of the urban commons and the principles extracted from our survey of policies and projects in over 180 cities as well as our own experiences working on some of these policies and projects. We end with our reflections on the challenges we continue to face in our application of these co-city principles and pathways for future study and research.

Chapter 1 introduces the foundational challenge from which our framework emerges; namely, to think of cities as more than a collection of public goods and private property. The infrastructure of the city—its physical spaces, structures, buildings, roads, streets, etc.—is a shared or common resource that is capable of being generative through the collective action of various urban actors who construct new goods from this infrastructure to meet the social and economic needs of urban populations. In this sense, we can think of the city as a “commons” and recognize as legitimate, and even innovative, the efforts by residents to utilize land and other infrastructure to construct informal neighbourhoods and settlements, community gardens and urban farms, mesh wireless networks, and new limited equity housing and commercial spaces that are collaboratively governed by community, public, and private participants for long-term affordability and sustainability. Thinking of the city as a commons also opens up the possibility for distributing, and re-distributing, common resources in cities to those populations most in need of them and enables them to become co-creators and stewards of urban revitalization in their communities. We also argue that the the commons can be a solution to enduring racial and economic inequities that continue to plague many communities around the world, particularly those on the margins—social, economic, and geographic—of so many cities. Systemic racism and injustice manifests, in part, through the dispossession of property and land from indigenous and Black communities. Contemporary examples of this dispossession are evident in cities like Detroit. Offering structurally disadvantaged communities the opportunity to steward land and other resources is a form of healing, and repair, for so many communities that lack the resources for human flourishing in a society with more than enough land and resources to share.

Chapter 2 delves deeper into the concept of the urban commons, beginning with understanding how urban commons differ from the kinds of commons, or common pool resources,

that Elinor Ostrom studied. While some urban commons, such as parks and urban gardens, share much in common with the natural resource commons that were the subject of Ostrom's work, many facets of collectively governed urban resources are notably distinct. We demonstrate why Ostrom's principles do not translate precisely in the city the way they do in nature. Ostrom's framework needs to be translated to the reality of urban environments which are often crowded, congested, socially diverse, economically complex, and heavily regulated. As such, we highlight some characteristics of "constructed" urban commons that are not captured well in Ostrom's design principles for user-governed natural resource commons. We identify three elements that are key to the creation of many urban commons and that are not always present in collectively managed natural resource commons. These are: the role of central authorities, or the state, in enabling the creation and sustainability of urban common; legal and property experimentalism, or adaptation; and social and economic "pooling."

We also draw a clear distinction between top-down and bottom-up urban commons. The former kind are exemplified by park conservancies and business improvement districts. While these institutional arrangements resemble some of the features of Ostrom's design principles, they are not the kinds of constructed commons that our work has identified as engaging resource users in the stewardship of shared common goods. Instead, they represent the kinds of self-professed "public-private partnerships" that can carry costs for urban communities least able to participate in the stewardship of the common resources that they manage. Many other kinds of urban commons emerge, on the other hand, from bottom-up efforts of residents or resource users who are motivated to overcome traditional collective action problems and to collaborate to construct new goods and services that many urban communities lack or find inaccessible to them. These constructed commons are increasingly taking the form of community land trusts, new forms of co-

housing, and limited equity cooperatives. We discuss the way that these institutions can become “nested” within the institutional framework of the city can scale with the support of local policies and public resources to create a polycentric network of urban commons in the city.

In Chapter 3, we turn to the emergence of city policies that enable, facilitate, and support urban commons and allow them to “nest” within the governance infrastructure of the city. We examine the emergence of public policies in a handful of cities that endeavor to deeply engage citizens through public-public and public-community partnerships with the goal of implementing an arrangement in which citizens are governing the city and not simply being governed. The policies described in this chapter situate the local government as an enabler and facilitator of collaboration and ultimately of political and economic redistribution through shared urban goods and infrastructure. While communities, and other stakeholders, organize themselves autonomously as potential collaborators that can collectively manage urban resources, city officials and staff are tasked to assist, collaborate, and provide technical guidance (data, legal advice, communication strategy, design strategies, sustainability models, etc.) to those efforts. The governance output that emerges from implementation of these policies is the co-design of a variety of urban commons, as well as the co- production of community goods and services at the city and neighbourhood level.

