

DESIGN CULTURE(S)

Cumulus Conference Proceedings Roma 2021

Volume #2

ARTIFICIAL
LANGUAGES
LIFE
MAKING
NEW
MULTIPLICITY
PROXIMITY
RESILIENCE
REVOLUTION
THINKING

**Design Culture(s)
Cumulus Conference
Proceedings Roma 2021**

Volume #2

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Cumulus the Global Association
of Art and Design Education and Research

Rome 2021

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DESIGN CULTURE(S) | CUMULUS ROMA 2021
JUNE 08.09.10.11, SAPIENZA UNIVERSITY OF ROME

About the conference

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The theme

More than three years ago (it was 2018), when we presented our candidacy to host the Cumulus Conference in Sapienza, our first effort was to set up a Conference Theme. The duty was not simple since we wanted to avoid any naïve, fashionable or captivating topic. We were in search of a theme which is appropriate to the times, the context and moreover, to the Cumulus's community.

Our starting point was to consider what Cumulus meant and still means, not only for us, but within the worldwide design community. Looking back in the history of Cumulus, we found an interesting picture in its name: in fact, "cumulus" is the English name of a specific kind of clouds and comes from a Latin word that means "heap, pile, mass". Therefore, the word Cumulus is refereed, at the same time, to those big clouds that appear in the sky every time in different forms and always in constant change, as well as it is referred to a set of singular elements that make up a unit together. As a consequence, Cumulus efficiently describes the idea of a set of many singularities that meet, settle and become each time a new and different entity.

This picture helped us to set our goal: offering to such variegated, mutant, but nevertheless aggregated "cumulus", a conference theme where to recognize itself. This idea of big entity made of a huge number of singularities is connected to the idea of community, and then we had no doubt that this was the exact purpose of the founders of Cumulus when they decided its name.

Today the concept of community is increasingly complex, since it is crossing new social, technological, political and economic challenges and at the same time it is more global and multicultural than ever, more and more enriched by new hybrid languages and habits, due to the increasing flows of goods and people around the world. As a consequence, also a

Design Community, as Cumulus, is evolving as a wide-open field with many new practices and sometimes new principles.

In this regard, in order to figure out such complexity, we found a suitable answer in another word with Latin roots: the word "culture". Culture comes from the Latin word "colĕre" which means "cultivating the land to make grow" and, figuratively, also "taking care" of something, including knowledge, and therefore, "cultivation through education, improvement and refinement of the mind". This second meaning of "culture" is based on an insightful concept by the ancient Roman orator Cicero in his *Tusculanae Disputationes*: "cultura animi", which is the cultivation of the soul.

The resulting parallel between the culture of the land and the culture of the soul was fascinating and highly significant to us, since it is showing the challenge of growing something new, starting from the roots, from the soil, from the context and - as we know - depending on available soil, context and roots, we are growing different plants, obtaining different fruits and seeds, to plant again in a virtuous life-cycle. Thanks to this metaphor, we understood that diversity is a prime condition for the birth and the growth of culture, while it doesn't mean opposition but combination, arrangement and hybridization. Thanks to this metaphor, we got back to the initial concept of accumulation, and to the concept of Cumulus.

On another note, the Cambridge English Dictionary states that culture is also "the way of life, the customs and beliefs, of a particular group of people at a particular time". This could be an interesting stimulus but, when associating "Culture" with "Design", it was immediately clear that we cannot refer to one unique Culture, but we need to open to the concept of bio-diversity, where Design cannot be considered as the result of a single dominant, globalized, levelling thinking.

Finally, looking into design as an expression of Culture(s) and Culture(s) as the outcome of Design means to take into consideration not only what we are doing now, but what we are inheriting from the past and which should be granted for the benefit of future generations, so intertwining past and future, tangible and intangible, innovation and tradition.

Here is our conference theme: Design Culture(S)

Here, the suffix (S) is not only indicating the plural, the diversities, but it is also connected with the "saxon genitive", which is taking Design as subject, while connecting it to other different objects/meanings.

Following this concept, we found the ten keywords which we used to describe the tracks:

Artificial, Languages, Life, Making, Multiplicity, Proximity, Resilience, Revolution, Thinking and New Normal.

Each keyword was enriched with three additional keywords, to better explain the different directions and connotations, which are:

- Artificial is connected with Digital, Technology, Robotics
- Languages is connected with Aesthetics, Expression, Visual
- Life is connected with Nature, Biology, Human
- Making is connected with Process, Production, Post-Industry
- Multiplicity is connected with Gender, Pluralism, Diversity
- New Normal is connected with Health, Education, Work&Play
- Proximity is connected with Places, People, Economy
- Resilience is connected with Social Innovation, Circular Economy, Sustainability
- Revolution is connected with Critical Thinking, Interruption, Change
- Thinking is connected with Theory, History, Criticism

We obtained 40 wonderful words, full of possible meanings, ready to be interpreted and declined by the worldwide community of cumulus to figure out Design not as a singular specific voice but as a plural ecosystem of meanings.

