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The role of the architect in participatory design projects

The case of the Brussels public market

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Abstract

For several years, the Brussels government has been promoting a policy of action aimed at developing public buildings, whether facilities or housing, in a participatory approach. This can be seen as a real desire to implement a culture of participation in the region. Through their actions on the urban landscape, this desire to include the inhabitants is imposed on architects. The latter, whether or not they follow this vision, must comply with these requirements in order to continue to obtain public contracts. Several questions then arise, leading to the following research topic: the role of the architect in participatory design projects in view of the public market in the Brussels-Capital Region.

This work is based on three case studies, the Tivoli, Rabelais and Anvers projects, by means of a qualitative approach induced by the prism we decided to follow after being interested in role theories. Based mainly on the notions gathered by Huot (2013), the role appears to be made up of a multitude of components: expected, prescribed, perceived, preferred, and performed. This approach to the role introduces a focus for this study which is the prescription of the architect's mission by the client, the acquisition of it by the practitioner and its concordance with the different expectations of the stakeholders. These case studies, for which we conducted semi-structured interviews, were preceded by a literature review in order to identify the characteristics of participatory projects.

The literature review allowed us to establish a conceptual model of participatory design. This model includes the main principles of this approach and takes the form of a roadmap, allowing the different participatory processes to be characterised. Following the characterisation of participatory design as theorised by Hansen et al. (2019), we present an 'Input - Mechanisms - Effects' model in triangulation, where the mechanisms of participatory design – collaborative development, balance of power relations and mutual learning, among others – operate through activities rooted in inputs to create specific effects. This model emphasises the self-feeding quality that processes must have and identifies three conditions for their proper functioning: the structuring of inputs; the production, through mechanisms, of effects; and the evaluation of these effects.

The study of the role of the architect in participatory design in Brussels led us to consider the latter as multiple and evolving. The multiplicity is determined by the influence of the role on the factors of the scale of the project – which can lead to a difference in objectives and the possibility or not of going into detail –, the objective of the contracting authority behind its request for participation – and therefore its prescription of the mission – and the personal preferences and habits of the architect. By crossing the concepts of Dimeglio (2001) and Lee (2006) – themselves based on Levebvrian theories – we consider the process of participatory design as a navigation between the abstract space of technique, the abstract space of politics and the concrete space of use, all three of which are intertwined. During the development of the project, themes will pull the project towards certain spaces and then towards others, which should lead to a reconsideration of the roles according to this tendency, thus causing the role to evolve.

Keywords: participatory design, public buildings, architect role, participation

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INTRODUCTION

Since its creation in 1989, Brussels-Capital Region has acquired, over the years, tools aimed at improving its understanding of the territory and better orienting its evaluation, at all scales. In the mobilization of all its collaborators, the "inhabitant-participation" debate emerged as a matter of course without, however, finding a form that is unanimously accepted (Interview Nicolas)¹. The "*Code Bruxellois d'Aménagement du Territoire*" (CoBAT), which institutes and governs the major mechanisms of spatial planning, sets out the legal framework for citizen participation. Thus, in its legal dispositions, the inclusion of citizens is achieved in two ways: public enquiry and concertation committee². Introduced nearly 30 years ago, these two tools have been perfectly assimilated by the various urban players but are now raising questions. Aware of the problem, the Brussels authorities are trying to develop participatory procedures upstream of the project, in order to intervene earlier in the design process. For example, in 2009, the government commissioned the "*Agence de Développement Territorial*" (ADT) – now perspectives.brussels – to develop:

"Un pôle d'expertise en matière de participation citoyenne et d'organiser des processus innovants de participation (en complément des obligations légales) sur les grands projets urbains permettant de prendre en compte les attentes de tous les acteurs dès l'amont des projets".³ (Accord du Gouvernement 2009-2014)

The current Brussels government has included, in its general political declaration for its 2019-2024 mandate, a statement on a policy of actions "*to guarantee public spaces and public infrastructures of proximity (nursery, school, parks, sports infrastructures, etc.) in a participatory and co-creative approach*".⁴ This can be seen as a real desire to implement a culture of participation in the region which requires, as the various urban actors are doing, a trial-and-error learning process. This campaign, although not compulsory, creates a tendency which is now reflected in many Brussels entities. Through their actions on the urban landscape via architectural projects, this desire to include the inhabitants will have an impact on architects. The latter, whether or not they follow this vision, will have to comply with these requirements in order to continue to obtain public contracts. Several questions then arise: how do architects work in this new design scheme? what degree of participation is involved in these new processes? are they free to conduct the project according to their own vision of participation? do they have a methodology to follow? what obligations do they have? are they properly equipped to respond to the missions entrusted to them?

All these questions lead us to the following research question:

<p style="text-align: center;">What is/are the role(s) of the architect in participatory design projects in the Brussels public market?</p>
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Aside from this commitment by the regional authorities, Brussels seems to us, because of its nature, to be a relevant field of study. Indeed, the city displays a heterogeneous pattern with numerous social, economic, and

¹ In addition to the interviews that were carried out according to the methodology that will be presented in what follows, we met Nicolas Hemeleers, administrator of CityTools. CityTools is an urban planning agency that also works as a participation office for many Brussels projects. At the time of writing, the office is in charge of editing a study on the "*Bouwemeester Maître Architecte*" (BMA), in particular to study the participative aspect that it tries to set up for some competitions. In addition to this, Nicolas Hemeleers is writing a carte blanche on the participatory framework of Brussels, which should be published in the course of 2021. For these reasons, we thought it appropriate to interview him on these topics. We will note "(Interview Nicolas)" the different information coming from this discussion for the following reading.

² These legal provisions will be presented on page 27.

³ A center of expertise in citizen participation and the organization of innovative participation processes (in addition to legal obligations) on major urban projects, making it possible to take into account the expectations of all stakeholders from the outset of the projects.

⁴ Pour garantir des espaces publics et des infrastructures publiques de proximité (crèche, école, parcs, infrastructures sportives, etc.) dans une approche de participation et de co-création.

cultural identities. Participation therefore appears to be a means of voicing these different realities and reconciling the city's fabric with its inhabitants. This way of conceiving the urban environment enables the debate to be refocused on the local level and to deal with the different tensions of scale engendered by Brussels' status as a national and European capital. These specificities, generated by the peculiarity of the city, push us to frame our research on the unique Brussels territory. Especially since its regionalization and therefore its autonomy in terms of territorial development, the Region has been provided with specific regulations, policies and public organizations that make it unique.

Even if urbanity is a question that participative policies often appeal to, we intend to focus exclusively on the work of the architect, the latter being understood to be the professional in charge of designing buildings and directing their construction. By this we mean excluding projects with an urbanistic focus and based solely on the study of public space and the organization of the city. The design of a building is the *sine qua non* condition to be included in the projects we are going to study, even if the urban issues are obviously addressed via their interconnectivity with architecture.

We introduced the problematics through the impulse given by the public authorities to the participatory approach in architecture. This study will remain in this field, excluding private projects. Firstly, because we believe that the challenges are different: the issues of transparency of land-use planning mechanisms and democracy are more in demand. Secondly, because in public projects, the project owner is clearly different from the future users, which creates a defined framework where the power relations may differ from private projects where these two entities may merge.

This paper opens with a review of the literature based on two main issues. Firstly, we try to define participatory design and to introduce its different characteristics. This study will be defined by its relatively general character, in view of the theorization of the movement that also originates in other fields of design, while highlighting however the specificities of participation in the field of architecture. The second issue aims to present our documentation of the architectural profession in Brussels and the mechanisms of public architectural production, by presenting the various rules in force and organizations involved. A detour through the theories of roles from the social sciences is also developed in order to identify the elements to be studied, in order to answer our research question. Following this review of the literature, we present the methodology that we have decided to adopt. This methodology is based on a qualitative approach of semi-directed interviews, introduced by a questionnaire survey as a first contact with the architectural offices corresponding to our research framework. These different interviews are linked to the study of three architectural projects for which the public contracting authority imposed a participative conduct of the design process. This analysis is presented in the fourth chapter of this paper. It is followed by a discussion on which this paper ends, in which we confront the results of our literature review with our observations from the case studies. This discussion focuses on the role of the architect but also on the participation process in the Brussels public commissioning process in view of its impact on the research question.

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STATE OF THE ART

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To answer the research question which is "what is/are the role(s) of the architect in participatory design projects in the Brussels public market?" we established our state of the art in 2 parts: participatory design and the role of the architect. The first one is structured as follows: first we propose to define participatory design by confronting what is found in the literature. We will also investigate what are the two main currents of thought on which it is based. We then will attempt to describe the various ways of characterizing participatory design. Thanks to this first part of the state of the art, we propose a conceptual model that summarizes the main concepts put forward in participatory design. This first result of our research work serves as an analytical basis for our study. In the second part, we look at the profession of architect. Before doing so, we propose a characterization of the term 'role' as it is through this prism that we continue this study.

Participatory design

"The widespread adoption of the language of participation across a spectrum of institutions, from radical NGOs to local government bodies [...] raises questions about what exactly this much-used buzzword has come to mean. An infinitely malleable concept, 'participation' can be used to evoke – and to signify – almost anything that involves people."

Thus, A. Cornwall (2008, p.269) introduces his work "*Unpacking 'Participation': models, meanings and practices*" in which he sets out to clarify the terms related to participatory practices. This is not an easy task, but certainly important in the light of what we have seen above. We have therefore played the same game.

In terms of the application of the participatory dimension to the field of design, the terms 'participatory design' and 'co-design' and their French equivalent 'conception participative' and 'conception collaborative' are generally encountered, although the use of the word 'participation' alone is regularly employed. Despite the almost exclusive use of the latter term by Brussels spatial planning actors, we also focus on these other terms because of their wide use in the international literature, which is the basis for our research. While a majority of the scientific literature chooses to use one or the other while having major similarities in their definitions and/or characterization [PD : 3, 4, 9, 10, 16, 20, 24, 26, 27, 36, 37, 43, 44, 47, 50, 54, 58 – CoD: 2, 38, 53 – P: 6, 7, 8, 13, 14, 15, 28, 42]¹, others use both terms [1, 5, 11, 19, 22, 23, 29, 32, 33, 39, 40, 41, 45, 46, 48, 51, 52, 54, 55, 56, 57, 59] as synonyms or not. C. A. Scariot et al. (2012) even use the term 'collaborative-participatory design'.

The following table (Table 1)² shows the different points of view regarding the differentiation of the terms 'co-design' and 'participatory design'. The table lists the authors who see an equivalence between the two terms (row 'equivalence') or a difference (row 'difference'). In the 'explicit' column we indicate the articles in which this (non)equivalence is clearly indicated (e.g.: [46] makes it explicit that "*Participatory Design was the terminology used until the recent obsession with what is now called co-creation/co-design*"). In the 'implicit'

¹ 1 (Agrawal et al., 2012) ; 2 (Albinsson & Forsgren, 2004) ; 3 (Andersen et al., 2015) ; 4 (Bano & Zowghi, 2015) ; 5 (Béguin, 2003) ; 6 (Berger, 2019) ; 7 (Berger & Beugnies, 2008) ; 8 (Blundell Jones et al., 2005) ; 9 (Bratteteig & Wagner, 2014) ; 10 (Brkovic & Chiles, 2016) ; 11 (Carriou, 2015) ; 13 (Cornwall, 2008) ; 14 (Curado, 2013) ; 15 (Dimeglio, 2001) ; 16 (Drain & Sanders, 2019) ; 18 (Ehn, 2008) ; 19 (Garces, 2016) ; 20 (Greenbaum & Loi, 2012) ; 22 (Hansen et al., 2019) ; 23 (Harrington et al., 2019) ; 24 (Hofmann, 2018) ; 26 (Hurlbert & Gupta, 2015) ; 27 (Jacob & Desage, 2015) ; 28 (Jenkins & Forsyth, 2009) ; 29 (Johansson, 2005) ; 32 (Lam et al., 2018) ; 33 (Langley, 2016) ; 36 (Luck, 2018a) ; 37 (Luck, 2018b) ; 38 (Manzini, 2016) ; 39 (Manzini & Rizzo, 2011) ; 40 (Meroni et al., 2018) ; 41 (Moellenkamp et al., 2010) ; 42 (Penven, 2013) ; 43 (Ravina et al., 2018) ; 44 (Robertson & Simonsen, 2012) ; 45 (Sanchez De La Guia, 2017) ; 46 (Sanders & Stappers, 2008) ; 47 (Sanoff, 2006) ; 48 (Scariot et al., 2012) ; 50 (Spinuzzi, 2005) ; 51 (Steen, 2011) ; 52 (Steen, 2013) ; 53 (Steen et al., 2011) ; 54 (Stelzle et al., 2017) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden & Mörtberg, 2015) ; 57 (Van Mechelen, 2017) ; 58 (Visser et al. 2005) ; 59 (Whicher & Crick, 2019)

² The numerical references in the table are the same as those presented in this footnote.

column we place those for which this is not mentioned but for which we have deduced through reading the similarity or not (e.g. [11] goes back and forth between the two terms throughout the article, suggesting that she uses it as a synonym).

Although this literature review is based on over sixty articles that were assembled through a spontaneous search via *Google Scholar*, it should be noted that this table is not intended to be representative of the entire research studies on participation in design, for which it would have been necessary to work in a more methodical way. Rather, the exercise we have undertaken is driven by a desire to highlight the different terms and definitions we have encountered in our research which have led us to use them with the meaning we propose at the end of this chapter.

In this work the term 'participatory design' will be the only one used. This choice was made de facto in view of the great tendency of public entities in Brussels to use the terms '*participatif*' and '*participation*' in their call for the inclusion of future users and/or neighbours.

However, it should be noted that in what follows we will sometimes use concepts borrowed from studies on co-design. This will only be done in cases where the notion is shared, according to the author of the respective study, by participatory design.

	Explicit	Implicit
Equivalence	CoD is the contemporary term for PD : 40, 45, 46, 51	11, 18, 32
Differences	<p>PD is a form of CoD that differs in its roots in democratic ideology : 22, 23, 52</p> <p>Difference in the need to involve all stakeholders : 19</p> <p>Difference in participants (PD = users ; CoD = all stakeholders) : 55</p> <p>Difference in the level of collaboration (PD = always led by experts, CoD not) : 33</p>	<p>59</p> <p>PD is a movement while the use of the prefix 'co' with the term 'design' means only a collaborative work : 1, 39, 41, 56, 57</p>

Table 1: Equivalence and differences between Participatory Design (PD) and CoDesign (CoD)

Definition

As mentioned above, the notion of participatory design is vague. There are as many definitions as there are ways to practice it. However, these can be categorized in different ways.

For a first classification, we can refer to the participants. While E. Sanders & P. Stappers (2008, p.6) mention in their book *Co-creation and the new landscapes of design "the creativity of designers and people not trained in design working together in the design development process"*, emphasizing the opposition between experts and participants, there are two distinct groups in the literature concerning the latter.

The first group defines participatory design as an approach that aims to involve future users [1, 3, 15, 18, 19, 43, 44, 48, 56]¹, while the second group involves all stakeholders impacted by the project [11, 17, 24, 28, 32, 38, 41, 53, 55, 57, 58]². Although the focus on future users seems obvious as they would be the most aware of their needs, we choose to include all stakeholders in our proposed definition. This is imposed by the scope of the study. Architectural projects and even more so those coming from the public market deal with many actors other than the future users: public authorities, associations, construction experts, local residents, etc.

A second classification can be based on the nature of the definition itself, what it focuses on. There are two groups: process-centered i.e., the way the process is conducted, and the methods used [1, 8, 15, 16, 18, 33, 36, 39*, 42, 44, 46, 48, 51, 55, 56*, 59]³, and objective-centered i.e., focusing on the targeted results [19, 22, 34, 39*, 56*, 57, 58]⁴. It seems logical to define participatory design by its primary character, being a collaborative work and reflection. Collaboration between the various participants is the essence of this approach and takes precedence over everything else, as D. Petrescu (2005, p.45) explains:

"In participative projects, the process is somehow more important than the result, the assemblage more important than the object."

Some authors, however, emphasize what is sought to be achieved through this process, as this is referred to designing Things. Some argue for a design process that allows *"the resulting designs to fit the way people will actually use the product in their own lives"* (Visser et al., 2005) others to simply give a voice to those who are directly impacted by the project (Van Mechelen et al., 2017). The objectives behind participatory projects and the interests of the different participants can be very diverse and therefore the definition we will be using is not of this category. Furthermore, studies have shown that in experiences of participatory processes, the main source of satisfaction for users was the feeling of having influenced the process and not the conformity of the result to their needs (Ravina et al., 2018). This highlights the primacy of the collaborative process itself over the findings. Based on what we have just seen and in relation to what we will study next, we propose to define participatory design as follows:

Participatory design is a design approach that focuses on collaborative work between the diverse stakeholders of a project and in which designers are no longer the exclusive owners of the design process.

¹ 1 (Agrawal et al., 2012) ; 3 (Andersen et al., 2015) ; 15 (Dimeglio, 2001) ; 18 (Ehn, 2008) ; 19 (Garces, 2016) ; 43 (Ravina et al., 2018) ; 44 (Robertson & Simonsen, 2012) ; 48 (Scariot et al., 2012) ; 56 (Van Der Velden & Mørtberg, 2015)

² 11 (Carriou, 2015) ; 17 (Dugua & Chakroun, 2019) ; 24 (Hofmann, 2018) ; 28 (Jenkins & Forsyth, 2009) ; 32 (Lam et al., 2018) ; 38 (Manzini, 2016) ; 41 (Moellenkamp et al., 2010) ; 53 (Steen et al., 2011) ; 55 (Szebeko & Tan, 2010) ; 57 (Van Mechelen et al., 2017) ; 58 (Visser et al., 2005)

³ 1 (Agrawal et al., 2012) ; 8 (Blundell Jones et al., 2005) ; 15 (Dimeglio, 2001) ; 16 (Drain & Sanders, 2019) ; 18 (Ehn, 2008) ; 33 (Langley, 2016) ; 36 (Luck, 2018a) ; 39 (Manzini & Rizzo, 2011) ; 42 (Penven, 2013) ; 44 (Robertson & Simonsen, 2012) ; 46 (Sanders & Stappers, 2008) ; 48 (Scariot et al., 2012) ; 51 (Steen, 2011) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden, 2015) ; 59 (Whicher & Crick, 2019) ;

⁴ 19 (Garces, 2016) ; 22 (Hansen et al., 2019) ; 34 (Lee, 2006) ; 39 (Manzini & Rizzo, 2011) ; 56 (Van Der Velden, 2015) ; 57 (Van Mechelen et al., 2017) ; 58 (Visser et al., 2005)

Two philosophies

Participatory design can be driven by various reasons. However, they can all be grouped under two different approaches: participation for ideological or instrumental reasons (Jenkins & Forsyth, 2009).

The ideology that all those affected in any way by a process have the right to participate has its origins in socialist and Marxist ideals (Harrington et al., 2019 ; Luck, 2018a). While architectural practices seeking to involve inhabitants can be found in many countries in the 1950s, this approach mostly echoes the social struggles of the 1960s (le Maire, 2005). Protest movements appeared throughout the Western countries. Among their demands is the desire to have more decision-making power over their lives. Participatory design appears as a possible alternative that provides this fundamental right that they claim. Even if participatory practices are institutionalizing, as we have seen above, with the resulting deviations such as their instrumentalization and their use as a '*democratic alibi*' (le Maire, 2005, p.130), this ideology remains for many practitioners and researchers the driving force behind the process.

Regarding instrumental reasons, there are a multitude of levers, the main one being the high level of matching the product to the users' needs. In the 1960s, many researchers, initially from the field of computer science and later from the whole domain of design, started to focus on users to optimize their design (Garces, 2016). Different methodological currents integrating abstract or concrete users (Agrawal et al., 2012) appeared, such as Empathic Design, User Experience, Interaction Design, ... Among them, Participatory Design (Skiba, 2014).

It should be noted that, although these two philosophical bases are different, they do not exclude each other and gather the same tools for design activities. However, the difference is illustrated when characterizing participatory design, where the importance will be put on one or the other criterion (the empowerment of the inhabitants for the first category we mentioned, for example). This brings us to the next point: the characterization of participatory design.

Characterization

1. Ladders and criteria

There are several approaches in the literature to characterize participatory design, including scale characterizations. We shall not discuss this in detail as we will not employ it in the remainder of this work. However, it seems important to give a brief introduction.

With the notion of deep democracy that the term 'participation' carries, it is used in all sorts of ways, sometimes as a miracle cure in the manner of the '*maux magiques*' (a pun on the homophones '*maux*' = '*woes*' and '*mots*' = '*words*', in French) to which Bruxelles en mouvement has devoted an entire issue ("*Les maux magiques*", 2019). Some authors have therefore aimed to differentiate the various forms that participatory practices can take by measuring the degree of citizens involvement in the construction of a decision (Penven, 2013). The first participation scale (Table 2) – which is still widely cited today – was constructed by S. Arnstein (Cornwall, 2008). She contrasts real participation with non-participation across a spectrum from total control by the authorities to full decision-making power for citizens.

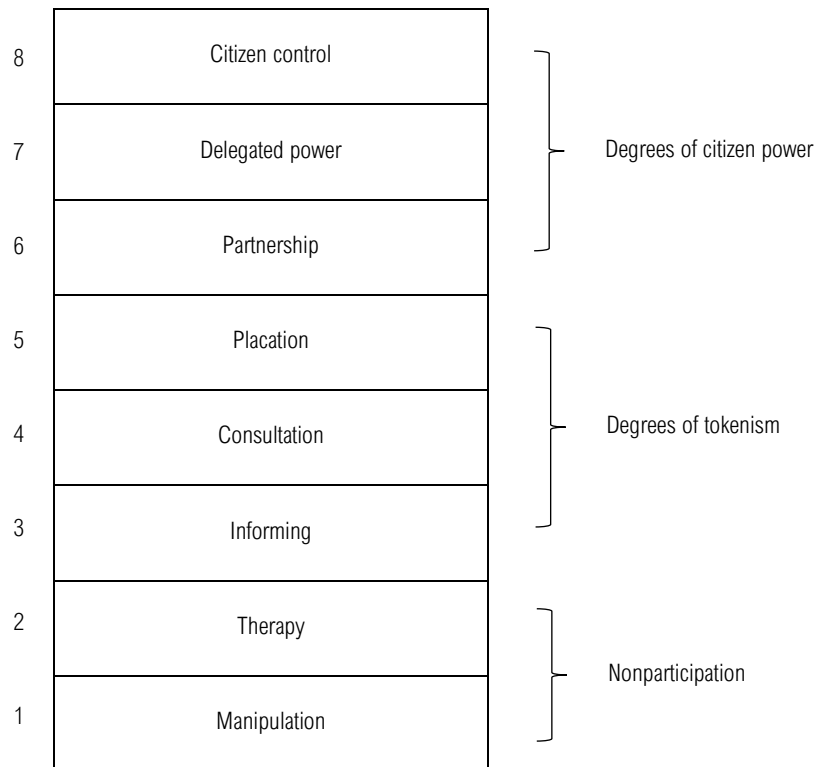


Table 2: Eight Rungs on a Ladder of Citizen Participation (Arnstein, 1969)

As another scale of participation (Table 3), we can mention that of S. White who develops a typology of interests of the different participants by distinguishing the interests of those who implement the participatory process (referred to as Top-Down) and those who are on the receiving end (Bottom-Up).

Form	Top-Down	Bottom-up	Function
Nominal	Legitimation	Inclusion	Display
Instrumental	Efficiency	Cost	Means
Representative	Sustainability	Leverage	Voice
Transformative	Empowerment	Empowerment	Means/End

Table 3: Interests in participation (White, 1996)

While the notion of scale – and particularly Arnstein's tradition – induces a form of duality with non-participation directed by the authorities at the bottom and total control by the citizens as the goal of true participation, other authors present the problem in a more nuanced way. This is the case of Y. Lee (2006) who proposes four types of participation (Table 4) depending on the space of operation. We are referring here to the notion of concrete and abstract spaces theorized by H. Lefebvre. The concrete space represents the space we live and experience while the abstract space is the designers' one, a “space of vision and geometry” (Lee, 2006, p.5). Participatory design would be situated in a spectrum at the intersection of these two spaces.

Space of operation	What's Design Participation for ?	The relationship between designers' space and the users' space	The role of 'designers'	The role of 'users'
1. Designers' space	1. Innovation (designer only)	Two spaces are separated	Masters/ authorities	Imagined user/ representatives
2. Realm of collaboration (between designers and people)	2a. Collaboration (designer-driven)	Overlapping at the corner and formed the realm of collaboration	Co-designers/ facilitators	Co-workers
	2b. Emancipation (user-driven)	People's space taking over experts' space	Stimulators	Creative people/advisers
3. Users/ people's space	3. Motivation (user only)	Overlapping as one entity	Craftsmen/ builders	Active clients

Table 4: Four Types of Design Participation (Lee, 2006)

In view of the ongoing debate on the notions of scales and spectrum of participation, we prefer to develop the notion of criteria for this work. Participatory design would be characterized by a number of criteria that would define the notion and frame the vagueness that surrounds this approach. This choice is based on the possibility of using these criteria as evaluation tools for researchers in participatory design or managers of this type of project. Indeed, in this study we are interested in architectural projects where a participatory approach has been initiated at the design level. In order to evaluate the participatory character of these projects, these criteria may be used. Moreover, this notion of criteria integrates in a better way the theoretical model that we will propose at the end of this chapter. We do not deny, however, that it will sometimes be necessary to call upon these notions of scale, particularly in the interviews where this conception is present among several interveners. This notion of scale is easy to grasp and understand by practitioners and allows them to easily situate the degree of participation to which the project has been subjected.

In what follows, we present the different criteria that emerged from our documentation work.

Democratic and functional empowerment

As we saw at the beginning of this chapter, some authors define participatory design in terms of its objectives. It is evident that even for those authors who do not take this into account in their definition, objectives are sometimes considered an essential criterion. C. Spinuzzi (2005) who, in *The Methodology of Participatory Design*, presents a series of criteria for evaluating participatory projects, states that the objective of participatory design is:

“To improve workers’ quality of life both in terms of democratic empowerment (that is, workers’ control over their work organization, tools, and processes) and functional empowerment (that is, workers’ ability to perform their given tasks with ease)” (Spinuzzi, 2005, pp.169-170)

These same objectives are found in other authors [3, 17, 18, 19, 22, 43, 50, 56]², with an emphasis on one (democratic) or the other (functional) depending, in our opinion, on the current of participatory design in which the author is situated. C. Spinuzzi adds that the co-determination of the character of the project by the different participants is essential to achieve this criterion. Thus, the designers do not have total control over the project, the other actors can also *“shape the project to reflect their values, goals and objectives”* (Spinuzzi, 2005, p.170).

Collaborative development

Next, we can address the collaborative nature of participatory design to which C. Spinuzzi refers with his second criterion: collaborative development shared by other authors [7, 8, 17, 19, 20, 22, 36, 38, 48, 50, 55, 56, 57]³. Scariot et al. (2012) describe the user as an 'inside and active contributor' throughout the design development. In the literature, we also find the criterion of equalizing the relations which, for most of the texts we have been interested in, underlies the same sub-criteria, the same question: how can one ensure that all participants are co-designers, intern and active as Scariot refers, of a same project?

A variety of tools and techniques exist for involving stakeholders in the design process. We will briefly discuss these methods in the next chapter. From these, we can draw three points which seem to be of primary importance: the construction of a common language [7, 19, 24, 28, 50, 59]⁴; the choice of a decision mechanism coherent with the participatory quality of the project [7, 8, 9, 24, 39, 47, 50, 55, 56, 57]⁵; and the adoption of a method for identifying who to involve in the process [1, 7, 14, 19, 24, 42, 47, 50, 55, 56, 58]⁶.

Common language

The ambition around the construction of a common language is twofold. An architectural design process brings together a multitude of actors, including construction experts such as engineers and architects. Among the users and inhabitants, people with a multitude of different social capital can also be encountered. Therefore, a participatory project involves a multitude of actors with a varied

¹ If C. Spinuzzi uses the term 'workers', this is due to his approach to the notion of participatory design in the professional world. In view of what we have read about participation in the field of architecture, we believe that these concepts can be applied to our study framework.

² 3 (Andersen et al., 2015) ; 17 (Dugua & Chakroun, 2019) ; 18 (Ehn, 2008) ; 19 (Garces, 2016) ; 22 (Hansen et al., 2019) ; 43 (Ravina et al., 2018) ; 50 (Spinuzzi, 2005) ; 56 (Van Der Velden & Mörberg, 2015)

³ 7 (Berger & Beugnies, 2008) ; 8 (Blundell Jones et al., 2005) ; 17 (Dugua & Chakroun, 2019) ; 19 (Garces, 2016) ; 20 (Greenbaum & Loi, 2012) ; 22 (Hansen et al., 2019) ; 36 (Luck, 2018a) ; 38 (Manzini, 2016) ; 48 (Scariot et al., 2012) ; 50 (Spinuzzi, 2005) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden & Mörberg, 2015) ; 57 (Van Mechelen et al., 2017)

⁴ 7 (Berger & Beugnies, 2008) ; 19 (Garces, 2016) ; 24 (Hofmann, 2018) ; 28 (Jenkins & Forsyth, 2009) ; 50 (Spinuzzi, 2005) ; 59 (Whicher & Crick, 2019)

⁵ 7 (Berger & Beugnies, 2008) ; 8 (Blundell Jones et al., 2005) ; 9 (Bratteteig & Wagner, 2014) ; 24 (Hofmann, 2018) ; 39 (Manzini & Rizzo, 2011) ; 47 (Sanoff, 2006) ; 50 (Spinuzzi, 2005) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden & Mörberg, 2015) ; 57 (Van Mechelen et al., 2017) ;

⁶ 1 (Agrawal et al., 2012) ; 7 (Berger & Beugnies, 2008) ; 14 (Curado, 2013) ; 19 (Garces, 2016) ; 24 (Hofmann, 2018) ; 42 (Penven, 2013) ; 47 (Sanoff, 2006) ; 50 (Spinuzzi, 2005) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden & Mörberg, 2015) ; 58 (Visser et al., 2005)

vocabulary. To avoid an exclusive control by the experts on the language used during the design activities, which would exclude some participants from the discussion, a neutral language has to be developed. A second objective of this exercise is to clarify the discussion. Indeed, it is important that the same term or concept evokes the same thing in everyone to avoid conflicts of interpretation later on.

