Bachelor Thesis Project
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Paris en Commun, an uncertain green future for Paris: a study case of the 18th district



Cover image: Vision of the Place Concorde (PCM-STREAM, 2020)

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Summary

The pandemic of COVID-19 pushed cities to change their structure and their inhabitants' lifestyles. Paris en Commun is a plan first introduced in 2020 to turn Paris into a green city, where biking and walking would be the priority over cars. However, as Paris has many districts, opinions about this plan might diverge. This thesis will try to answer the following question: *How can Paris en Commun be used to create a sustainable city without social inequalities?* The study case will be focused on the 18th district, the largest district, situated in the North of Paris, close to the Northern suburbs. To answer this question, interviews were conducted, and a survey was sent to the inhabitants of the 18th district and its close surroundings. Through this paper, we see how the sentiment towards Paris en Commun is very contradictory: while everyone wishes for a greener and more equal city, they doubt the feasibility of the plan and fear that worse consequences might come from it.

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Introduction

Background

Since 2020, the world had to change drastically because of the COVID pandemic. Cities and their inhabitants had to switch to a new lifestyle where going outside could be a risk for their health. Due to this, the way cities were organized had to be transformed into safer places to be. During those times, car travel had to be limited and more room was given for bikes (Moreno et al., 2021). Indeed, it was noticed that having new bike lanes helped improve the population's health, all while following the restrictions linked to the pandemic, and even creating sustainable habits. Those solutions, first temporary, had such success that they are now often considered long-term solutions, to create greener and healthier cities.

This thesis will be focused on Paris en Commun, a project aiming to transform the capital of France into a green and safe city for its inhabitants. This plan, following the principles of the 15-min city, was presented by Anne Hidalgo, the re-elected mayor of Paris in 2020 (Paris en Commun, 2020). However, even though the project was advertised to its population, there is still a lack of academic research about the project, its possible effects and consequences, and the opinion of Parisiens. As they will be the ones to experience the aftermath of this plan, it is important to assess their point of view, fears and doubts. This research aims to understand the opinion of the inhabitants of Paris, and will try to give an overview of Paris en Commun through the eyes of the people living in the city. As Wolf (1982) explains, it is important to assess the opinion of a population towards a plan as "those who reap the benefits [should] also bear the costs, [it] is a matter of social justice and social policy" (p.13).

Finally, Paris is a large city with many different districts, this thesis will focus on one: the 18th district situated in the North of the capital. This district is known to be poorer than the rest of the city, therefore their needs and concerns will differ from those living in another district. In our case, social inequalities are to consider as it is heavily impacting the lives of the 18th district's inhabitants, whether it is about the lack of proper and affordable housing, gentrification, the lack of job opportunities... If Paris en Commun is aiming to create a green and sustainable city, there is also less research about the effect it will have on social inequalities. This plan should consider how each district has different needs, and the 18th district might benefit from Paris en Commun but it should not increase the social inequalities its inhabitants are facing, even better, it should consider it and find ways to help to reduce those inequalities.

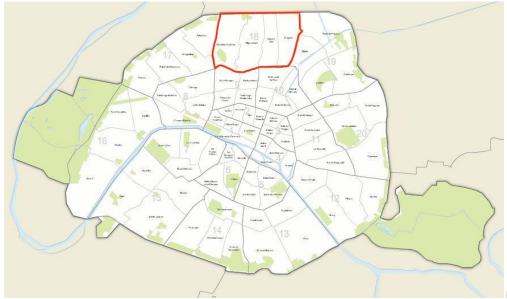


Figure 1. Map of Paris and

its 20 districts (Vivre Paris, 2020)

Research Problem

This thesis will answer the following research question:

How can the project **Paris en Commun** be used **in the 18**th **district** to create a sustainable city without social inequalities?

To answer this question, the following sub-questions have been formulated:

- What is the opinion of the 18th district's inhabitants regarding Paris en Commun and the current inequalities?
- How can ecological sustainability and social equality be reached through the plan of Paris en Commun?

