Service Design for Urban Commons

Anna Meroni and Daniela Selloni

Foreword

The Ducal Palace of Rivalta, the remains of which rise a short distance from the city of Reggio Emilia in the direction of the Apennines, has a long history as a commons. It has had complex and troubled history, in which it has been at the centre of several changes of ownership - private and public - and changes of function, until it was finally acquired by the Municipality of Reggio Emilia in 2004. Today, in 2022 - thanks to funding from the Ministry of Culture as part of the Ducato Estense project - the Reggia di Rivalta is being restored and upgraded to finally be returned to the Reggio Emilia community and all those who wish to visit it.

Built from 1724 onwards by the Modenese Duke Francesco Maria d'Este and his wife Carlotta Aglae d'Orléans, following the entry and expansion of the French army into Italy in 1796, the Reggia di Rivalta was taken over by the Republican State and subsequently purchased by the Corbelli family. During these exchanges its destruction began and continued: two of the three sides of the building were demolished, including the main façade facing the gardens, and the entire ducal garden was almost obliterated, making room for grazing lands. The wing that remains standing (now called the Ducal Palace) was probably originally intended as dwellings for the servants, and later housed the seminary, a small German garrison, and the lazaret, until it became a popular residence in the twentieth century known as the "Palazzone".

In the course of these multifaceted events, from the original aristocratic luxury to the long rural period, the Reggia has aroused mixed feelings in the Reggio Emilia community: estrangement, hostility, oblivion and neglect, but finally also of rediscovery, familiarity and affection, resulting in a strong sense of belonging, especially on the part of the inhabitants of Rivalta.

In fact, once the Este rulers had been driven out - the first Tricolour, the banner of the Cispadane Republic, was conceived here in Reggio Emilia on 7 January 1797. The Palace had been half-destroyed and what remained was gradually absorbed into the rural landscape of Reggio Emilia and used for practical purposes. In recent years it has become a fundamental point of reference for the daily life of the local community, which has preserved and cared for some of its historical remains, including the Secret Garden, continuing to animate the place with cultural and recreational initiatives.

To enhance the commitment of the citizens in the protection and care of the Ducal Palace and the large adjoining park (c.26 hectares), the Municipality of Reggio Emilia launched an initial participatory process with an Open Space Technology project in 2008, followed by a number of specific restoration and safety

measures. These were the years in which the first experiences of participation and active involvement of the population in decision-making processes were being launched in Reggio Emilia, seeking to enhance the public-private relationship and to combine a vision of the future with attention to both the present and to memories.

2016 saw the turning point for the rebirth of the Reggia: the Ministry of Cultural Heritage and Activities and Tourism (now the Ministry of Culture) allocated 14.5 million euros to the Municipality of Reggio Emilia as part of the Ducato Estense project involving the territories of the ancient Estense States: in addition to Reggio, Ferrara, Modena, and the Garfagnana in the province of Lucca, financed through the 2014-2020 Development and Cohesion Fund.

The project for the restoration of the Luoghi Estensi of Reggio Emilia envisaged three areas of intervention, with redevelopment actions in terms of culture, tourism and appeal: in addition to the Mauritian Palace and the eighteenth-century promenade linking the old town and the Royal Palace of Rivalta, it included the architectural and landscape restoration and the functional redevelopment of the Royal Palace of Rivalta, consisting of the Palace, the Park and the Secret Garden (for a total amount of €8.8 million).

While any intervention on the remaining wing of the Ducal Palace was limited to its restoration and functional recovery, and the Secret Garden was recreated following its historical design, the Park - currently a meadow used to grow animal fodder - was completely redesigned according to the winning project of the international competition, by the group formed by Openfabric, Casana and F&M Ingegneria.

In parallel with the competition procedure, the Municipality of Reggio Emilia wished to involve local players in the reflection on the future of the Reggia di Rivalta whose experience, competence and vocation could contribute to defining objectives and solutions for returning such a precious asset to the city.

With this in mind, the collaboration with the Polimi DESIS Lab of the Politecnico di Milano was born: they conceived and managed a service co-design process - the first to be carried out in Reggio Emilia - in which the Municipal Administration met with citizens and stakeholders to generate design hypotheses, which in turn could be included in a new, open and implementable initial scenario.

The experts and stakeholders were identified from among citizens' associations, members of the municipal administration, representatives of the main training bodies, and cultural institutions and bodies with specific expertise (reclamation, water, agriculture, etc.). The identification criteria took into account the territorial scale: neighbourhood, city, peri-urban area; and the field of interest: neighbourhood associations, mobility, sport, agriculture, environment, culture and entertainment. The choices of the neighbourhood scale were made through citizenship workshops,

identifying associations, social centres and groups of citizens active at the local level; at the city level, those people who could contribute to the definition of the objectives and solutions of the area were identified, each with their own sectoral expertise.

The choice of the neighbourhood scale was made not only because of the importance of the role played by the community of Rivaltesi during previous years, but also because, at precisely that time, the municipality was experimenting with the collaborative policy “Quartiere, bene commune”, which was the start of a new phase in the valorisation of the commons. The approach is still based on the neighbourhood dimension as a unit of measurement for a new model of governance in which all societal actors, including communities of inhabitants, collaborate in the definition, management and evaluation of urban innovation projects. Just as the inhabitants of Rivalta have done for years with regard to 'their' Reggia, in every community there are resources, skills, abilities and a potential for civic mobilisation in which the municipality encourages collaboration with the governance of the city, to be understood as a common good. This is not only a form of deliberative democracy but also a tool for greater inclusion, social and environmental justice that the collaborative approach makes more easily achievable.

With the results of the co-design process, the DESIS Lab has initiated a dialogue with the designers, in order to evaluate and refine the most coherent scenarios with the project, to result in a better specification of the possible activities and their location in the Palace and Park complex. This offers a precious premise for the definition of possible activities and operators, and therefore in the complete realisation of the project.

Work is in progress, but it can already be said that, finally, three centuries after the beginning of its history, the Reggia di Rivalta has been reborn for the community of Reggio Emilia and for those who wish to experience its present and future days.

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Summary

Introduction

This book was born from the research experience of a group of scholars at the Polimi DESIS lab of Politecnico di Milano, the Milano-based design laboratory of the international Design for Social Innovation and Sustainability network.

Although it focuses on a specific case study, it integrates thoughts and insights from various applied research projects developed in recent years on the contribution of service design to shape urban spaces and assets together with the communities they are connected to. During the development of these projects, we gradually realised that we were working around the so-called urban commons and realised that by approaching them through the discipline of design, we could help overcome some of the challenges they face, such as how they can be co-designed and how they can be theoretically framed to more fully include services and relationships in order to address their intangible dimension.

Hence, this book aims to describe the twofold challenge we faced: on the one hand, to adopt and adapt a set of appropriate design approaches for the co-design of urban commons, and on the other, to conceive both the tangible and intangible dimensions (space and services) as part of a single creative process, working in a *designerly* way with a group of heterogeneous participants.

The combination of a participatory process and the integration of spatial and service design led to *infrastructuring* a multi-stakeholder participatory action research of envisioning the future of a public good. This effort has been thus framed into a working methodology, specific tools and progressive outputs, which we define as Service Master Planning (the process), and Service Master Plan (the product).

The specific urban commons concerned here is a huge transformation project for the Ducal Palace and Park in the Rivalta district of the Italian city of Reggio Emilia, made possible by the availability of special funds from the Ministry of Cultural Heritage and Activities as part of the 'One Billion for Culture' plan (Fund for Development and Cohesion, FSC 2014-2020).

The role of public administration, or more generally of any policy-maker with influence on the public interest and public goods, is fundamental in establishing, or not, the conditions for effective institutional arrangements that can coordinate and govern the commitment of the many actors involved in place-making projects such as this one. Indeed, the concept of urban commons we refer to in this book defines an ecosystem of tangible and intangible resources that integrates actors connected by a set of rules, meanings, practices, interests, values and symbols, i.e., shared institutional arrangements.

Policy-makers therefore have the responsibility to work as facilitators in the co-creation of value and mutual exchange of services that takes place between the stakeholders of territorial transformations. The case study of Reggio Emilia has the peculiarity of having involved design experts, the Polimi DESIS Lab, to generate with co-design and service design methodologies the conditions to develop institutional arrangements around a common good.

This essay, therefore, describes the premises, the design criteria, and the evolution of a service design project for urban commons up to the point of integration of service scenarios with the spatial design, which corresponds to the beginning of the construction work.

This book is organised in 3 Parts.

“Part 1 - Design and urban commons” lays the foundation of the theoretical reflection that informs the applied work and its conclusions.

Chapter 1 “Commons, new commons, urban commons” provides a brief overview of the notion of the commons, describing its evolution from the traditional conceptualisation to the more recent idea of the "new commons". The concept of ‘commoning’ is also discussed as a process that requires participation, takes place in a specific local space, and continues over time. Then, it focuses on the urban commons and specifically identifies the perspective of their ‘immaterial’ dimension, which is shared with the participatory practices of communities and the relational nature of services. Finally, the chapter considers the connection of the urban commons with design, and more specifically with service design.

Chapter 2 “The rise of co-design processes for urban commons” examines and discusses participatory design to create a conceptual basis for the application of co-design to the urban commons. It argues for the nature of participatory action research as an activity that goes beyond rational problem-solving to become a reflective practice and a way of building relationships with stakeholders to create networks, from which opportunities may arise, as in an 'infrastructural' action. The chapter then explores the connection of participatory design with urban planning and quickly reviews the main top-down and bottom-up approaches to urban planning and architecture. Finally, it addresses the question of how co-design contributes to the design of the commons.

Chapter 3 “(Public) services as urban commons” discusses the relationship between services and urban commons, through the theoretical lenses of the service design discipline and adopting the service logic perspective. Accordingly, the chapter presents hypotheses based on the axioms of service logic to motivate the adoption of a service design approach to design urban commons. Then, the concept of urban commons is discussed as an ecosystem of stakeholders and tangible and intangible resources, with the Reggio Emilia project being proposed as a public service that aims to bring out, co-create and integrate through scenarios the cultural and economic resources, knowledge and skills of a community. Finally, the chapter presents the 'Nice Classification', an International Classification of Goods and

Services, as a possible reference taxonomy for the design of services for the urban commons.

"Part 2 – the 'Rival(u)ta Rivalta' case study" introduces and describes in detail the process and results of the project for the city of Reggio Emilia.

Chapter 4 "Context and process" introduces the case study 'Rival(u)ta Rivalta'. Hence, the city of Reggio Emilia, its Ducal Palace and the connected park are briefly described, as well as the general objective and guidelines of the design project conceived by Polimi DESIS Lab of Politecnico di Milano. The text first presents some reflections on participatory strategies in governance and then traces the main work phases and highlights the divergent and convergent thinking adopted as an approach to the project. Finally, the chapter focuses on the initial preparatory phase, underlining the importance of scoping activities.

Chapter 5 "Phase 1 – Generative Listening" describes the initial analytical phase of the project, aimed at producing an initial understanding of the place, through a limited field immersion and interviews with selected stakeholders. The approach adopted is described with respect to the standard empathising activities of design thinking and active listening techniques drawn from sociology and anthropology. The chapter then briefly describes the structure and tools used for the interviews and summarises the main observations that emerged, which were grouped together in a sensible collection of insights.

Chapter 6 "Phase 2 – Co-design workshops" describes the second phase of the process, which consisted of an intensive programme of co-design workshops involving a variety of stakeholders, with the aim of generating many ideas for the future of the site. The text begins with a reflection on the methodologies for co-design and scenario building, with the aim to design an effective process and its boundary objects for the specific case. Then, the chapter details the co-design methodology, the methods and tools employed, and the structure of each workshop and its outcomes.

Chapter 7 "Phase 3 – Integration into the spatial design" describes the third phase of the project, which is characterised by a close collaboration between service designers and the team of spatial designers who were winners of the international landscape design competition launched by the Municipality. The text starts with a review of some key service design notions with a specific focus on the service offering and related tools. Next, it goes deeper into the co-design activities between the teams of designers. The result of this phase is a set of 2 spatial & service scenarios complemented by situated maps of services.

"Part 3 – Service Master Planning and Service Master Plan" frames the process and outputs experimented in the case study into a consistent methodology and its product.

Chapter 8 "Process: Service Master Planning" describes step by step the full methodology of service design applied to urban commons that is Service Master Planning. This process is therefore illustrated in all its stages, each articulated in

phases, and finally in smaller and more specific steps. For each phase, the specific outputs are described, as well as why and how the process is collaborative, involves multiple stakeholders, and is organised in diverging and converging phases. The chapter then discusses the 7 features that characterise the process, which are being: situated, flexible, pragmatic, collaborative, adversarial, imaginative and political. It finally reflects on the procedural aspect of the process and thus reflects on infrastructuring, commoning, and policy-making.

Chapter 9 "The Service Master Plan" describes in detail the product of the Service Master Planning process that is the Service Master Plan (SMP). It is a document that consists of 3 sections – 'Scenarios', 'Specifications' and 'Recommendations' - each articulated in different parts, both textual and visual. The aim of the SMP is to provide a basis for the implementation of place-making projects addressing urban commons. The chapter also discusses the 6 features that characterise an SMP, which are: scenario-driven, mission-oriented, steering, comprehensive, brief, and visual. It finally presents an example of an SMP prepared for the Rival(u)ta Rivalta project.

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PART I - DESIGN AND URBAN COMMONS

Chapter 1. Commons, new commons, urban commons

Abstract This chapter provides a brief overview of the notion of the commons, describing its evolution from the traditional conceptualisation to the more recent idea of the "new commons". The concept of 'commoning' is also discussed as a process that requires participation, takes place in a specific local space, and continues over time. Then, it focuses on the urban commons and specifically identifies the perspective of their 'immaterial' dimension, which is shared with the participatory practices of communities and the relational nature of services. Finally, the chapter considers the connection of the urban commons with design, and more specifically with service design, with the aim of defining a theoretical and methodological basis for any further research action that might consider not only the relevance of participatory processes but also the reconsideration of the very idea of urban commons.

Keywords commons, new commons, urban commons, commoning, service design

1.1 From commons to new commons

The notion of "commons" and its various conceptualisations over time are central for the development of this book, especially the idea of urban commons and its connection with the design discipline, mainly through the approaches that characterise co-design and service design. Leveraging this connection, we assume that design might help urban commons overcome some of the challenges they are currently facing (Botero et al. 2020):

- how urban commons can be co-designed. Since, unlike traditional commons, urban commons are characterised by a greater heterogeneity of interests and stakeholders, we assume that a supportive, design-led process to share views, reach consensus and manage disagreement is useful;
- how urban commons can be framed theoretically to include services and relationships and thus, how to address their intangible dimension more thoroughly. Since commons need to be managed in a participatory way, and therefore these collaborative practices can also be considered as commons, urban commons include not only physical resources and community arrangements, but also a different number of interactions and relations, which need to be designed as commons.

Commons has a long and varied history, which encompasses the enclosure movement in England (Linebaugh 2009), Hardin's well-known "Tragedy of the Commons" article (1968) and Ostrom's Nobel Prize-winning studies on governing common-pool resources (1990).

Here we intend to focus in particular on the work of Ostrom and her research group, who analysed commons as natural and physical resources requiring on-going maintenance and a form of controlling the access. In her seminal book, *Governing the Commons*", Ostrom used the expression common-pool resources to describe "a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use" (Ostrom 1990: 30). She also intended commons as something "long-enduring, self-organised, and self-governed" (p.58) and provided examples of both success and failure to illustrate the characteristics of self-organising institutions from all over the world, such as mountain meadows in Switzerland, forests in Japan, and irrigation systems in Spain and the Philippines. From this analysis, Ostrom concluded that people "are more likely to create and conserve the commons when they have credible and reliable information about the costs and benefits of resource decisions and (crucially) when they have an opportunity to decide the rules of the game" (Forsyth and Johnson 2014: 6).

In a later work, together with her co-scholar Hess, Ostrom re-defined and extended the notion of commons beyond those recognised in the traditional fields of property and environmental law. In their book, *Understanding Knowledge as a Commons* (2007) they provide a new perspective on knowledge as a *commons*, i.e., a resource shared by a group of people that is subject to social dilemmas. Ostrom and Hess argue that knowledge commons can consist of multiple types of goods and regimes, and has many characteristics of a commons, including its complexity and variability. In the same vein, Bollier (2007) talks about the "growth of the commons paradigm", meaning that the commons model helps to take a more holistic perspective in the management and assessment of a resource.

Moreover, the diffusion of the discussion on commons in recent years "has helped identify new commons and, in providing a new public discourse, it has helped develop these commons by enabling people to see them as commons" (Bollier 2007: 29). Different attempts by scholars across an array of specialties have been carried out in identifying and classifying the so-called 'new commons' and here we particularly refer to the study proposed by Hess in her article "Mapping the New Commons" (2008).

She defines the new commons in a broad way, referring to the shared resources recently recognised as commons, and she presents a map to classify different resource sectors, also proposing a set of crucial issues arising from this "new" research area.

The new commons are categorised by Hess (2008) as follows:

a) Cultural Commons
b) Neighbourhood Commons
c) Infrastructure Commons
d) Knowledge Commons
e) Medical and Health Commons
f) Market Commons
g) Global Commons

In particular, Hess (2008) together with other scholars like Frischmann et al. (2014), highlights how a new generation of commons is emerging from the digital age, in particular those known as 'knowledge/information commons', which are characterised as being intangible or immaterial, and visible on the Internet. As Marttila, Botero and Saad-Sulonen (2014) point out, these types of commons may differ from open collective initiatives connected to shared resources (e.g., open access, open source etc.) and new forms of enclosure (e.g., digital rights management, intellectual property regimes and licencing strategies).

Moreover, the cultural commons are very close to this sphere and numerous elements overlap with the knowledge and neighbourhood sectors: it is about cultural heritage and the commodification of previously unownable cultural objects (Hess 2008), but it is also about creativity, art and tourism, which fall under this wide area.

All types of new commons lack consistent definitions: the rapid spread of the commons paradigm has caused a number of conceptualisations that have extended its semantic field. In her attempt to define them, Hess (2008) concludes that they are 'new' in two different ways. They are new in opposition to traditional commons: Ostrom's design principles (1990) and the features of long-enduring traditional commons do not necessarily apply to new commons. Secondly, they are new because they have created "a sense of awakening, of reclaiming lost or threatened crucial resources" (Hess 2008: 38), and this falls under the so-called strand of research of 'reclaiming the commons.' It is a sort of activist/practitioner movement in which commons are considered as a means for social change and democratic governance (Bollier and Helfrich 2012; Bauwens 2009). From this perspective, commons are conceived not only as shared resources, but also as a process, meaning a set of practices focused on how to create commons, how to support and govern them, or, more precisely, a set of "collaborative arrangements for value production processes" (Seravalli 2018: 1).

1.2 Urban commons and their design challenges

The notion of urban commons, which is central to the development of this book, emerges from this strand of research. Linebaugh (2009) also makes use of the verb *commoning* to express the idea of commons as a process that requires participation, takes place in a specific local space, and is continues over time. According to Bollier (2014), the idea of urban commons encompasses the concepts of common ownership and participative citizenship, and so, he again refers to something that is 'object' and 'process' at the same time. Bollier and Helfrich (2019), who are very critical towards commons' definitions that emphasise objects and individuals rather than relationships and systems, have more recently spoken about commons as 'living social systems', through which people address shared problems in self-organised ways. Commons "enable people to enjoy freedom without repressing others, enact fairness without bureaucratic control, foster togetherness without

compulsion, and assert sovereignty without nationalism". They "contain the germ of change for the whole" and function "outside of the capitalist mindset, for mutual benefit, with respect for the Earth, and with a commitment to the long term". Commoning, therefore, refers to the self-organising capacity of people to find solutions for their needs, independently of the state or the market, which means the community is active in defining, negotiating and sharing rules, assigning responsibilities and creating monitoring systems. This calls for what we define as "creative communities" (Meroni 2007), i.e., groups of individuals who get things done, overturning current ways of thinking and preconceived ideas about services, conventional public and private roles in everyday life, and looking at problems from different, non-rhetorical perspectives.

According to a more traditional definition, urban commons range from local parks, gardens, squares, streets, and public spaces (Foster 2011; O'Brien 2012) to a diversified number of services, including public transportation, water services, urban health, gas and electric distribution and many others (Iaione 2012). Hence, they are identified as urban spaces or services that are considered 'community goods' or 'local common goods' (Kassa 2008; Harvey 2012). Design-driven interventions in these types of urban spaces can be the pivot of more radical transformations and thus a seed change for the whole: Fassi and Vergani (2020) present a series of cases in the city of Milan where place-based communities activated through co-design actions have reinvented and prototyped specific urban places or entire neighbourhoods, leading to long-term transformations both in physical space and in the relationships between inhabitants.

Hess (2008), in her map of the new commons, places urban commons under the wider category of neighbourhood commons that incorporates "both urban and rural commons where people living in close proximity come together to strengthen, manage, preserve, or protect a local resource" (2008: 16).

The neighbourhood commons theories and practices to which Hess (2008) refers are strictly related to the literature referred to above of 'reclaiming the commons', in which urban commons and participatory processes are presented as being closely interconnected. And this leads to one of the main challenges urban commons are currently undergoing: how might they be co-designed, as they need to align the interests of all participants, and also to educate people how to be part of these processes (Pór 2012).

As researchers in methods and tools of co-design, we asked ourselves how we could contribute to support and structure the collaborative and participatory nature of urban commons: the case study presented in this book about the co-design process for the Reggio Emilia Ducal Palace and its park is an attempt that moves in this direction.

As Foster and Iaione (2016) state, urban commoning requires having someone who plays the role of 'enabler' to manage negotiations and cooperation among

participants with divergent interests. This is why we conducted co-design activities with diverse methods and tools in order to allow multiple participants with different voices to collaborate in a design process, applying an adaptive and iterative design approach (Meroni, Selloni and Rossi 2018).

The interconnection between urban commons, commoning and co-design is more fully explored in Chapter 2, while reflecting on the emergence in the last decade of a great variety of activities labelled as 'co-design processes', ranging from urban planning to community building, and involving private, public and third sector organisations (Trischler et al. 2018). We think it is necessary to reflect on this, with the aim to more effectively frame, assess and implement co-design for urban commoning.

As discussed, the challenges around the design of urban commons are not only connected to the related participatory process, but also to the reconsideration of the idea itself of urban commons: the co-design process outlined for the Reggio Emilia Ducal Palace and Park in Rivalta (the main case study presented in this book) was aimed at conceiving the future activities to be carried out in the park in terms of functions, services and future relationships, rather than designing the public space in its physical aspects. This position acknowledges that urban commons are shared resources, while at the same time they are collaborative arrangements to design them, institutions for regulating them, and "the community that devises the institutions, both shepherding and benefiting from the resources" (Huron 2017: 1063).

This conception of urban commons includes an 'intangible part', that is the idea of thinking (public) services as an integral part of urban commons, just like (public) spaces are, combining both tangible and intangible aspects. Thus, the expertise in service design appears fundamental, because it is related to an updated notion of urban commons.

According to Sangiorgi and Prendiville (2017), service design is the activity of planning, and organising people, infrastructure, communication and material components of a service; and this is why the systemic approach embedded in service design theories and practices has proved to be appropriate for the Reggio Emilia Ducal Palace co-design process. In addition, the co-produced nature of service provision calls for the use and the development of a collaborative design approach, in which the engagement of people in the design and transformation process is a fundamental condition (Meroni and Sangiorgi 2011). This leads to the second mentioned challenge of the current interpretation of urban commons that refers to their 'invisible' and relational component. This is inherent to services and service design, so that invisibility (or "intangibility") is an empirical feature of services, which are forms of social interactions that happen over periods of time: service design is therefore concerned with creating the material and immaterial conditions for interactions, experiences and relationships to happen (ibid.). According to Penin (2018: 12), designers design "the enabling conditions for people to solve a problem and improve their lived experience",which is an interpretation that may connect

service with the concept of commons as 'living social systems', thus including the partial unpredictability of the actual outputs. Chapter 3 discusses in depth what kind of services can be regarded as urban commons, and why.

Hence, this book aims to describe the twofold challenge we faced: on the one hand, to adopt and adapt a set of appropriate design approaches for the co-design of an urban commons such as the Reggio Emilia Ducal Palace and its park, and on the other, to conceive both the tangible and intangible dimensions (space and services) as part of a single creative process, creatively working with a group of heterogeneous participants.

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Chapter 2. The rise of co-design processes for urban commons

Abstract This chapter examines and discusses participatory design to create a conceptual basis for the application of co-design to the urban commons. It argues for the nature of participatory action research, which deals with ill-defined problems and situations, as an activity that goes beyond rational problem-solving to become a reflective practice and a way of building relationships with stakeholders to create networks, from which opportunities may arise, as in an 'infrastructural' action. The chapter then explores the connection of participatory design with urban planning and quickly reviews the main top-down and bottom-up approaches to urban planning and architecture, including master planning, community management and design for social innovation. Finally, it addresses the question of how co-design contributes to the design of the commons, and the relationship with the concept of commoning.

Keywords participatory design, co-design, community-centred design, infrastructuring, urban planning, master plan, commoning

2.1 A current landscape of participatory processes

In the last two decades, we have seen the rise of multiple and diverse participatory processes: marked with different names, they have been progressively adopted in different fields, among which urban planning and commons are prominent (Bannon and Ehn 2012). The landscape of these participatory practices is wide and heterogeneous: it includes public consultations, assemblies, co-design workshops, civic hackathons, participatory budgeting and several forms of physical or digital participation. The same diversification can be found in the private and third sectors, and the reasons for this are various. First, we live in the so-called “era of participation” and in a “participatory culture” (Smith, Bossen and Kanstrup 2017), in which people have the means (through the Internet, digital media, social media) to take part in many processes, expressing their interests and concerns. Second, participatory processes and practices of collective creativity promise to tackle complex issues: we may approach the complexity of our era in a more effective way by considering multiple and diverse voices (Meroni, Selloni and Rossi 2018) and by designing space for participation and collaboration. Accordingly, in a discourse about commons, there is a growing need to update and extend the reflection on participatory practices into new fields (Marttila et al. 2014).

This chapter is not intended to be a review of the whole subject of participatory processes: our purpose is rather to highlight some elements of understanding of this landscape that can help define a conceptual basis for the application of co-design to

urban commons, as inherently collaborative systems. As such, we will also reflect on the subjects considered in participatory processes.

In this book, we connect 'co-design' to 'participatory design' as formulated by the Scandinavian School of Participatory Design (Ehn 1988; Greenbaum and Kyng 1991; Ehn 2008). In acknowledging the different roots of the two concepts, their different degrees of political-ethical load and their different emphasis on designer-stakeholder engagement, we also recognise that they blur into broadly defined 'participatory co-design approaches' that become relevant when design has a social purpose and aims (Binder et al. 2008; Sanders and Stappers 2008). Thus, participatory design and co-design are both used here to refer to collaborative creativity applied across the entire span of a design process that aims to produce a positive social impact, through and beyond the outcome of the solution. That said, it is worth reflecting on the relationship between these approaches and service design as a discipline.