Decision mechanisms

The question of decision-making is at the heart of participatory thinking. Indeed, it is essential to be able to ensure that the participants have the power to influence the choices made during the design process. In architecture, there is, in essence, an inequality in the power relationship between the project owners and the other stakeholders in the project. Because of its status as the commissioner, all the final decisions are made by them, thus placing them above the other co-designers. However, as M. Berger & P. Beugnies (2008) points out in their book *Bruxelles à l'épreuve de la participation: les contrats de quartier en exercices*, this veto right does not de facto imply passivity with regard to the development of decisions. The various stakeholders involved are advancing the groundwork from which final decisions can be reached. It is the responsibility of the project owner not to ignore the work done by the participants, otherwise we would fall into a scenario that Arnstein would call 'manipulation'.

There are numerous tools for decision making. While one might think of majority rule voting, a mechanism that has become obvious in our democratic systems, some authors stress the importance of going beyond it in participatory projects. Helping participants to confront dominant ideologies and power relations seems essential for democratically ideologically driven participatory design, especially when the project addresses groups in society that have been marginalized (Luck, 2018b). Specific tools and techniques can lead to values such as openness and multiplicity that imply a postponement of decision making to ensure the possibility of change (Bratteteig & Wagner, 2014). The different participants must therefore adopt an open attitude towards the positions and ideas of others that allows for the renegotiation of their own positions (Vander Velden & Mörtberg, 2015).

Representation

Beyond these two first points that participatory design practitioners need to address when developing their methodology, one question stands out: who to involve in the process? Part of this question has been answered in our definition by mentioning the importance of involving all the various parties that might be affected by the project. However, it is not always possible to bring everyone together when projects are too large, as can be the case for public equipment and infrastructure. It is therefore legitimate to ask who should be brought to the table. The question of representativeness is addressed by Berger & Beugnies (2008) in the context of the "*Contrats de Quartier*". They present three cases, which can be seen in the table below (Table 5).

In the first line, the authors present a person is representative according to their similarity to the average inhabitant, in accordance with a set of criteria based on statistics. In the second one, a person is appointed to represent other inhabitants and must therefore be distinguished from them by his or her ability to represent. These two approaches, although opposite, imply that people are representative or unrepresentative by nature. One either is or is not. Berger proposes a third case, the citizen-investigator. The citizen-investigator reports people's opinions and speaks 'in the place of' instead of 'on behalf of' and would thus re-present the inhabitants (Berger & Beugnies, 2008).

	Objective	Type
To be representative	Looking like the average inhabitant; talking like the average inhabitant	The citizen as a sample
To represent	Distinguish oneself from the average inhabitant; speak up for the average inhabitant	The citizen-delegate
Re-present	Reporting facts, words, events, in the place of other inhabitants	The citizen-investigator

Table 5: Types of representativeness adapted from Berger & Beugnies (2008)

The question of representation is even more complex when the future users are not known. Indeed, some projects (e.g., social housing) are designed before the users are designated. The participants in the design process are therefore not always those who will ultimately use the building (Visser et al., 2005). When composing the list of participants, Berger suggests that the focus should not be on *who* is on the list but rather on *what for*. It is not important who they are (nationality, level of education, etc.) but what they are trying to defend. There is a plurality of the relation to the project, to the neighbourhood, which the practitioners must make sure to represent to be able to confront the different arguments that are linked to it (Berger & Beugnies, 2008). In view of the debate surrounding these methods of representation, it does not seem relevant to say here that one or the other approach is the right one. Rather, it seems to us essential that the practitioner choose one of them and communicate it in order to be transparent in the implementation of the participatory process.

Mutual learning

Working collaboratively involves an exchange of knowledge between the different participants. Collaboration between designers and users leads to a double flow of information, with designers gaining knowledge about users' practices and users learning knowledge that enables them to co-design and propose ideas. This is called mutual learning, which some authors consider to be a necessary criterion for a successful participatory process [5, 10, 20, 36, 44, 56, 57]¹. However, this learning phenomenon does not stop at an exchange of information. Participants not only share their knowledge and skills but also learn more about themselves (Vander Velden and Mørtberg, 2015). Moreover, this collaboration often appears as a new shared activity that is different from that of the designers and users and allows for the creation of new knowledge (Béguin, 2003).

Context-oriented

Another criterion worth mentioning is the need for context-oriented reflection. We refer here to the context as a whole, political, economic, social, cultural, etc. For example, when addressing the cultural context, A. Drain & E. Sanders (2019, p.44) point out that *“a lack of consideration for [cultural power structures], are highlighted time and time again as a barrier for PD collaboration”*. In the literature, the use situation appears to be the sine qua non of participation [3, 16, 20, 36, 48, 56]². Some authors

¹ 5 (Béguin, 2003) ; 10 (Brkovic & Chiles, 2016) ; 20 (Greenbaum & Loi, 2012) ; 36 (Luck, 2018a) ; 44 (Robertson & Simonsen, 2012) ; 56 (Van Der Velden & Mørtberg, 2015) ; 57 (Van Mechelen et al., 2017)

² 3 (Andersen et al., 2015) ; 16 (Drain & Sanders, 2019) ; 20 (Greenbaum & Loi, 2012) ; 36 (Luck, 2018a) ; 48 (Scariot et al., 2012) ; 56 (Van Der Velden & Mørtberg, 2015)

argue for situation-based actions, indicating the need to work directly with participants in their day-to-day lives, in real contexts rather than through formal abstractions (Greenbaum & Loi, 2012).

Continued participation

We end this sub-chapter with a final criterion: the principle of continued participation [9, 24, 28, 40, 43, 46, 49, 50, 55, 56].¹ N. Skiba (2014, p.39) defines it as “*the physical and moral involvement of users at every stage of the design process*”.² To remain connected to the uses and the principle of the right to participate, participatory design seeks to continuously involve the stakeholders, who develop a critical reflection on the project throughout the activities. To this, we can add that such a critique should be used to re-evaluate the previous steps. One should be able to revisit stages repeatedly and cyclically (Spinuzzi, 2005). Note that for architectural projects, it is usually difficult to achieve this since participatory processes are subject to time and budget constraints. Although we are no longer totally in the case of participatory design as it is beyond the design stages, Jenkins & Forsyth (2009) insist on the importance of continuing participation after construction to be able to evaluate the project in its entirety and potentially make improvements.

This last point closes this sub-chapter on the criteria of participation. These criteria – democratic & functional empowerment, collaborative development and its sub-criteria, mutual learning, context-oriented and continued participation – will be used in the first place to elaborate a conceptual model to characterize the processes of participative architectural design. Secondly, they will be useful during the case studies, to evaluate the different projects that we will study and will serve as anchor points for our analysis.

2. Methods, techniques, and tools

“A major strength of Participatory Design is that there is a robust connection between ethical practice and the choice of methods, tools, and techniques” (Robertson and Wagner, 2012, p.78)

Over the years, researchers and practitioners of participatory design have developed methods specific to this approach. Some authors even characterize participatory design through these methods, as well as through scale or criteria-based characterization (Hansen et al., 2019). We will not describe these methods, as their number and diversity are extensive. However, we would like to highlight a few points that will prove useful later.

Firstly, we will address some definitions that we have taken from Sanders, Brandt & Binder (2010, p.2) in their paper *A Framework for Organizing the Tools and Techniques of Participatory Design*. These are the definitions we will be using in this work:

- Tools = *the material components that are used in PD activities.*
- Toolkit = *a collection of tools that are used in combination to serve a specific purpose.*

¹ 9 (Bratteteig & Wagner, 2014) ; 24 (Hofmann, 2018) ; 28 (Jenkins & Forsyth, 2009) ; 40 (Meroni et al., 2018) ; 43 (Ravina et al., 2018) ; 46 (Sanders & Stappers, 2008) ; 49 (Skiba, 2014) ; 50 (Spinuzzi, 2005) ; 55 (Szebeko & Tan, 2010) ; 56 (Van Der Velden & Mörtberg, 2015)

² Engagement physique et moral des utilisateurs à chaque étape du processus de conception.

- Technique = *technique describes how the tools and toolkits are put into action. For example, many different techniques can be used with a deck of image cards. They can be sorted, categorized, prioritized, used to make a collage, tell a story and/or used to spark conversations.*
- Method = *a method is a combination of tools, toolkits, techniques and/or games that are strategically put together to address defined goals within the research plan*

In the same work, these authors classify the different techniques into three categories: telling-style (e.g., interviews, or discussions), enacting-style (e.g., enactment by setting users in future situations) and making-style (e.g., sketches, or model-making). Each of these categories induces a different mode of communication (Drain and Sanders, 2019), which is related to a specific type of knowledge (Sleeswijk Visser et al., 2005), as can be seen in the image below (Figure 1).

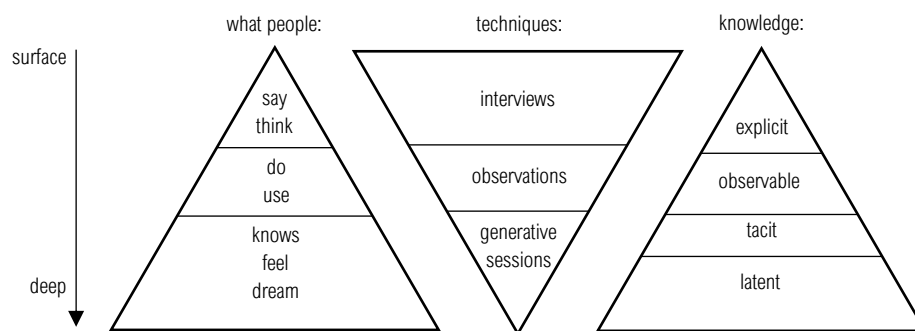


Figure 1: Different levels of knowledge about experience accessible via different techniques (Sleeswijk Visser et al., 2005)

In architecture, the choice of tools is all the more important because the participants in the activities are not always able to use the same tools as the expert. The reading of plans and sections for example, as well as the abstraction that results from all these drawings are very particular. The challenge of participatory design is to be able to gather participants around tools that are accessible to all, while multiplying the types of techniques used to induce the different types of knowledge mentioned above.

Even if this work does not focus on the methods used by architects or participation facilitators, we felt it was important to mention these various insights that will be useful to keep in mind when studying participatory projects (see Chapter 4).

Conceptual model

In the preceding subchapters, we have given an overview of participatory design, presented in a relatively succinct manner the different types of definitions, the bases on which the approach is founded, several ways of characterizing it and the methods that enable it to be implemented. We now propose a model on which we will base the rest of this paper. This theoretical model is taken from Hansen et al. (2019) is adapted in the light of what we have seen above.

Firstly, we shall present the model we adopt. Its authors searched for a new way to characterize participatory design. The aim was to base this characterization on the connections between the objectives, the effects that the process seeks to generate and the role of participatory activities in achieving them. They thus develop a triptych 'input - process - effects' which Table 6 illustrates the model. The authors point out that the list is not exhaustive and serves to highlight the point they raise in their study. Therefore, the titles and the first line are considered fixed and essential to the model while the second line is considered as examples.

- **Input** refers to the tangible and intangible resources needed to initiate and complete a program or project. By this the authors mean the different participants (users, designers, and other stakeholders) who will be involved in the process, but they also mention all the material necessary for the design. By intangible resources, it could refer to concepts or theories of design or participation.
- **Process** describes the actions completed by participants using available resources. The process includes:
 - **Mechanism:** it may be regarded as the fundamental entity that creates causality between input and effect.
 - **Activity:** it describes the particular way or the medium through which the mechanism is brought into action.

To differentiate these two notions, consider an example: the design of a nursery. During the participatory architectural design process, are organized workshops. It can include work on plans, models, etc. We are talking about activities. During these activities, mechanisms will take place such as mutual learning between the architect, early childhood authorities and daycare staff, and collaborative ideation. These mechanisms will result in effects, explained below.

- **Effects** are composed of three categories:
 - **Outputs** are tangible and intangible products emerging from the program. Outputs in themselves offer no indication of the derived benefits but refer to immediate product of the process. If we take the example above, we can consider that the collaborative ideation resulted in a new plan for the nursery. This is a tangible result. The mutual learning that took place by exchanging the knowledge of the participants can emerge as a new common knowledge related to crib design. The result can therefore also be intangible.
 - **Outcomes** are short and midterm effects of the program. Outcomes are not products but the derived consequences, benefits, drawbacks etc. of the program. Outcomes may be identified as causal consequences of the program and the outputs. The plan thus created and the reflections that took place during the process can lead the workers to adopt a new work practice, which can be considered an outcome of the project.
 - **Impacts:** Longer term effects of the program. While a program may deliver outcomes on its own, impacts are typically achieved in conjunction with other programs or initiatives. To finish with the same example, we can consider that these new plans and new work practices

have an influence on the quality of work of the employees but also on the education of the children, even more so if other programs on the architecture of the schools are developed.

INPUT	PROCESS		EFFECTS		
	Mechanism	Activity	Output	Outcome	Impact
Users	Collaborative reflection	Field studies	Social infrastructure	Mutual engagement	Long terms relationships/networks
Designers		Workshops	Technological products	Personal and professional skills	
Stakeholders	Collaborative ideation	Prototyping	Problem analysis	Competence	Democratic influence
Design materials	Balancing power relations	Infrastructuring	Design alternatives	New (work) practices	Quality of (work) life
		Evaluation	Domain knowledge		
	Mutual learning	Modified prototype	Organizational structures		
	Knotworking	Action plans			
	Networking	Scenarios			
	Design games	Evaluation results			

Table 6: Participatory design characterisation model with examples (Hansen et al., 2019)

The choice of this theoretical model is founded on several considerations. Firstly, the division of the process into three parts makes the process readable. Because of the frequent use of the ‘input-process-effects’ framework in many disciplines, the user of this model will find it easy to read and understand the issues that arise from it. Secondly, it allows us to point out the various elements that we have extracted from the different definitions found in the literature. In this system, both the process, the importance of which is stressed by some authors, and the effects sought to be achieved by using these participatory methods stand out. The degree of information on the division into mechanisms and activities seems to us to be particularly useful in describing the participatory process. In addition, the model distinguishes between different types of effects, which makes it possible to highlight the contribution that is sought beyond the end product itself, which we consider to be particularly important in participatory design. Thirdly, this deconstruction allows us to easily adapt this model into a kind of roadmap by incorporating the different criteria we have referred above (see p.12).

After the presentation of the model, we can discuss some points that we wish to adapt here. This concerns the **inputs**. Our previous research has enabled us to highlight the importance of certain issues, leading us to make a distinction, as Hansen et al. (2019) have done for process and effects, between the following inputs: co-designers, methods, objectives. This represents the first adaptation we make of this model and can be seen in the Figure 2.

- **Co-designers** includes all participants who take part in the participatory process. In the context of our study, this generally includes local and regional authorities, public institutions, architects, other design/building experts, association groups, future users, or local residents.
- **Methods** refers to the combination of tools and techniques that will be used during the activities for the participatory mechanisms to take place, as defined in the dedicated chapter on this subject.

- **Objectives:** the objectives of the project and its participatory design approach seem essential to us, so it is natural that we dedicate a category to them in the inputs. In addition to bringing clarity to the project, their enunciation makes it possible to know what effects are intended to be generated and via what mechanisms. This also makes it possible to evaluate the project at the end of the process.

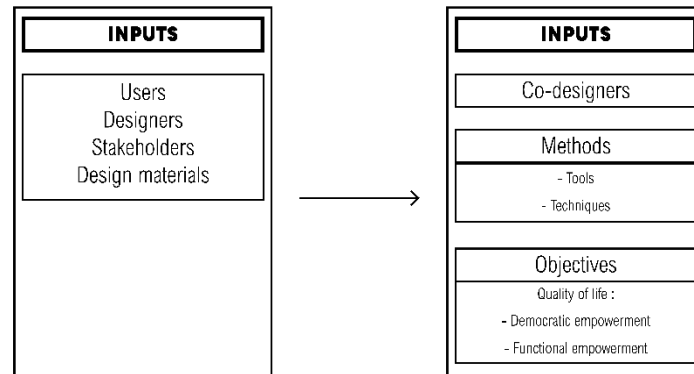


Figure 2: Inputs modification

A further adaptation is made at the level of **activities**. The authors of the model identify five categories which are: field studies (researching information on the context or field), workshops (activities where participants share knowledge and ideas), prototyping (designing the project and how it will work), infrastructuring (establishing the social, organizational, and technical arrangements which will ensure that the results obtained during the project can be sustained) and evaluation (assessing the tangible and intangible results). Our intention for this theoretical model would be to have activities that could be defined in terms of their timing in the process. Although we can imagine that activities in the evaluation category follow field studies, they are not clearly classified on a timeline: these field studies can be carried out at any time to inform one or the other. Our intention in transforming this part of the model by including a chronological dimension is principally for the character of continuity and iteration that we mentioned above (see p.16). By gathering activities not by categories but by phasing, we highlight the temporal dimension that is particularly important in the development of architectural projects. Among the research we encountered on the subject, that of D. Szebeko & L. Tan (2010) entitled *Co-designing for Society* stands out for the division it offers in terms of the first activities in three stages:

- **Diagnose:** firstly, the context and its challenges are understood, and the complexity of the problem is diagnosed.
- **Engage and discover:** the benefits of participation are highlighted and explained to each participant. They also share their experiences, and we seek to discover the needs and wishes of each stakeholder.
- **Design:** the findings are shared, and an attempt is made to generate ideas.

We therefore take these three steps and add the phases of development, infrastructuring and evaluation. We keep the category 'infrastructuring' mentioned by Hansen et al. (2019) because it seems to be essential in architecture, and even more so for public buildings. We can illustrate this importance with the example of passive houses. Work has to be done with the users so that they are sufficiently "educated" about their functioning to be able to make the most of their performance. We therefore propose to describe the stages of the participatory process as follows: diagnosis, engagement and discovery, ideation, development, infrastructuring and finally evaluation. If the phasing is similar to numerous other design approaches, in participatory design other mechanisms are called upon, through methods specific to this movement. The process, with the different steps we have just mentioned and the mechanisms that take shape in it, can be

schematized as follows (Figure 3). One can note the possible iteration at each phase of the process as evoked by C. Spinuzzi (2005).

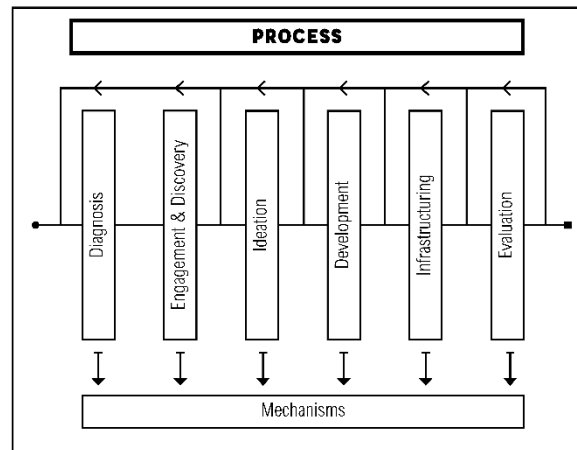


Figure 3: Process modification

As mentioned above, one of the advantages of this model is that its three-part distinctions allow for the possibility of incorporating the criteria we have described. The way to insert them depends on their nature. We identify criteria of a definitional order and others of a qualitative order. For the first, we mean the criteria that constitute the very essence of participatory design. This qualification is determined through the different definitions studied, which use these criteria to define the approach. They are integrated within the input-process-effect triptych. We contrast this with the criteria that emerge as qualifiers of the movement. We therefore consider these criteria as control parameters: points of attention that allow to evaluate the process. In Figure 4, which schematizes the conceptual model, these control points are placed under the main diagram, in relation to their focus, i.e. whether they check the inputs, the process or the effects. Thus, we include the objectives of democratic and/or functional empowerment as intrinsic components of the objectives placed as inputs, as are the mechanisms of collaborative development, balancing power relations and mutual learning for the process. For the control points, we find the criteria of context-oriented – for the methods, the choice of stakeholders and the objectives –, of participant representation and of co-determination of objectives. For the process, we can evaluate the criteria of decision mechanisms, common language, and continued participation. Our earlier decision to move from a categorical to a chronological presentation of activities is further justified by this desire to add criteria to the model. In this way, each phase can be evaluated with the different checkpoints. This will allow us to identify any changes over time in the participatory nature of the process and to place various observations, resulting from these controls, on a temporal dimension.

This review of the literature about participatory design results in a conceptual model schematized as follows (Figure 4):

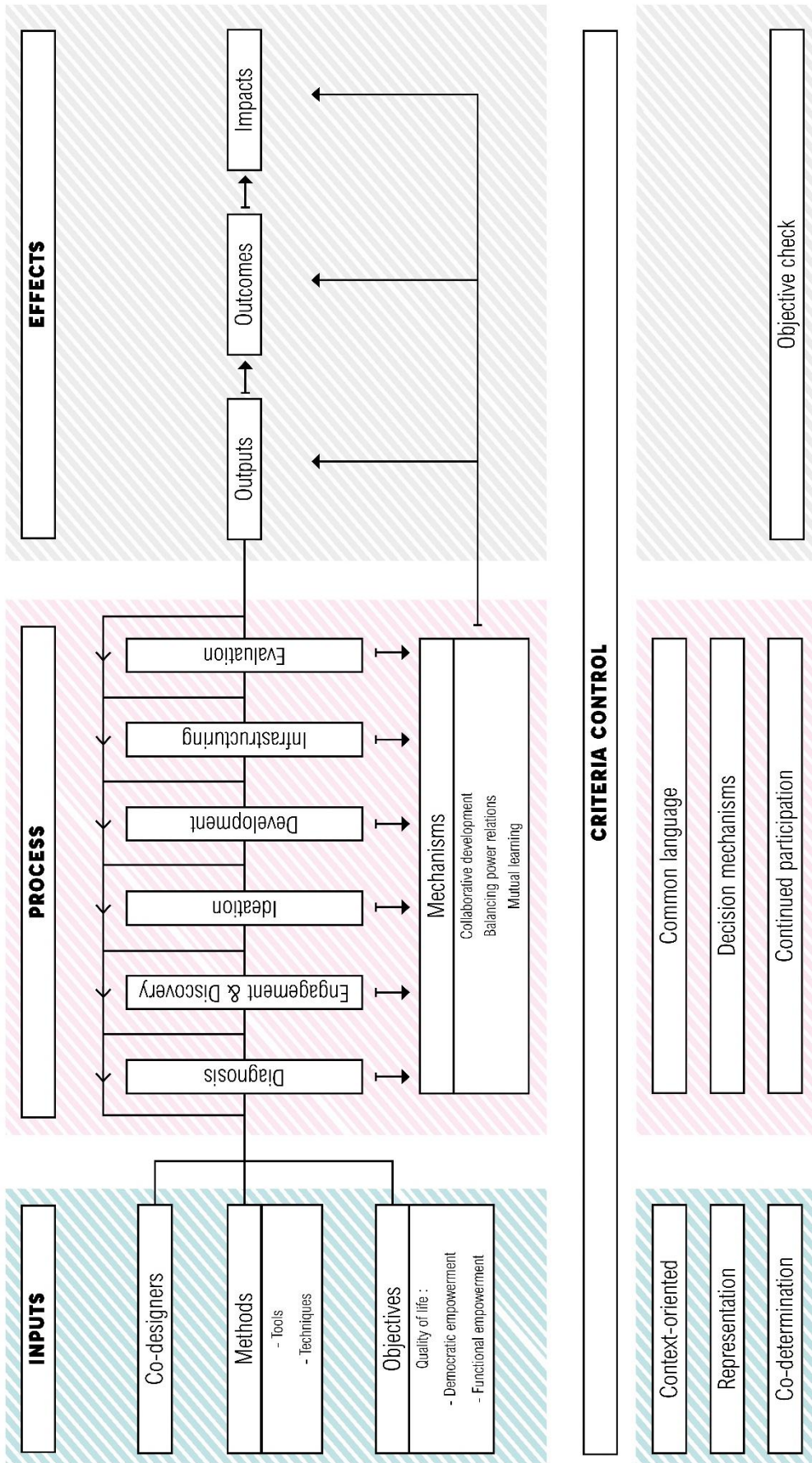


Figure 4: Participatory design conceptual model

Roles of the architect

The aim of this master thesis is to define the role of the architect in participatory projects. It is therefore essential to define what we mean by the term 'role'. To this end, we leave the field of architecture and borrow concepts and principles of role theory from the fields of sociology of work and social psychology. The idea here is not to claim to be a sociologist or to undertake a sociological work, but to enrich our research by adding notions that will guide our reflection. Indeed, the question of the role of the architect goes beyond a list of missions that we could prescribe to him. This is all the more true in participatory projects in which the architect finds himself practicing his profession with a multitude of different actors whose relationships to the architect differ. The theoretical contribution that can be provided by the studies of the human sciences will allow us to identify crucial issues for a complete understanding of the problem at hand.

We would also like to stress that we are aware that the notion of 'social role' is a subject of debate among sociologists today, many of whom describe it as obsolete or outdated by current social reality. However, we find in A. Huot's work (2013) a schematization of the problematic of roles that illustrates what we think is necessary to observe and question for our research on the role of the architect. Although based on the several researches which are not recent (like *Breaugh & Colihan, 1994* ; *Kahn et al., 1964* ; *Rizzo, House & Lirtzman, 1970* ; *Savoie & Forget, 1983*) the use of these theories remains particularly relevant by the points and problems that they highlight. Therefore, we will base ourselves mainly on this works to describe the different notions underlying the definition of the architect's role.

Role theory

The theory described by A. Huot (2013) focuses on the interactions between the target person – the architect in our case – and the other 'constituents of the role constellation' that occur within an organizational dynamic. Six components emerge that allow the role problem to be defined.

The first component is the **expected role** by the various actors other than the architect (this may be the project owner or other project stakeholders). This illustrates their respective expectations of the role they believe the architect should adopt.

The second component is the **transmitted role**. It represents the transmission of the expectations of the different constituents with the aim of influencing the target person to adopt the desired behavior, tasks and functions – for that is what it is all about. This transmission can be formal (transmitted via official documents or discussions) or informal (transmitted from person to person). This component also highlights the fact that these expectations are not always well expressed, sometimes leading to ambiguities, as will be explained later in this chapter. As mentioned by Huot, the term **prescribed role** is preferred by Beauchamp (1987) and Brunet et al. (1985) because of the prescriptive character that expectations can assume due to various regulations, laws, etc. This is also the term that we refer to in this paper, because of the institutionalization of the architectural profession, the regulations surrounding public commissioning and the contractual relationship that the architect and the owner observe.

While these first components were specific to the other constituents of the role constellation, the next two are specific to the target person: the architect. First, there is the **perceived role**, which is the interpretation of the role transmitted to him. Next, there is the **preferred role**, which corresponds to the target person's own

expectations and is intrinsically linked to his or her personality, goals and interests, as well as personal attributes.

These two components have a strong influence on the behavior that the target person finally adopts and thus on the **enacted role**. This behavior – this role – is observed by the different actors and is experienced differently by each. Finally, when discussing roles, we are referring to functions and tasks, but also to attitudes and values. This is what we are studying in this research, while remaining, it should be reminded, in the field of architecture which we know best.

In the following figure (Figure 5), all these notions are applied to the situation that interests us: the role of the architect in a participatory process. It can be seen that the enacted role is subject to the architect's preferences but also to the role that the professional perceives from what the law (represented in the diagram as a pentagon) and the contracting authorities (diamond) prescribe – which stem from their expectations. The expectations of other participants (square) also have an influence. As mentioned in the previous paragraph, the way in which the architect exercises his role is felt and perceived in a personal way by the architect himself (circle), the client and the participants. Note that the different points relevant to the stakeholders are represented as one entity under the name 'participant'. The reality is highly more complex. Indeed, each participant has different expectations and feelings that cannot be summarized in a unitary element. One of the future users has different perceptions and objectives than a neighbor, a local association, or a heritage organization, for example. However, to schematize the problem of the architect's role, we represent them under the same symbol.

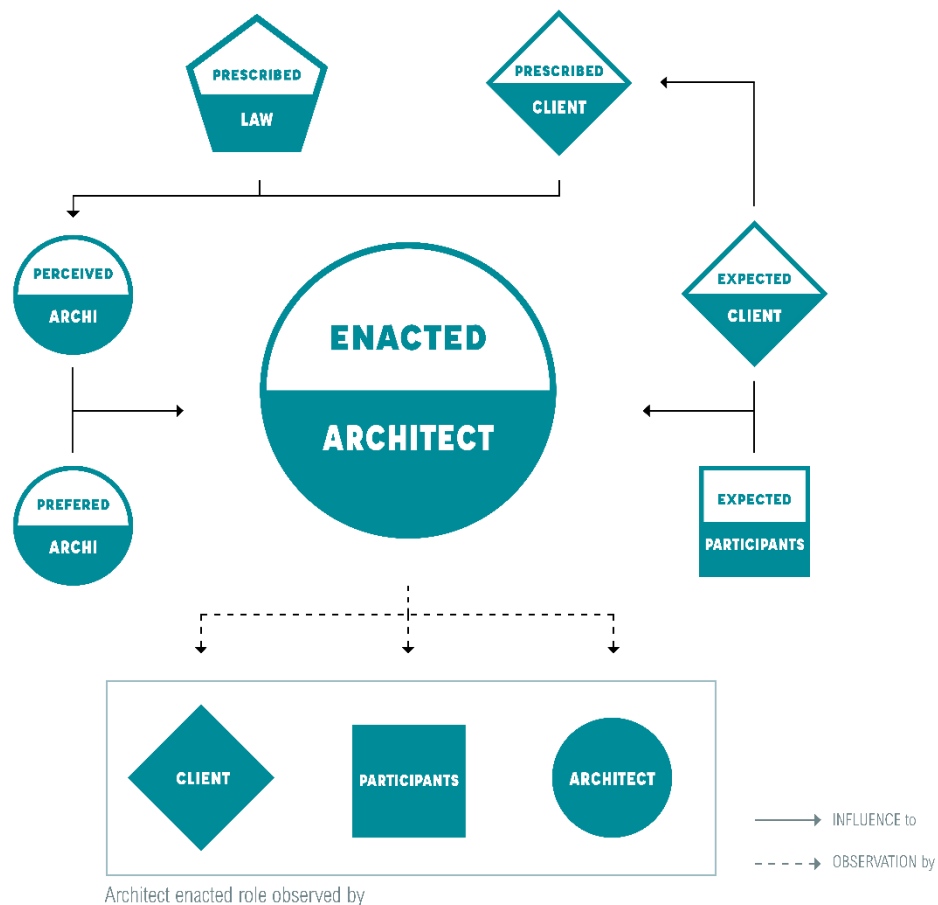


Figure 5: Constellation of the architect's roles in participatory design

This role, which ultimately consists of all these interdependent components that cyclically influence each other, ultimately must be learned, and exercised by the architect. This is what Huot calls role acquisition. This process is in reality a mechanism of balance between the pressures and the influence of the other constituents which seek to produce in him a behavior which St-Germain (1997) calls the normalized role and his internal resistances which lead to a **personalized role**. On this subject, Huot explains:

« La capacité de la personne-cible à produire un comportement qui tienne compte des rôles normalisés et personnalisés résultera en l'exercice d'un rôle intégré, c'est-à-dire un rôle exercé qui englobe tant le rôle attendu que le rôle préféré. L'acquisition du rôle devient donc une prise de conscience par laquelle la personne-cible intègre son rôle au quotidien, d'une façon opérationnelle. »¹ (Huot, 2013, p.64)

From this multitude of components emerges a complexity leading to issues that the author identifies as follows: **role ambiguity, role conflict and role overload**. The first results from a lack of information about the role the target person should adopt. It may be interpersonal, i.e. the definition of the tasks prescribed to the target person is unclear, or it may be intrapersonal, e.g. caused by the inability of the person to know whether the role they are taking on is what they want or have understood. Role conflict is the result of a discordance between the different components. Again, this occurs at several levels: intra-, inter- and extra-personal as well as organizational conflicts. The latter are illustrated in the diagram below (Figure 6).

