Digital platforms for participation in city plan: Typology of citizens' modes of presence

Noémie Lago

Introduction

In addition to new technologies, citizen participation is increasingly seen as essential to the sustainable development of the Smart City (Monfaredzadeh & Krueger, 2015). Indeed, a techno-centric approach imposes tools. If these tools are not adapted to the needs and abilities of users, they will not be used. Therefore, strengthening participatory processes is a priority for many cities.

In recent years, this priority has been concretized by the launching of digital platforms for citizen participation in city plan, often functioning as online box of ideas. Citizens can submit their proposals to improve their city and can give their opinions on the proposals of others (through comments and likes). Likes can be positive or negative, to signal as much agreement as disagreement with the proposals of others. The results of the platform are then analyzed by the public authorities and should orient the city plan. To better understand the functioning of these platforms, we followed three of them in Wallonia (Belgium): "Let's reinvent Liege!" launched in March 2017; "Tomorrow, Mons" launched in April 2017; and more recently "What will your "La Louvière" looks like in 2040?" launched in March 2019.

In this paper, we focus on citizens' appropriation of these platforms. In the first section, we analyze the increasing use of digital in participatory processes of cities, and the part played by citizens. Section 2 presents in detail the three studied platforms and our survey methodology. Sections 3 delves into the results, mainly a typology of citizens' modes of presence, but also some leads to adapt platforms to citizens' needs.

1. Framework of this research: the multiplication of digital platforms

In the field of citizen participation, innovation is currently sought through digital technology, as the work of many researchers underlines it. This is the case, for example of Zaza (2016, p. 163) "*To do this, digital technology is called upon as a solution to innovate and modernize citizen engagement devices*" or Gourgues (2013, p.104) "*the simple use of new technologies acts as a "quick fix" in the eyes of public authorities*". This approach is similar to the "*procedural tropism*" (Mazeaud, 2012) who pushes cities and researchers to link the success of a concertation to its process, while forgetting the importance of the context: the object of the consultation, its articulation with local policies or the existence of a social demand.

This "trend" is very present in Wallonia and many cities have launched their first digital platform for citizen participation. We have more particularly followed the development of those of La Louvière, Liège and Mons. The objective displayed by cities is to enrich their city plan by including citizens in an innovative way. These three platforms were commissioned by each city and developed by start-ups. Start-ups offer a "turnkey" product that is slightly adjustable to expectations and specificities of each city. The reproduction of the same model allows the

start-up to reduce its production costs and to launch the platform quickly. It also responds to cities' need of guiding, because they do not have this type of skills in-house, nor prior experience of a digital platform for participation.

We have noticed that citizens are completely missing from the tool choice and the platform design, while they are the main users. The framework built by the city and the startup define the possible uses and exercise a constraint on the participants. For example, it is necessary to register to propose an idea, and the submitted ideas are framed by a list of possible topics. So, how do citizens use and appropriate this imposed tool? To answer this question, we have analyzed the citizens' modes of presence on participation platforms. Our hypothesis is that each mode of presence reveals some citizen needs and expectations. Better knowing them could be a source of inspiration to adapt platforms to citizens.

2. Studied cases and methodology

We conducted a series of semi-directive interviews with city and platform provider workers. Moreover, we have retrieved some data directly on the platforms: proposals, votes and comments on each proposal. Mons provided us those data on Excel. For Liege, they are available on the open data city website (opendata.liege.be). To respect the GDRP[1], the cities did not want to transmit us the personal data of the participants (age, occupation, living place). We made a comparative table of useful data for this research (see below). We also get some numbers from CitizenLab, the Mons and Liege platform provider. They are in italics in the table, because we have no way of checking these numbers. The citizen consultation phase is ongoing at La Louvière, which explains the absence of certain datas. The process is the most advanced in Liège, with 77 priority actions identified and implemented by the city. Actions monitoring is available on the platform. For Mons, the project has been on hold since the municipal elections of October 2018.

