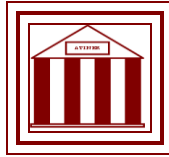


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**Experiences in Participatory Design
Processes: Assessing the Headland Park
Design**

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Experiences in Participatory Design Processes: Assessing the Headland Park Design

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Abstract

Participatory Design (PD) is a technique applied in Urban Design and Planning to engage stakeholders at any of the different phases of the development of projects. This aims to get an understanding of their opinions, as well as knowing prospective users expectations and perspectives on the issue. The target with this approach is to design strategies and guidelines, and /or to evaluate a proposal. This process involves a strict methodology, a specific workshop design, a thorough application and a detailed final report.

In the present paper we aim to expose our involvement as researchers and consultants experienced through all the stages of the Participatory Design process of the assessment of the Headland Park of the Barangaroo Project that is being developed in Sydney, Australia. The methodological approach is action research, which allows the study to take place along the ongoing participatory process, enabling the researchers to evaluate and re-shape the course of action.

Headland Park is a waterfront open space proposed to be used by both locals and tourists in a day to day basis and on special events, thus any kind of situations can occur, including ones involving criminal behaviour. In order to evaluate the aforementioned a participatory design workshop with experts on park management and criminality was created to assess the park's design and to elaborate management guidelines.

The staging of the methodology, the design of the workshop, its application and the final report, involved a challenging back and forth process that goes beyond any methodological structure, which comprises a series of group meetings, continuous evaluation and self-evaluation, piloting, improving, writing and re-writing; all of this enhancing our experiences as researchers and consultants.

Keywords: *Participatory Design; Parks assessment; Design and Management guidelines; Research and consultancy experience*

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What is Participatory Design? - Introduction

Participatory Design (PD) is a methodology applied in the built environment disciplines with the objective to engage the large diversity of stakeholders with and in urban projects. This mainly aims to get an understanding of the different approaches and perspectives regarding urban issues, as well as knowing prospective users expectations from the proposals and plans. Thus the target of this process is to create and design projects, strategies and /or guidelines, or at its minimum to evaluate proposals already developed by experts.

PD was initially applied in Information Technology processes (Asaro, 2000; Spinozzi, 2005; Carroll and Rosson, 2007). The origin of this methodology that has expanded to several disciplines was involving final users in the design and assessment of softwares and artefacts, to improve them and actually respond to their needs in order to develop an useful and sellable product. It evolved from the human-centred approach developed in the 1970's by the Scandinavians and North Americans, remaining in vogue throughout the 80's, being in the 90's when PD was adopted as a common basic approach around the world (Asaro, 2000; Carroll and Rosson, 2007). However it wasn't until 2005 when Spinozzi characterised PD as research and a methodology defining it as 'a way to understand knowledge by doing' (p. 163) by really considering participants' perspectives. Its paradigmatic ground is constructivism, since it departs from the base point that knowledge is co-created through interaction, considering the specific context (time - space - people) in which it occurs (Mirel, 1998). In this process a common language is generated 'with which both parties feel comfortable' (Spinuzzi, 2005, p. 165).

Moreover, PD is a co-creating process (Spinuzzi, 2005), thus being applied in research and consultancies in areas such as social development, health, public service, community and environmental psychology, among others. In the case of this specific project, PD was applied as a tool to co-assess the Headland Park and co-design its management guidelines.

In addition, regarding the methodology within PD, Spinozzi (2005) states that the original one involved workshops and games, along three phases: (1) *Initial exploration of work*, where a familiarisation with the participants and their basic activities took place; (2) *Discovery processes*, where the aim was to understand the work organisation and visualise its future, as well as agreeing on the expected results; and (3) *Prototyping*, where the technological artefacts were modelled.

Nowadays, PD has kept that basic structure, adapted to each specific situation and field. The familiarisation, the process of collaboration with participants and then the application of the results, or at least their formalisation into a report, still are the different phases embedded in PD methodologies.

Now, little literature can be found when looking for details regarding how to specifically apply PD. Furthermore, when attempting to deepen into the particularities of each component, such as which methods should be applied in

the second phase, what is mostly found are the outcomes of the researches exposed and the recommendations resulting from them. Moreover, an analysis of the personal experiences of the researchers is hardly presented in academic papers.

In this article, we are focusing in this latter, being it exposed throughout the whole document. Firstly the relationship between PD and Urban Planning (UP) is going to be outlined, followed by a brief description about the case of study in question (the Headland Park in Barangaroo, Sydney, Australia). Relatedly, we are discussing the characteristics of the different stakeholders involved, the methodology and some of our experiences as researchers and consultants along the PD process.