Following the perspective of Bannon and Ehn (2012) in the 1970s, the Scandinavian participatory design embraced action research as a way to iterate circles of planning, acting and then fact-finding on the outcomes of the action with the aim of focussing on local accountability and local needs. The resulting idea of 'participatory action research', in which the researcher is part of a change process working with the parties concerned, turns out to be intertwined with the ideals of collaborative knowledge production and democracy that are the very core of participatory design. It implies a view on design as a *reflective practice*, more than a *rational problem-solving* one, where reflection-in-action, learning-by-doing, and eventually experimenting are the distinctive elements of a design practice and research that deals with ill-defined problems and situations. Accordingly, experiencing circles of *making hypothesis - experimenting - evaluating* is the fundamental way for designers to operate, inquire and understand, and it is a keystone of participatory design. Therefore, involving a community in a design process, and using this to disentangle local needs and envision options for the future is a way to set up contexts of debate and experimentation that can work as reflective 'labs' for the city: platforms for collaborative enquiry (Binder and Brandt, 2008) that can provide an 'infrastructure' for thought, awareness and networking about present and future issues.

Here it becomes the concept of *infrastructuring*, born within the field of participatory design to define the distributed practice that emerges in the interaction of different actors involved in designing complex systems, which does not stop when a project is done (Seravalli and Eriksen 2017). It can be described as a continuous process of building relations with diverse actors, in order to foster social innovation in the society at large (Hillgren et al. 2011). Infrastructuring, in fact, is a way to approach innovation that, differently from project-based design, is aimed at building relationships with stakeholders, enabling them to act and create networks, from which opportunities may arise (Meroni 2019). The intrinsic value

of this practice, which acknowledges the design agency is not limited to expert designers but distributed among different stakeholders, lies precisely in this enabling factor that can bring about collective experimentations and reflective thinking on communal issues. Likewise, commons, as discussed in Chapter 1, are organisational forms for the collaborative generation, access and maintenance of 'shared resources' (Seravalli and Eriksen 2017). Thus, the collaborative design of shared resources can be seen as a commons; and the creation of the 'infrastructure' that enables this collaboration can be regarded as a 'public service'. In other words, co-design can be a service that public administrations offer to create more democratic, reflective, pro-active and inclusive societies, where innovation is not only the production of new products or services, but also the opening up of room for questions, possibilities and processes for radical change (Selloni 2017; Bannon and Ehn 2012). This brief overview shows that the discourse around commons has many connections with participatory design, such as the interest in democratisation (Ehn and Kyng 1987; Greenbaum and Kyng 1991) through the creation of shared political agendas, or the belief in the stakeholders' and communities' capability, and right, to act and decide upon their future. Both studies discuss the potentials and dilemmas of collective action (using different vocabulary) and its infrastructuring needs. The co-design methodology discussed in this book is an experiment in which a public administration together with a design research lab has *infrastructured* participatory action research.

The connection between co-design, service design, and design for social innovation lies in this background: it moves from an intellectual position in which the purpose of social innovation of meeting social needs, creating public value and social relations, is achieved not only through the services and practices actually implemented, but also through the collaborative process that takes place to design them. It is a process that the public administration can encourage and steer, as seen in many programmes implemented across the world (Avelino and Wittmayer 2018; Oeij et al. 2018), with the aim of empowering citizens and organisations to be more eager and ready to experiment with sustainable and inclusive ways of living. The spread of these initiatives does not deny, but rather acknowledges, that social innovation processes may be controversial and conflictual: in fact, diverse and opposite interests and aims of heterogeneous actors need to find a way to co-exist in complex systems where a full alignment and sharing of visions is not always possible. We can describe the way for designers to enter the complexity of these social innovation ecosystems as *community-centred design*, that consists of a combination of two main actions: 1) understanding values and behaviours, and gaining knowledge about the community and its habitat through observation and immersion; and 2) creatively co-designing with non-official but de facto designers, which turns to be an empowering activity (Meroni 2008; Manzini and Meroni 2014).

Therefore, design for social innovation increasingly assumes the shape of a collaborative practice of reflection and intervention that explores societal

challenges through participatory thinking and experimentation. *Expert design* (Manzini 2015) plays a major role in facilitating, steering and creating the conditions for this collaboration to happen, that is, in infrastructuring the relations between multiple and heterogeneous actors. To do this, methods and tools of service design are largely adopted, being the relations between actors forms of service: that's why this strategy can be intended as a *public service*, which aims to create collaborative learning environments for innovation and change. Furthermore, the act of infrastructuring conversations on the future in order to design scenarios, to find opportunities of reciprocal interest, and to create relationships and develop mutually beneficial solutions (Pahk, Self and Baek 2018), follows a logic of value co-creation. Paraphrasing Vargo and Lush (2016), we can indeed say that an effective community-centred design should support the actors of a given context to engage in a process of benefiting their own existence through benefiting the existence of other actors with service-for-service exchange or the provision of some output. This co-created value is therefore a 'new commons', maximised by the diversity of interests and views that find a way to coexist.

2.2 Participatory practices in urban planning

When it comes to the connection of participatory design with urban planning, the discourse is no simpler than the previous one. The inclusion of bottom-up and multi-stakeholder collaboration processes is widely recognised as extremely important for: urban planning; spatial planning (as it is more recently known); city-making; urban setting design; and reconfigurations of public spaces and services (Palermo and Ponzini 2010; Gehl 2013; Jannack, Münster and Noenning 2015; Marttila and Botero 2016).

In the book *Cities for People* (2013), Gehl speaks about city life as a 'vital city function' that requires consideration and careful planning by the professionals. While the connection between human behaviour and the physical form of the city has gained much attention in the research and theory of urban planning, a thorough reflection on human behaviour and service provision in the city is only just beginning. Although it is accepted that city life and people-centric approaches in spatial design are key in city planning, an actual recognition of the city space as a meeting place and a social forum for city dwellers is limited or has even been phased out. This goes beyond the supremacy of cars and of the free-standing individual building ideology: according to Gehl, it actually reflects a neglected vision of the urban commons, namely the social function of the city space to contribute towards sustainability and democratic society. To counteract this ideological position, different initiatives aiming at making (new) room for social and cultural opportunities and services in the public space have emerged. For the purpose of this book, the very point of these initiatives is the shift of the design focus from the physical form to the interactions and relations that take place there: activities that are highly complex, flexible and unpredictable; that change over time; and that the

space can hinder or give the means to. By adopting this perspective, we can see that the space is part of a wider context that either can or can't enable certain things to happen, namely activities and services that people or organisations can run. Gehl (2013) distinguishes between 'necessary' and 'optional' activities, the former being those that people have to undertake and that take place under all conditions, and the latter the recreational ones that people prefer and that take place only if the conditions are favourable. "Planning in new urban areas must start with expectations and prognoses about future activity patterns. In existing urban areas, one obvious starting point would be to study city life as it actually exists and then use this information to make plans for where and how to reinforce city life" (Gehl 2013: 209).

This approach to urban planning, implemented through participatory approaches, has been adopted in many countries since the 1970s. The disciplinary background of these approaches ranges from social sciences to architecture. With the purpose of understanding the contribution that service design and participatory design can bring to the fore, a critical review of the ways in which participation is intended in the different urban planning narratives is appropriate, including a reflection on the top-down or bottom-up tactics and strategies that are transforming the current way to think about and make the city.

Top-down planning strategies and practices of urban planning are those implemented by public governments and urban developers with the aim of envisioning, designing, organising and regulating the development of a place. Here, the use of 'master plan' narratives has appeared in the practice and theory of urban planning since the 1950s: they synthesise the built environment and its developmental process into a coherent urban form, responding to the functional necessities of the city (Beauregard 2003). The dominant theoretical paradigm of 'comprehensive planning' – a rational problem-solving and decision-making process, grounded in the faith in science, objectivity and in search for universals – connected to the idea of the city as a singular and invariant form, was born at that time (Campbell and Fainstein 2003). Its narrative has been replaced since the 1970s by postmodernist values based on pluralistic viewpoints derived from different cultural traditions and principles of relativity (Neamtu 2011). Common good, public interest, common values, and ethical principles informed by sustainability became keywords of 'sustainable urban planning', a paradigm based on ecology. Founded on a holistic approach and a long-term perspective, contextual and based on the acceptance of limits, sustainable urban planning acknowledges the active involvement of interested social parties in problem-solving (Wheeler 2004) as a key characteristic. As such, it draws from different theories, including New Urbanism, which is contextual and focussed on liveable built environments.

Although comprehensive planning remains one of the dominant paradigms of contemporary urban planning thanks to its clear method of formulating policy and programmes and its compatibility with quantitative methods, since the 1970s it is being influenced more and more by practices of sustainability and inclusion

(Neamtu 2011), as well as participation. The terms ‘master plan’ and ‘general plan’ can be considered almost synonymous with ‘comprehensive plan’, defining a geographical coverage that includes all the land area of the jurisdiction, the complexity of the subject matters related to the physical development of a community (in all its materialisations), and a fairly long time horizon (Neamtu 2011). They are dynamic “long-term planning documents that provide a conceptual layout to guide future growth and development. Master planning is about making the connection between buildings, social settings, and their surrounding environments. A master plan includes analysis, recommendations, and proposals for a site’s population, economy, housing, transportation, community facilities, and land use. It is based on public input, surveys, planning initiatives, existing development, physical characteristics, and social and economic conditions”.[1]

Today, several countries put forward different interpretations of comprehensive/master planning with regard to considering a participatory and holistic approach that was ‘user-interactive’ and ‘user-centric’ (Jannack, Münster and Noenning 2015). Terms such as ‘place making’ (with an emphasis on producing liveable and sustainable places by linking development management to housing, transport and community services provision - Palermo and Ponzini 2015), or ‘spatial planning’ (with an emphasis on collaborative processes for improving accountability of planning, integration across sectors, and ability to think and act long term in pursuit of the public good - Haughton and Allmendinger 2013), refer to approaches that, through different strategies, recognise the value of local choice and the engagement of local people as necessary pre-conditions for designing and implementing effective urban plans. The key idea is the involvement of the end-user as early as possible in the ‘master planning’, then maintaining this participation not only in the pre-design and briefing phases (to better focus the needs, problems and desires of the citizens), but also in the professional design and execution phases (to enable them to participate in the final decisions).

In Italy, the term ‘master plan’ overlaps with ‘Piano Regolatore Generale’the urban planning tool that regulates the construction activity within a municipality or territory. The two are not necessarily the same: a master plan is a voluntary strategic tool which can be developed by public or private entities, and that provides a comprehensive hypothesis about the planning of a territory, identifying stakeholders, funding mechanisms, instruments and actions for its implementation. It is characterised and legitimated by being formulated through participatory processes involving citizens and stakeholders of a specific place. It needs to be reconciled with the Piano Regolatore Generale and its legal tools. Although participation is considered primary in the construction of a master plan, it is not the same for the Piano Regolatore Generale, whose process of implementation implies a simpler ‘information’ phase (Arnstein 1969), conducted with stakeholders and citizens.

[1] https://urban-regeneration.worldbank.org/node/51

It is worth mentioning that these diverse top-down participatory practices may involve very large numbers of individuals and organisations, making the adoption of digital communication and interaction channels even more appropriate as an integration with the physical ones (Münster et al. 2017). This also allows for better management of qualitative and quantitative research strategies. Online communities, discussion forums, crowdsourcing platforms, augmented reality visualisations, 3D environments, co-design environments, data collection tools, sentiment analysis and machine learning tools are some of the tools that are expanding the repertoire of participatory techniques towards mass involvement, thanks to the digital means (Jannack, Münster and Noenning 2015; Münster et al. 2017). However, their potential is yet to be exploited and assessed.

Bottom-up practices for urban planning manifest as a wide variety of initiatives led by citizens, grassroots organisations or creative communities with the aim of making changes in the urban environment to better respond to people's activities. Since there is no comprehensive description or taxonomy of these practices, we would like to discuss two main forms of design-driven interventions within this category: social innovations and tactical urbanism initiatives.

Social innovations make alternative and creative uses of spaces for initiatives aimed at solving everyday problems with a care for relationship and sustainability (Meroni 2007; Jégou and Manzini 2008), or to express concerns for unfortunate or controversial situations with a critical design approach (Markussen 2011). Using the words of Marttila and Botero (2016), they can be described as *strategising* creative practices used by citizens to express concerns about the public sphere and to make a change. They materialise into initiatives such as: urban and guerrilla gardening; shared and alternative mobility with lower environmental impact vehicles and arrangements; neighbours' convivial feasts; street markets and festivals; improvised playgrounds; technological experiments for data access or sharing; temporary events in conjunction with artists; and many more. The 'creative communities' (Meroni 2007) who propose them may be enthusiastic dreamers or simply individuals motivated by practical urgency: yet, they manifest the idea that subjective well-being is related to the capacity to bring people together around an idea and to resolve a problem. They build community and instil a sense of personal well-being. They are forms of material hands-on engagements, practically contributing to the collective construction of the *Things* we should be concerned about, these being not only artefacts, "but rather assemblages of humans, non-humans and objects that help to articulate and gather an issue" (Marttila and Botero 2016: 76). This way in which people think and make the future and take collective action toward *Things* is also defined as *commoning* (Linebaugh 2009). It is rooted in volunteerism, political engagement, intrinsic motivation, visioning and a sense of belonging, and it is reframing the way in which several *commons*, including the public space, are defined today. It is also redefining the meaning and forms of participation as an alternative way to take part in societal debates.

Tactical urbanism and related initiatives are temporary actions conducted by citizens and local organisations within a frame defined with and by local governments. They materialise into temporary use models for squares, streets or small urban areas in which new arrangements of pedestrian/cycling/car lines and of meeting spaces are experimented together with a programme of community activities that take place in them. They are normally implemented with transient, low-cost technical solutions, and are made in collaboration with groups of local citizens that become contact-points with the public administration. The temporary solutions are assessed while in place, in order to understand what works and what doesn't work, in order to design the permanent ones. According to some authors (Silva 2016), tactical urbanism is one of the possible answers to the search for new paradigms in spatial planning and urban development, acknowledging that many urban processes do not result from planned strategies but from unplanned and bottom-up organised initiatives instead. Tactical interventions are seen as ways to adapt the city through small changes to the complexity of people's lives: as such, they are promoted by urban planners, because they are seen as ways to vitalise or re-vitalise parts of the city and tactics to experiment with new shapes and rules. Somehow self-organised, they are processes in-between the formal and informal spheres: having a place in the public space, they have to comply with legal rules defined by the public administration but they aim at experimenting with future new rules. Although tactical urbanism is not safe from criticism (on the contrary, the debate around it is quite animated), we can see in this approach an innovative way to use participation in urban planning. Citizens, in fact, are invited to co-design and co-produce both a set of community activities and the place that will host them, and in so doing, create a sense of community and ownership. Although tactical urbanism initiatives may also ignite conflicts in the neighbourhoods because they can become forms of provocation, the *Things* they contribute to design are units of material and immaterial resources that exemplify *commons* in its full sense.

As a conclusion of this reflection, it is worth mentioning that the progressive engagement of local actors through participatory activities in the design of master plans has a parallel in architectural practice, where it has evolved over time acknowledging the value of pluralism of views (Luck 2018). It has moved from the adoption of participation at the moment of decision to the one of participation at the moment of idea generation, thus embracing a proper co-design approach. In the last decade in particular, the emergence of architectural collectives working with people in creative ways, combining architecture and art, is a significant expression of participation through tangible intervention in everyday life. It also interprets co-creation as a situated, on-going and agonistic process: something existing in a place before the construction of something new and continuing afterwards, in which even the disagreement within a group that might come from design provocations is viewed as a constructive way to generate reflections on what counts (Luck 2018). This approach grew beyond the single architectural project thanks to urban policies

implemented by mayors around the world, which generated city-wide agendas for citizen participation in masterplanning and regional development (Luck 2018).

In line with this participatory approach applied to architectural practice, another experimental method comes from the Italian experience of social housing, and in particular from the methodological, operative and real-practice contribution elaborated by Fondazione Housing Sociale (FHS), from the beginning of the 2000s. As a reaction to the housing demands from less-wealthy social segments, FHS started to experiment with real estate interventions with a social nature: new approaches with an integrated design of the architectural, economic and social contents. It is based on the direct and responsible involvement of people, who, supported by *ad hoc* services and by a 'social manager' (Ferri 2016), actively participate in the experimentation of new, or renewed, forms of living, in which tenants are called upon to build a sustainable community (Ferri and Pacucci 2015). In this way, a participatory process aimed at designing both the place and its activities is orchestrated before the place and the community are formed and during the following co-evolution. Participation, as both co-creation and co-production of collective matters, is therefore a permanent condition that allows people to live rich and meaningful relationships, and to experience positive interactions with other inhabitants of the community (Ferri and Pacucci 2015). Two key issues underlined by this practice are: 1) the deliberate adoption of articulated participatory processes to co-design the place together with, and in the light of, the services the community collaboratively produces; 2) the use of these processes to form communities of intents, that is people not choosing each other but with a common desire to share an objective and operating mode. By "doing things together" with the tools of design and with a purpose, these communities come to a form of cohesion (Meroni 2016).

Finally, we can say that participation started to influence urban planning and architectural practice in the 1970s, when participatory design experimented with action-research, which impacted on different future-making practices. Likewise, in relation to urban planning, the path of convergence between participation and architecture should not be seen as progressive and seamless, but as a journey in which participation has gone through different degrees of favour.

2.3 Co-designing to produce *commons*

We have discussed the interplay between top-down and bottom-up strategies for urban planning, from the perspective of participatory design and with the aim of creating an initial framework to help understand how collaborative practices, including co-design, can contribute to urban commons. We can summarise this reflection with the following initial set of conclusions that discuss the 'what' (the design subject matter), the 'how' (the way in which co-design takes place), and the 'who' (the kind of participants) of co-design processes for urban commons.

What. In their very core, both commons and participatory design share an idea of democratisation of processes and of the right to decide by those who are affected by the consequences of a decision. Participatory design for urban planning includes practices of co-design that not only address the co-creation of public space solutions, but also of services and activities that will be enabled by the space, so that the latter is shaped by the former. This is particularly evident since the influence on top-down masterplanning of bottom-up practices of activism and social innovation has become stronger. This way of co-designing contexts and activities as a whole exemplifies the most contemporary approach of participatory processes to urban commons. Beyond this, the more the awareness of the power of co-design to open up room for questions, possibilities and radical changes increases, the more its value as a generator of urban commons increases. In other words, co-design is recognised as a promising strategy to empower citizens, to make them more reflective and to foster more cohesive communities, while designing the place in which they live and making things happen. A place is a space that enables certain things to happen, including community building. Similarly, in service design, the design of a human interaction is also the result of the design of the conditions that make it happen, accepting the heterogeneity and relative unpredictability of the circumstances. We can also see in this a transposition of the service-dominant logic (Vargo and Lush 2004) into the spatial context, so that services can be seen as a reason for re-conceptualising spaces and experimenting with new rules.

How. Co-design can be generally seen as a collective reflection-in-action. It is a situated, on-going and agonistic design thinking process. In the most interesting participatory approaches to urban commons, it does not end once a project is made, but continues afterwards, making the place alive and open to other evolutions. In co-design, even the disagreement within a group is of value: design provocations, as thought-provoking proposals designers may use to steer creative conversations (Meroni, Selloni and Rossi 2008) are ways to generate reflections on what counts for the community, where consensus is not necessarily the goal, but rather the acceptance and respect of divergences. Co-design being a means for civic engagement and awareness, it can be considered a ‘public service’ that public administrations may offer to citizens with two aims: fostering more democratic and inclusive societies and infrastructuring more collaborative networks of stakeholders. Accordingly, the public value generated by co-design is maximised when it allows new ways of seeing to emerge, together with divergent visions and diversity of interests; when it shows critical perspectives; and finally when it creates a civic and constructive space of context in which to debate them. By doing this, co-design responds to the principles of ‘new commons’ since it is a means for social change and democratic governance, and becomes a way for commoning, since it guides social ecosystems by collectively thinking and making the future.

Who. The review of the participatory practices for urban commons has shown that different kinds of people are impacted differently by the changing nature of

participation. This discourse warrants a more extensive reflection, which is out of the scope of this study. Yet, we deem it relevant for the discussion that co-design and co-production are practices that empower participants by creating not only competence, but also objective and subjective well-being. In fact, according to positive psychology (Inghilleri 2003), this is generated by the capacity to bring people together around an idea, to solve a problem or to exploit an opportunity together. In other words, to allow others to flourish in their potential. To build and expand on this discourse, it is worth mentioning that, today, debate around a design approach is not only concerned with humans but also with non-human entities. The expression 'more-than-human design' refers to a methodological shift "to overcome problematic narratives of human privilege and exceptionalism, but also to fundamentally question what participation can and might mean in our existing and future cohabitation with multispecies" (Clarke et al. 2018). In the view of environmentally and socially just, post-anthropocentric smart cities, participation is seen as a way to understand how cities and nature, humans and non-humans are interrelated and interdependent. These action research projects adopt a speculative attitude: they experiment with the participatory creation or discussion of artefacts that incorporate thought-provoking environmental values and that build on local folklore and mythologies.

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Chapter 3. (Public) services as urban commons

Abstract This chapter discusses the relationship between services and urban commons, through the theoretical lenses of the service design discipline and of service science, and adopting in particular the service logic perspective. Accordingly, the chapter presents hypotheses based on the axioms of service logic to motivate the adoption of a service design approach to design urban commons, and proposes interconnections between services and commons. Then, the concept of urban commons is discussed as an ecosystem of stakeholders and tangible and intangible resources, with the Rival(u)ta Rivalta project being proposed as a public service that aims to bring out, co-create and integrate through scenarios the cultural and economic resources, knowledge and skills of a community. Finally, the chapter presents the 'Nice Classification', an International Classification of Goods and Services, as a possible reference taxonomy for the design of services for the urban commons.

Keywords service design, public interest services, urban commons, service dominant logic, service ecosystem, institutions, service classification

3.1 Service and service design

In Chapter 1 we discussed how urban commons are today not only intended as natural, physical or spatial resources, but also as interactions, relations, and finally services. Within urban commons, Iaione (2012), for example, includes tangible assets such as parks, squares, local streets, public spaces in general and also a diversified number of services, such as transportation, water service, urban health, gas and electric distribution, and many others. He speaks about the shared care of goods (such as public spaces) and of services of common interest: they can all be seen as urban commons.

Shah and Garg (2017) argue that urban commons have a “service potential”: all the activities related to ensuring the benefits they produce, and to their management, are actual services that need to be designed and provided, and they are integral parts of urban commons themselves, which are at the same time ‘objects’ and ‘processes’.

In Chapter 2 we argued that co-design as a practice could become a public service when a public administration offers it as a strategy to foster more democratic and inclusive societies, to create collaborative learning environments for innovation and change, and to infrastructure more collaborative networks of stakeholders.

We also argued that services can be seen as reasons for re-conceptualising spaces and experimenting with new rules: places are spaces that enable certain things to happen, just like services are conditions that enable certain interactions. Accordingly, in the co-design process we conceived for the Reggio Emilia Ducal

Palace and Park, presented in Chapter 4, we prioritised the service perspective over that of the landscape.

This chapter discusses how and why certain kinds of services can be regarded as urban commons and how they might be designed, assuming that public interest services and relational activities taking place in public spaces are intrinsic components of commons, because public spaces are, by definition, urban commons.

Services are complex, hybrid artefacts: technical and social networks where people, products and places interact for a common purpose (Mont 2002; Stahel 2006; Manzini 2011). Service design deals with managing complexity and adopting a systemic approach to organise the people and the infrastructure that may enable an interaction. Although the review of the rise and evolution of service design as a discipline and practice (Meroni and Sangiorgi 2011, Foglieni, Villari and Maffei 2018) is beyond the scope of this book, we want to point out that in the last decade, in part because of the push of international and national policy making organisations, service design "has started being considered as a key driver for service innovation, social innovation and user-centred innovation" (Foglieni, Villari and Maffei 2018: 20). Governments, in particular, need service design to respond to the increasing demand of high-quality solutions yet optimising the use of resources, and to transform decision-making processes into more participative journeys. Service design, with its array of methods and tools, is regarded as an approach that can help with these and many other purposes: considering users and contexts envisioning creative solutions visualising complex systems, intangible elements and networks; and engaging and motivating stakeholders. It is also considered a way to shape a service design mindset in people within organisations and, more generally, in society, thus increasing proactivity, creativity and the ability to collaborate around shared goals (Meroni and Selloni 2018; Rossi 2020).

Therefore, service as a subject matter of design, and service design as a mentality and practice are now key drivers of innovation: this acknowledges the aforementioned paradigm of the Service Dominant Logic (Vargo and Lush 2004 - 2008 - 2016), according to which, services are a perspective on value creation rather than a value added to goods or, we might say, to spaces. On the contrary, goods (and spaces) are mediums of service provision. Since the value of services is always co-created with the beneficiary, culture, knowledge and capacities of people and contexts become integral parts of the benefits a service provides and the way it operates. The active participation of the beneficiaries in the production of a service not only sheds light on the importance of their involvement in the design of the service, but also on the understanding of the interactions, relationships and power relations of an ecosystem of stakeholders.

Building on this, we argue that services can be viewed as systems for interaction and action that can enable (or not) a group of actors to co-design, co-produce and exchange value within given contexts. They are platforms, in fact, that may create the right conditions for certain forms of interaction and relations to happen: as such, they are linked to the idea of infrastructuring as a strategy of public administrations to build relations with and between different actors, enabling them to act and create

networks from which opportunities for innovation may arise. Consequently, service design regards both the arrangement of these platforms as a public service and what these platforms do to generate and produce services.

3.2 Framing the concept of urban commons through Service Dominant Logic

Our approach to co-designing services for the Reggio Emilia Ducal Palace and Pak is thus informed by the conviction not to design a basic 'servitisation' of a space (Kowalkowski et al. 2017), namely adding value through services, but to design the 'space-as-a-service' for a wide and diversified community of beneficiaries and stakeholders. In other words, to contribute design to a place that would be meaningful, functional and manageable for a given culture and context of actors, in which the service component may be viewed not only as public services complementing public spaces, but as a system of meanings and a set of activities that may put a great variety of actors into play for the general interest of the city: private organisations, public institutions, local bodies, social enterprises, not-for-profit associations, groups of citizens, etc. Indeed, the aim of this co-design process was to imagine and define the activities to be carried out in the park in terms of functions and services, so as to inform the international landscape competition and finally achieve a design that would become an enabling platform for local actors. Thus, the design question was: How might we imagine future services that could inspire the design of a space that enables the generation of urban commons?

The concept of Service Dominant Logic developed by Vargo and Lush helped shape this question and the research programme. Since they published their article "Evolving to a New Dominant Logic for Marketing" in 2004, this theory has been studied by numerous researchers across disciplines and has been collaboratively expanded and deepened. Here we wish to examine in particular some principles that can be relevant to our discourse on urban commons and on the idea of the city as a 'service system,' as it is defined in service science: a "value-co-creation configuration of people, technology, value propositions connecting internal and external service systems, and shared information" (Maglio and Spohrer 2008: 40). Accordingly, building on some of the Service Dominant Logic's axioms (Vargo and Lusch 2016), we formulate the assumption presented in the following paragraphs.

1_ Service is currently the fundamental basis of exchange and, therefore, goods are distribution mechanisms for service provision: in the case study discussed in this book we assume 'goods' to be spatial arrangements. Moulaert and Van den Broeck (2018:27) define the 'territory' as the "localised interconnected spatial forms of the relations between actants (agents, beings, natural substances) living and acting there. These forms can be physical, natural or social." In other words, space embeds strategies, social relations and activities in a dynamic way: the design

of these interrelations together with, or prior to, the design of the space is a strategy to foster civic engagement and belonging of the communities to a territory, and thus its liveliness (Gehl 2013; Camocini and Fassi 2017) and its qualities of urban commons. The assertion that city spaces can be seen as distribution mechanisms for service provision does not neglect the various meanings, functions and values that spatial design has, but instead is an attempt to add a layer of reflection, rooted in the discipline of service design, to the planning of contemporary cities. Its purpose is to recognise the objective importance that services have in today's life, and the nature, and potential, of systems of relationship. Following Gehl, we believe that this perspective might strengthen the "social function of the city space as meeting place that contributes toward the aims of social sustainability and an open and democratic society" (Gehl 2013: 6).