After three years, during which our world is extremely changed, we can say that these words and this topic seems even more current and significant.

In the next pages of the Conference Proceedings, we are very enthusiast to offer a big picture of the biodiversity of Design Cultures and the multiverse of our Cumulus.

The experience

Cumulus Roma 2021 'Design Culture(S)' covered four days full of parallel sessions, working groups, poster sessions, exhibitions, social events, and more, but above all attending was a new form of experience than a conference.

While feeling the responsibility of filling a long void caused by the pandemic, we tried to re-design the whole experience to deliver a new form of conference which is keeping the in-presence through the online opportunities, so to bring you all to Rome and get the colors, the smell and the taste of the city, the architecture, the arts, the food, and the wine, always giving a cultural and a scientific perspective.

When facing the challenges, we wanted to deliver a new format to the whole Cumulus community, with the aim of innovating with technology, enhancing networking and the sociability of the experience, and keeping everyone on board to ensure the participation and democracy to our association from anywhere in the world, no matter of the time zone.

After four full days, we trust this conference at Sapienza University of Rome to be one of the longest Cumulus initiatives, counting with approximately 680 attendees, more than 350 papers and posters, 10 exhibitions, 10 tracks and 80 parallel sessions, 20 track keynotes and

four plenary keynotes, more than 50 schools exhibiting in the New Members Fair from everywhere in the world, and 18 schools participating in the Italian Members Fair.

Our aim was to develop a new form of hospitality to welcome and to make all of you feel at home in Rome but in a new virtual environment, while sharing design research and knowledge, along with the true spirit of Cumulus.

It is not enough to have a good project to gain good results, but it is necessary to get good responses. Your reaction was extraordinary, not only for the massive amount of registered participants, but for the involvement, the enthusiasm and not lastly the patience you have shown during the days of the conference. You joined in perfect Cumulus style from all over the world: from Oceania to the Americas, from Africa to Europe, to Asia, and you have actively followed the four days continuously, participating in a chat that often could not make your voices heard, but made us feel your presence very close.

Thank you for trusting us since the very beginning to the very end, while making this event possible. We will remember it for a long time for its extraordinary nature. We wish we will meet all together soon again without mask, and we will keep the memory of these days together among the best memories of this difficult period.

TUE 08 JUNE			WED 09 JUNE			THU 10 JUNE			FRI 11 JUNE		
9:30 CET DAILY PROGRAMME STARTS											
6 X ITALIAN MEMBERS FAIR			10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	5 X WORK KING GRO UPS	POS TER SES SION	EX TRAS
6 X ITALIAN MEMBERS FAIR			10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	5 X WORK KING GRO UPS	POS TER SES SION	DESIS EVENT
6 X ITALIAN MEMBERS FAIR			10 X TRACK SES SIONS + ROUND TABLE	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	10 X TRACK SES SIONS + ROUND TABLE	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	5 X WORK KING GRO UPS	POS TER SES SION	DESIS EVENT
12:50-14:30 CET LUNCH BREAK DESIGN CULTURE(S) OF ROME: FOOD EXPERIENCE											
OPENING PLENARY			10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	10 X TRACK SES SIONS	POS TER SES SION	EX HIBITION SES SI ON	CLOSING KEYNOTE SPEECHES		
KEYNOTE SPEECHES			10 X TRACK SES SIONS	1 X WORK KING GROUP	6X NEW MEM BERS FAIR	10 X TRACK SES SIONS	POS TER SES SION	GE NE RAL AS SEM BLY	FREE BREAKOUT SESSIONS 1:1 SPEED NETWORKING		
17:30 CET DAILY SESSIONS ENDING 18:30 EVENING EVENTS START											
EXHIBITION OPENING			DC(S) OF ROME: WINE DESIGN & TASTING			DC(S) OF ROME: MODERN ART EXPERIENCE			CLOSING REMARKS, CUMULUS GREEN		

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PLACES
PEOPLE
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DISRUPTION
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Keynote speakers

Roberto Marchesini

Roberto Marchesini is Director of the Center for the Study of Posthumanist Philosophy, as well as the School of Human-Animal Interactions, both based in Bologna, Italy. His studies focus on philosophical ethology, bioethics, zooanthropology, and posthumansism in an effort to better comprehend human-animal interactions. The cornerstone of his philosophical proposal is the unmasking of a perspective error that places humans at the center and at the measure of his predicates. One of his last books reinterprets the union between human beings and technology as a partnership that emerged from the phylogenetic set of the Sapiens species, highlighting the hybridizing and shaping potential of technology. From this perspective, every invention, every discovery, has an epiphanic effect; that is, it opens up a new dimension of the unexpected and of opportunities that change the boundaries and the perception of what we define human.