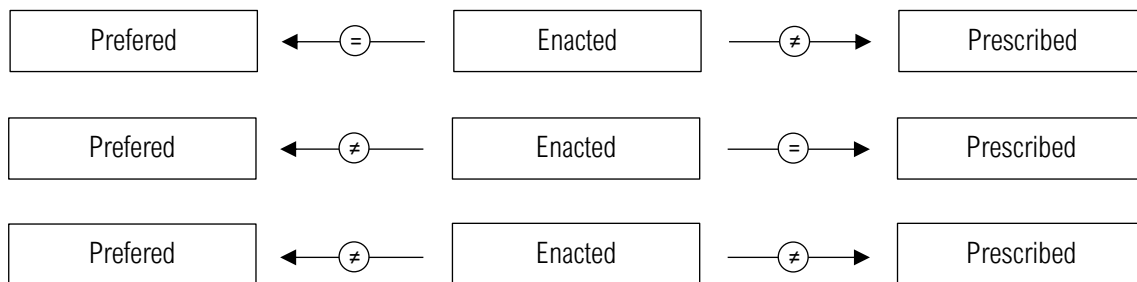


Figure 6: Organizational conflicts

Finally, role overload occurs when the target person becomes unable to perform his or her role adequately due to the multitude of demands placed on them.

In our study, all the notions we have just presented are used to answer our research question. The acquisition of the role appears to be of primary importance, while the three issues – role ambiguity, role conflict, and role overload – are particularly relevant as points of attention for addressing the question.

The architect profession

In Belgium, the architect's occupation is a protected profession since the law of February 1939. All architects must be registered with the Order of Architects (created in 1963 and divided into 2 language sections in 2008) and respect a Code of Ethics. Since the establishment of the profession, the legal mission of the architect concerns the architectural design and the control of the execution of works. According to the above-mentioned

¹ The ability of the target individual to produce behavior that takes into account both standardized and personalized roles will result in the exercise of an integrated role, that is, a practiced role that encompasses both the expected and the preferred role. Role acquisition thus becomes an awareness through which the target person integrates his or her role in a daily, operational manner.

law, the intervention of an architect is necessary for any construction or transformation work requiring an urban planning permit. As a result, the architect becomes the central figure in the construction and city development sector.

Behind this fixed framework lies a more confused reality. Many authors mention a crisis in the profession (see the work of Véronique Biau, Guy Tapie, etc.). Although this is a debate that we will not enter in this work, we thought it would be interesting to mention that the tendency of public projects to take on a participatory character does not simplify the problem of identity crisis that the profession is facing. However, some authors see it as an opportunity. In this sense, Giancarlo De Carlo (2005) makes an edifying statement: rethinking the place of participants in an architectural project is the only way for the architect to restore his credibility. But what credibility are we talking about? The author refers here to the disconnection that has occurred between the inhabitants of the city and the architects; a criticism like the one heard towards the political classes. He explains that the professionalization of architecture by the bourgeoisie has created a separation between the abstract space in which designers work and the concrete space in which people live (Lee, 2006). This has led to a tendency for practitioners to confine their architectural projects to this abstract space, disconnected from reality. R. Sara (2003 as cited in Brkovic & Chiles, 20016) also points to their poor listening, communication, and teamwork skills as criticisms they generally face, in addition to their egocentricity. Participatory design therefore appears as a remedy by destroying the pedestal on which these architects have placed themselves and places them in a three-pole system: political, technical and usage (Dimeglio, 2001). Indeed, it is no longer the artist with the powerful creative ability that the public expects, but rather the holder of a knowledge of design and construction. In this triangulation, the architects bring all their technical and administrative knowledge, their art of building and their experience, but understand that they are not the only ones who 'know'. They collaborate with other design experts, who also have technical and specific knowledge, with politicians who take on the role of project manager and with citizens (future users and the general public) who, through their expertise of their own lives, take on the role of usage manager (Dimeglio, 2001).

According to some authors, this configuration leads to a change of role: the terms 'facilitator', 'trigger', 'animator', 'moderator', 'informant', 'catalyst' or 'pedagogue' appear [8, 11, 21, 28, 35, 39].¹ These explain the importance that the architect must play in the project. Because of their knowledge, they must free the imagination, show the possibilities but also temper unrealistic ideas because they have all the necessary information in terms of regulations and experience. To be an architect in a participatory project is finally to find the balance between their role as creative director – because yes, it is not abandoned – and the non-imposition of their own desires but rather the stimulation of those of others (Lefèvre et al., 1985 ; Jenkins & Forsyth, 2009).

The literature is quite brief on the role of the architect in participatory design. In addition to the contracting authority and the architect (and other design experts), a third component – an expertise of use – is added to the classic project development scheme. The change in role seems to be occurring but the authors do not all seem to agree on the finality, especially in its interactivity with this expertise of use. However, it appears that the role must be carried out in all subtlety, the stake being in the balance to be found between its different tasks.

Coming back to the case of the architectural profession in Belgium, it seems interesting to look at the procedures and the different phases of a project. As a reminder, all public contracts must be subject to a call for tenders. The Order recommends the competitive procedure with negotiation (or the negotiated procedure without prior publication for contracts under the threshold of €139,000) in the interests of architectural quality and to combat

¹ 8 (Blundell Jones, 2005) ; 11 (Carriou, 2015) ; 21 (Gurtner et al., 2016) ; 28 (Jenkins & Forsyth, 2009) ; 35 (Lefèvre et al., 1985) ; 39 (Manzini & Rizzo, 2011)

the impoverishment of bidders in the case of open or direct negotiated procedures with prior publication. Competitions are generally conducted in two phases. In the first phase, the tenderer submits a sketch to meet the specifications indicated by the contracting authority. This phase may be similar to the preliminary study phase (PRE) indicated by the Order. On the basis of previously established award criteria, a number of projects (minimum of 3) are selected for the second phase. The work of the BMA (see p.29) has been prominent in recent years in terms of the increasing importance of architectural quality criteria over budgetary criteria. In the second phase, the candidates submit a preliminary design that will lead them to winning the contract or not. Following this, the architectural office continues in a more traditional phase consisting of a detailed preliminary project and a request for planning permission. It is during this permit application that the two legally required stages of "participation" take place. The two boxes (Figure 7) below explain the legal modalities according to the CoBAT. This is followed by the construction and work acceptance phases.

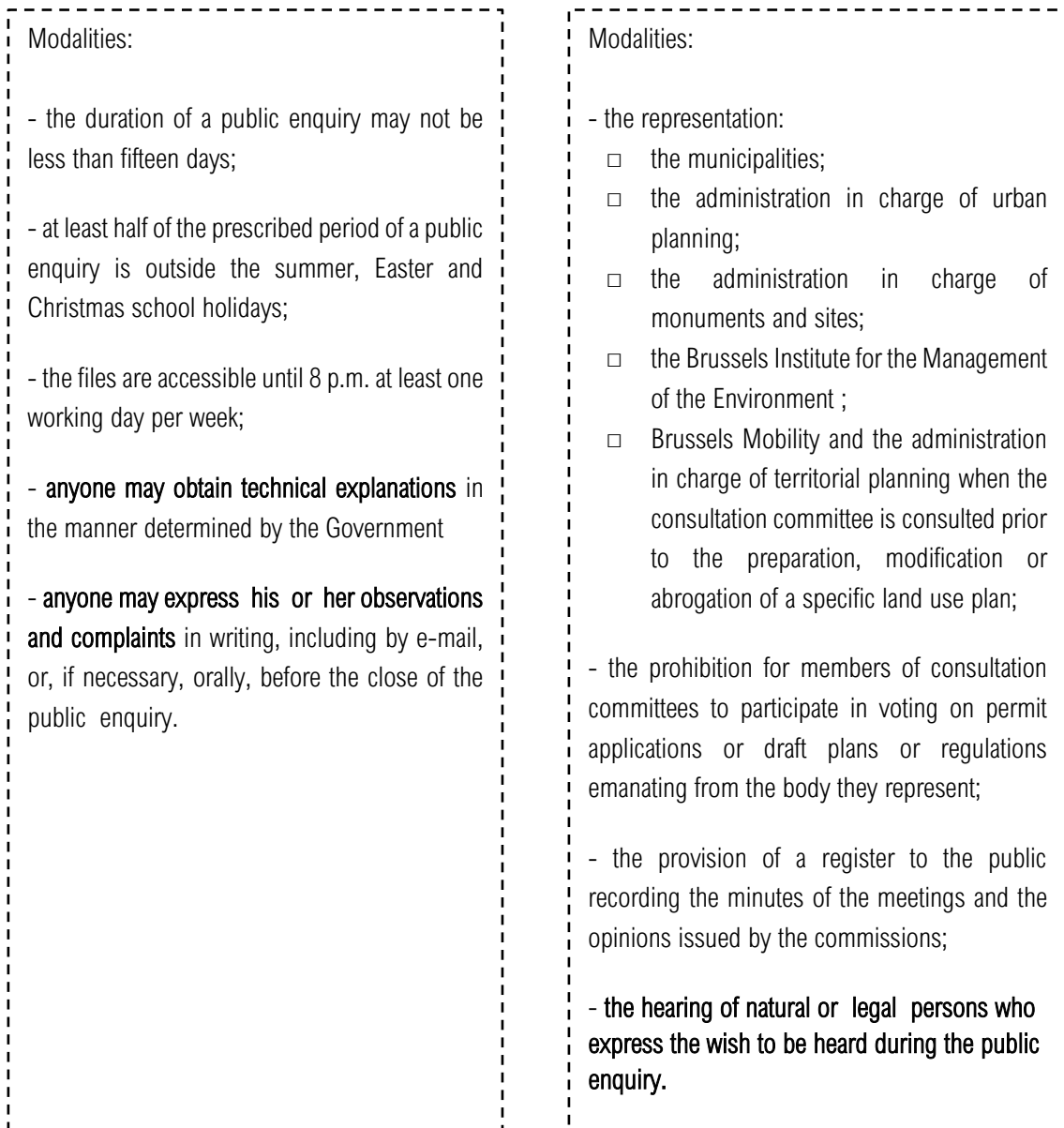


Figure 7: Legal modalities according to the CoBAT

Since so many public actors intervene in the Brussels-Capital Region to develop architectural projects, it appears important to give a brief overview. We do not make an exhaustive list of all the different public authorities that architects can deal with, but we would like to present the main federal, regional, and municipal bodies involved in the public market as well as the entities that have an influence on the development of such projects. We also introduce their vision of participation if it is shared. In addition to these presentations, we outline the main principles of the *'Contrats de Quartier Durable'* (Sustainable Neighborhood Contracts), the standard-bearer of participative design in Brussels.

As a federal agency, Beliris is the main protagonist on the capital territory.

Beliris is a collaboration between the federal government and the BCR that results from a desire to enable the latter to assume its role as capital. The organization is mainly concerned with developing projects related to transport infrastructure but also public spaces, urban parks, sports infrastructure, and social housing (Beliris, n.d.). In their Annual Report (2019), Beliris announces their desire to *"introduce citizen participation in their projects in a more structural way"*. Although aware that the methodology must be adapted to each project, they wish to develop an indicative note that will serve as a guide to the proper development of the project and its participatory dimension. In the following year's report (2020), only the holding of advisory committees is mentioned.

Among the regional institutions that act as project owners are the *'Société du Logement de la Région de Bruxelles-Capitale'* (SLRB)¹, citydev.brussels, the *'Société d'Aménagement Urbain'* (SAU), *'Bruxelles Mobilité'*, the *'Régie foncière de la Région de Bruxelles-Capitale'*, the *'Société des transports intercommunaux de Bruxelles'* (STIB), etc. We present the three first ones.

The **SLRB** is the institution in charge of social housing and the control of public service real estate companies – there are 16 of them on the Brussels territory. The company is a particularly active operator, since in 2020 it managed the construction of 979 housing units and the development of another 4110 (Société du Logement de la Région de Bruxelles-Capitale, 2020). In terms of participation, the SLRB states that it has *"a social vocation"* and therefore believes that it must *"listen, dialogue and exchange with all the parties involved at all stages of the projects: from political decisions to their implementation"* (Société du Logement de la Région de Bruxelles-Capitale, n.d.).

Citydev.brussels is a major organization with a twofold mission: to develop housing projects through partnerships between the public and private sectors and to support the economic development of the Region by creating spaces for companies. Citydev.brussels is also characterized by its tendency to realize mixed projects by linking its two missions. At the time of writing, this public actor is working with CityTools, an office specialized in urban planning and participation, to whom it has entrusted its 'participative consultation' procedure (Interview Isabelle) (Interview Nicolas).

The **SAU** manages major projects of urban development and public facilities with a regional vocation. Despite its recent creation, it is already a major public entity with, for example, the USquare project, the future Mediapark pole and numerous projects in the framework of the Canal Plan (Société

¹ Due to the particularity of the capital being a region where Dutch and French are the two official languages, these organizations have names in both languages. To simplify the reading, we choose to use only one of them.

d'Aménagement Urbain, 2019). SAU works closely with perspective.brussels, with whom it shares its visions on participation (see hereafter).

In addition to all these organizations, the Region has equipped itself with other agencies whose missions are less focused on project construction management but are just as important in the landscape of Brussels territorial development because of their roles as advisors, planners, or controllers. We can mention perspectives.brussels, the BouwmeesterMaîtreArchitecte (BMA), Bruxelles Environnement and urban.brussels.

Perspective.brussels is the Brussels center of expertise in territorial development. It is composed of different multidisciplinary teams, including the BMA, which we will present below. These teams have the task of studying the various urban issues in Brussels and helping the Region to develop by trying to "*meet the needs and improve the quality of life of the inhabitants and users of the Region*" (perspective.brussels, n.d.). At the time of writing, the agency is in the process of recruiting with a view to forming a Participation Department whose main mission will be to provide support for participation projects initiated by both private and public actors. It thus aims to establish "*reference methods and tools for the whole Region*" (perspective.brussels, 2021).

The **BMA** team was formed with the aim of ensuring the quality of the space in terms of architecture and urban planning by providing a framework for the markets. To this end, the architectural competition emerges as the main tool. The team assists the contracting authority in the development of the specifications and evaluation criteria of the contract, in addition to assisting in the evaluation of the proposals and the implementation of the entire competition process. Although participation is already a dimension that the BMA is trying to promote, Kristiaan Borret announces in his note of intent (2020) for his new mandate until 2024, his intention to work on a better integration of citizen participation in the competition system. We address the issue of the competition on page 85 where we present the observations we have from the study.

Brussels Environment is the institute in charge of environmental management for the entire capital region. As architectural regulations are becoming more and more stringent in terms of sustainability and energy performance, Brussels Environment is now a key figure in the world of construction and renovation. The institute's mission is to advise and support project owners and design teams, as well as to act as an inspector for compliance with environmental legislation and the granting of permits and certificates.

Urban.brussels is an administration that operates on three main axes: urban planning and architecture, for which it provides information on urban planning procedures and processes applications for planning permission; the urban heritage via the implementation of regional policy; and urban renewal with the management of the '*Contrats de Quartiers Durables*'. This complex organization is, among other things, in charge of the reform of the CoBAT, which governs the planning of the Brussels territory. Urban.brussels is also in charge of the secretariat of 3 bodies: the '*Commission Royale des Monuments et des Sites*' – a stakeholder responsible for the respect of the heritage regularly intervening in architectural projects –, the '*Collège d'Urbanisme*' and the '*Collège d'Environnement*' (be.brussels, 2021). Through all its services and administrations, urban.brussels is an entity with which all architects have to work when designing projects.

The **communal authorities** operate both as project managers and as regulators. Via the communal real estate agencies and its other services, the communal authorities are the other major public contractors. Closer to the citizen, they are also in charge of project management, even for projects that are mostly financed by the Region.

Regarding their regulatory power, it should be noted that they are responsible for the specific urban planning rules related to their respective territories and for granting urban planning permits. Each of the municipalities has an explicit desire to promote citizen participation in their general policy. In terms of participatory design for architectural projects, these project owners integrate these approaches into the development of '*Contrats de Quartiers Durables*'. The practice is not extended to all their architectural projects but is becoming encouraged.

The '*Contrats de Quartiers Durables*' (CQD) are instruments for public action and urban revitalization in Brussels. We refer the reader to the publications of Berger & Beugnies (2008) and Berger (2019) for information on the subject, as well as to the website of the "*Contrats de Quartiers*".¹ However, we would like to point out that these mechanisms, which have been in place for more than 25 years, provide the project with a precise participatory framework due to their legislation and their familiarity with the various urban actors. In particular, they require the establishment of a '*Commission de Quartier*' (CoQ) and the holding of an '*Assemblée Générale de Quartier*' (AG). The CoQ is a participatory body, with a regulated composition, which meets at least twice a year to monitor the progress of the CQD projects (Département citoyenneté Ixelles, 2018). The AG is organized at least once a year and is open to all the inhabitants of the district, rather for information purposes. The CQDs not only bring together the inhabitants with the public authorities, but also local associations, municipal and regional administrations from the economic, cultural and social sectors.

¹ <https://quartiers.brussels/1/page/definition/fonctionnement>

03

METHODOLOGY

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3. Data processing & analysis	40

Before initiating any work and establishing a methodology that would allow us to answer our research question, it was essential to undertake a review of the literature, without which it would not have been possible to properly frame our research. Although many authors praise theoretical ignorance as a way of avoiding conformism and any preconceived notions that might influence the research (Lejeune, 2019), we feel that our lack of knowledge of the subject – and of the research world in general – would have led us to an analysis with no roadmap, which would have run in all directions. Through our readings, the research question was refined, the issues were identified, initial hypotheses were developed, and a methodology took shape. As can be seen in the state of the art, this documentary work resulted in two important points: the conceptual model for characterizing participatory design and the constellation of the architect's roles. These two outputs constitute the two main stages of our study and in this chapter, we take the time to explain the methodology. Aiming at a mainly qualitative approach that aims at understanding and interpreting the practices of the architect who designs in a participatory approach, we seek, following this theoretical reframing work, to determine the role of the professional as well as the influencing factors related to the Brussels context. To do so, we base the second and third parts of this work mainly on two methods: the study by questionnaire and by semi-directed interview. Indeed, in view of the COVID situation, it seemed impossible to consider an in-situ observation method which could have led to richer results, but which would have risked delaying the research indefinitely. In this chapter the methodological approach adopted for these two parts is explained. The Figure 8 hereafter summarizes all the steps of the research and the main objective at the end of each step.

Questionnaire survey

Comparison of the conceptual model and characterization of the participatory public market in BCR

The desire to create a model to characterize participatory design, which we developed from the literature review, stems from an initial hypothesis: there are as many roles of the architect as there are ways of conceiving participation in architecture. We therefore needed a tool which would enable us to qualify the different processes which appear in Brussels in order to study the possible correlations with the roles enacted. For this purpose, the questionnaire seemed to be the best tool for depicting the situation in the capital. The power of the questionnaire survey lies in the possibility it offers to “gather a large amount of information, both factual and subjective, from a large number of individuals”¹ (Parizot, 2010, p.93). It is true that it has the disadvantages of not sufficiently reflecting the thoughts or actions of the respondents, of not having the assurance that the latter have really understood the meaning of the question or even that they are answering correctly (online self-administration), etc (Parizot, 2010 ; Baumard & Ibert, 2014). While we are aware of these limitations, we believe that this tool corresponds to our objective, i.e., to depict trends in participatory design practice. This type of survey is particularly appropriate when it comes to verifying a model that we already have and studying the frequency and distribution of predetermined indicators (Paillé & Mucchielli, 2021).

Target population

Before the questionnaire was drawn up, decision had to be made on who it would address. Addressing people who had taken part in participatory projects as local residents or future users immediately appeared to be an idea that should be discarded. The first problem would have been to identify them. There are generally no easily accessible lists of participants in such projects and hoping to reach them by launching the questionnaire to the

¹ Rassembler une grande quantité d'informations, aussi bien factuelles que subjectives, auprès d'un nombre important d'individus.

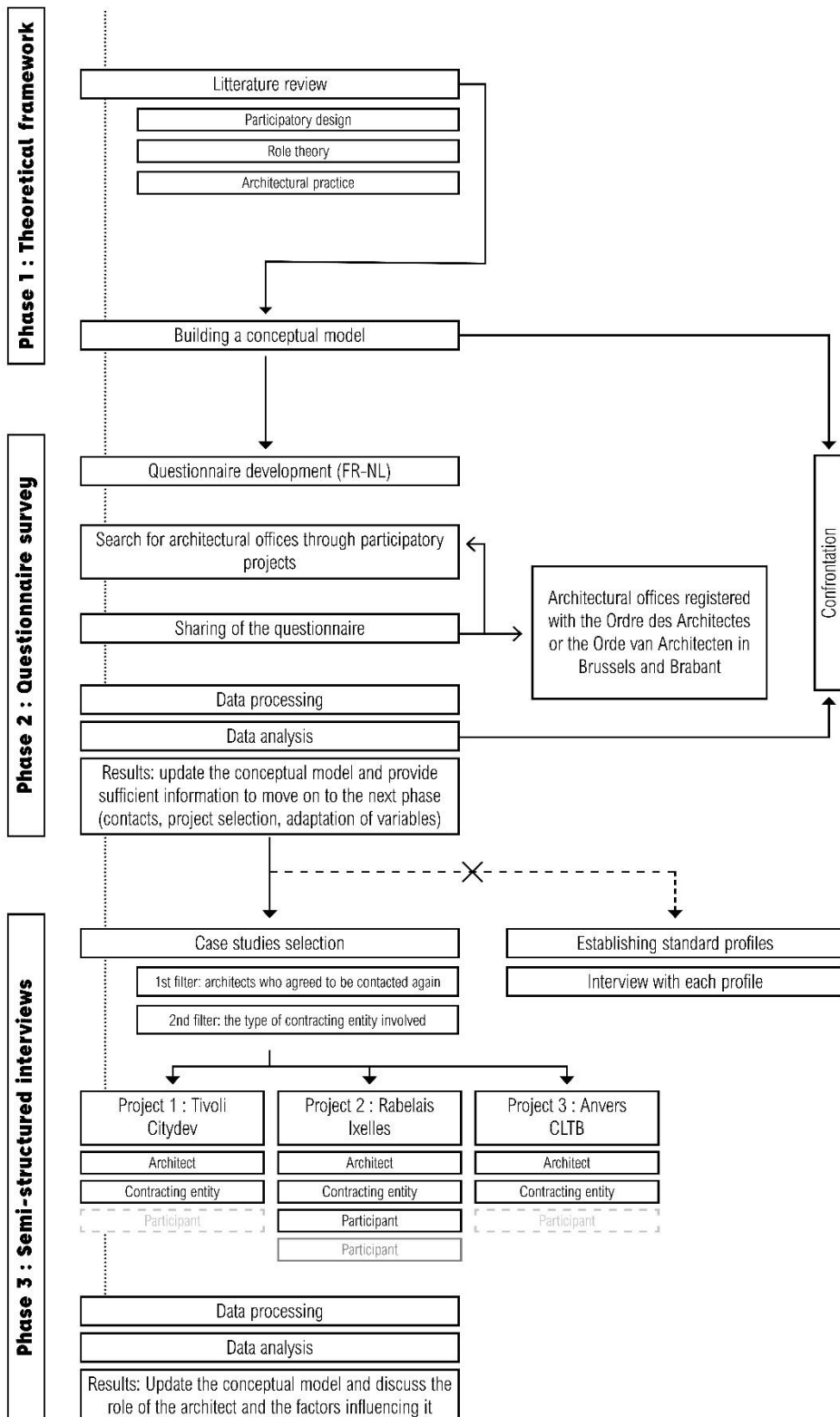


Figure 8: Methodology

public seemed utopian. The second disadvantage is that addressing such a public would have limited the questions to general topics and prevented any technical issues specific to the architectural profession. Addressing public institutions and other bodies involved in construction projects would certainly have limited the number of answers as they would not have answered for every project they were involved in. Thus, the only population we choose to contact for this survey is architects. As public projects are usually carried out by architectural offices and not by individual architects, we only contacted the former. To increase the chances of reaching architects who had already taken part in participatory projects in BCR, contacts were made with the BMA, perspectives.brussels, the SLRB, various participatory organizations and the urban planning departments of the nineteen municipalities. This gave us a base of architectural offices and their associated projects which we contacted by personalizing the email in the hope of a higher response rate. To broaden the panel, we also contacted the offices registered with the Order of Architects – both the “*Vlaamse Raad*” and “*the Conseil francophone et Germanophone*” (Cfg-OA) – in the Brussels and Brabant councils. In the end, the questionnaire (see Annex 1) was sent to 600 offices in the respective languages.

In contacting 600 offices, we were aware that we would not get a high enough response to carry out a quantitative study – Parizot (2010) mentions that it is not theoretically acceptable to use percentages for a number of respondents below 100. But that was not the point. The idea behind the questionnaire was to obtain indicative trends about the situation in Brussels to guide the further work. In addition, we wanted to establish profiles (according to different criteria, such as the habit of the office to work participatively, or whether an external body was involved in the participatory process) for the interviews in the second stage of this methodology, which is explained in the next section. The last point we wanted to evaluate was the theoretical model of characterization that we proposed. Indeed, if the latter enabled to characterize the projects studied, the questionnaire would allow us, in a two-way confrontation, to evaluate the accuracy and completeness of the model. However, the number of responses to the survey proved to be very low, despite the reminders, and on the basis that we have given ourselves a period of 2 months before closing the investigation. 35 responses were registered, but only 14 fit into the framework of our study, i.e. with the following joint criteria: participatory (in its broadest sense), public and Brussels-based. This response rate may seem extremely low, but it was the necessary first step in opening the door to semi-structured interviews focused on specific case studies.

Semi-structured interviews

Qualitative study of the different components of the architect's role

The study of the different components of the role constitutes the next phase of this work. This stage is crucial because the data collected here make it possible to answer the various research sub-questions and, by intersecting them with the theories emerging from the literature, the general problem. The choice of a qualitative method was imposed ipso facto, given our interest in understanding and interpreting architects' practices. Although there is no programmatic manifesto for this approach but rather a singularization via a set of good practices (Lejeune, 2019), this approach allows us, thanks to different tools, to “*collect qualitative data [and to] analyse this data qualitatively, i.e. by extracting meaning rather than transforming it into statistics*” (Paillé & Mucchielli, 2021). Observation, whether participant or not, has long been considered an instrument to be used in this study for two reasons: the study of social relations where the effect of context is significant and the attempt to objectify the facts. This second point seemed important in view of the criticisms generally levelled at participatory methods. The implementation of participation programmes in public projects is sometimes a marketing exercise and initiators and practitioners may portray the facts in an overly embellished way. However, we felt that the time-frame was too short for following a participation process for which, it should be

remembered, continuity is an essential criterion. The period of confinement also played a role in this decision. The work therefore focused on semi-structured interviews.

The interview makes it possible to collect data reflecting the conscious and unconscious mental universe of the individual through conversational techniques (Baumard & Ibert, 2014) by letting them express themselves in their own voice (Barbot, 2010). The advantage of this method consists in the richness and accuracy of the data – not to be confused with objectivity – which allows for a more refined analysis. If we speak of a semi-directive interview, it is because we believe that the principle of non-directivity is important in our case. Non-directiveness is the antithesis of the questionnaire, we enhance the respondent's speech by letting him speak. This principle implies an "*unconditional positive attention*" and an "*attitude of empathy*" towards the interviewee and to value each element of his or her speech as an analytical element of the study (Baumard & Ibert, 2014). It is essential to adopt an open posture but also to know where to focus attention. This is why the interview is called semi-directive, it is organized beforehand to ensure that the respondent addresses the subjects we are questioning. In addition, this structure makes it possible to address the same points during the various interviews and thus to be able to compare situations.

As explained above, the idea was to establish profiles via the questionnaire survey. The interviews were intended to be conducted with one architect from each profile. Due to the low number of responses, this was not possible. However, the survey did offer the opportunity to have an initial contact with architects and to find out whether they wished to be contacted again for further questions. A first filter was then applied to the respondents: their willingness to continue the study or not. The second filter we applied was based on another research hypothesis. We presume that the role of the architect is largely linked to the role that is prescribed to him/her and therefore to the missions that are attributed. This duty – power – of prescription is the responsibility of the client. Therefore, we have categorized the different contracting authorities linked to the projects studied. We find municipal authorities (8 projects), public organizations such as Citydev and the SLRB (4 projects) and non-profit organizations (1 project - CLTB)¹. One project from each category was selected, depending on the availability of the architects to study them. The choice to focus on specific projects may seem obvious, but in fact results from the following reflection. Questioning the architect on a particular project allows him/her not to fall into a stereotyped discourse but to build their reasoning on facts that they have experienced. This certainly does not preclude questioning the architect's overall vision of participatory design. Furthermore, this allows us to conduct interviews with the other participants in the project in order to try to avoid the bias we mentioned above regarding the embellishment of participatory processes. We therefore decided to interview a representative of the architectural team, a representative of the project owner and a participant (whether a member of an association, a local resident or a future user) for each project. Therefore, the interview with a participant was refused for two projects because the respective contracting authorities did not wish to solicit them further, referring mainly to numerous interviews with the press. For the other project (Rabelais), we interviewed two participants as the participative process was divided into two distinct parts. As our experience with semi-structured interviews is practically non-existent, we based ourselves on the principles of conduct set out by J. Barbot (2010). During the interviews with the architects, two tools are used in addition to the classic conversation methods: the timeline and the document "*L'architecte et ses missions*" (Meilleur, 2020) as a support.