2_ Value is always co-created by multiple actors, including the beneficiaries, and is sometimes co-produced with them. Therefore, value creation is interactional, cannot be created unilaterally, involves a unique combination of resources, and is determined by the beneficiaries. Here it becomes the concept of 'public value' together with the interconnected notions of 'public interest' and 'public services'. According to the EU – DG CONNECT (2013): "public services are services offered to the general public and/or in the public interest with the main purpose of developing public value. Public value is the total societal value that cannot be monopolized by individuals, but is shared by all actors in society" (EU 2013: 2). The services that populate the scenarios developed for the Rivalta Park were intended to deliver public value, yet not conceived as public services delivered by the public sector, but, rather, as public-interest services aiming to best serve the well-being of a social collective and provided by a configuration of actors between private, public, third sectors and civil society (Selloni 2017). By 'public services as urban commons', we refer to a wide array of services aiming at the general interest of citizens in many different areas, ranging from welfare and mobility to the green and cultural areas, in which most of the activities are related to the (shared) management and (collective) usage of those commons. They are services that have effects on everyone's life, whether they are public or private, and they produce a direct or indirect impact on live in the city.

A second aspect we wish to highlight on value co-creation by multiple actors is the opportunity to move beyond individuals when considering the concept of 'value' for a community. In fact, aligning the interests of 'individuals' and educating people to participate in the processes that aims to create this alignment (Pór 2012) are two of the main challenges facing the co-design of urban commons. We find in this approach an evolution of the already mentioned concept of community-centred design, in which design is recognised as a way to facilitate a process of engagement and progressive learning between the members of a community and between it and the whole society. As mentioned in Chapter 2, regarding the role of co-design in commoning, this activity of exchange and mutual benefiting generates public value, which is an element of the urban commons and

of the 'new commons' in general. Moreover, we assume it is maximised by the diversity of interests and views that find a way to beneficially coexist or, in other words, to align and amplify individual interests into public interests.

3_ A service-centred view is inherently beneficiary-oriented and relational since it is based on value co-creation. The approach adopted for the Rivalta Park intentionally did not privilege the design of the space over that of the activities and services that could be carried out there: it was driven by the goal of informing the design of the space with a greater awareness of the end users and future stakeholders, beginning with an understanding of their needs, desires, visions and interests. The design process was thus aimed at bringing out and ideally integrating the potential resources provided by different actors for a common purpose.

In fact, multi-stakeholder co-design processes involving actors from the private, public and third sectors, experts, civil society associations and citizens, have the potential to make this integration happen and to activate reciprocity of exchange (Meroni, Selloni and Rossi 2018). Therefore, they can be seen, in themselves as a service the public administration offers to a city with the aim of cultivating new urban commons. This way, a public entity operates as a facilitator of value co-creation leveraging shared institutions, here intended as "rules, norms, meanings, symbols, practices, and similar aides to collaboration" (Vargo and Lusch 2016: 6).

4_ Value co-creation is coordinated through actor-generated institutions and institutional arrangements: in a service ecosystem perspective, institutions and institutional arrangements have a central role in fostering the cooperative and coordinated behaviour of actors, which is key in commoning. In fact, we argue that the idea of institution, and institutional arrangements of Vargo and Lusch (2016), is very similar to the definition of urban commons as "collaborative arrangements for value production processes" (Seravalli 2018: 1) discussed in Chapter 1. Hence, it appears that the two definitions – one from the service science, the other from urban commons literature – are alike, thus supporting the link between the two theories. The concept of service ecosystem is worth deepening to better frame the discussion around actor-generated institutions and institutional arrangements. This service ecosystem notion builds on the 'service system' concept previously described as a configuration of people, technology, and other resources that interact with other service systems to create value (Maglio et al. 2009). Comparably, Vargo and Lusch define a service ecosystem as "a relatively self-contained, self-adjusting system of resource integrating actors connected by shared institutional arrangements and mutual value cocreation for service exchange" (2016:10-11). Hence, the service ecosystem notion in Service Dominant Logic differs from the service system concept of the service science essentially because of the highlight of the more crucial role of 'institutions'. These are intended as "social structures that have attained a high degree of resilience [and are] composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life" (Scott 2008: 48). Service

Dominant Logic presents a whole narrative of cooperation and coordination in ecosystems and connects it with the reflections on institutions and commons elaborated by Ostrom (2005). It is argued that the role of institutions is to provide "building blocks for increasingly complex and interrelated resource-integration and service-exchange activities in nested and overlapping ecosystems organized around shared purposes" (Vargo and Lusch 2016: 17). Likewise, in the 'Institutional Analysis and Development framework', Ostrom (2005) identifies a set of universal building blocks, i.e., common structural components for all institutions. It is not the purpose of this chapter to describe in detail each building block, but we want to highlight that they are part of a 'multi-level conceptual map' on which one could zoom-in or zoom-out. This map is instrumental in clearer analysis of complex collective action problems by identifying and splitting them into 'action arenas', that are smaller parts of a practically understandable function. For each action-situation there is a set of 'actors in positions' (namely, roles recurring in those circumstances) who can make choices within the existing rules and who are influenced by a number of elements, i.e., the institutional arrangements, the socio-economic conditions, and the physical environment.

From our perspective, which interconnects the areas of service design and urban studies, the similarities between the analysis of institutions by Vargo and Lusch and by Ostrom seem to be part of the same narrative: the concept of urban commons we refer to in this book defines an ecosystem of tangible and intangible resources that integrates actors connected by a set of rules, meanings, practices, interests, values and symbols, that is, shared institutional arrangements. Thus, institutional arrangements have a key role in coordinating and governing such actors, in working as facilitators in value co-creation and reciprocal service exchange.

In our view and building on the thought of Bollier (2007), this reflection can be included under the 'growth of the commons paradigm' in which a holistic perspective in the management and assessment of resources is crucial. The contribution of Huron (2017:1063) is even more meaningful for our argument: she includes the notion of institution within her three-fold definition of urban commons, which are made up of: "a) resources; b) institutions for regulating those resources; and c) the community that devises the institutions, both shepherding and benefiting from the resources." Foster and Iaione (2016) suggest that the whole city can be considered as 'a commons', namely a shared resource open to, and shared with, many types of people. Thus, the 'city as a commons' needs, more than other commons, to design effective rules, norms and institutions for resource stewardship and governance.

Moving from the basic theory of service design and the axioms of the Service Dominant Logic, we have so far drafted a number of interconnections between services and commons, which help frame the Rivalta case study into the subject of designing for urban commons:

1) some services, namely the public interest ones, can be considered as urban commons, being aimed at the general interest of citizens in many different areas. In

services, value is always co-created with the beneficiary, which makes the role of culture, knowledge and skills of people and contexts very relevant. This in turn strengthens the connection with shared resources subject to social dilemmas;

2) services are platforms for interaction that may enable a local ecosystem to co-design, co-produce and exchange value not only for individual interest but also for the general one of a city, thus generating urban commons;

3) space is a delivery element of services and can be designed so as to be 'at the service' of a wide and diversified community of beneficiaries and stakeholders: thus, the design of the services together with, or prior to, the design of the space is a strategy to foster civic engagement and sense of belonging of the communities, and thus the qualities of urban commons;

4) public administrations need service design not only to innovate almost every sphere of activity, but also to convert decision-making processes into more collaborative ones. This is particularly relevant when it comes to urban commons, in regard to which definition and consolidation of institutional arrangements have a central role to foster participation and the cooperative behaviour of actors. Infrastructuring, therefore, is a public service that is a pre-condition for commoning.

Using these interpretive lenses, we can describe the Rival(u)ta Rivalta case study as a public service aiming to bring out, co-create, and integrate in coherent service scenarios, the cultural and economic resources, knowledge and skills of a community, in order to activate a commoning process on urban commons in transformation. Therefore, the project that had per se the characteristics of a new commons, in which the sense of awakening or reclaiming threatened crucial resources such as the Rivalta complex, has been turned, through co-design, into a creative experience of mutual learning with the purpose of innovation and change, facilitated by the public administration.

3.3 A taxonomy of services

We have discussed services with respect to their nature as interactive and co-produced artefacts, observing how diverse the areas are in which they operate, even if we narrow the field to those that are only of public interest. The way a city takes into account services in urban plans manifests the policy of the services offered to its inhabitants and city users: it highlights priorities and urban strategies. A masterplan, as a conceptual layout guiding future growth and development on the basis of hypotheses, connects buildings, open spaces, social settings and activities: as such, the way services are taken into account and integrated in the design manifests an urban policy and vision. A 'service plan' is thus designed and integrated into the urban plan: it catalogues the existing public services and services of public interest assessing their accessibility, usability and quality; it ascertains the demand for services of the population and its emerging needs. Notably, urban green is generally considered as a service that is indispensable, prescriptive and binding in nature.

As an example of the worldwide strategic relevance of services in the design of the contemporary city, we can mention the discourse that emerged in 2020 during the COVID-19 pandemic about the so-called '15-minute city' and evoked an idea of city in which one can reach the main facilities, services and places needed to conduct everyday life in a maximum 15-minute walk/bike ride (Moreno 2019). We can define this as an idea of city built around proximity-based services, which goes under the wider definition of 'new chrono-urbanism' (Moreno et al. 2021). Actually, according to the C40 Cities Climate Leadership Group (2020), all neighbourhoods are 'complete', if they have core services and amenities that residents can easily and equally access, including, for instance, green space. For this to be possible, cities and neighbourhoods need to be rethought, considering different urban planning and service strategies, in which indoor and outdoor, private and public spaces could accommodate different functions and time schedules, in a hybrid and flexible fashion. Public spaces, in particular, are to be designed to serve multiple purposes at the same time and to be 'reversible', namely, designed to be easily converted for different uses. A city of proximity-based services is also, according to Manzini (2021), a city of care, i.e., a city that can take care of people and that people can take care of, since what is proximate is more likely to be cared for by the inhabitants and easier to govern democratically, in order to provide quality services. This way, the 15-minute city becomes an organising principle for urban development and a hypothesis for the recovery from COVID-19: it may help foster more local, healthy and sustainable ways of life, while achieving, social interaction facilitated by density, digitalisation and the increased technological advancements that drive the Smart City concept (Moreno et al. 2021). It is not surprising that the 15-minute city strategy implied a participatory design process, in which stakeholders and dwellers are engaged to create, select and produce the local projects they want to make happen.

Therefore, when it comes to designing innovative and transformative scenarios for urban developments, it is worth counting on a taxonomy of services that was internationally recognised and neutral with regard to pre-set strategies. In fact, it has to be as wide and open as possible to be adaptable to the different contexts and visions, such as the one just mentioned. A system that can serve this purpose is the so-called 'Nice Classification', created in 1957 in Nice (France), which has been continuously revised and is based on a multilateral treaty administered by the World Intellectual Property Organization – WIPO (Nice Classification 2022). Today recognised by 84 nations, as its full name indicates, the "Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks" is meant to classify goods and services for the purpose of registering trademarks. It consists of class headings, explanatory notes and an alphabetical list of goods and services. The class headings are descriptive names of 34 classes of goods and 11 of services, accompanied by explanatory notes that provide descriptions of the types included. About 1,000 services are included in the list, organised in the following classes: advertising and business management;

insurance and financial affairs; building construction; telecommunications; transport; treatment of materials; education; scientific and technological services, and research and design related thereto services for providing food and drink and temporary accommodation; medical services; and legal services. These classes, better articulated in their explanatory notes, encompass all the possible fields of activity one can imagine, which may materialise into private, public or public interest services. They refer to 'activities', differently from the definitions that are normally used in urban planning, which may refer to 'functions' (such as living, working, commerce, healthcare, education and entertainment in the Moreno 15-minute city concept), or to assets that provide services (such as 'urban green', or 'religious facilities' in many urban plans). This approach can help decouple given assets from given functions and services, thus allowing actual flexibility and thinking about more innovative solutions, according to a true service logic.

The project developed for the Rivalta Park, as described in the following chapters, has been based on a service design approach and methodology, developing what we call a service master plan through a service master planning process. As such, it considers functions as systems of activities without predefined associations with conventional spatial assets, except when already inherited from a recognised social or historical legacy.

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PART II - THE “RIVAL(U)TA RIVALTA” CASE STUDY

Chapter 4. Context and process

Abstract This chapter introduces the case study 'Rival(u)ta Rivalta', briefly presenting the local context and the structure of the whole design process set up for the place. The city of Reggio Emilia, its Ducal Palace and the connected park are briefly described, as well as the general objective and guidelines of the design project conceived by Polimi DESIS Lab of Politecnico di Milano. The text first presents some reflections on participatory strategies in governance and then traces the main work phases and highlights the divergent and convergent thinking adopted as an approach to the project. Finally, the chapter focuses on the initial preparatory phase, underlining the importance of scoping activities with people representing institutions and policy-makers in order to correctly frame a problem and initiate a strategic project.

Keywords: urban commons, strategic design, participatory practices, new governance model, scoping action, social innovation.

4.1 Implementing a service design approach to urban commons

The case study of Reggio Emilia presented and discussed in this book offers an ideal field of experimentation to define how a service co-design approach to urban commons can be framed into a working methodology, specific tools and progressive outputs. It also offers the opportunity to reflect on the degree of participation we should have achieved by following the strategy suggested by the municipality and to implement a process accordingly.

It should be noted that the municipality of Reggio Emilia has a long tradition of participatory policies: adopting the metrics of The Public Sector Design Ladder introduced by the Sharing Experience Europe network (SEE Platform 2013), we can qualify the adoption of design thinking by this municipality as "Design for Policy". In fact, it is used by policymakers to meet some of their needs, such as: seeing things from the citizens' point of view; streamlining the process from policymaking to implementation; prototyping to mitigate the risks of implementation; getting an overview of a system; cutting across silos; and engaging people from outside the government (ibid.). Overall, it is a shared sense-making activity that we can call Strategic Design (Zurlo 2012). This policy manifests itself in various initiatives, some of them permanent, others occasional or one-off, often facilitated by design experts, as in the case of the project discussed in this book. Hence, we can classify the way of operating of the Municipality of Reggio Emilia as in compliance with the so-called "new governance model", in which the delivery of public services relies on complex relationships between public organisations and other actors, including citizens, which are invited to be not only co-producers at the operational level but also co-designers in a strategic phase (Bracci, Fugini and Sicilia 2016). As such, co-design is added to the institutional arrangements adopted

by the administration and intended as a pre-condition for co-production (Selloni 2017).

As shown in the case presented here, designing and planning together with local actors the services that a city (or a part of it) will need in the future, requires taking an initial position on the level of involvement of local actors. Why, who, when and how to activate them is a political decision and entails the use of different strategies and tools of participation.

The debate around this, i.e., the level of participation in decision-making, is enormous, as are the related methodologies, tools and policy mechanisms. We have already touched on this topic in Chapter 2, by discussing the connection of co-design processes and urban commons. For the purpose of the present reflection, we refer to the well-known conceptualisation of participatory strategies provided by Sherry Arnstein in 1969 (Arnstein 1969) in some of its later interpretations. In particular, we acknowledge the recent analysis of Castelnovo (2016), who underlines that the rungs of the ladder do not have to be necessarily considered as increasing levels leading to better forms of participation, but as different "participation configurations" instead. These may correspond to diverse top-down or bottom-up dynamics and be more or less effective in particular circumstances and contexts, and in relation to given issues.

Arnstein's ladder is organised in eight rungs, grouped in three stages, which increase from 'Nonparticipation', to 'Tokenism', to 'Citizen Power'. 'Partnership', 'Delegated Power' and 'Citizen Control' are, progressively, the levels of Citizen Power that can be associated with co-production, in the meaning of strategic design discussed above, and with the fundamental role of co-creating value that was not only for the individual but also for the public; which means public value. At this level, participation becomes co-production since local actors are required to provide some of the resources relevant for the implementation of the services that concretise the co-designed public policies. In return for this participation, they have a value that is connected with the personal, intrinsic, motivation to contribute to a cause, with the idea of generating benefits for a wider community but also with a direct, private return that may accompany the implementation of the policies (Castelnovo 2016). As we have discussed in Chapter 1 with regard to commons, people are more likely to get involved in creating and conserving common resources when they have the opportunity to decide the rules that govern them. Thus, if public value is intrinsic in urban commons, a public administration has to decide which design principles to adopt to support a commons property regime and thus the organisation of collective action. Following Ostrom (1999), the collective-choice arrangement (or participatory decision-making) is essential as creation of arenas in which individuals affected by rules can participate in modifying them within clearly defined boundaries of action, resources and mechanisms. Therefore, to reach a level of effective co-creation, which may correspond to a 'Partnership', the establishment of the right pre-conditions is key. This can be done using strategies that belong to the stage of 'Tokenism', which allows citizens to hear ('Informing'); have a voice

('Consultation'); and advise, although the power-holders retain the right to decide ('Placation'). In design terms, this stage comprises co-design strategies, in particular as forms of consultation. In fact, the choice of the Municipality of Reggio Emilia was to give voice to selected social actors, through what in Arnstein's terms can be defined as a 'consultation': an initial co-design activity aimed at leading to a full co-production and partnership with relevant stakeholders, in which they can exert direct influence on policy-making and participate in the implementation of the resulting public programmes.

Indeed, it was a consultation that we conducted with a design approach, characterised by an interactive and thought-provoking process aimed at boosting and amplifying collective creativity. Yet, in Arnstein's terms, a level that has real equivalence to the decision-making and power redistribution of the co-design approach is actually missing.

There is a more recent conceptualisation about participatory strategies which is the Spectrum of Public Participation (IAP2 2007): this framework defines the citizens' role in any public participation process and is composed of five main levels, providing a more concise classification than Arnstein's. The stages are: 'Inform', 'Consult', 'Involve', 'Collaborate' and 'Empower'. They range from the simple level of keeping citizens updated with balanced and objective information ('Inform'); to providing feedback on how public input influenced the decisions ('Consult'); to working directly with people throughout the process and ensuring that their concerns and desires are considered (Involve'); to partnering with citizens in each aspect of the decision by developing alternatives and identifying the preferred solution ('Collaborate'); and finally to placing decision- making in the hands of citizens ('Empower'). According to this spectrum, the case study of Rival(u)ta Rivalta can be placed between 'Involve' and 'Collaborate': the municipality of Reggio Emilia definitely wanted to listen and incorporate the voice of selected social actors in the project, including their advice and recommendations. The final stage of 'Empowering', which is the implementation of what people decided, was not reached, because it was not an objective of the municipality that had a clear vision about the future of the Rivalta complex and wanted to carry out a design-led participatory process to take the correct decisions in terms of public interest and feasibility.

In urban studies and policy-making literature, this form of involvement is also defined as 'citizen sourcing' (Castelnovo 2016), in which knowledge, ideas, opinions and needs of citizens are gathered to improve the government's situational awareness, and to help execute services. More than being a structured 'sourcing' process, design-led consultations leverage the creativity of participants and help them to think collaboratively, as we will discuss later. The co-design process we followed for Rival(u)ta Rivalta can be seen, in fact, as a structured collaborative decision-making sequence of 'divergent' phases of research activities and co-design encounters intertwined with 'convergent' ones of policy choices, connecting action with research. This can be intended as a socially innovative practice itself, aiming to strengthen the capability of people to collaborate, making them more reflective

in in their practice and more aware of the complexity of solving problems. As such, it can be regarded as a process to facilitate social innovation.

4.2 The city of Reggio Emilia and the programme 'QUA – Neighbourhood as a commons'

Reggio Emilia is a city in the Emilia-Romagna region of northern Italy. It has about 172,276 inhabitants (Demo ISTAT 2020) and it is the main municipality of the Province of Reggio Emilia. Founded along the Via Emilia, the ancient Roman road, Reggio Emilia is characterised by a prosperous small/family-business infrastructure of light industry and food production and it is part of one Italy's wealthiest regions. It is well known for some of its food specialities, such as the Parmigiano-Reggiano cheese, and for the so-called 'Reggio Emilia Approach', an educational philosophy that has made Reggio Emilia's municipal infant-toddler centres a reference point throughout the world.

Reggio Emilia has been governed by left-wing administrations since the end of fascism, and it is known as a 'red city' for its strong socialist tradition. Over the years, the municipality of Reggio Emilia has developed policies for inclusion, integration and active participation for its inhabitants, establishing close collaborations with a wide network of local actors, including civil society organisations, cooperatives, and any other association operating for the general interest of citizens.

In the last five years, Reggio Emilia developed a specific programme named "QUA - Il quartiere bene comune" (that can be translated as "QUA - Neighbourhood as a Commons") which aims to enhance the 'protagonism' of citizens, both in their associative forms and as individuals (Comune di Reggio Emilia 2020). The key-word is 'protagonism', because this project supports a transition from simple participation to actual, responsible leadership of citizens, providing a platform to collaboratively address the social, environmental and economic problems of the city.

"QUA - Il quartiere bene commune" is explained and regulated in an official document approved by the municipality in December 2015: entitled 'Regulation for Citizenship Labs' (Regolamento dei laboratori di cittadinanza 2020) this regulatory framework was inspired by the former and famous 'Bologna regulation on collaboration between citizens and the city for the care and regeneration of urban commons' (Regolamento di Bologna 2020). This is a sort of handbook for civic collaboration in which citizens agree to enter into a co-design process with the municipality that leads to the drafting of 'collaboration pacts' to regulate single, short-term interventions and long-term care of the urban commons.

Other cities in Italy have approved almost identical regulations, yet in Reggio Emilia a special reinterpretation has been carried out, building upon the peculiar

history of the city and considering the specific characteristics of the local community and context, i.e., actually considering 'neighbourhoods as a commons'.

More fully, the programme 'QUA - Il quartiere bene commune' takes concrete shape in two main actions that manifest the 'design for policy' strategy of the municipality: 'Citizenship Workshops' and 'Urban Laboratories'. The first are participatory processes in which citizens try out a whole journey from collective discussion to actual co-design, co-production, management and monitoring on a specific issue: in this way, participants are called to co-responsibility, which is formalised into a 'Citizenship Agreement', a legal regulatory instrument to improve the life in neighbourhoods on a given topic. The 'Urban Laboratories' are similar processes dedicated to specific areas of the city, working on the maintenance of physical spaces, and the improvement of the quality of places and related infrastructures. While 'Citizenship Workshops' are more devoted to the care of the community (personal services, support projects, socialisation, intercultural integration, culture, sports and well-being for different age groups), 'Urban Laboratories' are specifically dedicated to the care of public spaces.

What distinguishes the Reggio Emilia approach in the panorama of similar policies, is the establishment of a specific profile in charge of the participatory processes: the so-called 'Neighbourhood Architect' is a professional employed by the municipality who carries out the constant work of active listening to the needs and desires of a neighbourhood, and who identifies, together with citizens and associations, projects and actions to be developed and collectively managed.

Each district has its 'Neighbourhood Architect': he/she is actually a new type of public servant who works in close contact with people, and acts as a bridge between citizens and local government and as mediator of conflicts between the top-down and the bottom-up. Besides this, the Neighbourhood Architect has a propositional role to encourage the emergence of innovative solutions and he/she is in charge of elaborating project drafts. This professional is not necessarily an architect by training: he or she can be a sociologist, anthropologist, geographer, designer or an urban planner, and must have a broad set of skills, including the ability to manage social relations, to find creative solutions, and to navigate through the bureaucratic maze of the city council.

The programme is currently running, and in 2018 a first assessment of the project was published by the municipality (Quartiere Bene Comune 2014-2018 2020), in which both the 'process' and the 'results' were adopted, using qualitative and quantitative perspectives. From the beginning of the programme to the end of 2018, 163 projects were developed and 27 'Citizenship Agreements' were signed; from a total of 1,540 participants, 784 have become subscribers to the agreements, mainly in associative forms rather than individual. The majority of participants in the role of project leaders stated that they were satisfied with the project (83.54%), and in general, a positive evaluation of the 'Citizenship Agreements' and a positive opinion of the impact of the project on the community of reference were registered among the participants.

This overview of Reggio Emilia and its policies to include and empower citizens aims to briefly frame the context where the 'Rival(u)ta Rivalta' project took place: it is a very fertile environment, in which people already have a 'cultural background' of activation and participation. We can argue that this is a 'mature context', since the municipality has already promoted the shift from engagement to citizen empowerment, i.e., power sharing and capability building in the responsibility for the urban commons. More generally in Reggio Emilia there is a growing awareness of the importance of shaping a form of collaborative governance for the city: the sense of belonging and well-being that this condition can produce is expressed in the high scoring of the city in the Italian yearly classification for the quality of life (in 2020, 17th place of 107, despite the pandemic – Lab24 2020)

Consequently, the opportunity to experience this context was unique for our research team, the Polimi DESIS Lab (Design for Social Innovation and Sustainability) that investigates the field of design for services and social innovation: we were asked to operate as design experts in a highly responsive, advanced and differentiated ecosystem of actors, developing a strategic project to contribute to the regeneration of a symbolic urban commons in the city. Being unfamiliar with the specific place and city was regarded as a positive, as we were not influenced by prejudice and pre-conceived opinions.

4.3 The Reggio Emilia Ducal Palace and its park

The Reggio Emilia complex of the Ducal Palace and park is located in the Rivalta district in the southern part of the city, a few kilometres from the historic centre. It was built in 1723 for Francesco III d'Este and Carlotta d'Orléans as a part of a larger complex including the villa in Rivaltella and the 'Corbelli pool'. The project was conceived as a 'little Versailles' by its first architect Ferraroni and was then realised by Bolognini, who finished the building in 1733, while the park was subject to a continuous process of enrichment and embellishment. Between 1740 and 1760 the Royal Palace was in its golden age, with grand parties that echoed the splendour of Paris. After its occupation by Napoleon's troops, the palace was seriously damaged and was handed over to a committee of citizens who, around 1807, demolished some parts and converted the park for agricultural use (Turismo - Comune di Reggio Emilia 2020).

Today, only a few portions of the original architectural complex remain: a part of the entrance exedra, the south wing of the palace, probably assigned to the servants (and quite small compared to the other two that were destroyed), the ruined chapel, incorporated into agricultural buildings. All that remains of the park (originally characterised by water features using water from the nearby Crostolo stream) are the remnants of the main avenue, the perimeter fenced by a stone and brick wall, an oval basin, orchards and the partially ruined 'belvedere'. The 'secret garden', also fenced, is still characterised by the presence of a four-lobed basin. The

whole area is huge: the park covers 213,362 m^2, the access courtyard about 11,616 m^2 and the secret garden measures 10,318 m^2 (26 ha in total).

In 2005 the park and the garden were acquired by the Municipality of Reggio Emilia, which began a process of improvement and recovery. This is part of the wider Dukedom d'Este project, funded and promoted by the Ministry of Cultural Heritage and Activities as part of the 'One Billion for Culture' plan (Fund for Development and Cohesion, FSC 2014-2020). Its main objective is to promote the possibility of designing an 'eighteenth-century promenade', involving not only the Ducal Palace of Reggio Emilia, but also the route along the Crostolo stream, the villa of Rivaltella and, more extensively, the whole Duchy of Este (which also includes Modena and Ferrara). The idea is to develop a plan that is both touristic and cultural at the same time, something that can be attractive to residents and visitors, in an attempt to implement a regeneration process that operates on different levels: local, national and international.