	La Louvière	**Liège**	**Mons**
Platform name	What will your "La Louvière" looks like in 2040?	Let's reinvent Liege!	Tomorrow, Mons
URL	https://www.flui.city/7100-la-louviere/news?lang=fr	www.reinventonsliege.be/	mons.citizenlab.co/fr-BE/
Platform provider	Fluicity	CitizenLab	CitizenLab
Timing	March 2019 – in progress	March to Nov. 2017	May 2017 to Jan. 2018
Inhabitants	80 000	197 000	95 000
Number of accounts		*5 015*	*1 065*
Number of ideas	216 (in July 19)	988	909
Number of ideas writers	89 (in July 19)	353	286

[1] GDRP : General Data Protection Regulation ; It is a European Union regulation (2016/679) which constitutes the reference text for the personal data protection.

Number of voters		4 988	812
Number of votes		94,688 votes 84,130 likes 10,558 dislikes	9,960 votes 8,336 likes 1,624 dislikes
Visitors		*28 703*	*15 512*
Results	Work in progress	77 priority actions	Work in progress

Figure 1 - Data comparison of the 3 platforms

To carry out our analysis, we crossed quantitative analyzes (number of proposals, comments, votes) and qualitative analyzes (content of the proposals). Furthermore, we relied on the theories of two researchers, Hirschman and Akrich, as a key to read the citizens' modes of presence on the platforms.

Hirschman (1970) defined three ideal-type users' attitudes towards a product or a policy they do not agree: "loyalty", "exit" and "voice". Loyalty is unwavering support. Exit is abandonment, and voice is speaking up to be heard and to change things.

In a similar approach, Akrich (1998) studied interventions of users on constituted devices, causing them to be transformed or shifted compared to the initial definition of designers. She also showed that users' interventions could be a source of innovation and improvement of the devices. She proposed a classification in 4 categories of possible users' actions on an existing device. The first two categories concern a modification of uses:

- Displacement: "*Displacement involves changing the spectrum of intended uses of a device, without annihilating it for what it was designed, and without introducing major changes in the device* "(Akrich, 1998). For example, using sometimes a table as a stepladder.
- Hijack : "*A device is hijacked when a user uses it for a purpose that has nothing to do with the scenario originally planned by the designer*" (Akrich, 1998). For example, using a table as a sledge.

The other two categories concern the modification of the device:

- Adaptation: *"We will talk of adaptation when it comes to introducing some changes in the device that allow to adjust to the characteristics of the user or its environment without affecting its primary function*" (Akrich, 1998). For example, someone raising a table to adapt it to his physiognomy.
- Extension: *"We speak of extension when a device is pretty much preserved in its form and its uses but is added one or more elements that enrich the list of its functions"* (Akrich, 1998). For example, adding wheels to a table to be able to move it easily.

These two categories of action, in the case of digital platform, correspond to a modification of the platform code. This requires specifics skills not common among citizens. Moreover, the three platforms are programmed using proprietary softwares. The platforms codes are kept secret and no citizen nor city worker is allowed to change it. The modifications of the device according to Akrich will therefore not be observable in our studied cases but could be observed on platforms coded using free software.

Results

We have made a typology of citizens' modes of presence on participation digital platforms. To validate our typology, we confronted it with the results of other research: the participative budget of Paris "Madam Mayor, I have an idea" (Douay, 2016); Carticipe in Marseille, Strasbourg and Laval (Douay and Prevot, 2015); and "ordinary" political participation on YouTube (Babeau, 2014).

1) **The missing ones:**

Most citizens do not go onto the platforms. For CitizenLab (interview of 07/12/2017) the goal and success tag are to reach, in number of visitors on the platform, the equivalent of 10% of the city inhabitants. In Liège, according to CitizenLab numbers, the equivalent of 14,6 % of the city population has connected at least once to the platform. In Mons, it was 16,3% of the city population. It is important to note that this does not include the inhabitants of the living area, but only those of the city.

Moreover, the link between the number of visits and the number of visitors is not obvious. From the same IP address several people can go onto the platform, and different IP addresses can correspond to the same person connecting from different places.

The study of participation on "Carticipe" by Douay and Prevot (2015) also shows that a vast majority of citizens do not use platforms. On Carticipe Strasbourg, there were "*more than 12,000 visitors in 8 months and a half*", or about 4% of the city inhabitants. For Marseille, "*8000 people in 5 months*" which is 1% of the city inhabitants.