Salvatore Iaconesi and Oriana Persico

Salvatore Iaconesi is a robotic engineer, designer and artist; Oriana Persico is a cyber-ecologist, autobiographer and expert in digital inclusion. Living and working together since 2006 under the brand [AOS – Art is Open Source], they created artworks and performances of global interest united by the exploration and observation of contemporary technological human beings and societies – and their continuous mutation. Promoting a possibilistic vision of the world in which art is the glue between science, politics, anthropology and economics, they are the founders of Nuovo Abitare and HER, the two research centers they use to study the psychological and social implications of data and computation in human societies. Together they wrote *Digital Urban Acupuncture* (Springer, 2016), *La Cura* (Codice Editore, 2016), *Read/Write Reality* (FakePress Publishing, 2011), *Romaeuropa FakeFactory* (DeriveApprodi, 2010) e *Angel_F: diario di vita di un'intelligenza artificiale* (Castelvecchi, 2009).



Pier Luigi Capucci

Pier Luigi Capucci has been concerned since the '80s with the studies on communication, the new media and the new art forms, and with the relationships among arts, sciences and technologies. His theoretical activity is concerned with technologies of representation and communication, with technoscience-based art forms and with the media archaeology studies. He published more than 350 texts in books, magazines and conference papers in Italy and abroad. Founder of the first online magazine in Italy NetMagazine / MagNet; president of Noema, journal on the relationships between forms of expression, technologies, sciences and society; member of the International Advisory Board in many editions of Ars Electronica. Recently he founded art*science, a three-year research project on art and climate change and he serves as a consultant to the European Commission on the relationships between scientific disciplines and technologies (in particular Artificial Intelligence and Big Data) and humanities.



Chiara Luzzana

Chiara Luzzana is an Award-winning Sound Designer. She pairs a broad range of leadership in Sound Design, Music Composition, Sound Branding, Soundtrack and Audio Installation collaborating with companies and agencies all over the world. Noted among others for her project “The sound of city”, she explores and listens in awe to the artifacts of the urban environment, the products of the industrial cultures all around the world. Eclectic Artist, she wanted to break the rules imposed by notation, working only with noise. Former student at Berklee College, she investigated how the brain reacts to sounds, experimenting with everything from the neurobiology of musical cognition, to the construction of microphones and sound sculptures. Her projects and talks take us to a journey starting from listening to our life, up to listening to ourselves turning life into a “soundtrack”.



About Sapienza University of Rome

Faculty of Architecture and School of Industrial Design

The conference took place at Sapienza University of Rome, Faculty of Architecture. Sapienza University of Rome was founded in 1303 by Pope Boniface VIII and it is one of the oldest universities in the world. At the moment, Sapienza is hosting about 115,000 students and 4.000 professors and researchers, and it is a top performer in international university rankings, thanks to the 63 Departments organized in 11 Faculties driving high levels of excellence in several fields.

The Degrees of Design are part of the Faculty of Architecture, which was founded in 1920 and it happens to be the first modern Faculty of Architecture in Italy. At the core of its mission is the commitment to innovation, technology, urban living, while serving a fast changing society.

Its programs and curricula are divided between scientific research, studies in the humanities and experimentation with old and new technology. All this is leading to the education of the modern designer, which can be considered the synthesis of a scientist and a humanist who is both an artist and a technologist at the same time.

After the Degrees in Design, the Faculty is also offering programs in architecture, city planning, landscape, interior architecture and design management. Its high-calibre graduates are equipped with the skills which are necessary to design and to manage sustainable products, systems, services and environments, leading to innovation, technology, visual communication and design.

The Design Degrees in Sapienza are the following:

- A Bachelor Degree in Design;
- An International Master of Science in Product and Service Design (in English);
- A Master in Design and Visual and Multimedia Communication;
- An Interdisciplinary PhD Program in 'Planning, Design, Technology of architecture'.



DE
SIGN
CULT
URE(O F)

PROXIMITY

P L A C E S
P E O P L E
E C O N O M Y



TRACK CHAIRS

DESIGN CULTURE (OF) PROXIMITY
PLACES | PEOPLE | ECONOMY



Sam Bucolo,
Swinburne University of Technology, Australia
“Exploring the role of design through research which is focused on our economy through the lens of interaction (proximity) between people and places within our communities.”

Claudia De Giorgi,
Polytechnic University of Turin, Italy
“Design for territory is evolving beyond local connotations by considering an expanded world, to be reinvented through multidisciplinary reflections on the sustainable relationship with resources, the material cultures linked to them and the real dimension of our presence on the planet.”



Frédéric Degouzon,
L'École de design Nantes Atlantique, France
“In a time of globalisation going backwards and despite a clear recognition of design as a solution to complex issues, how close should be design practice to be efficient, detail driven and systemic?”

Giuseppe Lotti,
University of Firenze, Italy
“The design between opening and closure / globalisation and localisms / lands and borders: roles and responsibilities”





DESIGN CULTURE(S) | CUMULUS ROMA 2021
JUNE 08.09.10.11, SAPIENZA UNIVERSITY OF ROME

Co-designing the future of a public space and its related services. The case of the Reggio Emilia Ducal Palace and its park.