Parallel to this top-down strategy, a re-activation process started from the bottom-up, thanks to a citizen association named 'Insieme per Rivalta' ('Together for Rivalta') that brought together volunteer organisations of the neighbourhood with the purpose of conceiving, organising and carrying out diverse types of activities to revive the whole context. Since 2013 they have been running a programme of events mainly in the summer season and have supported the development of research studies and publications on the history of the site.

The advent of this association, born from voluntary movements, was facilitated by the municipality: they worked together to respond to a municipal call for cultural projects, which they won. As a result, they created 'Insieme per Rivalta'. It is therefore a case of a fertile encounter between bottom-up and top-down, allowing an active conservation of a territory that would otherwise have remained abandoned and inactive until the completion of the restoration project supported by the Ministry of Cultural Heritage and Activities.

4.4 Brief overview of the process and main phases

In 2018 the municipality of Reggio Emilia initiated the restoration project through two main actions:

- orchestrating a process of strategic co-design to envision the future of the Ducal Palace, by identifying design experts to manage it and selecting local actors to be involved;
- launching an international competition for architects and landscape designers, making sure to connect this to the main insights of the co-design with local actors.

As POLIMI DESIS Lab, we received a mandate from the Municipality to design and implement the strategic co-design programme.

The two actions were closely linked. In fact, we started with a co-design programme whose results were included in the briefing for the finalists of the international competition. Once the winners were identified (a group composed of Openfabric, Casana, F&M Ingegneria), the outputs of the co-design were further integrated into the spatial proposal through a joint workshop with the architects, thus generating two alternative scenarios. These are intended to become conversation and visualisation pieces that can lead to the final implementation of the project, not only in the spatial qualities, but also in relational, service and organisational ones. This book describes the premises, the design criteria and the evolution of the project until this point of integration, which correspond to the beginning of the construction work.

The project was named ‘Rival(u)ta Rivalta’ (translated as ‘Re-value Rivalta’): it started at the beginning of 2018 and involved six researchers for around one year. To do the project, we outlined a methodological guide: set up as an alternation of divergent and convergent phases of thinking, so as to allow a progression of phases of exploration and selection, analysis and synthesis, and 'opening' and 'closing' thinking many times, until a set of outputs and results was reached. This methodological framework was roughly drafted at the beginning of the project, it was then refined along the way, and in the last part of this book (Chapter 8) it is theorised and presented as a ‘Service Master Planning’ process. As such, it was a 'living process': something that, although pre-designed and carefully prepared, evolved through a logic of trial and error, as an action-research methodology.

The main phases of ‘Rival(u)ta Rivalta’ are outlined here as they actually took place, and are described in more detail in the following chapters:

- Phase 1: Generative listening

  26 local actors, selected by the municipality, were involved in individual interviews to collect relevant information about the history of the place and insights about its present and future condition. This analytical phase was not only aimed at gathering knowledge, but above all at stimulating conversations about perceptions, desires and expectations about the place. The definition of the 'generative listening' phase derives from this: in fact, its main objective was to outline preliminary and shared design guidelines that would serve as a starting point for subsequent co-design activities. Thus, it functioned simultaneously as a research and creative phase;

- Phase 2: Co-design workshops

  The second phase consisted of an intensive programme of workshops with diverse stakeholders to explore multiple service areas and related scenarios. Building on the results of Phase 1, we drew up a map that was discussed with the municipality and modified according to their indications and policies. Then, 5 co-design workshops took place involving 42 participants, identified among the participants in the first phase and new stakeholders belonging to relevant cultural institutions, NGOs, universities and local authorities. The map served

as a compass to navigate in 4 main directions on which to place the personal visions developed by the co-design workshop participants. These produced 6 scenarios that expressed different values, activity models and usages of the Ducal complex. They were included in a detailed report to inform the international landscape design competition, providing suggestions and orientation to the team of designers;

- Phase 3: Integration into the spatial design

After the selection of the winners, we engaged them in a co-design workshop to work together towards a consistent and integrated proposal. The initial 6 scenarios, were developed into 2 macro-scenarios, representing the basis of a comprehensive plan for services and solutions. This plan was then theorised and structured into what we named 'Service Master Plan', which will be presented in the final part of this book (Chapter 9).

4.5 A set of scoping activities to prepare the process

Before the 3 phases briefly outlined, we made a 'Phase Zero', a preparatory activity to start the whole process and to ensure favourable conditions for a positive development of the project. This can be better described as a set of scoping activities to align our methodological proposal with policy-makers' orientations and plans. Actually, Rival(u)ta Rivalta started with a series of meetings involving the POLIMI DESIS Lab researchers and two policy-makers from the Municipality of Reggio Emilia, Massimo Magnani (in charge of the Coordination of Special Projects - Area Competitiveness, Social Innovation, Territory and Commons) and Nicoletta Levi (in charge of Policies for Responsible Leadership and Smart City). These meetings allowed us to connect with the context, understand our role, and adapt our proposal according to the suggestions of the policy-makers. More specifically, they have made it possible to:

- acquire explicit and official knowledge about the Reggio Emilia Ducal complex, the Rivalta district, and the main actors involved in the project. The policy-makers provided us with an overview of the situation that allowed us to draw a first knowledge framework;
- gather informal knowledge in the form of 'warnings': the policy-makers reported and anticipated possible conflict situations, issues that might have arisen during the process at the community level. For example, the most active groups in the Rivalta neighbourhood deserved special attention, as they had been responsible for maintaining the vitality of the area over the years, and therefore they expected to be involved in the restoration project. Other 'warnings' and insights became clear during the generative listening;
- understand, share and interpret the policy-makers' guiding vision for the area: this was the most important and complex scoping activity. Since the policy-makers already had a general idea of the future of the area, our contribution as researchers was to focus and supplement that idea, grasping

> the design principles that best interpreted the 'genius loci' (for example the Reggio Emilia vocation for social inclusion and integration could not be ignored, as well as their attention and sensibility towards educational contents since they are ambassadors of the ‘Reggio Emilia approach’…).

We can call these meetings ‘Socratic dialogues’: through conversation, the policy-makers focused on certain issues, while the design researchers gained understandings that could be elaborated on and used in subsequent activities. Eventually, six thematic directions were identified as worth being explored as a basis on which to structure and organise the following phase of generative listening: nature and landscape; art and culture; entertainment and recreation; agriculture and production; sport and well-being, employment and work. The guiding vision was to consider the Ducal complex as a place with various possible 'identities' for its multiple beneficiaries: the more local (residents of the Rivalta neighbourhood), the inhabitants of Reggio Emilia, as well as national and international visitors. Yet, there was a need to identify a 'fil rouge' linking these identities, a strong element identifying the whole project. In this regard, the policy-makers made their intentions clear: the park was to be an oasis within the city, a 'green lung' for the people of Reggio Emilia. This 'natural' character was to be predominant and therefore this recommendation informed our work and guided the scenario building throughout the ‘Rival(u)ta Rivalta’ process.

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Chapter 5. Phase 1 – Generative listening

Abstract This chapter describes the initial analytical phase of the Rival(u)ta Rivalta project, aimed at producing an initial understanding of the place, through a limited field immersion and several interviews with selected local stakeholders. The approach adopted is described with respect to the standard empathising activities of design thinking and active listening techniques drawn from sociology and anthropology. The chapter then briefly describes the structure and tools used for the interviews and summarises the main observations that emerged, which were grouped together in a sensible collection of insights, i.e., a final output useful for creating a map of design orientations and triggering subsequent co-design workshops.

Keywords empathise, discover, generative listening, design thinking, field research,

5.1 Generative listening: a 'designerly' way to conduct field research

The first exploratory phase of the 'Rival(u)ta Rivalta' process was aimed at gathering information and gaining knowledge about the current local situation. We were given about a month to complete this task, so it was not possible to conduct a full immersive investigation of the context with a quasi-ethnographic approach. However, we organised interviews that were as interactive as possible, encouraging people not only to convey information and opinions, but also to express wishes and describe visions. We agreed with the policy-makers on a selection of the most suitable local stakeholders to be consulted. This allowed, on the one hand, to have participants who were very relevant to the subject matter, and on the other, to limit the exchange to a specific selection of people.

This work was conducted in a 'designerly' way, i.e., placing empathy at the centre of the investigation, based on the practice of design thinking. In his seminal book *Change by Design*, Brown (2009) argues that empathy should be a mental habit for designers, a starting point necessary for any project. In a later article, he (Brown 2019) specifies that empathy is not an end itself, but it is 'the means': a way to actually connect and interact with people. In our research, we tried not only to connect with the interviewees, understanding what they see, feel and experience, but also to collaborate with them in being able to express their wishes and proposals. Thus, we tried to use empathic design to uncover people's latent needs, as designers traditionally do, while also trying to connect with their aspirations and go beyond a simple understanding of the current situation. We wanted to gradually shift the discussion from the present state of the Rivalta Park to its possible future(s) and so to stimulate interviewees to imagine new identities for the area, even if in a rough and incomplete way.

This approach is a form of 'generative listening', which expands the traditional activities of listening and information-gathering towards the generation of fruitful and purposeful conversations. It builds upon the notion of ‘active listening’ developed by Sclavi as “an art for the transformation of pains and anxieties into opportunities for knowledge and awareness” (2008: 3). The active listening stimulates the free flow of thoughts and the creation of empathy between individuals, but it does not reduce the conversation to an exercise in sympathy: “we have to assume our interlocutor’s intelligence not because we have understood what she/he is saying, but in order to be able to understand it” (Sclavi 2008: 3). Consequently, we tried to go beyond the role of the passive interviewer conducting a survey, and instead set ourselves up as facilitators of a discussion and enablers of purposeful reflection, and therein lies the generative nature of our activities. Thus, our idea of generative listening includes both the ‘perceptive’ and the ‘conceptive’ capacities described by Dewey (1938): it combines the perceptive capacity to see, hear, touch, smell and taste ‘what is’ and the conceptive capacity to imagine and envision ‘what could be’.

We conducted our interviews using a semi-structured method, asking specific questions about the past and the current situation and encouraging a reflection on the future, by proposing a number of thematic areas that could characterise the park in different ways, from agriculture to sport and wellness, to name but a few. In the following paragraph we describe in more detail how these interviews took place, who was interviewed and which tools we used to guide and turn conversations into something fruitful and generative for the subsequent co-design workshops.

5.2 Structure of the generative listening phase

The municipality of Reggio Emilia selected 26 local stakeholders from among the most active and relevant actors in the cultural and associative fields as well as experts in technical sectors. Additionally, some members of the government of the city were also selected to be interviewed: the Councillor for Participation, Digital Agenda and Care of the Neighbourhoods; the Councillor for Security, Culture of Legality and Historic City, with responsibility for Trade and Productive Activities; and the Mayor of Reggio Emilia. Hence, we never met individual citizens or residents from the Rivalta neighbourhood due to an explicit choice by the municipality, which already involved individuals through the programme ‘QUA - Neighbourhood as a Commons’, and was specifically dedicated to improving ‘the leadership of citizens.’

Within the Rival(u)ta Rivalta project, the municipality’s aim was to engage relevant stakeholders with a voice about the Reggio Emilia Ducal Palace and its park: in this first phase, this led to meetings with representatives of associations, foundations and institutions, and thus to consultations with ‘entities’ rather than citizens. This approach was also adopted in the subsequent co-design workshops, characterising the whole project as a multi-stakeholder collaboration process.

Each interview was conducted according to the same two-part structure: one to discuss the past and present of the park, the other to think about its future.

- To introduce the topic, we designed a tool named ‘The Ducal Palace Park: yesterday and today’ (Fig. 5.1). It displays a map with empty placeholders to be filled in with descriptions of different characteristic features: nature and landscape, tourism, history, art and architecture, community, events and culture, and others. At the bottom of the map space was left to describe positive and negative elements in terms of resources, barriers and criticisms. The map was useful in starting the conversation and getting the interviewees to approach the topic from a variety of perspectives: we let them talk about the features, considering both past and present, while we filled in the blank placeholders for them. This tool worked as a visual support to stimulate the discussion, without following a precise sequence of questions.

- The second part of the interview was focused on the possible futures for the park: we used a set of cards named ‘The Ducal Palace Park: tomorrow’ as a stimulus to explore six thematic directions (Fig. 5.2). These directions, selected in agreement with the municipality (Chapter 4), were: agriculture and production; work and employment; art and culture; entertainment and recreation; sport and well-being; landscape and nature. Building on the interviewees’ expertise, each thematic direction was expanded in four core dimensions: accessibility, identity, management, and revenue model. This generated very rich and varied conversations, because we asked the interviewees to perform an exercise of imagination, to connect with their dreams about the area and to mention exemplary places in the world that could serve as a source of inspiration for the new identity of the park.

Fig. 5.1 The map: ‘The Ducal Palace Park: yesterday and today’

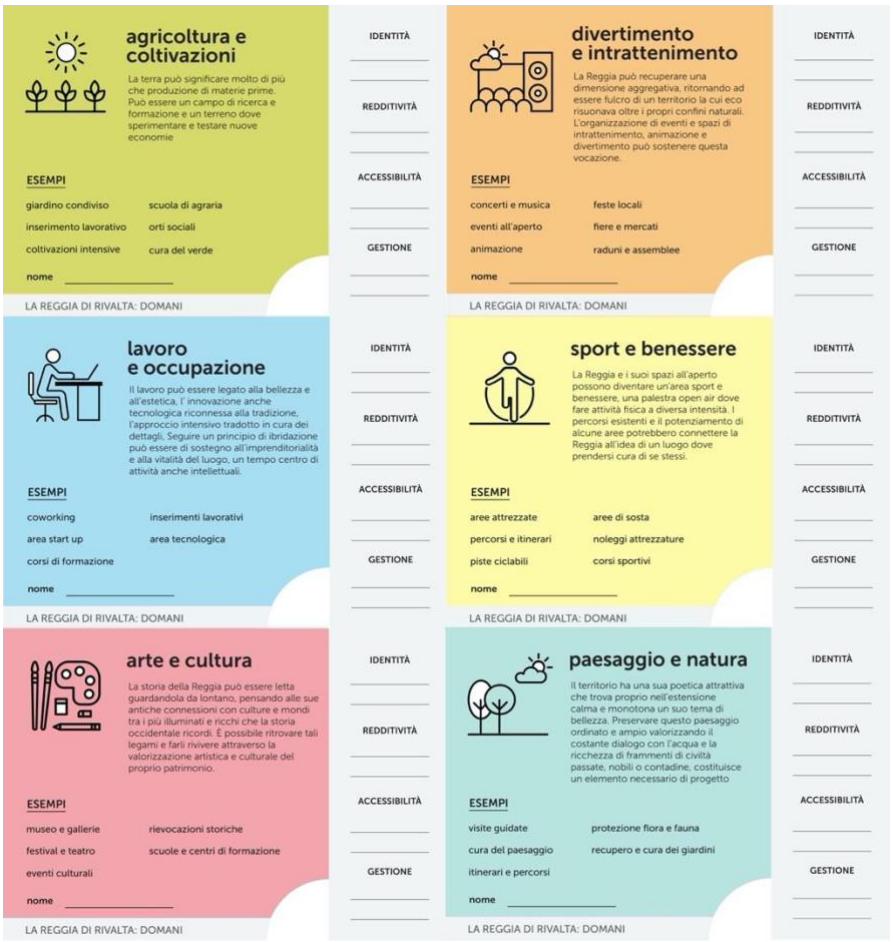

Fig. 5.2 The set of cards: 'The Ducal Palace Park: tomorrow'

5.3 Results of the generative listening

The inputs from the 26 interviews were then organised into four main clusters of insights: current situation, opportunities, criticisms and ideas. The following paragraphs offer a short summary of the outputs.

Current situation

The majority of interviewees agreed on the relevance of the Ducal Palace and its park to the whole city: this place has not only a strategic and institutional importance, but also has an emotional connection for the citizens. Someone even argued that Rivalta is 'a place of the soul', especially during summer, when many events are organised at night, turning the park into a 'magic place.' They all

recognised the effort done by local associations to keep the park alive, and also valued the role of the municipality in supporting this collective endeavour: they proudly stated that 'citizen participation was born in Reggio Emilia' and so this kind of situation and such a level of activism were not unusual in the city.

In addition, all the interviewees pointed out that it is crucial to consider Rivalta as a part of broader context, an actual territorial system that connects the park with the so-called route of the '18th-century promenade', expanding the city perspective into a regional, even national and international one.

In contrast, there was a minority of interviewees who had a mainly negative vision of the current situation: they defined the park as 'a field in which to put hay', a sort of non-place that had lost its role and significance in Reggio Emilia.

As usually happens in complex situations, both visions were plausible and authentic, and truly described the multifaceted circumstances with which we were dealing.

Opportunities

The Mayor of Reggio Emilia argued that "The plan for the Ducal Palace and its park is one of the most important issues the city will have to tackle in the coming years. It is a train to be taken. Today we have the financial means to do something important." This statement underlined the relevance of this challenge for the whole city: the project was considered a huge opportunity for the city and a creator of many other interconnected opportunities.

Among the crucial opportunities was tourism: many of the interviewees pointed out that Rivalta project was an occasion to rethink tourism in Reggio Emilia from a broader perspective, because in the past it had not been able to invest in tourism in an effective and coordinated way. According to them, the Rivalta project was offering the opportunity to rethink a communication strategy that has always been inward-looking and to open the city up to the outside world. In fact, the many outstanding characteristics of the city (food, textiles, and education) have always been promoted separately, lacking any real connections or integrated plans. According to the mayor, the challenge relied primarily on the construction of a solid but multiform identity, as do all big European cities: multiple and diverse elements need to be in place and contribute in creating an innovative image of the city without forgetting its peculiarities and past. Most of the people agreed on the importance of grouping diverse functions together within the project: hospitality, well-being, culture, entertainment, agriculture and others, trying to harmonise their presence in an annual programme of initiatives and events.

Criticisms

As is very often the case in listening activities, the interviews were also a time for complaints and criticism.

Some interviewees highlighted a complaint related to the local association who was managing the area at the time of the interviews. All the interviewees acknowledged that members of the association had the merit of keeping the place

alive, but they were described as resistant to listening and implementing innovations, for fear of losing their positions. The resulting wish was to include them in the new project with a redefined role. Additionally, the local association was also very much in favour of a historical reconstruction of the palace and its park, while the majority of other stakeholders argued that an accurate restoration was inappropriate for both symbolic and practical reasons. To mention just one, an Italian-style garden would be very expensive, because it requires ongoing maintenance. More generally, maintenance of green spaces is one of the most expensive aspects of a public administration's budget and many of the interviewees were aware of this fact. They agreed on the need for the contribution of private investors: this was connected to the governance of the area, that should provide for a public-private partnership to work effectively and sustainably.

A shared feeling about the very identity of the city was also contrary to a historical reconstruction: Reggio Emilia had never been a ducal city, but rather one of the people. Therefore, the inhabitants had the "reality of peasants" and any idea of a city nobility was diametrically opposed to the centrality of 'real' people in Reggio Emilia, where bottom-up power makes its unique.

Accordingly, all the interviewees argued that, after ten years of bottom-up management of the Rivalta complex, it was unthinkable to even imagine running it in a top-down manner. Being expert stakeholders that knew the governance's dynamics in the city, this tension between top-down and bottom-up was something they were familiar with, since it has always been at the heart of public debate in Reggio Emilia.

Finally, another fundamental problem was highlighted: the route to the palace was very congested creating a conflict with pedestrians. The main problem was that today's transport is focused on current demand, with little strategic vision for future potential users, which again revealed a lack of touristic perspective that emerged from the interviews.

Ideas

Thanks to the use of the 'The Ducal Palace Park: tomorrow' cards in the interviews, various proposals for the future of the Rivalta complex were expressed during the generative conversations.

Most suggestions converged towards an idea of a park that takes centre stage: they emphasised the need of recreating a natural environment, with more trees (that are insufficient now), and a few built elements that allow a true immersion in the local landscape.

Such 'natural vocation' of the space also emerged in other proposals: one suggested re-imagining the Italian-style garden in a contemporary way and building something that could become truly iconic. Another was about the creation of a 'productive garden' and to think about agriculture as a possible part of this new 'natural identity'. Moreover, agriculture could offer the possibility of creating many public and private initiatives, integrating them into a common framework: from urban gardens to professional agriculture. On the one hand, there was the possibility

of enhancing the tradition of the 400 urban gardens existing in Reggio Emilia, and on the other the idea of creating a permanent place where local farms could showcase good agricultural practices and innovation: a place to demonstrate and anticipate the evolution of the agricultural system.

Many proposals around nature and agriculture were suggested, emphasising the need to preserve the natural soul of the place, which is an important oasis for Reggio inhabitants, an environment to escape to at the weekend, and to practise sports. This was also related to the idea of combining different elements to create a special place for well-being: physical activities, healthy and epicurean food, meditation, educational nature trails, and therefore offering a place of relaxation and respite from a hectic lifestyle.

Some of the proposals concerned an integrated vision of art, culture and sport in an outdoor environment, grouping the suggestions into winter and summer events. The summer season was obviously considered for many ideas, becoming a crucial time in the park's identity.

A great variety of ideas emerged from the interviews and many transcended or sometimes neglected those we suggested to prompt conversation: topics such as ‘food’, ‘hospitality’, ‘technology’ or ‘sociability’ emerged; while ‘work’ or ‘job’ were not considered relevant. The general flow of conversations was very rich and depicted a park with multiple and coordinated identities for a variety of users.

The sensitive collection of insights resulting from this phase of generative listening created the basis for a conceptual map to guide the subsequent co-design workshops.

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Chapter 6. Phase 2 – Co-design workshops

Abstract This chapter describes the second phase of the process followed for the Rival(u)ta Rivalta project, which consisted of an intensive programme of co-design workshops involving a variety of stakeholders, with the aim of generating many ideas for the future of the Ducal Palace and its park. The text begins with a reflection on the methodologies for co-design and scenario building, with the aim to design an effective process and its boundary objects for the specific case. Then, the chapter details the co-design methodology, the methods and tools employed, the structure of each workshop and its outcomes organised into a set of 6 co-created preliminary scenarios that were used to inform the next phase of the work, which is the connection with the international landscape design competition.

Keywords co-design, scenario, scenario building, boundary objects

6.1 Boundary objects for co-design workshops of scenario building

The aim of the work after the generative listening phase was to develop the insights that emerged and to present them to the decision-makers during one or more debriefing meetings, thus triggering a strategic conversation to prepare the following co-design process. Since the scoping meetings at the beginning of the project, we were conscious of their original vision for Rivalta: an idea of a park with multiple identities and a hybrid character, i.e., with different functions, in the form of a contemporary green oasis for the people of Reggio Emilia.

For the debriefing meetings we prepared a visual map to facilitate the debate on the insights: this map went through several versions, from a richer, denser version to a more schematic and concise one. The common thread was the organisation of contents into scenarios, following a scenario-building methodology. This methodology has a long history in business, government and military sectors and today it is considered part of the discipline of ‘futures studies’. According to Warfield (1996), a scenario is a narrative description of a possible state of development over time: it can be useful to communicate speculative thoughts about future evolutions, elicit feedbacks and stimulate imagination. Ratcliffe (2000) and Masini (1993) argue that scenario building can be seen from multiple perspectives: it is an objective method based on data and information; it is a multiple method that applies several techniques at various stages; it is a systematic method, because interconnections between areas are emphasised; it is a synoptic as well as a simultaneous method, because a great number of variables are analysed at the same time. As design scholars, we intend scenarios as stories about the future conceived in a narrative and visual form, similar to what Ogilvy (2002) defines as plots characterised by distinctive factors, forces and values that shape a set of narratives. They are based on a ‘relational worldview’, meaning a worldview that shifts focus from things and materials to relationships and structures. In this line of thinking,

imagining services helps conceive and build up the structure and relationships that make up a scenario, while redefining the roles, values and capabilities of the different actors.

Thus, scenarios are neither predictions nor forecasts: they are projections of possible futures and we use them as part of a creative process to trigger design conversations about what could happen. In the same vein, Manzini and Jégou (2004) developed the methodology of 'DOS - Design Orienting Scenarios': this defines a set of visions for the future that are motivated, illustrated and visualised through specific solutions, representing the different perspectives that the scenario-builder aims to discuss with the scenario-users, to create a framework for the design of new concepts.

It is not only in the design field that scenario building is a key method for engaging multiple and diverse stakeholders in place-making projects and gaining over their commitment; by engaging the social parties in scenario co-design, public administrations can commit to the new visions, while sustaining the convergence of social creativity and innovation (Meroni and Sangiorgi 2011). As Ogilvy clearly expresses, there is not a singular future, but a hierarchy of values and beliefs: scenarios are ways to explore different futures while having imaginative and coherent conversations about what might be. Once we acknowledge that the future is not predictable, we also acknowledge that it is not independent of our will, but "we're part of the picture" (Ogilvy 2002).

Following this approach and combining the insights of the interviews with the strategic orientations discussed with policy-makers, we elaborated a conceptual framework represented by a visual map. It highlighted six core themes and intersecting opportunity areas for action and included a vast of contents. The six areas were defined as follows:

- Park of Nature: Rivalta is a garden, a place dedicated to nature and its contemplation.
- Park of Agriculture: Rivalta is the showcase for agricultural innovation, a place where the agricultural world can show and experience its best practices and innovations.
- Park of History: Rivalta is a fairy tale, bringing back to life and telling stories of the past with an innovative and avant-garde spirit.
- Park of Wellness: Rivalta is a place where you can feel good, where people can find regeneration for their body and mind.
- Park of the Arts: Rivalta is an open-air museum where art can happen and be actively experienced by citizens.
- Park of the People: Rivalta is a place with a popular soul, where people lead the ideation, organisation and managing of events

A second version of the map was produced after several conversations with policy-makers: they decided to delete the 'Park of the Arts', since there were already many spaces in Reggio Emilia dedicated to different forms of art and they did not intend to create duplicates. They also suggested considering the 'Park of the People'

as something that was connected with all the other areas: this is connected to the popular roots of Reggio Emilia that we have already mentioned, and to the so-called 'leadership of citizens', who are used to having a say in every project and participating in a proactive way in the civic life.

In the final version of the map (Fig. 6.1), we created a hierarchy of the selected areas, placing the 'Park of Nature' at the centre of the map and positioning the remaining areas equally along three main axes (history, wellness and agriculture). The output of this phase can be defined as a compass for envisioning: a map showing a selection of possible design directions and a visual representation of the shared choices which, during the workshops, may work as a tool for conceptual navigation of different options.

The compass for envisioning became the central boundary object of the co-design workshops: printed on a large board hung on the wall, it served as a physical support for all the co-design activities and worked as a real compass to guide the participants' proposals. As Meroni, Selloni and Rossi (2018) argue, boundary objects can be defined as "representatives of the subject matter of design in the material form of design artefacts (images, sketches, maps, diagrams, representations, storyboards, models and prototypes), whose function is to align designers and users in synchronous design processes" (2018: 44). In defining boundary objects, authors refer to the work of scholars (Star 1988; Ehn 2008; Johnson et al. 2017) who built the concept from a sociologic perspective: boundary objects are artefacts shared by different communities that facilitate the interaction between them. "They allow the temporary alignment of participants cooperating for a precise length of time. Above all, it is important to align diverse stakeholders who may have different agendas, but, thanks to boundary objects, who share a temporary common ground on which to discuss and explore the possibilities of collaboration" (Selloni 2017: 92). The compass for envisioning, in fact, worked as a common ground for participants and represented the starting point for all the co-design workshops.

