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**Co-design and new participatory design tools, a
case study.**

The Quinta do Braamcamp, Barreiro (Portugal)

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ABSTRACT

The main aim of the thesis was the initiation of a Co-Design process, for the elaboration of a project proposal for the *Quinta da Braamcamp*, an abandoned rural complex located in *Barreiro* (Portugal).

Through the experimentation of some existing Co-Design methods, and with the elaboration of a new tool for participatory design, the research describes the various steps of the so-called “Co-Design Journey”. The Journey saw the local community involved in the initial steps of the project design cycle – namely the starting problem identification, the problem and objective analysis, and a preliminary strategy identification. This was done mainly through two participatory workshops, both organised and facilitated by the researcher.

The main result of the research is the elaboration of “*Dixit Braamcamp*”, representing an example of how a boardgame can become a creative and scalable tool for Co-Designing with the local community. Furthermore, the benefits of participating in a co-designed process were assessed through questionnaires. Finally, a last point of the research contributed to the exploration of the relationship between top-down projects, bottom-up projects, and sustainability. This was done through the application of an existing tool - the SDG Tool by the UN Habitat - aimed at assessing the sustainability of urban projects.

EXTENDED SUMMARY

Questa ricerca nasce dall'idea di avviare un processo di co-progettazione per la rigenerazione della *Quinta do Braamcamp*, un complesso rurale abbandonato situato a *Barreiro* (Portogallo). Il comune, appartenente all'area metropolitana di Lisbona, si trova in un'area altamente urbanizzata. In questo contesto, *Braamcamp* e l'area di *Alburrica* – Riserva Ecologica Nazionale dove il complesso si trova - rappresentano un insieme di patrimonio culturale e naturale da proteggere e valorizzare.

Nel 2019, tuttavia, c'è stato un tentativo di vendere l'area della *Quinta do Braamcamp* al mercato privato. Se non fosse stato per il forte impegno della Piattaforma Civica "*Braamcamp é de Todos*" (tradotto in "*Braamcamp* è di tutti"), l'area sarebbe stata trasformata in una zona residenziale, e gli edifici di *Braamcamp* trasformati in un hotel. Il mega-progetto è stato quindi interrotto, ma da allora l'area giace in gran parte abbandonata, con alcune iniziative (es. visite guidate, attività di birdwatching, eventi culturali) organizzate dalle associazioni locali.

Questa ricerca si aggiunge all'insieme di queste iniziative, offrendo un'opportunità alla popolazione locale di poter condividere le proprie idee riguardanti il futuro di *Braamcamp*. La ricerca si focalizza infatti sull'empowerment della comunità locale, in ogni fase del cosiddetto "*Co-Design Journey*". Quest'ultimo riguarda in particolare le fasi iniziali della progettazione, ovvero l'identificazione del problema iniziale, l'analisi dei problemi e degli obiettivi e l'identificazione preliminare della strategia del progetto.

La ricerca ha visto l'esplorazione di tecniche di workshop partecipativi, con la realizzazione di due workshop e la creazione di un nuovo strumento di Co-Design, "*Dixit Braamcamp*". Quest'ultimo è un perfetto esempio di come un gioco da tavolo possa essere trasformato in un efficace e creativo strumento per la co-progettazione. La realizzazione dei workshop ha anche permesso di esplorare i benefici del Co-Design per i partecipanti, mentre un ultimo punto affrontato è stato il rapporto tra progettazione dall'alto, progettazione dal basso, e sostenibilità. Questo è stato effettuato tramite l'applicazione di uno strumento esistente, l'*SDG Project Assesment Tool*, mirato alla valutazione della sostenibilità di progetti urbani.

In generale, la tesi può servire come punto di partenza per l'elaborazione di una proposta progettuale per *Braamcamp*, mentre fornisce vari spunti di ricerca, con la possibilità di servire come caso studio per la futura ricerca accademica sulla progettazione e sulle nuove tecniche di Co-Design.

Preface

This research is born from the idea of initiating a Co-Design Journey for the regeneration of the *Quinta do Braamcamp*, an abandoned rural complex located in Barreiro (Portugal). The municipality - which belongs to the Metropolitan Area of Lisbon - is highly urbanised, with *Braamcamp* and its surroundings - the site of *Alburrica* - representing one of the few remaining green habitats of Barreiro. Seen as a whole, *Braamcamp* and *Alburrica* represent in fact a set of cultural and natural heritage that deserves to be protected and valorised.

This aspect, however, was mined in 2019, when there was an attempt of selling the area of the *Quinta do Braamcamp* to the private market. If it wasn't for the strong commitment of the self-organized Civic Platform (*Plataforma Cidadã "Braamcamp é de Todos"*), the area would have been transformed into a residential area, and the main buildings of *Braamcamp* turned into a hotel. The mega-project was therefore stopped, but the area lays largely abandoned since then, with some initiatives (i.e. guided walks, bird-watching activities, cultural events) organised by the local associations.

This research adds to the range of these grassroot¹ initiatives, providing an opportunity for the local people to share their ideas on how they would like to see *Braamcamp* repurposed. In particular, the main focus of this work lies in the participation of the local community in the Co-Design process, where participation is defined as "empowerment participation". You will notice how the focus on empowerment is present in the various phases of the so-called "Co-Design Journey" - which tackles the very initial steps of the project design (i.e. the starting problem identification, the problem and objective analysis, and a preliminary strategy identification).

The research was also an opportunity for exploring some participatory workshops techniques, with two workshops implemented, and with the creation of a new tool for Co-Design. The Tool, named "*Dixit Braamcamp*", is a perfect example of how boardgames can be turned into creative and effective tools for participation.

The implementation of the workshops also allowed for exploring the benefits of Co-Design for the participants, while a last point tackled by the research being the

¹ With "grassroot initiatives" I refer to self-organized initiatives that see the local people taking action for their community and territory.

relationship between top-down projects, bottom-up projects, and sustainability. To this extent, the research experiments the application of an existing tool for the assessment of the sustainability of urban projects.

Finally, looking at the future, we can state how this thesis may serve as a starting point for the elaboration of a project proposal for *Braamcamp*, while it also opens the space for new research, and may serve as a case study for the future academic research on Co-Design and participation.

1. Introduction: Research goals

This research aims at experimenting some existing Co-Design methods, while elaborating a new tool for participatory design, for the main goal of initiating a co-design process. The so-called “Co-Design Journey” involves the local community in the initial steps of drafting a project proposal for the regeneration of the *Quinta da Braamcamp*, an abandoned rural complex located in Barreiro (Portugal). The main goal is therefore not related to the implementation of the project, but rather to the steps behind the Co-Design Journey undertaken, that tried to engage the local community as much as possible in the initial steps of the project design cycle, namely the starting problem identification, the problem and objective analysis, and a preliminary strategy analysis.

The *Quinta da Braamcamp* (to which we will refer as *Braamcamp*, or *Quinta*) is located on the North-Western riverbank of the city of Barreiro, a municipality belonging to the metropolitan area of Lisbon, situated on the opposite side of the Tagus (*Tejo*) River. *Braamcamp* is also located in the natural area of *Alburrica-Mexilhoeiro* - one of the few remaining green spaces in the urban area. Several are the associations and movements that, in the last years, have been working for the protection of the natural and cultural heritage of the area (i.e. *Associação Barreiro – Memória, Património e Futuro*², *Plataforma Cidadã “Braamcamp é de Todos”*³).

The future of *Braamcamp* is uncertain. In 2015, it was bought by the municipality of Barreiro (*Câmara Municipal do Barreiro – CMB*) and the area granted, in 2017, the status of “Site of *Alburrica and Mexilhoeiro* and its Milling, Environmental, and Landscape Heritage (*Sítio de Alburrica e Mexilhoeiro e seu Património Moageiro, Ambiental e Pasagístico*), becoming therefore an area of municipality interest. However, in 2019 the municipality decided to sell the area, which was awarded, through a public tender, to the 40M € project proposed by *Saint Germain – Empreendimentos imobiliários S.A*⁴. This mega-project would include the construction of a 178-rooms hotel – with an annexed gym, SPA, swimming pool, and bar - and 185 residential units. In June 2020, the selling was stalled by the Administrative and Fiscal Tribunal of Almada, mainly due to the work done by the

² About the association <https://associacaobarreiropratrimonio.pt/razoes-de-ser-da-associacao/>

³ About the Civic Platform <https://braamcampers.pt/>

⁴ Project proposal by Saint Germain <https://www.youtube.com/watch?v=RHWFmxET15U>

self-organized Civic Platform “*Braamcamp é de Todos* (translated to “*Braamcamp belongs to everyone*”).

The court ruling did not deter the municipality and the company from conducting business, nor did the negative assessment of the mega-project presented by the Portuguese Environmental Agency (*Agência Portuguesa do Ambiente*). In May, 2020 the project was in fact submitted for approval to the CCDR (*Comissão de Coordenação e Desenvolvimento Regional* – Commission of Regional Coordination and Development). The most recent events indicate that in May, 2021 the company Saint Germain was found suspected of being involved in some bribery, in the context of *Monte Gordo*, in the South-East of Portugal. Thereafter, in August of the same year, the company decided to cancel all its projects in the country⁵.

The series of events confirmed that there are local people interested in protecting the area from mega projects of this type, stating how “Barreiro deserves a serious process, conducted in a transparent way, for the rehabilitation of the *Quinta do Braamcamp*” (Publico, 2020), but also that they would rather like to contribute to “rehabilitate the buildings in a sustainable way, re-naturalizing the most significant parts of the *Quinta*, harmonizing the benefits to be achieved in the area, with the impact of climate change and with the natural flora and fauna” (Publico, 2020). Reflecting this interest, several were the events organized by local actors in the last years (i.e. walks in the area, birdwatching activities, guided tours, art events, among others) and some alternative project proposals for the place were also presented – without success - to the municipality (ie. Estejo project - see [subsection 6.4.4](#)).

Adding to the range of these grassroots initiatives, this research aims at sharing the Journey behind the co-designed process of what could become a smaller scale project, which would not include big architectural plans for the space regeneration, but would rather focus on tackling the problem from a social point of view (i.e. improvement of the connotation of the local people of the place, environmental awareness, sensibilization of the local community).

The research will serve in different ways:

- i. It will contribute to the knowledge base on Co-Design tools and techniques, presenting a new tool for participatory design to further be explored in other

⁵ More information at the link <https://www.sulinformacao.pt/2023/10/conceicao-cabrita-acusada-de-corrupcao-passiva-no-caso-do-terreno-de-monte-gordo/>

contexts. The methodology of the implementation was made open source, in order to ensure its possibility for replication and scaling up.

- ii. It will present a new methodology for further researchers, in the framework of the implementation of a co-designed process with the local community. Further thesis projects might be based on this methodology in the future.
- iii. The research can be used in the future as a starting point for the elaboration of an alternative project proposal for *Braamcamp*, and for the application through an existing call (i.e. the European Solidarity Corps).
- iv. Finally, the research will also serve as a case study for further research on Co-Design methods and the process of empowering the local community.

I hope to show:

- How a Co-Design process can be initiated through a thesis/research project.
- How a new participatory tool for co-design can be developed, in a creative way, and in collaboration with the local community.
- The benefits coming from the participation in a Co-Design process.
- A possible methodology to assess the sustainability of a top-down project Vs. a bottom-up and co-designed one.

The research is composed of ten main chapters. After this first introductory chapter, a description of the research questions and objectives follows ([Chapter 2](#)). Thereafter, the Theoretical frame and Literature review is presented ([Chapter 3](#)), to then move to the methodology of the research ([Chapter 4](#)). This is followed by a description of the main delimitations, limitations, and assumptions of the research ([Chapter 5](#)), while [Chapter 6](#) is dedicated to a detailed presentation of the case study. The main part of the research is represented by [Chapter 7](#), describing the Co-Design Journey, while the main results can be found in [Chapter 8](#). Finally, [Chapter 9](#) is dedicated to the conclusions of the work, with the main recommendations for future research to be found in [Chapter 10](#).

2. Research questions

Since the very beginning of the research, the main objective was related to sharing the Co-Design Journey of the last months, that brought to the initiation of the elaboration of a project proposal for the regeneration of *Braamcamp*. This process has been initiated through both consolidated and new participatory methods and tools. As we will see later, flexibility was a big assumption of this work. However, the individuation of a main research question (RQ), and a series of sub-questions was essential in structuring the work and keeping the research on a safe and solid path. The main RQ therefore was:

RQ1: How can participatory design methods be implemented at the initial steps of the project design, to initiate a Co-Design process that involves the local community in the regeneration of an abandoned public space?

The following sub-questions develop around the main RQ, these being:

RQ1.1: How can board games become a tool for participatory design?

RQ1.2: In which ways can the participation in a co-design process be beneficial for the local community?

RQ1.3: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?

The methodology of the research design, followed to answer the above mentioned RQs, is detailed in [Chapter 4](#) .

3. Theoretical frame & Literature review

Despite having an history of around 70 years, the concept of co-design for local development is still not universally defined. This diversity can be seen in the different terms used to refer to it, among others “participatory design”, “community planning”, “co-creation”, “community-based development”, and “citizen engagement”.

In 2000, Wates was describing how all over the world there was an “increasing demand from all sides for more local involvement in the planning and management of the environment” (Wates, 2000). To this extent, looking at the recognition of the benefits of citizen involvement in development, there was in general “an emerging need to embed a more citizen-oriented engagement approach” (Gudowsky & Peissl, 2016; Sanders and Stappers, 2008). The benefits of co-design in an urban environment are several, and, to this extent, different authors highlight the crucial role of a shared process, characterised by a multi-scalar stakeholder partnerships, in order to increment the greening potential of urban spaces towards more inclusive and climate resilient cities (Bason, 2010; Bisschops & R., 2019; Jansen & Pieters, 2017; Leith, et al., 2014; Puerari, et al., 2018; Mahmoud & Morello, 2021).

By the end of the Chapter, we will understand how Co-Design is strictly related to the empowerment of the local communities. The Chapter will first provide an introduction to the history of participatory design methods – from the early Scandinavian participatory approaches of the 1970s, to the more recent generative design research by Liz Sanders, passing through co-design in international organizations and organisms (i.e. the World Bank, and the European Union). Then, we will understand the approach of this research towards co-design, in particular Co-Design as “empowerment participation”. Finally, we will look at the principles that this research undertakes under Co-Design as “empowerment participation”.

3.1. Brief history of Co-Design

Methods for Co-Design continue to be refined, and new ones invented. At the same time, participation has since the 1960s been applied to several fields, from service design to international development, but also in public services and local development.

Already in the 1970s, Scandinavia was considered a leading region in exploring participatory approaches to system design, classified under the label of “cooperative

design” (Halskov & Brodersen Hansen, 2015), and contrasting the US-driven approach known as “user-centred design” – where the user is rather seen as a subject. On the contrary, **Participatory design** (PD) sees the user as a partner. It has in fact been conceptualised mostly as being about “engaging users in the design of new information technology” (Bratteteig, et al., 2013), emphasizing users and designers actively working together for a process which main aim was improving the quality of working life. Since the early contributions of Professor Kristen Nygaard, PD has become a commonly used methodological approach, given its promise of democratizing the design process. A bi-annual Participatory Design Conference (PDC) has also been held regularly since 1990.

However, the beginnings of the participatory design movement were happening elsewhere at the same time (Sanders & Stappers, 2008). For example, between the 1960s and the 1970s, **Participatory Action Research (PAR)** was developed by the Colombian sociologist Orlando Fals Borda. His methodology involved local inhabitants and the whole range of stakeholders as participants in the identification of the core issues and strategies for the development process.

This initial wave of more participatory approaches is to be linked to the recognition at that time that there was a need for new approaches to design. We read how, at the time there was “certainly a need for new approaches to design, if we are to arrest the escalating problems of the man-made world, and citizen participation in decision making could possibly provide a necessary reorientation” (Cross, 1972).

Returning to participatory design in development, one of the most widely known range of participatory development techniques today, are those related to ‘**Participatory Rural Appraisal**’ (PRA) and its counterpart ‘Participatory Urban Appraisal’. PRA developed and spread fast in the 1990s, described as a “growing family of approaches and methods to enable local (rural or urban) people to express, enhance, share and analyse their knowledge of life and conditions, to plan and to act” (Chambers, 1994). PRA was born from many sources, one of the **Rapid Rural Appraisal (RRA)**. The shift from RRA to PRA is actually considered one of the most significant (Tufte & Mefalopoulos, 2009). The two share some principles, as the “reversal of learning” - where the facilitator learns from the local community; the flexibility in methods used: and the seek for diversity - meaning looking for and learning from exceptions. However, PRA differs from RRA in various ways: in terms of the outsiders’ behaviour and attitude, resulting in “handing over the stick” to local

people (in this way they would own the change); but also in terms of “self-critical awareness” of the facilitator, that is continuously and critically examining his behaviour. More particularly, we can state four “discoveries”, as Chambers (1994) define them, brought by PRA, these being: local people’s capabilities – as they have better capacities as observing, quantifying, estimating than the outsiders (the facilitators); behaviour and rapport between the facilitator and the locals - establishing the trust needed as a precondition for PRA; diagramming and visual sharing, and the discovery of their potential; and the power of sequences of methods, and their combination. PRA approaches and methods have been mainly innovated by non-governmental organizations, and already in the 1990s were also starting to be used increasingly by government agencies (Chambers, 1994).

When we look at multilateral organisations, we can notice an increasing use of participatory methods since the 1990s. Let’s take the World Bank (WB) example, and the consequences of the failure of many development projects in the 1970s and 1980s, whose causes are to be “ascribed to the limited understanding of local context and the insufficient involvement of local stakeholders” (Tufte & Mefalopulos, 2009). Already in 1990, a “Bank-wide Learning Group on Participatory Development” was launched, aimed at examining participation and the challenges that the WB was facing in “stepping up its efforts to support participation in its operations” (The World Bank, 1994). Nowadays, the WB “recognizes that **Community and Local Development (CLD) approaches** and actions [that put citizens at the centre of designing their own solutions] are important elements of an effective poverty-reduction and sustainable development strategy” (The World Bank, 2023), with a total of 373 active CLD projects in 96 countries⁶. Citizen engagement is also part of the WB strategy, with the “Strategic Framework for Mainstreaming Citizen Engagement in WBG Operations” (The World Bank, 2014) developed in 2014.

An interesting guide published the WB is the practical guide for Participatory Communication, where **Participatory Communication** can be defined as “an approach based on dialogue, which allows the sharing of information, perceptions and opinions among the various stakeholders and thereby facilitates their empowerment, especially for those who are most vulnerable and marginalized” (Tufte & Mefalopulos, 2009). Its guiding principles are free and open dialogue, giving voice

⁶ As of June 2022

to marginalized groups, and a strong action-oriented approach. All these principles are very much based on the key concepts stemming from **Paulo Freire's** pedagogical approach, these being: praxis (action/reflection) – people must not only come together in dialogue, but also in action, to critically reflect on their reality and transform it through further action; generative themes – referring to the fact that each epoch “is characterized by a complex of ideas, concepts, hopes, doubts, values and challenges in dialectical interaction with their opposites striving towards their fulfilment” (Freire Institute, n.d.); easter experience – meaning that people must be moved by a constant process of re-examination of themselves; dialogue – which presupposes equality among participants in the dialogue, trust, and mutual respect; conscientization – as a process of developing critical awareness of our social reality, through reflection and action; codification – as a way to gather information, a process that allows us to codify (“build up a picture”); and the banking concept of knowledge – where education is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing.

Looking at the European Union (EU), it is interesting to notice how several examples of Co-Design exist in the framework of the EU institutions. For example, the European Commission (EC) has adopted an “ambitious co-design approach” (European Commission, 2021) in the making of the strategic plan 2021-2024 of the Horizon Europe programme – one of the biggest EU funding programs - with the aim of enlarging the ownership of the programme to a larger number of stakeholders, and optimise the effect of the investments coming from it. Another example is the **New European Bauhaus (NEB)**, an initiative that was also a catalyst for the European Green Deal transformation. Since its very beginning, the NEB “opened its activities by proposing a series of conversations on the places we inhabit and on our relationship with natural environments” (European Union, n.d.), resulting in around two thousand contributions⁷. The focus on empowerment can also be found in the **New Leipzig Charter**, which presents a vision for a more sustainable urban development in Europe, strictly connected to the Urban Agenda for the EU, stating how “the skills and capacities of all urban stakeholders should be strengthened with strategies and tools for their empowerment” (EC, 2020). Then, specifically related to finding environmental solutions for urban areas, is the recent concept of **Nature-**

⁷ Contributions can be downloaded here https://new-european-bauhaus.europa.eu/about/co-design-process-and-contributions_en

Based Solutions (NBS). These are defined by the EC as “Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social, and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes, and seascapes, through locally adapted, resource-efficient, and systemic interventions” (EC, n.d.). Co-Design relates here as the European Commission (EC) states that “there is an invaluable heritage and community in research and innovation exploring NBS-type approaches to a range of themes including climate change adaptation; systemic approaches to urban resilience and sustainability; innovative land-use planning; citizen participation and co-creation” (EC, 2020).

Finally, moving out of the EU case, a more recent approach to Co-Design is worth mentioning. In the last two decades, “in the area of participatory design, the notions of **co-creation and Co-Design** have been growing” (Sanders & Stappers, 2008), the two terms often been confused or treated synonymously. Co-creation is indeed a very broad term that can be applied to various areas. According to Liz Sanders, a key author addressing **generative design research**, when co-creation is applied to design, we come out with the concept of “Co-Design”. She defines Co-Design as “the creativity of designers and people not trained in design working together in the design development process” (Sanders & Stappers, 2008). Her approach looks at bringing the people who are served through design directly into the design process, so that their needs and dreams for the future are met (Sanders & Stappers, 2012). As the earlier Scandinavian-led participatory approach of the 1970s, generative design research also looks at the user as a partner in the design process, with a big assumption of Sander’s work being that everyone is creative.

3.2. Defining Co-Design as “empowerment participation”

We saw how participatory design methods developed since the 1960s, and alongside the different approaches, the definition of Co-Design evolved too. At the same time, “stakeholders often have very different visions and definitions of participation in development” (Tufte & Mefalopulos, 2009).

In this complex scenario, I would like to focus on two main approaches to participation defined by Tufte & Mefalopulos (2009), namely the social movement perspective, and the project-based or institutional perspective. While these two approaches share a common understanding of participation, as the “involvement of

ordinary people in a development process leading to change” (Tufte & Mefalopulos, 2009), they differ however in scope and methods. A main difference is to be found when trying to answer the question “*which are the reasons why a participatory approach is required?*”. So, while for the institutional perspective, participation is a tool to achieving a goal that is pre-established by someone external to the interested community; for the social movement approach, participation is seen as a tool to reach the goal of an empowering process.