PD and Urban Planning

As previously mentioned, the majority of the PD literature available is linked to IT disciplines, mainly because of its historical relevance. However, as also exposed above, this methodology has evolved and spread from this discipline to others including urban planning. In urban planning, PD has been commonly labelled by researchers and practitioners in this field as Participatory Planning (PP).

It is noticed in academic papers discussing PP, most of the topics addressed when discussing or applying this methodology are regarding the usage of different tools such as GIS or CAD softwares to let residents express their perspectives on their neighbourhoods (Talen, 2000; Cain, Gyi and Campbell, 2002; Geertman, 2002), the linkage with other methodologies as action research (Tippett, Handley and Ravetz, 2007), or reporting how its application was successful without delving into it (Vinka, Imadac and Zinkd, 2008). Other approaches that can be found in the literature review, are the theoretical perspectives around PP, where the paradigmatic discussion and its landing into the professional practice are the focus (Flyvbjerg, 1996; Healey, 1996; Fainstein, 2000; Lane and Hibbard, 2005).

Notwithstanding, all of the authors relate in some way the planning discipline with PD methodology, being this one of the possible approaches to develop a project or plan. In this order of ideas, Forester (1999) exposes how planners, considering them as key actors in determining the future of cities, can also be very influential in the public's perspectives and feelings regarding a place. Thus, how much we as planners involve not only the inhabitants, but also other stakeholders related, could make the difference in the process of place-making. In this matter, for PP to be really effective the diversity of interest groups have to be considered (Baggett, Jefferson, and Jeffrey, 2008).

Moreover, PP can also be applied to address specific matters, being one of those *criminality*. Crime Prevention through Environmental Design (CPTED) has been an approach developed with the aim of keeping criminal activities in urban spaces from happening, by their co-design between users and specialists. Furthermore, though it has not yet been proven to be effective, several attempts

have been made to apply this, such as in collaborative environments between academia and external partners (Camacho Duarte, Lulham and Kaldor, 2011). In addition, besides using PD in planning to co-design projects along with stakeholders, it is also employed to assess existing proposals in order to improve them or establish guidelines for future plans related to them. In the case of this research, PD methodology was partially applied to evaluate the design of a green open space with the aim to outline recommendations to prevent potential crime in that proposed place.

An Overview of the Research Project and the Urban Proposal

The assessment project that we were involved as researchers and consultants was the design of a workshop based on PD principles to evaluate the Headland Park. This proposed open space is located in the northern area of a broader site named Barangaroo in Sydney, Australia. This project has been very controversial since its beginning because of its privileged location in the Sydney Harbour close to the Harbour Bridge and the CBD; in addition to a lot of political, economic and social interests have risen around this site, generating a large matrix of opinion that has influenced in the development of the proposal.

The Barangaroo site is divided in three interconnected and well-defined sections (see Figure 1): (1) *Barangaroo South*, where a high density development is being built, mainly comprising commercial and office buildings, along with some residential areas; (2) *Barangaroo Central*, which's detailed plan is currently being elaborated, this area is meant to be a transition zone between the northern parkland and the highrises of the southern zone; and (3) *Headland Park*, located at Barangaroo North, designed to be an waterfront open space where locals and tourists can go on a daily basis to enjoy, exercise and relax.

Figure 1. Barangaroo Concept Plan



Source: Barangaroo Delivery Authority, 2012

The Project - Headland Park Assessment Consultancy and Research

Delving into the Headland Park proposal, this comprises a range of diverse areas to enable different activities within the park, predominating a bushland character. This public space of 5,74 Ha will shelter an underground cultural centre, underground parking, cycle ways, pedestrian paths, an accessible foreshore, an open lawn, cafes, bushwalk areas, an amphitheatre, and connections to the surrounding areas (Barangaroo Delivery Authority, 2012).

These activities are meant to attract not only local residents and *sydneysiders*, but also tourists on both a daily basis and on special events. Considering this, it is only responsible to assume that any kind of situation could arise, including those of a criminal nature. Thus, it seems vital to try to prevent them as possible.

In order to achieve the aforementioned, PD presented itself as the best methodology to approach different stakeholders and experts who could provide to the team their perspectives regarding the design of the park. However, from all the phases comprised within PD processes, the second one (discovery process) was the focus of this research and consultancy.