¹ We considered the CLTB project to be suitable for our procurement framework for the following reasons. Firstly, it is a non-profit organisation with a public interest mission. Secondly, one third of the Board of Directors is represented by the public authorities. Thirdly, the association is largely financed by public funds.

Timelining

Timelining is part of visual research methods. The use of these methods is legitimate because there are other possibilities of expression than the spoken word. By asking the interviewees to draw the timeline of the project, a non-linguistic dimension is reached which allows them to reach other levels of expression (Bagnolli, 2009). We decided to include this method in our work because of its narrative, contextualization, and interactive qualities. The timeline serves as an entry point to the discussion and, through the act of drawing – especially since part of the audience, the architects, are familiar with it – allows us to establish a more relaxed and comfortable climate for the rest of the interview (Sheridan et al., 2011). It also serves as a memory aid and visual guide for both the participant and the researcher (Kolar et al., 2015). Thus, the construction of this timeline allows the interviewees to recall events as they are visually placed and as a guideline for their narration. As for the researcher, the timeline appeared to us to be a way of chronologically placing the data collected by linking them to certain events, but above all to be able to more easily discuss and interact with the respondents. The instructions during the interviews were to recount the course of the project, incorporating in particular the intervention of the various stakeholders.

Auto-confrontation

The second visual support (see Annex 2) we use during these interviews is a table based on the document “*L’architecte et ses missions*” (Meilleur, 2020). This document is provided by the Order of Architects and includes all the tasks that are legally the responsibility of the architect as well as other optional tasks that the Order recommends. With this tool, which follows a method inspired by auto-confrontation protocols, we wish to confront the subject with the tasks which are incumbent upon him. Through this retrospective work, the objective is to focus the memory on specific points and to be able to discuss them afterwards (Forgues et al., 2016). The material therefore consists of a triptych of A3 sheets, each containing, in table form, the tasks related to each of the three design phases: preliminary studies (PRE), preliminary design (APS) and detailed design (APD). Three boxes are linked to this. The first box was to be ticked if other participants had been involved in undertaking the task within the framework of the project studied. The second box was outside the scope of the project and related to the ideal of a participatory project: it had to be ticked if the task should be carried out, according to the architect, in a collaborative way with the other participants. The third one is the difference, if any, in terms of workload for the practitioner to complete the task alone in a classical way, or in a group with the participation of other actors. In addition to this, the different stakeholders during the phase and the participation activities performed are indicated.

Figure 9 shows one of the sheets completed by an architect.

The objectives are twofold: to use this table as a motor for the discussion and as a way of getting into details. Indeed, making the interviewee active by having them tick and annotate the document is intended to untie their speech. Like the timeline, this visual medium is intended to serve as a reminder. Listing all these tasks is also a way of immersing the architect in a world they are familiar with and feel comfortable in. However, we noticed that this first objective was not conclusive. The respondents were fluent and conversational from the start. This is why we delayed the introduction of this material as much as possible, so as not to cut off this momentum. This cut-off proved to be real with one of the respondents who did not fully grasp the meaning of the table. The reason for this may be the complexity of the latter, but the feeling we have is rather that he was lost because he ticked very few boxes, due to the low participatory character of the project and his ideal. His intervention “*but then I don’t tick anything*”¹ (Interview Yoram) illustrates our point. With this interviewee, we chose not to dwell on this medium and to return to a classic conversation in which he was very comfortable. The second objective is therefore to be able to question the role of the architect in much greater detail. Indeed, this data

¹ Mais alors je ne coche rien !

seems to us difficult to obtain in the course of the discussion, although we consider it important for our research. The table therefore makes it possible to focus the respondent's discourse on these very specific tasks and thus to indicate the importance we attach to them so that they do not remain general for the rest of the interview. We believe that this role has been fulfilled.

B - AVANT-PROJET SOMMAIRE (APS)

Anvers	Ideal	Diff.	Tâches
			Estimation sommaire du coût des travaux
X			Réajustement du programme et du budget
X			Synthèse des remarques et observations relatives aux études préliminaires
			Recherches d'informations complémentaires sur base des études préliminaires et des techniques
			Fixation des dimensions principales des ouvrages et de l'aspect général (volumétrie)
X			Précision des options techniques générales
X			Vérification de la conformité par rapport aux normes et règlements
			Assistance au MO pour la désignation des partenaires (stabilité, techniques spéciales, ...)
			Désignation des partenaires par le MO
			Vérification et précision du budget
X		x1,5	Dossier graphique du projet
			Si BIM, alors préparation de la maquette numérique
X		x1,5	Sinon, dossier de présentation complémentaire (maquette, ...)
			Formalisation de l'accord du MO

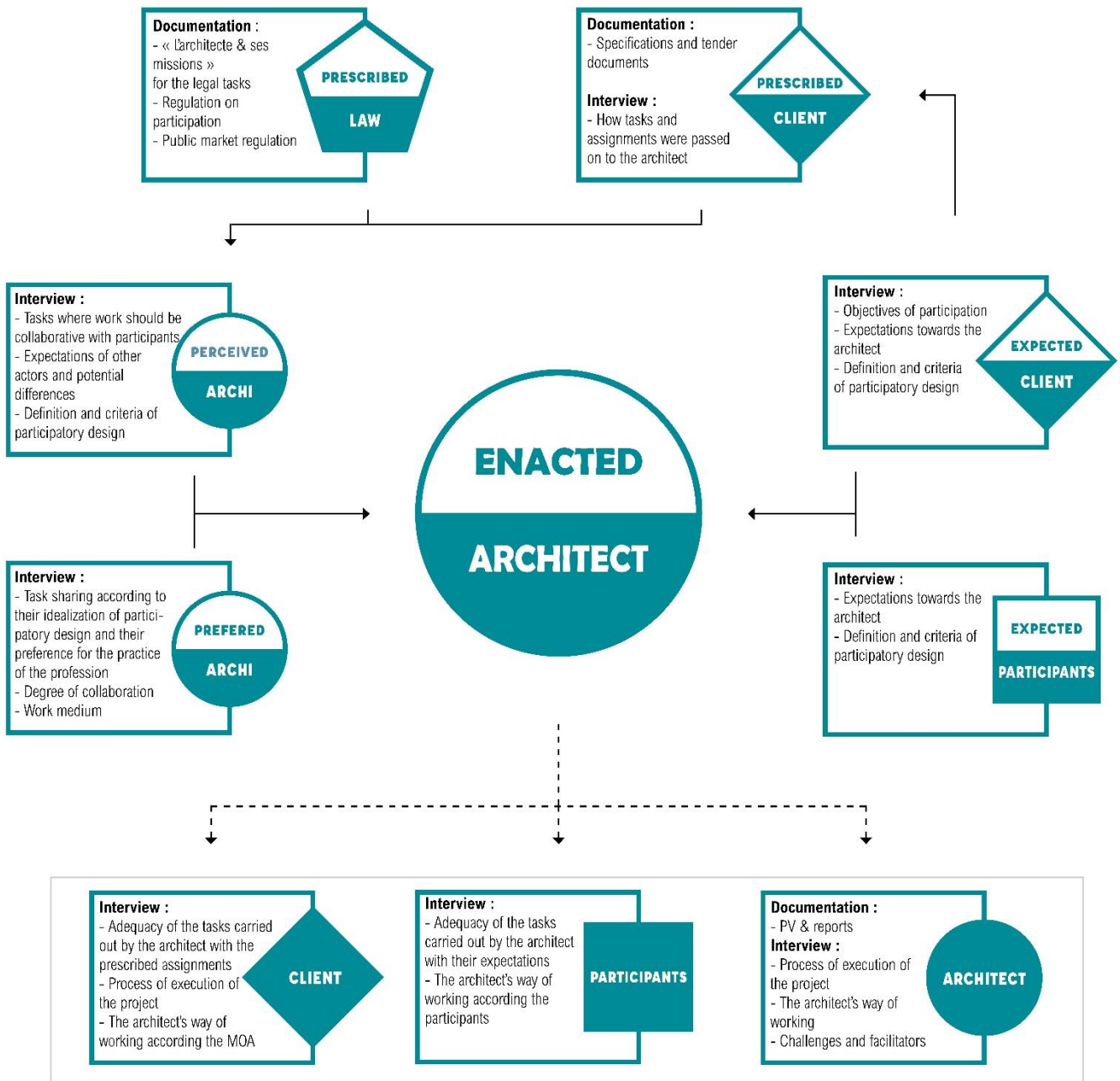
ACTEURS IMPLIQUÉS :

- Autorités communales
- Groupe(s) associatif(s)
- Futurs utilisateurs
- Autorités régionales
- Architecte(s)
- Grand public (riverains)
- Institution(s) publique(s)
- Autre(s) expert(s) de la conception et/ou de la construction

ACTIVITÉS AVEC LES DIFFÉRENTS ACTEURS : Archilabs
Réunions avec les administrations.

Figure 9 : One of the tables filled in by Beatriz (Auto-confrontation)

Interviews, for which the detailed protocols can be found in Annexes 3 and 4, are not the only data collection methods we used in this phase. We also relied on document analysis for some of the research questions as we were able to access the project specifications and some of the meeting minutes. The diagram below (Figure 10) shows the different components of the role constellation and how the data was gathered.



Architect enacted role observed by

→ INFLUENCE to
 - - - - - OBSERVATION by

Figure 10: Data collection related to the role constellation

Data processing and analysis

Our analysis was based on the two diagrams resulting from the state of the art: the conceptual model of a participatory process (see Figure 4, p.22) and the constellation of the architect's roles (see Figure 10, p.39). All the data collected, whether through the questionnaire, the interviews or the study of the documents, were categorized according to their interest in one or the other table. They were then placed in the appropriate section (e.g.: the different stakeholders during the project are placed in the inputs of the diagram (see Figure 4, p.22), the objectives of the participation are placed in the inputs of the same diagram but also in the other one, under the box 'expected role'). This allowed us to have a complete visualization of the participatory process for each of the three projects studied and to add the associated role constellation.

From this data, we worked on each of the projects individually. The result of this analysis is presented in the fourth chapter of this paper: Case studies. Each project has a timeline attached to it, which we would like to emphasize is not the one drawn by a respondent to our interviews, but one drawn by us, taking into account the cross-referenced data from our different sources. In this presentation of our individual analysis, we have tried to structure the project in the form of Input - Process - Effects. Even if we link, through the reading, the different elements to the roles of the architect, the focus is not put on that in this part. The idea is to give an overall view of the project in order to deduce implications for the role itself.

A joint analysis and confrontation of the different projects with each other was then conducted. The results are presented in the fifth part: Discussion. Through this analysis we have tried to answer our research question. A comparison of these results with those of our literature review was also carried out and presented in this section.

04

CASE STUDIES

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TIVOLI PROJECT

Project owner | CityDev

Promotion team | Parbam

Program | 271 subsidized housing units marketed by citydev.brussels, 126 social housing units acquired by the SLRB on behalf of the Foyer Laekenois, 2 eco-nurseries of 62 children each, 7 commercial surfaces totalling approximately 770 m², more than 650 bicycle parking spaces, of which more than 580 are for private use, underground parking lots with a total capacity of 291 spaces, approximately 10,000 m² of public spaces, including 3 new roads, a 2,000 m² tree-lined square and a 1,000 m² mall

Interviews | Yoram Lipski – architect at YY architecture
| Isabelle Penneman - in charge of participation at CityDev

Documents | *Cahier spécial des charges*
| Detailed CityDev planning for participatory consultation
| Scientific papers, see bibliography

TIMELINE | TIVOLI

The granting promotion market phase is longer than expected due to appeals. During this period, the participation workshops are stopped.

Public procurement procedure

2012



2012

Start of the participation mission

Periferia begins its participation mission without developers and architects. Isabelle calls it Phase 1.

2014

Contract award to Parbam

Parbam is a team composed of two developers (Pargesy and ImmoBam), four architectural offices (Atelier 55, Atlante, Cerau and YY Architecture) and a landscape designer (Eole). Start of Phase 2: three meetings are organized.

Public enquiry and concertation committee phases. Start of Phase 3 with the construction works.

Submission of planning permission

2015



2019

End of the construction works

Neighborhood celebration for the inauguration. Closing of the participatory process. Phase 4.

| Participatory workshop with architects involved

- - - - - Participatory process with architects involved

The Tivoli project was the first participatory project of cityev.brussels (CityDev), still called the “*Société de Développement pour la Région de Bruxelles-Capitale*” (SDRB) at the time. It is located in the North-West of the Brussels Region, near the canal, close to the Vergote basin on a former storage site that has become “*a real canker where there is a lot of delinquency*”¹ (Interview Isabelle). The authorities saw the area as strategic to fulfil CityDev's two institutional missions: to help the region's economic expansion by creating spaces for businesses and to respond to the housing crisis facing the city by creating housing accessible to all. The project then takes two forms: one of the three plots is dedicated to the Greenbizz project, promoting the establishment of sustainable economic activities in the area; the other two plots host a sustainable neighborhood project, the one we are interested in for this work and which we call Tivoli for the rest of the reading.

The cabinet of Minister Huytebroeck (Ecolo) plays a key role in the sustainable character of the project, even though the definition of this qualifier is rather vague for all the project's actors (BMA, Brussels Environment, CityDev, the cabinet, etc.) (Bilande et al., 2016). The following objectives are then established (Curado, 2013, p.12):

- Create a sustainable neighbourhood where people want to live, where they feel good;
- Integrate the existing neighbourhood and its inhabitants into the new neighborhood and make them aware of the issue of sustainable behavior;
- Integrate the new district and its inhabitants into the existing district and make them aware of the issue of sustainable behaviour;
- Ensure social cohesion;
- Create an exemplary neighbourhood.

The desired sustainability here is obviously geared towards energy management and performance, but also highly focused on social principles, for which participation is an essential pillar both in conception and in governance (Curado, 2013). Thus, the objectives related to the implementation of the participatory process are to create an exchange of information between the public – which we will define hereafter – and the authorities and design team, as well as to create a neighbourhood structure. This structure consists of a collective of inhabitants – old and new – that can take over the participatory governance at the end of the mission and interact with the public authorities (Bilande, 2015). Isabelle Penneman adds that as CityDev's very first participatory program, Tivoli also serves as a pilot project with “*the aim of serving as a test to establish a process for future projects*”². The entire participatory process was entrusted to Periferia subsequent to the call for tender in 2011.

The target audience for the approach comprises the residents and local shopkeepers. One of the major difficulties that CityDev faces in its housing projects is the unknown identity of the future inhabitants of the area. However, potential purchasers are contacted, for example to answer an electronic survey. As their involvement does not guarantee them the acquisition of a dwelling on the site, it is difficult to raise their interest in participating. While the success of the project is highly dependent on social cohesion and the interweaving of the new neighborhood with the old one, it can be observed that a part of the public is not mentioned. The future users, the associative sector, or the purchasers of the social housing – however unknown – which alone represent 30% of the new housing built, are not invited to participate (Curado, 2013). Periferia also notes that some of the target audiences are missing, such as young people of the neighbourhood.

The system set up by Periferia according to CityDev's instructions is composed of two axes: information and consultation – the term used here is not the one used by the organization at the time but one we have selected,

¹ Un vrai chancre où il y a beaucoup de délinquance.

² L'objectif de servir de test pour la création d'un processus pour les projets futurs.

a point which will be returned to later. This duality is undertaken during all phases of the project, whether before the development contract or during the submission of the planning application. Phase 1, which begins after the signing of the sales agreement, aims on the one hand to inform the neighbourhood of the authorities' intentions regarding the future project, with the idea of preempting the 'not in my backyard' (NIMBY) phenomenon. On the other hand, we are trying to bring out the expectations and needs of the residents in order to possibly feed them into the programming of the future project. During the second phase, which runs from the award of the development contract to the submission of the planning permission (PU), the winning project is presented to the public and workshops are organized *"to collect the comments and suggestions of local residents in order to be able to adapt the project if necessary"*¹ (Citydev.brussels, 2021). Then come the last two phases: construction, phase 3 – whose main aim is to inform people about the progress of the building work – and closure, phase 4 – which consists of an inauguration to bring together new and old inhabitants of the neighbourhood.

Absent during the first phase, the architects were invited to participate in the meetings during the second. Three sessions were organized on the site, under the circus tent that occupied the area. Periferia is responsible for facilitating the workshops and acts both as a coordinator and as a link between the public and the team of project developers, which includes CityDev's project managers, the team of architects and other construction experts. During these different meetings, the project and the modifications made following the previous meetings are presented to the public. The latter exchange, debate and question the designers on the various remarks they have. However, this reflection work, to which the inhabitants are committed, does not guarantee a result. The following passage illustrates this:

« **Comment utilisez-vous les conclusions qui émanent de ces réunions ?**

Isabelle : Ces conclusions, on doit les discuter en interne, elles ne sont pas toutes recevables. Il y a d'une part, toute une question budgétaire et d'autre part toute une réglementation et une faisabilité derrière tout ça.

C'est CityDev qui décide et qui transmet ensuite aux architectes les conclusions qu'ils doivent prendre en compte ?

Isabelle : Non c'est pas 'tchak tchak' [signe avec les mains renvoyant à un élément trop cadré]. C'est une sensibilité à avoir. L'architecte a pour rôle d'écouter les avis et de se rendre compte de ce qui peut être pris en compte ou pas. Mais il ne faut pas oublier qu'on a toute une équipe de chefs de projet chez nous. Ils collaborent ensemble et surtout, ils les guident sur ces avis à prendre en compte. »²

These decisions taken outside the public sphere raise questions about the term 'participation' used here by the project owner. Referring to the criteria we set out above (see p.12), we observe that the balance of power relations does not really take place. It is not a matter here of questioning all processes in which the participants would not have the right to make the final decision, but rather of discussing the place offered to the inhabitants within the framework of this system. The workshops carried out in the form of presentations of the project and its modifications, as well as the closed decision-making moments, suggest that the instigators of the participatory process consider the inhabitants to be consultants rather than real participants. This problem of semantics, which might seem insignificant, is recognized as crucial by the various stakeholders. Indeed, the

¹ Recueillir les commentaires et suggestions des riverains afin de pouvoir adapter le projet si nécessaire.

² **How do you use the conclusions that come out of these meetings?** Isabelle: We have to discuss these conclusions internally, they are not all acceptable. On the one hand, there is a whole budgetary issue and on the other hand, there are regulations and feasibility issues behind it all. **Is it CityDev that decides and then sends the architects the conclusions they must take into account?** Isabelle: No, it's not 'tchak tchak' [a sign with the hands referring to an overly framed element]. It's a sensitivity to have. The architect's role is to listen to opinions and to realize what can be taken into account or not. But you have to remember that we have a whole team of project managers. They collaborate together and especially, they guide them on these opinions to be taken into account.

name used implies a whole series of expectations from the different participants which, in this case, does not correspond to what the authorities want to develop. Yoram insists on the importance of being transparent from the beginning of the process about the role offered to the inhabitants:

« Il faut bien doser ce qu'on attend pour ne pas dire à un moment aux gens qui vont participer qu'ils auront plein pouvoir sur la suite du projet. Non ce n'est pas plein pouvoir sur la suite du projet, c'est juste pouvoir en discuter. »¹

This issue of framing expectations has been quickly understood by CityDev, who admits that they made a mistake with the term used and has since renamed its approach 'participatory consultation'.

The expectations surrounding the role of architects do not seem to conflict in the interviews we conducted. Although present at all three meetings, the architects play an external role in the participatory process. The workshops are entirely orchestrated by the office in charge of the participation mission, which releases the design team from this animation function. The role of participant is also not assigned to them, as it is reserved for the inhabitants. They are then mandated as observers of the process, with a mission to listen to the different opinions emanating from these meetings. Their presence as design experts also serves as an anchor for more technical questions. This definition of the role of the architect is fully shared by both the client and the architect with whom we have been in contact, even if the motivations are perhaps not the same.

CityDev insists on the architect's expertise and on the importance of focusing on that precise function. When asked about the architect's role in the process, Isabelle spontaneously replies that "*you must not let him talk about his project*".² She explains this reaction by the difficulty some architects have in adapting their language to the public by distinguishing the quality of designer from that of pedagogue. In this perspective, the externalization of the participation process has inevitably occurred for all the projects conducted by the regional organization.

YY architecture suggests that this clear separation between the design team and the inhabitants is a vision shared by the office, as this extract attests:

« Quelqu'un qui va manger au restaurant, il va regarder la carte et prendre ce qui lui plaît mais pas un moment il va aller en cuisine dire que la sauce béarnaise, il faut la faire comme ça. »³ Yoram

With this metaphor, we can understand that Yoram insists here on the expertise of the architect. Their training and experience make them competent to design and build, a knowledge that the participants do not possess. He understands, however, that it is important to listen to the latter and to integrate their requests while remaining master in the face of desires that are sometimes too far removed from budgetary, technical or regulatory realities. The control that he has over the Tivoli project, thanks to the consultative rather than participatory nature of the approach, allows him to avoid falling into what seems to him to be the paradox of the profession. The architect is, according to himself, an "*egocentric character*"⁴ in their desire to print the city with their own signature. His speech reflects a certain importance given to the legacy left to the city for a hundred years. The intervention of non-experts in the creation of this heritage disturbs his conception of it, except if he remains master of the project. To return to the restaurant metaphor, although we understand that Yoram wanted to emphasize the

¹ We have to be careful about what we expect so that we don't tell the people who are going to participate that they will have full power over the rest of the project. No, it's not full power over the rest of the project, it's just the opportunity to discuss it.

² Tu ne dois pas le laisser parler de son projet.

³ Someone who goes to eat in a restaurant will look at the menu and take what he likes, but not for a moment will he go to the kitchens and say that the Béarnaise sauce must be prepared like this.

⁴ Quelqu'un d'égoцентриque.

inviolable expertise of the cook, we would like to consider the choice of the customer. Even though the menu is limited to a certain number of dishes, the client has the possibility to choose what he wants. However, this is not what Yoram intends when we ask him the question:

« Si on donne la possibilité au public de faire des choix, on se perd tous. Il n'y a plus de force, on perd toutes forces du projet. Nous, on pense qu'au moins il y a d'intervenants, au plus le projet sera fort. »¹

If the vision around the role of the architect is shared by CityDev and YY architecture, it is also thanks to the good perception of the latter of the objectives of the project. The intention to guarantee social cohesion, stated by the public organization at the beginning of the development of the project, has been well integrated by the designers. External to the participatory process, they have tried to respond to this through the architecture they propose. Based on their experience with the Bervoets project in Forest, in which neighbourhood life was a central idea, the same development team – with the addition of the Cerau office – is trying to repeat the experience. The emphasis is on opening up the city blocks – as recommended by the master plan – on meeting spaces and on the mix of social and subsidized housing². The objective underlying the implementation of a participatory process is also well identified. Behind the public declarations of the authorities, there is a real need to make the project accepted by the local population.

« Il y avait toute cette volonté-là de dire à la population voisine 'on va venir avec un énorme paquebot mais au final, ce ne seront que des petits bateaux'. »³ Yoram

There is a political will to stop offending local populations by imposing major urban projects, which can be understood as a real ideology of 'construct the city with its inhabitants' for some, but especially to anticipate the public enquiry and consultation committee phases. By informing people about the project and trying to involve them, CityDev seeks to eliminate the fear that any new large-scale project generates. The NIMBY phenomenon occurs so regularly that it is often used as a reductive argument by participatory design detractors. The Brussels organization considers the phenomenon to be a natural mechanism of mistrust and that, with awareness-raising, residents are able to understand the project and, in some cases, to embrace it. In addition to the need to reassure the population about the project itself, there was a certain preoccupation – among parents in particular – about the insecurity emanating from the site. The interviewees explained that before their intervention, the site was subject to drug trafficking and other acts of delinquency. Although they do not have the power to put an end to this, the project designers provide reassurance to the neighbourhood and abandon their idea of opening up the blocks to secure the site with fences.

« Ce travail en amont du PU (permis d'urbanisme) était salvateur et a permis, lors de la concertation, d'avancer sereinement et ainsi éviter toute surprise. »⁴ Yoram

Yoram nuances this comment – which appears to be a first guarantee of success – with the fact that the experienced design team played an important role in getting the different stakeholders to adhere. On the owner's

¹ If we give the public the opportunity to make choices, we all lose ourselves. There is no more strength, we lose all strength of the project. We think that the fewer the number of participants, the stronger the project will be.

² The mix of subsidized and social housing, which was intended not to create a partition between the two, has not been achieved. The non-ownership of the flats of the social tenants leads to a more rapid deterioration of the buildings due to poor maintenance, according to the sector's responsible. This reason, in addition to a management issue, led the authors of the project to finally create a physical separation.

³ There was all this intention to say to the neighbouring population 'we are going to come with a huge boat but in the end, they will only be small ships'.

⁴ This work upstream of the PU (urban planning permit) was salutary and allowed, during the consultation, to move forward serenely and thus avoid any surprises.

side, the designers had identified the sustainability expectations and "*knew what they had to do to seduce*".¹ On the residents' side, he explains that there was very little reluctance, thanks to the social spirit of the project but also to all the little touches they made, such as the installation of beehives or nesting boxes for swifts and sparrows.

In the end, the results of this whole process are rather mitigated. While most of the initial objectives in terms of sustainable design – as evidenced by the numerous awards received – and the acceptance of the project by the residents seem to have been achieved, the participatory approach was somewhat disappointing. Periferia and YY architecture point out that the issues raised in the workshop had a relative impact on the final project. The first add that certain programmatic functions such as a neighbourhood hall or spaces for youth have not been added to the project despite a strong demand from the inhabitants. Isabelle explains this by the initial reluctance of CityDev's project designers to use participatory methods, but notes that today, everyone is convinced by the approach. In this respect, the process can be considered successful because it has allowed, as a first attempt, to help build a new model of "participative consultation" in which the role of the architect does not change.

¹ On savait quoi faire pour séduire.



RABELAIS PROJECT

- Project owner** | Municipality of Ixelles assisted by BouwemesterMaîtreArchitecte
- Design team** | Urban Platform, R²D² and Studio Basta (landscape)
- Program** | The renovation of the covered courtyard, known as “la Halle”, of the old atheneum into a public space, the renovation and refurbishment of two existing sport halls, the renovation of the old atheneum, the demolition of the existing pre-guardianship building and the construction of a new building for an early childhood facility (70 children), the construction of 8 affordable housing units and a new development of the public space
- Interviews** | Xavier Lostrie - architect at Urban Platform
| Pierre Sabot – project manager at Urban Renovation Service Ixelles
| Sara – local resident
| Gisela – teacher at Ecole 4
- Documents** | *Cahier spécial des charges*
| *Charte de Participation citoyenne*
| Meeting minutes

TIMELINE | RABELAIS

After the competition, the architectural team takes over the participation mission with the help of Daniel Wathelet.

**Contract award
to Urban Platform and R²D²**

2018



2016

Start of CQD Athénée with PTA

PTArchitecten is in charge of the preliminary studies and starts its participation mission with the assistance of the Commune.

2018

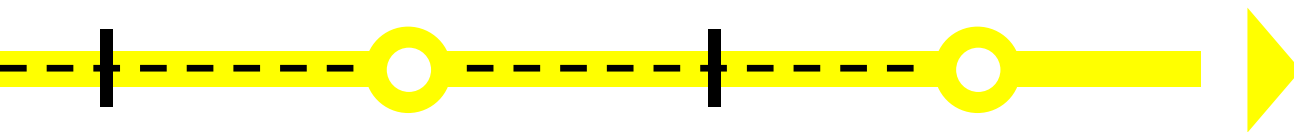
End of the sketch phase

1 workshop was held to present the winning project and to conduct a first work on the shared spaces between the neighborhood and the school

A second workshop took place, also focusing on the management modalities of the shared spaces

End of the preliminary project

2019



2020

Submission of planning permission

After a third workshop, the planning permission for the Rabelais project is submitted. It is subject of a public inquiry from August 20 to September 31, 2020.



Participatory workshop with architects involved



Participatory process with architects involved

Between 2017 and 2020¹, the Contrat de Quartier Durable (CQD) Athénée is granted in Ixelles. It is located in the upper part of the municipality between the European district, along the Rue du Trône, and the Louise district, in the axis of the Chaussée d'Ixelles (Ixelles, 2021). The Rabelais complex, which is the focal point of this chapter, is the flagship project. The regional and municipal intentions for the CQD Athénée are in line with those of the other Contrats de Quartier: to increase local infrastructures, to create a quality public space and to create housing accessible to all. However, a specific concern emerges due to the high density of education facilities: the desire to "*pay particular attention to the issue of school urbanism and synergies between the school and its neighborhood, in order to improve the quality of life for all*"² (Ixelles, 2021). With the Rabelais project, the Commune wishes to revalue the site – the 19th-century buildings of the former atheneum are neglected – by developing a "*mixed programme of great public interest*"³ (Département citoyeneté Ixelles, 2018). The exact programming is determined after a study of the needs of the neighborhood – which is a first step of the CQD – with the involvement of the inhabitants.

The Rabelais project, which is part of the CQD framework, is subject to the two procedures of the CoQ and the AG (see p.30). In what follows, we try to focus on the project itself, even if we are occasionally compelled to go beyond this focus to understand various external influences related to the Athénée CQD in its entirety. In addition to the participation objectives targeted by the CQD, the Commune of Ixelles is trying to implement a culture of participation in its entire policy, as the new Charte de Participation Citoyenne⁴ (Ixelles, 2020) attests. The latter sets out the challenges of this vision: to strengthen "*democracy, good living together and the ecological transition*"⁵. It also states as a first rule the importance of a clear and shared framework:

« Le processus participatif repose sur la transparence : les enjeux et objectifs sont présentés. [...] »

Les parties prenantes sont clairement identifiées, ainsi que leurs responsabilités propres et contraintes auxquelles elles sont soumises. Pour chaque processus participatif, au début de toute réunion publique les règles de la participation sont clairement énoncées : objectifs, méthode, temps de parole...

Chaque étape du processus participatif donne lieu à un bilan de la Commune, qui explique, en la motivant, la manière dont elle a pris en compte ou non les contributions du public dans son choix final. [...]