To better understand and turn a critical eye toward these policies, we organized them in two categories” “declaratory” versus “constitutive” policies or laws. A declaratory policy acknowledges the existence of collectively managed individual resources or neighborhood institutions as forms of urban commons. These policies officially recognize the right of these communities to self-organize and might entail recognition of social norms agreed upon by the community and/or validation of the public value produced by the community which justifies their right to utilize the shared resource. The local government might even enter into some sort of an

agreement with the collective, lending legitimacy and some stability to the effort, as well as indirectly encouraging other bottom-up efforts throughout the city. Constitutive policies, on the other hand, embody a more top-down, institutionalized approach. They are specifically aimed at encouraging the creation of urban commons throughout the city and endeavor to create the conditions for governing some city resources collaboratively by offering new legal authority or adapting existing laws. Those two approaches are implemented through a range of different legal tools ranging from collaboration “pacts” or agreements to civic use regulations allowing the private use of public assets. Both approaches present ongoing challenges and attendant costs, which we discuss in the chapter.

Chapter 4 conceptualizes the “urban co-governance” that is reflected in policies and settings in which communities interact with the state and other actors to co-create and co-govern urban resources like land, buildings, and even utilities and wireless networks. This urban co-governance embraces the role of the facilitator state, in which city officials and staff are tasked to assist, provide resources and technical guidance to help create the conditions for co-governance, sometimes in the form of public-public and public-community partnerships. It also creates a system which at its core redistributes decision making power and influence away from the center and towards a network of engaged urban actors. The co-governance model that we embrace takes as a starting point the active involvement, or participation, of citizens in the management and governance of urban resources to support the livelihood and wellbeing of their communities. We argue, however, that to truly generate collective benefits for city residents and truly democratize the local economy, citizens cannot act alone. As such, our model of co-governance implies the involvement of other actors including public authorities, private enterprises, civil society organizations or NGOs, and knowledge institutions. The only question is how to think about, or

conceptualize, their involvement. Building on the idea of the “helix” from innovation studies, our co-governance model integrates the literature on innovation ecosystems, engaged universities, and citizen science, participatory or deliberative democracy, and governance of common pool resources.

The chapter contrasts co-governance with participatory policies, such as participatory budgeting, other forms of decentralized local decision making. Even the highest form of participation and citizen power can fall short of altering the unequal power dynamics, privileges and advantages that often characterize urban geographies that are stratified by class, ethnicity, immigrant status, and race. The challenge for any system of participatory or collaborative governance is to avoid replicating the very inequalities and power dynamics they are often set up to address. The best collaborative urban processes, in our view, will intentionally and deeply engage and empower the most vulnerable stakeholders in any collaborative or “partnership” process, arrangement, or agreements. The chapters offers examples of cities that are experimenting with institutional and organizational public-public and public-private-community partnerships that target areas and populations exhibiting poor health, social, and economic outcomes. These partnerships are aimed not only at improving the quality of urban space and infrastructure, or strengthening community social ties, but also at leveraging constructed urban commons as platforms to generate collaborative economies that provide communities in these neighborhoods with the opportunity to develop new skills, support job creation, and offer childcare and other shared services. These examples also reveal other innovations in designing an environment that is conducive to co-governance arrangements throughout a city, such as the importance of administrative mediators (i.e. the neighborhood architect) and institutional spaces (i.e. the Co-Labs and the Collaboratory) that facilitate public, civic, private actors to collaborate before

institutionalizing the alliance through contractor or legal partnerships. What these examples also demonstrate is the crucial role that digital and technological infrastructures play in increasing the capacity of vulnerable communities to engage in partnerships with other actors as part of urban co-governance.

Chapter 5 explains the five design principles that characterize a “co-city”: a city that enables its infrastructure to be utilized as a platform on which a variety of urban actors cooperate and collaborate to govern and steward built, environmental, cultural, and digital goods through contractual or institutionalized public-community partnerships (PCPs), or public-community-private partnerships (PCPPs). These partnerships involve cooperation and collaboration between civic, knowledge, public, and private actors that support the creation and governance of shared and common resources by an identified group of people, or community, vested with the responsibility of maintaining and keeping accessible (or affordable) the resource for future users and generations. These recurring characteristics, methodologies, and techniques best define the ways in which the city can operate as a cooperative space in which various forms of urban commons can emerge and can be economically, socially, and ecologically sustainable. Some of the design principles described in this chapter will resonate with Elinor Ostrom’s design principles, while others reflect the reality of constructing common resources in the context of contemporary urban environments.

A short concluding chapter reflects briefly on the challenges that we continue to face in the application of the co-city design principles and pathways for future study and research. The design principles are extracted from the projects that we have surveyed and studied, including some that we have participated in. As the co-city approach has spread to different kinds of cities, beyond the mostly European cities featured in our survey results, we have begun to identify some of the challenges to its application in other political, social, and economic contexts. In this concluding

chapter, we identify new challenges from projects in Baton Rouge, Louisiana and Rome, Italy that will test the power and saliency of the co-city approach to address endemic racism and injustice in an American city and bureaucratic ossification and dysfunction in a capital city with one of the richest cultural heritages in the world.

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