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Abstract | This paper describes an extensive co-design process conducted by the authors, a group of researchers of the Polimi DESIS Lab, to imagine the future of the Reggio Emilia Ducal Palace and its park, in Italy.

As an effort to co-design *urban commons*, it implied two main challenges: the first one deals with how urban commons might be co-designed, being characterized by diversity of actors and interests; the second one is connected to exploring how urban commons can be complemented including (public) services as an integral part of them, and thus, how to deal with their 'intangible' facet, that is about the interaction that will take place.

The paper concludes reflecting on the opportunity of including the expertise of service design in creating the social and infrastructural conditions to foster the development of urban commons and to make it a standard for any project, since it contributes defining the public interest activities that shape an important part of the commons.

KEYWORDS | URBAN COMMON, CO-DESIGN, SERVICE DESIGN, SCENARIO BUILDING,
MULTI-STAKEHOLDER ENGAGEMENT

1. Background knowledge: on urban commons, co-design and service design.

In the last decade, we assisted to the emergence of a variety of activities labelled as ‘co-design processes’, ranging from urban planning to community building and conducted under the auspices of the private, public and third sectors (Meroni, Selloni, Rossi, 2018; Trischler, and alt. 2018).

In this paper we discuss a co-design process developed by the authors for the Municipality of Reggio Emilia, a mid-sized town in the centre of Italy: its main objective was to imagine the future of the Reggio Emilia Ducal Palace with particular reference to its park, a huge public space in the outskirt the city.

This park is considered by the city inhabitants as an *urban commons*: a place of shared interest, critically important to the city environment, perceived as a symbolic space that gives a community its identity and facilitates social interactions (Ostrom, 1990; P2P Foundation, 2019).

The notion of urban commons is central for our argument, because we discuss one of the main challenges that urban commons currently face: i.e. how they might be co-designed, since, more than traditional commons, they are characterized by great heterogeneity of interests and participants, and need a support process to reach alignment and consensus (Foster, 2011; Iaione, 2012; Seravalli, 2018).

Urban commons may be considered ‘new commons’: Hess (2008) mapped the new commons out, identifying numerous categories, such as tangible and intangible commons, cultural commons, knowledge commons, global commons, infrastructure commons and many others. According to Hess, urban commons fall 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, p. 16).

In particular, she argues that theories and practices of neighbourhood commons draw especially on the so-called literature of ‘reclaiming the commons’. In the same line of thinking, Marttila, Botero and Saad-Sulonen (2014) identify a strand of commons as the activist/practitioner movement, which considers commons as a means for social change and democratic governance (Bollier and Helfrich, 2012; Bauwens, 2009). Therefore we can assume that urban commons are conceived not only as shared resources, but also as processes: set of practices focused on how to create (other) commons, how to support and govern them, that is a set of “collaborative arrangements for value production processes” (Seravalli, 2018 p.1.).

On the one side, we build on this approach to commons to discuss an experimental programme of co-design activities for the Reggio Emilia Ducal Palace and its park, conceived and implemented to design a place intended to be part of the urban commons. It is consolidated (Pór, 2012) that aligning interests between participants and educating people to participate in processes aiming at this are today two of the main challenges to co-design

urban commons. We can interpret this approach an evolution of the concept of 'community-centred design' (Meroni, 2008), 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. The continuous work of activating and structuring strategic conversations on the future is, in fact, a way to exchange value between people: this is functional to design a scenario, to find opportunities of reciprocal interest, to create relationship and develop mutually beneficial solutions (Pahk, Self and Baek, 2018) in a value co-creation logic that has network orientation and contextual nature (Vargo and Lush, 2016). Paraphrasing Vargo and Lush (2016), we can 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. The value so created is therefore an element of the 'new commons' and we assume it is maximised by the diversity of interests and views that find a way to co-exist.

The multi-stakeholder co-design process conceived and implemented for the city of Reggio Emilia involved actors from the private, public and third sectors, experts from the academia and associations from the civil society. They were selected and activated by the public administrators in order to consider different perspectives on the present and future of the Palace and the park. As Iaione and Foster (2016) state, in *urban commoning* implies having someone that plays the role of 'enabler' in managing negotiations and cooperation between participants with divergent interests. Here it comes the opportunity to conduct co-design activities with diverse methods and tools in order to allow multiple participants having different voices collaborate in a design process, applying an adaptive and iterative design approach (Meroni, Selloni, Rossi, 2018). This way, the activation of co-design initiatives can be seen as a service that the public administration offers to nurture the birth and flourishing of new commons.

On the other side, we explore, through this experimentation, possible relations between service design and urban planning, aiming at testing at the city level two of the very axioms of the service dominant logic (Vargo and Lush, 2004; Vargo and Lush, 2016):

- Service is today the fundamental basis of exchange and, therefore, goods are distribution mechanisms for service provision. In the Reggio Emilia project we assume "goods" to be spatial arrangements.
- Service-centered view is inherently beneficiary oriented and relational. In the Reggio Emilia project the value co-creation was intended to activate processes of reciprocity of exchange, facilitated by shared institutions (here intended as "rules, norms, meanings, symbols, practices, and similar aides to collaboration" Vargo and Lush, 2016, p. 6) that coordinate this exchange.