In this order of ideas, the project was commissioned by the Barangaroo Delivery Authority (BDA) which is the governmental entity that manages the Barangaroo development, and within it the Headland Park. They contracted Designing Out Crime Research Centre (DOC) in 2012 to evaluate the possible implications of the park's design on safety and security, with an emphasis on crime prevention. Considering this, after a few months working together it was decided to engage with a PD approach. For this, the School of Built Environment (SBE) from the Faculty of Design, Architecture and Building was involved to design the assessment workshop. Both DOC and SBE are affiliated to the University of Technology Sydney (UTS). This research focuses in the process of the workshop design.

The methodology adopted to develop the aforementioned research within this consultancy contract was *action research*. This approach allows the study to be developed simultaneously to the PD process, enabling the researchers to evaluate and re-shape the course of action. As Spinozzi (2005) states, 'action research involves alternating between practical work to support changes (such as design activities) on one hand, and systematic data collection and analysis on the other hand' (p. 164).

Stakeholders (researchers/DOC/BDA) - People involved.

In this project there were two levels of stakeholders involved: (1) *the ones involved with the organisation of the PD process*, BDA, DOC and SBE; and (2) *the participants of the workshop*, park managers, neighbours, police officers, security and criminology specialists. In this paper we are going to focus in the interaction and experiences with the first group, which can be categorised as follows:

- *BDA the client*: this stakeholder was comprised of managers, urban designers and architects who had been involved with the

Headland Park project since its beginnings in 2009. Consequently, attachment to the project and to the concept plan that outlined the design was present. Hence, although the group was eager to engage with PD, they had *unknown* expectations (by them) of the workshop's outcomes. The consultant team was advised at the beginning of the contract, that the workshop's objectives were to outline both design and management guidelines. However after its implementation, in a preliminary meeting to expose some of the results, it was stated that the design couldn't be modified, thus only management guidelines were required.

- *DOC the contracted research centre and consultants*: a diversity of disciplinary backgrounds composed this team such as urban planning, industrial design, graphic and visual communications, architecture specialised in crime perception, and design consultancy. After some time working with BDA to assess the Headland Park with the perspective of crime prevention, PD methodology arose as the most appropriate approach to this issue. Considering their expertise and their primary evaluation of different possible future scenarios for this new park, the application of the scenario building procedure was assumed as proper. This can be supported by the argument by Kensing and Blomberg (1998) about the commonality in using scenarios and mock-ups as a technique in PD.
- *SBE external researcher and consultant - (the author)*: with a disciplinary background in urban design and urban planning, focusing both in research and consultancy involving PD methodology. The contribution in this project was in guiding the workshop's design and its facilitation. Within this process, liaising with the team's expectations and their interpretation of the client's requirements was an important part of the experience.

Methodology in PD - what should happen in the discovery phase?

Considering the project exposed, the second phase of PD, the workshop design and its implementation, involves a series of steps that should be followed in order to comply with PD principles. Consecutively, the report has to be written and delivered to the client.

- *Workshop design*: This phase comprehends meetings with the client and the team to understand the expected outcomes, setting the objectives, selecting the participants, evaluating the best approach to the issue, stating a first layout of the workshop and piloting the activities, re-assessing the outline and resources, involving the whole team in facilitation and at the end, the final revision of the workshop before implementing.

- *Implementation*: details such as setting the venue and organising the participants are vital. In addition, other parts are the application of each activity, keeping track of time, wrapping up of each exercise and of the whole session and if possible getting feedback from the participants regarding the workshop.
- *Report*: Lastly, the final stage is writing the report, in which all the comments and results of each activity have to be analysed, along with the overall outcomes. Afterwards, focusing on this specific project, the design and management guidelines are outlined from the previous analysis. Within this step we could subdivide it into a set of preliminary meetings (or could be just one) with the client to expose the general outcomes of the workshop and from there, discuss the results and re-evaluate them in order to further write the final text.

As stated, all the aforementioned comprise the *shoulds* in relation to the second stage of PD. However, all those steps are determined by the interaction among the stakeholders. In addition, embedded within this interaction we also have to liaise with all of their previous knowledge and beliefs about the project and PD processes. Thus, our own experiences as researchers and consultants are shaped by this synergy.

Some of our Experiences as Researchers and Consultants

Dealing with internal and external stakeholders involved in PP processes, unfolds into a challenging process of going back and forth. This sway in PD and in our own approaches to this process, goes beyond any methodological structures and all the *should be's*.

The first issue that should be addressed in this section is that there is no separation between ourselves as researchers and as consultants. In PD, the experience is just one; and understanding the paradigmatic perspective behind this methodology (constructivism), we acknowledge that we cannot separate ourselves from another aspect ourselves nor the *object of study*. There is no *subject - object* approach, just the interaction constructed among the participants of this project.