In the pursuit of this research, it would be interesting to carry out surveys to find out if these absences are voluntary or unintentional. The voluntary absence is close to Hirschman "Exit" strategy. On the other side, the involuntary absence could be linked to a lack of communication around the platform or to the digital divide.

2) **The viewers:**

They visit the platform but do not create an account. Thus, they can read the posted ideas, but they are not allowed to comment or like. In Liège, the equivalent of 14,6 % of the population of the city has connected to the platform, but only 2.5% have created an account. Therefore, around 5/6 of the people who came to the platform chose not to participate. In Mons, it is around 14/15 people who visit the platform without participate. The same phenomenon occurred with Carticipe: "The proposals filed on the map interested an average of 15 "curious" for 1 active contributor." (Douay and Prevot, 2015).

It would be interesting to investigate the reasons for this non-involvement after visiting the website, for example using semi-directive interviews with participants. It can be a strategy of exit and boycott of the process, or a "displacement" according to Akrich, if they use the platform as an informative tool and not a participative one.

3) **The pragmatists:**

They give mostly "likes" or make one or two very short, realistic and in-frame proposals. These are the "perfect" participants from the designers' point of view because they respect all the rules. Their behavior is similar to Hirschman's concept of loyalty. The share of pragmatists

doing only likes is very high: 93% in Liège and 73% in Mons. The difference can be explained by a two-step process in Liege (proposals only then votes only), while in Mons it was possible to vote and propose ideas throughout the process. The choice to use only the “likes” can be explained by a lack of time to be more invested, or a shyness in writing, as demonstrated by Babeau in his analysis of the use of “likes” on YouTube (2014) "*These may be individuals who do not have the verbal skills to articulate complex thinking and who are fully reflected in some comments. They then access by this means [likes] to the scriptural existence. Internet users who do not want to invest in writing a message that is too expensive in terms of time and know-how can use this method to participate in the discursive exchange. The "like" is therefore an additional tool to express his ideas, which still has the advantage of ordering a visibility usually governed by the most talkative or clever.* "

4) **The omnipresent**:

They master the platform and they are connected on it regularly. They suggest ideas that respect the framework but in very large quantity. In Liège, 3 participants suggest more than 50 ideas each, for a total of 169 ideas (17%). On Mons' platform, the top three participants posted 185 ideas (25%) and the top one 117 ideas (15%). It could be a "displacement" (Akrich, 1998) of use by some citizens, for social recognition. This phenomenon is amplified in Mons and Liège by a ranking of citizens according to their number of ideas submitted, on both platforms home page. At La Louvière, there is no ranking of the citizen. We still observed the same phenomenon in smaller proportions. Of the 216 ideas, the largest contributor suggested 26 (12%) and the three most prolific contributors submitted a total of 53 ideas (25% of La Louviere ideas). To limit this phenomenon, which is detrimental to the democratic process, the number of possible proposals per citizen could be officially limited, in order to favor quality over quantity. This could be enough because the profile corresponds to people respecting the fixed framework.

This profile is also found on Carticipe (Douay and Prevot, 2015): "*Thus, the main participant, Hugo Lara, alone accounts for 28 proposals, or 6% of all. Similarly, 10% of contributors proposed 44% of the ideas*".

5) **The dreamers:**

They make idealistic proposals, sometimes very original and unrelated to the financial and technical realities. For example: to put the city under dome (Liège), to move only on foot and on horseback (Mons), kart race in the city (Liège), gondola on the canal (La Louvière), organize a universal exhibition (La Louvière), landing strip for UFO (Liège) ... Their proposals do not gather many votes but almost only negative votes, because a mechanism of social control is set up by the pragmatists and omnipresent. Technical support from the city could help "dreamers" to adapt their proposals to field experiences and realities.