In fact, the challenges around the design of urban commons are not only connected to the related participatory process, but also to reconsideration of the idea itself of urban commons: the co-design process outlined for the project was aimed at conceiving the future

activities to be carried out in the park in terms of functions and services, rather than and prior to designing the public space in its physical aspects. This implies that the future common denominator of the production and exchange of value in the Ducal Palace and park was the application of specialized knowledge, mental skills, labour and the sharing of assets, “embedded” by the spatial arrangements.

Therefore, the starting point of the Reggio Emilia project was that an artful design of the activities that might take place in the future and qualify the area would have informed the design of the space with an increased awareness of the final users and of the visions of possible future stakeholders. This approach to urban commons, also, assumes that (public) services and relational activities are integral parts of urban commons, since (public) spaces are so. Not by chance, Iaione (2012) in defining urban commons not only includes physical resources as parks, squares, local streets, and public spaces in general, but also a diversified number of services, including public transportation, water service, urban health, gas and electric distribution and many others.

Overall, we assume that the Reggio Emilia project’s combined approach of structuring collaboration processes, putting the service perspective prior to the landscape design and adopting a relational perspective, is a way to envision new ways to integrate and beneficially apply potential resources for a shared purpose.

2. The case study of “Rival(u)ta Rivalta”

“Rival(u)ta Rivalta” (a title that can be translated as “Re-value Rivalta”) is the project we delivered as researchers of the Polimi DESIS Lab of the Department of Design of Politecnico di Milano for the Municipality of Reggio Emilia, which is part of the wider Ducato Estense development financed and promoted by the Italian Ministry of Cultural Heritage. Its specific objective was to renew and reinvent the Reggio Emilia Ducal Palace and its huge park, in the suburb of Rivalta.

It consisted of a process of strategic codesign of scenarios for the future of this space, conducted with local actors. It initially explored the varied and often conflicting perceptions, experiences and wishes of the stakeholders for the area (phase 1), and then defined, in a dialogue with the public administration, a first interpretative framework to orient the following design phase. On the base of this, through a sequence of co-design workshops (phase 2), 6 service-based scenarios were produced to inform the first phase of a landscape-design international competition concurrently launched (phase 3). As a final stage (phase 4), a codesign workshop, involving the designers and the team of the winning project (a group made up of Openfabric, Casana, F&M Ingegneria) was organized to develop 2 macro-scenarios, following the criterion of integrating the characteristics of the spatial proposal with the emerged imaginary. These final scenarios have the aim of stimulating a strategic dialogue around the Reggio Emilia Ducal Palace and its park and of guiding the final implementation of the project.

2.1 Phase 1: Generative listening

The expression 'generative listening' refers to the goal of broadening the scope of the initial analytical phase from the collection of information, in the traditional sense, to the stimulation of conversations about the perceptions, desires and expectations on the Ducal Palace Park. The process was structured as a series of interviews to 26 local stakeholders, selected in collaboration with the Municipality of Reggio Emilia among the most active and relevant actors in the cultural and associative field as well as among experts in more technical sectors.

In order to provoke and enable a generative conversation, each interview was structured by using a set of tools that had the goal of exploring both present and past conditions related to the area, as well as possible activities to be carried out inside and outside the palace. More in detail, the tool named 'The Ducal Palace park: yesterday and today' guided the dialogue around the map of the place, investigating distinctive positive and negative elements in terms of potential resources, barriers and criticalities. While the set of cards 'The Ducal Palace park: tomorrow' has been used as a stimulus to explore 6 thematic clusters of activities: agriculture and production, work and employment, art and culture, entertainment and recreation, sport and wellness, landscape and nature. Building on the expertise, knowledge and network of the actors involved in this phase, each thematic area was then discussed in terms of impact on the management and revenue model, on the accessibility and on the identity of the place.

The choice of identifying 6 themes emerged from the initial scoping phase carried on with the Municipality and from the analysis of existing data and reports. Results of the generative listening phase were, indeed, a baseline knowledge framework and an orientation towards different design hypotheses, which have been re-discussed with the Municipality and served as inputs for the following steps.

2.2 Phase 2: Co-design sessions

The second phase was planned as an intensive programme of workshops with diverse stakeholders to explore multiple service areas. Building upon the results of phase 1, we elaborated a preliminary map which was then implemented and adapted to the strategic orientations and policies set by the Municipality.

From this dialogue, a Scenarios' map emerged (Fig. 1). It presents 4 main directions: the central one represents the core theme (Park of the Nature), while the surrounding areas support the exploration of alternatives (Park of the Agriculture, Park of the History and Park of the Wellness).