This research takes the side of the second approach, participation as empowerment, as a tool to strengthening the people’s capacities and the demand side of governance (i.e. bottom-up mechanisms for participation in the decision-making). This approach assumes that participation works on some intangible outcomes for the local community, in terms of increased feelings of ownership.

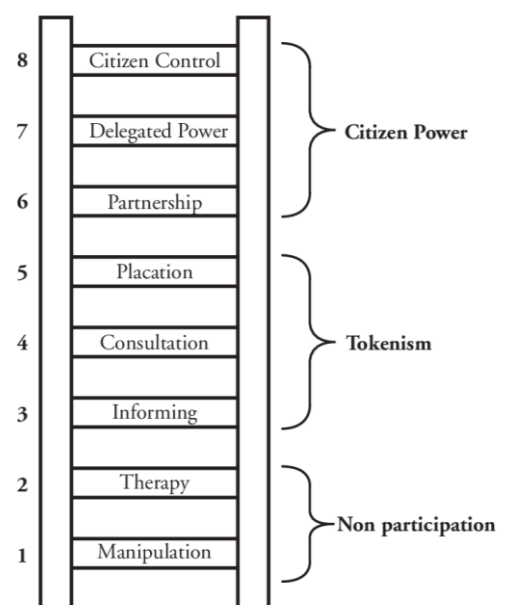
Trying to define participation, and using Co-Design as an umbrella term for participatory, co-creation and open design processes, a definition that meets the principles of this research is the following:

“Empowerment participation is where primary stakeholders are equal partners of the outsiders, with a significant say in the joint decision making about what should be achieved and how; ownership and control of the process rest in the hands of the primary stakeholders.” (Tufte & Mefalopulos, 2009)

Participation as empowerment is also highlighted by what is perhaps the most known and well-established model of participation, namely Arnstein’s **ladder of participation** (Arnstein, 1969). Composed of 8 steps, the model (Figure 1) presents how, from the bottom to the top of the ladder, different levels of participation are to be found. The bottom levels (1) Manipulation and (2) Therapy both describe levels of “non-participation”, as their real objective is to enable the powerholders to “educate” the participants. Moving up to (3) Informing and (4) Consultation, they represent the “tokenism”

Figure 1

Arnstein’s ladder of citizen participation



Note. Ladder of citizen participation (Arnstein, 1969)

levels, or “*façade*” participation, not allowing for a follow-through of the heard voices. Rung (5) Placation simply represents a higher-level tokenism, still with no right to decide for the “have-nots”; Finally, levels (6) Partnership, (7) Delegated Power and (8) Citizen Control represent, with increasing degree, decision-making levels of citizen power. This is where real participation can be found, and it is therefore strictly related to decision-making. Arnstein herself was aware that this represents an oversimplification; however, the ladder is useful as it highlights the centrality of the concept of **empowerment** for an effective and true participation.

Arnstein’s model of participation was used as a basis for new ones. One example is the IAP2 ladder, developed by the International Association for Public Participation (IAPP) in 2018. The main difference with Arnstein’s ladder is the recognition that “differing levels of participation are legitimate and depend on the goals, time frames, resources, and levels of concern in the decision to be made” (IAP2, n.d.). Furthermore, it seeks to ensure genuine participation with the addition of a “promise to the public” for each level/type of participation.

3.3. Principles of Co-Design as “empowerment participation”

Now that we have understood the positioning of this research on Co-Design, that is “participation as empowerment”, we will look at its main principles (see [Figure 2](#) below). This has to be seen not as an exhaustive list, but rather as the main principles that this research follows as regards participation in project design.

As Sanders & Stappers (2008) state, “there are a number of reasons why it has taken so long for the principles and practices of participatory design/co-designing to make an impact on the man-made world” (Sanders & Stappers, 2008). According to the author, one of these reasons for this is that we still need to embrace the believe that everyone is creative. She highlights another important aspect, that the roles in the design process are changing: “the person who will eventually be served through the design process is given the position of ‘expert of his/her experience’, and plays a large role in knowledge development, idea generation and concept development” (Sanders & Stappers, 2008). This does not of course deny the crucial role of the designer, who plays a critical role in giving form to the ideas. The researcher (the designer) will therefore take on the role of a facilitator. Designers will be needed therefore to find missing information, and to be able to make necessary decisions in the absence of complete information.

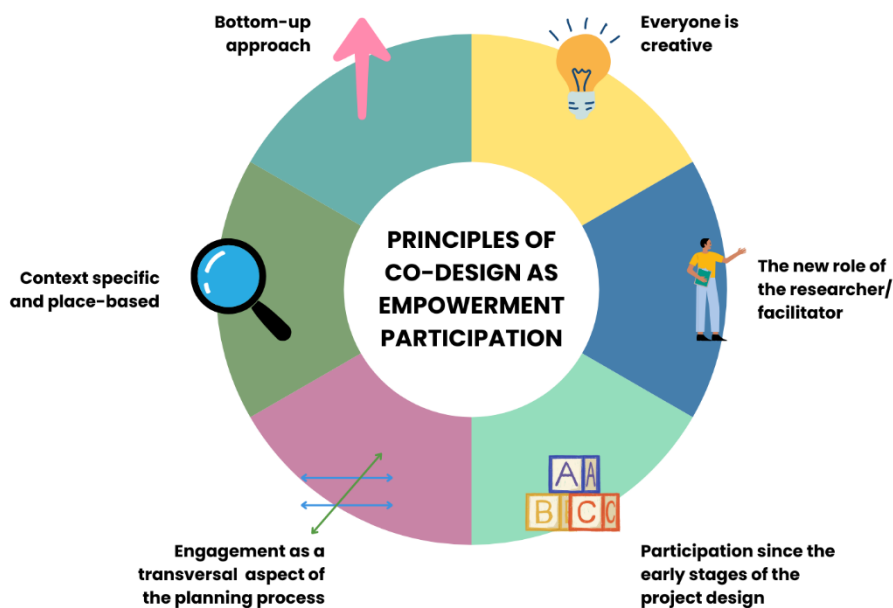
Another aspect is that participation must be ensured from the very beginning of the project design process. In fact, “when stakeholders are not included from the start, participation is significantly impaired.” (Tufté & Mefalopoulos, 2009). If this aspect is met, the chances for success and sustainability of the initiative increase significantly.

Another assumption, stemming from the Nature-based Solutions approach, is that “citizen and stakeholder engagement is not just one step to be taken, but a necessary transversal aspect of the planning process” (Breukers & Jeuken, 2017).

Lastly, there is not one unique way to participation, as it is context specific. To this extent, the co-creation process does not have a one-size fits-all approach (Wippoo & Van Dijk, 2019). At the same time, given its place-based approach, and its orientation to empowerment, participatory design asks for a bottom-up approach, as it also brings various stakeholders working together, recognizing and valuing complexity and diversity.

Figure 2

Principles of co-design as empowerment participation



Note. Elaboration of the author

4. Methodology & Research Design

The thesis is structured as a case study research, as it requires an extensive exploration and interpretation of the case study, with the goal of expanding existing theories rather than generalising from a single-case study. The research is mainly qualitative, as it is my intent constructing subjective interpretations rather than testing hypotheses. Following a qualitative research approach, I would also be able to keep an open and interactive relationship between theory and research.

As we will see in [Chapter 7](#), and in order to answer the main RQ (**RQ1**: How can participatory design methods be implemented at the initial steps of the project design, to initiate a Co-Design process that involves the local community in the regeneration of an abandoned public space?), the case study research evolves around the implementation of two participatory workshops. Different participatory design methods were implemented, at the same time experimenting and creating a new scalable tool for co-design with the local community. The main RQ will therefore be answered once the case study research is completed, while several theories and sources were used for the various phases of the Co-Design Journey.

Regarding the project design methodology used, this stems from the **Results Based Management (RBM) approach** for project writing, and the related **Theory of Change (ToC)**.

RBM is a management approach that stresses the importance of results in a project life cycle, through all its steps, from the initiation to the implementation, including the monitoring of the project. Furthermore, the approach assumes a strong degree of flexibility. Applying this way of thinking to projects, its management becomes more effective, while ensuring a maximization of the project's results. This reflects into a better achievement of the positive change that the project contributes to, both for the beneficiaries and the territory. The RBM has different approaches, among these the Theory of Change.

The Theory of Change can be defined as a participatory process, where a group of stakeholders of a planning process “articulate their long-term goals and identify the conditions they believe have to be unfold for those goals to be met. These conditions are modelled as desired outcomes, arranged graphically in a causal framework.” (Taplin & Clark, 2012)

Following the RBM and the ToC, a clear intervention logic is needed. The **intervention logic**⁸ of our project is defined in the following steps: I) Big frame analysis; ii) Defining the starting problem; iii) Stakeholder analysis; iv) Problem analysis, v) Objective analysis; vi) Strategy analysis; vii) Output and activity identification; viii) Final verification.

Moving to the first sub-question (**RQ1.1**: How can board games become a tool for participatory design?), two were the sources used for the development of a new Co-Design tool, these being the “**Community Planning Handbook**” (Wates, 2000) and the “**Convivial Toolbox: Generative Research for the Front End of Design**” (Sanders & Stappers, 2012)

The “Community Planning Handbook” was published in 2000, after more than 6 years of research and international networking. It stresses that each strategy related to community planning is place-based and varies for each community. In fact, “each place needs to carefully devise its own community planning strategy to suit local conditions and needs (Wates, 2000). At the same time, however, some methods and scenarios appear to be universally relevant, and were used in this case to get some guidance and inspiration. Keeping a sound ground of flexibility, and for designing a strategy geared to the local circumstances, the research followed the series of steps defined in the Handbook, these being: i) Definition of a goal or purpose; to then devise a strategy through ii) Sketching out a scenario for the situation; iii) Completing the Action Plan; iv) Thinking of who might be involved; and v) Producing a budget and allocate responsibilities.

Looking at the identification of the toolkit for the new Co-Design tool (i.e. “*Dixit Braamcamp*”), an important source for methodological purposes has been the “Convivial Toolbox” by Sanders & Stappers (2012). First let’s make a clear distinction between tool and toolkit, where the former refers to “a physical thing that is used as a means to an end”, and the latter “refers to the way in which the tool is employed” (Sanders & Stappers, 2012) - e.g. A pen is a tool for the technique of drawing. Also, the same tool may be used in different ways, that is to say with different techniques. The author makes a clear distinction between three types of tools and techniques: Say techniques, Do Techniques and Make techniques. With Do techniques,

⁸ The Intervention Logic (or Logic Model) of a project is a way of visualizing the overall concept of a project, explaining how change happens. It also helps identifying the relationships of the project with relevant strategies, inputs, activities, outputs, outcomes, and impacts.

someone is observing people and their activities. An example of Do tools are the use of photo and video-cameras, voice recorders, words on paper. Then, by using Say techniques, as questionnaires and interviews, the researcher may collect information without the need of being physically present - and can also be able to collect some quantitative statistical data. Despite a generative study being usually composed of a combination of the three, it also stresses and puts emphasis on the last one, the Make techniques. Not only are Make techniques the most recent, but they also are the ones that mostly provide the chance to deeply explore experience. The Make tools and techniques “involve participants by having them perform a creative act with respect to the subject under study” (Sanders & Stappers, 2012). We will see that this research focused on the development of a Make tool, especially a toolkit for expression, complemented with some Say techniques.

Looking at the second sub-question (**RQ1.2:** In which ways can the participation in a co-design process be beneficial for the local community?), this was targeted through a **survey**, sending a questionnaire to the participants of the first workshop. The questionnaire, composed of a set of open and closed questions, was created as a google form, and sent through an email. The tool represents in fact a cheap method for data collection, even if some problems may arise (i.e. low response rate, if self-administered), and therefore a simple and effective formulation of the questions was a crucial aspect to follow. As concerning the formulation of the questions, the two main sources used were the already introduced Community Planning Handbook (Wates, 2000) and the Step-by-step toolkit on implementing and evaluating co-design (Man, Abrams, & Rosie, 2019). The former contains some templates to be used when assessing the effectiveness of the co-design process, while the latter – developed by NPC, a think tank and consultancy for the social sector - explores how to assess the outcomes of the co-design, how to assess the quality of the process, and how to learn from the data collected.

Finally, the last sub-question (**RQ1.3:** How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?) has been tackled through an example of application of the **SDG Project assessment Tool**.

The SDG Project Assessment Tool⁹ (or SDG Tool), from the UN Habitat, is an offline, digital, and user-friendly instrument that guides city authorities to develop more inclusive, sustainable and effective urban projects. The tool was developed in the framework of the Global Future Cities Programme¹⁰ and the New Urban Agenda (NUA)¹¹. It was targeted at the improvement of the quality of selected urban projects since the planning phase, to enhance sustainability and inclusiveness, promote a good environment for the viability of the projects in the medium and long terms, and to steer a participatory process between city authorities and other partners. By applying the Tool regularly throughout different phase of projects implementation, a more efficient alignment with the SDGs was ensured. Looking at the Tool itself, the SDG Tool is based on some selected Sustainability Principles, organized under technical and effectiveness Key Drivers – eight in total. While the former are related to a sustainable and inclusive urbanization, the latter relate to the implementation, and viability beyond the Programme period. Each driver then includes a set of principles, and includes between five to ten Performance Criteria. For each project, the relevant criteria are ranked on a scale from “not included” to comprehensively aligned”.

While the Tool is targeted to urban authorities, in this case the assessment steps will be adjusted to the scope of the research. The original steps, detailed in the SDG Tool Guide¹², include: (i) the definition of a set of principles; (ii) the review of the project; (iii) the discussion of the results; (iv) the provision of recommendations; and (v) the improvement of the project. In the framework of this research, the first step was implemented, namely the definition of a set of principles.

In particular, the mega-project proposed by Saint Germain in 2019 is used as a case study for the application of the SDG Tool. We will see how the assessment can be useful for identifying the main strengths and weaknesses of the project, related to sustainability. Regarding the Key Drivers of the SDG Tool, both the technical ones (A.1 Social Inclusion; A.2 Spatial Planning; A.3 Environmental Resilience; and A.4 Economic Development) and the effectiveness ones (B.1 Data-driven Processes and

⁹The general framework of the SDG Project Assessment Tool can be consulted at the link https://unhabitat.org/sites/default/files/2020/07/sdg_tool_general_framework_jan_2020.pdf

¹⁰ <https://unhabitat.org/programme/the-global-future-cities-programme>

¹¹ <https://habitat3.org/the-new-urban-agenda/>

¹² The SDG Project Assessment Tool User Guide to be downloaded at the link <https://unhabitat.org/sdg-project-assessment-tool-volume-2-user-guide>

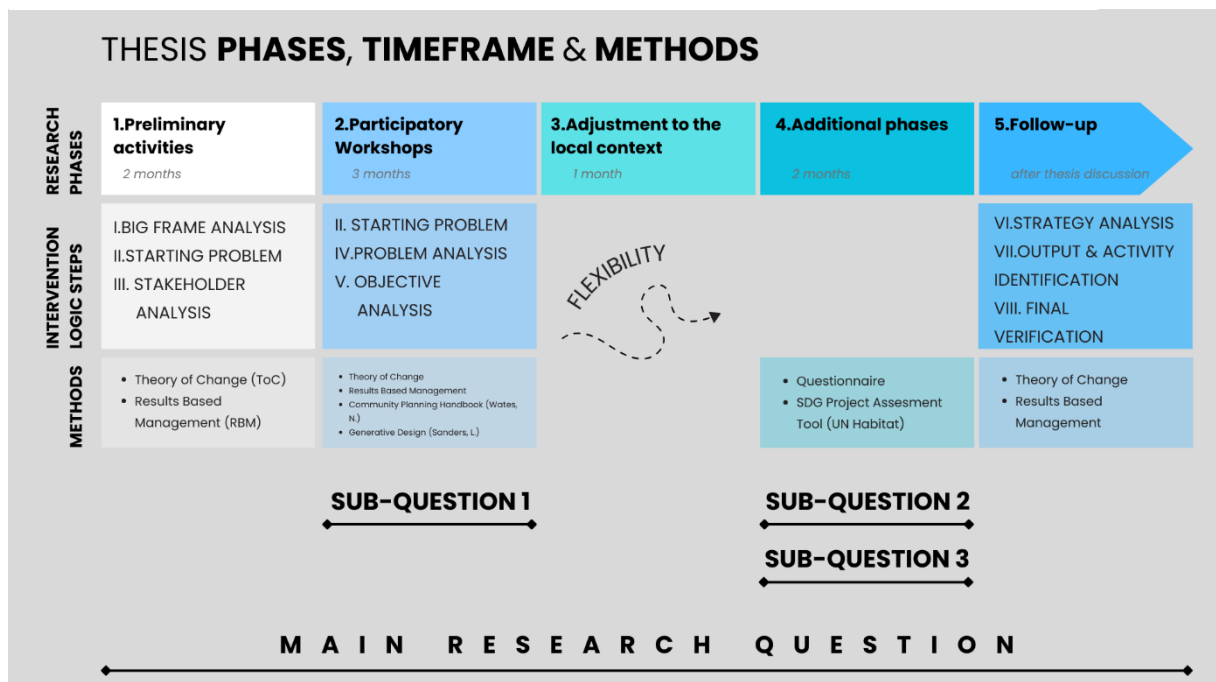
Management; B.2 Capacity and Market Maturity; B.3 Urban Governance and Legal Frameworks; B.4 Financial Strategies) were considered.

Finally, **spatial analysis** and **graphs** complete the overall research, both useful tools for a more dynamic visualization of the results.

Before the start of the work, an expected time frame, through a Gantt chart, was developed. However, a series of constraints identified at the beginning of the research (see next Chapter), confirmed the need to keep a flexible approach, also meaning a change and continuous adaptation to the events. By the end of the research, I can confirm that the following were the main steps undertaken, highlighted in [Figure 3](#), presenting a holistic overview of the (approximately) timeframe, theories and methodologies used for the research. The graph also highlights in which of the phases the different RQs are explored.

Figure 3

Thesis phases, including timeframe and methods



Note. Elaboration of the author

5. Delimitations, Limitations & Assumptions

Since the early stage of the research, some risks were very likely to be encountered, and some elements were particularly hard to control. An early analysis at the very beginning of the thesis drafting was crucial to understand which problems could have been encountered, and how to mitigate those risks. Three main risk categories were identified: i) those related to the thesis and the RQs; ii) some related to the implementation of the participatory workshops; and iii) some elements related to the project proposal elaboration and application to an existing call for funding.

Regarding the first category, the initial plan of the research included more activities than the ones finally implemented. Since the early stage of the work, an important premise was the awareness that some of the planned activities had to be cut or adjusted to the development of the events. A big precondition for the implementation of the activities has in fact been the strong reliability on people, and their commitment and availability to participate in the research activities (i.e. participatory workshops).

Moving to the second risks category, this refers to the activities regarding the implementation of a series of participatory workshops with the local community. In this case, a main pre-identified risk was the uncertainty about the number of people taking part in the co-design workshops (e.g. *will I be able to capture the interest of local people for participating?*). Then, another element of uncertainty was the little experience of the researcher in facilitation activities (e.g. *am I ready for being a facilitator?*). Another big limitation came from the period when the workshops were held, the summer, which is the time of the year when people tend to travel and enjoy cultural activities (e.g. festivals, concerts) more often; but also, the warmest time of the year (this being a problematic element as one workshop was to be organized outdoors, in the premises of the case study).

Since the beginning of the research, there has been a strong intention to apply to an existing call for proposals, for the implementation of the co-designed project. This was perhaps the strand of risks where most elements of uncertainty have been identified. A first point relates to the ownership of the area of intervention, legally belonging to the municipality. This implies the need of going through a process of consultation with the municipality Council, process that, according to the experience of most local associations, would have been quite problematic. This assumption was consequential in starting a consultation process that, in any case, would have required a strong commitment, given the long and slow bureaucratic processes

overall. Another big limitation was the short amount of time available for drafting the whole project proposal, and the period of the research, corresponding to the summer. Also, a strong problem that was confirmed during the research was the difficulty in finding a group of people that would really commit to the project and manage it. As the research explains after (see [sub-section 7.1.1](#)), the most suitable call for the case seemed to be the European Solidarity Corps (ESC) Solidarity Projects. This project would need a group of at least 5 young people designing, managing and implementing the project, and the events showed that this group was difficult to be found. This element actually opens the space for a new topic of research: how to ensure that the local community is already prepared, before the start of a co-design project, for taking its ownership?

In general, we understand that a main assumption of this research was the need for a flexible approach, meaning a continuous adjustment to the events, circumstances, and developments of the participatory process. A flexible approach is in fact “important to be able to respond to new circumstances and opportunities.” (Wates, 2000). In this way, I could ensure the success of the research in tackling the identified research questions.

6. The Case Study

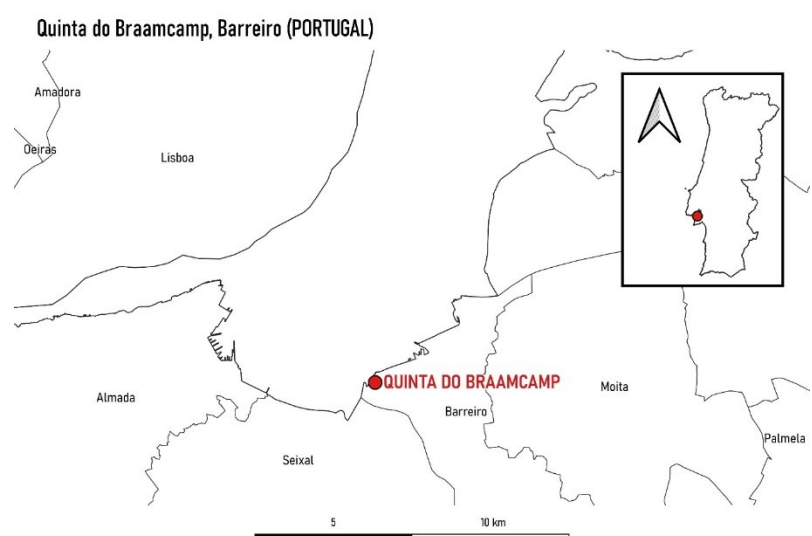
As mentioned in the introduction, the *Quinta do Braamcamp* is a ruined rural complex, located on the north-western riverbank of the municipality of Barreiro, situated in front of the city of Lisbon (see [Figure 4](#)). It is at the same time part of the Site of *Alburrica* and *Mexilhoeiro* and its Milling, Environmental, and Landscape Heritage (*Sítio de Alburrica-Mexilhoeiro e seu Património Moageiro, Ambiental e Paisagístico*), partially a National Ecological Reserve Regime (*Regime de Reserva Ecológica Nacional - REN*). We also saw how the future of *Braamcamp* was threatened by the attempt of selling the area for the construction of a hotel and residential units. This project would have in fact implied the loss of an important cultural trait of Barreiro, while negatively contributing to the loss of biodiversity and ecosystem services delivered by the marshland of *Alburrica*. We learnt how the project was stopped, through the commitment of the Civic Platform *Braamcamp é de Todos*, that has since then organised some grassroots initiatives in the area (i.e. guided walks, bird-watching activities, cultural events).