6) **The off topic:**

They make proposals that come out of the topics planned by the city, while remaining realistic. It is often more political subject, for example the reduction of advertising space; free public transports; free shelters for homeless people; ... Some of these proposals are popular. In Liège, when the city reorganized the ideas in category before the voting phase, 50 proposals (5%) was put in an "unclassifiable" category. 11 off topics ideas collected more than 100 likes each, and the most popular one, "Liège without ads" has collected 208 likes. This idea ranks 75 out of 988 in number of like received. However, none of the unclassifiable ideas became part of the 77 priority actions to be carried out. Douay (2016) did a similar observation in his analysis of Paris participatory budget: "*This [framework] limits interest to participate as the public is*

regularly confined to micro local debates and that the really political and therefore often controversial issues are not the subject of consultation".

Therefore, it would be interesting to open the dialogue and to authorize ideas outside the predefined topics (for example with a category "other topics"), followed by a possible integration of these ideas in the city plan.

7) The discontented:

They make a single proposal "rants and raves" against the policy or the administration. They do not invest otherwise on the platform, no likes nor comments. This is a "hijack" defined by Akrich because the discontented use the platform for another reason of its original function: express their discontent against institutions of all levels. For example: "no VAT reduction for photovoltaic panels on new homes", "no police actions to enforce an 30 limited area ", "impossibility to contact municipal services by email", "need to change the majority of the city council" ... Providing a dialogue space between the city and the citizens seeking to be heard could be an interesting "extension" (Akrich) for the platform, an additional functionality that meets the expectations of some citizens. La Louvière' platform is currently evolving in this direction. Fluicity is adding alternative options to idea submission (see figure 2 below): Soon, users will have the opportunity to ask a public question or send private messages to the administration. Thus, platform providers are aware of certain limitations of their tool and in a continuous improvement dynamic.

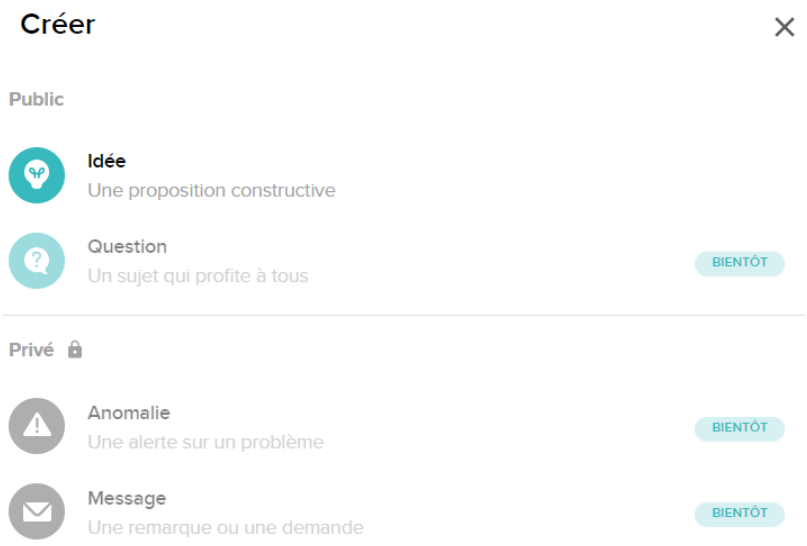

Figure 2 - Alternative options under development on La Louvière platform, July 2019, Fluicity.

Conclusion

We studied appropriation forms, by the citizens, of digital platforms for participation in city plan. Our analysis of "Tomorrow, Mons", "Let's Reinvent Liege!" and "What will your "La Louvière" looks like in 2040? " allowed us to sketch a typology of citizens' modes of presence. We made a summary graph of them (see figure 3 below).