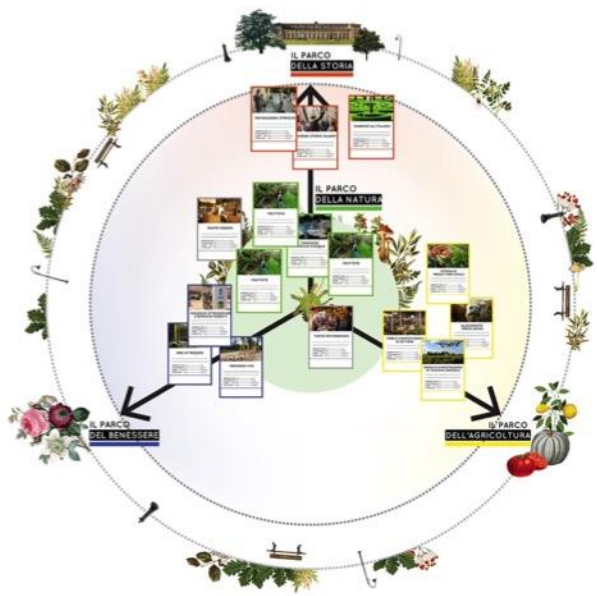


Figure 1. The Scenarios' Map developed to guide the co-design sessions.

In addition to the map, we produced a catalogue of cards (Fig. 2) representing potential services and activities, thanks to a preliminary study of existing case studies. This deck of cards, together with the Scenarios' map, were the main tools designed to conduct the workshops.

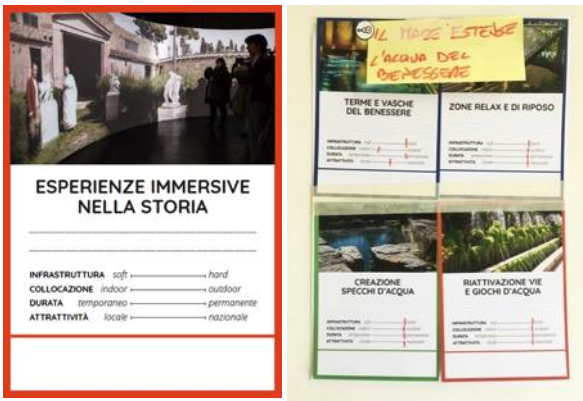


Figure 2. Example of the cards designed to explore services and activities and of the elaboration of a personal vision.

This phase comprised 5 co-design sessions and involved a total number of 42 participants, partially identified among the participants to the first phase, and partially among new relevant stakeholders belonging to cultural institutions, NGOs, universities and local authorities. Each session was organized around 3 main steps.

Step 1: the creation of a personal vision. After introducing the Scenarios' Map, each participant was invited to select, from the deck of cards, 4 activities, that combined together presented a personal vision for the future, in the form of a consistent series of services for the Ducal Palace park. Additionally, participants were asked to evaluate, for each card, some characteristics that might impact on the service model (type of infrastructure, location, duration and scale of attractiveness) and to enrich or modify the cards according to them (Fig. 3). Finally, the personal visions were placed on the Scenarios' map and discussed, merged and combined in a collective session. In this circumstance, participants have been aggregated in couples according to links between their visions, in order to start thinking to the stakeholders involved or impacted by the future arrangement.



Figure 3. The co-design sessions.

Step 2: the evaluation of the qualifying elements. The second step was focused on assessing the resulting visions according to 4 main qualifying elements. The Ducal Palace park should indeed also comprise the following qualities:

- Digital: the park is enabled by advanced technological solutions;
- Educational: the park has a strong didactic and popular approach;

- Recreational: the park offers opportunities for entertainment, conviviality, meeting;
- Sustainable and circular: the park is based on elements of ecological sustainability and circular economy.

These qualities emerged from the generative listening phase and from the dialogue with the Municipality: they contributed to characterize the range of activities chosen by each group.

Step 3: the analysis of the transversal areas and the definition of the Actors' map. The last step of the co-design session aimed at including into each vision a number of additional activities that relate to transversal areas and complete the map of the Ducal Palace park. These transversal areas are linked to the perception and imaginary associated to the park, and emphasise its being a place of relief and conviviality, active and inclusive participation, of accessibility, of openness, of entertainment and recreation.

As a last activity, groups focused on the identification of the stakeholders to be involved into the implementation of the scenario and on the various management models to be foreseen. The output of this phase was an Actors' map for each group in which they identified the key-protagonists of their scenario, outlined a hierarchy and a set of connections between them.

2.3 Phase 3: Scenario development and integration to the international landscape design competition

The third phase of the process was aimed to inform the international landscape design competition that was meanwhile conceived and launched to select a spatial design for the area. For this purpose, we developed 6 main scenarios (Fig. 4) building upon the results of the previous co-design process:

- The Mindful Park: a place of silence
- The Water Garden: history through engineering and nature
- The Active Park: sport and social agriculture in action
- The Innovation Garden: an agricultural landscape to live and experience
- The Climate Oasis: a piece of nature within the city
- The Welcoming Garden: a path toward a collective wellbeing.