In this Chapter, we will get more familiar with the case study, while looking at the different elements composing its territorial capital. Studies on territoriality teach us in fact the importance of including the different elements of a territory, that is to say the different types of territorial capital, in the analysis. Introduced with the report Territorial Outlook 2001 (OECD, 2001), territorial capital is a concept that encompasses a wide variety

of both material and immaterial assets, from the geographic location, to the natural and physical resources, but also local non-tangible factors related to the fostering of entrepreneurship, creativity and innovation. “The notion of territorial capital allows us to add a territorial dimension to the various forms of capital” (Davoudi,

Figure 4

Locating the Case Study



Note. Elaboration of the author, through QGIS and data from <https://geoportugal.ineg.pt/pt/>

et al., 2008). We will do that by looking at the different scales of the territory. First, we will look at the *Tejo* estuary ([Section 6.1](#)), to then move to the municipality of Barreiro ([Section 6.2](#)). [Section 6.3](#) is instead dedicated to the *Sítio de Alburrica-Mexilhoeiro e seu Património Moageiro, Ambiental e Paisagístico*, while [Section 6.4](#) focuses on the *Quinta do Braamcamp*, the case study of this research.

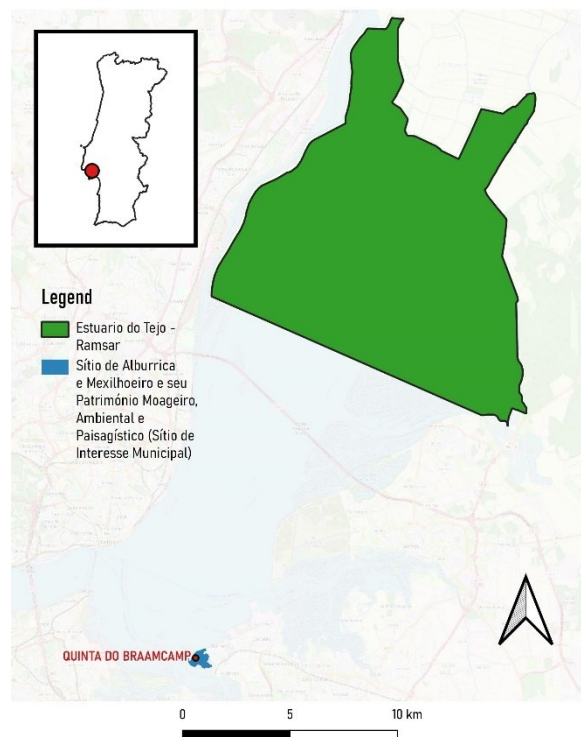
6.1. The Tejo estuary

The *Tejo* (Tagus) estuary stretches for around 80 km, covering an area of 320 km². Awarded the status of Natural Reserve under national legislation in 1975, it is to be considered the most valuable wetland in Portugal. Since 1980, some parts of the area are also designed as a Ramsar Site (see [Figure 5](#)), under the Convention on Wetlands¹³. At the European level, it is protected by the Natura 2000¹⁴, and as a Special Protection Area for wild birds. The Ramsar Convention on Wetlands describes wetlands as “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters” (Ramsar Convention Secretariat, 2013). Being estuaries transition areas between the aquatic and terrestrial environment, they are quite vulnerable coastal habitats, in particular the estuarine beach and sandbanks - and consequently the ecosystems that depend on it, like marshes and muddy platforms. In marshes, several ecosystem services happen, as the export and import of sediments, organic matter, nutrients and

Figure 5

The Case Study in relation to natural protected areas

Quinta do Braamcamp and natural protected areas



Note. Elaboration of the author, through QGIS, with data from <https://rsis.ramsar.org/>

¹³ The Convention on Wetlands (Ramsey, 1971) is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. More information here <https://www.ramsar.org>

¹⁴ Natura 2000 is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. More information here https://environment.ec.europa.eu/topics/nature-and-biodiversity/natura-2000_en

pollutants. Most of the time, these services are executed by the vegetation that colonizes these habitats, fundamental for the balance of these estuary ecosystems, also supporting its trophic pyramid¹⁵ (Amorim, 2015).

Apart from being nursery for different marine species (e.g. *true sole solea solea*, *European seabass dicentrarchus labrax*), the wetland also hosts up to 120.000 wintering waterbirds, while being the most important location in the country for wintering flamingos, ducks, waders, and gulls (BirdLife International, 2023).

6.2. Barreiro

6.2.1. A city with a rich industrial past

Barreiro grew from being a small municipality with around 2.500 inhabitants by the end of the XVIII century (Carmona, 2009), to become a city of 78.761,5¹⁶ inhabitants in 2021.

In the Middle Ages, salt flats were set up in the area, while documented proofs exist on the conversion of these into piers, for the installation of tidal flow mills (Pereira & Ramos, 2014). The tidal mills operated contemporary to the arrival of the windmills, built instead on the white sand areas of *Alburrica*. Moving to the XX^t century, we notice how the history of Barreiro is linked especially to two activities, these being the rail transport, and heavy industry. The industrial complex of the *Companhia União Fabril* (CUF) was inaugurated in the beginning of the XX century, with the opening of a factory of oil used in the soap industry in 1908. Other later productions involved fertilizers, copper refining, textiles, metalworking, and shipbuilding.

In the 1960s, the empire of the CUF started to suffer from the negative effects of the oil crisis. Nowadays, walking in the North-Eastern part of the city, one can still wonder through the remains of the industrial past of Barreiro, with its former worker-class neighbourhood, that included a cinema, a school, a canteen, and the mausoleum built in remembrance of Alfredo da Silva – founder of the CUF. Finally, what was “the major industrial pole of the Iberian Peninsula” (Reis, 2018), saw its final decline in the 1990s, with the dismantling of its economic activity.

¹⁵ Also known as ecological pyramid, the trophic pyramid can be defined as basic structure for all biological communities, referring to the way that food energy is passed between the trophic levels, through the food chain.

¹⁶ Data taken from <https://www.ine.pt>

Other relevant economic activities for the municipality, apart from, and previous to its industrial period, were related to fishing and naval construction, with a small nucleus of fishermen still existing.

6.2.2. *The path towards a sustainable city*

Nowadays, the municipality is still in a transition phase towards a more sustainable path. However, looking at existing urban sustainability initiatives at the European level, the municipality still did not sign the Aalborg Charter¹⁷ and neither is part of the European Sustainable Cities Platform¹⁸ (Carapinha, 2022). Only in July, 2023 Barreiro entered the MCR2030 (Making Cities Resilient 2030) initiative¹⁹. A Climate Action Plan was also approved in 2009, aiming at a “Strategy for a sustainable Barreiro”, but still no evaluation of the concretization of its objectives was done. (Carapinha, 2022)

Several low environmental impact projects were also implemented by the municipality, positively benefitting the area of *Alburrica*. These include a project for the construction of 3 walkways, linking the town to the three windmills of *Alburrica*.²⁰ Partially funded by EU, the project was implemented through 2016-2019. Then, a new project was approved in April 2022, financed by the Compete2020²¹ programme. This, instead, was aimed at the environmental requalification of the pond of the *Moinho Grande* (Big Tide Mill)²².

¹⁷ Inspired by the Rio Earth Summit’s Local Agenda 21, the Aalborg Charter (1994) is one of the biggest urban sustainability initiative, and the largest European movement of its type, comprising more than 3000 local authorities from around 40 countries.

¹⁸ Launched in 2016, the European Sustainable Cities Platform is an information hub for governments, at both local and regional level, and for civil society organisations, aimed at collecting information, and best practices supporting the sustainable urban transformation across Europe.

¹⁹ The MCR2030 is a global partnership aimed at ensuring cities are becoming sustainable and more resilient by 2030, by providing tools, technical expertise, and establishing city-to-city learning networks.

²⁰ More information about the project here <https://www.cm-barreiro.pt/municipio/camara-municipal-do-barreiro/projetos-financiados/alburrica-portugal-2020/noticia/valorizacao-integrada-do-sitio-de-alburrica>

²¹ Incorporated in the REACT-EU (Recovery Assistance for Cohesion and the Territories of Europe), as an instrument created by the European Commission, to accelerate the recovery from the covid-19 crisis and prepare to an ecological, digital and resilient recovery of the economy https://www.compete2020.gov.pt/REACT_EU_COMPETE2020

²² More information about the project here <https://www.cm-barreiro.pt/municipio/camara-municipal-do-barreiro/projetos-financiados/requalificacao-da-caldeira-do-moinho-grande/noticia/requalificacao-da-caldeira-do-moinho-grande>

Despite these good examples of environmental protection measures, still a lot needs to be done in order to ensure a more resilient city, better prepared to face climate change related challenges in the future.

6.3. O Sítio de Alburrica e seu Património Moageiro, Ambiental e Paisagístico

The site of *Alburrica* is part of the *Tejo* River wetland habitat, that managed to survive at the heavy urbanization of the Southern bank of the *Tejo* estuary. This area is *per se* a place of symbiosis between the natural and anthropological evolution of the landscape. The beauty of the place is also reflected in the origin of its name “*Alburrica*” that, according to José Pedro Machado (1991), is a toponym that derives from the arab “*al-barriqâ*”, that means brilliance, splendour (*brilho, splendor*).

Given its singularity and its environmental relevance - a peninsula with several ponds, and where small river beach form - the area is partially included in the National Ecological Reserve Regime (*Regime de Reserva Ecológica Nacional - REN*), classified as “beaches and sandbanks” (“*praias e restingas*”). However, despite being located in an area of “Estuary and adjacent humid areas, including Islands and Marshlands” (*Estuário e zonas Húmidas Adjacentes, incluindo Ilhéus e Sapais*), it is still not included in the limits of the Natural Reserve of the Tejo Estuary (*Reserva Natural do Estuário do Rio Tejo*), nor in those of the Natura 2000 network. At the same time, it is not included in the protected area of the estuary that is designed as a Ramsar site. As the Ramsar wetlands Information Sheet states, there are in fact still several important sites, worldwide, not included (RSIS, 1992).

Figure 6 A-D

Sítio de Alburrica-Mexilhoeiro e seu Património Moageiro, Ambiental e Paisagístico



(A) Windmills of Alburrica



(B) Wetlands of Alburrica



(C) Repurposed Moinho pequeno – Centro Interpretativo de Barreiro



(D) Tide mill of Braamcamp

Note. Pictures by the author

Geographically speaking, the estuarine waterfront of Barreiro is composed of two small peninsulas, formed through alluvions. According to the Corine Land Cover (CLC), the area is classified as salted marsh. A salted marsh is in fact one of the main habitats – together with mudflats and manmade reedbeds - of the *Tejo* estuary. More specifically, a salted marsh is a type of coastal wetland, constantly flooded and drained by tides (see Figure 6B). The Ramsar Convention classifies a salted marsh as an estuarine type of wetland.

Salt marshes are beneficial as being important nesting and feeding grounds for birds, while their particular waters – shallow and brackish – provide an important shelter for molluscs, crustaceans and fish. Research shows how this type of ecosystem – together with mangroves, peatlands, and seagrass beds – store more carbon than all the world on land forests combined (Keith, et al., 2020; UNEP, 2021).

Some characteristic territorial elements of the area are its tide mills and windmills. The history of tide mills in Portugal is centuries-old, with the oldest documents mentioning them dating back to the 13th century (Wittenberg, 2016). The *Moinhos de maré* (tide mills) are composed of a “*caldeira*” (reservoir or mill pond) which would be filled with water through the “*adufa*” (a sluice gate) when the tide was high. It would then be closed when the water level decreased, and therefore used from 2 to 5 hours when the tide was low. In Barreiro, the first source stating the existence of a *Moinho de maré* dates back to 1498, when the religious and military Order of Santiago received "an annual payment of 24 bushels of wheat, from the New Mill in Cabo de Pero Moço [the so-called *Moinho do Cabo*] " (Carmona, 2009). Starting from that, other tide mills were built in the area, as the Big Tide Mill (*Moinho Grande*) - active at least from 1652 - and the Small Tide Mill (*Moinho Pequeno*) – first referred to in 1652. The most recent one is the Braamcamp Tide Mill (*Moinho do Braaamcamp*) – see Figure 6D. The *Moinho Pequeno* was requalified in 2019, with the establishment of the Interpretative Centre of Barreiro (*Centro Interpretativo do Barreiro*) – see Figure 6C. The centre is located at the start of the walkways that lead to the *Alburrica* beach. Finally, as it concerns the *Moinho Grande*, and as mentioned in [subsection 6.2.2](#), a new project was approved in April 2022, financed through the Compete2020 programme, aimed at the environmental requalification of the tide mill's pond.

Looking at the windmills (see Figure 6A), the group consists instead in the Giant Windmill (*Moinho de Vento Gigante*) – active until 1919 – the Nascent Windmill (*Moinho de Vento Nascente*) and the West Windmill (*Moinho de Vento Poente*) –

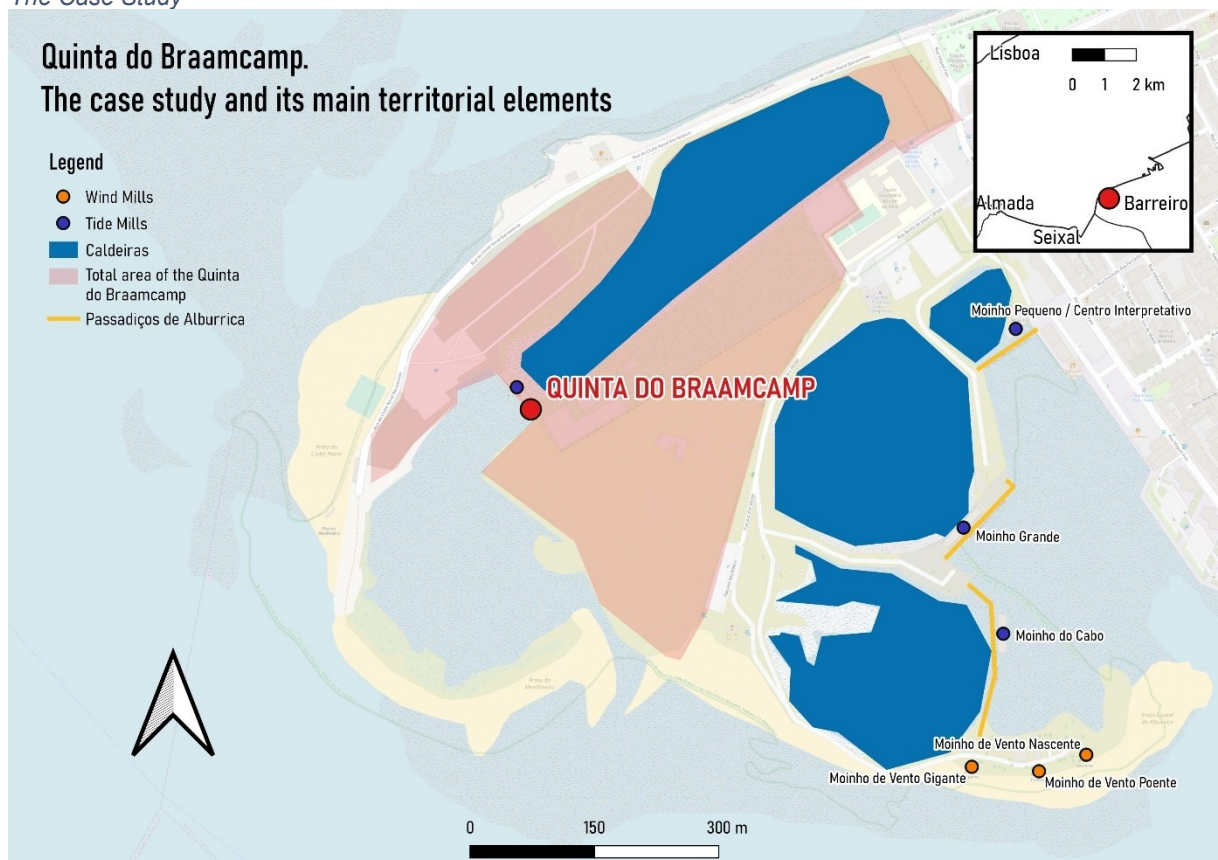
both active until 1950. As mentioned before, Barreiro was better connected to the windmills through 3 walkways, constructed between 2016 and 2019, under a project partially funded by the EU. The project contributed for both the windmills and the tide mills to become important elements of the touristic circuits of Barreiro²³.

6.4. Our case study, the *Quinta do Braamcamp*

This section is dedicated to a detailed presentation of the case study. It starts with the description of the environmental capital of *Braamcamp*, to then move to the history of the place. Thereafter, it focuses on the recent developments, and a final sub-section is dedicated to existing alternative proposal for the future of the area.

Figure 7

The Case Study



Note. Elaboration by the author, through QGIS, on an OpenStreetMap layer

6.4.1. Environmental capital

In 2019, an ecological evaluation of the flora and fauna of *Quinta Braamcamp* was made by Quercus²⁴. According to the study, the vegetation of the area falls into the category of low and medium marsh, the majority of plants being in fact nitrophilous,

²³ <https://www.cm-barreiro.pt/conhecer/turismo/circuitos-turisticos/circuito-moageiro>

²⁴ Quercus is a Portuguese environmental NGO founded in 1985, working on different thematic areas related to the protection of the environment, these being biodiversity preservation, energy, water, waste, climate change, forests, sustainable consumption, and environmental responsibility. Nowadays, it includes various working groups, and several permanent projects.

with some arboreal species in the premises of the buildings' ruins. The Western part of the area is instead mainly characterized by a vegetation typical of marshes. The study also presents some advices on further studies (i.e. the need of creating a floristic inventory, to be realized in spring times) and highlights that any urbanistic operation to be developed in the area should always take into account the valorization of the marsh areas and the ecosystem that characterizes the property, but also the requalification of the tide mill pond integrated in the *Quinta da Braamcamp* (Quercus, 2019)

6.4.2. History of the Quinta do Braamcamp

Extending on an area of 21 hectares and located in the above-mentioned area of *Alburrica*, on the North-Western riverbank of Barreiro (see [Figure 7](#)), the *Quinta do Braamcamp* was established in the framework of a European social and cultural movement, imported by the renaissance Italian villas, evolving into the French and English models, with some influence from the Portuguese “recreational farms” (“*quintas de recreio*”)(Santos, 2019). Initially a tide mill, it was rebuilt by Vasco Lourenco after the 1755 earthquake²⁵, and sold by his heirs to Geraldo Wenceslau Braamcamp, the first baron of Sobral, in 1804. That is when it gained its name. He increased the number of mills from 7 to 10, making of it one of the biggest tide mills of the Tejo estuary (Carmona, 2009). Apart from using its premises for family retreat, he also started to produce silkworms destined for the textile industry. Afterwards, *Braamcamp* belonged to the English merchant Abraham Wheelhouse, and was thereafter sold to the heirs of Robert Hunter Reynolds, in 1884. They went to live in the *Quinta*, and established a cork industry in 1892, which became the main activity of *Braamcamp*. According to Santos (2019), the development of the cork industry in Barreiro was strictly linked to the instalment of the railroad in Barreiro in 1859, and therefore its facilitated access to Lisbon via boat. In 1897, the complex was sold to the National Cork Society (*Sociedade Nacional de Corticas*) and the building of the tide mill was totally converted to the industrial activity.

It is in 2008 that the cork enterprise *ESENCE Sociedade Nacional Corticeira, S. A.* was declared insolvent by the Commercial Tribunal of Lisbon (*Tribunal de Comercio de Lisboa*), and in 2010 its belongings were sold at auction. Three companies from

²⁵ The “Great Lisbon Earthquake”, as it came to be known, struck on November 1st, 1755. The sequence of earthquakes, followed by subsequent fires and a tsunami, almost completely destroyed Lisbon. With a magnitude of at least 7.7, it is to be considered one of the largest earthquakes in history.

the scrap industry bought the machinery, equipment, and instruments of the fabric, while the land was bought by the Bank Group BCP (*Banco Comercial Português*). This meant a period of abandonment for the *Quinta*, its premises further ruined by an arson on February 18, 2011, that destroyed the *Moinho do Braamcamp*. This event was followed by a second large fire, on September, 23 of the same year, that destroyed the palatial house, several warehouses, and many centuries-old palm trees.

Already in 2010, the *Associação Barreiro-património, memória e futuro* expressed its concerns to the CMB, worried about the loss of the goods and especially of the future memory. Some documentaries were created, and other material collected, to preserve the memory of the history of the site. After the first fire of 2011, the Association protested and opened a petition – which received around 700 signatures – reflecting the common outrage with the situation of abandonment in which the *Quinta* was finding itself.

On November 4, 2015, the CMB approved, in a private session, the buying of the *Quinta do Braamcamp*, which was officially bought on December 2016 for €2,9M. This allowed for the “opening of 21 hectares of riverbank to the fruition of the community [...] withdrawing it from the real estate market and affirming a discourse and a strategy of public fruition” (CMB, 2015)

In 2016, a meeting (“Nature and Biodiversity”) was held by the municipality, during which the *Sítio the Alburrica* was recognised as an “area of high ecological value”²⁶.

On July 6, 2017, the CMB approved the final decision of classifying the *Quinta da Braamcamp* as Site of Municipal Interest (*Sítio de Interesse Municipal – SIM*), integrating the *Sítio de Alburrica e do Mexilhoeiro* to its milling, environmental, and landscape heritage.

6.4.3. Recent developments. A place-neutral proposal?

Things changed in 2018, when the new municipality president, elected in 2017, shared a project proposal for the *Quinta do Braamcamp* during its visit to the Real Estate international fair (MIPIM) held in Cannes of that year.²⁷

²⁶The main presentation of the conference to be consulted at the following link https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/8939/barreiro2030_oficina9_naturezabiodiversidade.pdf,

²⁷ More information can be found, in Portuguese, at the web article <https://www.dn.pt/lusa/barreiro-considera-quinta-do-braamcamp-uma-perola-e-quer-desenvolver-projeto-no-local-9193719.html>

One year after, on February 18, 2019, an open session was organized, to invite the population to “enlight”²⁸ them on the destiny of the lands of the *Quinta do Braamcamp*. During that occasion, however, the selling to privates was proposed as only viable option (Carapinha, 2022).