La participation citoyenne est considérée comme un processus et conçue dans une volonté d'amélioration continue. »⁶ (Ixelles, 2020)

¹ These are the dates indicated by the Commune of Ixelles. They represent the operational phase. The CQD Athénée in fact started in 2016 with the diagnostic studies and will finish by the end of 2023 with the completion of the construction and renovation works.

² Se penche particulièrement sur la question de l'urbanisme scolaire et des synergies entre l'école et son quartier, afin d'en améliorer la qualité de vie pour tous.

³ Programme mixte à grand intérêt public.

⁴ The charter presented here was established after most of the activities related to the Rabelais project. Therefore, we do not intend to check whether or not it has been respected. However, we would like to use it here for two reasons. The first is that it is the result of observations made during previous participatory processes of which the Rabelais project is a part. The second is that it attests to the theoretical knowledge of the participatory conception of the Commune and can therefore enable us to understand that the problems raised by the various interviewees are often of a practical nature.

⁵ Renforcement de la démocratie, du bien vivre ensemble et de la transition écologique.

⁶ The participatory process is based on transparency: the issues and objectives are presented. [...] The stakeholders are clearly identified, as well as their own responsibilities and the constraints to which they are subject. For each participatory process, the rules of participation are clearly stated at the beginning of each public meeting: objectives, method, speaking time, etc. Each stage of the participatory process gives rise to a report by the Commune, which explains, with reasons, the way in which it has taken into account or not the contributions of the public in its final choice. [...] Citizen participation is considered as a process and is conceived with a view to continuous improvement.

The establishment of such a framework – in which many criteria mentioned in our conceptual model (see p.22) are included – should help the various actors to understand their respective roles, particularly for the architect. In the special specifications, the Municipality, supported by the BMA, dedicates a whole chapter to the prescription of the participatory mission, called here 'concertation process'. There they state their motivation but also their expectations towards the designers of the project. They wish to involve local residents and users in the development of the project so that they can contribute their knowledge and experience of the district in terms of both functionality and impact on quality of life. The architect, for his part, must frame and integrate this input while retaining "*their ability to propose and innovate*"¹ (Département citoyenneté Ixelles, 2018). One of the objectives mentioned is also to ensure the adhesion and appropriation of all the stakeholders for the success of the project but also for the acceptance of the constraints. Accompanying this is an indicative planning of the participation process, which is notable for its detail. Indeed, for each phase of the project, the Municipality indicates the types of activity (meetings, presentations, workshops, etc.) that should take place as well as the different players to be involved depending to the areas to be worked on. One should note the creation of two distinct working groups: the "School" group and the "Neighborhood" group. The project owner also asks the team of architects to submit a methodological note explaining how they plan to get involved in this process and their possible suggestions for modifying the prescribed system. Aware of the methodological knowledge that such an approach requires, Urban Platform and R²D² called on Daniel Wathelet to assist them in their participation mission, both for the organization and for the facilitation of the sessions.

Before going into the full process and the role of the architect in it, we would like to look back at the participatory phase carried out before the architectural project. The study office PTArchitecten oversaw the diagnosis and the establishment of priorities with the Urban Revitalization service. The programme that resulted from this work seeks to respond to the different wishes: those of the Region, which is financing the project for more than 93%, those of the municipality of Ixelles and those of the inhabitants and local players. Pierre reports that the Region needs secondary schools, that many project initiators are asking for premises, and that the inhabitants note the lack of public facilities. Indeed, the district is known for its high activity and has a regional influence – even on a larger scale – but is not oriented towards the district and its inhabitants. The Municipality therefore sees the Rabelais project as an opportunity to respond to these needs by decompartmentalizing the school spaces and making them usable for the neighbourhood. The programme therefore consists of school spaces ranging from early childhood to secondary school, sports facilities, housing, and premises for the local area. This decompartmentalization, which the authorities mentioned, quickly becomes the main issue of the project, as the inhabitants' expectations are so high. The architects have clearly understood the situation. For the competition, they propose a project with a permeable building front to extend the public space into the former covered courtyard known as 'la Halle'. This hall would be shared by the neighbourhood and the school.

To discuss these neighbourhood-oriented spaces, three workshops are organized: one after the project granting procedure, one during the preliminary project and one before the submission of the permit. Throughout the process, the Municipality pays attention to informing the local residents as much as possible by distributing information to all the letter-boxes, by creating a mailing list and by providing access the reports of the meetings. The workshops take place in the hall to "*immerse the inhabitants in the future place and to make them understand its dimensions, its accessibility and its acoustics*"² (Interview Xavier). After a presentation of the project, its latest changes and the agenda, the participants work in tables according to topics and elaborate proposals. These are then presented to all the participants with a view to drawing conclusions that would serve to modify or not the project. In this way, the architects respond to the mission prescribed to them; through the subcontracting of the facilitation of the workshops and through the position of acute listening that they have

¹ Sa force de proposition et d'innovation.

² Immerger les habitants dans le futur lieu et leur faire comprendre ses dimensions, son accessibilité et son acoustique

adopted. While one might think that the process was fruitful, either the architects (via Xavier), the contracting authority (via Pierre) or the inhabitants (via Sara) indicate the contrary, in a more or less nuanced way.

« Moi je n'ai pas été très convaincu de la démarche. Ce n'est pas nécessairement la faute de la personne en charge de la participation ni du bureau d'étude. Je pense juste que cette démarche est venue se greffer à un processus architectural mais sans vraiment avoir d'input fort. J'ai l'impression que c'est quelque chose qui est resté assez extérieur à la mission. Les architectes ont joué le jeu et ça, je ne peux pas leur reprocher mais je sens que ça reste assez extérieur au travail architectural. »¹
Pierre

From the semi-structured interviews conducted, we identify three factors that influenced the process and that would explain this impression: the focus on the management of the site, the lack of clarity of objectives, and the feeling of padlocking by authorities.

Focus on the management

« C'est pas tellement sur le côté architectural que j'avais des commentaires, moi j'y connais rien. J'estime qu'il y a des gens qui ont de l'expertise là-dedans, les Monuments et Sites par exemple. Il y avait beaucoup d'intervenants qui avaient leur mot à dire. Moi c'était plus 'Vous allez rénover ça, c'est génial. Maintenant, votre idée de l'intégrer au quartier, concrètement comment ça se passe ?' Et ça, ça ne se voit pas sur les plans, ça va dépendre de l'usage qu'on en fait [...] Ce sont deux processus différents même si au final, la question de gestion influencera sur le choix d'une porte là ou d'un mur là. »² Sara

In this extract, one of the participants clearly expresses her initial expectations. We note her feeling of illegitimacy in the case of a potential intervention on her part in the architectural process and the trust she places in the other stakeholders to discuss the issue. But if we chose this extract, it is above all for the importance of the management of the spaces shared between the neighbourhood and the school that emerges. All the players we interviewed point to management as a major issue for the project. The use of school infrastructures by residents and other users, beyond academic hours, is becoming an increasingly widespread consideration today and is, as mentioned above, one of the objectives of the CQD Athénée. The architects propose to be more radical than a simple binary sharing by removing this distinction between the schedules and by opening the project to the neighbourhood permanently, especially the hall. While the inhabitants tend to agree, this is not the case for the other stakeholders. The question of management has become so important that the focus of the workshops is on this issue. Xavier reports that the Region obliged the municipality of Ixelles to draw up a note on the management arrangements for the hall to ensure that the space would not be reserved for the school. However, the three participatory sessions did not allow the different parties to reach an agreement. If the participatory process ultimately has limited impact on the plans, it is due to the focus on this management issue, which prevented other aspects from being addressed in-depth and the postponement of decision-making. This is demonstrated by this passage:

¹ I was not very convinced of the approach. It is not necessarily the fault of the person in charge of the participation nor of the design office. I just think that this approach was grafted onto an architectural process but without really having a strong input. I have the impression that it is something that remained rather external to the mission. The architects played the game, and I can't blame them for that, but I feel that it remained rather external to the architectural work.

² It's not so much on the architectural side that I had comments, I know nothing about it. I think that there are people who have expertise in this area, the Monuments and Sites for example. There were many people who had something to say. I was more like, 'You're going to renovate this, this is great. Now, your idea of integrating it into the district, concretely, how does it happen?' And that, it's not visible on the plans, it will depend on the use we make of it [...] These are two different processes even if, in the end, the question of management will influence the choice of a door there or a wall there.

« Nous, on a dit à un moment : on est qu'architectes. On formalise des volumes, des espaces, de l'accessibilité mais s'il n'y a pas derrière d'ambitions et de modalités de gestion ; il nous est impossible d'aller plus loin »¹. Xavier

The architect thus recalls his role in the process. The mission of participation is entrusted to him – whether he subcontracts or not – which he finds to be positive because he can thereby remain the “*orchestra conductor of the project*”² (Interview Xavier). However, his contribution must stay in the field of architecture, which is no longer really the case for the question we are raising here. Pierre notes this:

« L'illusion qu'on a pu avoir, c'était de penser qu'on pouvait avoir une participation uniquement sur la partie conception du projet architectural. [...] Ici on s'est focalisé sur la question de la gestion. Je ne sais pas mais il y a quelque chose avec la temporalité qui n'allait pas et qui fait que la participation n'a pas beaucoup nourrit le bureau d'étude. »³

Temporality is indeed a variable that dictates the project. The “*Contrats de Quartier Durables*” are subject to a very strict phasing, which must absolutely be respected. The architects are expected to make progress on the details of the project in preparation for the application for planning permission. In this case, they have been obliged to propose a solution while the management is still not settled and therefore the plans are not optimized accordingly. Part of the reason the issue has taken so long and consumed so much time is the lack of clarity of objectives, as Xavier points out, which leads us to the next point.

Lack of clarity of objectives

While one could raise the ambiguity that reigns around the real objectives of the implementation of a participatory approach, we would rather address the lack of clarity of the programming and management objectives regarding the spaces dedicated to the neighbourhood in general and the hall in particular. With the question of management as a major concern that has not led to any clear decision, Xavier questions the issue stated at the inception of the CQD of rethinking the synergy of the schools and the vicinity. After this whole design process, he observes “*a step backwards on the part of the Municipality*”.⁴ Indeed, he feels that the latter is trying to respond to regional and political imperatives to create school places without thinking about the optimization of the occupation of the place. Thus, the porosity of the building and the different connections between the spaces – which make the Rabelais centre specific and the architectural project particularly exciting – is diminished. The ambiguity raised here is revealed by the lack of interaction between the ‘school’ group and the ‘neighbourhood’ group. The desired synergy could in fact have started with the synergy between the two working groups, but this was not the case, as shown in the timeline (Figure 11) produced by the architect during our interview. The timeline shows two processes taking place simultaneously but independently of each other. It seems that the problem was raised early on by Urban Platform without really having any repercussions on the rest, which calls into question the municipal intentions. The architect concludes his remarks by saying that “*the Municipality has gone further than usual in the prescription of the mission*”⁵ but that behind this precise

¹ We said at one point: we are only architects. We formalize volumes, spaces, accessibility, but if there are no ambitions and management modalities behind it, it is impossible for us to go any further.

² Le chef d'orchestre du projet.

³ The illusion that we may have had, was to think that we could have a participation only on the design part of the architectural project. [...] Here we focused on the question of management. I don't know, but there was something about the time frame that didn't fit and that meant that the participation didn't feed the design office much.

⁴ Un pas en arrière de la part de la Commune.

⁵ La Commune est allée plus loin que d'habitude dans la prescription de la mission.

framework, the objectives are not clearly defined. This opinion is shared by Pierre, particularly with regard to the functions of the future premises:

« Il arrive que nous, maîtres d'ouvrage, on exprime mal nos attentes. [...] Ils [les architectes] ont besoin d'éléments concrets de programmation qu'on n'est pas toujours en matière de leur fournir. Et on a parfois tendance à se retrancher vers la participation en disant que ça sera à préciser durant les réunions de participation »¹.

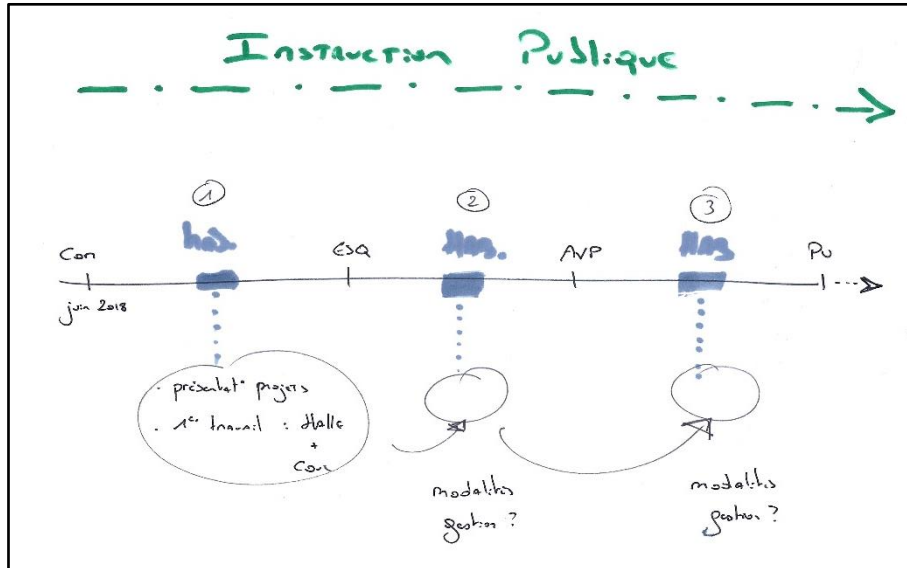


Figure 11: Timeline drawn by Xavier

This programming imprecision can lead to frustration for the architect when designing the project. The office therefore reacts by submitting a highly flexible proposal. Even if participation allowed the project to be refined, this is only to a small extent because "there was not much left to do"² (Interview Pierre). To temper this last observation, we would like to take the work on the playground as an example. Initially designed only for the pupils of the first cycle secondary school (12-15 years old), it turns out that it might also be open to the neighbourhood. This opening up of the courtyard would mean the arrival of a different public and therefore a redesign of the courtyard to accommodate younger children. In addition to this, the participants also push for a more extensive greening of the place.

Feeling of project padlocking

With the Rabelais pole, the authorities seem to be promising a neighbourhood-oriented space. Residents and architects are involved in the project with this idea. As explained above, the participatory process focuses on this aspect. "But in the end, what remains?"³ as Sara asks herself. The Municipality increasingly seems to want to distinguish the school from the neighbourhood, contrary to the wishes of the participants. The result is a feeling among the members that the entire project was decided beforehand and that their involvement is not seen as essential to its success. The same observation was made by the architects:

¹ It happens that we, owners, do not express our expectations well. [...] They [the architects] need concrete programming elements that we are not always able to provide. And we sometimes tend to withdraw to the participation by saying that that will be to specify during the meetings of participation.

² Il n'y avait plus grand-chose à faire.

³ Mais à la fin qu'est-ce qu'il reste ?

« Ils nous ont demandé de faire de la participation, ce qui nous a coûté beaucoup de temps mais aussi d'argent. J'ai dû engager quelqu'un pour animer tout ça. Mais en fait derrière, c'est juste un écran de fumée. Peu de considérations des habitants ont été prises en compte. Et ça pour moi c'est une vraie frustration. D'autant plus qu'à notre niveau de bureau d'architecture qui fait plutôt de la grande échelle, la grande frustration c'est de ne jamais connaître les utilisateurs finaux. On rencontre généralement des promoteurs privés, des fonctionnaires publics mais qui ne sont jamais les utilisateurs. Ici, on a la chance de pouvoir les connaître mais [...] tout l'intérêt de les connaître c'est de pouvoir entendre ce qu'ils veulent. Et là on n'en tient pas compte, ce qui provoque une frustration pour nous, auteurs de projets »¹. Xavier

All the frustration expressed in this passage by Xavier lies in the conflict between the perceived – and preferred – role and the one he performs. According to what was prescribed to him, he placed all his expectations of an architect who designs “for the people”², as he likes to recall. While he had understood the expectations of the inhabitants and local actors – which were in line with his project, it should be noted – and the initial discourse of the project owner also seemed to be in agreement, the openness seems to be nuanced or even compromised.

« Il n'y a rien de pire pour un architecte que de construire un bâtiment et que celui-ci ne soit pas utilisé »³. Xavier

It should be mentioned, however, that the commissioning and the decision-making are two quite distinct elements. The Urban Renovation Service, which is responsible for carrying out the mission as a representative of the Commune of Ixelles, the contracting authority, is not the body that ultimately decides. This is the responsibility of the “*Collège des Bourgmestre et Echevins*”, regardless of the degree of participation achieved. Even if this body approves the public procurement order, it may find itself distanced from the real ambitions of the project and consider the importance of the various criteria differently. Regarding this control over decision-making, this has always been clear to the various stakeholders, just by the wording of the process: concertation. However, it is not the lack of decision-making power that is evoked but the lack of consideration of their interventions and mainly, the lack of explanations concerning the choices made as Sara remarks:

« C'est bien d'écouter les citoyens, c'est bien de trancher et c'est bien d'expliquer pourquoi on prend une solution et pas une autre. Ça, souvent ça manque. Vous [les autorités] ne pouvez pas nous consulter, décider autre chose – le politique décide, c'est son boulot – mais après nous donner une explication qui ne tient pas la route. »⁴

The discussion above is about the participatory process with the 'Quartier' group, but what about the 'Ecole' group? At the beginning of the project, the Commune expressed its intention to anticipate the reforms of the school landscape – within the framework of the 'Pacte d'excellence'⁵. In parallel with the project designer's

¹ They asked us to do participation, which cost us a lot of time but also money. I had to hire someone to facilitate this. But in fact behind it, it's just a smoke screen. Not many considerations of the inhabitants have been taken into account. And that for me is a real frustration. Especially since, as an architectural firm that works on a large scale, the great frustration is that we never get to know the end users. We usually meet private developers, public officials but they are never the users. Here, we have the chance to know them but [...] the whole point of knowing them is to be able to hear what they want. And here, they are not taken into account, which causes frustration for us, the authors of the projects.

² Pour les gens.

³ There is nothing worse for an architect than to construct a building and have it not be used.

⁴ It's good to listen to the citizens, it's good to make a decision and it's good to explain why we take one solution and not another. This is often missing. You [the authorities] can't consult us, decide something else - the politician decides, that's his job - but then give us an explanation that doesn't hold water.

⁵ The 'Pacte pour un Enseignement d'excellence' is a large-scale educational reform. It is a systemic and long-term reform initiated in 2015 and based on a common ambition of all school partners: to strengthen the quality of education for all pupils.

mission, a process of reflection on the new pedagogy to be adopted takes place, conducted by the 'School' group and the 'Service de l'Instruction Publique'. The architects, for their part, are responsible for proposing, in collaboration with these various players, a project adapted "to contemporary pedagogical methods, in the spirit of 'active pedagogy'"¹ (Département citoyeneté Ixelles, 2018). In its indicative planning, the Commune foresees several meetings between architects and the 'School' working group to finalise the sketch, at least two for the preliminary project and several more for the elaboration of the permit application file. However, Gisela reported the following:

*« On a eu une réunion avec l'IP [Instruction Publique] et l'architecte. Mais sinon, non, je ne me souviens pas d'avoir fait d'autres réunions avec les architectes. [...] C'était Johanna de Villers qui était responsable du projet et des réunions. Je ne sais même pas si elle était architecte mais elle était chargée de ça. Elle tenait compte de nos observations et quand elle ne savait pas nous répondre, elle répondait par mail ou à la réunion suivante. Elle nous transmettait tous les messages des architectes ».*²

The Commune quickly considers that the complexity of the project lies in the number of parties involved, as shown in Figure 12, where one can see the large number of different departments involved. Meetings between architects and teachers would perhaps confuse the project and complicate the task of the designers, especially as only the teaching staff of Ecole 4 is known – not that of the new secondary school. Exchanges of information are conducted by letter and through a municipal representative. In addition to raising the issue of the "téléphone arabe"³, Xavier finds the situation frustrating. This feeling is caused by the authorities' retraction regarding their initial ambitions on the one hand and by the expectations he had regarding the process on the other. He explains that the plans proposed during the competition should have been challenged during the consultation meetings. In the end, this challenge never happened, to the great displeasure of the architect, even though the modifications made are of great importance for the teachers. Indeed, the reason Gisela and the other kindergarten teachers were involved in the project is a concern for use. Recent renovations to the school premises have not resulted in a situation that is suitable for their professional practice. By joining the project, they hope to bridge the gap between the design of their work environment and its use. The focus is on the ergonomics of the space.

*« Le nombre de WC par étage était critique dans le chef des professeurs. Ce qui pour l'architecte peut paraître de l'ordre du détail, pour eux peut être essentiel. »*⁴ Xavier

*« Il me reste moins de 10 ans avant de terminer ma carrière, j'ai envie de les passer dans un lieu qui est adapté et qui soit bien fait. »*⁵ Gisela

Despite the lack of direct exchange between architects and teachers, Gisela is very satisfied with the resulting revisions. All their comments have been considered and integrated into the project. Although architecture as a force for generating 'thoughtful' spaces and volumes is not addressed, questions of usability are.

¹ A des méthodes pédagogiques contemporaines, dans l'esprit « pédagogie active ».

² We had a meeting with PI [Public Instruction] and the architect. But otherwise, no, I don't remember having any other meetings with the architects. [...] It was Johanna de Villers who was responsible for the project and the meetings. I don't even know if she was an architect but she was in charge of that. She took into account our observations and when she didn't know how to answer us, she answered by e-mail or at the next meeting. She would pass on all the messages from the architects

³ With this expression, which comes from the Telephone Game, the architect underlines the eventual distortion of intentions and remarks caused by the presence of intermediaries in the transfer of information.

⁴ The number of toilets per floor was critical to the teachers. What to the architect may seem like a detail, to them may be essential.

⁵ I have less than 10 years left before I finish my career, I want to spend them in a place that is adapted and well done.

Although the participatory process of the Rabelais project was not as fruitful as hoped for the reasons mentioned above, Pierre nevertheless notes positive elements: the dynamics of the city's development have been integrated by some; information on projects in the neighborhood is circulating, etc. The CQD Athénée has mobilized many players and created links between local residents who now do not hesitate to voice their interests. He also mitigates the absence of a major creative moment by the community through the work upstream of the project and the very relevant offer of the architects. The elaboration of the programme prior to the architectural mission made it possible to link regional, municipal and neighbourhood expectations. Urban Platform and R²D² submitted a proposal that accommodated the wishes of the inhabitants. The participation process then confirmed that the project was on the right track. We conclude the analysis of the Rabelais project with this sentence from Xavier, who poses here as the defender of the interests of the inhabitants.

« Je me battraï jusqu'au bout pour que les habitants aient leur mot à dire et leur droit d'occupation du site. »¹

¹ I will fight until the end to ensure that the residents have their say and their right to occupy the site.

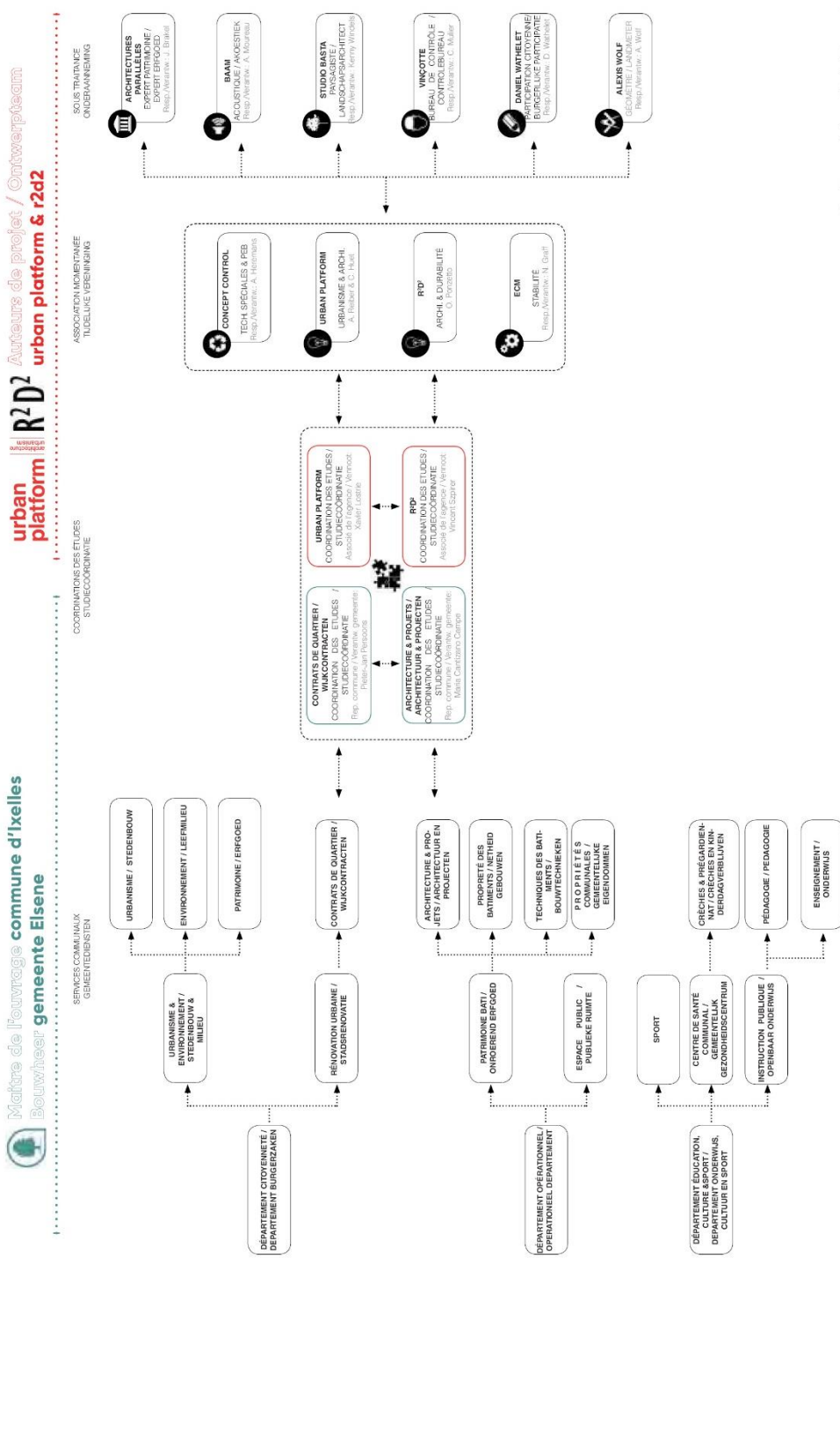


Figure 12 : Stakeholder chart for the Rabelais project (Urban Platform, 2019)



ANVERS PROJECT

Project owner	CLTB and Bruxelles Environnement, assisted by Bouwmeester MaîtreArchitecte
Architects	Pierre Blondel Architectes
Program	14 dwellings (CLTB), an hub for the guardian-animators of the Senne park (Brussels Environment), a multipurpose room and a collective garden
Interviews	Beatriz Gonzalez Ruiz – architect at Pierre Blondel Architectes Sophie Ghyselen – project manager at CLTB
Documents	<i>Cahier spécial des charges</i> Presentation documents for ArchiLabs Meeting minutes Tender analysis grid made by CLTB

TIMELINE | ANVERS

Three workshops were conducted by the architects with the CLTB, bringing together associations, experts, guardian-facilitators, and potential purchasers.

Submission of planning permission

2021



2020

**Contract Award to Pierre
Blondel Architectes**

During the competition, an ArchiLab is organized by the CLTB to evaluate the offers. Two representatives are members of the jury to transmit the comments.

Worksite visits with the participants as well as a follow-up of appropriation after the works will be realized.

End of the construction works

???



???

Start of the construction works

Before that, for the final submission file, workshops will be held with the future owners and the guardian-facilitators.

— Participatory workshop with architects involved

- - - Participatory process with architects involved

A plot of land located between the Chaussée d'Anvers and the Senne park, in the North of Brussels, hosts the *Anvers - Lumière du Nord* project, which we will call Anvers herein after.¹ The CLTB and Brussels Environment aim to develop a common project there: to offer housing according to the Community Land Trust policy², and to build an hub for the park guardians-facilitators. Strengthened by its recent projects, the CLTB maintains its objectives and methods for the present one. Besides the answer it tries to provide to the Brussels housing crisis, the association rethinks the interactions between the inhabitants. These interactions are stimulated as much by its system of governance as by the architecture of its buildings or the feeling of belonging to a community that the CLTB tries to create. Regarding the architectural production for Anvers, the contracting authorities ask the architects to design in a sustainable way with as central issues the circular economy and the potential synergy between the two entities (housing and antenna) as to the synergy between the different housing units. This design process is characterized by the organization of ArchiLabs, emblems of the CLTB practice.

'ArchiLab' is the term given to the participative workshops that are the signature of the association's projects. The objective behind this process is twofold: to co-design the project and to tame it. This tamer process is multi-faceted. The participants learn to understand the mechanism of project development; the future users become familiar with the place and are educated on the proper management and maintenance of their habitat (Fondation d'Utilité Publique Community Land Trust Brussels, 2019). These workshops begin with the analysis of the proposals for the public market and end with the submission of the file for the urban planning permit. The participation mission continues afterwards by adopting additional methods. This process is applied to all the projects carried out by the CLTB, although some leeway is left to the architects at the request of the contracting authorities, during the competition, to submit a methodological proposal.

*« En fonction de cette proposition, ça peut colorer de différentes façons le processus. [...] Chaque architecte décide jusqu'où il veut aller et donc on va avoir des projets où l'accent sera mis à des endroits différents. »*³ Sophie

The experience acquired during previous projects led to the participatory scheme currently used by the association. Initially, the project was based on theory and was carried out from start to finish with the inhabitants, including the joint writing of the specifications. The following observation was made: the energy required for such a project was too heavy (for all the stakeholders) and deployed over too long a period. On the basis of this observation, the CLTB decided to divide the process into smaller steps to finally arrive at the method used in the present project. The specifications are written internally but, as Sophie explains, "*are fed by certain remarks from other ArchiLabs or feedback from other projects that can often be generalized. [...] The CLT projects are similar and often have the same objectives*".⁴ As such, participation begins at the competition phase. Candidate-buyers living within a 1km radius of the project are asked to analyze the proposals of the 5 candidates. All members of the association – sympathizers and owners – can also get involved in the analysis.

¹ We apologize to the reader for the confusion that this appellation may lead to with the city of the same name.