The description of these scenarios was further elaborated in a report that included: the narrative aspects of each scenario, a series of activities to be included as potential functions and services and some distinctive features with reference to architectural guidelines provided by the competition's brief. The report became therefore an integral part of the brief made available to the 5 finalists of the international competition. This way, the take-up of elements selected from the scenarios was assured, since they were supposed to be embedded in the final design of the proposal.



Figure 4. The 6 scenarios developed to inform the international landscape design competition.

2.4 Phase 4: integration to the landscape design-winning project.

The connection of the results of the co-design process with the landscape design competition was further elaborated in this last phase. After the selection of the winners, we engaged them in a co-design activity in order to converge towards a consistent and integrated proposal. More in detail, the 6 service-based scenarios were reviewed with reference to the characteristics of the winning project.

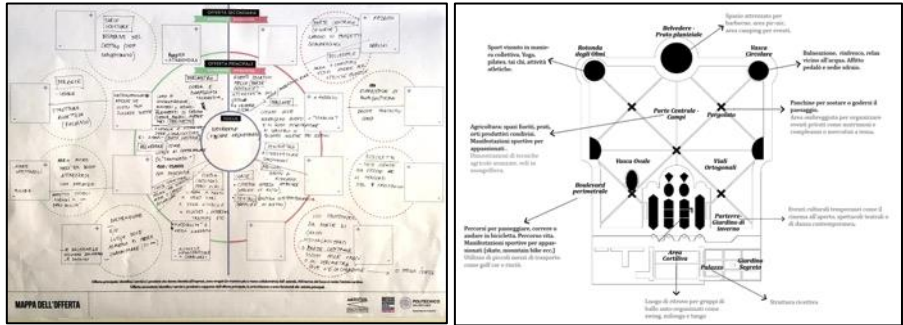


Figure 5. The Wellness Park offering Map (Polimi DESIS Lab) applied to the spatial project by Openfabric, Casana, F&M Ingegneria.

By using an expanded Offering Map (Fig. 5), primary and secondary levels of activities were identified. Then, building upon this work, the design researchers elaborated 2 macro-scenarios (Fig. 6):

1. The Wellness Park, which elaborates the themes of health and living well, mainly resulting from the scenarios 'The Contemplative Park' and 'The Active Park'.
2. The Habitat Park, which refers to the themes of landscape, nature and harmony between humans and the surrounding environment, mainly resulting from the scenarios 'The Circular Oasis' and 'The Contemplative Park'.

After being discussed with the landscape designers, they resulted in a comprehensive plan for services and solutions, meant to orient the final design of the park. At the same time, they can be seen as a powerful means to keep the narrative, vocational and poetic dimension of the initial scenarios within the project.



Figure 6. Visualization of the final macro-scenarios: the Wellness Park and the Habitat Park

3. Reflections and conclusions

The outcomes of this co-design process aiming at the generation of future scenarios for the Ducal Palace and park are, now, constrained by the stage of the work of the entire project, which is in the final development of the executive project.

Yet, they can be discussed with regard to the effectiveness of the co-design process that brought about the activation of a dialogue with the stakeholders, the generation of service-based scenarios that informed a landscape design brief, and the integration with the spatial design project.

Considering the whole experimentation as the first step toward 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 emerged from the interviews (conducted in the first phase of the process) that we grouped in a set of reflections on the present situation, of opportunities for the future and of possible criticalities are a good evidence of the openness of the process that guided the participant throughout a reflection without imposing perspectives. In fact, the topics emerged as qualifying the present and the future of the place, transcended or sometimes neglected those suggested by the interviewers to prompt the conversation: topics as 'food', 'hospitality', 'technology' or 'sociability' emerged, while 'work' or 'job' were not considered as relevant.
- The even bigger variety of visions generated during the workshops (one for participant, for a total of 42, conducted in the second phase of the process) eventually grouped by the designers in 6 scenarios (in the third phase of the process), came out easily, often in a positive flow of conversation with the other participants of the same session, alternating individual and collective thinking. We can assume this variety to be encouraged by the numerousness and diversity of the activity cards provided for the co-creation: nevertheless, the nature and distinctiveness of the 6 scenarios is completely transversal to the proposed orientations and extremely rich of inputs that neither came out from the previous interviews and conversations, nor were provided by the designers.
- The criteria with which the different visions were clustered and arranged in scenarios were based on the actual and logical possibilities to combine a variety of comparable or complementary inputs in meaningful wholes. Each input represented an individual view and the related interests, including the resources (competences, assets, skills, and much more) that each participant explicitly or implicitly wished to put in the future system. By combining them together, we aimed to draft future service ecosystems (Vargo and Lusch, 2016) meant to generate value for all the stakeholders and for the citizens or visitors; this accomplishes the abovementioned logic of the urban commons as valuable because of the way they have been generated and because of their very nature. This work has been facilitated by initial reflections on the possible combinations of actors that could manage the activities in the future.
- The people involved in the co-design process, stakeholders and experts identified by the Municipality of Reggio Emilia, often knew already each other, but most of the time did not: whatever their condition was, the workshops were for them opportunities, often the first, to talk together in a constructive and creative way about the future of the Palace and the park. As such, we may assume they were

also opportunities to ignite future processes and purposeful connections, including the discourse about the future co-governance of the place.