The proposal was materialized on March 6, 2019, when the municipality decided to sell the area, which was awarded – through a public tender - to the 40M € project²⁹ proposed by Saint Germain – *Empreendimentos imobiliários S.A.* The project included the construction of a 178-rooms hotel – with an annexed gym, SPA, swimming pool, and bar - and 185 residential units. In June 2020, the selling was stalled by the Administrative and Fiscal Tribunal of Almada, thanks to the grassroots initiative which led to the creation of the Civic Platform “*Braamcamp é de Todos*”.

The Civic Platform was born already in March 2019, with a meeting of around 100 people, and originated by civil society associations - in particular the *Associação Barreiro Património Memória e Futuro*, the *Cooperativa Cultural Barreirense* and the *Cooperativa Mula*. Despite being born as a horizontal movement (i.e. without leaders, but rather representing the local population), several activists agree on how the Civic Platform soon started to be seen by the municipality as rather serving the political party in the opposition.

Apart from being able to stop the selling of the process in the Court of Almada, the Platform concretized other strategies, like the organization of a series of activities in the *Quinta* (i.e. guided walks, bird-watching activities, cultural events), reaching several Portuguese news medias (*RTP, Público, Sol, Antena 1*), also organizing a seminar titled “Which future for the *Quinta do Braamcamp*” (“*Que Futuro para a Quinta do Braamcamp*”)³⁰. The seminar saw the intervention of several experts (ie. Rodrigo Dias, architect specialized in *quintas*, Carlos Antunes, mathematician that has been studying the future effects of rising water levels, Jaime Sousa, expert in areas of nidification and the importance of the marsh ecosystem preservation).

The Court ruling, however, did not deter the municipality and the company from conducting business; nor did the negative assessment of the project presented by

²⁸ About the “Enlightening session about the Quinta do Braamcamp” (*Sessão de Esclarecimento sobre Quinta do Braamcamp*) <https://www.cm-barreiro.pt/viver/arquivo-de-noticias/2019/noticia/sessao-de-esclarecimento-sobre-quinta-do-braamcamp>

²⁹The project can be found at the link <https://www.youtube.com/watch?v=RHWfmxET15U>

³⁰ More info at the link <https://www.rostos.pt/inicio2.asp?cronica=9008384>

the Portuguese Environmental Agency (*Agência Portuguesa do Ambiente*). The project was in fact submitted for approval, in May 2021, to the CCDR LVT (*Comissão de Coordenação e Desenvolvimento Regional de Lisboa e Vale do Tejo*). The most recent events show how the winning company, Saint Germain, was found suspected of being involved in some corruption crimes in *Monte Gordo*, in the South of Portugal, which led the company to stop all its projects in Portugal.

To conclude, another element of uncertainty for the future of *Braamcamp* needs to be mentioned, related to the *Arco Ribeirinho Sul (ARS)*. The project, launched in 2008, aims at the urban requalification of the Southern margin of the *Tejo* River, of which Barreiro is part. The most recent development is represented by the Resolution n°41/2023 of May 10th, 2023³¹. The Resolution presents the main intervention axis of the Project, which include i) economic activities, ii) equipment, iii) mobility and accessibility, and iv) environment and landscape. The future of *Braamcamp* will highly depend on the development of the ARS, which might represent either a positive or negative opportunity for the area, depending on the development aspects that will be prioritized for the area.

6.4.4. *Alternative proposals for the Quinta do Braamcamp*

In 2013, in the framework of the project EsTejo of the *Universidade Lusíada*, a series of workshops with some students were implemented, resulting in a proposal involving low architectural structures, and other activities as urban gardens and equipment for the fishermen of the area. All the material was presented and made available online, among which the “Open Charter to the Municipality of Barreiro” (*Carta Aberta à Câmara Municipal do Barreiro*)³². Presented on August 12, 2020, the researchers expressed their disagreement on the project proposed by Saint Germain, based on a detailed analysis that highlighted: the unfavorable conditions (e.g. rising water levels, aggressive winds) confirmed by several studies; the loss of the opportunity of recreating the original structure of the XVIII-hundred century Quinta; the lack of sustainability of the proposed arboreal species, incompatible with the local ecosystem; and the unsustainable project proposal that would interrupt the

³¹ The Resolution can be consulted at the link <https://diariodarepublica.pt/dr/en/detail/resolution-of-the-council-of-ministers/41-2023-212837355>

³² The Open Charter, together with the materials related to the EsTejo Project, to be found at the link <https://web3.lis.ulusiada.pt/news/Home/Detail/Details/CITAD-equipa-de-investiga231227o-do-projeto-ESTEJO-dirige-carta-aberta-224-C226mara-Municipal-do-Barreiro-1>

continuous movement of estuarine water that sustains the tide mill ponds of *Alburrica*, that would lead to a huge ecological and environmental loss.

Then, several master's thesis from architecture students proposed alternative and more sustainable projects, more in harmony with the area, and respecting its natural values. Among them, we highlight "Public Spaces in the Democratization and Right to City in Barreiro: Co-production and Co-governance starting from Various Actors in *Braamcamp*" (*Espaços Públicos na Democratização e Direito à Cidade no Barreiro: Coprodução e Cogovernança a Partir de Vários Actores na Braamcamp*) (Bravo, 2021), and "Multi-use centre in *Alburrica*. The Equipment as an Element of Requalification of the Prospective Space" (*Centro Multiusos em Alburrica. O Equipamento Enquanto Elemento de Requalificação do Lugar Expectante*) (Lemos, 2019).

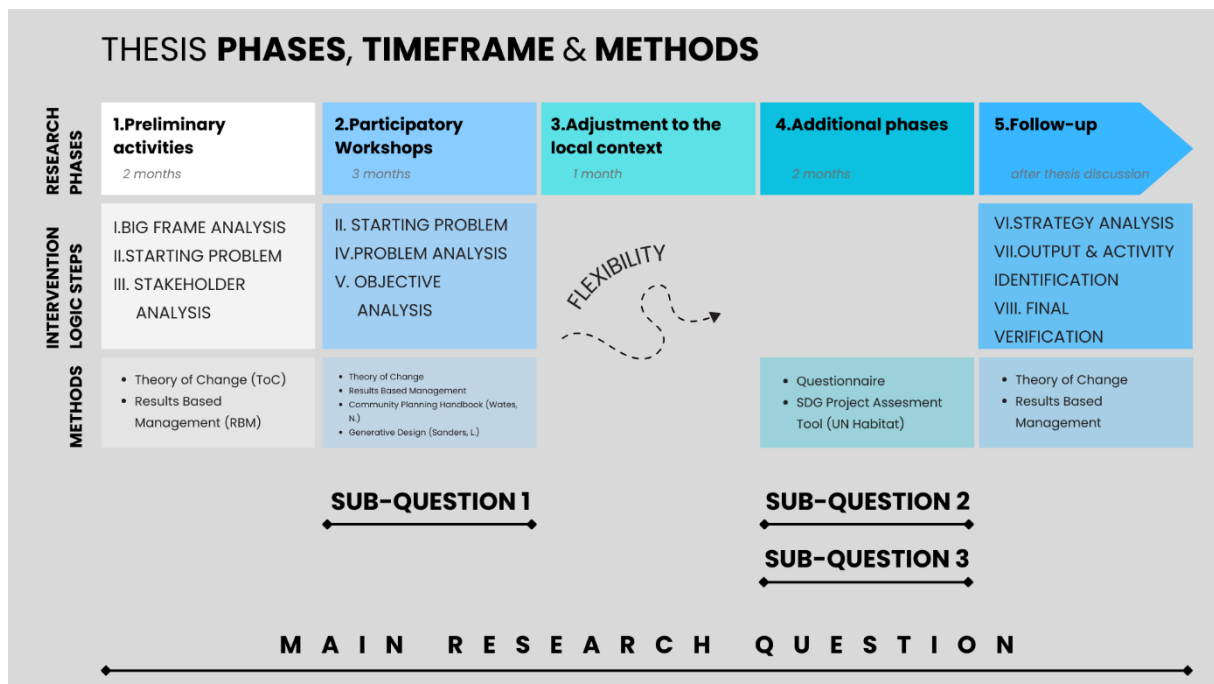
The next Chapter represents the main part of the research, describing the Co-Design Journey, and therefore the various steps undertaken in order to answer the RQs.

7. The Co-Design Journey

This Chapter is dedicated to the presentation of the main steps undertaken in the Co-Design process, that was divided into 5 phases. The image below (Figure 8), already introduced in Chapter 4, shows how each one of the phases is related to a specific step of the intervention logic regarding project design, while involving different methods. The graph also highlights in which phase of the thesis each research question enters the investigation.

Figure 8

Thesis phases, with timeframe and methods applied



Note. Elaboration by the author

Looking at the phases individually, **Phase one** corresponds to the first three intervention logic steps, namely the i) big frame analysis, the ii) starting problem identification, and the iii) stakeholder analysis. For this phase, the methodology used stems from the Theory of Change (ToC) and the Results Based Management (RBM) approach for project design. [Section 7.1](#) and its two subsections are dedicated to this phase.

Then, looking at **Phase two**, this still corresponds to the ii) starting problem, also tackling the fourth and fifth steps of the intervention logic, namely the iv) problem analysis and the v) objective analysis. While stemming from the ToC and the RBM approach, the other two sources used were the Community Planning Handbook (Wates, 2000), and Generative Design (Sanders & Stappers, 2012). These two methods were involved in the implementation of two participatory workshops, and in

the creation of a new tool for Co-Design (i.e. *Dixit Braamcamp*). [Section 7.2](#), and the included subsections, explore in detail the phase.

At this point, **Phase 3** is dedicated to the adjustment of the co-design journey according to the context specificities, with [section 7.3](#) presenting the various specifications and problems encountered.

Phase 4, detailed in [section 7.4](#), is instead dedicated to two additional phases, aimed at answering the sub-questions 2 (**RQ1.2**: In which ways can the participation in a co-design process be beneficial for the local community?) and 3 (**RQ1.3**: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?). These phases do not correspond to any of the intervention logic steps; however, they are still necessary for finalizing the research.

Finally, [Section 7.5](#) is dedicated to **Phase 5** of the Co-Design Journey, namely the follow-up of the project, that is to say the list of possible activities to follow after the end of this research. We will see in fact that, in the framework of this research, the project design only tackles the initial steps of the intervention logic, leaving the vi) strategy analysis, the vii) output and activity identification, and the viii) final verification for a later stage.

For a detail analysis of the methodology used, please refer to [Chapter 4](#) of the research.

7.1. Phase 1: Preliminary activities

7.1.1. Research on available calls for proposals

Despite the research focus on the journey behind the Co-Design of a project proposal, rather than the project implementation, an analysis of the best suited calls was still carried out. This analysis started as a very preliminary activity but was completed only in phase three – in accordance with the continuous adjustment of the research to the local context and events. By the end of the journey, the following best calls for proposals were individuated, to be used in the future for the case of *Braamcamp*: specific Horizon Europe calls; the European Solidarity Corps (ESC); initiatives related to the New European Bauhaus (NEB); and finally, the Portuguese Participatory Budget (*Orçamento participativo*).

This subsection is dedicated to describing the above-mentioned calls. For the scope of this research, we will see that the ESC was considered the most suitable call for

the context specificities. However, due to a series of circumstances – partially detailed in [Chapter 5](#), and that will also be highlighted further in the research– the project did not reach the application stage. In any case, I believe that this section can be useful for students, and whoever will be reading this research, to get familiar with possible calls that could serve them in the future, for projects similar in scope to this one. Of course, each case is specific, and a detailed analysis of the context will lead to the better option. The list is therefore not exhaustive, but can serve as a good starting point³³.

Horizon Europe

Horizon Europe is the biggest EU funding programme for research and innovation, with a set budget of €95.5 billion for the financial framework 2021-2027. The programme aims at fostering cooperation between EU member states, in the framework of research and innovation, also tackling climate change and the achievement of the United Nations (UN) Sustainable Development Goals (SDGs), while boosting the EU competitiveness and growth.

Horizon Europe is the successor of the Horizon 2020, that referred to the financial framework 2014-2020, which at the same time is the follow up of the Seventh Framework Programme (FP7) of 2007-2013.

The innovation of the Horizon Europe compared to its predecessors lies mainly in the so-called 5 “missions”, a set of measures targeting specific challenges (i.e. Adaptation to climate change, including societal transformation; Cancer; Healthy oceans, seas, coastal & inland waters; Climate-neutral & smart cities; and Soil health & food).

In general, Horizon Europe is composed of 3 main pillars, namely (I) Excellent Science, (II) Global Challenges and European Competitiveness, and (III) Innovative Europe. Pillar II is further divided in 6 Clusters (CLs), these being: i) Health; ii) Culture Creativity and Inclusive Society; iii) Civil Security for Society; iv) Digital, Industry and Space; v) Climate, Energy and Mobility; and iv) Food, Bioeconomy, Natural Resources, Agriculture and Environment. To analyse which funding opportunity is available for each cluster, one must check the so-called Work

³³ Please note that this paragraph, despite containing some results of the research, was not included in Chapter 8 (Discussion) but rather here. The reason is mainly due a practicality and continuity of the discourse.

Programmes (WP)³⁴, where each WP is dedicated to a specific cluster, its destinations, and the different calls for each destination.

For what regards our case, a call that perfectly suits a project for the regeneration of the *Quinta da Braamcamp* would be the following “HORIZON-CL2-2024-HERITAGE-01-01: New European Bauhaus – Innovative solutions for greener and fairer ways of life through arts and culture, architecture and design for all”. The call belongs to the destination “Innovative research on European cultural heritage and cultural creative industries – building our future from the past”, and is to be found in the WPs 2023-2024 of CL2 Culture, Creativity and Society³⁵. The call is described in the following paragraph, that is dedicated to the New European Bauhaus (NEB) initiative.

The New European Bauhaus (NEB) and the NEB Prize

Already introduced in [section 3.1](#), the New European Bauhaus (NEB) is an interdisciplinary and creative EU initiative which aims at building together a more inclusive and sustainable future. The above-mentioned Horizon call aims at the development of innovative solutions that demonstrate how NEB investments can be successfully realised, increasing the visibility of the initiative, while involving citizens in the involvement of citizens in the preservation and enhancement of cultural heritage. However, the implementation of such a project would require a mature and strong partnership carried out in at least 5 small scale-trials, in at least 3 member states. At the same time, it also needs a mature municipality, ready to be part of the partnership, and with a different approach (i.e. place-based, bottom-up) to urban development. In general, we can say that the call exceeds the scope of this research.

The New European Bauhaus has also launched, in 2021, the NEB Prize competition. The 2024 edition includes prizes awarded in four categories, these being: i) Reconnecting with nature; ii) Regaining a sense of belonging; iii) Prioritising the places and people that need it the most; and iv) The need for long-term, life cycle thinking in the industrial ecosystem. For each category, three parallel competition strands are established, these being: Strand A: “New European Bauhaus Champions”, devoted to existing and completed projects with clear and positive

³⁴ Available work programmes can be consulted at the link https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes_en

³⁵ The call can be found at p.91 of the document to be consulted here [wp-5-culture-creativity-and-inclusive-society_horizon-2023-2024_en.pdf \(europa.eu\)](#)

results; Strand B: “New European Bauhaus Rising Stars”, dedicated to concepts submitted by young talents aged 30 or less (the concepts can be at different stages of development, from ideas with a clear plan to the prototype level); and Strand C: “New European Bauhaus Education Champions”, that will be devoted to initiatives focusing on education and learning - both completed projects, as well as initiatives with a minimum level of maturity are eligible. (NEB, 2023)³⁶.

ESC solidarity project

Solidarity Projects are specific projects that bring together a group of at least 5 young people (not necessarily belonging to any formal association), aged between 18 and 30 years old. Ideally, these young people, coming from the same member state, wish to tackle a specific challenge affecting their community. The project should also demonstrate European value, therefore drawing on EU priorities as climate change, inclusion, democratic engagement, citizenship, and/or gender equality.

The duration of the project can go from a minimum of 2 months to a maximum of 12, and is mainly part-time, allowing young people to use their free time. In fact, the group is the one responsible for the design, management, and implementation of the project.

Activities of the project can receive around €500 per month for covering the costs of managing and implementing the project, while additional funding is secured for the involvement of a “coach”. A coach, as we read in the ESC guide, is a resourceful person- external to the applying group - that might have experience in accompany youth groups and can support the applying group of people (not the target group) in different ways. For example, “through regular coaching sessions throughout the project period, punctual trainings on specific topics or a combination of both. [...] The coach can provide advice on having quality learning process and assist in identifying and documenting learning outcomes at the end of the project. [...] For example a coach could be a person to turn to with doubts, questions, conflicts in the group; a trainer to give a workshop on project management; to teach the group certain skills needed for the project; a person supporting and monitoring the learning process” (EC, 2023). Furthermore, a project proposal elaborated through the ESC Solidarity Projects could be used to apply for the above-mentioned NEB Prize, under strand B.

³⁶ More information on the NEB prizes 2024 to be found here <https://prizes.new-european-bauhaus.europa.eu/about>

“New European Bauhaus Rising Stars”, as it is dedicated to concepts submitted by young talents aged 30 or less, and does not need to be a completed project, but also in its initial stage, as an idea. The Prize under this strand is set to €15.000.

Even if this seems to be the most suited call for a small-scale project, also given the local specificities of our case study, some problems need to be highlighted. In particular, being the Solidarity Corps based on a voluntary participation of young people, it is easy to understand that to take part in this project, young people must be willing to dedicate their time to the project – aware that they will not receive any financial compensation for their commitment. At the same time, these people must have enough free time to dedicate to the project. As already mentioned in [Chapter 5](#), a main problem emerging during the Co-Design Journey was indeed finding 5 young people able and willing to commit for the project. Another element to be considered is the relationship between the municipality and local associations initiatives, that – as past experience showed - is not of the most cooperative. This is relevant mainly because the land where *Braamcamp* is located belongs to the municipality, making it mandatory to have the institution supporting any kind of project in the area.

Orçamento participativo

Finally, a last initiative to be mentioned is the *Orçamento Participativo*. Launched by the Portuguese government in 2016, the *Orçamento Participativo Portugal* (OPP), translated to “Participatory Budget Portugal”, is a process that allows citizens to submit investment proposals and choose, through voting, which projects they want to see implemented in different areas of governance.³⁷ However, the last information about *orçamento participativo* on the website of the municipality of Barreiro is dated 2020.³⁸

7.1.2. Key local actors: a “co-design team” and the understanding of local specificities

To ensure a participatory approach during all the project steps, the initial idea was that of finding a team of people that would join me in what would become the “project design team”. This team would have been the responsible for the organization of the participatory activities to be held with the local people. Therefore, this has to be seen

³⁷ More info on the *Orçamento Participativo Portugal* here <http://www.portugalparticipa.pt/>

³⁸ More information at the link <https://www.cm-barreiro.pt/participar/orcamento-participativo>

as a “co-design of the co-design workshops”, in particular related to the organization of the two participatory workshops, that will be detailed in the following section.

However, a series of factors limited this possibility, these factors being: the difficulty in finding interested people to commit; time constraints (i.e. the summer approaching, and the difficulty in combining different scheduled); the conflicting relationship between the municipality and the local associations (i.e. a meeting with some key local people made it clear that it would have been better to keep my research detached from the local associations as much as possible).

In the end, most of the organizational aspects were conducted by the researcher, while receiving a big support from M.P and L.R.

At the same time, a series of meetings and informal conversation between the researcher and some key local actors (i.e. representatives of local associations, activists from the *Plataforma Braamcamp*, local actors directly involved in the protection of *Braamcamp*, and key informants in general) were crucial for better understanding the context specificities, and the best possible strategies to follow.

At this point, the second phase of the research was started, which saw the implementation of two participatory workshops. These were aimed at bringing together local people, for a sharing of ideas about the future of *Braamcamp*, while starting to identify the main problems related to the case study.

7.2. Phase 2: Participatory Workshops

Having identified some key local actors to help the researcher in the organizational activities, and having developed a better understanding of the local context through the key informants, the second phase of the Co-Design journey was related to the organization and implementation of two participatory workshops, namely “*Dixit Braamcamp*” (Workshop 1 - W1), and “*Braamcamp’s* problem and objective analysis” (Workshop 2 - W2). I already explained how this phase is related to the intervention logic steps (ii) Starting problem, (iv) Problem analysis, and (v) Objective analysis”. Both workshops had as main goal that of bringing local people together, to share ideas about which dreams they have about *Braamcamp* (Workshop 1), and to collectively identify the main problems related to the case study (Workshop 2).

About this section, [sub-section 7.2.1](#) is dedicated to the organization of the two workshops - which happened simultaneously - while the following two are dedicated

to an analysis of the methodology applied for both Workshop 1 ([sub-section 7.2.2](#)) and Workshop 2 ([sub-section 7.2.3](#)).

7.2.1. Organization of two participatory workshops

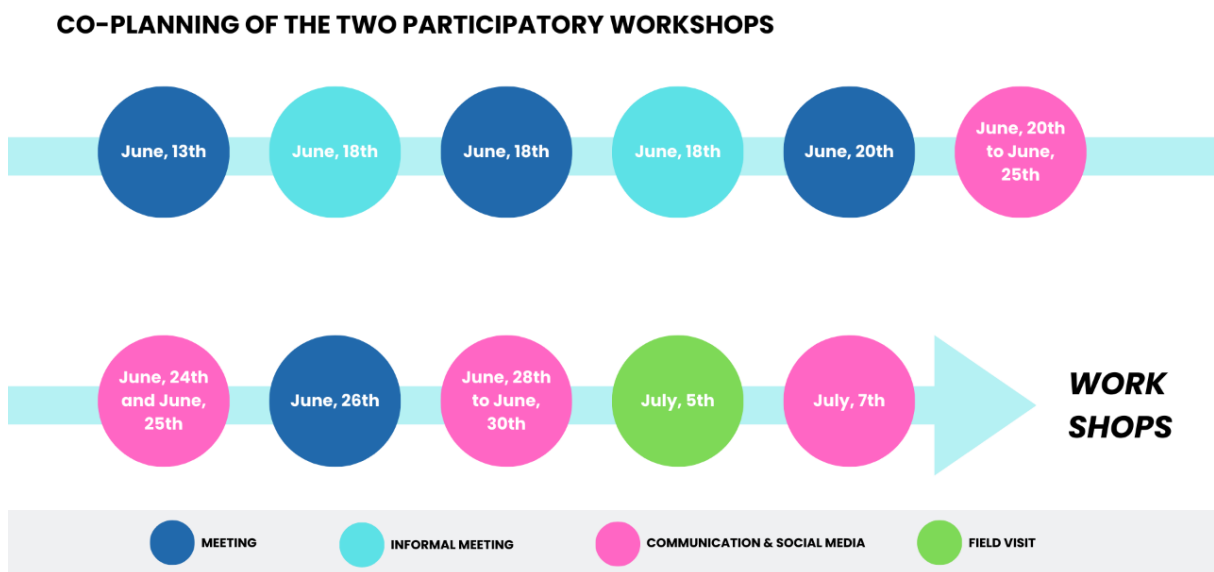
As mentioned before, despite discarding the option of having an established co-design team, the help of M.P. and L.R. was particularly needed for the organization of these two workshops.