Structure

We will first set a theoretical framework to understand the important concepts surrounding the research question. Secondly, the way data was collected will be explained. Then, the results will be analyzed and discussed. Finally, the conclusion will answer the main research question and its secondary questions. The last part of this thesis will be the discussion of the findings in relation to other academic literature and give further recommendations.

Theoretical Framework

Social inequalities

The 18th district is known to be two-faced. On one hand, La Butte Montmartre is a touristic destination for many visitors, where they can enjoy the impressive church Sacré-Coeur, walk in the small and intimate streets, meet street artists, etc. On the other hand, outside of this area, the 18th district is considered rather poor and in need of better care. Because of this contrast, the 18th district is heavily affected by social inequalities. We define social inequality as when someone has less chance, or opportunity than someone else because of their social class, economic status, revenue, education level, housing situation, etc (Duvoux, 2021). According to the official website of En Marche (Buzyn, 2020), the presidential campaign of Emmanuel Macron, the 18th district has the most substandard housing in Paris, and 10,7% of its population is poorly accommodated (compared to an average of 8,6% for the city of Paris). Moreover, the 18th is the leading district with the highest rent increase, with a growth of 34,5% in the past 5 years. This is caused but also reinforced by the French concept of embourgeoisement. This concept is very close to the English term gentrification, meaning that there is a renewal of the social and demographic composition of an area to the benefit of more affluent households. This process has affected Paris even more after the 1990's when more wealthy households moved to the capital, which led to an increase in rents (Fleury et al., 2012). The Northern districts were particularly concerned by this process of gentrification, which forced poorer households to leave to capital and move to the Northern suburbs. Figure 2 shows how, even with the process of gentrification, the north part of the 18th district is still the area with the lowest median household tax income (Piketty, 2016). The only blue part in the 18th represents Montmartre, the wealthy area of the district. As we see in the 2020 campaign En Marche, this is still an issue for the 18th district nowadays. The poverty rate there is 23,3%, or 7.1 points higher than the Parisien average. Along with the 19th district, the 18th district is the only district considered a Priority Intervention Zone (Zone d'Intervention Prioritaire or ZIP in French). Those zones tend to have a lower education level, higher unemployment rate, and an important population without diplomas.

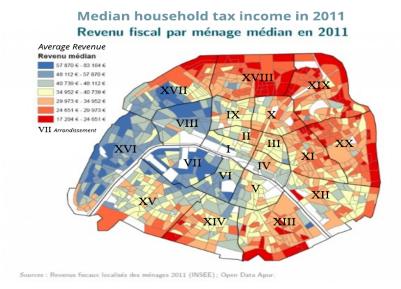


Figure 2. Median household tax income in 2011 (Piketty, 2016, translated by author)

Social Impact Assessment

The goal of this thesis is to understand the population's opinion on Paris en Commun and the effect that it will have on them. To assess this, we will make use of a Social Impact Assessment, specifically the one based on the IOCGP's (1994) "Guidelines and Principles For Social Impact Assessment". This assessment is made with the goal of having a "better understanding [of] the social consequences of projects, programs and policies" (p.2). This report shows how to assess the social impact during the development of a project. In our case, we focus on Stage 1, Planning/Policy Development, as Paris en Commun is not yet fully in the stage of construction or implementation. The other component of this SIA is to select which variables to focus on. The report introduces 5 variables: population characteristics, community and institutional structures, political and social resources, individual and family changes, and community resources. In our thesis, the following two variables are most important as we are looking at the opinion of the individual and the community living in the 18th district.

- 4. Individual and Family Changes refer to factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friend-ship networks. These changes range from attitudes toward the policy to an alteration in family and friendship networks to perceptions of risk, health, and safety.
- 5. Community Resources include patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Under this collection of variables we also consider possible changes for indigenous people and religious sub-cultures.