² A Community Land Trust is a not-for-profit organisation whose mission is to acquire and manage land for the purpose of creating accessible housing. The sale is done by separating the ownership of the land from the buildings. The CLT remains the permanent owner of the land. The purchasers of a CLT dwelling have all the rights of ownership, but accept specific conditions of occupation and transfer, in order to guarantee that the dwelling will always be accessible to the target group.

CLTs are open organisations. Not only the occupants of CLT dwellings, but also anyone who lives or works in the neighbourhood where the CLT is located, can become members, participate in the development of the CLT, and elect their representatives to the 'Conseil d'Administration'. One third of the administrators represent the residents, one third the neighbours and civil society, and one third the public interest or government. This balanced distribution guarantees the participation of the residents in the management, while ensuring that the interests of the neighbourhood residents and the general interest are also respected (Community Land Trust Bruxelles, 2021).

³ Depending on this proposal, it can color the process in different ways. [...] Each architect decides how far he wants to go and so we're going to have projects where the emphasis is going to be in different places.

⁴ Sont alimentés par certaines remarques d'autres ArchiLabs ou des retours d'expérience d'autres projets qui peuvent souvent être généralisés. [...] Les projets CLT sont similaires et ont généralement les mêmes objectifs.

This study during the competition takes place in three workshops. The first two serve as an introduction to architecture during which the CLTB, which leads the process at this stage, tries to educate the participants in the architectural vocabulary and notions but also in the method used to analyze the different offers. However, this exercise is restricted to the criteria of urbanity and habitability; the other three award criteria – budget, sustainability and participation – are reserved for other experts. It should be noted that the participation criterion is not discussed with the participants. The conclusions of these analyses are transmitted to the final jury via two representatives who take part in it.

Pierre Blondel Architects joins the participatory process after obtaining the public contract. ArchiLabs are developed, in accordance with the methodological proposal submitted by the winning team. For both the client and the design team, the emphasis must be on use. If one notes that the participants are not the future users because they are not yet known at this stage of the process, the relevance of this focus is not diminished. Indeed, this first part is not devoted to adapting the project to the future inhabitants in a personal way, but rather to take into account notions of use that the designer would not have thought of. This explains the presence of the associations Solival¹, De Harmonie² and Ciré³ who bring their experience in their respective fields. The dialogue between designer and participant about the use is not exclusively reserved to the work of the architect. Depending on the topic, experts from other fields intervene and participate in the workshops, as was the case with the office of special techniques and the landscape designer, who collaborate in the same way as the architect.

« Il y a deux cas de figure. Le premier c'est quand quelqu'un fait une remarque et qu'on ne sait pas si c'est possible de le faire. On répond alors qu'on va faire des tests, que rien n'est promis et que la décision sera prise lors de la prochaine réunion. Le deuxième c'est quand on sait que cela engendre un surcoût ou ce genre de chose. Le projet a un budget assez serré. On se tourne donc vers le CLTB pour la décision »⁴. Beatriz

This passage illustrates the balance of power that is involved and also the roles of the different parties included. The participants have a real impact on the decisions, even if the CLTB always has right of veto, generally for budgetary reasons. The architect's role is to be the draughtsman – and the main designer since the volume and the main lines of the project are not in question – challenged by the remarks made during the ArchiLabs. During each of the workshops, the architect submits to the participants different scenarios according to the previous indications, as can be seen on the Figure 13. These numerous modifications represent a heavy workload for Beatriz. This overload is caused not only by the three-hour workshops, which are tiring, but also and especially by the preparation of the files, the visuals, the presentation. She adds that *"it also requires a lot of variants to present and explanations so that the participants can make a choice. And that is in parallel with our usual work with special techniques, stability engineers, etc"*.⁵

In terms of fees, the CLTB advised by the BMA offers a rate of 12%. *"Which is a high and not so high"*⁶ (Interview Sophie). This maximum rate is mostly adjusted to the work needed to achieve energy standards and other sustainability goals. However, the client insists that the participation mission and the fee rate are explicit

¹ Solival is an association focusing on the adaptation of housing for people with a loss of autonomy.

² De Harmonie fights against the social isolation of the elderly and/or people in need of care.

³ Ciré works on the defense of the rights of exiled people, in particular with a service of assistance in finding housing.

⁴ There are two situations. The first is when someone makes a remark, and we don't know if it is possible to do it. The answer is that we will do some tests, that nothing is promised, and that the decision will be made at the next meeting. The second is when we know that it will cost more or that kind of thing. The project has a pretty tight budget. So we look to the CLTB for the decision.

⁵ cela demande aussi beaucoup de variantes à présenter et d'explications pour que les participants puissent faire un choix. Et ça, c'est en parallèle de notre travail habituel avec les techniques spéciales, les ingénieurs de stabilité, etc.

⁶ Ce qui est beaucoup et pas beaucoup.

in the contract and that the adaptation must be done by the candidates by submitting a realistic methodological proposal. Beatriz evokes the pleasure of being involved in such a project, which evens out the difficulties linked to the increased workload. This feeling stems from the integration of the preferred and prescribed roles, in perfect symbiosis, which thus leads to an acquisition of the integrated role. Both the architectural objectives (e.g., the creation of meeting and community spaces) and those related to participation (e.g., the adaptation of explanations to the public through comics and sketches) allowed the architect to "*have fun in this project*"¹ (Interview Beatriz).

However, the coronavirus pandemic put the process to the test from the beginning of the ArchiLabs linked to the analysis of the contract offers. The impossibility of meeting radically changes the methods normally adopted for this type of design approach.

*« La richesse de ces ateliers c'est d'être autour d'une maquette, autour de plans et de pouvoir échanger et de profiter des atouts de chacun. L'un peut avoir plus l'habitude de lire des plans, l'autre peut expliquer en Arabe ou en Peul à sa voisine de table. C'est tout cet échange qui crée cette richesse mais que tu n'as pas en vidéoconférence. »*² Sophie

In the present case, the workshops are conducted via Zoom. While participation is known to be tenuous with respect to the equal involvement of all, these remote meetings raise a number of questions. Accessibility is the most sensitive aspect to this distance, with problems of reliable internet connection, access to a quiet room to follow the meeting or even access to a computer. The understanding of the project and the projection into it are also complicated by this distance, which forces the use of images alone³, as opposed to models or tools that engage the participants (see p.17). The inequality arising from the reading of plans or other – even if Beatriz and her colleagues have multiplied the means of representation – is then increased. To this, we note that the collective emulsion sometimes resulting from physical presence and exchanges was not possible due to the situation of confinement. Sophie notes however one advantage: the availability of the people.

Contrary to the two previous projects in which an external office took over the mission of participation – requested by the project owner for Tivoli, by the architectural office in the case of Rabelais – the Anvers project has developed autonomously. In addition to the experience of the office in collaborative or consultative approaches, it is above all the role that the CLTB chooses to play that is at the origin of this decision. On the one hand, they know how to guide the architects in their approach to the participatory mission through their knowledge of their audience, and on the other hand, they take charge of the moderation of the meetings. They frame the debate through the "*principles of sociocracy that we use at the CLT*"⁴, explains Sophie, who understands this to mean techniques that allow everyone to be heard. Beatriz sees this as a valuable help, as this passage attests:

*« La maîtrise d'ouvrage a toujours un représentant qui sait gentiment couper la parole et passer au suivant. Autant, lorsque les gens sont trop timides, elle sait [faire intervenir les gens] et animer un peu. Et ça c'est important, ça nous a beaucoup aidé et nous permet de nous concentrer sur le projet pendant qu'eux animent ».*⁵

¹ De s'amuser dans le projet.

² The richness of these workshops is to be around a model, around plans and to be able to exchange and take advantage of the assets of each. One may be more used to reading plans, the other may explain in Arabic or in Peul to his neighbor. It's all this exchange that creates this richness but that you don't have in videoconference.

³ The architectural office had also made a model but was forced to use it only by filming it, which greatly reduces its value.

⁴ Principes de sociocratie qu'on utilise au CLT.

⁵ The project owner always has a representative who knows how to gently interrupt and move on to the next speaker. As much, when people are too shy, they know how to [bring people in] and animate a bit. And that's important, it's helped us a lot and allows us to focus on the project while they facilitate.

At the time of writing, the application for planning permission is in the analysis phase. The project is therefore subject to a public inquiry. We note that this is the first time in the process that the neighbourhood is invited to intervene, while Beatriz evokes the importance of explaining the project to the inhabitants directly impacted by the new construction. She even notes that this type of discussion is part of the culture of the Pierre Blondel office. We do not know the reasons for this voluntary exception, but we can make the following assumptions. First, the project has relatively little impact on the neighbourhood, it is rather self-centered. Second, the process attempts to create a high-quality dialogue that might be more difficult to achieve with a larger group of people. Third, as Sophie recalls, the success of the participation lies in its realism and the balance of the number of workshops.

Once the permit is obtained, the future inhabitants of the site will be known. The architects will then begin the second participatory part with them. First, the apartments will be adapted to the owners' desires, particularly in terms of materials, and second, site visits will be organized. The objective of this phase is mainly to train them to properly maintain the building and "*guarantee that the appropriation will be maximum*"¹ (Interview Beatriz).

¹ Garantir que l'appropriation du bâtiment sera optimale.

05

DISCUSSION

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In the discussion that follows, we cross-reference the observations from the case studies with the theory from our literature review. During the reading, we use several excerpts from our semi-structured interviews to illustrate our points. To simplify the reading, we note only the first names of the speakers. In order to help the reader find his or her way through the various interventions, we refer to Table 7.

Tivoli

Yoram	Architect at <i>YY architecture</i>
Isabelle	In charge of participation at <i>CityDev</i>

Rabelais

Xavier	Architect at <i>Urban Platform</i>
Pierre	Project manager at « <i>Service de Rénovation Urbaine d'Ixelles</i> »
Sara	Local resident
Gisela	Teacher at <i>Ecole 4</i>

Anvers

Beatriz	Architect at <i>Pierre Blondel Architectes</i>
Sophie	Project manager at <i>Community Land Trust Bruxelles</i>

Other

Nicolas	Administrator at <i>CityTools</i>
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Table 7: Names of the interviewees

In this chapter we try to bring answers to our question which is “*what is/are the role(s) of the architect in participatory design projects in the Brussels public market?*”. To do so, we first look at the literature, especially at Dimeglio's theories (2001) – participative processes are built on the three poles of Politics, Technique & Use – and Lee's theories (2006) – participants' space, vs. designer's space – drawn from Levebvrian concepts. Briefly presented in the state of the art, we return to them in more detail after observing similarities in our case analyses. From these, we give three influencing factors concerning the role of the architect that we could identify. We end the discussion by comparing the conceptual model presented on page 22 with our results in order to introduce some modifications following the observation of the Brussels cases.

Polarization of fields of expertise

Throughout the various conversations we engaged in as part of this research, Levebvrian theories arose regularly. Implicitly and even sometimes explicitly, the concepts of concrete and abstract spaces structured the conversations. Before addressing the problem of the architect's role, we would like to return to these principles. In the state of the art (see p.12), we briefly referred to Lee's (2006) adaptation of Henri Levebvre's theories, which breaks down space into two distinct domains: the concrete space in which people live and the abstract space in which specialists work. In public architectural commissions, this differentiation is exercised both for designers (architects, engineers, etc.) and for decision-makers (politicians, civil servants, etc.). The professionalization of architectural and political practices has led to a fragmentation of the perception of space, disconnected from that experienced by the city's inhabitants.

Then arises the triptych dear to Dimeglio (see p.26) establishing a Technique - Politics - Usage tri-constellation (Figure 14). Around these three poles gravitate actors working jointly in two spaces, as can be encountered in several examples in the cases studied above (see chapter 4). One thinks in particular of the representatives of the architectural commission. The public authorities and organizations sculpting the urban landscape have on their staff technicians, sometimes – not to say often – architects or urban planners by training, in charge of developing the project in collaboration with the winning design team of the public contract. Their function is to represent the interests of the authorities by guiding the design process, but they do not always have the power of decision. In the case of Rabelais, there is a clear distinction between the development of the project by the “*Service de Rénovation Urbaine d'Ixelles*” and the decision making by the “*Conseil des Bourgmestre et Echevins*”. This two-space operation is not limited to the intersection of politics and technology, Solival being an example. The association – which participated in the Anvers project – works on the adaptation of housing for people with a loss of autonomy. Their approach is to juggle the technical and usage spaces. Even if their interaction with architects is in the field of design, their expertise comes from their collaboration with users.

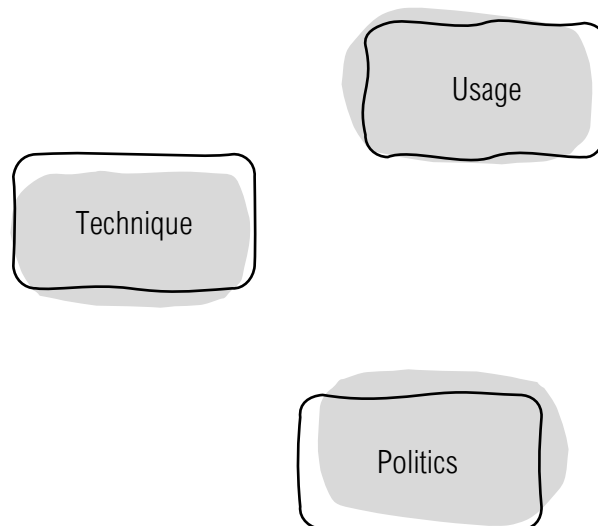


Figure 14 : Tri-constellation adapted from Dimeglio (2001)

Participatory design: the confluence of expertise

The point of Dimeglio's (2001) reference to these three poles is to make them work together. These poles represent groups of people who each intervene at specific moments of the project to design, supervise, decide or verify according to their function and phase. He thus aims at the democratization of spatial practices, the adaptation to potential uses and an improvement of the social acceptability of a project. His approach of "generative and participative programming" follows the same principles as participative design (see p.12). Instead of understanding this triptych as entities or groups of people intervening in the process of elaboration of the project, we link to it the concepts of spaces of abstraction or concreteness mentioned above. Thus, the notions of technique, politics and use are no longer actors who collaborate but spaces that intermingle in which the participants work together, in the manner of Lee (2006). The author refers to Design Participation as the coming together of designer and people spaces. She elaborates several nuances, as shown in the following diagram (Figure 15).

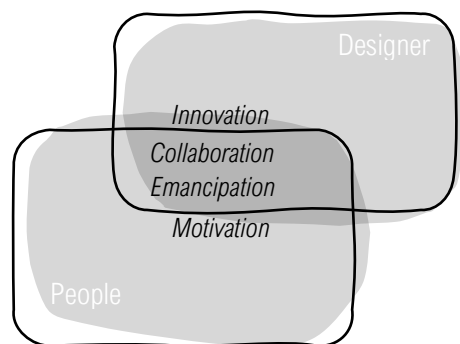


Figure 15: Design participation nuances adapted from Lee (2006)

Here the researcher establishes several approaches to operating. *Innovation* is staying within the realm of design but seeking to address the user's perspective. This may be similar to the way the design team conducted the Tivoli project. Their working methods remain the same as those traditionally used by architects with a more attentive listening to the inhabitants' views, which they tried to follow to improve the project in a social acceptability sense. *Collaboration*, which is strongly related to participatory design as we stated its criteria before (see p.12), is very close to *emancipation* with a tendency more towards one or the other space according to the definition. In such a system, designers and inhabitants work together having "different roles but a similar social status" (Lee, 2006, p.12). In the last model, the *motivation*, no difference is established between designers and citizens. In view of the laws established in Belgium (see p.25), this last approach is not possible, the architect remaining the legal reference person for any project of a certain size. These different nuances can be related to the tri-constellation and thus allows to specify the intertwining of the technical, political and use spaces.

The work of the above-mentioned author is also interesting since it induces a difference of roles according to the space in which the exchange takes place. Before transferring our observations from the cases studies to this statement, we would like to consider the case of Rabelais to illustrate these notions of intersecting spaces. In the following excerpt, Sara recounts her interpellation of an architect.

« J'avais dit : 'Est-ce que vous avez demandé à votre staff de s'installer là [la localisation concernée par la réunion] de 8h du matin à 10h du soir. Juste pour observer. Voir comment ça vit, qui occupe cet espace, qu'est-ce qu'il s'y passe, etc. Faites ça et vous comprendrez ce qu'on vous raconte, ce que les habitants vous racontent.' L'idée est que ce que l'architecte va faire est, par définition, dans un espace qui n'est pas vierge. Par exemple, là ils disaient toujours 'oui mais à Gand'... mais on n'est pas à Gand. C'est une super ville mais ce n'est pas la même population, on n'y fait pas là même chose. »¹

By calling on the architect to leave the design space and physically move into the space of the inhabitants, Sara appeals to the paradigm of proximity stated by Sintomer (2008) on which the defenders of a *knowledge of use* rely. This proximity is firstly geographical – the *knowledge of use* is micro-sectoral – but also communicational between the designer and the inhabitant. By linking the notions of spaces to the technical, political and usage poles in which the participants navigate, we think we are also decompartmentalizing the participationist theses that are built exclusively on the knowledge of usage and therefore on this proximity. Indeed, the detractors of participation – and the adherents of elitist theories who wish to confine the process to ultra-localized situations – often express the opinion that when the issues go beyond their daily lives, citizens lose their notion of what's practical (Sintomer, 2008). However, the interest of such processes also lies in the transversality of the different spaces, by appealing to the *common sense* of the stakeholders. Pierre notes that "*there are participation techniques to take participants out of their condition and make them take on the role of designer*" for example. By engaging them in disparate groups, participants continue to defend their interests but are also able to reason and understand the different logics present. To continue with the Rabelais project example, collaborative work between the inhabitants and the "*Service de l'Instruction Publique*" – strongly requested by Urban Platform – but also with the other communal services – as suggested by Pierre –, would certainly have allowed the management issues of the Halle to be handled more easily and quickly. Therefore, this task consists of a collaboration between the stakeholders at the confluence of the abstract space of politics and the concrete space of use.

During our interview, Nicolas Hemeleers, administrator of CityTools, explained that he visualizes the participatory process as a sinusoidal function that goes back and forth between moments of participation turned towards the inhabitants and others that are more in the domain of the architect and the project owner (Figure 16). We would like to adopt this very evocative image by applying it to the conceptualization of the spaces we mentioned. Thus, the process is no longer seen, as Dimeglio explains, as a development during which the three poles intervene and collaborate (Figure 17) but as a navigation between the three interlinked spaces during which the roles evolve (Figure 18).

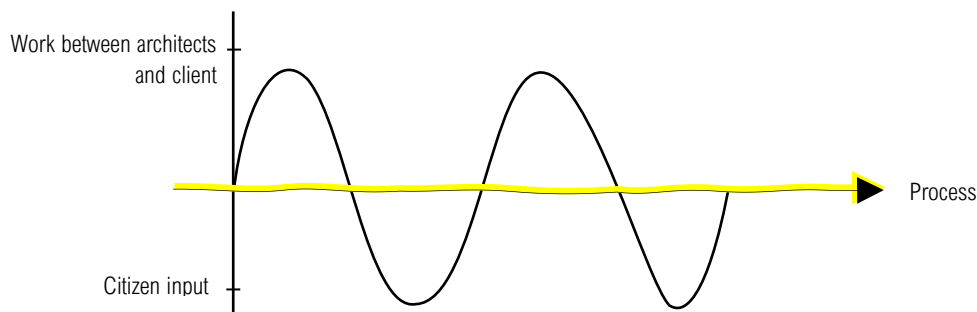


Figure 16: Sinusoidal vision of a participatory project according to Nicolas Hemeleers

¹ I said, 'Did you have your staff set up there [the location of the meeting] from 8am until 10pm at night? Just to observe. See how it lives, who occupies that space, what happens there, etc. Do that and you'll understand what you're being told, what the residents are telling you.' The idea is that what the architect is going to do is, by definition, in a space that is not blank. For example, they always said 'yes, but in Ghent'... but we are not in Ghent. It's a great city but it's not the same population, we don't do the same thing there.

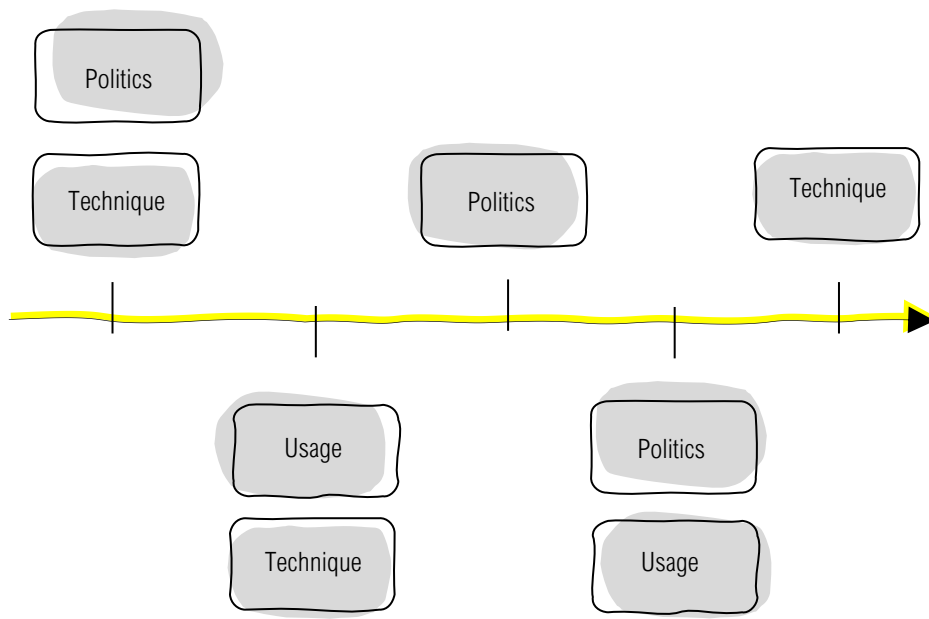


Figure 17: Participatory process adapted from Dimeglio (2001)

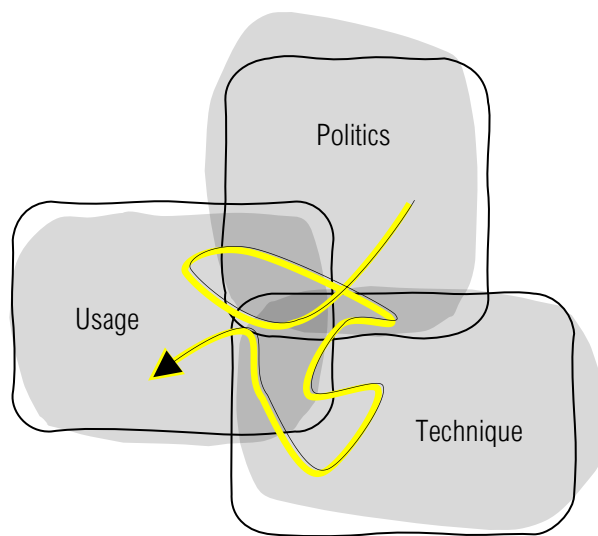


Figure 18: Participatory process

Roles of the architect: a matter of space

Our hypothesis, at the beginning of this research study, was to believe that there are as many different roles for the architect as there are participative procedures. The analysis of the three projects leads us to go even further by establishing the following observation: the role evolves over time according to the space in which the architect is working at the time *t*. As we have observed, the development of public architectural projects follows a very long process – albeit with a tight timeframe for each phase – during which participation workshops are relatively limited. The vast majority of interviewees expressed the importance of knowing when to collaborate with different stakeholders and when to work in isolation. The following excerpt is one of many examples:

« On ne peut pas prétendre, en tout cas c'est mon avis en tant qu'architecte, que tout se fasse en participation. Parce qu'on peut très vite se perdre. [...] C'est pour ça qu'il est important de cibler la participation, avec une ligne directrice et des sujets précis. »¹ Beatriz

It would indeed be illusory to believe that an architecture project can be set up, during its entire development, in a collaborative way. The realism of the methods was regularly mentioned in opposition to the “*utopian co-design*” (Interview Nicolas) for each phase and each choice to be made. The process is thus balanced between the different technical, political and usage workspaces. These fluctuations take place according to the different tasks to be carried out, the questions that will be raised, the tools and resources available and the roles that each person can play.

In the previous point, we raised that one of the mistakes made in the Rabelais project was to have given a role to the architect that was not appropriate to the issue of managing the Hall. By entrusting Urban Platform at the beginning of the mission with the responsibility of assuming the implementation of the process – although already framed by the CQD regulations – the problem was removed from the appropriate space to manage it. This question of shared premises between the school and the neighborhood appeals more to notions of politics and use, while the abstract realm of design need not be called upon. As soon as one no longer works in their own space, the role of the architect changes. It is not, however, a matter of considering that they should be absent from these meetings – even if, for the sake of saving money and time, this could have been envisaged. When the work is done at the intersection of other fields, the architect can leave the role of conductor and take the role of observer or participant-advisor for example. Before and after that, the process would have followed a winding road passing by the politico-technical for the conceptualization of the architecture of a new pedagogy, by the technico-usage for the optimization of the classrooms and the in-between for the aspects of circulation and relation between the buildings. Through this adventure, the architects, always with their official hat of legal representatives of the project, would have taken on sometimes a role of pedagogue and sometimes a role of “concretizer” of ideas, etc.

This visualization of the participatory process that we finally arrived at was influenced predominantly by the confrontation of the tasks that the architects are responsible for, according to the Order (see Annex 2). The instruction was to mention, for each task, if it had been (and/or should have been) undertaken in participation with other stakeholders. The architects themselves qualified and coloured the participation referred to for each of the tasks with comments such as “*here we explain it to them*”, “*we integrate their requests and then we submit the different proposals according to what they have asked*” (Interview Beatriz). The result is an evolving architect-stakeholder relationship over time and changing spaces of work depending on the task.

¹ We cannot pretend, at least it is my opinion as an architect, that everything is done in participation. Because we can very quickly get lost. [...] That's why it's important to target participation, with a guideline and specific topics.

Roles of the architect: a matter of scale

« Le grand problème de ce schéma, c'est le temps. L'envergure de nos projets [CityDev] impose un développement sur 10 ans. C'est très long. Et parfois, entre la phase 1 et la phase 2, on peut avoir un an sans qu'il ne se passe rien. »¹ Isabelle

The scale of the projects emerges as an influential factor on the participatory process and through it, on the role of the architect. Time, as mentioned here by Isabelle, appears to be the inevitable variable both in terms of its length and its brevity. Soliciting the participants – be it the project owner, the design team or others – over such a long period of time is taxing both on the workload and the interest to be kept alert. Paradoxically, the time may also seem tight considering the gap between the different deadlines which do not always allow the process to be conducted in an ideal way. Through the cases studied, we note two other components marking the influence of the scale of the project: the number of stakeholders and the focus of the project.

As we showed in the analysis of the Rabelais case with Figure 12, the size of the project led to a complex organizational chart with a high number of stakeholders involved in the project. This resulted in the cancellation of the participatory workshops with the teachers, replacing them with exchanges via electronic mail. The various municipal services were also removed from the process, whereas Pierre believes that it would have been beneficial to involve them for the success of the project. Dalsgaard (2010) also notes the complexity of large-scale projects as a challenge for participatory design. He notes the difficulty that can arise when future users are not known at the beginning of the project. Both the Tivoli and Antwerp projects leave the reality of the fact that the future inhabitants are unknown until the application for planning permission. However, when it comes to the attribution of the dwellings to the future owners, the two processes take different paths. The architects of Pierre Blondel intend to carry out two interviews with each of the future users for the private sphere of the project and two workshops for the collective area. In the methodological note attached to their proposal during the competition, they note:

« Ces entretiens permettent à l'architecte de comprendre les différentes façons d'habiter et donc, d'établir un scénario de vie pour chaque logement, adapté au cas par cas aux futurs habitants. Pour l'habitant, il lui permet de s'approprier son projet et de créer un lien direct et de confiance avec l'architecte ».²

This case-by-case reflexive work – even if its influence on the project is yet to be verified, given that it will already be significantly determined – is made impossible according to CityDev because of the scale of their projects. These two are effectively at the antipodes with respectively 397 dwellings created for Tivoli against 14 for CLTB project. Their scale also induces a completely different scope of influence on the neighbourhood. Whereas for Anvers, we understood a self-focused project, one of the main challenges for Tivoli was the inclusion of the project in the existing district. The participatory process therefore had to be adapted to the situation with, for Antwerp, a participation focused on the architecture and led by the design team while in the other, the acceptability and cohesion issues were rather brought by the participatory work of Periferia.

From this last observation emerges the notion of focus, the third component related to the impact of scale on the participatory process and the role of the architect. Large-scale projects such as those carried out by CityDev

¹ The main problem with this framework is time. The scale of our projects [CityDev] requires a 10-year development period. That's a very long time. And sometimes, between phase 1 and phase 2, you can have a year without anything happening.

² These interviews allow the architect to understand the different ways of living and therefore, to establish a life scenario for each dwelling, adapted to the future inhabitants. For the inhabitant, it allows him to take ownership of his project and to create a direct and trustworthy link with the architect.

are at the crossroads of urban planning and architecture. The objectives of participation are therefore regularly more political than real questions of adaptability to use. The participation workshops consequently call more strongly on political conceptual fields, which will place the architect in a different posture than for a small project like Anvers. Unlike the other two, Rabelais is a medium-sized project. This made the participatory objectives more complex to determine, as demonstrated by the combination of an ambition for citizen political reflection and a desire to adapt the school spaces in detail to the usages of its future users. This complexity was transposed to the work of the architects for the participation mission. With this observation, we do not seek to categorize participatory processes by size. Nor do we blame the Ixelles authorities for having aimed to address the project in all its aspects. We seek to show the influence that the scale of a project can have on the role of the architect, as Isabelle explains to us that she cannot carry out the architectural process to the extent of her ideal because of the scale of Tivoli.

Roles of the architect: a matter of individual

Given the decision to focus only on public projects where the request for participation is included in the specifications, the project owner is always the initiator of the participatory plan. The role of the architect is thus closely linked to the role prescribed to them. From the analysis of these three projects, this is undoubtedly the most preponderant confirmation of our starting postulate. In approaching these theories of roles, we had also defined – quoting Huot (2013) – the acquisition of the role (see p.25) as being the phenomenon of integration on the part of a person of both the notions of expected and preferred role. It therefore refers to a personal characteristic.