The planning included a series of meetings with different stakeholders, a communication strategy³⁹, and the organization of schedule of the two workshops.

For the whole duration of the planning, I found it useful to keep track of the different meetings, informal talks, and other activities that led to the implementation of the workshops. A summary of these is presented in [Figure 9](#).

Figure 9

Co-Planning of the two participatory workshops



Note. Elaboration of the author

7.2.2. Workshop 1: “Dixit Braamcamp”

W1 was particularly aimed at gathering local people together, to discuss and share ideas on what they would like to see in *Braamcamp*. It is therefore to be seen as the launching event of the Co-Design journey. By the end of the workshop, we were able to identify and elaborate a new creative tool for co-design methods, named “*Dixit Braamcamp*”. We will look at the results in [Section 8.1](#), while the following two

³⁹ Available for consultation at the Instagram page <https://www.instagram.com/codesignbraamcamp/>

paragraphs describe the methodology used for both the implementation of the workshop, and the creation of the toolkit related to the workshop.

Despite being related to the first three steps of the intervention logic, the workshop also relates to step (vi) strategy analysis and (vii) output and activity verification. In fact, during this day, we were able to identify some activities that might be implemented in the framework of a future small-scale project for *Braamcamp*.

Methodology in action – Implementation of the workshop

The methodology for the implementation of the workshop was taken from the Community Planning Handbook (Wates, 2000). In particular, the following steps for designing a strategy geared to the specific circumstance were followed: i) definition of a goal or purpose; to then devise a strategy through ii) sketching out a scenario for the situation; iii) completing the action plan; iv) thinking of who might be involved; and v) producing a budget and allocate responsibilities.

The Handbook also states that “flexibility is important to be able to respond to new circumstances and opportunities [while] planning a provisional overall strategy is a useful discipline so that everyone understands the context in which the chosen methods are being used” (Wates, 2000).

In our case, the main goal (i) was understanding people's needs, at the same time producing creative ideas, building trust, and ensure citizen empowerment. To achieve this, our strategy included the use of Dixit – a game that stimulates creativity - and was based on the following scenario (ii)⁴⁰:

“The Quinta da Braamcamp is a ruined rural complex, in need of repurposing. With a rich milling and industrial past, Braamcamp is located in one of the few remaining natural areas of a highly urbanized area.

The area, which belongs to the municipality of Barreiro (PT), was in risk of being sold for the construction of residential units and an hotel, a project that would have detached the space from the above mentioned natural, cultural, and social values.

The local people, through a Civic Platform, managed to bring the case to court, stalling the selling process. Since then, Braamcamp remained mainly abandoned to itself.

⁴⁰ Taken from Annex II

Dixit Braamcamp has to be seen as the first of a series of workshops aimed at involving the local community in a process of reappropriation of the space. One of the final goals of the project is in fact elaborating a project proposal to be presented to the municipality, for managing the space at least for a temporary period, and ensure the protection of the public space, at the same time taking into account the true needs of the Barreirenses.”.

Then, an action plan (iii) was elaborated, highlighting all the activities that were required to plan. The location of the workshop was also chosen, this being the premises of the *Quinta do Braamcamp*. The action plan can be consulted in the table in Annex I, where activities to be planned were divided into three categories: before the workshop, the workshop day, and after the workshop.⁴¹ The table also contains information of the budget (v) that we needed. The other step, related to whom to involve (iv), was done simultaneously to the action plan, when devising the communication strategy. Furthermore, the meeting with some key stakeholders was crucial to understand whom to reach, and how.

Methodology in action – A new toolkit for co-design

Moving to the creation of the toolkit, I will first introduce Dixit, the boardgame that was used and applied to become a new tool for Co-Design. Dixit is a game which involves dreamlike cards. The participants, in turns, become the so-called “storyteller”, which chooses a card to which s/he relates a sentence, word or feeling. The other participants have to select, in their own cards, one that could be related to that word. Once everyone has chosen, the cards are turned facing up, and participants vote, with the aim of trying to guess the storyteller’s card. At each turn, points are assigned accordingly. The game ends when the first player reaches the end of the gameboard.

In our case, we used Dixit as a starting point for the development of a new tool for Co-Design. Therefore, participants were delivered some blank cards, and on each one they would draw an activity or an idea of something they dreamt to see in *Braamcamp*. The drawing session was held in the premises of the case study, with participants moving either individually, or in small groups. After the drawing session, participants were divided into groups, and started playing Dixit. A further step was

⁴¹ The Action Plan in Annex I is aimed at highlighting the main steps followed. When doing your Action Plan, it might be useful to include a column for the responsible person for each task, and one for the delivery date of the specific task.

added to the original game: at the end of each turn, the players would share more details about their own cards played during that turn.

The methodology used for the creation of the toolkit stems from Sander's approach detailed in her Convivial Toolbox (Sanders & Stappers, 2012). In [Chapter 4](#) I introduced three types of tools and techniques: Say, Do, and Make. These types of research tools and techniques may be used in different degrees during the research, and a combination of the three can provide extra value to it. For W1 we co-created a Make tool, meaning a tool where participants are given the chance to apply their creativity with respect to the topic of the workshop (i.e. participants were drawing their own cards). The Make toolkits are in fact designed to "facilitate, support, and provoke creative thinking" (Sanders & Stappers, 2012). The Make technique was followed by some Say techniques, meaning the description of the Make tool that was created (i.e. at the end of each turn, participants were sharing more details on the cards they personally drew).

The toolkit can be consulted in Annex II. Several were the aspects considered for the making of the toolkit: time and budget available (i.e. both in terms of time needed by the researcher in creating the toolkit, and time needed for the participants); location of use (i.e. the venue location); topic of the study (i.e. collecting concrete examples of activities that the participants would like to see in the case area); comfort level (i.e. making sure that participants feel at ease in expressing themselves); the intended use of the fundings (i.e. use the collected ideas for defining the strategy of a possible project proposal for the regeneration of *Braamcamp*); the size of the toolkit (i.e. it should not be overwhelming).

While the toolkit was mainly prepared by the researcher⁴², it was completed only once the workshop ended. Therefore, the participants were actively contributing to the toolkit creation.

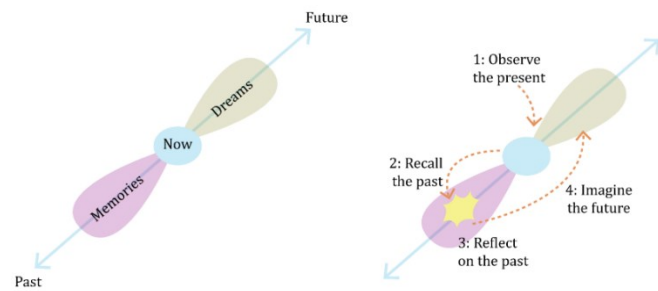
Finally, we can see how the creative process was guided by the "path of expression", which can be defined as a guide of the time course of the creative process (Sanders & Stappers, 2012). The path of expression is based on a model (see [Figure 10](#)) that illustrates how the concept of experience is focused on the moment (the "now in the image), that connects both to the past experience and to the future ones. "In order to invite people to explore future experience, it is vital to provide them with the space

⁴² Check Annex II for a detailed explanation of how the Toolkit was created

and the materials with which to imagine and to make things that they can use to show or to tell their ideas about future scenarios of use” (Sanders & Stappers, 2012). For this purpose, we provided participants with an individual toolkit composed of 4 blank cards, some colours and a drawing pad. Again, more information on the toolkit creation is to be found in Annex II.

Figure 10

Left: the experience domain model; Right: the path of expression



Note. Visualisation based on (Sanders, 2001) and (Sanders & Stappers, 2012, p. 55) – in (Woertink, 2021)

7.2.3. Workshop 2: Braamcamp’s Problem and Objective analysis

The second workshop was aimed at bringing local people together for developing a problem and objective analysis related to the case study. While the initial idea was that of hosting a more complete workshop (i.e. tackling also the strategy analysis step of the intervention logic), we had to adapt the workshop to the specific circumstances. Therefore, we restrained it to the problem analysis and objective analysis steps of the intervention logic. Several were the reasons, among these: the difficulty in involving participants two days in a row (W2 was hold the day after W1), and the poorer planning dedicated to W2 compared to W1.

Methodology in action

As already mentioned in [Chapter 4](#), the methodology used for the implementation of the W2 stems from the RBM approach for project design. Several are the techniques that can be used for the problem and objective analysis. In this context, we implemented a brainstorming through a problem and objective tree. The problem tree can be defined as a graphic tool that helps structuring in a hierarchical way the identified problems (stated in a negative way). These are to be linked in a cause-effect relationship. The objective tree is instead the “positive interface of the problem tree, hierarchically organizing the corresponding objectives” (EC, n.d.). The problem and objective trees are therefore useful for the identification phase of a project, representing a starting point from which to further develop the intervention logic.

The following steps were followed during the workshop: i) Selection of a starting problem; ii) Brainstorming and identification of related problems; iii) Linking direct causes and effects (i.e. establishing the hierarchy of causes and effects); iv) review and validation of the diagram; v. Converting the problem tree into an objective tree.

Also, while W1 was hosted outdoors, W2 was hosted indoors.

7.3. Phase 3: Adjustment to the local context

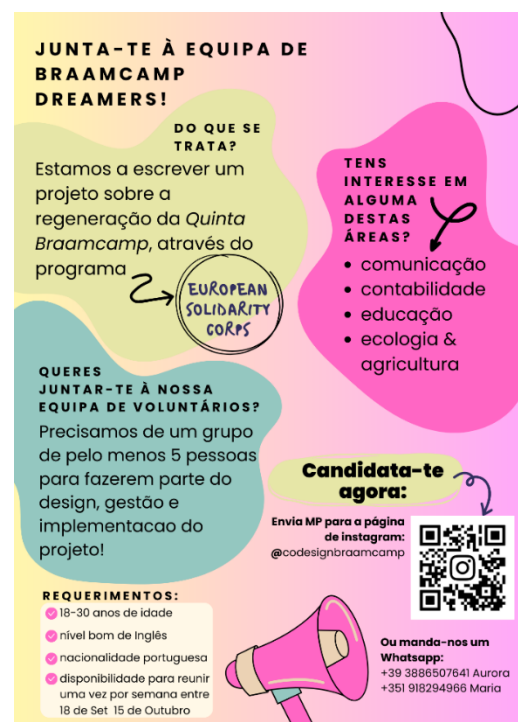
At this stage, and with the two workshops implemented, we were able to have a general understanding of what the participants would like to see in the *Braamcamp*. At the same time, the problem and objective analysis was developed.

This phase, differently from the others, does not correspond to any intervention logic step. I chose to define it as “flexible adjustment” phase, as the goal was to review the research on possible call for proposals ([subsection 7.1.1](#)) and choose, also according to the information we had up to that point, apart from the specificities of the context, which would be the best path to follow. To this extent, and after a series of meetings with M.P. (one of the main contributors and co-design helpers of the researcher), we commonly agreed that the best call to apply for would be the ESC Solidarity Projects. This for several reasons: young people would have more time to dedicate to the project (the Solidarity Projects being targeted to young people, in charge of the managing and implementation of the project); the project would be easier to manage (i.e. the Solidarity Projects going from a minimum of 2 to a maximum of 12 months, with a budget of almost 600€ per month); we also thought that the municipality might be more willing to accept a project like this, being a very small one, not too ambitious - a big problem, as mentioned in [Chapter 5](#), was in fact the conflicting relationship between the municipality and local associations initiatives.

Therefore, the follow-up of the project consisted in a communication strategy, aimed at individuating a minimum number of 5

Figure 11

Flyer used for the communication strategy



Note. Elaboration of the author, in collaboration with M.P.

young people, that would be in charge of the design, management, and implementation of the small-scale project to regenerate *Braamcamp*. The communication strategy involved various activities: posting on social media (Instagram); printing a flyer to be delivered to some local associations (see [Figure 11](#) above) ; a meeting with MOLA⁴³ (one of the main youth association in Barreiro); and emails to former participants to the workshops.

As already mentioned, it was difficult to identify a group of committed young people. Nevertheless, more favourable times may come, and a Solidarity Project may be implemented in the future.

7.4. Phase 4: Additional phases

The additional phases refer to the second (**RQ1.2**: In which ways can the participation in a co-design process be beneficial for the local community?) and third (**RQ1.3**: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?) sub-questions. The section is divided into two parts, each one dedicated to one of the above-mentioned research questions. Again, these additional phases are not related to a specific intervention logic step, but rather to the research itself.

7.4.1. Evaluating the benefits for the local community participating in the co-design process

In [Chapter 3](#) we saw how this research takes the side of participation as empowerment. This approach assumes that participation works on some intangible outcomes for the local community, in terms of increased feelings of ownership. When people are involved in shaping their local surroundings, other benefits can be identified, in terms of: additional resources, better decisions, building community, compliance with legislation, democratic credibility, easier fundraising, empowerment, more appropriate results, professional education, responsive environment, satisfying public demand, speedier development, sustainability (Wates, 2000). At the same time, we can emphasize that “while impact evaluation is conducted at the end of the communication initiative, it needs to be planned from the very beginning of the initial phase. If indicators are not defined, validated, and assessed from the start, no measurement will be able to assess the impact of the initiative after its activities are

⁴³ More information on the MOLA association here <https://www.instagram.com/mola.2830/>

implemented” (Tufte & Mefalopulos, 2009). In general, “what is less widely embedded are approaches for assessing the effectiveness and impact of co-design” (Man, 2019).

In order to assess the benefits of taking part in participatory initiatives for the local community, a questionnaire was developed, following different methodologies and sources: the Community Planning Handbook (Wates, 2000) and the Step-by-step toolkit on implementing and evaluating co-design (Man, Abrams, & Rosie, 2019). The Handbook contains some examples of templates to be used when assessing the effectiveness of the co-design process. To this extent, some questions to be asked to participants might be: *Why did you get involved in this co-design project?; Which activities did you enjoy and not enjoy?; What were your relationships like with the facilitators and other stakeholders?; Did participation have any impact on you?* (Man, 2019). The Step-by-step toolkit was instead useful in understanding how to assess the outcomes of the Co-Design, and how to learn from the data collected. Both sources were used to get inspiration for the formulation of the questions

The questionnaire⁴⁴ was targeted to the participants of the first workshop, and shared to them as a google form, after the end of the workshop. While its main aim was that of understanding some benefits from the participation in co-design activities, the questionnaire was also used for receiving some feedback from the participants on how to improve the workshop and the new tool for participatory design (*Dixit Braamcamp*). We see therefore how an participatory approach was experimented also at this stage of the research.

7.4.2. Bottom-up Vs. top-down projects. A sustainability analysis

As already mentioned in different part of the research, the work of the Civic Platform *Braamcamp é de Todos* was essential in stopping the selling of *Braamcamp* to the construction company Saint Germain. The 40M € project would have been brought to the construction of a 178-rooms hotel – with an annexed gym, SPA, swimming pool, and bar - and 185 residential units. We also saw how the project is no longer viable, especially after the company was found suspected of being involved in some

⁴⁴ To be found at the link

https://docs.google.com/forms/d/e/1FAIpQLSfiEa7GiSllrZBU2GNjI9ZVBd5SSwLwHmLIZM_iLbAlx6Gg8w/viewform

corruption crimes in the South of Portugal, and therefore decided to stop all its projects in the country.

While the initial idea for this part of the analysis was to compare this top-down mega-project with the one elaborated by this research, this was no longer possible. In fact, by the end of the research, the co-designed project is still in its initiation and ideation phase, with a detailed project proposal still in need of elaboration. However, in order to answer the third sub-question (**RQ1.3**: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?), this part of the analysis provides an example of the application of an existing tool, the SDG Project Assessment Tool (or SDG Tool). Developed in the framework of the UN, the SDG Tool allows us to explore the sustainability of an urban project through a set of indicators.

The example of the application is based on an evaluation of the project proposed by Saint-Germain in 2019. Despite the project no longer being viable, it represents in fact a good example of a project with a strong focus on pure economic development, with a poorer focus on environmental protection, and no inclusion of the benefits and additional costs related to the impacts the project might have had. This is confirmed by the results, presented in the next Chapter.

In this subsection, a first paragraph is dedicated to the analysis of the project proposed in 2019 by Saint-Germain. This is based on the document “Land Use Study – Quinta do Braamcamp/Alburrica” (*“Estudo De Ocupação Do Solo - Quinta Do Braamcamp/Alburrica”*)⁴⁵, elaborated by the municipality of Barreiro, and related to the Saint-Germain mega-project. The second paragraph is to be seen as the application of a holistic lens, that looks at some key recent events happening at the higher scale, and that strictly relate to the assessment of the sustainability of the mega-project by Saint-Germain. Finally, a last paragraph explains in detail how the SDG Project Assessment Tool is applied. The main results can be consulted in [Chapter 8](#), with some spatial analysis complementing the research.

The project proposed by Saint-Germain

⁴⁵ To be found here https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14585/prog_procedimento_doc_13.pdf

It was tricky to find a detailed description of the project by Saint-Germain. The better source was found in the “Land Use Study – Quinta do Braamcamp” (*Estudo De Ocupação Do Solo - Quinta Do Braamcamp/Alburrica*).

By reading the document, it is interesting to note how the environmental value of the area is recognised and mentioned several times. However, while the analysis addresses the economic positive externalities coming from the project implementation, the same does not happen for the environmental ones, both in terms of positive and negative externalities. The economic positive externalities included are the impacts of the residential units and the hotel (*Impactos da Habitação/ imobiliário e da hotelaria*), and the economic impacts for the municipality (*Impactos económicos para a autarquia*).

According to the municipality analysis, the initial investment would have included €45M, while the positive externalities would be in terms of: 550 new residents; 30.000 guests/tourists per year; 50 new jobs created (30 in the hotel, 10 in restaurant, 10 in the management of the space); a direct economic impact for the municipality of €150.000 per year; €35M in 10 years of indirect economic impact (coming from the new habitants consumptions and expenditures): economic revenues of €29M, in 10 years, coming from the hotel activities; and a global economic impact of more than €52,4M, in a period of 10 years.

Therefore, just by reading the assessment, we can get some glimpses on the strong focus on the economic development and related benefits analysis, while the environmental and social costs and benefits seem to be overlooked.

Applying a holistic lens to the case study

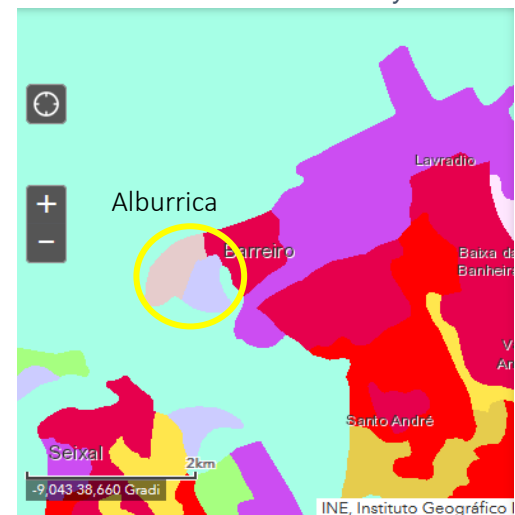
Before moving to the description of how the SDG Tool was applied to the case study, some key recent events must be mentioned that, even if happening at a higher scale when compared to the case study, seem to be reflecting how a project a project as the one proposed by Saint-Germain would negatively impact the sustainable development of *Braamcamp*, rather than fostering it positively.

A first event is related to climate change and the increased number of heavy rains and flooding events affecting the area of Lisbon, and the biggest Portuguese urban areas overall. It is true that the southern bank of the *Tejo* river (where the case study is located) has a lower susceptibility to flooding than the Norther part (where Lisbon

is) (Leal, Ramos, & Pereira, 2018)⁴⁶. Despite this seemingly positive aspect, however, data from the 2018 Corine Land Cover (CLC)⁴⁷ show how most of the area of Barreiro is classified as continuous/discontinuous urban fabric and industrial commercial units, while *Alburrica* – and therefore *Braamcamp* – represents the last remaining green area – classified as salt marshes. (see the highlighted circle in [Figure 12](#)). The lower susceptibility of the Southern margin can be linked to the benefits given by *Alburrica*, where coastal ecosystems as the marshland play a crucial role in physically protecting the people and property from storms and flooding (IPCC, 2022).

Figure 12

Corine Land Cover of the case study area



CLC Code

<ul style="list-style-type: none"> ■ 111: Continuous urban fabric ■ 112: Discontinuous urban fabric ■ 121: Industrial or commercial units 	<ul style="list-style-type: none"> ■ 123: Port areas ■ 421: Salt marshes
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Note. Retrived from <https://land.copernicus.eu/pan-european/corine-land->

Research confirms the benefits of urban vegetation for the local context, in terms of mitigation of the negative impacts of climate change, through carbon sequestration, reduction of heat waves, and alleviating extreme droughts and floods (Demuzere, et al., 2014). Further confirming the importance of preserving urban vegetation, other studies stress on benefits as (i) better environmental quality, reducing pollutants and noise, while creating ecological niches where to promote nature and biodiversity (Isaifan & Baldauf, 2020); and (ii) increased human wellbeing, contributing to stress reduction, inducing positive emotions, and preventing human respiratory problems (Carrus, et al., 2015).

Also related to climate change, is the problem of rising water levels. Some studies already show how, in 50 to 100 years, different areas of Barreiro will be flooded (Branco, 2013). This simply means that grey infrastructure in the area of *Braamcamp* and *Alburrica*, which is basically by the *Tejo* River, is unsustainable even from a purely economic point of view.

⁴⁶ The northern bank is in fact characterised by a higher number of built-up areas; smaller drainage basins; lower altitude and slope.

⁴⁷ The CORINE Land Cover is a project of the European Environment Agency, aimed at collecting data about the land cover of European countries.