In addition to this compass, another boundary object was ideated: it consisted of a deck of cards (Fig. 6.3) representing potential services and activities drawn up from a preliminary study of existing case studies. Each card, depending on the specific service illustrated, was marked with a colour-code consistent with the four thematic areas presented in the map (agriculture, history, wellness and nature), to facilitate the association of concepts, without forcing any actual connection. Each card had blank rows to allow co-designers to specify, qualify and personalise the service or activity that was presented, and eventually to detail it with regard to the soft/hard kind of infrastructure, the indoor/outdoor placing, the temporary/permanent duration, and the local/national attractiveness.

This tool helped participants to stimulate, explore and express their own ideas about the future of the Ducal Palace and its park. It fits within the classification of co-design tools made by Sanders and Stappers (2008), who identified 3 main typologies: tools for 'telling', 'enacting' and 'making.' The last one was particularly emphasised in a later contribution by Sanders and Stappers (2014), in which they

highlighted how the majority of current co-design tools falls under the ‘making’ category: “tools for making give people – designers and non-designers – the ability to make ‘things’ that describe future objects, concerns or opportunities. They can also provide views on future experiences and future ways of living” (Sanders and Stappers 2014: 6). Our deck of cards was a 'making tool' for the creation and transformation of meaning through a hands-on approach, with the aim of using 'making activities' to make sense of the future. Following Sanders and Stappers, making activities were used “as vehicles for exploring, expressing and testing hypotheses about future ways of living” (2014: 6).

To complement the co-design apparatus we ideated for the Rival(u)ta Rivalta workshops, we included a tool that we named ‘actors’ map’. It draws on the stakeholder map, a well-known tool in the service design community (Giordano et al. 2018), whose aim is to identify key stakeholders and to outline their hierarchy and possible interconnections. It was employed as an exploratory tool to trigger a conversation about roles and power distribution, taking into consideration public-, private- and third-sector organisations and, thus, to initiate a reflection about the future management and governance of the place.

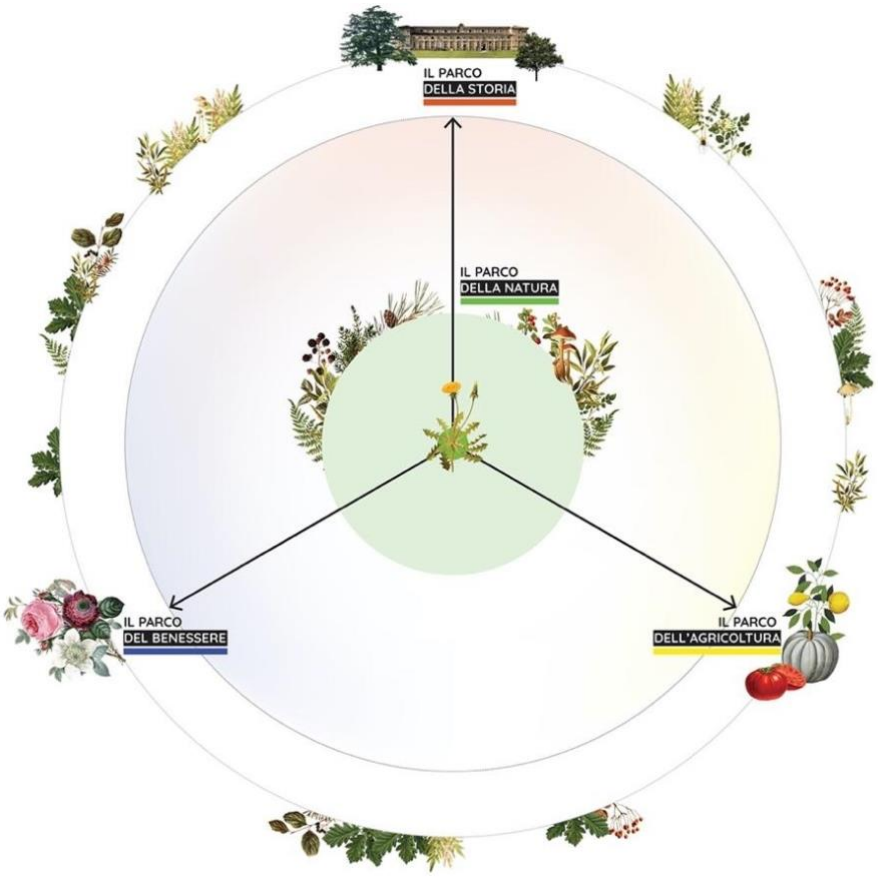

Fig. 6. 1 The final version of the ‘Compass for envisioning’

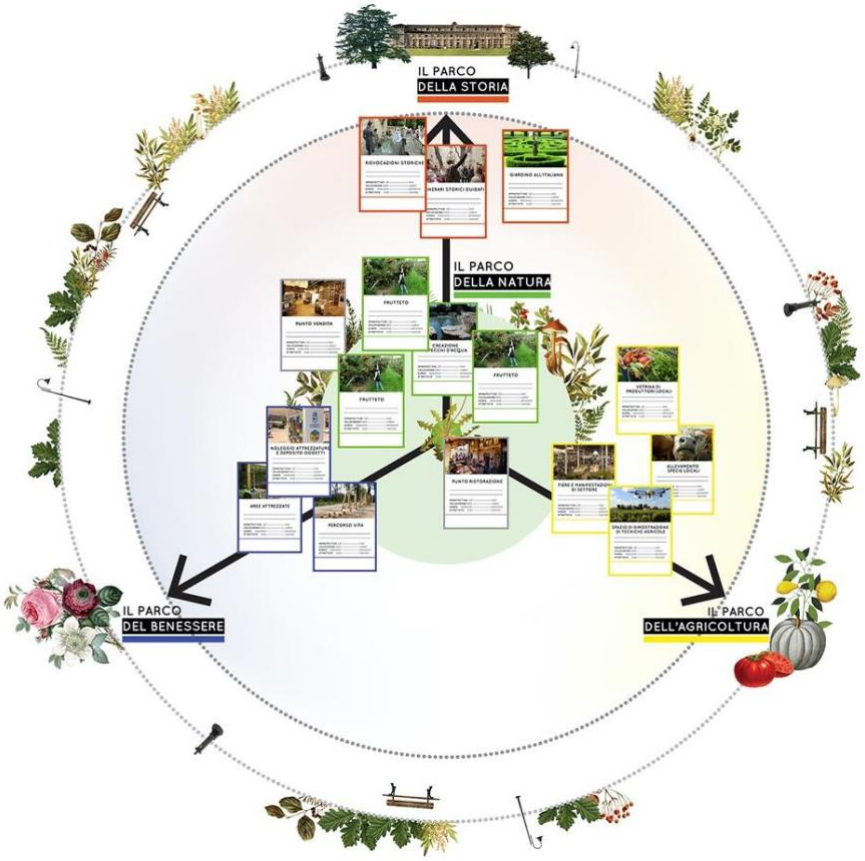

Fig. 6.2 The 'Compass for envisioning' filled with cards during the co-design workshops

Fig. 6.3 Samples from the deck of cards used during the co-design workshops

6.2 Structure of the co-design workshops

We conducted 5 co-design workshops involving 42 participants, partially identified among the participants of the first phase of the project and partially among relevant stakeholders from cultural institutions, NGOs, universities and local authorities.

Each workshop lasted about 3 hours and was organised into 3 main steps.

Step 1: creation of a personal vision
After introducing the compass for envisioning, each participant was invited to select 4 services/activities from the deck of cards: these activities, when combined, resulted in a personal vision for the future of the Rivalta complex which could be a mix of agriculture, history, wellness and nature. Furthermore, participants were asked to evaluate for each card some characteristics impacting on the service model (type of infrastructure, location, duration and scale of attractiveness) and to enrich or modify the cards accordingly. Finally, the personal visions were placed on the compass for envisioning board and discussed, merged and combined in a collective presentation.

Step 2: evaluation of the qualifying elements
The second stage was focused on assessing the visions resulting from the previous stage according to some key criteria, which were identified as essential features of the future park:

- Digital: the park is enabled by advanced technological solutions;
- Educational: the park has a clear educational role and popular style;
- Recreational: the park offers opportunities for entertainment, conviviality, meeting;
- Sustainable and circular: the park is based on elements of ecological sustainability and the circular economy.

These features emerged from the generative listening phase and from the dialogue with the Municipality; they contributed to specifying the activities selected by each participant.

Step 3: analysis of transversal areas and elaboration of the actors' map
The last phase of the workshop aimed to include a number of additional activities in each vision, relating to cross-cutting conceptual areas and thus further enriching the compass for envisioning. Such areas are connected to the perception and imaginary associated with the park, which must retain its main character as a place of relief and conviviality, active and inclusive participation, accessibility and openness, entertainment and recreation. For the final activity, participants were paired according to links between their visions, in order to start thinking about the stakeholders involved in or impacted by the future arrangement, reflecting on the implementation stage and possible management models.

The output of this phase was an actors' map for each group in which they identified key stakeholders of their vision, and outlined a hierarchy and a set of connections between them.

Fig. 6.4 Some images from the co-design workshops

Fig. 6.5 Some images from the co-design workshops

Fig. 6.6 Some images from the co-design workshops

6.3 Results of the co-design workshops

At the end of the 5 co-design workshops, we collected 42 personal visions and 21 actors' maps. Altogether a huge amount of material that had to be analysed, interpreted and processed to create a report to be integrated into the brief for the international landscape design competition for the Rivalta complex and, thus, to inspire the participants in the competition.

Below, we provide a general overview of the personal visions and describe the 6 co-created scenarios that resulted as a synthesis of them.

General overview of the personal visions

The personal visions produced in the workshops were very different from each other: the titles illustrate this diversity, while some similarities allow interconnecting elements to be recognised and combined in a summary.

Some visions, such as 'The Park of Silence' and 'The Park of Emptiness' evoke a space for rest, a place to take a break from the city: the underlying idea to create a natural oasis of peace and quiet.

Others are related to the water, which was an integral element of the original garden: 'The Water Park' and 'The Estense Sea' are just two of the many visions that emerged around the idea to place water at the heart of the park, as a fundamental component of the Rivalta complex identity.

'The Good Living Park', 'The Academy of Well-being' and 'The Park of the 5 Senses' show the co-designers' interest in the concept of care and the development of a path towards collective and individual well-being.

Agriculture was another key element that emerged from several visions: 'The Permanent Agricultural Workshop' and 'The Park for Experimenting Innovative Social Farming Solutions' are just two examples of the numerous concepts originating around the idea of creating a place to practise the most advanced farming techniques, evoking a wider sustainable development strategy and building upon the city's ancient agricultural function.

'The Active Garden' and 'The Park in Motion' (among others) are visions that consider sport as the essential element of the future park. They take into account any possible kind of sport, from group sports that need specific grounds, to individual activities that can benefit from specific equipment in the park, such as fitness trails and lockers.

Moreover, another series of visions supported the idea of a historical reconstruction of the palace and its garden, aiming to literally interpret its ancient legacy: 'The Reconstructed Park' and 'The Recovered Garden' mainly focused on the idea of a restoration to relive the splendours of the past, on the rebuilding of the Royal Ducal Palace as it was in the 18th century.

The majority of visions imagined a place in which nature takes centre stage, because they were oriented in this direction by the compass for envisioning. Nevertheless, each vision provided a distinctive interpretation of this central topic: 'The Park of the City', 'Caring for Nature' and 'The Park as a Landscape

Workshop' are just a few examples of ideas sharing the principles of biodiversity and environmental ethics.

A common trait of all the visions was the search for beauty, the intention to transform the Rivalta complex into something gorgeous and spectacular, building upon a contemporary interpretation of 'Italian beauty', which has its roots in the Renaissance. It should be said that even the most ambitious visions had elements of feasibility and actual connection with the context, being the result of the creativity of a group of experts, who have a close connection with the place. As design researchers we were satisfied with the positive balance between creativity and feasibility.

Resulting co-created scenarios

The extensive reworking to produce a synthesis of the visions was mainly in our hands, and eventually reviewed by the policy-makers of Reggio Emilia Municipality. Its goal was to produce tangible and inspiring inputs for the briefing paper of the international landscape design competition.

While combining and expanding the personal visions, we considered all the main emerging elements, discarding those not in line with the Municipality's intentions or too far from the project's values and principles. However, we decided to include some innovative aspects that arose from the co-design workshops: the sessions were actually effective in modifying and enriching the original compass for envisioning, adding unexpected ingredients.

We finally developed 6 co-created preliminary scenarios (Fig. 6.7):

1. 'The Mindful Park' is a place of peace and silence, where you can immerse yourself in harmony with nature and practise activities for physical and spiritual well-being. The park is scattered with areas for relaxation and rest, providing a setting for personal care activities.

2. 'The Water Garden' tells the story of the engineering and hydraulic genius of the Este family through the restoration of the original system of basins, ponds and channels, also connecting the park to national touristic circuits and to new itineraries. The tale of the history is also entrusted to the vegetation – not spontaneous but skilfully managed – which offers a collection of original and rare varieties.

3. 'The Active Park' is a place for 'doing' and 'healthy living'. The offer is mainly dedicated to sport, with equipment spread throughout the area and organised into 'fitness trails' for everyone. Agricultural activities are part of this scenario too: an edible garden and a community garden are part of a wider participatory agriculture project.

4. 'The Innovation Garden' is a centre for experimentation, training and dissemination about agriculture: it is a research laboratory that places the agricultural culture of Reggio Emilia back at the centre, allowing technological

updates and supporting the intervention of different communities. Agriculture characterises the whole landscape of the park, which is not only a 'productive' space, but also a place for enjoyment and active participation.

5. 'The Circular Oasis' is a park where nature is queen, a space where the local flora and fauna are reintroduced. Each activity is considered as an integral part of a sustainability model in which everything is reused and recovered in a systematic way. Visitors are immersed in this environment where the human touch is visible in the landscape design, by outlining a natural setting to enjoy and experience the park.

6. 'The Welcoming Garden' is a space where the healing power of water regulates and defines its layout. Hot water pools, aromatic paths, and natural hydrotherapy practices create a pleasant environment in which to immerse yourself and rediscover a balance with nature. The park guarantees accessibility for people with disabilities and it is developed with particular care in the design of access and functions, building upon a sustainable ecosystem of low-impact structures and renewable energy sources.

These 6 scenarios were widely illustrated in a document report that became an integral part of the briefing material made available to the 5 finalists of the international landscape design competition. For each scenario, we provided: a general narration; an explanation of its guiding vision and values; an in-depth description of the activities to be included as potential functions and services; a series of distinctive features with reference to the landscape guidelines provided by the competition's brief; and a representative picture of the scenario.

More fully described in the third and final part of this book, the output of this phase was identified as a set of co-created preliminary scenarios: a catalogue of collective stories about possible futures, and a set of visual and textual narratives proposing new ways of living in a given context, developed to inspire the participants in the competition.

Fig. 6.7 Visualisations of the 6 co-created preliminary scenarios

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Chapter 7. Phase 3 – Integration into the spatial design

Abstract This chapter describes the third phase of process followed for the Rival(u)ta Rivalta project, which is characterised by a close collaboration between service designers and the team of spatial designers who were winners of the international landscape design competition launched by the Municipality. The text starts with a review of some key service design notions with a specific focus on the service offering and related tools. Next, the chapter goes deeper into the co-design activities between the teams of designers, explaining how the service offering map and the spatial layout were integrated. The final result of this phase is a set of 2 spatial & service scenarios complemented by situated maps of services.

Keywords service design · service offering · offering map · situated scenarios

7.1 Definition of the service offering

The third phase of the Rival(u)ta Rivalta process was the stage in which the expertise in service design emerged as crucial: the 6 scenarios developed to inspire the international landscape design competition offered a wide set of possible activities for the park. Nevertheless, a more specific reflection was needed on how to develop them into a comprehensive service offering integrated in the spatial layout.

Acknowledging service design as a set of activities for planning and organising people, infrastructures, communication and material components of a service (Sangiorgi and Prendiville 2017), we intend here to focus on one specific activity of service design: the ideation of the service offering, as an organised combination of activities in a given situation.

A service offering is generally designed from the users' perspective, considering both the positioning within their wider value constellation and the organisation's value proposition (Patricío and Fisk 2013). Therefore, it is important to combine both perspectives, designing an offer that is coherent and intelligible for the user and strategically relevant for the organisation. It also incorporates a preview of the partnerships that the organisation will establish with other actors in the wider value constellation (Patricío et al. 2011), thus envisioning the network of stakeholders for the delivery of the whole offer.

In service design, the definition of the service offering is essential to answer the fundamental question 'What does a service provide?' It is a reflection to be done on top of the other service design activities, prior to the production of user journeys, blueprints and prototypes. To shape a service offering, designers are pushed to think about scale, hierarchy, thematic areas of the solution, possible clusters and connections between them. After the co-design workshops of the Rivalta project,

we were in a position to design the broad service offering of the future Rivalta complex, considering the positions of policy-makers and of the group of architects and professionals who won the international competition. What the park would eventually offer to visitors and how the different services would find a physical display in spatial touch-points were the design issues to be addressed.

To support this design conversation, we used a service design tool named 'offering map'. While other service design tools are more well-known and largely employed (such as user journey maps and stakeholder maps), the offering map is still a less-explored and -recognised tool. It is useful to define the primary and secondary offering, i.e., the core service and the additional services (Foglieni, Villari and Maffei 2018; Hoffman and Bateson 2010) and to connect it to the relevant touch-points. It lacks a standard model: "the offering could be described with words, images or through a simple graph. As services grow in complexity, the offering map can also become more articulated, showing distinct macro-areas of offer, and then narrowing them down into more specific areas and functions" (Service Design Tools 2021). Hence, the offering map allows a service to be visually represented in all its activities and can take different configurations with reference to aims and target groups.

For the Rival(u)ta Rivalta project, we used service offering maps as part of the scenarios that were created to steer the conversation about the future of the park. As such, they are part of the visual apparatus designers use to represent possible futures, by making them manifest and proposing "a narrative view of the possible interplay between stakeholders, technologies, natural elements, social trends and uncertainties" (Morelli et al. 2021: 83).

7.2 Integration into the spatial design

The original project of the winning group of the international landscape design competition (composed by Openfabric, Casana and F&M Ingegneria) showcased several elements that were undoubtedly inspired by the document of the design brief presenting the co-created scenarios. Thus, their work was already aligned with the results of the co-design process: several elements of the scenarios were interpreted and incorporated into the project's concept, such as the hybrid identity of the park, being open to different configurations and with the natural element at the centre. They created a flexible layout, open to be 'filled in' with a variety of services and activities. Yet, a further elaboration was necessary to better integrate the results of the co-design process into the project: a workshop with the architects was therefore planned with this aim.

Our work in this phase was organised into 3 main parts:

- A preparatory activity before the workshop: it allowed further combination of the 6 co-created scenarios into 2 scenarios to be discussed during the workshop. Entitled 'The Contemplative-Active Wellness Park' and 'The Anthropic-Natural Habitat Park', they were still rough concepts, but

integrated into the spatial design by Openfabric, Casana and F&M Ingegneria. We designed them as 'sacrificial concepts' to stimulate feedback and input from participants. Just like boundary objects, sacrificial concepts (Brown 2009) are design-thinking artefacts thought to open up conversations about the future and to be eventually sacrificed to the ideas they trigger. In other words, scenarios were designed in order to be changed, with particular regard to the proposals of integration of the services within the spatial layout.

- The actual workshop, organised in 3 stages:
  1. In the first stage, we introduced the 2 scenarios and triggered an initial dialogue among the participants.
  2. The second stage, the core activity, was aimed at the development of the offering map and at the design of its spatial display, thus merging the service and landscape designs. The offering map was adapted to the layout, hypothesising how the so-called 'intensità progettuali' roughly translatable as 'design concentrations' imagined by the architects might have enabled and accommodated the different activities and services. To do this work, we first created a map in which 2 main layers were visualised: the main service offering and the secondary one. Then, we added another level of detail to the map: the distinction between temporary and permanent services, as this dichotomy is fundamental when considering outdoor and seasonal activities.
  3. The third stage was a review of the decisions taken so far, to better merge the different mindsets: one 'space-driven', the other 'service-driven'. The result was a fully integrated artefact of space and service, in which the activities of the offering map were finally associated with the 'design concentrations' of the spatial project (Fig.7.3 and Fig. 7.4). It has to be noted that this integration was done for both scenarios discussed, as detailed in the following paragraphs.

- A further reworking and visualisation of the 2 scenarios: we concluded the activity by finalising the work done during the workshop and reviewing it with the policy-makers. We prepared an ultimate storytelling of the finally integrated spatial and service designs, to be delivered to the policy-makers for the following stages of the implementation of the Rivalta project.

7.3 Spatial & service scenarios

The output of this phase, which will be discussed in greater detail in Part III, was a couple of integrated spatial & service scenarios, which finally resulted from the development of 2 scenarios prepared for discussion with the architects. They were named:

1. The Well-being Park (Fig. 7.1), which deals with the themes of health and living well, arising from the co-created scenarios 'The Mindful Park' and 'The Active Park'.
2. The Biosphere (Fig. 7.2), which refers to the themes of landscape, nature, and harmony with the surrounding environment, arising from the co-created scenarios 'The Circular Oasis' and 'The Mindful Park'.

Described as a constant mix of temporary and permanent activities and as requirements for the natural capital and the built environment, the scenarios were complemented by a situated service offering map which is a spatial layout annotated with services areas and related activities (Fig. 7.3 and Fig.7.4). Notably, the service offering maps corresponding to the two scenarios were integrated into the same master plan, adapting the activities to the detailed layout defined by the architects for the park.

These two outputs, together with the integrated spatial & service scenarios and the situated service offering map, formed the initial knowledge and concept basis for a further reflection that brought about the design of a comprehensive strategic framework to design service scenarios for urban commons. Called the Service Master Plan, it combines the functions, services, assets and rules that are integrated into the spatial design of the site.

Hence, two integrated spatial & service scenarios resulted from this phase. The underlying reasons for there being 2 rather than 1 is to be found in the very nature of scenarios:

- the scenario-building approach on which this work is based, as discussed in Chapter 6, postulates that the future is not predictable and the best way for a community to contribute to design it is to consider a range of different narratives and define the strategies that can take place there, understanding whether there are options that are robust across all scenarios, and thus becoming practicable;
- the acknowledgment that the civic process of development of the whole project of regeneration of the Rivalta complex was still far from completed. In fact, the subsequent steps of implementation included, in parallel, the building of the landscape according to the selected design and the definition of the future management system. We may assume that the management will be a public-private partnership "that together constitute a relatively coherent assemblage that facilitates coordination of activity in value-co-creating service ecosystems" (Vargo and Lusch 2016: 18).

The two alternative scenarios were therefore developed to activate and orientate this future conversation by providing different but plausible narratives of what might be. This conversation, which will be coordinated by the Municipality of Reggio Emilia, will have to accommodate worldviews and interests of different stakeholders within a value proposition that is strategically relevant for the public administration.

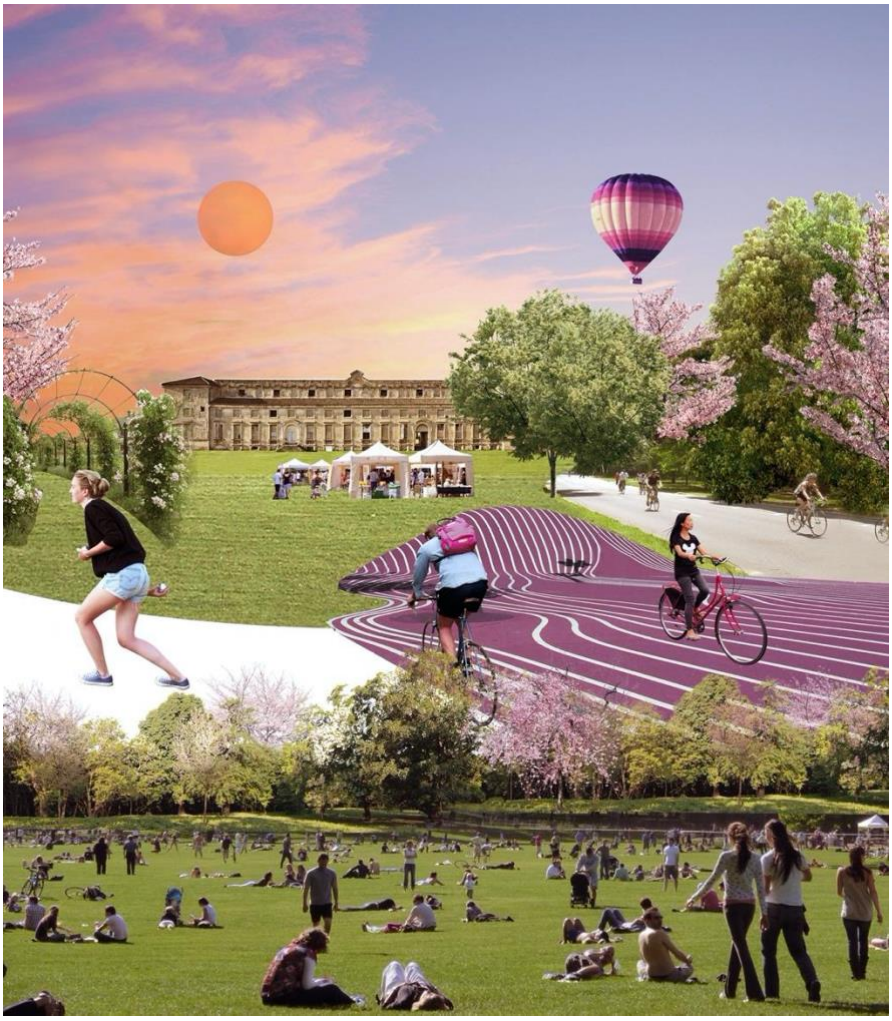

Fig. 7.1 The Well-being Park

Fig. 7.2 The Biosphere

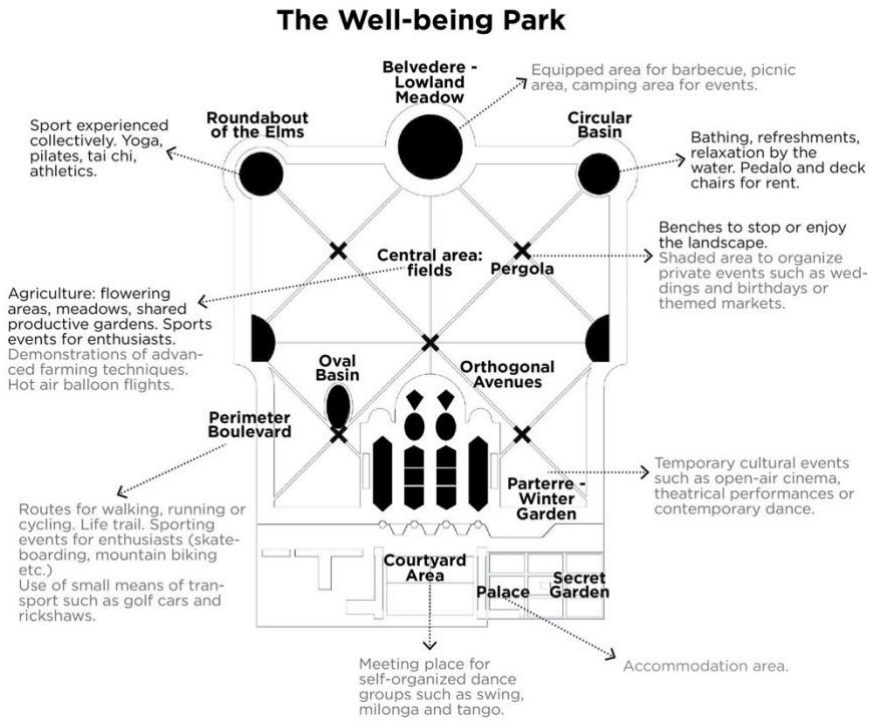

Fig. 7.3 Situated Offering Map of 'The Well-being Park' scenario (layout map © Openfabric)

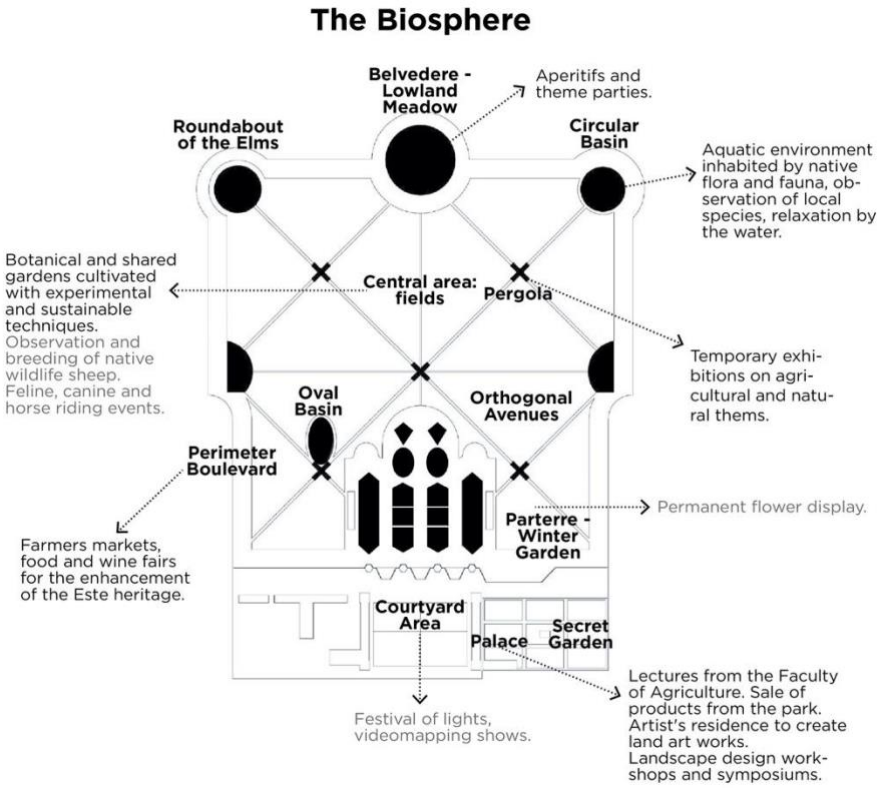

Fig. 7.4 Situated Offering Map of 'The Biosphere' scenario (layout map © Openfabric)

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PART III - SERVICE MASTER PLANNING AND SERVICE MASTER PLAN

Chapter 8. Service Master Planning

Abstract This chapter describes step by step the full methodology of service design applied to urban commons that is Service Master Planning. This process is therefore illustrated in all its stages ('Understanding', 'Designing', and 'Delivering'), each articulated in phases ('Discover', 'Interpret', 'Ideate', 'Develop', 'Implement') and finally in smaller and more specific steps. For each phase, the specific outputs are described, as well as why and how the process is collaborative, involves multiple stakeholders, and organised in diverging and converging phases. The final product of the 'Develop' phase is a Service Master Plan. The chapter then discusses the 7 features that characterise the process, which are: being situated, flexible, pragmatic, collaborative, adversarial, imaginative and political. It finally reflects on the procedural aspect of the process, making a comparison with other processes of urban commons design, and thus reflecting on infrastructuring, commoning, and policy-making.