Beatriz, Xavier and Yoram all expressed a different affinity with participation and the conduct of such a process. Beatriz reports that she enjoyed the project, especially in adjusting her communication skills with the other participants. The design of comic strips and simple explanatory diagrams are tools that she decided to develop in the specific context of exchanges with novices in architectural design. The project manager on the CLTB side also mentions this notion of personalizing the role by praising the qualities of the architectural office to exchange outside the workshops. Sophie explains that she worked on the plans for a staircase in order to optimize it, which was appreciated and integrated by Pierre Blondel Architectes. "*Which is not always the case*", she remarks.

« Moi j'adore discuter avec les gens parce qu'ils ont toujours une vision autre que notre vision parfois trop de technicien du bâtiment sur l'utilisation au quotidien qu'on peut en faire. »¹ Xavier

The acquisition of the role can only occur with full knowledge of one's personal capabilities. Even if Xavier expresses his desire to exchange in the above passage, he is aware of the methodological means that the implementation of such a process requires and which he does not yet have. By choosing to subcontract the question of animation and organization of the workshops, the architect of Urban Platform delegates by his own will certain tasks that are part of his initial mission.

« Les jeunes architectes sont friands de ça [le design participatif]. Ils adhèrent à la démarche. Ce sont les vieux qui ne veulent pas en entendre parler. »² Isabelle

¹ I love talking to people because they always have a different vision than the one we sometimes have as building technicians about the daily use that can be made of it.

² Young architects are fond of it [participatory design]. They're embracing it. It's the old people who don't want to hear about it.

Isabelle's feeling, which she bases on her experience and her various connections, suggests a future architectural practice more easily oriented towards participatory approaches. As public commissions become more and more important, the profession will be able to familiarize itself with these approaches, thus favoring the acquisition of the roles related to them. Moreover, the various representatives of the contracting authorities have each emphasized that every process is evaluated and serves to feed the next one, which results in a better understanding of the participation for the contracting authorities who will be able to better formulate their expectations and guide the architects in their practice.

From this first part of the discussion, it is clear that the role of the architect in participatory design cannot be defined in one precise role. It is the result of a multitude of factors, both personal (preference, habits) and organizational (project scale, prescription). We believe that the role should be evolving during the process, adapting to the working spaces – of technicality, politics, or use – in which the different activities develop, especially according to the themes. The way in which the acquisition of the role takes place depends on the architect – on their personal abilities and preferences. This suggests that it is also evolving over time: the increasing demand for participatory projects will have an impact on the architect-participatory design relationship.

The structuring of the process as a pillar of participation

Beyond the role of the architect itself, a thematic emerges from our investigation as primordial: the establishment of a framework for the participative process. Except for one participant, all the interviewees underline the importance of structuring elements for the proper functioning of the project. This makes it possible to give a role to each stakeholder but also to avoid a maximum of the problems mentioned in Chapter 2, which are the ambiguity and conflicts of roles (see p.25). Linked to this structuring, we find the need for democratic transparency called for by one of the ideologies of participation by sharing information on the different stakeholders, the phasing, the decision-making mechanisms, etc.

We identify the need for a structuring of the process at the origin of the development, when writing the specifications for example. The first structural element is the statement of objectives. These must be clearly identified, as we saw in the Rabelais project where, despite the good elaboration of the specifications, the lack of objectives led to confusion among both the architects and the participants. The second element is the identification of the people who will be invited to participate. Pierre addresses this issue by talking about 'consultation structures'. This means recognizing the different stakeholders who need to be involved in the process, but also establishing rules for the members composition of the different meetings. The advantage of these rules lies in the fact that the project is not ultra-dependent on its participants. Indeed, due to the duration of the projects, it is regular that inhabitants leave the process in progress (heavy involvement, moving, ...). These structures thus make it possible to maintain the balance of power between the stakeholders by replacing one inhabitant by another. In addition to these two aspects, it is above all the definition of the collaboration that is important. Sophie explains this, after referring to the Arnstein scale (see p.11):

« Je pense que ce qui est important, c'est de bien définir les règles et les champs d'intervention. C'est hyper important dans tout processus de participation pour ne pas créer des gens frustrés que ce soit dans le chef du maître d'ouvrage, du participant ou de l'architecte. Il faut être clair dès le début sur

*quoi il y a moyen de discuter et sur ce qui a déjà été décidé. Comme ça tu sais dans quel type de participation tu es ».*¹

The definition of this collaboration requires the identification of the topics – or field of intervention as Sophie says – for which each participant can respectively intervene on the one hand, and the power of influence that they may have on the other. This notion is crucial for most of the interviewees so that their expectations are not confronted with a completely different reality. It is even more important for the architects who must know how to position themselves and how to carry out their participation mission.

While this first prescription seems to be the responsibility of the project owner, we note the need for negotiation of this structure. Indeed, the latter should be of the order of an indication to specify the mission at the time of the launching of the contract, whereas it should then be determined in a collaborative way, as we can refer to the criterion of co-determination ruled by Spinuzzi (2005) (see p.13). Sara sees this renegotiation as a way to avoid the simple application of the mission without real involvement of the architects, as she explains in the passage below.

*« Le bureau avait dans le cahier des charges : 'organiser des réunions avec les habitants'. Donc ils ont organisé des réunions avec les habitants mais ils n'ont rien écouté. Et ça, ça c'est très fort ressenti. »*²

Thus, the contracting authority can, through this negotiation, make sure of the good perception of the architect of the role which is entrusted to him/her and to know also their preferences in order to possibly adjust the methods to them. In the other direction, the structuring of the process together also allows the architect to express their expectations. In the following passage, Xavier expresses the expectations he had of the commune of Ixelles and the problem that resulted from poor communication.

*« J'ai l'impression que la charge mentale de la participation nous a été transmise à nous alors qu'ils ont quelqu'un en interne qui ne fait que ça. Ils devraient avoir, en interne, un matériel de base pour ce genre d'ateliers. On devait aller acheter les bics, on a dû prendre notre projecteur. Et ce qui était étonnant, c'est que cette personne n'était même pas présente durant ces moments. Ce qui était limite choquant. Au niveau du fonctionnement de la commune, il y a quelque chose que je n'ai pas compris. »*³

In addition to renegotiating the framework of participation in relation to the architect and other stakeholders, it seems important to do so in relation to the project – the winning proposal of the competition. Each project is characterized by different qualities where the involvement of participants can play an influence on different elements. The renegotiation of the objectives and the fields of intervention with the different stakeholders thus allows the process to be adapted to the architectural project (Interview Xavier).

A final aspect appears when we observe the three projects studied: the importance of structuring each activity. The Anvers project shows a very detailed structure of the ArchiLabs. The architects determine the different

¹ I think that what is important is to define the rules and the fields of intervention well. This is very important in any participation process in order not to create frustrated people, whether it is the owner, the participant, or the architect. You have to be clear from the beginning about what you can discuss and what has already been decided. That way you know what type of participation you are in.

² The office had in the specifications: 'organize meetings with the inhabitants'. So they organized meetings with the inhabitants but they did not listen to anything. And this is very strongly felt.

³ I feel like the mental burden of participation has been passed on to us when they have someone in-house who just does that. They should have basic equipment in-house for these kinds of workshops. We had to go buy the pens, we had to take our projector. And what was surprising was that this person wasn't even present during those moments. It was almost shocking. At the level of the functioning of the commune, there is something that I did not understand

points that need to be addressed, but above all a timing for each question and the need to have a decision at the end of the time limit. According to Beatriz, this strict framework is necessary to allow progress in a process that is regularly characterized by its time-consumption.

From our interviews, the importance of a process structure emerged. The latter concerns the project and personal objectives, the stakeholders, the fields of intervention and the methods of collaboration and decision-making. It seems crucial that an indication is first given by the contracting authority when the competition is announced. The flexibility of this structure is essential in order to be able to renegotiate it later with the different stakeholders and thus establish a clear framework for the system and the role of each participant.

Review of the conceptual model

Edition of the diagram

We end this discussion with a comparison of the conceptual model (see p.22) from our literature review with the results of our various surveys. The model that we proposed is presented in a diagram because it is through its graphic representation that it seemed to us to be the most comprehensible and the easiest to handle for potential users. Our analysis shows that it is precisely this representation that raises questions and that needs to be improved, without calling into question the concepts that result from it. Indeed, the model is presented in the input-process-effect form but in a rather linear way, with an iteration indicated within the activities themselves. However, our analysis reveals that participatory design is particularly qualified by the circularity of its system, reintroducing its outputs and outcomes as input for the next activity. We believe that the graphic schematization of the model does not sufficiently convey this self-feeding of the system.

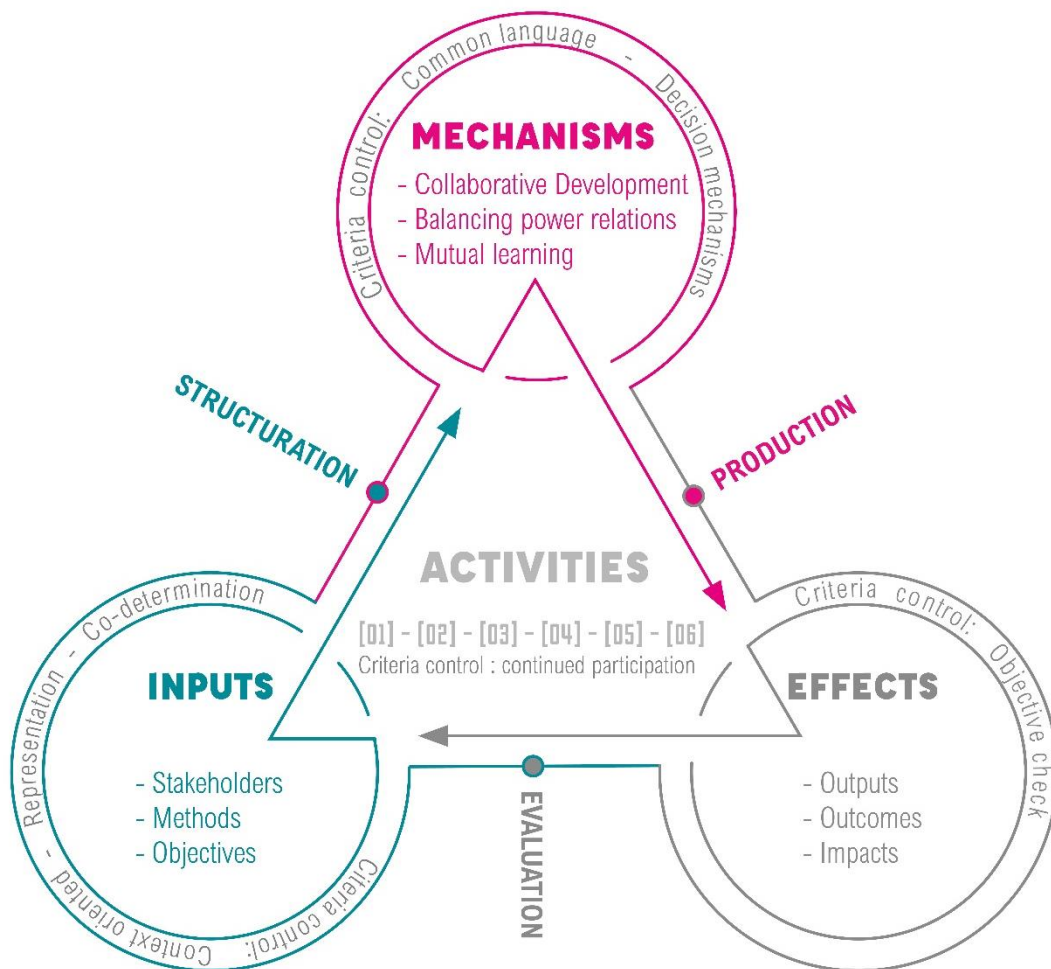
The circularity of participatory design appears in various forms and at several levels. If the production of tangible objects – plans, for instance – during each phase and their reintroduction into the system for the next phase are common to all architectural practices, we can underline the importance of the circularity of immaterial outputs. Participatory models are characterized by the emphasis on the human factor at the center of the design process. As emphasized by the process-centered definitions (see p.9), which stipulate that the process is more important than the result, the project is created through the social mechanisms of collaboration and learning from others. It is therefore a question of producing intangible effects, through formal or informal activities¹, that will serve the project's continuation. These data are essential to reintroduce into the system to ensure its proper functioning. One example is the adaptation of work methods to participants who are sometimes not sensitive to certain techniques or not able to use certain tools. This non-conformity of the method becomes a result in itself of the activity and must be integrated afterwards. The structuring of the process that we just discussed in the previous point, which is done through a negotiation with the different stakeholders, is another example. This negotiation constitutes a first activity of the process, where the resulting framework decided upon is reintroduced as input for the phases that follow.

We present with Figure 19 on the following page the graphical modifications that result from this reflection. It shows an 'Inputs - Mechanisms - Effects' triangulation that is self-reinforcing during each activity. This preserves the original concept of Hansen et al. (2019), which defines mechanisms as the entity that creates causality

¹ We make this distinction between formal and informal activities because participation can take place beyond organized meeting spaces. For example, people can talk in the streets, as Sara told us.

between inputs and effects (see p.18.), while the activity is defined as the medium through which these mechanisms operate.

In addition to this graphic modification, we have added the points 'structuring', 'production' and 'evaluation' between the different notions of the triangulation. By this act, we seek to emphasize these three elements. We see them, after our analysis, as conditions of success for the successful development of the participatory process. We have dedicated the above sub-chapter to 'structuring', and it does not seem necessary to us to go back over it, except to specify that it is important that the framework be established globally, but also for each phase and activity, in order to determine the working space - space in the sense described on page 78: the tri-constellation of the spaces of Politics, Technique and Use. The 'production', which we place between the mechanisms and the effects, serves to highlight the importance that at the end of each activity a result emerges. The short deadlines and the reduced number of workshops organized in the participative architectural processes impose on the participants to progress at each meeting. For example, in the Rabelais project, despite the focus on management issues, no decisions were made and the participants were left not knowing what would happen to these issues. Next, the effects must be evaluated. This 'evaluation' should not be confused with the 'objective



[01] = Programming phase, [02] = Competition phase, [03] = Preliminary project phase, [04] = Planning permission phase, [05] = Construction phase, [06] = Acceptance & Infrastructuring phase

Figure 19: Participatory design conceptual model for public architectural projects

check' criterion related to outcomes. The latter deals with the results of the program as a check on their correspondence with the initial objectives. We see in the evaluation the determination of what can be reintroduced as input for the continuation of the process.

We also chose to change the phasing of the process. This decision was engendered by our desire to bring it closer to the architectural reality in Brussels, as the one we presented before was more general to the world of design and therefore difficult to grasp for practitioners. This choice of phasing follows the classic procedure of a public project in the Brussels-Capital Region and thus makes it easier to situate each activity in the chronology of the project. The criterion of continuous participation becomes easier to control and has enabled us to identify a discontinuity in the projects studied, during the competition phase.

The competition's problematic

In studying the procedures of public commissions, which we briefly presented on pages 26-27, we quickly detected a difficulty concerning the continuity of the participative process. Indeed, since the competition tool has been made compulsory, public architectural projects turn out to be designed at the sketch level, internally, between designers. The reality of participatory design, which aims to include other stakeholders in the development of the project, is undermined, especially as these involvements are privileged at the earliest stage of the process (Sanders & Stappers, 2008). In this phase, the proposal includes the volume, organization of spaces, etc. What we can understand as the major architectural decisions. While Xavier explains that he had integrated the participation process by considering the proposal submitted to the competition as something that could be modified – although this was not the case – Beatriz and Sophie do not share this view. They consider that the architectural project must be respected and that the interventions of other stakeholders are elsewhere: optimization, materials, interior plans for instance. This leads to the presentation of a project that has already been drawn up in its general outlines to the participants, who can sometimes be reluctant to accept this idea. In this sense, Pierre explains that "*the inhabitants feel a real gap*"¹ between their expectations towards the process and finally their margin of action. What solutions can we consider to overcome this constraint of the architect's competition?

The option generally used today in Brussels is to consider the collective as a delegation of the contracting authority, i.e. the programme is the result of participatory work, the conclusions of which are then transferred to the candidates of the competition (Interview Pierre). In order to continue the process of participation even during the study of the tenders, we have seen with the case of the CLTB projects that the stakeholders can also be part of the committee of evaluation. The BMA has already expressed its intention to proceed in the same way for the competitions they manage (Borret, 2020). The question of their inclusion in the jury is a matter of debate, with some arguing that the evaluation of projects is done on criteria that are too technical for novices to make an informed choice; a criticism that the CLTB has tried to address by asking for the evaluation of proposals only on specific criteria. However, it is important to note that regardless of the influence of the stakeholders on the contracting decision, the work of the architect does not change. They remain "*the great creator*"² (Interview Pierre) who works in isolation for the time it takes to develop their sketch. This diverges from our definition of participatory design but is still in line with the objectives of democratic empowerment.

To address this issue, it may be possible to introduce participatory workshops during the competition phase. The solution must take into account the two main constraints of this procedure: the lack of time and the financial impact on the architectural offices. Competition procedures are generally quite short, in our opinion too short

¹ Les habitants sentent un vrai fossé.

² Le grand créateur.

to envisage a real participation process, especially as it would have to be done with the various candidates. This would also increase the costs for the architectural offices, which are already poorly remunerated for unsuccessful candidates. However, Nicolas suggests possible ways of creating links between designers and participants: site visits and debates. These debates could be organised around the study of the specifications, with the different candidates in the competition and the participants in the preliminary programming workshops. This reduces the filter that the project owner could have put on the conclusions of the pre-studies and creates an initial dialogue between the different stakeholders. The site visits bring together these same actors to comment on the site together and to come away with a common understanding.

These changes to the competition system would affect the work of architects to some extent. It is important to consider the effect on their workload and how it might feed into their thinking. These two activities – site visits and debates – are not very costly or time-consuming and already bring the participants closer to the design of the draft and thus to the main lines of the project. They are the first answers to a question which remains open and which we consider to be crucial for the future of public participatory design in Brussels.

06

CONCLUSION

The research conducted in this study aims to understand the role of the architect in participatory design projects. This issue is studied through the Brussels public market, given the growing demand for the implementation of this type of process in the design of public buildings. Exploring this theme also means taking an interest in the participation processes in the Brussels-Capital Region, which have a variety of typologies. We therefore undertook a study with a dual focus: the architectural participatory process from a contextualisation perspective and the role of the practitioner as the main research subject.

The adoption of a qualitative approach was induced by the prism we decided to follow after having been interested in role theories. Relying mainly on the notions gathered by Huot (2013), the role appears to be made up of a multitude of components: expected, prescribed, perceived, preferred and enacted. By applying a clearly defined protocol – semi-structured interviews with the architects, the elaboration of a timeline and a self-confrontation with their tasks – we were able to give a capital importance to the respondents' discourses allowing an analysis of these different components. This way of approaching the role introduces a focal point for this study, which is the prescription of the architect's mission by the client, the acquisition of this mission by the practitioner and its concordance with the different expectations of the stakeholders. We have therefore voluntarily decided not to focus on the methods used by the architect and their ways of inducing the mechanisms specific to participatory design.

This work is based on three case studies, the Tivoli, Rabelais and Anvers projects. For each of them, we wanted to collect, through semi-directed interviews, the points of view of the architects, the project owner and a participant; in addition to relying on documents such as the specifications or the minutes. However, this objective could not be fully achieved as we were denied contact with the participants of two projects. While this was initially seen as a limitation, we then saw the possibility of increasing our focus on the prescription of the role and relationship of the project owner-architect, especially as the issue we are studying has been brought about by the growing interest of public project owners in participation. These case studies were preceded by a literary research work, in order to identify the characteristics of participative projects and a survey by questionnaire which was the necessary step to open the doors of the interviews.

The literature review that we undertook first allowed us to establish a conceptual model of participatory design. This model takes up the major principles of this approach while taking the form of a roadmap, a guide to good practice. This is induced by our desire to insert control criteria, which we have determined through this documentation work, so that they can enable us to evaluate the processes developed in Brussels. These control criteria are: stakeholder representation, co-determination of objectives and methods, creation of a common language, contextual orientation of the process, decision-making mechanisms, continuous participation and achievement of the initial objectives. Taking up the characterisation of participatory design theorised by Hansen et al. (2019), we present an input-mechanisms-effects model in triangulation where the mechanisms specific to participatory design – collaborative development, balance of power relations and mutual learning, among others – operate through activities, taking root in inputs to create specific effects. The questionnaire survey and the case studies emphasised the self-feeding quality that the processes must have and added three conditions for their proper functioning: the structuring of inputs; the production, through the mechanisms, of effects; and the evaluation of the latter. The establishment of such a structure; determining the participation periods, the themes to be addressed, the people who are to participate and the methods to be used; emerges as essential for the proper functioning of the process and the definition of everyone's role.

The study of the role of the architect in participatory design in Brussels led us to consider this role as multiple and evolving. The multiplicity is determined by the influencability of the role by the factors of the scale of the project – which can lead to a difference in objectives and the possibility or not to proceed in detail –, the objective of the contracting authority behind its request for participation – and therefore its prescription of the

mission – and the personal preferences and habits of the architect. Its evolving character can be understood in two ways. The first takes place during the design process itself. By crossing the concepts of Dimeglio (2001) and Lee (2006) – themselves based on Levebvrian theories – we consider the participatory design process as a navigation between the abstract space of technique, the abstract space of politics and the concrete space of use, all three of which intertwine. Throughout the development of the project, themes tend to push the project towards certain spaces and then towards others, which should lead to a reconsideration of the roles according to this tendency. The second component of the evolving quality of the role lies in the architect's ability to acquire it. The Brussels government is trying to establish a culture of participation in the capital, which requires practitioners to learn and master this type of practice. The aim is to create expertise among the various professionals, enabling them to assume their role in participatory design projects in the best possible way.

The reflection that we have developed in the course of this work reveals a discontinuity in the participation of stakeholders during the design process. Indeed, legislation in relation to public procurement obliges the commissioners of architectural projects to organise competitions. During this phase where the main principles of the project are determined, the architectural offices work alone, without any collaborative work with the inhabitants, thus abandoning the very essence of participatory design. It seems crucial to us to carry out future research to solve this problem of discontinuity.

In addition, the budgetary impact on the finances of architectural offices was regularly mentioned during our interviews. Interviewees use the notion of process 'realism' to describe the correlation between the number of workshops held or the way they work, and the budgetary aspect of the project. A study highlighting these economic realities could help to improve the conduct of participatory projects.

Finally, while the political desire is to establish this culture of participation, the potential extreme solicitation of citizens raises questions. A simple multiplication of participatory actions on the Brussels territory, through projects of different sizes and linked to various organisations which shape the urban environment, could lose the inhabitants. We are therefore calling for a real reflection on the participation policy in the Brussels-Capital Region.

07

Bibliography

- Accord de Gouvernement 2009-2014 : Un développement régional durable au service des Bruxellois. (2009).
- Agrawal, V., Vaidya, A. R., Shluzas, L. A., Steinert, M., & Katila, R. (2012). Conceptual and practical user integration into the design process-a four step stakeholder approach. In *DS 70: Proceedings of DESIGN 2012, the 12th International Design Conference, Dubrovnik, Croatia* (pp. 705-716).
- Albinsson, L., & Forsgren, O. (2004). Who's at the wheel of user driven projects when user can't drive. In *3rd International Conference on Systems Thinking in Management (ICSTM)* (pp. 19-21).
- Andersen, L. B., Danholt, P., Halskov, K., Hansen, N. B., & Lauritsen, P. (2015). Participation as a matter of concern in participatory design. *CoDesign*, 11(3-4), 250-261.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.
- Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and arts-based methods. *Qualitative research*, 9(5), 547-570.
- Bano, M., & Zowghi, D. (2015). A systematic review on the relationship between user involvement and system success. *Information and software technology*, 58, 148-169.
- Barbot, J. (2010). Mener un entretien de face à face. In: Paugam, S. (dir) *L'enquête sociologique*. Presses Universitaires de France. p. 115-141.
- Baumard, P., & Ibert, J. (2014). Chapitre 4. Quelles approches avec quelles données?. In : Thietart, R. A. *Méthodes de recherche en management-4ème édition*. Dunod.
- Beauchamp, Y. (1987). Les rôles de gestion des administrateurs de Cégep. Montréal, Université de Montréal.
- Béguin, P. (2003). Design as a mutual learning process between users and designers. *Interacting with computers*, 15(5), 709-730.
- Beliris. (2019). *Rapport annuel 2019*. <https://www.beliris.be/files/files/general/Rapport-annuel-2019-web.pdf>
- Beliris. (2020). *Rapport annuel 2020*. <https://www.beliris.be/files/files/general/rapport-annuel/Rapport-annuel2020.pdf>
- Beliris. (n.d.). *Qui sommes-nous ?*. Retrieved August 8, 2021.
- Berger, Mathieu. (2019). *Le temps d'une politique. Chronique des Contrats de quartier bruxellois*. BUP Bruxelles urbanisme et patrimoine - CIVA, Belgique, Bruxelles
- Berger, M., & Beugnies, P. (2008). Bruxelles à l'épreuve de la participation : les contrats de quartier en exercices . Ministère de la Région de Bruxelles-Capitale.
- Be.brussels. (2021). Urban.brussels. <https://be.brussels/a-propos-de-la-region/bruxelles-urbanisme-et-patrimoine>
- Bilande, A. (2015, December, 7). *Processus participatif dans la conception du projet de rénovation urbaine: Tivoli Quartier Durable* [PowerPoint Presentation].

https://environnement.brussels/sites/default/files/user_files/pres_20151207_amo_1_4cpe_rif_fr.pdf

- Bilande, A., Dal, C., Damay, L., Delmotte, F., Neuwels, J., Schaut, C., & Wibrin, A. L. (2016). Tivoli, quartier durable: une nouvelle manière de faire la ville à Bruxelles?. *Brussels Studies. La revue scientifique pour les recherches sur Bruxelles/Het wetenschappelijk tijdschrift voor onderzoek over Brussel/The Journal of Research on Brussels*.
- Blundell-Jones, P., Petrescu, D., & Till, J. (2005). *Architecture and participation*. Spon Press.
- Borret, K. (2020). *Maitre Architecte de la Région de Bruxelles-Capitale : note d'intention 2020-2024*. <https://bma.brussels/app/uploads/2021/02/Note-dintention-2020-2024-Kristiaan-Borret.pdf>
- Bratteteig, T., & Wagner, I. (2014). *Disentangling participation: power and decision-making in participatory design*. Springer.
- Brkovic, M., & Chiles, P. (2016). 'Spector-The Sustainability Inspector': Participatory Teaching, Learning and Evaluation Game for Architects, Architecture Students and Pupils. *Facta Universitatis, Series: Architecture and Civil Engineering*, 1-20.
- Brunet, L. (1985). *Le rôle du directeur d'école au Québec: 1ère partie*. Université de Montréal, Section d'administration scolaire.
- Carriou, C. (2015). Malentendus et inattendus autour de la participation habitante. La «coopérative» d'accession sociale Le Grand Portail à Nanterre (France). *Lien social et Politiques*, (73), 215-231.
- Citydev.brussels (2021) *Planning for participatory consultation*. Unpublished internal company document.
- Citydev.brussels. (n.d.). *Tivoli GreenCity*. Retrieved August 8, 2021
- Code Bruxellois de l'Aménagement du Territoire (CoBAT). (2017).
- Community Land Trust Bruxelles. (2021, April). Comment ça marche ?. <https://www.cltb.be/comment-ca-marche/>
- Cornwall, A. (2008). Unpacking 'Participation': models, meanings and practices. *Community development journal*, 43(3), 269-283.
- Curado, L. (2013). Durabilité et participation dans les politiques urbaines à Bruxelles. Le cas du premier quartier durable «Tivoli». *Recueil des articles du 1er Congrès interdisciplinaire du développement durable*, 5-22.
- Dalsgaard, P. (2010, November). Challenges of participation in large-scale public projects. In *Proceedings of the 11th Biennial Participatory Design Conference* (pp. 21-30).
- De Carlo, G. (2005). Architecture's Public. In P. Blundell Jones, D. Petrescu, J. Till (Ed.), *Architecture and Participation*. Spon Press.
- Déclaration de politique générale commune au Gouvernement de la Région de Bruxelles-Capitale et au Collège réuni de la Commission communautaire commune. (2019).
- Département citoyenneté Ixelles. (2018). *Marché publique de services n° 2018- 133 : Cahier Spécial des charges*. Unpublished internal company document.