A second important local event to consider for the sustainability assessment is the housing crisis affecting Portugal's main cities. Barreiro is in fact an important and highly inhabited suburb of Lisbon, in risk of gentrification in the coming years. At the moment of writing – October 2023 – already 3 big protests have been held in Lisbon – and other main urban areas. In March 2023, the association *HabitAção Barreiro*⁴⁸ was established, following the international movement “Housing Action Days 2023”. This movement reflects a general need to focus on accessible housing, an aspect that is not taken into consideration by the 2019 project by Saint-Germain project

Applying a sustainability assessment Tool

In order to apply a scientific and academic approach to the above qualitative analysis, an application of the SDG Project Assessment Tool was implemented, using as example the mega-project by Saint-Germain. As already mentioned, the SDG Tool is based on some selected Sustainability Principles, organized under Technical and Effectiveness Key Drivers, the former related to a sustainable and inclusive urbanization, and the latter related to the implementation, and viability beyond the project period. Each driver then includes a set of principles, all assessed against five to ten Performance Criteria.

We also saw how the SDG Tool's guide⁴⁹ provides a detailed description of the five steps to follow. The example here is based only on the first step, that is the “definition of a set of principles”. Since the project was stalled, and given the participatory and multi-stakeholder approach (i.e. between partners, urban authorities, other stakeholders) of the other four steps, their analysis was not included.⁵⁰

In the framework of this research, the “definition of a set of principles” was divided into three sub-steps: i) Identification, for each of the eight Key Driver, the sustainability principles and related Performance Criteria that are relevant for the analysed project; ii) Assessment of each performance criteria on a scale from “not included”, to “partially included” and “comprehensively aligned”; and iii) Completion of the analysis with some comments and recommendations – which might be useful in the future for the elaboration of an alternative project proposal for *Braamcamp*. As it

⁴⁸About the association <https://linktr.ee/habitacaobarreiro>

⁴⁹ The SDG Project Assessment Tool User Guide to be downloaded at the link <https://unhabitat.org/sdg-project-assessment-tool-volume-2-user-guide>

⁵⁰ As a reminder, the other four steps are: (ii) the review of the project; (iii) the discussion of the results; (iv) the provision of recommendations; and (v) the improvement of the project.

concerns the recommendations, these are to be considered as an interpretation of the author, and other researchers may have a different opinion. Again, the aim of this part of the research was to provide an example of the application of the SDG Tool, leaving space for more research on the topic in the future. The main results are presented in in the discussion ([Chapter 8](#)).

7.5. Phase 5: Follow-up

Finally, stepping into the intervention logic steps once again, this section aims at describing the steps that might be undertaken after the thesis delivery and discussion. We saw how a big limitation for the continuation of the project was the difficulty in finding a committed group of young people to manage and implement it.

The following steps represent an overview of how the project could continue in the future, that might use the work done with this research as a solid starting point.

Furthermore, to follow the continuation of the project, I invite the readers to follow and keep track of the *Braamcamp* project at the Instagram page

[@codesignbraamcamp](#).

The follow-up steps ideally include:

- i. The planning of an internal communication strategy, aimed at ensuring an efficient coordination among the team members;
- ii. Organization of further workshops (ideally 4) involving the group of youths individuated;
- iii. Implementation of the workshops;
- iv. Meeting(s) with the municipality, in order to ensure that the project activities can actually be implemented in the space;
- v. Application, through an existing call (i.e. the Solidarity Projects of the ESC);
- vi. Implementation of the project.

8. Discussion

By the end of the research, and after the implementation of existing and new participatory design methods and tool, we understand how crucial it was to keep a flexible approach, allowing for a continuous adjustment, therefore keeping a strong place-based approach.

To answer the main research question (**RQ1**: How can participatory design methods be implemented at the initial steps of the project design, to initiate a Co-Design process that involves the local community in the regeneration of an abandoned public space?) several were the participatory methods and tools implemented. This section explores the overall results, starting with the results of Workshop 1 ([section 8.1](#)), to then move to the results of Workshop 2 ([section 8.2](#)). The two sections are divided in i) A summary of the day, ii) Main results related to the research questions and iii) Points of improvement. Then, [section 8.3](#) looks at the results in terms of how participation in co-design activities can be beneficial for the local community, while [section 8.4](#) is related to the application of the SDG Project Assessment Tool, that was complemented with the implementation of some spatial analysis. Finally, a last part ([section 8.5](#)) highlights some additional results, not directly related to any of the identified research questions, but still relevant to be mentioned and shared.

8.1. The results of Workshop 1

Summary of the day

The workshop started with an introduction to the research, with some local experts contributing to the presentation of the case study (see Figure 13A). The activities of the workshop were also introduced, including a presentation of the boardgame Dixit. After that, the individual Toolkit (i.e. four blank cards, different coloured pencils, and a small wood board to serve as a drawing pad) was delivered to the participants, and the drawing session started (B). This part was organised as a walking around the premises of *Braamcamp* (C), during which participants – either individually or in group – would draw on each card a specific activity that they would see happening in *Braamcamp*. The cards would then be used to play the board game session “*Dixit Braamcamp*”. Therefore, after the drawing session, people were divided groups of five to six people (D). The aim of the boardgame session was that of bringing

together the different perspectives and ideas of the participants, adding an additional step to the original Dixit boardgame. The step was about giving more details about the personal cards that would appear in each turn (E). This was therefore the main part of the game, which was also recorded – with the permission of the players – in order to ensure the elaboration of the results by the researcher.

The participation saw around 20 people, most of them local, but also some people from the neighbouring Lisbon municipality, and some foreigners (i.e. friends of the researcher, interested in the experimentation of this new Tool for Co-Design). At the same time, each group playing *Dixit Braamcamp* was composed by a variety of people of different age (from 10 to 77 years old) and background (i.e. students, recent graduates, teachers, firemen, office workers). This resulted in a very interesting sharing of different perspectives and opinions.

The researcher was the main facilitator of the workshop, with the contribution of L.R. (one of the main contributors and co-design helpers of the researcher) in both the setting-up of the venue and the assistance to participants during the boardgame sessions.

Main results

As it concerns the main RQ (**RQ1**: How can participatory design methods be implemented at the initial steps of the project design, to initiate a Co-Design process that involves the local community in the regeneration of an abandoned public space?), this workshop was fundamental as it helped highlighting some problematic aspects related to the case study,

Figure 13 A-E

Workshop 1



(A) Introduction to the participants



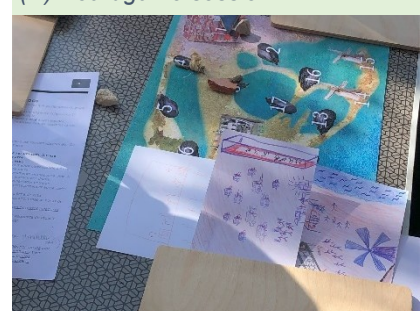
(B) Drawing session



(C) Walking around Braamcamp



(D) Boardgame session



(E) Sharing of ideas

Note. Pictures by the author

some of these crucial for the participatory process to happen. I am referring to elements as: the recurring opinion on the conflicting relationship between the municipality and local associations initiatives; the lack of hope that the situation can change, in positive, for *Braamcamp* (this mostly confirmed by younger participants); and the renewed interest of the participants in actively contributing for the development and regeneration of *Braamcamp*.

In relation to the second sub-question (**RQ1.2**: In which ways can the participation in a co-design process be beneficial for the local community?) we were able to adjust an existing boardgame, Dixit, and turn it into a tool for participatory design with and for the local community. *Dixit Braamcamp*, a so-called Make tool - according to Sander's approach of regenerative design – confirmed to be a useful tool in understanding the deep layer of emotions, feelings, dreams that local people may have in relation to the case study. The tool was made available online, on the Session Lab Library⁵¹, and can also be found in Annex II.

The questionnaire (see [subsection 7.4.1](#)) was also useful for understanding the result of the workshop. As it regards the communication strategy, the answers show that all the communication means (i.e. social networks as Instagram and Facebook, emails, and personal invitations) were effective tools to reach out participants. About the motivation for taking part into the workshop, the participants' answers confirm that most people took part as they were feeling emotionally connected to the place, while fewer participants showed an interest in participatory design techniques as their main motivation for participating. While most of the participants had already taken part into activities organized in *Braamcamp* (i.e. guided walks about the history of *Braamcamp*; bird watching activities; activities organized by local associations as *Mola*, *Associação do Património do Barreiro*, and *Plataforma Cívica Braamcamp é de Todos*), for some participants it was the first time taking part into one. Participants described the event as entertaining, satisfactory, interesting, unique, involving, and inclusive. All the participants were highly satisfied with the workshop overall, and in particular with the card drawing activity and boardgame session. All the participants answered that they would take part into similar workshops in the future, and they would all recommend the workshop to friends and family members. The level of hope remains however not too high, as all participants voted 3 for the question "In general,

⁵¹ Available at the link <https://www.sessionlab.com/methods/ibcmqw>

how much do you feel that something can change in Braamcamp?” (scale 1-5). Lastly, in the final open question, some participants also reaffirmed their concern as regards the situation of *Braamcamp*, somewhat afraid that current policies may represent a strong threat for the future of the space.

Where to improve

In general, we can state that this first workshop was a success, both in terms of satisfaction and engagement level of the participants, but also in relation to *Dixit Braamcamp*, which proved to be an effective and creative tool for Co-Design.

Still, despite the success of the workshop, some elements of improvement need to be mentioned, also in order to improve it and ensure a more effective scalability of the new Tool. Some of the questions of the survey were actually targeted at this improvement, with the participants’ feedback and suggestions on stressing more on the introduction part of the workshop and making the boardgame rules simpler.

8.2. The results of Workshop 2

Summary of the day

The second workshop was held the day after the first one. Therefore, it started with a recap of the previous day, and a presentation of the activities scheduled for this second meeting (see Figure 14A). Then, a first brainstorming was initiated (B), aimed at identifying the main problems related to *Braamcamp*. Afterwards, a second brainstorming was dedicated to the transformation of these problems into objectives (C). After a break(D), a last activity was about relating each card drawn for *Dixit Braamcamp* (Workshop 1) to a

Figure 14 A-E

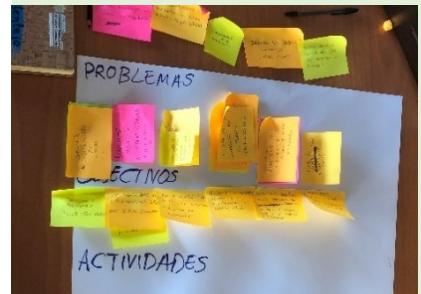
Workshop 2



(A) Recap of the previous day



(B) Brainstorming



(C) From the problem to the objective tree



(D) Break



(E) W1 meets W2

Note. Pictures by the author and participants

specific objective of the defined tree (E). This last activity showed to be particularly entertaining, as the drawn cards could be very abstract. Therefore, different perspectives emerged, and some activities confirmed to be transversal to the encountered problems.

Regarding the number of participants, this workshop had a much smaller affluence, with a total of 6 people, plus the researcher. Half of the group was composed of new participants, which were not present the day before.

The researcher was the main facilitator, also in this case assisted by L.R. for the preparation of the venue.

Main results

In relation to the main research question, the workshop was a continuation of the intervention logic steps. We were able to implement a problem and objective analysis, a step which is fundamental and crucial for the initiation phase of a project. The results of the workshop's brainstorming are presented in [Figure 16](#) (next page). The problem and objective trees (the second being a transposition of the first) were in fact transferred into a digital format, through FigJam⁵². When looking at the Figure, please note that, as it concerns the objective tree, elements highlighted in red are those that would exceed the scope of a small-scale project like the one that this research aims at. These elements pertain in fact to various institutional levels (i.e. municipality, regional, and national), and would therefore be difficult – if not impossible – to tackle them through this kind of grassroots and de-politicised project.

Apart from the problem and objective trees, the cards drawn during Workshop 1 were also digitalised, mainly to keep them safe from being deteriorated. As already explained, it was interesting to note how different cards, *alias* different activities seemed able to serve various of the

Figure 15

Example of a digitalised card drawn in Workshop 1



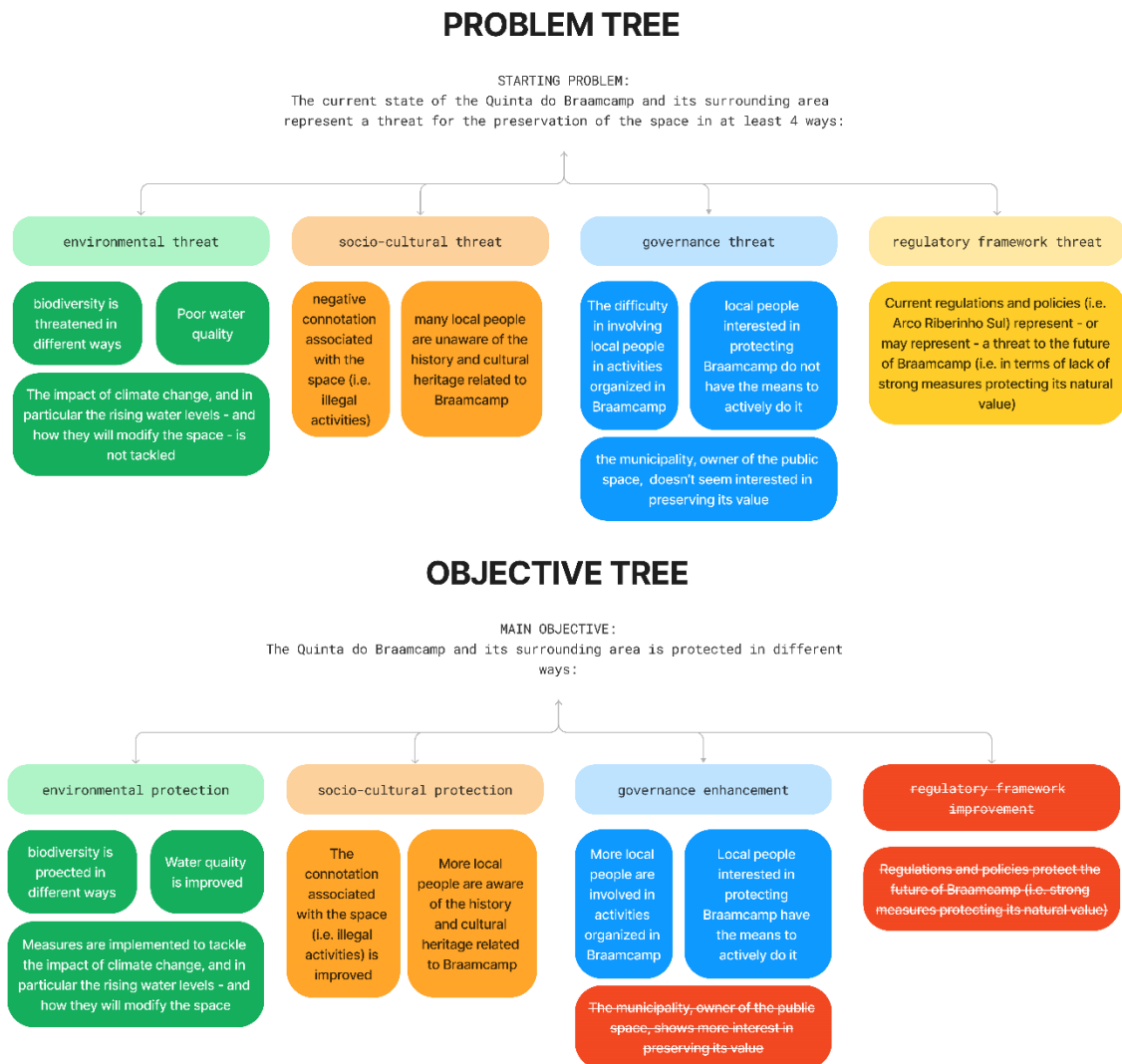
Note. Elaboration by a participant to the workshop

⁵² FigJam is an online and open-source whiteboard, developed by Figma. The Tool can be used for collaborative brainstorming, but also for the analysis and the creation of diagrams. FigJam is accessible, through login, at the link <https://www.figma.com/figjam/>

defined objectives. An example of this is presented by [Figure 15](#), where the card named “*Horta Comunitaria*” (Community Garden) could be an activity to be implemented in the framework of both the objective “Biodiversity is protected in different ways” and the objective “More local people are involved in activities organised in *Braamcamp*”.

Figure 16

Results of workshop 2. Problem and objective trees



Note. Elaboration by the author and the workshop participants

Where to improve

Also for this workshop, some aspects to be improved need to be mentioned. The main issue here was mainly related to the little time dedicated to the organization of the workshop, which, as we saw, was held the day after W1. A big advice would be to hold the workshops in different weeks, especially if the team organizing it is not a big one. Then, the problem and objective trees proved the need of having a skilled

and trained facilitator. Therefore, a big suggestion is opting for an easier tool in terms of expertise needed, especially if it is one of the first facilitating experience of the researcher. A good source, plenty of tools and techniques is the SessionLab Library.⁵³

8.3. The benefits of co-design for the participants to the Workshops

We already presented some results of the questionnaire, that was delivered to participants of Workshop 1 some days after the workshop. The questionnaire proved to be an efficient tool for assessing the benefits coming from the participation into co-design activities. We will now analyse the most relevant results of the survey, by looking at the different questions (underlined below) and the related answers.

How much did you feel involved during the whole duration of the workshop? (scale 1-5)

All the participants showed a high level of involvement during the whole duration of the workshop, assigning 4 and 5 to the question. Furthermore, for most participants the best aspect of the workshop was the high level of involvement achieved.

In which way do you think that the workshop contributed for making you feel more attached to *Braamcamp*?

To this question, most people affirmed that this happened.

In which way do you think that the workshop improved your knowledge about Braamcamp? (scale 1-5)

All participants voted 4. More specifically, it allowed some to discover the potential of natural resources in making the social life of Barreiro thriving. At the same time, the discovery of other's people perspectives was considered by some as an interesting aspect.

Apart from contributing to answering the second sub-question (**RQ1.2:** In which ways can the participation in a co-design process be beneficial for the local community?), we already mentioned how the questionnaire also aimed at getting some useful feedback from the participants regarding the improvement of the overall workshop. Allowing the participants to contribute to this is a crucial aspect for ensuring a higher level of participation, and empowerment of the participants, in an equal exchange of

⁵³ <https://www.sessionlab.com/library>

learning between the facilitator/researcher and the facilitated/participants. Questions as “Do you have any suggestion to improve the game?”, or “Where the cards enough to conclude the game session? If not, how many do you think would be needed?” not only allow for a stronger inclusion of the participants in the co-design process, but also represent a way of improving the workshop and, in this case, the Tool that was created (i.e. *Dixit Braamcamp*). The recommendations gathered were included in the revised factsheet of the game, that can be consulted in Annex II. In particular, the answers to the questionnaire highlighted the need of having more cards in order to complete the game, suggesting in average 6 cards for each player. Also, some participants highlighted the difficulty in understanding the game rules initially, that therefore needed to be simplified. Some suggested making them easier, and advised of stressing even more on the debate and sharing of ideas part.

8.4. Assessing the sustainability of top-down Vs. bottom-up projects

This part of the analysis contains a first sub-section on the results in terms of application of an existing tool (i.e. the SDG Tool) for the assessment of the sustainability of urban projects. A second sub-section presents instead some spatial analysis that was implemented. Some graphs are also complementing the analysis.

While the initial aim was to compare the sustainability of a top-down down project compared to a bottom-up and co-designed one, this was no longer possible. By the end of the research, the co-designed project is in fact still in its ideation and formulation phase. However, an example of the application of the SDG Tool was still possible, implementing only the first of the five steps highlighted by the SDG Tool Guide⁵⁴. The mega-project proposed by Saint-Germain is used as a case study⁵⁵.

In general, we can confirm how this analysis highlights some weak points, in terms of sustainability, of the top-down project analysed. The results may therefore be used in the future as a starting point for elaborating a more sustainable proposal for *Braamcamp*.

8.4.1. Applying the SDG Assessment Tool

⁵⁴ The SDG Project Assessment Tool User Guide to be downloaded at the link <https://unhabitat.org/sdg-project-assessment-tool-volume-2-user-guide>

⁵⁵The project can be found at the link <https://www.youtube.com/watch?v=RHWfmxET15U>

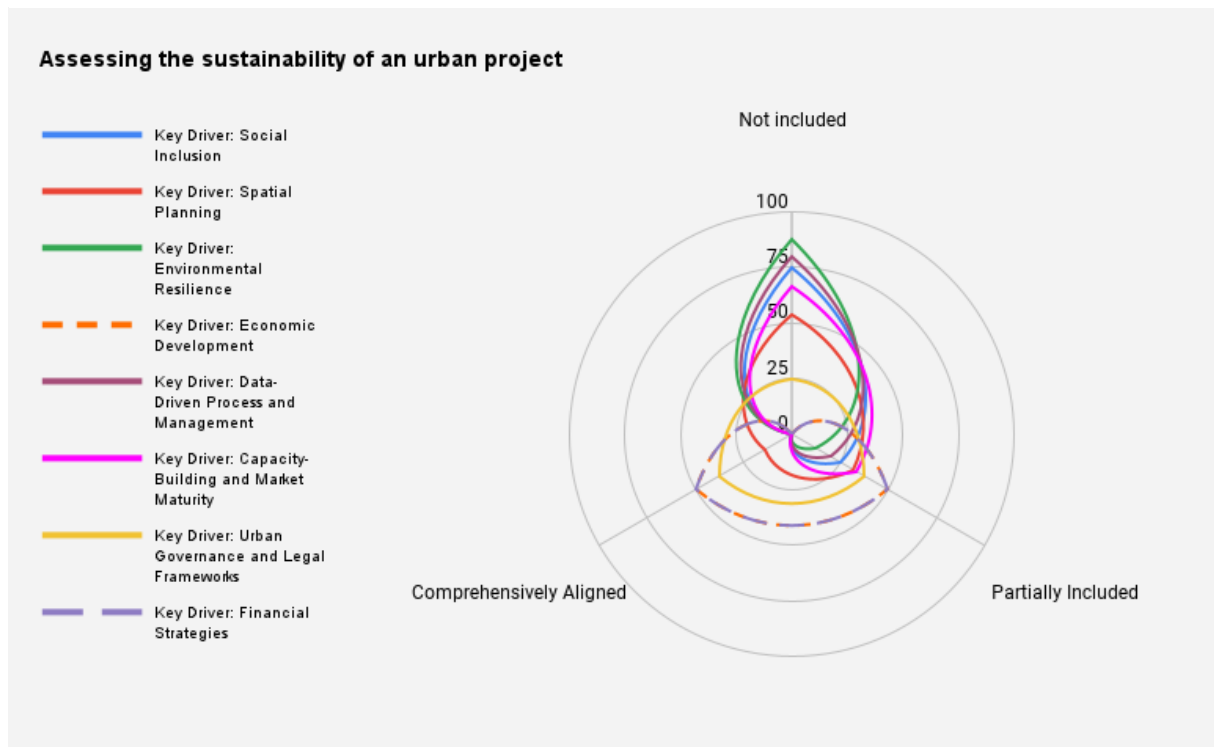
Answering the last sub-question (**RQ1.3**: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?) this research confirms the SDG Tool being an efficient methodology to be used.