Keywords co-design, service design, design thinking, place-making, sense-making, policy-making, infrastructuring, commoning,

8.1 Stages, phases and steps in Service Master Planning

We described the Rival(u)ta Rivalta case study as being composed of 3 main design phases: (1) generative listening; (2) co-design workshops; and (3) integration into the spatial design.These phases are part of a wider methodological framework named 'Service Design Plan' (Fig. 8.1) which we developed as an evolution of the well-known Double Diamond methodology (Design Council 2022) and which provides a guidance for design thinking. When it comes to the application of this methodology to the design of urban commons, it turns out to be the basis of a specific design thinking activity for place-making that we can call Service Master Planning, which is the co-design of a Service Master Plan.

The Double Diamond methodology, proposed by the Design Council in 2004, is considered to be one of the most representative explanations of what design thinking actually is, i.e., an alternation of divergent and convergent phases of thought. It provides a visualisation of a design process organised into 4 main stages (Discover, Define, Develop, Deliver) across two adjacent diamonds, in which the first is about problem framing and understanding, and the second is focused on developing and delivering a solution. It is not the only conceptual model of design thinking, but we find the alternation of divergent and convergent thinking extremely insightful. Indeed, it allows a continuous analysis and synthesis of a problem, effectively expanding or reducing the options affecting the problem many times until a desired outcome is reached. In Service Master Planning, divergent thinking ensures opening up the options of values, services and activities, with numerous inputs, enough to

be considered in a plan, while convergent thinking ensures that policy decisions will be guided or acknowledged.

However, from a service design perspective, the Double Diamond has often been seen not to suit all the phases experienced when dealing with complex projects, regardless of whether the final result is a service, strategy or scenario (Meroni, Selloni and Rossi 2018; Joore and Brezet 2015).

When dealing with a composite and stratified activity like Service Master Planning, this is even truer, and this is why we expanded and detailed the original Double Diamond methodology. Thus, we propose more iterations in the alternation of divergent and convergent thinking, since the complexity of the planning activity requires a more definite path to progress and deliver a Service Master Plan.

Stages, phases, steps and outputs

This chapter goes through each phase of what we call Service Master Planning: a collaborative and multi-stakeholder process that involves various actors and policy-makers as well as design experts.

The full methodology comprises the stages: Understanding, Designing, and Delivering, which are macro-sets of activities organised into more phases. Each phase is organised into sub-activities, the steps involved, and has specific outputs.

What results from the Develop phase is defined as a Service Master Plan: it is a document of the implementation that will be fully described in Chapter 9.

Each phase is discussed as follows:

- a brief general description;
- a mention of how this phase was performed in the Rival(u)ta Rivalta project;
- a list of ‘design outputs’, namely visual and textual deliverables.

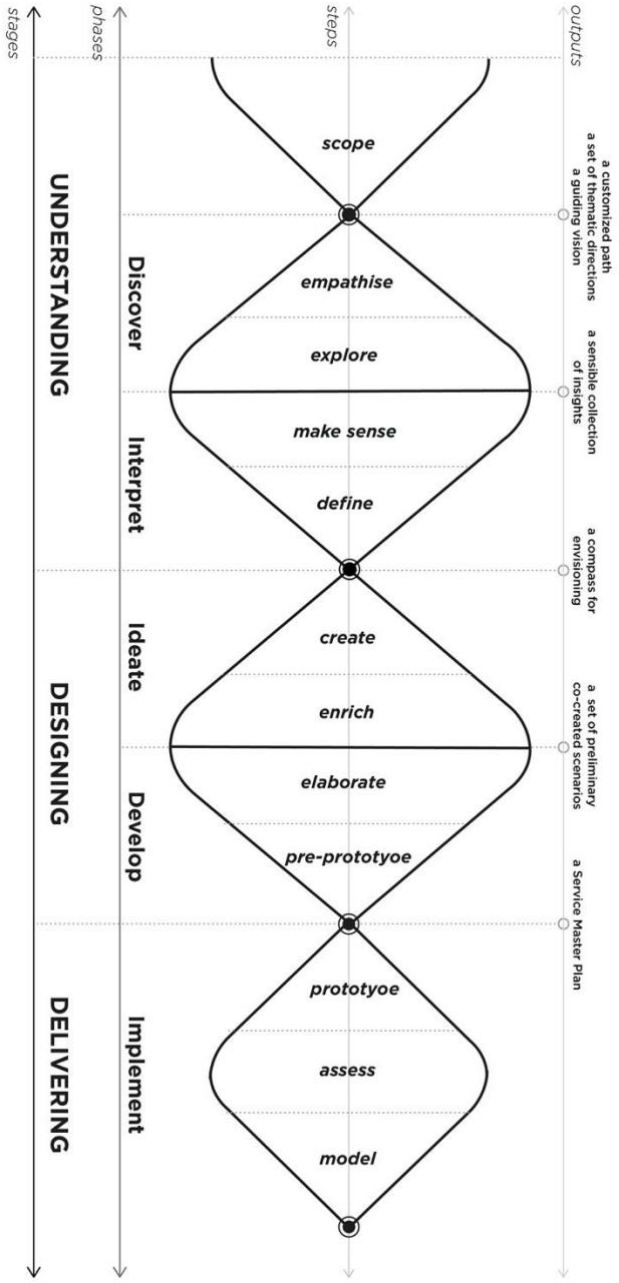

Fig. 8.1 The Service Design Planning process developed by the authors

8.1.1 Scope

In design activities characterised by a collaborative approach, an initial ‘scoping’ is needed to align the diverse interests and actors, and to set expectations for the results, to reach an initial consensus. It is a ‘phase zero’: a preparatory activity necessary to start the whole process and to ensure the successful completion of Service Master Planning. This step includes policy-makers and any other institutional actor who has a say on the issues considered in the planning. Hence, the scoping activity consists of a set of strategic conversations in which the objectives of designers are: to obtain relevant information, to look at the context, to identify and clarify the main issues, to adapt the Service Master Planning to the specific case, and to agree on the expected results. The Scope phase is less structured and more open, or rather more informal, than the other phases, and aims to collect explicit and tacit knowledge. It consists of strategic conversations between design experts and policy-makers, that may turn into forms of Socratic dialogues: in fact, it is by means of dialogue that policy-makers clarify issues (often, first to themselves), while design experts practise active listening and gain insights to make assumptions and design the process.

It is also a phase in which a deal is made: policy-makers, designers and other involved actors (usually public managers and servants) agree on an initial vision that may guide the project. Hence, this is an activity of sense-making, aimed to clarify a range of possible results and build consensus around the process of Service Master Planning.

In the Riva(u)ta Rivalta project, this scoping activity lasted half a year and consisted of several meetings with a group of representatives from the Municipality of Reggio Emilia: high-level public managers closely linked to policy-makers. The initial meetings were dedicated to understanding each other: on the designers’ part to focus on the project context; on the municipality’s part to understand what service design can do.

After this 'fine-tuning' phase, further meetings facilitated the planning of the whole process and the emergence of the main issue related to the Ducal Palace of Reggio Emilia and its park. Finally, 6 thematic areas were identified as initial directions on which to structure and organise the subsequent phases. It should be noted that these directions originated from a proposal by the Municipality that was discussed and supplemented with us: we can see this as a top-down virtuous process, in which policy-makers have a vision and a general idea of what they want for their city.

Main outputs of ‘Scope’ are:

- A *customized path* within the Service Master Planning: a customised plan of activities, i.e., a visual framework showing stages and activities to be carried out in a specific time frame.

- A *set of thematic directions:* a set of values and conceptual areas to start working from, which are relevant for the given context and related issue, and which may inform the project.
- A *guiding vision*: an attractive idea that could provide direction and set a course for the future regarding the project issue, i.e., a key image and a short text explaining the best possible option for the issue in question.

8.1.2 Discover: Empathise and Explore

The 'Discover' phase is organised in the steps 'Empathise' and 'Explore'.

It is an exploratory activity in which designers aim at analysing and deepening the main issue. This is the time to carry out field research, getting in touch with the context and, above all, to empathise with people and explore an issue by getting involved in it. It is important to obtain an explicit mandate from policy-makers in this phase: design experts should be clearly authorised by the public administration to operate in a context, so they are accepted and recognised by the community. Policy-makers should also identify the individuals to be involved and the gatekeepers for the local communities, and act as intermediary with the designers. The selection of relevant individuals could include multiple and diverse actors, ranging from representatives of local associations, companies, institutions, ordinary citizens, i.e., every person who has an opinion on issue. Empathising with their perspective is paramount. Other forms of understanding may come from exploration of places or issues through field immersion, as well as from desk and secondary research.

Empathising and exploring are kinds of divergent thinking, because the more input, points of view, needs, desires, values and feelings, the better to get useful insights for master planning. This is a form of active and generative listening (Sclavi 2003), in which the role of design experts is of enablers of a debate and of a propositional reflection, rather than of a passive interviewer conducting a social investigation. It is thus a form of participatory observation. It is good that the designers entrusted with this exploratory mandate are external to the context: and in this case, they are a third party able to observe and evaluate a situation in a more detached and objective way, having no involvement or connection. They should therefore be able to rethink an issue from an original and novel perspective.

In the Riva(u)ta Rivalta project, as presented in Chapter 5, this phase was called 'generative listening' to emphasise the proactive attitude of designers who ran the 26 interviews. They were conducted as conversations stimulated by a set of design tools, ideated with the purpose of orienting and provoking reactions and, thus, to conduct a fruitful and focused discussion in which the seeds of possible visions and proposals should already be visible in their early stages. Field exploration was done through visits and research in parallel with the interviews.

The main output of the 'Discover' phase is:

- A *sensible collection of insights:* a document report in which a set of insights are selected, connected and organised into meaningful clusters.

8.1.3 Interpret: Make Sense and Define

The 'Interpret' phase is organised in the steps 'Make Sense' and 'Define'.

After the 'Discover' phase it is time to make sense of what has emerged and to define a design hypothesis. This is the work of design experts.

The 'Interpret' phase falls under a convergent thinking process: it is an action of reflection, elaboration and synthesis, to be then expanded and enriched again in the design stage. Its purpose is to "connect the dots" and provide an interpretative framework to guide the next steps. For this activity, the competence of designers is crucial: their ability to think outside the box, to conceive novel connections and, more generally, to transform the work of interpretation into a propositional one, are skills that are part of the designers' cultural background.

In this phase, the active participation of policy-makers is key: they should support this work of evaluation and signification by guiding it towards the most suitable directions for the place, according to their vision, and contribute to defining the hypothesis that is the foundation of the following creative phase. Thus, this is a collective activity performed by design experts and policy-makers in a joint effort of connection, interpretation and definition. In this way, the intentions and ambitions of policy-makers meet the creativity and the rigour of design thinking.

The 'Interpret' phase in the Riva(u)ta Rivalta project was carried out in a close collaboration between the designers and the representatives of the Municipality of Reggio Emilia. We filtered the insights from the generative listening activity and organised them into an affinity map, allowing possible design directions to emerge that were formed on the basis of our expertise. This map served as a boundary object for a strategic conversation with the policy-makers: it worked as a basis for a productive discussion. It was one of the most important design tools of the project, because it served to orient the following design choices, depicting the most selected design directions for the Reggio Emilia Ducal Palace and its park.

The main output of 'Interpret' is:

- A *compass for envisioning:* a map showing a selection of design directions, i.e., a visual representation of shared design choices that works as a tool for orientation in the following design phases.

All the phases described so far, belong to the 'Understanding' stage, which encompasses scoping, discovering and interpreting. In our view, it comprises a set of research activities to be performed prior to the ideation phase, with the aim of building the knowledge base needed to design something new. Yet, we do not mean that understanding is limited solely to that phase of the project; on the contrary, it is important to exercise understanding throughout the project. However, at the beginning of a master planning process, deep immersion in a context and its

community, and "fine-tuning" with policy makers is far more important than in other types of projects.

8.1.4 Ideate: Create and Enrich

The ‘Ideate’ phase is organised in the steps ‘Create’ and ‘Enrich’.

Once a range of future directions is developed, it is time for idea generation: concepts are co-created in those directions and then enriched by consulting a group of actors who are familiar with the issue.

This phase is a kind of a divergent thinking: it is about co-designing ideas with stakeholders to extend the design options through the contribution of multiple and diverse opinions. It is a collaborative effort that needs design experts. It draws on the long tradition of participatory design, from which it applies a wide range of methods and tools, as discussed in Chapter 2. Here, we build upon the ‘Collaborative Design Framework’ (Meroni, Selloni and Rossi 2018) to adapt or create a dedicated set of ‘boundary objects’, which are combinations of prototypes and tools.

‘Boundary objects’ are representatives of the subject matter of design in the material form of design artefacts (images, sketches, maps, diagrams, representations, storyboards, models and prototypes), whose function is to align designers, users and stakeholders in synchronous design processes. They are thought to facilitate engagement and interaction with the design subject matter and a conversation around its different features. The boundary objects that can serve the co-design activities of Service Master Planning are diverse: however, in order to stimulate a multi-stakeholder conversation about the future, we consider a simple map of future directions, such as a compass for envisioning, complemented by tools that can stimulate the imagination, to be more convenient and effective. In this phase, creation and enrichment can take place in the same design workshop, or in subsequent activities.

In the Riva(u)ta Rivalta project, the programme of co-design workshops with the stakeholders was widespread and intensive: we aimed to explore different service areas for the Reggio Emilia Ducal Palace and its park. Policy-makers and representatives of the municipality did not participate in this phase: their input had already been incorporated in the ‘compass for envisioning’. Their contribution was, instead, fundamental in the selection and involvement of stakeholders, acting as intermediary and making those participants feel significant to the future of Rivalta.

In Chapter 6, we illustrated in detail the workshops with the stakeholders, the use of the compass for envisioning, and the use of a deck of cards presenting potential services as boundary objects to conduct the sessions. The workshops produced a wide variety of ideas, thanks also to the diversity of interests of participants: yet they were all connected to the directions displayed by the compass, so that, at the end of the sessions, it was easy to draw out 6 main scenarios for the future to be further developed.

The main output of 'Ideate' is:

- A *set of preliminary co-created scenarios*: a catalogue of collective stories about possible futures, i.e., a set of visual and textual narratives proposing new ways of living in a given context.

8.1.5 Develop: Elaborate and Pre-prototype

The 'Develop' phase is organised in the steps 'Elaborate' and 'Pre-prototype'.

Once a collection of rough scenarios is drafted, they have to be developed through elaboration and pre-prototyping. The Service Master Plan is an output of this phase, when service scenarios are discussed in reference to possible spatial layouts. What comes after, is its further enrichment and implementation.

This phase is part of a process of convergent thinking, in which, once again, the role of policy-makers is central: the collection of co-created scenarios is presented and discussed with them through a series of conversations guided by design experts. The output is a selection that results from the combination and elaboration of the rough materials, revised in accordance with the policy-makers' indications and orientations.

At this stage, the contribution of spatial designers becomes key, because the more they participate in this process of integrating services and spaces in a common framework, the better in terms of actual coherence of the envisioned services with the spatial layout. This work may require the organisation of several workshops in which the objective is to produce together a 'situated offering map of services', i.e., a sensitive placement of service areas and related activities. This comes from an effort of combining, harmonising and tuning spaces and services, until plausible matches emerge. Schematic layouts annotated with services are part of a pre-prototyping phase in which a Service Master Plan finally ends-up in the hands of policy-makers as a guiding document for their urban projects. We will describe this output in detail in the next chapter.

In the Rival(u)ta Rivalta case study the 'Develop' phase led to the transformation of the 6 preliminary co-created scenarios into 2 final spatial & service scenarios, integrated with the project of the spatial designers.

First, we met the policy-makers from the Municipality of Reggio Emilia to discuss the preliminary scenarios that emerged from the co-design workshops: by welcoming their inputs, we were able to reshape them into 2 scenarios. With this material, we organised a workshop with the spatial designers selected through the international competition for the Reggio Emilia Ducal Palace and its park. The aim of the workshop was to understand each other's perspectives and combine them into a common vision. In this workshop we used a tool from service design, the 'offering map', to discuss and develop each service, and to outline a hierarchy of principal and secondary activities. We then combined the scenarios, the offering maps, the spatial layouts and some recommendations about the future implementation into a comprehensive document that was delivered to the Municipality. It was a draft

version of the Service Master Plan, a pre-prototyping document thought to convey all the necessary information to start operating in the project area. Therefore, the output of the 'Develop' phase is the Service Master Plan, which will be described in detail in the next chapter.

The main output of 'Develop' is:

- A *Service Master Plan:* a comprehensive strategic framework of future scenarios that includes combinations of functions, services, assets and rules effectively integrated into the spatial design of a site. It is composed of 3 main parts:

- Scenarios: 'integrated spatial & service scenarios'
- Specifications: 'list of services' and 'situated service offering maps'
- Recommendations: 'commoning strategies' and 'opportunities and criticisms'

These activities conclude the Designing stage: the following stage, Implementing, is an integral part of a Service Master Planning process and guided by the Service Master Plan. Since it is aimed at actuating the strategies of the plan, it has to be adequate to, and adopted by, each specific context with its own rules.

8.2 Features of Service Master Planning

The idea of Service Master Planning can be better examined by defining its main characteristics: we propose a series of distinctive features, highlighting how this process of place-making can be complex and even conflicting, yet productive of a series of outputs, the expected outcome of which is the creation of urban commons with identity, value and quality for all the communities linked to them.

Situated: Service Master Planning is an activity comprising specific spatial and temporal dimensions. It is rooted in a context with physical characteristics that serve both as inputs and constraints for planning initiatives. By 'situated' we mean that there is a precise scale of intervention and that it is embedded in a community where different actors and interests coexist, originating a particular set of circumstances that characterises a situation and qualifies related service scenarios. It is therefore, a place-making process. The 'situated service offering map' is a way to focus on the territorial rootedness of the process and to include both the physical space and the intangible dimension of services.

In Service Master Planning everything is 'highly' situated and contextualised, not only on a spatial basis, but also in reference to a specific time framing. Developing, phasing and implementing a schedule of work and identifying priorities for accomplishments require activities with a high degree of situatedness in time and space. We may argue that, more than a feature, the characteristic of 'situated' should be a prerequisite of every Service Master Planning process,

connected to the ‘Scope’ and ‘Discover’ phases, but also important in the ideation and development stages.

Flexible: Service Master Planning should be a process that is easily subject to modifications when necessary. This also encompasses the notions of openness and iteration. As urban projects are generally long-term actions, it is essential to consider master planning as a dynamic activity that can be altered when project conditions change over time. Therefore, Service Master Planning must have sufficient flexibility to allow feedback from the actors involved, i.e., design experts, policy-makers and representatives of key organisations.

‘Flexible’ also includes the possibility of iteration, of doing and re-doing some stages if they do not produce the desired outputs. Each step might be repeated: this is particular valid for the steps ‘Explore’ and ‘Enrich’, in which the participation of other actors is crucial. Sometimes it may be necessary to expand that collaboration and to iterate several specific activities. More iteration allows for larger involvement and a stronger validation of hypotheses and ideas.

Managing a flexible Service Master Planning in a smart way should ensure the development of a good Service Master Plan: the flexibility of the process makes the production of an exhaustive and ready-to-use output possible. In other words: it is better to keep flexibility in the process than to let flexibility characterise the output, which otherwise might become too open to interpretation, and thus less feasible and achievable.

Pragmatic: this is connected to the ideas of flexibility and iteration. Even if Service Master Planning is defined and outlined from the beginning, it is a trial-and-error process. As a learning-by-doing approach, it has the experimental character of a research activity. It is a work that entails framing problems, finding solutions, experimenting and testing: for it to be effective, a well-defined 'alliance' with policy-makers is crucial. They must agree to the possibility of doing experimentation, be part of the research themselves, and oversee these experimental activities without limiting or reducing their effectiveness. Thus, pragmatism is the right approach for such a process, whose activities and results may be evaluated to the extent that they work satisfactorily at any given time and circumstance.

Collaborative: Service Master Planning requires the involvement of an assortment of participants whose level of collaboration can vary according to their roles and can change over time. Who gets to participate and to what extent is a major issue. In our experience with co-design processes, complex issues require complex processes, in which many interdependent players participate and collaborate in order to achieve any goal, so that people having different voices collaborate in a design process broken down into different steps and formats and resulting in a relevant and diversified amount of data (Meroni, Selloni and Rossi 2018). The inclusion of different voices is also essential for Service Master Planning, but it is not necessary to involve a large number of participants: diversity rather than number

should be the guiding principle. Collaboration in Service Master Planning is not about reaching consensus among the largest group of people, but it is a consultation of actors selected on the basis of their diversity. This consultation can take place in different ways depending on the goals and type of actor: a strategic conversation; a generative listening activity; participation in co-design workshops.

In Service Master Planning the collaboration with policy-makers and decision-makers is central and takes place at several points of the process: in the beginning, scoping and envisioning are fundamental to the subsequent work, while in the later stages, interpretation, development and decision about what results are mandatory for the planning to be effective. The collaboration with policy-makers and decision-makers is at the top of the Service Master Planning and informs all the activities, since strategic decisions are in their hands, including that of recognising the importance of service design in urban planning. In the Rival(u)ta Rivalta project the policy-makers' dialogue with the designers has been continuous, in order to progressively define orientations and make decisions according to what was emerging from the co-design process, yet having a broader view on the city development as a whole.

Collaborations with other players means listening to their different voices and building scenarios that may consider collective social needs. This is a way to practise a more extended idea of democracy, yet Service Master Planning is not comparable to other forms of citizen engagement thought to expand democracy and make it more inclusive (we refer to some well-known practices of citizen consultation, such as citizen summit, citizen assembly, charrette, participatory budgeting etc., all of them classified by 'The Engage2020 Action Catalogue'). In fact, in Service Master Planning, the involvement of selected actors is instrumental to gather the relevant knowledge about an issue and to ensure that all voices are considered. Hence, this multi-actor collaboration aims at building a robust basis for the subsequent activities.

Adversarial: Service Master Planning is a process that connects different voices. As such, it may sometimes (or often) lead to conflict. The issues tackled within urban projects are by their very nature divisive for a community, and lead to the emergence (and consequent dispute) of diverse opinions and interests. In a sense, Service Master Planning serves to deal with disagreements in a more structured way, to consider all the voices and to include them within a creative process that produces a set of results in which a selection of interests is represented and justified to the community. Part of the designers' work is to make discontentment more explicit and to channel it into a propositional activity rather than a polemical one, setting a path that aims at amplifying individual interests into public ones (Selloni 2017).

However, some actors can still disagree with the final outcome, despite being involved and consulted. Service Master Planning is not a process designed to "please" everyone: as design researchers we know that building scenarios with the specific aim of including every single opinion does not necessarily lead to a good

result. This mash-up of all voices is likely to generate a ‘grey’ output, in which the act of merging diverse perspectives affects the identity and the quality of the final project. This is close to what Mouffe (1999) described as ‘agonistic’, referring to a political process in which controversies are allowed to exist side by side: she highlights the bright side of a polyphony of conflicting voices, instead of negotiating them into consensus.

Certainly, it is not possible to completely avoid conflicts: we just may argue that Service Master Planning offers a creative and transparent way to deal with them.

Imaginative: Service Master Planning adopts the strategy to harness the power of imagination, of conceiving new worlds and possible ways of doing, with the aim of envisioning the future of urban commons: still, the by-product of this strategy might contribute to overcoming opposing voices, and this is why this feature is complementary to the previous one.

Using and stimulating imagination is the core job of designers and that’s why Service Master Planning is a process led by design experts: their role is not only to frame and implement co-design activities with stakeholders, but also (and most importantly) to use imagination to support policy-makers in conceiving, imagining and anticipating the future they would like to see and make happen.

We also argue that, in order to better enable the imagination of all participants, a Service Master Planning should be designed according to an 'aesthetic quality', because the aesthetic care of creative encounters puts the participant in conditions of comfort, well-being and happiness that foster creativity (De Bono 1970). In fact, the aesthetic quality of boundary objects, of design tools in general, is instrumental in inspiring participants and it is also necessary to complement the intangibility of service scenarios. By using attractive representations and visualisations, participants can better conceive possible future scenarios which otherwise remain too vague or difficult to be envisaged. Hence, Service Master Planning should be visionary and imaginative, as all design activities are by nature.