- Dimeglio, P. (2001, October). La programmation générative et participative en architecture et en urbanisme: proposition pour l'élaboration du projet urbain de l'Île St-Denis. In *L'architecte aux côtés du citoyen*.
- Drain, A., & Sanders, E. B. N. (2019). A collaboration system model for planning and evaluating participatory design projects. *International Journal of Design*, 13(3), 39-52.
- Dugua, B., & Chakroun, L. (2019). Planifier avec le territoire: la dynamique des lieux de projets à l'épreuve des approches participatives et paysagères. *Vertigo: la revue électronique en sciences de l'environnement*, 19(1).
- Ehn, P. (2008). Participation in design things. In *Participatory Design Conference (PDC), Bloomington, Indiana, USA (2008)* (pp. 92-101). ACM Digital Library.
- Fondation d'Utilité Publique Community Land Trust Brussels (2019). *Cahier spécial des charges : Référence 19002_Anvers*. Unpublished internal company document.
- Forgues, E. C., Carignan, V., Forgues, D., & Rajeb, S. B. (2016, October). A framework for improving collaboration patterns in BIM projects. In *International conference on cooperative design, visualization and engineering* (pp. 34-42). Springer, Cham.
- Garces, G. A. A. (2016). *Intégration des préférences des parties prenantes et amélioration de l'acceptabilité lors du processus de co-conception: application au système de santé* (Doctoral dissertation, Université de Lorraine, Metz, France).
- Greenbaum, J., & Loi, D. (2012). Participation, the camel and the elephant of design: an introduction. *CoDesign*, 8(2-3), 81-85.
- Gurtner, P., Lang, W., & Voillat, M. (2016). Chapitre I. Rôle et éthique de l'architecte. In Graduate Institute Publications. Graduate Institute Publications. <https://doi.org/10.4000/books.iheid.3693>
- Hansen, N. B., Dindler, C., Halskov, K., Iversen, O. S., Bossen, C., Basballe, D. A., & Schouten, B. (2019, December). How participatory design works: mechanisms and effects. In *Proceedings of the 31st Australian Conference on Human-Computer-Interaction* (pp. 30-41).
- Harrington, C., Erete, S., & Piper, A. M. (2019). Deconstructing community-based collaborative design: Towards more equitable participatory design engagements. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1-25.
- Hofmann, S. (2018). Participative Architecture: The Way to More Environmental Justice. *Architectural Design*, 88(5), 116-121.
- Huot, A. (2013). *La perception des problématique de rôle chez les coordonnateurs dans les départements de soins infirmiers dans les cégeps*. (Doctoral dissertation, Université du Québec, Montréal, Canada).
- Hurlbert, M., & Gupta, J. (2015). The split ladder of participation: a diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environmental Science & Policy*, 50, 100-113.
- Ixelles. (2020, September 11). *Charte ixelloise de la Participation citoyenne*. Participation. <http://www.ixelles.be/site/129-Participation>

- Ixelles. (2021, May 21). *Contrat de quartier durable Athénée*. <http://www.ixelles.be/site/697-Contrat-de-quartier-durable-Athenee>
- Jacob, L., & Desage, F. (2015). Présentation: les aménagements de la participation: design, innovation et controverses sociospatiales. *Lien social et politiques*, (73), 3-12.
- Jenkins, P., & Forsyth, L. (Eds.). (2009). *Architecture, participation and society*. Routledge.
- Johansson, M. (2005). *Participatory inquiry: collaborative design*. (Doctoral dissertation, Blekinge Institute of Technology, Blekinge, Sweden).
- Karasti, H. (2014, October). Infrastructuring in participatory design. In *Proceedings of the 13th Participatory Design Conference: Research Papers-Volume 1* (pp. 141-150).
- Kolar, K., Ahmad, F., Chan, L., & Erickson, P. G. (2015). Timeline mapping in qualitative interviews: A study of resilience with marginalized groups. *International Journal of Qualitative Methods*, 14(3), 13-32.
- Lam, B., Phillips, M., Kelemen, M., Zamenopoulos, T., Moffat, S., & de Sousa, S. (2018). Design and creative methods as a practice of liminality in community-academic research projects. *The Design Journal*, 21(4), 605-624.
- Langley, J. (2016). Participatory design: co-creation| co-production| co-design combining imaging and knowledge. In *Knowledge Utilisation Colloquium*, Llandudno, Wales
- le Maire de Romsée, J. (2005). L'architecture participative, essai de chronologie. *Les Cahiers de la Cambre. Architecture*, 3, 123-132.
- Lee, Y. (2006). Design participation tactics: redefining user participation in design. In *Proceedings of Design Research Society Wonder Ground Conference*. Lisbon.
- Lefèvre, P., Bonnin, P., Blondel, A., & Kalouguine, V. (1985). *Rôle de l'architecte dans un processus de maîtrise d'ouvrage et de maîtrise d'oeuvre collectives* (Doctoral dissertation, Ministère de l'urbanisme, du logement et des transports/Secrétariat de la recherche architecturale (SRA); Ecole nationale supérieure d'architecture de Paris-La Villette).
- Lejeune, C. (2019). *Manuel d'analyse qualitative*. De Boeck Supérieur.
- Les maux magiques. (2019, July). *Bruxelles en mouvement*, 301.
- Luck, R. (2018a). What is it that makes participation in design participatory design?. *Design Studies*, 59, 1-8.
- Luck, R. (2018b). Participatory design in architectural practice: Changing practices in future making in uncertain times. *Design Studies*, 59, 139-157.
- Manzini, E. (2016). Design culture and dialogic design. *Design Issues*, 32(1), 52-59.
- Manzini, E., & Rizzo, F. (2011). Small projects/large changes: Participatory design as an open participated process. *CoDesign*, 7(3-4), 199-215.
- Meilleur, P. (2020). *L'architecte et ses missions*. Ordre des Architectes | Conseil francophone et Germanophone. https://ordredesarchitectes.be/files/documents/ODA2469-04_2020_De%CC%81pliant_Missions_Architecte_SITE.pdf

- Meroni, A., Selloni, D., & Rossi, M. (2018). *Massive Codesign: A proposal for a collaborative design framework*. FrancoAngeli.
- Moellenkamp, S., Lamers, M., Huesmann, C., Rotter, S., Pahl-Wostl, C., Speil, K., & Pohl, W. (2010). Informal participatory platforms for adaptive management. Insights into niche-finding, collaborative design and outcomes from a participatory process in the Rhine basin. *Ecology and Society*, 15(4).
- Paillé, P., & Mucchielli, A. (2021). *L'analyse qualitative en sciences humaines et sociales-5e éd.* Armand Colin.
- Parizot, I. (2010). L'enquête par questionnaire. In: Paugam, S. (dir) *L'enquête sociologique*. Presses Universitaires de France. p. 93-113.
- Penven, A. (2013). *L'ingénierie sociale*. Erès.
- Perspective.brussels. (2021, July 22). *Coordinateur du service Participation*. <https://perspective.brussels/fr/actualites/coordinateur-du-service-participation>
- Perspective.brussels. (n.d.). *Nos missions*. <https://perspective.brussels/fr/qui-sommes-nous/propos/nos-missions>
- Petrescu, D. (2005). Losing control, keeping desire. In: Blundell Jones P, Petrescu D, and Till J (eds) *Architecture and Participation*. Spon Press.
- Pierre Blondel Architectes. (2021). *ArchiLab Anvers: Avant-projet définitif*. Unpublished internal company document.
- Ravina, D. V., Shih, R. R. L., & Medvegy, G. (2018). Community architecture: The use of participatory design in the development of a community housing project in the Philippines. *Pollack Periodica*, 13(2), 207-218.
- Robertson, T., & Simonsen, J. (2012). Participatory Design: an introduction. In *Routledge international handbook of participatory design* (pp. 21-38). Routledge.
- Robertson, T., & Wagner, I. (2012). Ethics: Engagement, representation and politics-in-action. In *Routledge international handbook of participatory design* (pp. 84-105). Routledge.
- Sánchez de la Guía, L., Puyuelo Cazorla, M., & de-Miguel-Molina, B. (2017). Terms and meanings of "participation" in product design: From "user involvement" to "co-design". *The Design Journal*, 20(sup1), S4539-S4551.
- Sanders, E. B. N., Brandt, E., & Binder, T. (2010, November). A framework for organizing the tools and techniques of participatory design. In *Proceedings of the 11th biennial participatory design conference* (pp. 195-198).
- Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *Co-design*, 4(1), 5-18.
- Sanoff, H. (2006). Multiple views of participatory design. *METU Journal of the Faculty of Architecture*, 23(2), 131-143.
- Scariot, C. A., Heemann, A., & Padovani, S. (2012). Understanding the collaborative-participatory design. *Work*, 41(Supplement 1), 2701-2705.


- Sheridan, J., Chamberlain, K., & Dupuis, A. (2011). Timelining: visualizing experience. *Qualitative research, 11*(5), 552-569.
- Sintomer, Y. (2008). Du savoir d'usage au métier de citoyen?. *Raisons politiques, 3*(3), 115-133.
- Skiba, N. (2014). *Processus d'innovation centré sur l'utilisateur: identification des besoins et interprétation des données issues de l'intégration de l'utilisateur dans le processus de co-conception* (Doctoral dissertation, Université de Lorraine, Metz, France).
- Société d'Aménagement Urbain. (2019). *Rapport d'activités 2016-2018*. https://sau.brussels/sites/default/files/sau_rapportactivites_2016-2018.pdf
- Société du Logement de la Région de Bruxelles-Capitale. (2020). *Rapport annuel 2020 : Pour un logement public de qualité en Région de Bruxelles-Capitale*. https://slrb-bghm.brussels/sites/website/files/publications/documents/slrb-ra2020-fr_13-6.pdf
- Société du Logement de la Région de Bruxelles-Capitale. (n.d.). *Qui sommes-nous ?*. Retrieved August 8, 2021.
- Spinuzzi, C. (2005). The methodology of participatory design. *Technical communication, 52*(2), 163-174.
- Steen, M. (2011). Tensions in human-centred design. *CoDesign, 7*(1), 45-60.
- Steen, M. (2013). Co-design as a process of joint inquiry and imagination. *Design Issues, 29*(2), 16-28.
- Steen, M., Manschot, M., & De Koning, N. (2011). Benefits of co-design in service design projects. *International Journal of Design, 5*(2).
- Stelzle, B., Jannack, A., & Noennig, J. R. (2017). Co-design and co-decision: Decision making on collaborative design platforms. *Procedia computer science, 112*, 2435-2444.
- St-Germain, M. (1997). Du pouvoir de la gestion à la gestion des pouvoirs: le rôle de la clanocratie. *Transformation des enjeux démocratiques en éducation, 103-164*.
- Szebeko, D., & Tan, L. (2010). Co-designing for Society. *Australasian Medical Journal, 3*(9).
- Van der Velden, M., & Mörtberg, C. (2015). Participatory design and design for values. *Handbook of Ethics, Values, and Technological Design: Sources, Theory, Values and Application Domains, 41-66*.
- Van Mechelen, M., Derboven, J., Laenen, A., Willems, B., Geerts, D., & Abeele, V. V. (2017). The GLID method: Moving from design features to underlying values in co-design. *International Journal of Human-Computer Studies, 97*, 116-128.
- Visser, F. S., Stappers, P. J., Van der Lugt, R., & Sanders, E. B. (2005). Contextmapping: experiences from practice. *CoDesign, 1*(2), 119-149.
- Whicher, A., & Crick, T. (2019). Co-design, evaluation and the Northern Ireland innovation lab. *Public Money & Management, 39*(4), 290-299.

08

ANNEXES

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Annex 1: Questionnaire survey – French example




0%

Bonjour et bienvenue,

Ce questionnaire porte sur le rôle de l'architecte dans le cadre de projets "participatifs". Une précision importante est à apporter sur cette notion. Par "participation", nous entendons toute volonté d'inclusion dans le processus de conception et/ou de construction des usagers et/ou des habitants et/ou de non experts du domaine.

Cette étude se focalise sur les projets d'architecture (bâtiments). Lorsqu'il vous sera demandé de parler de votre expérience, veuillez privilégier les projets de ce domaine plutôt que ceux de type urbain.

Bon questionnaire et merci d'avance !



20%

Nom du bureau d'architecture

Poste occupé dans le bureau

Quelle est la proportion de projets incluant une quelconque forme de participation (des usagers et/ou des habitants et/ou de non experts du domaine) par rapport au nombre total de projets réalisés par votre bureau ?

- Entre 0 et 5 %
- Entre 5 et 10 %
- Entre 10 et 20 %
- Entre 20 et 40 %
- Entre 40 et 60 %
- Entre 60 et 80 %
- Entre 80 et 100 %

Avez-vous été formé au design participatif ?

- Oui
- Non et je ne ressens pas le besoin de suivre une formation parce que j'ai déjà participé à des projets impliquant un design participatif
- Non et je ne ressens pas le besoin de suivre une formation parce que je n'aurai pas à l'utiliser dans un avenir proche
- Non et je ne ressens pas le besoin de suivre une formation parce que je n'en vois pas l'intérêt
- Non mais j'aimerais avoir la possibilité de suivre une formation

Avez-vous déjà pris part à un projet de conception et/ou de construction (peu importe la phase concernée) où une quelconque forme de participation (des usagers et/ou des habitants et/ou de non experts du domaine) était demandée ?

- Oui
- Non

Cette demande concerne-t-elle un ou des projet(s) provenant d'un marché public bruxellois ?

- Oui
- Non

Si oui, pourriez-vous lister les noms du ou des projet(s) auxquels vous avez participé dans le cadre d'un marché public bruxellois ?



40%

Nous allons vous demander dans ce qui suit quelques détails et retours à propos d'un des projets cités ci-avant et qui vous semble avoir été le mieux abouti en terme de participation.

Nom du projet concerné par la démarche participative

Dans quelle commune se trouve le projet ?

Maîtrise d'ouvrage

Date du début et date de fin de ce projet (année - année)

Date du début de la mission de participation

Durée de la mission de participation

Qui a initié la demande de participation ?

- La maîtrise d'ouvrage
- Les habitants
- Le bureau d'architecture
- Je ne sais pas
- Autre

Est-ce qu'un dispositif participatif a été prévu dans la demande ?

- Oui, un processus participatif a été instauré.
- Non, aucun dispositif participatif n'a été mis en place.

Si un dispositif a été prévu, qui s'est chargé de mettre en place le processus participatif ?

- En interne
- En externe, demandé par la maîtrise d'ouvrage
- En externe, demandé par le bureau d'architecture
- Autre

Si en externe ou autre, donnez le nom du bureau chargé de mettre en place le processus

Des objectifs ont-ils clairement été définis et fixés à la suite de la mise en place de ce processus participatif ?

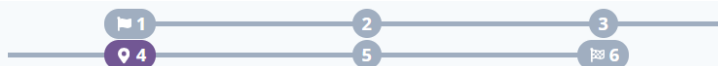
- Oui
- Non

Pourriez-vous estimer le degré d'implication des différents acteurs dans le projet ?

	Ne participent pas au projet	Participent en donnant de l'information pour le projet	Participent en donnant leurs avis sur le projet	Participent dans les choix à prendre en considération pour le projet
Autorités communales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autorités régionales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institution(s) publique(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groupe(s) associatif(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Architecte(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autre(s) expert(s) de la conception et/ou de la construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Futurs utilisateurs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grand public (riverains)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment estimeriez-vous l'intérêt que portait chaque acteur pour la démarche participative mise en place dans le cadre de ce projet ?

	Non impliqué-e-s	Pas intéressé-e-s	Plutôt pas intéressé-e-s	Plutôt intéressé-e-s	Intéressé-e-s	Sans avis
Autorités communales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autorités régionales	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institution(s) publique(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Groupe(s) associatif(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Architecte(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Autre(s) expert(s) de la conception et/ou de la construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Futurs utilisateurs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grand public (riverains)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



60%

Nous allons maintenant aborder les méthodes et outils utilisés pour mettre en place le processus participatif. Veuillez compléter la phrase suivante avec la réponse la plus appropriée.

Les méthodes participatives ont été:

- Aucun(e) -

Quelle(s) méthode(s) avez-vous utilisée(s) ?

L'Ordre des Architectes découpe le processus d'un projet comme suit:

- Etudes préliminaires [PRE]
- Avant-projet sommaire [APS]
- Avant-projet détaillé [APD]
- Constitution du permis d'urbanisme [PDU]
- Constitution du dossier de consultation des entrepreneurs [DCE]
- Mise au point des marchés de travaux [MDT]
- Exécution des travaux [EXE]

Toujours dans le cadre du projet décrit ci-avant, nous utiliserons ce découpage pour les questions qui suivent.

Quel(s) acteur(s) étai(en)t impliqué(s) dans la phase PRE ?

- Autorités communales
- Autorités régionales
- Institution(s) publique(s)
- Groupe(s) associatif(s)
- Architecte(s)
- Autre(s) expert(s) de la conception et/ou de la construction
- Futurs utilisateurs
- Grand public (riverains)

Quelles activités participatives ont été organisées lors de la phase PRE ?

Quel(s) acteur(s) étai(en)t impliqué(s) dans la phase APS ?

- Autorités communales
- Autorités régionales
- Institution(s) publique(s)
- Groupe(s) associatif(s)
- Architecte(s)
- Autre(s) expert(s) de la conception et/ou de la construction
- Futurs utilisateurs
- Grand public (riverains)

Quelles activités participatives ont été organisées lors de la phase APS ?

Quel(s) acteur(s) étai(en)t impliqué(s) dans la phase APD ?

- Autorités communales
- Autorités régionales
- Institution(s) publique(s)
- Groupe(s) associatif(s)
- Architecte(s)
- Autre(s) expert(s) de la conception et/ou de la construction
- Futurs utilisateurs
- Grand public (riverains)

Quelles activités participatives ont été organisées lors de la phase APD ?

Mis à part la maîtrise d'ouvrage et les architectes, d'autres acteurs sont-ils intervenus dans les phases PDU, DCE, MDT ou EXE ?

- Oui
- Non



80%

Listez, d'après vous, les éléments qui ont aidé à la réussite de la démarche participative dans ce projet ?

Durant ce projet, quelles difficultés avez-vous rencontrées ? (possible de cocher plusieurs cases)

- Processus participatif modifié/annulé à cause de trop courtes échéances
- Retards causés par le processus participatif
- Moyens financiers insuffisants pour mettre correctement en place le processus participatif
- Moyens méthodologiques insuffisants pour mettre correctement en place le processus participatif
- Nouveaux besoins pas inscrits dans les budgets prévisionnels révélés via la participation
- Perte de l'intérêt à participer chez les futurs utilisateurs
- Perte de l'intérêt à participer chez la maîtrise d'ouvrage
- Participants pas aptes à participer
- Surcharge de travail pour mettre en place le processus participatif
- Surcharge de travail causé par l'excès de sollicitations
- Ecart trop important entre les objectifs des différents acteurs
- Autre

D'après votre expérience (d'après ce que vous avez ressenti, vu et vécu) êtes-vous d'accord ou pas d'accord avec les propositions suivantes ?

	Pas d'avis	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Plutôt d'accord	D'accord	Tout à fait d'accord
Le panel des acteurs présents aux activités participatives représentait la population concernée par le projet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Les relations entre les différents acteurs lors des activités participatives étaient égalitaires, chacun apportant son expertise en tant que co-designer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Le langage utilisé lors des échanges permettait à chacun d'exprimer correctement ses idées	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ces échanges ont entravé la créativité de l'architecte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ces échanges ont permis de stimuler la créativité de l'architecte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ces échanges ont eu un impact sur les décisions prises par l'architecte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vous êtes sortis enrichis de ce processus participatif grâce à un apprentissage mutuel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ce processus participatif n'a pas eu l'apport escompté au projet. Vous en êtes sorti avec une sensation de perte de temps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ce processus participatif a permis de mieux répondre aux besoins des utilisateurs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ce processus participatif a permis de concevoir un bâtiment mieux accepté par les utilisateurs et les riverains	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
La mise en réseau des différents acteurs permet une meilleure durabilité du bâtiment au niveau fonctionnel et appropriation des lieux	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mon implication à ce processus participatif m'a permis de ... (complétez)

Après cette expérience décrite ci-avant, pensez-vous que l'architecte devrait avoir des compétences supplémentaires lorsqu'il travaille sur un projet de design participatif, par rapport à un projet de conception classique ?

- Oui
 Non

Si vous deviez décrire le rôle de l'architecte dans les projets de design participatif en quelques mots, quels seraient-ils ? (5 mots maximum)



100%

Merci pour avoir pris le temps de répondre à ce questionnaire !

Avez-vous des commentaires ou des remarques en rapport avec l'enquête ?

Seriez-vous d'accord pour être recontacté pour d'éventuels compléments d'information concernant vos différentes expériences dans des projets participatifs ?

- Oui
 Non

Si oui, pourriez-vous nous donner les indications suivantes ? (Nom, Prénom, Adresse e-mail)

Annex 2: Tasks documents for interviews with architects

A - ÉTUDES PRÉLIMINAIRES (PRE)

Anvers	Idéal	Diff.	Tâches
			Fourniture des informations relatives au programme
			Etablissement du programme
			Aide à l'établissement du programme
			Analyse du programme
			Examen des souhaits du MO
			Liste des documents et informations souhaités par l'architecte
			Examen des documents du MO
			Fourniture des données relatives au terrain
			Visite sur site
			Mise au point d'un organigramme
			Relevé d'une situation existante
			Assistance au MO en cas d'études spécifiques confiées à des tiers
			Collecte des informations auprès des services urbanistiques et autres administrations impliquées
			Esquisses avec au maximum 3 propositions
			Fixation du budget par le MO
			Estimation budgétaire sommaire et provisoire
			Rapport synthétique sur les dispositions générales et les solutions techniques
			Formalisation de l'accord du MO
			Si fin de collaboration: paiement des honoraires dus par le MO
			Si poursuite de la collaboration: établissement d'une convention et formalisation de l'accord

ACTEURS IMPLIQUÉS :

ACTIVITÉS AVEC LES DIFFÉRENTS ACTEURS :

C - AVANT-PROJET DÉTAILLÉ (APD)

Anvers	Idéal	Diff.	Tâches
			Synthèse des remarques et observations relatives à l'APS et présentation des adaptations
			Désignation d'intervenants spécifiques complémentaires (décorateur, cuisiniste, ...)
			Assistance au MO dans le cadre du choix des intervenants et des accords à conclure
			Coordination avec les partenaires
			Si BIM, alors maquette numérique et coordination des intervenants
			Sinon, dossier de présentation complémentaire
			Vérification de la conformité aux normes
			Questionnement des services de préventions incendie
			Questionnement des autres intervenants éventuels suivant la spécificité du projet
			Réalisation des plans, coupes, façades, gabarits, matériaux et systèmes constructifs
			Dossier de présentation graphique du projet
			Estimation financière détaillée
			Réajustement du programme et du budget
			Formalisation de l'accord du MO

ACTEURS IMPLIQUÉS :

ACTIVITÉS AVEC LES DIFFÉRENTS ACTEURS :

B - AVANT-PROJET SOMMAIRE (APS)

Anvers	Idéal	Diff.	Tâches
			Estimation sommaire du coût des travaux
			Réajustement du programme et du budget
			Synthèse des remarques et observations relatives aux études préliminaires
			Recherches d'informations complémentaires sur base des études préliminaires et des techniques
			Fixation des dimensions principales des ouvrages et de l'aspect général (volumétrie)
			Précision des options techniques générales
			Vérification de la conformité par rapport aux normes et règlements
			Assistance au MO pour la désignation des partenaires (stabilité, techniques spéciales, ...)
			Désignation des partenaires par le MO
			Vérification et précision du budget
			Dossier graphique du projet
			Si BIM, alors préparation de la maquette numérique
			Sinon, dossier de présentation complémentaire (maquette, ...)
			Formalisation de l'accord du MO

ACTEURS IMPLIQUÉS :

ACTIVITÉS AVEC LES DIFFÉRENTS ACTEURS :

Annex 3: Interview guide with architects

Guide d'entretien avec les architectes – Xavier Lostrie de Urban Platform

1) Présentation

- a. Explication de la recherche : *au vu de la hausse du nombre de projets d'architecture dans lesquels on cherche à inclure les habitants et autres parties prenantes dans la conception, une redéfinition du rôle de l'architecte pose question. Je cherche donc à comprendre si ses missions changent, quelles sont les méthodes à employer, les qualités à avoir, etc. Cette recherche rentre dans le cadre de mon mémoire à l'ULB en ingénieur architecte.*
- b. Demander la permission d'enregistrer

2) Echauffement

- a. Présentation du bureau : quelle est leur vision, taille de l'équipe, types de projets
- b. Présentation du projet : lignes directrices, concepts, intervenants, caractéristiques

3) Ligne du temps

- a. Demander à l'architecte de réaliser une ligne du temps qui définirait le projet : phasage, activités, intervention des différents acteurs, etc.
- b. Si la participation a commencé avant la venue de l'architecte dans le projet, demander de préciser sur la ligne du temps et demander comment cela s'est déroulé, qu'ont-ils réalisés avant et comment s'est passé l'intégration de l'architecte dans le processus participatif
- c. Intégration de l'architecte dans un processus déjà commencé auparavant.

4) Attentes des autres acteurs du projet

- a. Selon l'architecte, qu'est-ce que les autres acteurs attendaient-ils de lui ? Cela a influencé sa manière d'exercer son métier ou le processus de conception ?
- b. Y avait-il une différence significative entre les rôles attendus par les divers acteurs du projet, selon l'architecte ? Si oui, quelle(s) était(en)t telle(s) et quel impact ?

5) Travail sur le document « l'architecte et ses missions »

- a. Présenter « l'exercice » : *on va maintenant s'intéresser en détail aux différentes tâches qui ont été effectuées durant la conception du projet. Pour cela, j'aimerais que l'on s'appuie sur des tableaux fournis par l'Ordre des Architectes qui regroupent toutes les missions de l'architecte et de la maîtrise d'ouvrage pour chaque étape du projet. Nous nous intéresserons uniquement aux phases de conception, c'est-à-dire la phase d'études préliminaires, d'avant-projet sommaire et d'avant-projet détaillé.*

J'aimerais donc que l'on passe en revue ces différentes tâches ensemble et que vous m'indiquiez dans cette case (nom du projet), les tâches pour lesquelles les autres participants sont intervenus. (Demander si c'est clair).

En plus de cela, je vous demande d'indiquer dans cette case-ci (idéal) si, dans une situation idéale de participation – donc pour un autre projet que le vôtre – il faudrait qu'il y ait intervention des participants pour la tâche concernée. (Demander si c'est clair).

Et pour finir, cette case-là (diff. Pour différence) vous permet d'indiquer si le fait d'impliquer les participants dans la réalisation de la tâche concernée crée une différence au niveau de la

charge de travail, auquel cas vous ajoutez un multiplicateur (par exemple : fois 2, divisé par 3, ...). (Demander si c'est clair et commencer).

- b. Pourquoi considère-t-il que certaines tâches devraient, dans l'idéal, avoir lieu en interagissant avec les autres participants ?
- c. Y a-t-il des tâches véritablement essentielles à partager ?
- d. Dans le cas où l'architecte annonce une différence en termes de charge de travail, pour quelles raisons ?
- e. Décrire précisément l'intervention des participants pour la tâche concernée : activités, sujets, problèmes rencontrés, ...
- f. Pourquoi cette différence entre ce qui a été fait et ce qui devrait, selon lui, être fait ?
- g. Les tâches dans lesquelles les participants sont intervenus ont-elles été dictées par la MO ou choix de l'architecte ou autre ? Si prescription précise des tâches, ont-elles été toutes effectuées ? Si différence, pour quelles raisons ?
- h. Cette grille convient-elle pour décrire les tâches d'un projet participatif ?

6) Prescription de la mission de participation

- a. Que pense l'architecte de la prescription de la mission participative (forme et fond) ?
- b. La mission de participation a-t-elle été discutée et/ou renégociée par la suite ?

7) La participation en général

- a. Qu'est-ce que, selon vous, le design participatif ?
- b. Quels en sont les critères ?
- c. Quel est votre rapport vis-à-vis de la participation en architecture ?

8) Questions en rapport avec le questionnaire – demande de précision

- a. Perte de temps
- b. Les architectes n'étaient pas présents aux réunions du groupe de travail « Ecole ». Johanna de Villers transmettait le tout. Comment en sont-ils arrivé là ?

Annex 4: Interview guide with contracting authority

Guide d'entretien avec les maîtres d'ouvrages – Sophie Ghyselen du CLTB

- 1) **Présentation**
 - a. Explication de la recherche : *au vu de la hausse du nombre de projets d'architecture dans lesquels on cherche à inclure les habitants et autres partie prenantes dans la conception, une redéfinition du rôle de l'architecte pose question. Je cherche donc à comprendre si ses missions changent, quelles sont les méthodes à employer, les qualités à avoir, etc. Cette recherche rentre dans le cadre de mon mémoire à l'ULB en ingénieur architecte.*
 - b. Demander la permission d'enregistrer

- 2) **Echauffement**
 - a. Présentation : quel est son rôle dans le projet, son parcours etc.

- 3) **Prescription de la mission de participation**
 - a. Niveau de détail visible dans CSC : cadre. Demande de méthodologie. Qu'est-ce qui a séduit dans celle proposée par le bureau ?
 - b. Le pouvoir de décision laissé aux participants n'est pas discuté. Comment cela a-t-il été décidé ?
 - c. La mission de participation a-t-elle été discutée et/ou renégociée par la suite ?

- 4) **Ligne du temps**
 - a. Demander au MO de réaliser une ligne du temps qui définirait le projet : phasage, activités, intervention des différents acteurs, etc.
 - b. L'équipe d'architecte a commencé le processus de participation après la phase concours. Est-ce que de votre côté, vous avez commencé avant ? Le programme et le cahier des charges sont-ils le résultat d'un travail avec les membres ? Durant le concours, il y a-t-il un comité d'avis composé des membres ?
 - c. Quelle place occupe la MO dans le processus ? Participe-t-elle également aux ateliers ?
 - d. Est-ce que la phase de concours, durant laquelle les équipes d'architectes conçoivent le projet, ne biaise pas le caractère participatif dans le sens où les changements faits par la suite sont minimes par rapport aux grandes lignes déjà dessinées ?

- 5) **Attentes des différents acteurs du projet**
 - a. Quel rôle attendez-vous de l'équipe d'architectes ? Correspond-il avec ce qu'ils sont en train de réaliser maintenant ?
 - b. Y avait-il une différence significative entre les rôles attendus par les divers acteurs du projet, selon le MO ? Si oui, quelle(s) étai(en)t telle(s) et quel impact ?

- 6) **La participation en général**
 - a. Qu'est-ce que, selon vous, le design participatif ?
 - b. Quels en sont les critères ?
 - c. Quel est votre rapport vis-à-vis de la participation en architecture ?

- 7) **Questions en rapport avec le questionnaire – demande de précision**
 - a. Durant les premières phases, les futurs acquéreurs ne sont pas connus. Est-ce que les membres présents, candidats-acquéreurs, ont plus de chance d'accéder à ces futurs logements ?

Annex 4: Consent form for interviews

Entretien réalisé dans le cadre d'un travail de fin d'étude à l'Université Libre de Bruxelles

Etudiant : Jonas Rents jonas.rents@ulb.be

Promotrice : Samia Ben Rajeb samia.ben.rajeb@ulb.be

Vous avez été invité(e) à participer à un projet de recherche mené par Jonas Rents, étudiant en Master 2 en ingénierie architecturale à l'Université Libre de Bruxelles. L'objectif de cette recherche est d'analyser le rôle de l'architecte dans les projets récents de design participatif provenant du marché public bruxellois. Au cours de cet entretien vous serez amené(e) à répondre à plusieurs questions dans le but de recueillir votre vision et expérience pour le cas du projet Tivoli.

- La participation à l'étude est volontaire. Vous avez le droit d'arrêter à tout moment, et ce, pour n'importe quelle raison.
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- Je donne la permission d'être enregistré(e) pendant l'étude (le support audio ne sera jamais diffusé et ne sera exploité que par l'étudiant pendant le traitement des données).
- Je suis conscient(e) que les supports produits lors de l'étude ne seront exploités que dans un cadre pédagogique et de recherche.
- Je donne la permission d'inclure dans des documents de recherche résultant de cette étude des phrases formulées directement lors de cet entretien.

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Date et signature de l'étudiant :

Annex 5: Document concerning the consultation of this Master thesis paper



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d'études,
au verso de la première page de couverture.

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Je soussigné

NOM : **RENTS**

PRENOM : **Jonas**

TITRE du travail :

**The role of the architect in participatory
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