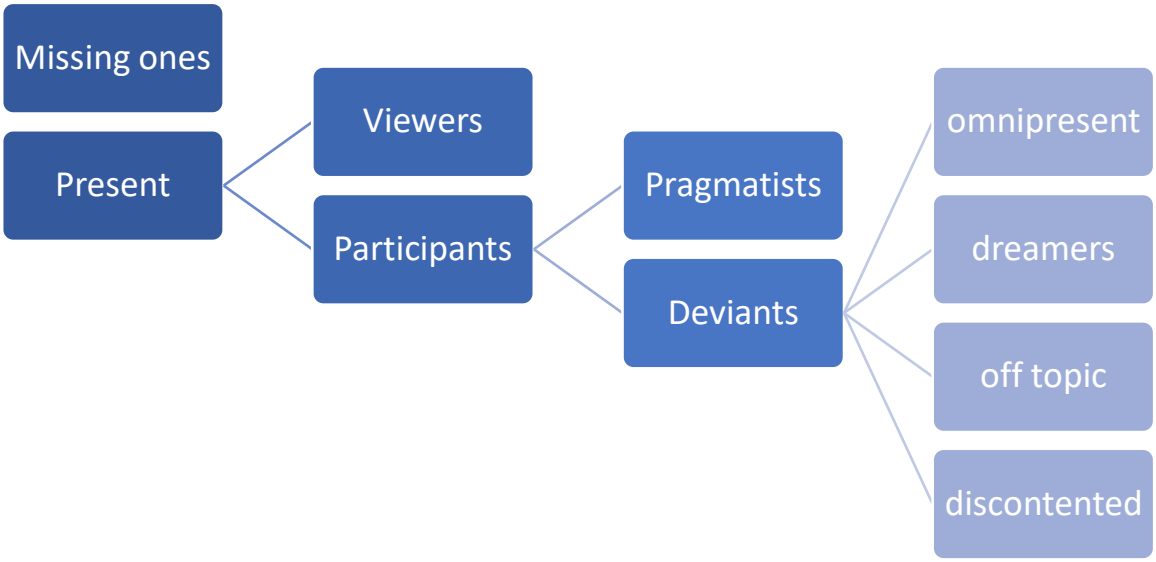

Figure 3 - Summary graph of the typology of Citizens' modes of presence, N. Lago, 2019

As with other participation tools, the main issue is the low participation rate: more than 90% of citizens do not visit these platforms. Two lines of work are possible: improving communication and adapting platforms to citizens expectations. Identifying the modes of presence leads to options for adapting platforms to the citizens' needs, which are partly expressed by "deviant" behaviors. For example, to reduce the hold on the process of the "omnipresents", platforms designers could limit the number of possible proposals per citizen. For the "dreamers", the city could give some advice, number and technical information to adapt their ideas. For the "discontented", platform could offer a dialogue space with the city, in parallel with the idea platform. For the "off-topics", the platform could propose an "other subjects" topic, for ideas that do not fit into the topics chosen by the city.

To confirm the typology and better understand citizens motivations, we would like to continue this research with a series of semi-directive interviews of citizens. In addition, we would like to go beyond certain limits encountered. For example, access to the personal data of the participants, anonymized off course, would allow us to associate profiles to the modes of presence. It would also be interesting to be able to check the data provided by the platform providers (number of visits, accounts created, ...). To this end, we are working to set up closer collaborations between researchers, cities and platform providers, in compliance with the RGPD and professional secrecy.

Bibliography

Akrich M. (1998). Les utilisateurs, acteurs de l'innovation. *Education permanente*, n°134, p.79-89

Babeau, F. (2014). La participation politique des citoyens « ordinaires » sur l'Internet : La plateforme YouTube comme lieu d'observation. *Politiques de communication*, 3(2), 125-150. https://www.cairn.info/revue-politiques-de-communication-2014-2-page-125.htm.

Douay N. (2016). La numérisation des dispositifs de participation de la Mairie de Paris, *Netcom*, 30-3/4, 249-280.

Douay N. & Prevot M. (2015). Reconfiguration des pratiques participatives. Le cas de « Carticipe ». *Traces numériques et territoires.* 239-247.

Gourgues G. (2013). Les politiques de démocratie participative, Presses Universitaires de Grenoble.148 p.

Hirschman O. (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*, Harvard University Press. 162p.

Mazeaud, A., Sa Vilas Boas, M. & Berthomé, G. (2012). Penser les effets de la participation sur l'action publique à partir de ses impensés. *Participations*, 2(1), 5-29. doi:10.3917/parti.002.0005.

Monfaredzadeh, T. & Krueger, R. (2015). Investigating Social Factors of Sustainability in a Smart City. *Procedia Engineering*, 118, 1112–1118. https://doi.org/10.1016/j.proeng.2015.08.452

Zaza O. (2016). L'e-gouvernance pour la participation citoyenne : imaginaires du futur, nouvelles compétences et impacts territoriaux, *Pyramides*, 26/27, 163-190.