Political: Service Master Planning is a political act and has political implications. It is a process to transform urban commons by (service) design and, in doing so, it challenges the relationship between policy-makers, public servants, organisations’ representatives, and citizens through new forms of political participation and political possibilities (Staszowski et al. 2014). In our view, it is a political process that allows the emergence of different voices and deals with them in a transparent and framed way. It is more than a set of practices and procedures to provide solutions to specific urban challenges; instead, it should go beyond that ‘solutionism’ and act as a sense-making process. Its output is a political vision not only as the co-created future state of a place, but also as a way to get there together with a community.

In his book, *Design, When Everybody Designs*, Manzini (2015) discusses a dichotomy between ‘problem-solving’ and ‘sense-making’ in the work of designers. He describes the designer as a ‘problem solver’, as Simon (1969) also does in his

studies, arguing that designers can be viewed as agents for solving problems at all levels, from micro to macro scale. Yet, this is only one side: on the other, "design is concerned with making sense of things – how they ought to be in order to create new meaningful entities" (Manzini 2015: 35). And, paraphrasing Margolin (2002), design "collaborates actively and proactively in the social construction of meaning". This is why we think that the contribution of design experts is important in making Service Master Planning a political process.

The political value of Service Master Planning is particularly relevant at this point in history, in which policy-makers seem to be more attracted by so-called 'solutionism' and forget to exercise their important mission of sense-making (Niessen 2019). This issue is urgent and broader than the purposes of this book, suffice is to mention the work of Morozow (2013; 2020) who warns governments of the dangers of 'solutionism' because it leads them to forget how to determine the shape of the future, and, thus, to exercise visioning and sense-making activities.

We claim that policy-makers should be able to deal with collaborative design processes and, even more importantly, they have to re-discover their mission of generating proposals and developing them (Selloni 2019). For this reason, they must be trained in design approaches, methods and tools. Through design, they need to sharpen their ability to generate visions, drawing from the areas of future studies, scenario building, lateral thinking, and from the design culture in general. Therefore, Service Master Planning is a political process, in which policy-makers both contribute and learn how to generate visions, and design experts learn to operate in the complex political environment (Staszowski et al. 2013). It is a mutual learning process, in which, as designers, we need to understand and navigate within the hierarchies and bureaucracies of the political system, acting to embed a design mentality into the mechanisms of government, while designing Service Master Planning as a process in which political agency is actually exercised, not only by policy-makers but by all actors involved.

8.3 Service Master Planning as infrastructuring, commoning and policy-making process

At the beginning of this chapter, we argued that Service Master Plan and Service Master Planning are parts of the same concept, in which the former is the 'product' of the latter, the 'process'. Here, we wish to reflect on its procedural aspect, making a parallel with other types of processes we mentioned as relevant to the goal of designing urban commons. Hence, Service Master Planning can be viewed as:

- a kind of *infrastructuring*
- an activity of *commoning*
- a *policy-making* process.

Infrastructuring

The concept of infrastructuring was originally developed by Star and Ruhleder in 'Steps Toward an Ecology of Infrastructure: Design and Access for Large

Information Spaces' (1997), and later in 'How to Infrastructure' (Star and Bowker 2002). Particularly in this last work the authors highlighted the processual dimension of infrastructuring, emphasising the 'doing' aspect, i.e., the activity to infrastructure a set of resources and diverse actors in a specific context and timeframe. This idea was later implemented in the field of participatory design by Ehn (2008: 96), who argued that "…infrastructuring is a socio-material public thing, it is relational and becomes infrastructure in relation to design-games at project time and (multiple potentially conflicting) design-games in use". In the same line of thought, Björgvinsson et al. (2010) described infrastructuring as an ongoing alignment between contexts, while Hillgren et al. (2016) saw it as a continuous process of building relations with diverse actors to support social innovation. Seravalli and Eriksen (2017) defined infrastructuring as the distributed practice that arises in the interaction of diverse actors engaged in the design of complex systems, which goes on even after a project is completed.

We think that Service Master Planning is a form of infrastructuring, because both processes may be viewed as encounters between individuals, communities and infrastructures and, above all, because they share the same objective: building relationships with stakeholders, enabling them to act and develop networks, from which opportunities may arise (Meroni 2019). Thus, Service Master Planning can be seen as a continuous process of alignment of conflicting interests: this is clearly necessary because contexts and practices experience many concomitant changes, especially in the field of urban commons.

'Infrastructuring as Service Master Planning' is a process that goes beyond the mere design phase, and covers other stages from development to implementation and negotiations, which is similar to what is defined as commoning.

Commoning

Linebaugh (2009) used the expression 'commoning' as a verb instead of commons as a noun to convey the idea of a process that requires participation, takes place in a specific local space, and is continuous in time.

In the introduction to the anthology *Patterns of Commoning*, Bollier and Helfrich (2015) propose an idea of commoning as a living process, as an integral feature of the human condition, as a continuous social activity that never repeats in exactly the same way. They argue that commons are not things or goods, but an organic fabric of social structures and processes. Hence, they warned against paying undue attention to only physical resources: it is better to identify a joint action to create and manage commons. The emphasis is rather on 'how' we can deal with a certain resource and how this resource may have an influence on governance structures. So, the focus is on interpersonal and human/nature relationships: "human beings show an irrepressible impulse to work together to create, maintain and protect those relationships and things that are dear to them" (Bollier and Helfrich 2015). Which is why they argued that a commons can endure only if it can cultivate and preserve this deeper level of 'commoning'; because it is what makes a commons long-lasting, adaptable and resilient.

Following this line of thought, commoning may be interpreted as a form of participative and active citizenship, especially when it comes to urban commons. Policy-makers and design experts can try to boost and support this participative path of designing and building commons, but, above all, commoners must mainly do this work themselves, although not necessarily alone or without support (Bollier and Helfrich 2015). Foster and Iaione (2016) pointed out that the process of commoning needs someone who becomes the 'enabler' and deals with negotiations and collaboration among participants: a certain degree of facilitation is definitely required because commoning is about aligning divergent interests.

We think that Service Master Planning corresponds to this 'pattern' of commoning, in which facilitation is exerted by applying design methods and tools to allow multiple participants having different voices to collaborate, applying an adaptive and iterative design approach. As Bollier and Helfrich (2015) explained, commoning can have different patterns and Service Master Planning is just one of many: it is always necessary to not reduce commoning to a mere theoretical framework disconnected from everyday practices, since each process has its own uniqueness and application in a local space and specific timeframe.

Policy-making

A number of scholars have focused attention on the connections between design and policy-making (Mortati 2019; Bailey and Lloyd 2017; Bason 2014, Junginger 2013; 2014; Rein and Schön 1977; Simon 1969), suggesting that policy-making can be reframed as a design activity. Here we wish more specifically to build upon the work of Junginger (2014) who argues that design is a means of inquiry, envisioning and developing new possibilities for better policies, highlighting the need of equipping policy-makers and public managers with the full range of design tools and methods. She identifies four different areas of intervention of design in policy-making, in which the first two are more established, while the other two are emerging:

- communicating existing policies: disseminating to influence the success of a policy;
- implementing policies: designing product and services making policies actually happen;
- informing new and existing policies: using insights gained during the development of products and services to adjust ongoing policies or build new ones;
- envisioning future policies: adopting a 'complete' design-thinking practice that starts with identifying a policy problem and continues in all the phases of creation and development of products and services for policy implementation.

We think that Service Master Planning is an activity of policy-making consistent with this last area: it is the co-design of a Service Master Plan from the identification of an issue until the design of specific services, in which policy-makers collaborate with design experts in most of the phases.

Yet, above all, Service Master Planning *also* includes activities of envisioning policies, which opens a discourse with the scientific community. In fact, according

to the policy cycle proposed by Howlett and Ramesh (2003), design is not foreseen in the early stages (identification of the policy need, clarification and formulation of the policy), but is a part of policy implementation. This is what Junginger highlights in her work, and was in a way anticipated by Simon (1969) and by Rein and Schön (1977): "yet, design is denied the ability to envision future policies when it is only slotted into the policy design process as an isolated, in-itself closed activity, a fragment or part of policy implementation" (Junginger 2013: 5).

Similarly, we claim that policy-making might be reframed as a design practice that goes beyond merely a problem-solving activity but one that also embraces envisioning and sense-making. Thus, Service Master Planning can be viewed as a collaborative policy-making process, in which co-creation and co-design are valuable in all stages, and, at the same time, it is an actual political process that allows the emergence of different voices within a structured path.

Hopefully, this may contribute to lead to what Bason and Austin (2021) called a 'human-centred public governance' that: emphasises multi-stakeholder, bottom-up and highly differentiated processes compared to traditional governance models; places more emphasis on future making; and adopts a more radical perspective to achieve public outcomes that starts with the experiences of societal actors.

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Chapter 9. The Service Master Plan

Abstract This chapter describes in detail the product of the Service Master Planning process, that is the Service Master Plan (SMP). It is a document that consists of 3 sections – 'Scenarios', 'Specifications' and 'Recommendations' - each articulated in different parts, both textual and visual. The aim of the SMP is to provide a basis for the implementation of place-making projects addressing urban commons. The chapter also discusses the 5 features that characterise an SMP, which are: scenario-driven, mission-oriented, steering, comprehensive, brief, and visual. It finally presents an example of a SMP prepared for the Rival(u)ta Rivalta project and discusses some preliminary outcomes of its application.

Keywords service design, master plan, place-making, scenario, implementation, prototyping.

9.1 The Service Master Plan as a driver for action

The Service Master Plan (SMP from now on) is the result of the Service Master Planning process: it is the product of the collaborative design effort of the Design Plan methodology, including Development phase. It results from the macro-activities of understanding and designing, and it is generated by several design and policy decisions taken with and by the main stakeholders, considering inputs from a community. As such, it can be seen as a pre-prototype of a project to then be implemented through prototyping, assessing and modelling.

As discussed, a master plan is a planning document that provides a conceptual layout to guide the future growth and development of an area, and it can consist of a short report or multiple volumes. Following Kelly (2010), it has to include all the land area subject to the planning jurisdiction; all subject matter related to the physical development of the community and the physical aspects of plans related to economic developments; while considering a time horizon of about twenty years. Being a tool to plan for a community, a master plan is built around a collective set of goals or a common vision. This may come from alternative approaches, which can be goal-driven (establishing goals in a participatory way for the community that guide the planning); trend-driven (projecting current population and land-use trends into the future); opportunity-driven (assessing the future based on opportunities and constraints); issue-driven (identifying in a participatory way the critical issues of a community and focusing on them); and, finally, vision-driven (defining through a strong leadership an overarching goal that controls the process).

We suggest that the SMP is a 'scenario-driven' instrument. Scenarios are stories about the future, by which, like Ogilvy (2002), we mean based on a relational worldview: a paradigm that shifts the focus from things and substances to relationships and structures. Relationships between entities help to recognise,

understand and accept the differences between them, without excluding, but instead, facilitating the focus on common causes and the formation of a collective identity as members of a community of place, purpose or project. Projects, in fact, may become common causes despite the diversity of the actors involved and their interests: these may come together for a common goal, with very different motivations. In a recent article, Fassi and Manzini (2021) speak about project-based communities as heterogeneous groups united around and by a project, which is a concrete action aiming to produce a result. They become a community thanks to these activities and their collaborative nature. In the presence of an 'agent' who, in a given space, can prompt action and help connect people around causes, various project-based communities can flourish, act, and ultimately develop a sense of collective identity, which can also be recognised from the outside. Recent practices and cases (Selloni 2017; Mazzucato 2019; Meroni 2019; Fassi and Manzini 2021) show that this 'agent' can be a public administration, a university lab, a civil organisation, a local business network, a citizen association, a creative community: entities with different natures that, for different purposes and with different motivations, ignite actions that spread out and move from top-down or bottom-up.

We advocate that the SMP can be a top-down way to prompt and steer this action. Even more, it aspires to be a plot that helps coordinate and integrate the initiatives according to a policy strategy, manifested through scenarios. Services are relational artefacts and, as discussed in Chapter 3, the service logic is a paradigm through which innovation occurs in all fields. A co-created scenario, built around values recognised by a local community and around the interactions that may qualify the relationship of the local community with the urban commons, can thus be the plot that drives the writing of a meaningful collective story of a place. The SMP and the process it results from are convenient tools to design the future of a place when it comes to considering the different and often conflicting interests of a community. Scenarios ought to be collective narratives: in whatever context and field they are used, they are co-created, conceptual constructs that bring about co-production of the activities that will then take place and co-manage governance. They must be designed and designated to be actionable and lead to implementation: in this way, scenarios can act as mechanisms to implement a truly community-centred design approach, from conception to execution, where divergent interests can discuss around different visions in which elements consistent with the perspectives of different stakeholders are present.

Following Ogilvy, the test of scenarios is not whether they accurately predict the future, but whether they contribute to making better decisions as a result of considering those possible scenarios. In fact, ambiguity lies at the very heart of scenario-planning and a scenario-driven plan must find a comfortable stance with the coexistence of alternatives and the flexibility of thinking.

Scenarios are stories collectively created for igniting strategic conversations among the members of a community. Accordingly, an SMP is a strategic document that describes some alternatives of what might happen in a given place and time in

terms of services, to facilitate public administrations, stakeholders, civic organisations and citizens in populating a place with activities consistent with a shared strategy. It has to facilitate experimentation, transformation, and even random modification, so as to bring about evolutionary learning for the whole ecosystem. An SMP thus comprises more than one scenario, each one narrated as a stated description of the characteristics of a place and the services available there, in some particular future time. Each one is also completed by possible commoning strategies (that is, management systems) and trajectories of how to get there, which might be expressed as policy recommendations. The value of a set of scenarios rather than a single-point forecast is the robustness of the decisions it may drive: following again Ogilvy, we can understand that imaging strategies for a range of futures rather than one, allows us to "see whether there are some options that are robust across the range of scenarios. In the end what you are after is a strategy for all seasons". (Ogilvy 2002: 77). Moreover, this multiplicity of possibilities allows very different groups with very different interests to be reflected in the configuration and possible conflicts to emerge through discussion. This may be the most effective way to ultimately accommodate many viewpoints, in an effort to achieve an outcome. In addition, multiplicity allows for multiple interpretations for the spatial layout of an area, so that the creativity of the spatial designers is also accommodated in the process. As a result, a place is presumed to increase its status and perception of public good, its shared resource stewardship and governance, and ultimately the features that make it an urban commons.

Interestingly, an approach to innovation that helps understand relationships, stimulates projects, and sets goals though visions, resonates with the mission-oriented programme of the European Commission. It is, in fact, presented as "a way to 'structure' conflicting policy goals by specifying the end result based on criteria and characteristics, not the solution and allow for plenty of space for experimentation". (Mazzucato 2019: 16). In fact, in the strategy of the European Commission, missions should be broad enough to engage the public and attract cross-sectoral investments without prescribing how to achieve a result but setting the direction for a solution. In other words, they have to stimulate the development of a range of different solutions to achieve the objective. In the same way, the SMP is intended as an instrument to activate conversations between the various social parties and stakeholders about how to produce and co-manage urban commons according to defined strategies. Being a comprehensive plan of the services for an area, it aims at orienting and inspiring not only the activities that will take place in the public space, but also those in the private space, thus fostering a better relationship with and predisposition to the infrastructures. In other words, it has to nurture out-of-the-box thinking, bottom-up experimentation, and multi-stakeholder collaboration. Not surprisingly, a massive and multi-stakeholder co-design process is considered a way of giving societal ownership of the missions' goals and objectives, ensuring that they have longevity beyond the government's, and to avoid their seizure by vested interests or any specific group (Mazzucato 2018).

9.2 The Service Master Plan towards implementation

The concept of urban commons at the core of this book refers to an ecosystem of tangible and intangible resources that integrates actors connected by a set of rules, meanings, practices, interests, values, and symbols. These shared institutional arrangements have a key role in coordinating and governing such actors, and facilitating value co-creation and reciprocal service exchange. Institutional arrangements do not come easily and need to be infrastructured through participatory practices by those who govern the public goods.

Participation and collective creativity are, in fact, distinctive elements not only of the genesis of an SMP, i.e., the Service Master Planning process, but also of the subsequent implementation phase, i.e., its prototyping as co-production and modelling as co-management. We suggest the SMP to be the strategic document that frames communing strategies and therefore several tactical initiatives on identified urban commons. The proof of concept of a valid SMP is its capacity to inspire, on the one hand, the spatial design of the area and to raise, on the other, interest in the community for starting up initiatives and thus becoming part of the co-production of the services that are envisioned. This includes the attraction of private sector investments.

Therefore, an SMP could lead to several ways of moving from scenarios to implementation, considering both the design of the physical space and the identification of the actors providing the services that will populate the physical space. The former requires the integration of the work of architectural, urban or landscape designers, the latter, the facilitation of stakeholder consultations and calls for action to find actors to produce the services. This book is not the place to discuss in detail the different possible procedures for these implementation steps; yet, being aware of their requirements and processes is indispensable to defining the structure of an SMP, which would aspire to become its basis.

The first step is the integration of the work of spatial designers, who, by interpreting the SMP and other specific design briefs prepared by the client (the public or private entity that owns the area), develop a spatial proposal which ‘materialises’ the scenarios into a specific layout. Their design process entails taking decisions, embracing certain options over others, and proposing solutions with a degree of freedom from the received project brief and the SMP. As with service design, spatial design can benefit from considering different scenarios as starting points: in fact, the spatial strategy that can ultimately be delivered may be more robust and flexible because it results from the consideration of different options.

It is better to have already incorporated the results of the integration of the work of spatial designers into the final document of the SMP, as for the case of the Rivalta complex, where the convergence took place in the pre-prototyping phase. Yet, we

assume that this condition would not be always possible, and therefore the SMP can sometimes be preparatory to the development of the spatial design by the spatial designer.

In the Rivalta case study, the selection of spatial designers (more precisely, a multi-disciplinary team of architects, landscape designers, engineers, and urban experts) was done though an international call for projects, organised in two steps. A first draft of the SMP was added to the design brief at the second step of the selection process, once an initial set of 5 ideas (and design teams) were identified. Thus, the SMP served to specify the public administration's vision for the place, integrating the inputs from bottom-up. This choice was due to time constraints and specific circumstances. In a more ideal process, a draft of the SMP can be part of the original brief for the spatial design, disseminated through a public call for proposals. In the spring of 2021, an article in a local online newspaper (Next Stop Reggio 2021) and accurately describes the landscape project and its implementation in terms of different services and activities, which is scheduled for completion in 2023.

The second step is the identification and selection of the actors designing and supplying the specific services and activities. If the area of the plan is owned by a public administration, in the Italian context, the possible options to proceed with the phase of implementation could be:

_ set 'collaboration agreements' ('patti di collaborazione') between one or more active citizens and a public body, in which they define the terms of collaboration for the care of tangible and intangible urban commons. An agreement identifies the common good, the objectives of the collaboration, the general interest to be protected, the skills, the competences, the resources of the subscribers, the duration of the agreements, and the responsibilities (Labsus, on-line material). A collaboration agreement is a binding yet informal instrument for governing commons: it can involve informal groups, committees, inhabitants of a neighbourhood united by the interest in promoting the care of a specific common good.

_ set an initial call for 'expression of interest' ('manifestazione di interesse') and a subsequent public call that will get the concession of the good to economic operators (individual people, legal entities, temporary associations of enterprises, and many more) that can offer the delivery of a service. This mechanism requires operators to submit a proposal that follows the project brief, and often to join forces and share expertise across different types of entities.

Each country and city have their own procedures, which are comparable with those just mentioned. However, when it comes to areas owned by private entities, the procedure is less constrained by the legal requirements of a public good, yet there are many similarities about the need to engage various and multiple stakeholders.

The implementation steps just described requires the SMP to be a clear and actionable document, as described in the following paragraphs and specifically exemplified in Section 9.5 ‘An example of a Service Master Plan’.

9.3 The Service Master Plan as a document

The SMP is a document consisting of 3 main sections:
- Scenarios
- Specifications
- Recommendations

9.3.1 Scenarios

This is the section of the SMP that describes the scenarios (more than one) that inform the plan, designed according to the visions generated throughout the Service Master Planning process. Presented as ‘integrated spatial & service scenarios’, they are narrative and visual descriptions of:
- the values that inspire the scenarios and their specific and concrete implications for the area of the plan;
- the value proposition that the place makes to the community, in terms of high-level functions and objectives, in the time set for the project;
- the signature features of each scenario, which qualifies and distinguishes each of them in terms of identity and recognisability. Features are connected to signature spatial attributes or ‘design concentrations’ and landmarks;
- the signature activities and services corresponding to the features of each scenario, broadly linked to the spatial attributes;
- the main actors that operate in the area, described in a non-specific way, and the main beneficiaries, visitors, city users or inhabitants.

It is suggested that the full description of each scenario should be in the form of a short document, including both a written narrative and visualisations.

Written narrative:
- Title and subtitle
- Short abstract (70/80 words) and key words
- Rationale of the scenario: motivations and values (80-100 words)
- Extended description of the scenario (around 500 words)
- List of signature features (3 to 5) and of the corresponding main activities/services described in short sentences
- High-level description of the actors: stakeholders, operators and beneficiaries (80-100 words)

Visualisations:

- A key image illustrating the mood, ambience and distinctive spatial characters that qualify the place. This image is intended to be the main visual suggestion of each scenario: it is not an accurate 3D rendering, but an inspiring image-composite instead, purposefully created by juxtaposing different visual inputs that, when combined, create the visual concept of the scenario. The image must be created with the intention to stimulate imagination and help the community to think about the future of the place. It must be characterised enough to suggest a possible spatial configuration, yet open enough to steer without constraining the spatial designers. It leverages the potential of the visual language to also appeal to the creativity of urban and spatial designers. It is helpful for this key image to be accompanied by notes that help connect the features/activities of the scenario with its visual concept.
- Key frames can be also produced to describe specific areas and details of the place in order to keep a connection with the broader scenario.

9.3.2 Specifications

This is the section of the plan that focuses on describing the scenarios in terms of specific services and activities, providing all their details and connecting them to the attributes of the future spatial layout. Each scenario has its own specifications.

List of services:

Services are organised and presented according to the Nice Classification 2022, and therefore grouped into the following 11 classes:

- 35. Advertising; business management, organisation and administration; office functions.
- 36. Financial, monetary and banking services; insurance services; real estate affairs.
- 37. Construction services; installation and repair services; mining extraction, oil and gas drilling.
- 38. Telecommunications services.
- 39. Transport; packaging and storage of goods; travel arrangement.
- 40. Treatment of materials; recycling of waste and trash; air purification and treatment of water; printing services; food and drink preservation.
- 41. Education; providing of training; entertainment; sporting and cultural activities.
- 42. Scientific and technological services and related research and design; industrial analysis, industrial research and industrial design services; quality control and authentication services; design and development of computer hardware and software.
- 43. Services for providing food and drink; temporary accommodation.

- 44. Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, aquaculture, horticulture and forestry services.
- 45. Legal services; security services for the physical protection of tangible property and individuals; personal and social services rendered by others to meet the needs of individuals.

Each class (defined through an explanatory note of the World Intellectual Property Organization – WIPO) defines a macro-area of service: on this basis, the SMP suggests a specific vision for each relevant class and a short description of each service.

The vision describes the way in which the values that inspire the scenario are interpreted and turned into a specific value proposition referred to a specific class of services. Then, it presents areas of opportunities for future services and hypothesised expected impacts (for economy and market, public space, natural and social capital, and time management); and requirements (for space, infrastructures, resources, technologies, touch points, rules and regulations).

Services are categorised as 'primary' or 'secondary' offerings: a distinction that is established on the basis of the attributed importance in the overall service eco-system and of the priority of their implementation and development. They are then described as integrated in the draft spatial layout: a key issue of this output is the adoption of the perspective of a spatial designer, which turns into the use of the urban planning and architectural language, and into the proper identification of the 'design concentrations' that are relevant and distinctive for the spatial project. Services, in fact, are described starting from the logic of these spatial concentrations.

The accuracy and granularity of description of these classes of services and of the specific services may vary from case to case, according to the level of detail agreed with the project developer. The text for each class may range from 100 to 1,000 words or more, while each service may be drafted in a few lines.

Situated service offering map

The situated service offering map is a visual representation that links the services (primary and secondary offerings) to the draft spatial layout, and in particular, to the site- and floorplan of the space or to its draft volumetric projections.

In the situated service offering map, services can also be briefly presented with their spatial requirements, with particular regard to the nature of the space as public, private or semi-private, and indoor or outdoor. As for the previous list, it is paramount to refer to the design concentrations and attributes that qualify, or may qualify, the spatial design.

9.3.3 Recommendations

The final section of the SMP presents a set of recommendations drawn from the previous specifications and organised as commoning strategies, opportunities, and criticisms. They are intended to orient future policy-making and further service and spatial design choices.

The recommendations are common to the entire set of scenarios in an SMP: therefore, the effort in formulating them lies primarily in identifying common issues.

Commoning strategies

Commoning strategies are a set of recommendations that help to consider the scenarios of the SMP from the view of the stakeholders' engagement, including the capacity to stimulate bottom-up initiatives, such as tactical urbanism, and social innovation and activism for the co-production of services and initiatives. Thus, recommendations are intended to argue in favour of a particular course of action, e.g., to adopt a particular approach, without suggesting a specific solution but a possible direction instead. They move from opportunities that have been identified during the Master Planning Process.

Recommendations, are thought to broaden the discourse, suggesting policy goals and end results based on criteria and characteristics, thus allowing for plenty of space for experimentation.

Recommendations have to be summarised in short and clear statements (bullet point style) and can be expressed with action verbs that stimulate the reader to make a decision. They should be limited to 5 to 10 points.

Opportunities & criticisms

Opportunities & citicisms are a set of notes that come from the critical assessment of inputs that emerged from the field work (interviews, conversations, facts and more) and from the reflection on the Service Master Planning process.

They may highlight diverse voices and consider both mainstream and minority positions, highlighting possible conflicts and even expressing conflicting positions. They may consist of quotes from interviews, conversations, or other materials, and reflections from the researchers developing the SMP. They provide, at the same time, motivations for the directions of the SMP's scenarios and warnings about problematic or controversial issues.