The analysis included the selection of the SDG Tool sustainability principles and performance criteria associated to the eight Key Drivers, that would relate to the project presented by Saint Germain. In total, 28 Performance Criteria have been identified, and assessed on a scale from “not included”, to “partially included” and “comprehensively aligned”. The assessment can be consulted in Annex III, while a summary of the analysis is represented by the graph in [Figure 17](#).

The graph highlights how “Financial Strategies” and “Economic Development” represent the two Key Drivers with a higher percentage of performance indicators that are comprehensively aligned. On the contrary, the Key Driver “Environmental Resilience” represents the one with the highest percentage of not included performance indicators, followed by the Key Drivers “Data Driven Process and Management”, and “Social Inclusion”.

Figure 17

Radar chart presenting the results of the sustainability assessment of a top-down project



Note. Elaboration by the authour

The analysis is based on an interpretation of the researcher, and other views are therefore possible. The same applies to the series of recommendations, to be

consulted in the last column of the table in Annex III. When consulting the Annex, please note that the numbers assigned to each sustainability principle and the related performance criteria refer to the number assigned to them by the SDG Project Assessment Tool General Framework.

By the end of the analysis, we understand how the weakest Key Drivers are those that would need to be strengthened in the framework of a project for a sustainable regeneration of *Braamcamp*. One must in fact focus on keeping a holistic approach to development, therefore finding a compromise between more economic-based and environmental-related Key Drivers. Each case study is different, and a place-based approach needs to be maintained. Still, this research may provide an example, with the SDG Tool providing a good resource to be used for the assessment of a project.

8.4.2. Implementing spatial analysis

We will here show an example on how spatial analysis can be applied to the SDG Tool assessment, as a useful tool for better and more dynamically visualizing the results. We will take as example the performance criteria – and its related recommendation – presented in [Figure 18](#).

Figure 18

Example of the analysis of a Performance Criteria related to the sustainability assessment of a top-down project

Key Driver: Spatial Planning				
#	Sustainability Principles	Performance Criteria	Comments / Recommendations	
13	Appropriate urban density, urban regeneration and planned city extensions ensure compact and sustainable city form	13.3 The project prioritises urban infill, brownfield redevelopment, or vacant urban land instead of new development in greenfield areas.	This is partially true, as some brownfield redevelopment is considered (i.e. former industrial area ruined infrastructure). However, new development in greenfield areas is also considered (see Figure 19)	

Note. Taken from the table in Annex III

The Performance Criteria relates to the focus of the analysed project on the prioritisation of “urban infill, brownfield redevelopment, or vacant urban land instead of new development in greenfield area”. To this extent, and based on sources found, we can state how “this is partially true, as some brownfield redevelopment is considered (i.e. former industrial area ruined infrastructure). However, new development in greenfield areas is also considered.”

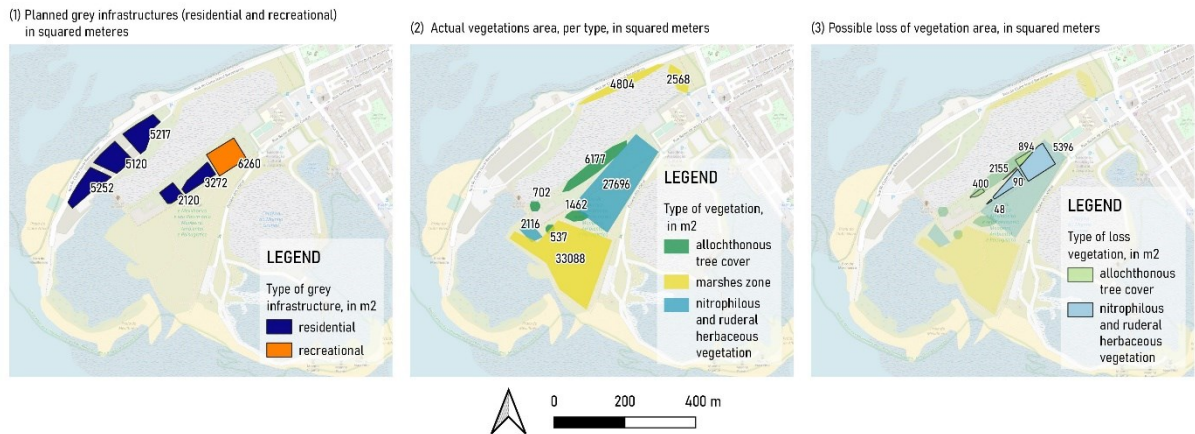
At this point, some spatial analysis was implemented (see [Figure 19](#)), aimed at quantifying the loss of vegetation area that the project would cause. By looking at the

map, we see that the project foresaw the construction of several grey infrastructure, namely residential buildings and recreational areas. After the implementation of some simple statistics through QGIS, we can state how the total planned area of new grey infrastructures - residential and recreational - would amount to 27.241 m². The

Figure 19

Sustainability analysis through spatial analysis

Sustainability analysis of a top-down project for the Quinta do Braamcamp (PT). Focus on the possible loss of vegetation area.



Note. Elaboration by the author, through QGIS, with data from https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14585/prog_procedimento_doc_13.pdf, https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14586/delib_462_2019_avaliacao_ecologica_quinta_braamcamp_anexo_iii.pdf, and https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14570/caderno_encargos_doc_5.pdf

already introduced analysis implemented by Quercus(2019), tells us that the total vegetation area of *Braamcamp* corresponds to 79.150 m². By implementing an overlaying analysis, we see that 8.983 m² of vegetation would be loss, corresponding to the loss of 1/3 (32,98%) of the total vegetation area.

8.5. Additional results

Finally, this section is dedicated to results not strictly related to any of the research questions, but nevertheless still worth to be mentioned. Another important result – coming from W1 - is therefore to be found in the table in Annex I, which presents a detailed list of activities to follow for organizing a participatory workshop involving the creation of a new tool for Co-Design. This set of steps may be applied in the future by other researcher willing to experiment participatory design techniques.

Then, about the experience of the researcher as a facilitator, this research allowed for an application of Co-Design methods on the field, strengthening my experience in terms of organizing, and facilitating, participatory workshops.

9. Conclusions

By the end of the research, the study shows how academic research can serve as an initiator of a co-design process. Looking at the methodology used, the research also confirms the importance of keeping a flexible approach, continuously adapting to the local context, when implementing some Co-Design techniques involving the local community. At the same time, the series of meetings and informal conversation between the researcher and some key local actors (i.e. representatives of local associations, activists from the *Plataforma Braamcamp*, local actors with direct experience in protecting *Braamcamp* in the past, and knowledge holders in general) was crucial for understanding better the context specificities, and the best possible strategies to follow.

We also saw how games proved to be an efficient and enjoyable tool for co-design, with *Dixit Braamcamp* being a perfect example of how a boardgame can be turned into an effective and creative tool for participatory design.

Measuring the benefits for the local community coming from participating in co-design activities proved to be a bit of a tricky task, as confirmed by existing literature. Nevertheless, the use of a questionnaire was helpful in understanding how the Co-Design process can be beneficial, simultaneously, for both the territory and the local people themselves. At the same time, it also was a useful tool for receiving constructing feedback on how to improve both the workshop and the Tool created.

Finally, looking at how to assess the sustainability of urban projects, the research showed how the implementation of existing tools, as the SDG Project Assessment Tool, can serve this scope efficiently. Furthermore, the implementation of some spatial analysis proved its efficiency in terms of visualizing results in an easier and more dynamic way, while it was also useful to complement the research with some quantitative statistical data.

By the end of the project, I can also confirm what stated in the introduction, namely that:

- i. The work represents a contribution to the knowledge base on co-design tools and techniques, *Dixit Braamcamp* representing a new tool available for further local development practitioners, experts, community workers, and interested individuals. As already mentioned, the new tool for co-design (see Annex II) can also be consulted in SessionLab, at the link

<https://www.sessionlab.com/methods/ibcmqw>. making the methodology of the tool opensource was considered a necessary step in order to ensure its scalability and implementation by others in the future.

- ii. The research also developed around a new methodology for the implementation of a co-designed project (see [Figure 3](#) or [Figure 8](#)), that other researchers and students might use in the future.
- iii. Through the research we were able to initiate a project proposal elaboration, by looking at the problem and objective analysis. This can be used as a starting point for a future project proposal – at the small scale – for *Braamcamp*. As we saw, the ESC Solidarity Projects seem to be a good call to start with.
- iv. Finally, the research can serve as a case study for further research on co-design methods and the process of empowering the local community.

The process was not easy, in some steps really demanding, but in the end, it was worth the try. Despite the project not being completed by a proposal, time and circumstances might be more favourable in the future.

Finally, the research was a great experience for me too, especially in terms of improving facilitation and organizational skills. Again, working for the elaboration of a Co-Designed project proposal can be a tiresome and demanding process, although the experience showed how rewarding this can turn out to be.

Again, please feel free to keep track of the *Braamcamp* project by following the Instagram page [@codesignbraamcamp](#), and please feel free to contact me at the email address aurora.circhetta@gmail.com for any additional information and/or future collaboration.

10. Recommendations for future research

By the end of the research, several aspects were identified that deserve further studying. Following a chronological order of appearance, a first point that might be interesting exploring is the relationship between the emergence of Co-Design processes and sustainability, both appearing in the international discourse in the 1970s.

During the research, and especially after understanding the difficulty in finding a group of young people to commit to the implementation of a ESC Solidarity Project, a new topic of research emerged. This would be about how to ensure that the local community is ready, before the start of a Co-Design project, for taking its ownership. Accordingly, it might be interesting to focus on how to support the local community in establishing this governance model.

The analysis regarding the last sub-question (**RQ1.3**: How to assess the sustainability of a top-down project vs a bottom-up and co-designed one?) was perhaps the one that provided most insights on possible further studies. In particular, the application of the SDG Project Assessment Tool to the top-down project presented in this research, could be further developed, while the initial results could be used as a starting point for another project proposal. An important aspect that would be interesting covering with further research, would be the inclusion of environmental and social costs, co-benefits, in the financial and purely economic analysis which is the mainstream. An example of tools to be used is the SAVI Methodology, developed by the IISD⁵⁶. Despite made on purpose for Nature Based Infrastructures, this methodology could also be applied in this context.

In general, all the materials produced with this research remain open for free consultation. Therefore, the methodology implemented, the new tool for co-design, the schedule of the workshops, the planning of the workshops, and the results overall, can be used in the framework of further research, while the research itself could serve as a case study for further research on co-design for Local Development.

⁵⁶ More information on the SAVI methodology here <https://www.iisd.org/savi/>

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Annexes

Annex I. Action Plan

#	TASK	Details	TIMING	€
PREPARATION. Before the workshop				
1	Choose the venue	If possible, in the premises of the building / area to regenerate	1 month before the workshop	/
2	Event schedule	See example in Annex II	3 weeks before the workshop	/
3	Prepare the toolkit	See example in Annex II	From 3 to 2 weeks before the workshop	15€ ca.
4	Communication strategy Main goal: to reach out possible participants	You may use several means of communication: emails, social media (Instagram and/or FB) and word of mouth. We tried to avoid printing flyers, but that might be the best options for your case (having a key informant person, in our case it was not necessary).	2 weeks before the workshop	/
4.1.	Prepare a text for an email to be sent to possible participants	Important elements: location; time schedule; presentation of the researcher and the project; aim of the workshop; link to a google form for attendants (see next point)	10 days before the workshop	/
4.2.	Create a google form	If you choose to send emails to invite participants, remember to include the link to a google form (see example here). Knowing the estimated number of participants will help you for the organization of the workshop.	10 days before the workshop	/
4.3	Social media promotion.	In our case, we created an Instagram page (@codesignbraamcamp) and started a social media campaign	From 10 days before the workshop – to the workshop day	/
5	Prepare a feedback survey	Prepare a feedback survey to be sent to participants some days after the workshop. You can still update it afterwards, but an early monitoring plan will help you keep focused on what you want to gain from the workshop, and can be opportunity to learn on where to improve.	1 week before the workshop	/
6	Prepare and print an attendance	See example in Annex II.	5 days before the workshop	0,40€

	form and the game rules			
(7)	Buy ingredients and prepare a snack	You might consider offering a free snack, if you believe this could increase the number of participants	2 or 1 days before the workshop	5-15€
IMPLEMENTATION. The workshop day				
8	Setting up the venue	You may need to reach the venue before the event starts, to settle up the place. In our case, we had to bring some table and chairs, to be set up for the board game sessions	3 hours before the workshop	/
9	Take pictures	Remember to document the workshop. The material can be used for the promotion of the event after its end	During the workshop	/
10	Remember to let participants sign the attendance form.	You will need their email to send further news on the project, and to deliver the feedback survey. Also, you will need their permission for visual contents – or any other kind of documentation you might use	Before the end of the workshop	/
MONITORING. After the workshop				
11	Communication	As soon as the workshop is over, you might want to share the results of the workshop on social media, and send some emails to thank the participants. Also, if you are planning a follow-up, you might want to share some details to the participants.	After the end of the workshop	/
12	Store the cards into a digital format	This activity will ensure the storage of the cards in a safer format. At the same time, it will be easier to share them for a follow-up of the project.	From 1 day to 2 weeks after the workshop	/
13	Listen to the recordings of each group, and elaborate the data as it best suits your project.	This activity might take long. Also, it is recommended to do it not too much after the workshop, so that your memory is fresh	From 1 day to 3 weeks after the workshop	/
			TOT.	20 – 30 €

Annex II. Dixit Braamcamp. Turning a boardgame into a co-design tool for citizen participation in local development



DIXIT BRAAMCAMP

Turning a boardgame into a co-design tool for citizen participation in local development

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📷 <https://www.instagram.com/codesignbraamcamp/>

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THE SCENARIO

The *Quinta da Braamcamp* is a ruined rural complex, in need of repurposing. With a rich milling and industrial past, *Braamcamp* is located in one of the few remaining natural areas of a highly urbanized area.

The area, which belongs to the municipality of Barreiro (PT), was in risk of being sold for the construction of residential units and an hotel, a project that would have detached the space from the above mentioned natural, cultural, and social values.

The local people, through a Civic Platform, managed to bring the case to court, stalling the selling process. Since then, Braamcamp remained mainly abandoned to itself.

Dixit Braamcamp has to be seen as the first of a series of workshops aimed at involving the local community in a process of reappropriation of the space.

One of the final goals of the project is in fact elaborating a project proposal to be presented to the municipality, for managing the space at least for a temporary period, and ensure the protection of the public space, at the same time taking into account the true needs of the Barreirenses.

THE TOOL

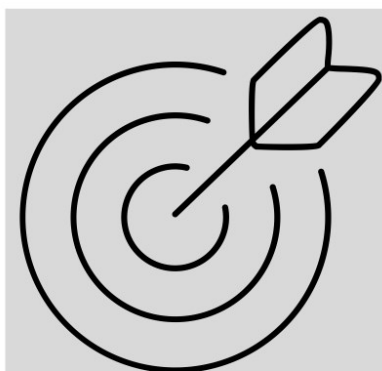
Dixit (name of the place)

limited edition

OPEN TO: local community, any age



- Games are enjoyable ways to get people to work together;
- The original Dixit is a board game based on perspectives, creativity and feelings;
- Games can produce preliminary design proposals and ideas;
- People are participant of the toolkit design.



GOALS:

- understanding people's needs
- produce creative ideas
- trust building
- citizen empowerment

TIPS

- Play in the premises of the space
- Seek for diversity in each group

THE WORKSHOP

Workshop schedule

1. MEETING & INTRODUCTION

It's important to clarify the scope of the workshop to participants. Our aim is: collecting ideas on activities that local people would like to see in the place.

Deliver the individual toolkit ★
(15-30 min)

3. INDIVIDUAL WALK

Participants are given some time to walk around the area and draw on the blank papers what activities they dream to see happening in the place.

IMPORTANT: Each drawing should represent a specific idea of what they would like to see there. It doesn't have to be a technical drawing! On the contrary, it can be a bit abstract (eg. representing a feeling or a dream).
(1 hour)

4. GAME SESSION

Participants are divided in groups of max 6 people, and delivered with the game set (SEE "game components", p.11). Deliver the game rules to each group playing, and remind them that you're available for any doubt they might have.

***this is the most crucial part for data collection.

Suggestion: ask each group to record the game session, it will be easier to elaborate the data afterwards***
(1 hour)

5. FOOD & TALKS :)

You might consider offering a free snack, if you believe this could increase the number of participants
(1 to infinite hours)

[total duration: around 4 hours]

INDIVIDUAL TOOLKIT ★

Each person gets:

- 4 blank cards
- 1-3 coloured pencils
- a small wood board to serve as a drawing pad

REMINDER

Remember to document the workshop! (eg. photos, videos)

BUDGET:

20 - 30 €

TOOLKIT IN THE MAKING

MATERIALS FOR CREATING ONE GAME SET

- 6 coloured thick papers;
- 10 white A4 sheets;
- 1 black marker

INSTRUCTIONS

1. Design the board for the game (see IMAGE 1 and p.8). The original Dixit has 30 steps, we suggest to have 15 for the purpose of this tool. You can design it digitally (eg. using photoshop), and print it in an A3 format;
2. Prepare 6 origami players, one in each colour. Check online for the origami instructions!
3. Cut 6 squared voting tokens for each player (3,5cm x 3,5cm should work). Write numbers from 1 to 6 on each of them. Use a pen, to avoid the marker to leave a sign on the other side of the scoring tokens (they need to face down during the game!);
4. Cut the A4 sheets in 4 parts. You will deliver 4 blank cards to each player during the workshop;
5. Draw some cards in advance. We suggest to have around 15 additional, to make sure that there are enough cards to complete the game;
6. The toolkit will be completed once participants draw their cards!

According to the expected number of participants, you can create one or more game sets. Keep in my mind that you can have max 6 players per game



IMAGE 1. BOARD



IMAGE 2. PLAYERS AND SCORING TOKENS



IMAGE 3. COMPLETE GAME SET

ACTION PLANNER (1)

PREPARATION. Before the workshop			
#	TASK	Details	Timing
1	Choose the venue	If possible, in the premises of the building / area to regenerate	1 month before the workshop
2	Event schedule	SEE example at p.5	3 weeks before the workshop
3	Prepare the toolkit	SEE example at p.6	From 3 to 2 weeks before the workshop
4	Communication strategy. Main goal: to reach out possible participants	You may use several means of communication: emails, social media (instagram and FB) and word of mouth. We tried to avoid printing flyers, but that might be the best options for your case (having a key informant person, in our case it was not necessary).	2 weeks before the workshop
4.1	Prepare a text for an email to be sent to possible participants	Important elements to include: location; time schedule; presentation of the researcher and the project; aim of the workshop; link to a google form for attendants (see 4.1.2)	10 days before the workshop
4.2	Create a google form	If you choose to send emails to invite participants, remember to include the link to a google form (see example here). Knowing the estimated number of participants will help you for the organization of the workshop.	10 days before the workshop
4.3	Social media promotion	In our case, we created an instagram page (@codesignbraamcamp) and started the social media campaign (check examples on the instagram page)	1 week before the workshop
5	Prepare a feedback survey	Prepare a feedback survey to be sent to participants some days after the workshop. You can still update it afterwards, but an early monitoring plan will help you keep focused on what you want to gain from the workshop. You can learn on where to improve.	1 week before the workshop
6	Prepare and print an attendance form and the game rules	SEE examples at pp. 11-12	5 days before the workshop
(7)	Buy ingredients and prepare a snack	You might consider offering a free snack, if you believe this could increase the number of participants	2 or 1 days before the workshop

ACTION PLANNER (2)

IMPLEMENTATION. The workshop day

#	TASK	Details	Timing
8	Setting up the venue	You may need to reach the venue before the event starts, to settle up the place. In our case, we had to bring some table and chairs, to be set up for the board game sessions	3 hours before the workshop
9	Take pictures	Remember to document the workshop. The material can be used for the promotion of the event after its end	During the workshop
10	Remember to let participants sign the attendance form.	You will need their email to sent further news on the project, and to deliver the feedback survey. Also, you will need their permission for visual contents – or any other kind of documentation you might use	Before the end of the workshop

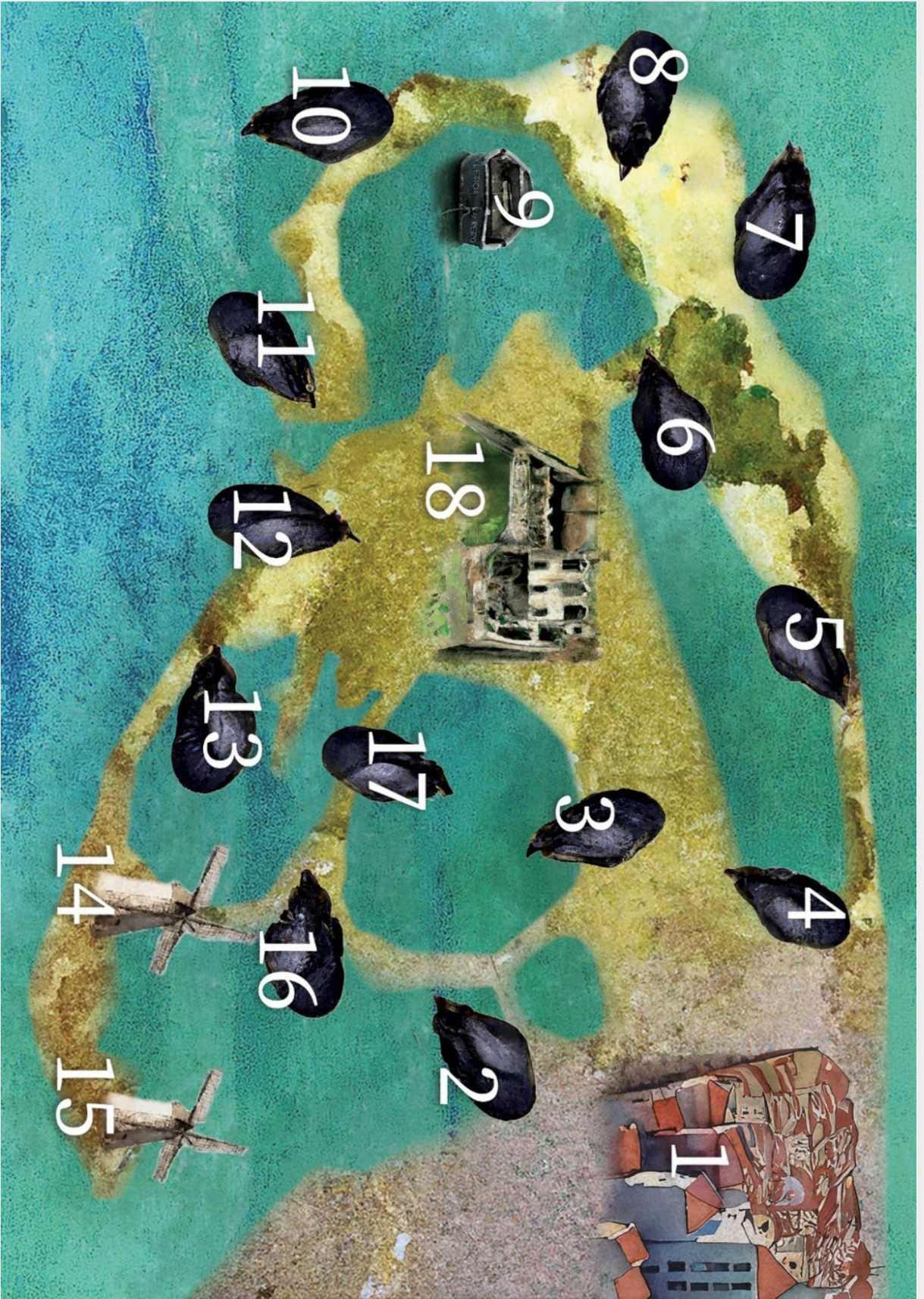
TO BRING ON THE WORKSHOP DAY

- Game set(s)
- 1 table and 6 chairs for each game set
- attendance form (SEE p. 12)
- game rules (SEE p.11)
- blank cards
- mix of colours and pens

ACTION PLANNER (3)

MONITORING. After the workshop

#	TASK	Details	Timing
11	Communication	As soon as the workshop is over, you might want to share the results of the workshop on social media, and send some emails to thank the participants. Also, if you are planning a follow-up, you might want to share some details to the participants.	After the end of the workshop
12	Store the cards into a digital format	This activity will ensure the storage of the cards in a safer format. At the same time, it will be easier to share them for a follow-up of the project	From 1 day to 2 weeks after the workshop
13	Remember to let participants sign the attendance form.	This activity might take long. Also, it is recommended to do it not too much after the workshop, so that your memory is fresh	From 1 day to 3 weeks after the workshop



Game rules



GAME COMPONENTS:

- one game board (scoring track)
- 40 cards
- 36 voting tokens in 6 different colours
- 6 origami players

GAME SETUP:

- Each group plays with the cards drawn by the players of the group
- Each player chooses one origami and places it on the 1st place of the scoring track.
- Shuffle the 40 images and give 4 to each player
- Make a draw pile with the remaining cards.