One of the most relevant aspects and experiences when working as a researcher with PD, is realising that the project you work on is not actually *participatory design*, since, in this particular case, the management guidelines were not developed *with* the participants. In the end, it became an analysis of their opinions and perspectives biased by the researchers' and consultants' own previous knowledge and disciplinary backgrounds. Moreover, after a first report draft revision by the client, some adjustments were made to the recommendations. This demonstrates two of the main challenges in PD processes.

Firstly, *the broadness of PD*, over the years this methodology has been applied for several reasons (politics, economic, eagerness to involve the community, among others) by both private industry and public institutions. Within this application, the participants have been involved in several levels of the participation ladder (Arnstein, 1969). However, steps from *citizen power* are almost never achieved, where participants are supposed to actually be involved in the decision-making process. Whereas, informing and consulting are the levels usually achieved and mostly aimed in planning situations, which as Arnstein (1969) exposes are a way of tokenism. Revising PD principles, people's engagement throughout all of the phases stands as one of the basic aspects to be a determinant of a good PD approach, however we realise this is not always achieved. Even in cases with high degrees of participation, as can be seen in Valencia-Sandovala, Flandersb and Kozaka (2009), partnership, the lowest scale of the citizen power level, does not involve the community they worked with, but only the local council, academics and the financing NGO. Thus we ask ourselves as researchers and consultants: are we really applying PD methodology or are we using it as a tool to just mediate between stakeholders and clients? How do we manage to really involve stakeholders and clients in planning projects?

The other challenge faced in PD processes, *dealing with personal perspectives*, is related to the latter question. Usually clients, as well as consultants and other stakeholders, have their own opinions and desires regarding a place, a design, a planning issue. All these emerge during the whole PD development, from the moment the client approaches the consultants until the urban proposal is finished. Hence the outcomes of PD can be interpreted biased by this previous knowledge, as well as by the existing attachment to the project. In this specific case, due to limited resources, attachment to the original concept plan and restricted timing, it was decided that only management guidelines were required, because the design could not be modified. From a personal experience point of view, this was demanding, because as researchers we tend to confront the *best practice* with the reality we live in these situations. In this project, the participants of the workshop developed some relevant suggestions on how to improve the design of the Headland Park considering crime prevention. These were not taken as such, but reinterpreted and incorporated into the management guidelines. In situations like this, other questions arise: how do we encourage clients to engage with the PD outcomes? How can we provide some understanding about the importance of PD results? Can we actually state from the beginning of the process that some issues or suggestions may appear that are opposite to what the client could have in its mind?

In addition to the challenges mentioned before, some other concerns usually develop during the experience of PD. *Reaching consensus* within the consultant team is also an exciting process. Taking all the different backgrounds and previous experiences, mixing them all together and trying to achieve one common ground to set up a workshop is a huge task. To which it has to be added having different levels of expertise regarding designing and

facilitating a PD workshop. For instance, it presented itself in this project as difficult, trying to understand that while facilitating it is really easy to interfere with the participant's thinking process, even with the smallest intervention from the research team. Therefore that it was vital to encourage people to collaborate without us providing any kind of opinions regarding the assessed project. Thus, when the actual workshop implementation took place, some interference arose. Now, this opens room for a reflection regarding how much can the PD researcher control within a workshop. Can a workshop be fully developed as planned? How do we open our minds to invite other's perspectives and experiences?

Furthermore, if one PD expert is brought into the team after the PD process was initiated, how open are we to adjust our preliminary thoughts on the subject? How can we as experts modify those preconceived actions that are considered appropriate to be taken? Sometimes this late involvement in research projects results in adapting strategies that may not be the best to achieve the objectives outlined. Within this process, we have to incorporate our knowledge on the subject with the perspectives of the rest of the team, and develop the best possible design from it. One key element in this situation is piloting, trying out the design on a control group, considering that this is no guarantee of the success of the workshop. Besides that, getting feedback from the participants about the facilitation and the different activities contributes to the learning of this process by all team members, including the *expert*.

To conclude we would like to emphasise the main characteristic of PD as a moving forward and backwards situation, where researchers, consultants, clients, participants and other stakeholders may be involved. Thus, understanding that those groups are basically comprised by people with their own backgrounds, perspectives, opinions and attachment issues, would make the PD process more viable, liveable and successful. In addition, this is solidified by comprehending that not all the methodological implications can be addressed. Visualising that there could be *flaws* along the stages of PD, and embracing them not as such, but as stepping stones to improve. Considering and acknowledging our own experiences in any kind of project and reflecting on them could help us become better researchers and consultants.

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