9.3.4 The Service Master Plan at a glance

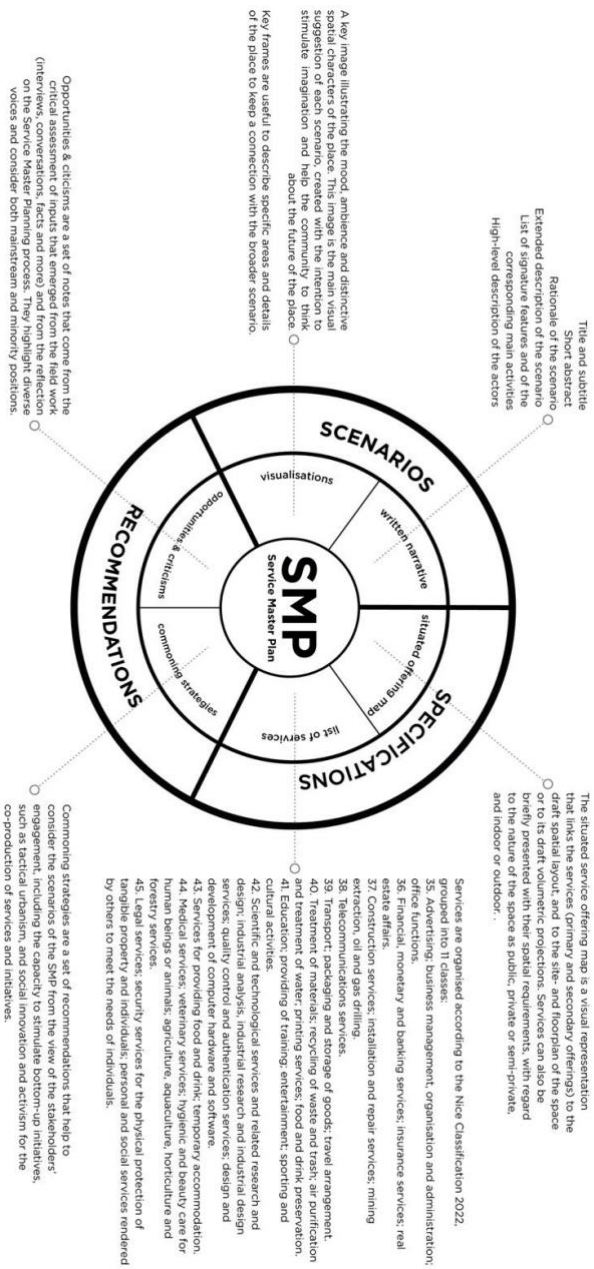

Fig. 9.1 Visual summary of the Service Master Plan

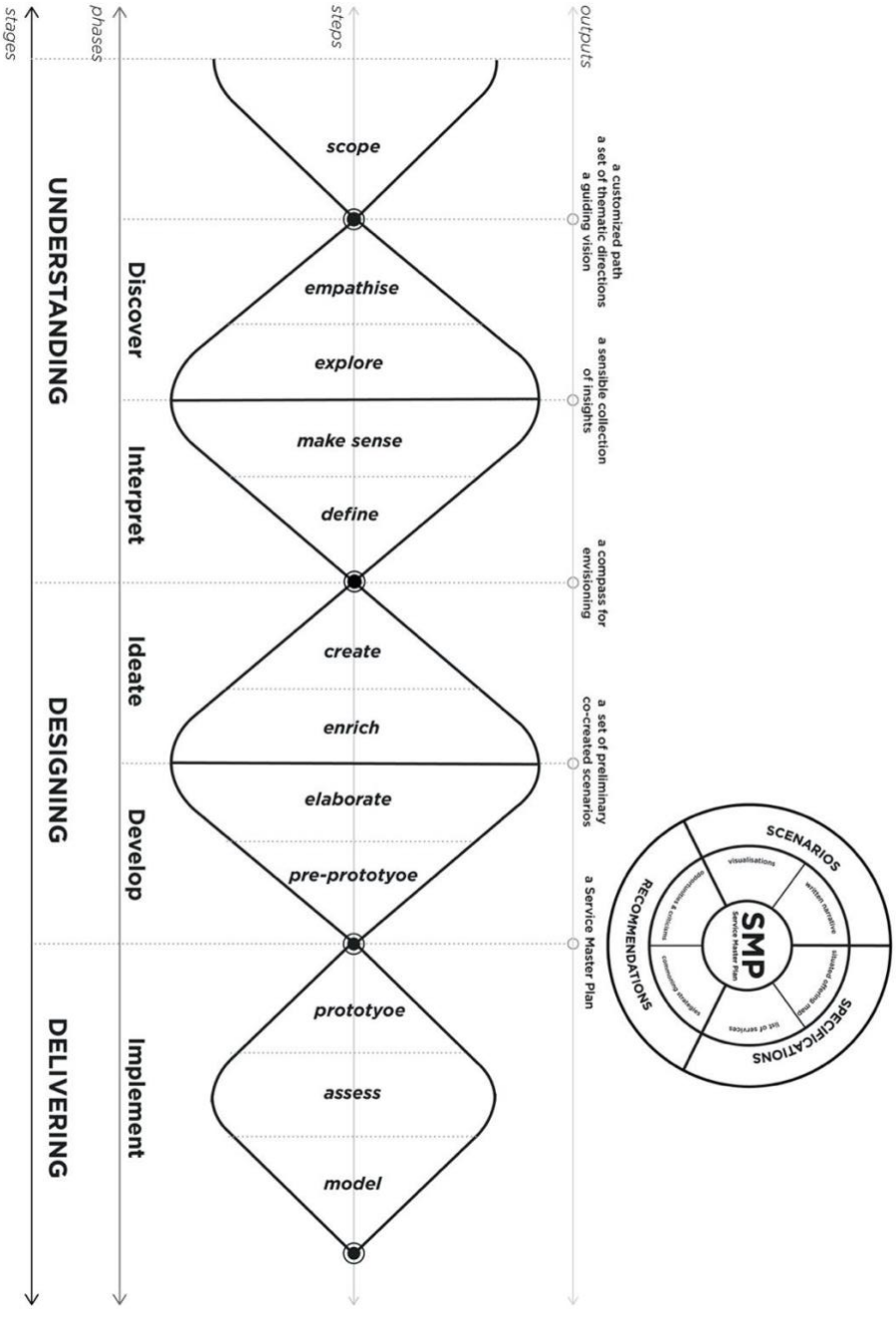

Fig. 9.2 The SMP as an output of the Service Master Planning process

9.4 Features of the Service Master Plan

An SMP, an instrument to steer the future service and space development of an area, is a document that can be integrated with traditional urban master plans, with specific urban designs, and with the innovation policies of a city or a region.
In summary, it is:

Scenario-driven: an SMP is a strategic document that describes alternative, yet consistent, scenarios of what might happen in a given place and time in terms of services. It facilitates public administrations, stakeholders, civic organisations and citizens to come together to co-design and then co-produce activities consistent with a shared strategy. It comprises more than one scenario, rather than a single-point forecast, to increase the robustness of the decisions it directs, because they entail options that are valid across the whole range of scenarios. Multiplicity allows also reflect the interests of different groups and anticipate possible conflicts.

Mission-oriented: an SMP, similar to the mission-oriented strategy of the European Commission, stimulates the development of a range of different solutions to achieve an objective. It does so by activating creative conversations between public administrations, social parties and stakeholders on how to co-produce and co-manage urban commons according to defined strategies.

Steering: an SMP is a steering instrument to stimulate commoning strategies, which are behaviours and initiatives through which people think and make the future, and take collective action towards the *commons*. Hence, an SMP is conceived as a top-down, yet open and thought-provoking, tool to facilitate stakeholder engagement and stimulate bottom-up initiatives. It recommends a particular course of action suggesting a possible direction, thus allowing for plenty of space for experimentation. It can be seen as a top-down strategy to steer bottom-up tactical initiatives.

Comprehensive: an SMP, unlike the service plans of the city's urban plans, does not only consider the public interest services and their implications in terms of spatial and infrastructure planning, but the entire future service landscape in a given area and its possible impacts and requirements. It is a tool that may help to envision future activities and service enterprises of any kind and in any field, beside the conventional "services" contemplated in urban planning.

Brief and visual: an SMP is a concise, actionable and effective document, thought to be straightforward and oriented to implementation. Visual narratives and schemes are its indispensable components, as it has to inspire people to be creative by leveraging different ways of thinking and creative aptitudes.

9.5 An example of a Service Master Plan

As described in Chapter 9, the SMP is a document consisting of 3 main parts:

- Scenarios
- Specifications
- Recommendations

9.5.1 Scenarios

The Service Master Plan for the Park of Rivalta Complex would consist of 2 integrated spatial & service scenarios, 'The Well-being Park' and 'The Biosphere Park'. However, for the sake of brevity, only the second is described here in full.

The Well-being Park

A place for contemplation and for physical and mental activity

The Wellness Park is a place of peace and good living, where you can spend time doing outdoor activities and finding harmony with yourself and others, surrounded by natural beauty. The provision of equipment, infrastructure and initiatives to stay and do together, and for physical and mental well-being, is therefore characteristic of the whole space and makes it an element of excellence in the integration of the natural and agricultural dimensions.

Fig. 9.3 The Well-being Park scenario and its main services

The Biosphere Park

A place of dynamic balance between components of the Earth.

The Biosphere Park is a place of immersion in the biodiversity and richness of a natural ecosystem, where nature is sovereign and integrates human activities.

It is an open space where local flora and fauna are reintroduced in the light of a sustainable and experimental agricultural and landscape culture: each activity is, in fact, an integral part of a model of sustainability and circularity, which is aesthetically combined with the historic traces of the Ducal complex.

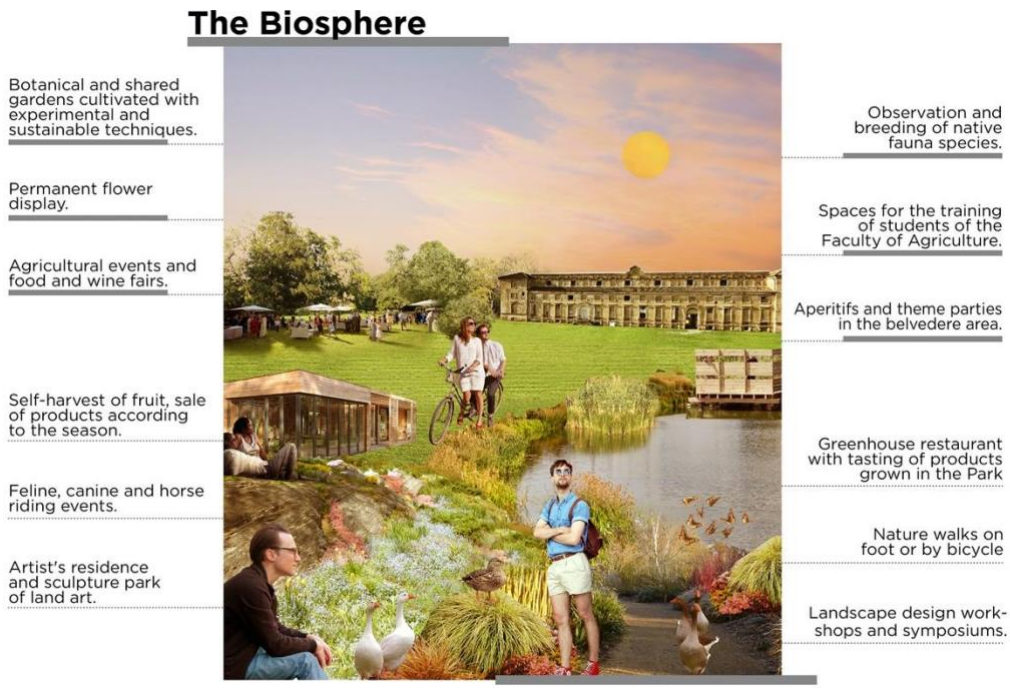

Fig. 9.4 The Biosphere scenario and its main services

[Additional key frames (images of details) may be put here]

Rationale of the scenario: motivations and values

The scenario of The Biosphere Park materialises the aspiration of the community to celebrate sustainability and inclusion as distinctive features of the territorial culture and as the heritage of this land, historically devoted to agriculture. This

strategic direction, in fact, does not neglect the historical past of the complex, but instead celebrates its integration into the natural ecosystem, becoming an example of sustainable landscape design and circularity.

Extended Description

The Biosphere Park is a place for immersion in the biodiversity and richness of a natural ecosystem, where nature is sovereign and integrates human activities.

Visitors are immersed in a natural setting that characterises the aesthetics and fruition of the park, making it unique because it is designed as a natural ecosystem, characterised by diversity, stability and flexibility. The result is a balanced and aesthetic environment: an open space where the local flora and fauna are reintroduced in the light of a sustainable and experimental agricultural and landscape culture, and where every activity is part of a model of sustainability and circularity.

The various indigenous species, vegetation, agricultural species, and forgotten fruits and flowers are studied, reintroduced and rotated following an overall direction that also governs them according to the aesthetic design of the landscape, the health of the soil, and efficiency in maintenance. In this way, the vegetation also tells the story of the place, offering a collection of original and rare varieties.

The same applies to animal species, for which the most suitable habitat is provided. The idea is that the environment is self-regulating and thus triggers the circularity typical of nature's processes that preserve biological diversity. The agro-ecological and experimental approach becomes distinctive through many activities that involve visitors of all ages in practices and initiatives related to gardening and horticulture with a strong experiential value. Similarly, there are courses and activities for a professional audience, which is offered the possibility of lodging on site.

There are also productive and popular aspects: in the recovery of essences and fruit varieties there is the idea of giving space to cultivation, harvesting and activities complementary to the simple enjoyment of the environment, and numerous training events and exhibitions dedicated to flora and fauna. Activities such as gathering of fruit, participation in synergistic gardening and horticulture, activities in greenhouses and winter gardens, and the purchase of Park products are organised and offered to visitors throughout the seasons. Therefore, the Park aims to activate 'natural production' and present itself as an experiment in sustainability.

Land-art installations also contribute to this scenario.

The ponds, which are home to aquatic species and plants for phyto-treatment, offer visitors the possibility of various summer and winter recreations.

The belvedere and adjoining lawn are equipped as rest areas with seating and a cafeteria, and catering services for parties and ceremonies. The pergolas are equipped to host parties and social events, such as receptions, communal tables, and private and public celebrations. The courtyard area, on the other hand, hosts

collective and popular events, such as markets, shows and performances; important exhibitions of flora and fauna are set up at the parterre.

Wildlife observation and exploration points are dotted throughout the park, creating routes along which visitors can be accompanied by guides.

Finally, at the restaurant (integrated into small greenhouses), the Park serves some of the agricultural products grown there, which can also be purchased at a sales point.

Signature features

The Biosphere Park is the place *par excellence* for immersion and integration in nature.

- On a national scale, the scenario is part of the Estense system: the Park aims to be an “exemplum” of a contemporary park, understood as a "biosphere", i.e., a place that allows the development of life in its various forms. It therefore aspires to be an example of sustainability. Landscape, nature, and landscape-design enthusiasts in particular see it as an original and unusual destination for the Italian landscape, characterised by native plant and animal species. The multi-sensory immersion experience makes a visit to the park unique. The use of water, the essences of the garden, the studied presence of elements of biodiversity, and the works of land art create an exceptional background to the activities taking place.
- In line with this vocation, the Park hosts various open-air activities, including observing fauna and flora, experimenting with natural gardening and horticulture, and practising numerous physical activities. It also hosts national and international fairs and events related to these themes, all of which are of a very high quality, attracting amateurs and professionals alike.
- On a city-wide scale, the Park is attractive because it represents the park that was missing in Reggio, a reference point where nature is on the doorstep and can be reached by bicycle. Connected to the eighteenth-century Promenade, it represents its most naturalistic section, precisely because it allows complete environmental immersion. The relationship between the park and the city thus becomes permeable as a place of respite and natural refuge for the people of Reggio Emilia. Moreover, it is designed so that everyone can move freely, and in a natural setting.

High-level description of the actors

The project targets both citizens of Reggio Emilia and national and international visitors, attracted by the peculiar features of the park, because it is intended to become a benchmark in its genre.

Paramount is its accessibility for all, in terms of the absence of any barrier, be it spatial, economic, social or cultural.

Equally important is the presence of associations, civil organisations and all kinds of local stakeholders in the management of the complex to increase participation, belonging and social innovation.

9.5.2 Specifications

List of services for the scenario 'The Biosphere Park'

Class 35. Advertising; business management, organisation and administration; office functions.

VISION: A place where commerce is functional to add value and provide market channels for local production, in particular agricultural production, including what comes from the Park itself.

Primary offering

- Palace. Some areas of the palace are dedicated to the management and sale of products grown in the Park (permanent offer).
- Perimeter Boulevard. Both the perimeter area and the courtyard are areas used by farmers markets and food and wine fairs dedicated to enhancing the Estes' heritage (temporary offer).

Secondary offering

- Central area/fields. The central area frequently hosts events for cats and dogs, as well as for commercial purposes (temporary offer).

Class 41: Education; provision of training; entertainment; sporting and cultural activities.

VISION: An exemplary sustainable biosphere, which is a park that allows the development of life in its various forms. A destination for lovers and scholars of sustainable landscape design, characterised by native plant and animal species, where they can find meeting opportunities, educational activities, and opportunities to develop skills and awareness about health, the environment and nature.

Primary offering

- Palace. Some areas of the palace are used for university agricultural classes. This facilitates students' direct access to the fields in the central area and the greenhouses adjacent to the building (permanent offer).
- Central area/fields. In the central area there are botanical gardens and shared vegetable gardens, which are cultivated using organic techniques and aimed at sustainability and minimising the human impact on natural processes. This area is also a testing ground for innovative sustainable farming techniques (permanent offer). From time to time, the park becomes the stage for important international flower shows (temporary offer).

- Pergolas. The pergolas are used for exhibitions and temporary displays on agricultural and natural themes (temporary offer).
- Parterre. There is a permanent flower exhibition in the parterre, which offers a different colour show depending on the season (permanent offer).

Secondary offering

- Palace. The palace is equipped with spaces for artistic work and training, particularly on the theme of land art (permanent offer).
- Central area/fields. A great deal of attention is also paid to the fauna living in the park: there are artificial nests throughout the area and a dedicated beekeeping area. The central area frequently hosts cat and dog shows, as well as horse riding events (temporary offer).
- Courtyard area. The palace is an exceptional location for the annual festival of lights. On this occasion and on summer evenings, the façade and courtyard area are enhanced by performances (temporary offer).
- Elm Rotunda. Light sports activities (temporary offer).

43. Services for the provision of food and drink; temporary accommodation.

VISION: A park that offers accommodation and hospitality for different visitors, from local inhabitants to international travellers, who are interested in exploring and enjoying natural ecosystems and cutting-edge landscape design. Food and drinks offered are made with traditional local produce and often come from what is cultivated and produced in the park.

Primary offering

- Belvedere/Plainside. The belvedere is a very atmospheric area with a 360° panorama, ideal for hosting aperitif events and themed parties (temporary offer).
- Circular pool and oval pool. Pools form an aquatic environment inhabited by native flora and fauna such as water lilies, fish, tadpoles, swans, frogs and phyto-purification plants. They are therefore a very attractive area for visitors who find rest areas where they can enjoy the coolness of the water and observe the species that live in it (permanent offer).

Secondary offering

- Palace. The palace has rooms for hosting artists who contribute to decorating the park with land art works. The rooms of the palace, beside housing permanent educational activities, can be rented for the organisation of workshops, laboratories or symposia (temporary offer).
- Central part/fields. The restaurant in the park is housed in a greenhouse and the menu features ingredients from the park's crops (permanent offer).

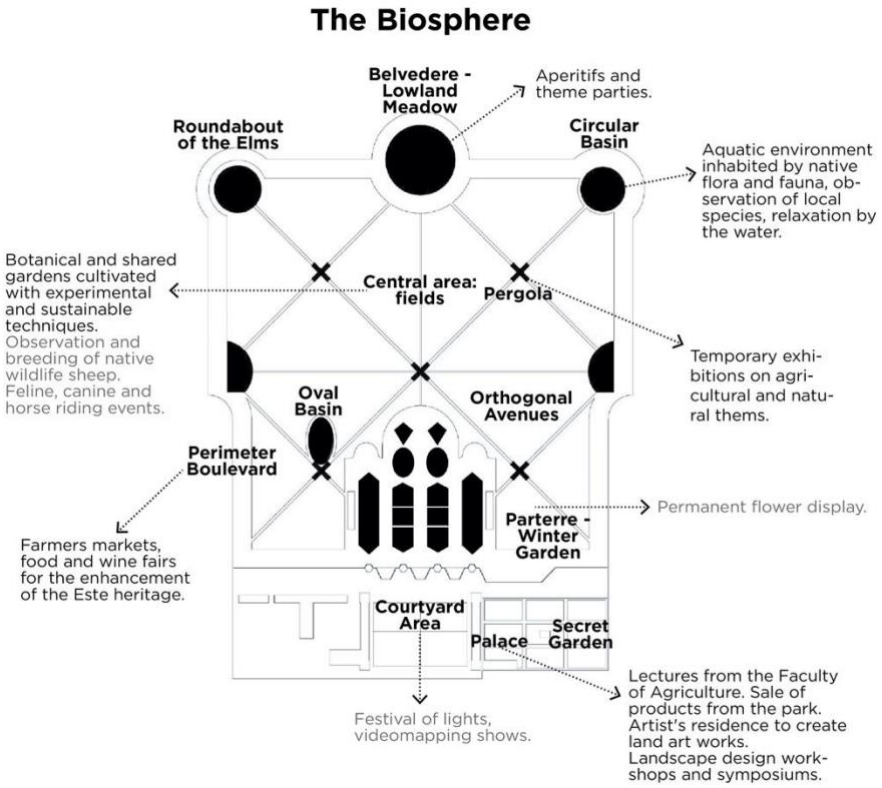

Fig. 9.5 Service offering map (Elaboration from the plan of © Openfabric)

9.5.3 Recommendations

Commoning strategies

- Situate environmental sustainability at the centre of the renewal strategy: the place must be an ecological system where the botanical species and the landscape design create a balanced habitat for humans and animal species. The park, thus, must be designed for the best integration within the local micro-climatic and environmental conditions, become a best practice of this kind, and offer activities to learn about ecology.

- Enable visitors to gather and stay together in the park, providing space, facilities and opportunities to regain physical and mental well-being. Provide accessibility for all, despite their social, economic and physical status. Ensure free entrance to as many as possible spaces and initiatives.

- Consider the historical heritage of the place, without being constrained by priorities of purely aesthetic solutions or literal reconstructions yet respecting its past and memory. Provide, accordingly, for activities and initiatives that can help visitors discover its history and evolution across the centuries.

- Explore directions for a flexible public-private collaboration in the management of the complex, where local stakeholders participate to conceive, organise and manage initiatives, taking part in opportunities and risks, gains and losses. Support initiatives of social innovation and foster the contribution of local associations and civil organisations.

Opportunities & criticisms

For the future it is necessary to maintain the ability to listen: it can only be an open and democratic place, for all. The park cannot be a private place serving one function of the building. Many functions and identities must be able to be integrated and coexist, to be open and not just private.
(Mayor of the city of Reggio Emilia)

There is an opportunity for a private-public management entity to bring together various aspects and find the conditions for the project to be sustainable over time. A bottom-up management model is needed: working together to make people feel involved.
(City Councilor of Reggio Emilia)

The area's companies providing energy could be activated through the corporate social responsibility branch, doing a project that studies technologies and sustainability to be applied in the park.
(Executive person of a craftmanship national association)

The inhabitants must be the first to be happy and proud. One can therefore imagine "managers of conviviality places" who also generate income and are thus self-financing: one can find allies who support the idea.
(Member of the local association formerly in charge of activities in the Rivalta complex)

Consider the relationship between local and global: today it is a local issue, but after the restoration it will be a national magnet like few others in Italy. It is important that it does not lose that relationship of belonging that the citizen feels in relation to the place. The project path needs a social innovation project, it cannot be just a top-down operation.
(Mayor of the city of Reggio Emilia)

The sustainability of the park cannot be the sole responsibility of the public administration. However, it is difficult to think of large projects that do not have a strong public presence and relevance, in which the public remains involved. Even if private presence is desired.

(Mayor of the city of Reggio Emilia)

Listening has always been fundamental: when people have arrived who have done things without listening, mistakes have always been made. The value of the association has been to bring together so many people with different interests and skills, who contribute on a voluntary basis, including to maintain the logo and the greenery.

(Member of the local association formerly in charge of activities in the Rivalta complex)

There is a difficulty in the relationship with the association that manages Rivalta, because there is little willingness to listen: "they say they have already done everything". A generational change is needed.

(Member of a local association)

Bringing everything to a non-existent and incorrect history could create a problem. Reggio has never been a ducal city, but a rural area, so the character of the people has the reality of peasants. It is therefore necessary to find a balance between purely cultural and aesthetic aspects and the practicality and usability of the place.

(Member of the local association formerly in charge of activities in the Rivalta complex)

The route to the place is now very busy and there is conflict with pedestrians. It would be necessary to widen it or differentiate it.

(Member of a local riding federation)

9.6 A few reflections on the application of Service Master Planning and the resulting Service Master Plan in the Rival(u)ta Rivalta project

The completion of the Rival(u)ta Rivalta project will take some years: the construction of the physical space of the park is expected in 2022-2023 and the definition the services that will be offered and of their management will follow a similar timeline.

However, some outcomes of the Service Master Planning can be already discussed with regard to the effectiveness of the process that brought about the activation of a dialogue with the stakeholders, the generation of service-based scenarios that informed the spatial design brief, and the integration with the spatial design project.

Considering the whole experimentation as the first step towards the design of new urban commons, it can be first assessed against its capacity to generate strategic dialogues and outputs (specific scenarios) that could integrate different interests, perspectives and resources in a mutual beneficiary exchange. The evidence of the above can be summarised in the following points:

- The variety of perspectives that emerged from the interviews conducted in the first phase of the process on the present situation, future opportunities and possible criticalities are good evidence of the openness of the approach adopted, which guided the participants in a reflection without imposing perspectives. In fact, the themes that emerged transcended or sometimes overlooked the inputs given by the interviewer to stimulate the conversation: themes such as 'food', 'hospitality', 'technology' or 'sociability' emerged, while 'work' or 'employment' were not considered relevant.
- The even bigger variety of visions generated during the workshops (one vision per participant, for a total of 42 and eventually grouped in 6 scenarios) came out easily, often in a positive flow of conversation with the other participants in the same session, alternating individual and collective thinking. We can assume this variety to be encouraged by the number and diversity of the activity cards provided for the co-creation: nevertheless, the theme and distinctiveness of the 6 scenarios is completely transversal to the proposed orientations and extremely rich inputs that neither came out from the previous interviews and conversations, nor were they provided by the designers.
- The criterion used to cluster the different visions in scenarios was the possibility to generate meaningful wholes. Each input represented an individual view and related interests, including the resources (competences, assets, skills, and many more) that each participant explicitly or implicitly wished to put in the future system. The work consisted in combining them together according to affinities and recognising the different directions that emerged. This process made it possible to design future service ecosystems with the possibility of being considered valuable by a variety of stakeholders and to increase the transparency of the process.
- The stakeholders and experts identified by the Municipality of Reggio Emilia and involved in the Service Master Planning process sometimes knew each other already, but most of the time did not: whatever their condition, the workshops were an opportunity, sometimes the first, for them to talk together with a purpose and to use creativity imaginatively about the future of that place. As such, we can assume that the co-design workshops were also opportunities to connect and initiate future interactions, so preparing the ground for a dialogue about the future co-management of the place.

Another way to assess the effectiveness of the whole experimentation is against the relevance and the 'dominance' of a service design perspective and orientation in the design of the space. This turns into an evaluation of how the scenarios influenced or even informed the spatial design proposal that resulted from the international spatial design competition. In fact, the preliminary 6 co-created scenarios, presented as a mix of temporary and permanent services and as requirements for the natural design and the built environment, became part of the design brief for the finalists of the competition. Looking at the material delivered by the team that won, we can find a systematic review and development of future activities to be implemented in the area, freely chosen from the proposed scenarios and organised by typologies and fields that are based on them. The same are described in their duration in time, extension and possible economic return for the future management and the public administration. The activities are also situated in the layout of the place and described in terms of occupation of space and requirements for dedicated infrastructures and arrangements. This makes the design unique and notable for its liveliness and dynamism and lets us deduce a good degree of permeability of the spatial design to the proposed scenarios.

The last step of the process, as discussed, will be the implementation of the Service Master Plan through a process of stakeholder engagement and of progressive identification and selection of organisations that will co-design, co-produce and co-manage the place with Reggio Emilia's Public Administration. Of course, we do not have evidence of the validity of the SMP for these future steps, yet its success will be assessed against the degree of creativity, variety and interconnectedness of the activities that will be initiated, and by the diversity of actors, including those new to the Rivalta landscape, that will mobilise around the new commons.

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Authors' notes

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