GAME RULES:

- One player is the storyteller for each turn.
- The storyteller chooses (secretely) one card, and makes up a sentence related to it. S/he says the sentence out loud, and puts the card (face down) on the table.
**The sentence can take different forms:
It can be made of one word or more, it can even be a sound. The sentence can be either invented or be inspired on an existing work of art (poetry or song sample, movie title, proverb, etc).**
- The other players select amongst their images the one that best matches the sentence made up by the storyteller. They place the card (face down) on the table
- The storyteller shuffles all the cards on the table, and randomly places them face up on the table. The card on the left will be number 1, the one next to it will be number 2, and so on...
- The goal of the other players is to find which image belongs to the storyteller amongst the displayed ones. Each player secretly votes for the card that s/he believes to be to the storyteller's (who doesn't vote).
- To do so, each player places face down in front of him the voting token corresponding to the number of the image he voted for. Once everybody has voted, all the voting tokens are revealed and placed on their corresponding images.
- Each payer moves as many steps as many points s/he score (see "scoring" after).
- **Each player will share with the others more details on his/her drawings showing in each round.**
- Each player draws one card. The storyteller for the new turn is the player to the left of the current one (and we keep going clockwise for the following turns).
- The game ends when the first player reaches the end (18)

SCORING

1. the storyteller gets 4 points if his card is chosen at least by one player
2. Each player that guesses correctly the storyteller's card, gains 3 points
3. However, if either all the players have found his image, or if none have found it, then the storyteller doesn't score any point and everyone else scores 3 points
4. Each player, except the storyteller, scores 2 additional points for each vote on his/her card
5. The players move as many steps as many points they score

ATTENDANCE FORM FOR WORKSHOP: _____
DATE: _____

#	NAME	AGE	ASSOCIATION (IF ANY)	E-MAIL	TEL.	CONSENT FOR VISUAL CONTENT	SIGNATURE
1							
2							
3							
4							
5							
6							
7							
8							
9							

Annex III. An example of a sustainability analysis of a top-down urban-project, through the implementation of the SDG Project Assessment Tool

#	Sustainability Principles	Performance Criteria	Comments / Recommendations
Key Driver: Social Inclusion			
1	Diversity of housing types based on income, tenure, and size ensures housing stock that meets local demand	1.1 The project assesses current and future demographics and trends, and tries to meet the identified housing needs of the population	The project does this, as it includes the provisioning of new housing opportunities that would accommodate 550 people. However, this does not mean that the type of housing offered (i.e. high-priced apartments) corresponds to the needs of the population (19,8% of the residents of Portugal were in risk of poverty in 2020 ⁵⁷)
		1.7 Proposed housing is affordable to the current and future population, including vulnerable and disadvantaged groups	Refer to the previous comment
2	Appropriate provision and spatial distribution of affordable housing meets shelter needs and ensures access to basic services and livelihood opportunities for all	2.6 The project increases overall access to adequate and affordable housing for all, including vulnerable and marginalised groups	Refer to the previous comment
3	Housing conditions, especially in informal settlements, are safe, secure, and promote well-being	3.2 The project promotes housing in locations which are not exposed to natural disasters or other threats to health (i.e. hazardous chemicals and air, water and soil pollution and contamination)	The area of intervention is exposed to natural disasters. Several are the studies confirming how the rising water levels constitute a main threat for Barreiro (Branco, 2013)
Key driver: Spatial Planning			
10	Respecting city limits and protecting natural ecosystems from development helps prevent urban sprawl, vulnerability to disasters, as well as loss of biodiversity and natural resources	10.1 The project is based on a comprehensive land assessment, taking into account existing land uses, cultural significance, and environmental factors including vulnerability to climate hazards	The project does not consider a comprehensive assessment including the cultural significance and environmental factors (i.e. vulnerability to climate hazards). It does take into account existing land uses ⁵⁸ , but these were established in 1994 – therefore not aligned with nowadays climate challenges
		10.2 The project considers existing land zoning and is designed to minimise exposure to climate hazards	Refer to the previous comment

⁵⁷ https://www.ine.pt/xportal/xmain?xpgid=ine_tema&xpid=INE&tema_cod=1110&xlang=pt

⁵⁸ Existing land uses to be consulted here https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14566/caderno_encargos_doc_1.pdf

		10.6 The project undertakes city-wide climate risk mapping under a range of scenarios	Different scenarios were not taken into consideration (i.e. risks related to the rising water levels)
		10.7 The project ensures that urban development is in line with future population growth projections, and does not result in unsustainable land use and consumption	It is true that Portugal is undergoing a housing crisis, and the project would contribute to the increasing of the number of residential units available for the population. However, this crisis has to be seen as a blend of factors, among which high rental prices, and high number of empty houses ⁵⁹ . Therefore, creating new residential units does not necessarily provide an effective solution to the housing crisis
		10.8 The project identifies land within the city limits suitable for extensions (informed by demographic, economic, and other holistic projections), promoting sustainable and controlled city growth	Investing in grey infrastructure in the marshland area of <i>Braamcamp</i> does not promote a sustainable and controlled city growth, especially when other buildings in urban areas already exist - that could be repurposed without undermining the habitat of <i>Alburrica</i>
11	Urban regeneration before developing new areas promotes compact city form and helps prevent destruction of natural features and habitats	11.1 The project includes an assessment of potential assets (i.e. existing vacant land, buildings and infrastructure such as degraded railway lines) that can be regenerated, preventing unnecessary expansion of the city. The assessment considers environmental and spatial factors including proximity to residential and commercial areas, and transport	Refer to the previous comment The project does however consider proximity to residential and commercial areas, and transport
12	Integrated urban planning and design at different scales (neighbourhood, city, region) and across different sectors (transportation, infrastructure, land use, etc.) ensures consistency and positive catalytic effects	12.1 The project is based on a spatial assessment of the existing urban conditions, dynamics and opportunities across different urban scales (neighbourhood, city-municipal, city-region, metropolitan, and national scale) and sectors (e.g. transportation, infrastructure, land use)	The analysed document does mention different territorial scales, also considering Barreiro in relation to its "international notoriety". However, the synergy among sectors is not well balanced, stressing very much on purely economic sectors (i.e. infrastructure, tourism) and neglecting others (i.e. sustainable land use, environmental protection)
13	Appropriate urban density, urban regeneration and planned city extensions ensure	13.1 The project is based on a comprehensive assessment of urban conditions, including urban form and physical characteristics, population dynamics, and population and job density	The assessment partially exists, but is not comprehensive of all the mentioned elements (i.e. does not include physical characteristics)

⁵⁹ More information here https://expresso.pt/economia/economia_imobiliario/2023-02-16-Retrato-de-um-pais-de-casas-vazias-rendas-altas-e-pouca-construcao-3345c4f5

compact and sustainable city form	13.3	The project prioritises urban infill, brownfield redevelopment, or vacant urban land instead of new development in greenfield areas.	This is partially true, as some brownfield redevelopment is considered (i.e. former industrial area ruined infrastructure). However, new development in greenfield areas is also considered (see Figure 19)	
	13.4	The project locates higher density development in proximity to existing and planned infrastructure (e.g. for basic services and mobility systems)	The project is indeed in the proximity of both existing and planned infrastructures. Regarding the planned ones, it foresees the improvement of mobility systems for accessing the area with public transportation, with the establishment of new bus stops	
	13.7	The project promotes compact (re)development based on a human scale, featuring walkable distances and encouraging social interaction and the use of public space	The area, being located in the proximity of the urban centre, allows for walkable distances to the planned project. At the same time, it mentions the willing of “devolving the <i>Quinta Braamcamp</i> to the use of the local community” ⁶⁰	
14	Mixed-use development creates more vibrant cities with improved distribution of opportunity	14.1	The project is based on a background assessment and understanding of the existing urban form, population growth, population and job density, and accessibility and transportation trends, considering past, present and future trends.	The project does not consider important past, present, and future trends. Considering these trends would instead mean, among others, stressing on the importance of preserving the cultural heritage of the space (past); foreseeing measures for affordable housing (present); and considering a sustainable development of the area (future)
16	Urban design solutions that are climate responsive ensure comfort and enhance urban resilience	16.1	The project is based on an analysis of climate-related risks and hazards, including sea level rise, extreme heat, changing precipitation patterns, flooding etc	The project does not consider an analysis of - or measures related to- the future risks coming from climate events.
		16.2	The project utilizes urban design solutions to enhance urban resilience through increased soil permeability and drainage, including but not limited to increasing permeable surfaces, water retention areas, green areas and retention basins, particularly in drought prone and flood affected areas.	Refer to the previous comment
		16.3	The project utilizes urban design solutions to ensure human comfort and reduce heat-island effects, which includes but is not limited to introducing green areas and shade, eco-system services, ventilation	The project foresees the implementation of some measures related to greening the area (i.e. creation of a cultural and recreational park, instalment of a

⁶⁰ Retrived from https://www.cm-barreiro.pt/cmbarreiro/uploads/writer_file/document/14585/prog_procedimento_doc_13.pdf

		corridors, and other measures responding to the city's climatic and environmental conditions	point for birdwatching). However, the measures are quite weak, and are not foreseen in relation to responding to the city's climatic and environmental conditions	
20	Public space as a city-wide network ensures equitable distribution and continuity of ecosystems	20.3	The design and management of public space considers drainage, microclimates, the environmental protection of ecologically valuable areas (reparation areas, river banks, wetlands and biodiversity), and the reduction of urban environmental risks	No mention of any of the listed aspects
		20.4	If relevant, the project includes the renovation of degraded ecosystems and remediation of contaminated air, water and soil	There is no mention of renovating the ecosystems. On the contrary, the project would have a negative impact on the existing one
		20.5	The project considers a city-wide network of public space on different urban scales (i.e. community, neighbourhood, city, district) and types (i.e. streets, boulevards, squares and plazas, parks, gardens, waterfronts, public urban facilities).	Different urban types are considered (i.e. recreational areas, residential buildings, streets); however, the same does not fully apply to different urban scales.
21	Adequate provision of public space improves healthy living conditions	21.4	The project provides opportunities for physical activity (walking, cycling and sports), socialization and play.	The project foresees the implementation of some measures related to greening the area (i.e. creation of a cultural and recreational park, instalment of a point for birdwatching).
		21.6	The project is designed to promote mixed and diverse use of public space, in terms of both the users and the functions	Looking at the planned project, we can see that it does include mixed and diverse use of public space (i.e. residential, touristic, recreational)
		21.7	The project engages communities in the design of public space	There is no mention of engaging the community in the design of the space which, on the contrary, is pre-established following a top-down approach
22	Well-designed public space provides nature-based solutions for increased resilience	22.1	The project is based on an assessment of how existing public space contributes to city resilience efforts, including disaster mitigation and response	City resilience efforts are not mentioned in the analysis document.
		22.3	The provision of public space on environmentally sensitive and high-risk areas is avoided, particularly on riparian land and/or river banks	On the contrary, construction is foreseen in high-sensitive areas (i.e. marshland ecosystem)
		22.5	The project and its design solution takes into account the area's existing biodiversity and ecological infrastructure, proposing nature-based solutions that promote the use of native species	The project foresees the implementation of some measures related to greening the area (i.e. creation of a cultural and recreational park, instalment of a point for birdwatching). However, there is no mention of the importance of promoting nature

			species. At the same time, existing biodiversity is threatened by the implementation of other actions of the planned project (see Figure 19)
		22.6	The project ensures that public space contributes to overall resilience and reduces the impacts of climate change, including heat island effects
			The project does not foresee a contribution for making the area more resilient. On the contrary, several ecosystem services (i.e. marshland related) are undermined
23	Protection and preservation of cultural and natural heritage has economic, social and psychological benefits	23.1	The project is based on an assessment of heritage and cultural assets, including natural elements, urban and architectural elements and intangible heritage such as traditions and festivities
			The document recognizes the relevance of the territory in terms of “identity”, cultural dimension, and promotion of the heritage. However, the proposed actions do not reflect this rationale
		23.2	The project promotes active protection and stewardship of heritage
			No cultural heritage promotion is foreseen. On the contrary, the buildings representing the cultural heritage of the area will be repurposed for touristic activities
		23.3	The project uses adaptive reuse and repurposing to preserve sites and buildings with heritage significance
			Buildings with heritage significance are planned to be repurposed. However, the repurposing will not reflect the area’s past
Key Driver: Environmental Resilience			
24	Identification and assessment of vulnerable areas in planning helps reduce exposure and prevents damage from climate disasters	24.2	The project is based on a background assessment of current and future risk scenarios, identifying the most severe and most probable scenarios
			Different scenarios were not taken into consideration (i.e. risks related to the rising water levels)
		24.3	An assessment of exposed and vulnerable areas is conducted at multiple scales, including, but not limited to, neighbourhood, district, city, regional and watershed levels
			An assessment of vulnerable and exposed areas was not conducted
		24.5	The project is based on an assessment of significant direct and indirect costs of potential disasters, including, but not limited to, human and financial losses
			The only costs – direct and indirect – mentioned, are those related to economic revenues and to the creation of new jobs. No mention of costs and benefits related to potential disasters. This could be conducted through the SAVI methodology ⁶¹
28	Integrated water systems, including hard infrastructure and nature-based solutions help improve storm water management	28.3	The project protects and strengthens relevant ecological systems, including but not limited to, water retention, infiltration, afforestation, urban vegetation, floodplain management, mangroves, and coastal vegetation
			On the contrary, the high-density construction project would mine these ecological services, with all the consequences related to the loss of these valuable services (i.e. marshland ecosystem services, as pollution retention)

⁶¹ More information on the SAVI methodology here <https://www.iisd.org/savi/>

30	Efficient, climate-sensitive and context-relevant design helps reduce energy consumption and the impact of extreme weather conditions	30.1	Extreme weather conditions are simulated as scenarios in feasibility studies conducted to inform the project	Different scenarios related to extreme weather conditions were not taken into consideration in any feasibility analysis
		30.2	The project incorporates nature-based solutions that are relevant to their location and build upon local environmental conditions and traditions.	Even if not referring to them as Nature Based Solutions, the project foresees the implementation of some measures related to greening the area (i.e. creation of a cultural and recreational park, instalment of a point for birdwatching). However, there is no focus on the "building upon local environment conditions and traditions"
		30.3	The project includes nature-based solutions and renewable energy sources with a goal of energy conservation.	Energy conservation is not a goal of the project, with no mention of renewable sources of energy
Key Driver: Economic Development				
31	Capitalizing agglomeration benefits and economies of scale increases efficiency and attract new businesses	31.3	The project details how it can contribute to support existing and potential economic clusters and activities	The analysed document presents a detailed analysis of this aspect
32	Prioritizing access and spatially equitable distribution of jobs and businesses attracts diverse human capital	32.3	The project considers the creation and accessibility of varied types of employment	It foresees the creation of new jobs; however, they do not seem varied (i.e. they relate to the touristic activity mainly)
Key Ddriver: Data-Driven Process and Management				
39	Inclusive, transparent, continuous and meaningful participation ensures that the needs and aspirations of the community are addressed though the project.	39.1	The background assessment identifies public, private, academia and civil society stakeholders at city, regional and national level that are relevant to the project. The project assesses how affected groups can be included and how to ensure a gender sensitive approach	No mention to any of these aspects
		39.2	The project builds on existing mechanisms to ensure community participation in urban planning and management processes. If these mechanisms do not exist, capacity development and recommendations are provided	Community participation in the urban planning is not foreseen
		39.4	The participatory process is ongoing throughout the project lifecycle, starting from the formulation stage onwards	A participatory process is not foreseen
		39.5	Stakeholders have opportunities to influence the project through a meaningful participation process. The project targets the needs of the population.	Since the project does not foresee any participation process, local stakeholders would not have the opportunity to influence it

		39.6	The project clearly communicates how participatory processes will be conducted. Relevant information is provided regularly to stakeholders and affected communities on the project development and outcomes of participatory engagements. Information is made available, shared in a reasonable timeframe and channels have been provided for stakeholders to submit their concerns or request information	Documentation is made available on the municipality website. At the same time, a meeting was organised in 2019, to inform the local people about the project. However, as Arnstein (1969) states, informing only does not mean that the participatory process is ensured
Key Driver: Capacity-Building and Market Maturity				
40	Strong technical and professional capacity from all relevant stakeholders secures long term implementation	40.2	The background assessment identifies capacity gaps in all relevant partners and stakeholders. This can include stakeholders within government at technical or leadership level, and third parties such as the private sector, civil society and academia	No kind of this assessment exists, and local stakeholders are not considered as relevant partners.
42	Building local partnerships, and drawing on local resources/capacities, facilitates sustainable project implementation	42.1	The project explores the opportunity to involve local partners in the execution and maintenance of the project	This would happen indirectly, meaning through the job opportunities for the local people in the tourist activities.
		42.4	The project only proposes international partners for its execution and maintenance where local capacity and market maturity does not meet minimum standards	Local capacity and market maturity is not considered when identifying potential partners
Key Driver: Urban Governance and Legal Frameworks				
43	Urban planning and regulatory frameworks enable the project's implementation and sustainability in the long term	43.2	The project aligns with existing land uses. Changes in land use are enabled by mechanisms in legal frameworks. If these mechanisms do not exist, recommendations are provided	The project aligns with existing land uses (i.e. those established in 1994)
		43.5	The project makes use of zoning codes and existing incentives to encourage risk mitigation, resource efficiency and sustainable uses	Risk mitigation, resource efficiency, and sustainable uses are not considered in the framework of the project
44	Alignment and coherence with existing laws and policies at local, regional and national level enhances the viability and impact of projects	44.1	The project aligns with existing policies (at local, regional and national level)	The project does align with local and regional policies related to urban development. However, it does not align with national and EU regulations related to sustainable urban development
		44.3	The project aligns to the city's strategic goals including spatial, economic and environmental strategies as well as existing projects implemented or in the pipeline	The project aligns with the city's strategic goals and reflects the rationale of existing projects
46	Defined roles and responsibilities at all levels of government provide clarity in case of overlapping mandates	46.6	Proposed partnerships follow principles of good governance by being transparent, fair and promoting public benefits	Public benefits are promoted; however, principles of good governance are not ensured (i.e. tokenism participation)

47	Prevention measures against gentrification and land price speculation secure land rights and adequate housing for all	47.1 Land use and financing instruments are used to ensure that increases in land and property value created by the project are shared with government	Increases in land and property value will not be shared by all, but will rather foster existing differences
49	Tenure security to housing, land and property improves social and economic status for all, especially marginalized and vulnerable groups	49.2 The project promotes security of tenure by guaranteeing legal recognition of tenure, and providing protection from involuntary harassment, eviction, and other threats.	Security of tenure would be ensured
		49.6 The project uses pro-poor and gender responsive land tools to promote security of housing, land and property rights for all, especially marginalised and vulnerable groups	Increases in land and property value will not be shared by all, but rather foster existing differences
Key Driver: Financial Strategies			
52	Realistic long-term financial strategies are essential for project implementation	52.2 A financial strategy is developed that is aligned with existing financial capacity. Market conditions (including supply, demand, public budgeting, etc.) as well as political, social and environmental risks are assessed in this strategy	A financial strategy is ensured. However, it does not include social and environmental risks
53	Mechanisms for own-source revenue through the project strengthen the government's financial standing	53.2 The proposed financial strategy proposes a mix of revenue sources that can increase budget stability. This can include income tax, property tax, user charges and fees, land-based finance tools and consumption taxes.	Revenue sources, for the municipality, would come from different sources (i.e. tourism taxes, family expenditures)