Another way to assess the whole experimentation is against the relevance and the 'dominance' of a service design perspective and orientation in the design of the landscape and in the spatial design. This turns into evaluating how the scenarios, which were made part of the brief received by the 5 finalists of the international competition, actually influenced or even informed their final design proposal.

The scenarios were described as a consistent mix of temporary and permanent activities (and therefore services and relations) and in terms of requirements for the natural capital and the built environment. Looking at the material delivered by the team of architects and experts that won the competition, we can find a systematic review and elaboration of future activities to be implemented in the area, freely chosen from the proposed scenarios and organised by typologies and fields that draw from the them. The same are described in their duration in time, extension and possible economic return for the future management and the public administration. They are also narrated in terms of occupation of the space and needs for dedicated infrastructures and arrangements and are sketched in the design of the place, which has been actually conceived to change according to them. This made the design unique and notable for its liveliness and dynamicity, and let us deduct a good degree of permeability of the landscape design to the proposed scenarios. This descriptive material delivered for the competition was the basis for the following collaboration, aiming at merging the service and the landscape design.

In fact, as described in the section 2.4, by matching this design with the 6 scenarios produced in the third phase of the work, we proposed 2 "merged" scenarios that could have been better materialised by the design of the park. From here, we organised a final workshop with the project leader of the winning team of Openfabric, Casana and F&M Ingegneria. For the workshop, a very peculiar service design tool, the Offering map, was adapted to the circumstance by hypothesizing a placement of the different activities and services into the spatial characters of the landscape design, the so-called 'intensità progettuale' roughly translatable as 'design concentrations'. During the workshop, we acknowledged a good alignment of the visions with the architect, yet had to make an effort from both sides to merge, through the tool of the Offering map, the different mind-sets: one 'space driven', the other 'service driven'. Hence, the activities presented in the map were finally associated to the 'design concentrations', so to create a fully integrated space and service artefact. In the view of optimising the interaction for a future activity, this integration could be better designed in the template of the tool.

As a conclusion of the experience, two macro-scenarios have been delivered, each one characterised by slightly different meanings and activities and both suitable to be materialised by the landscape design. The very reason for being two rather than one is the acknowledgment that the civic process of development of the whole project of regeneration of the Ducal Palace and park is still far to finish. In fact, in parallel to the construction of the

landscape arrangement, the future management system and its ‘institutional arrangements’ will be defined: we may assume this will be a public-private partnership that is likely to start-up with a set of rules “that together constitute a relatively coherent assemblage that facilitates coordination of activity in value-co-creating service ecosystems” (Vargo and Lusch, 2016, p. 18). The two scenarios, therefore, are intended to activate and steer this future conversation, which will be coordinated by the public administration, following the logic to establish collaborative processes as an imperative for the creation of urban commons. Notably, the guiding and coordinating role of the public administration has been crucial throughout all the process with different strategic decisions:

- to carry out this process in order to contribute nourishing the projects produced by the teams of architects and expert. This decision was central, because it builds upon the idea that the design of a (public) space could be informed by the design of (its) services, and so the development of specific activities builds the identity of a space- an urban commons - in every aspect;
- to select the participants to the process, intentionally excluding citizens in this phase. They engaged, instead, subjects that aggregate different interests and experts, in order to start a conversation about the future on the base of knowledgeable and informed experiences and views;
- to dialogue closely with the researchers, in order to progressively define orientations and making decisions according with what was emerging from the co-design process, yet having a broader view on the city development as a whole.

In the perspective of creating the social and infrastructural conditions to foster the development of urban commons, we deem that the expertise in service design is crucial: in fact urban commons are shared resources and, at the same time, the collaborative arrangements that design them, the institutions that regulate them, and “the community that devises the institutions, both shepherding and benefiting from the resources” (Huron, 2017, p.2). Acknowledging that service design is the activity of planning and organizing people, infrastructures, communication and material components of a service (Sangiorgi and Prendiville, 2017), the systemic and collaborative approach embedded in service design as the one developed for the Reggio Emilia co-design process, could be considered a case to start from in order to make it a standard for any project, and in particular for those regarding public interests.

These activities are a “continuous process of building relations with diverse actors and by a flexible allotment of time and resources” that qualify the contemporary strategies of infrastructuring (Hillgren, 2013 p.81). Furthermore, it might help creating in (not only) public organizations the social infrastructures that empower human beings to creatively and continuously support each other and taking projects forward (van der Bijl-Brouwer, 2017).

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