Figure 3. Variables from the IOCGP Social Impact Assessment Guide (1994)

A Social Impact Assessment also helps answering the question "Who benefits and who loses?" (Wolf, 1982, p.12) as the answer usually shows inequalities. This question is also important as it can help the planners to consider different scenarios or plans leading towards more equity and (social) justice. Wolf (1982) explains that the need to assess the social impact of a plan or policy "has arisen because of the unwanted and untoward impacts (side effects and spillovers) of planning approaches that looked good at the time but didn't turn out so good" (p.12). Finally, Burdge & Vanclay (1996) affirm that SIA is necessary for the success of a project and can prevent the failure of a plan.

Paris en Commun

In 2020, cities had to face the COVID-19 pandemic and the consequences it had on its population and their daily lives. Pisano (2020) explains that because of the situation, cities had to consider the concept of Epidemic Prevention Area (EPA) proposed by the Urban Heritage Conservation and Sustainable

Development Research Team, the School of Architecture, Southeast University (SEU), China, the SEU Key Laboratory of Urban and Architectural Heritage Conservation, the Ministry of Education, China, and the UNESCO Chair in Cultural Resource Management. They defined an EPA as an "integrated urban functional and spatial responding system, meant to face the epidemic thanks to the optimization of its present and local resources: Spaces, functions, and community" (p.5). This system follows three strategies (see figure 4):

- 1. Decentralization of facilities
- 2. Hierarchization of the transport system and public services
- 3. Redundancy of public and semipublic functions

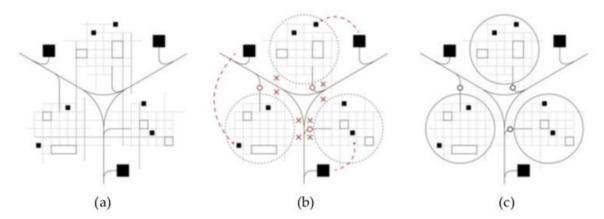


Figure 1. (a) Conceptual urban system before the pandemic spread: The highway system ensure accessibility to the different districts; the districts are connected between each other through secondary roads; health facilities (large and small squares) are mainly not specialized; (b) during pandemic spread, the epidemic prevention area (EPA) system is established: The main accesses of the districts are controlled; secondary connections between districts are not allowed; a clear hierarchy between health facilities is established; (c) both sanitary and life supporting networks could be arranged to limit connections at the city scale. Source: Author derived from the examples presented in the "Urban Function-Spatial Response Strategy for the Epidemic—A Concise Manual on Urban Emergency Management" [14] in particular from the case study of Shenzhen (pp. 17–19).

Figure 4. Cities using the EPA concept, retrieved from Pisano (2020).

The 2020 campaign of Hidalgo, mayor of Paris, became a post-covid strategy following those three points and introducing the 15-min city concept in her project Paris en Commun. Moreno, Hidalgo's adviser, developed the concept of the 15-minute city in 2016 and described it as a city where "locals are able to access all of their basic essentials at distances that would not take them more than 15 min by foot or by bicycle" (Moreno et al., 2021, p.100).

Figure 5 is present in Hidalgo's brochure of Paris en Commun, illustrating how one could live, with all necessities within 15 minutes of walking or biking. According to Moreno et al., (2021), the main urban social functions to sustain a decent urban life are the following: living, working, commerce,

healthcare, education, and entertainment, which are all present in the 15-min cycle presented by Hidalgo.

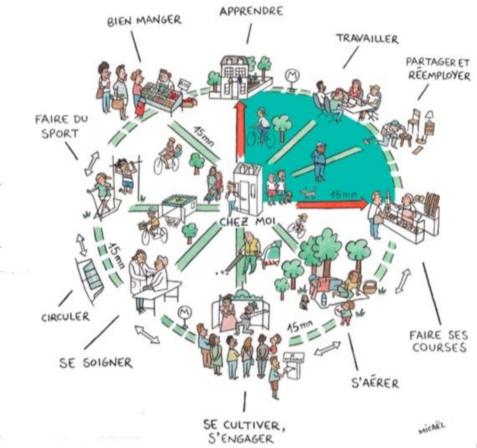


Figure 5. The 15 minutes cycle is

illustrated in Paris en Commun brochure (2020). From the top, then clockwise: Learn, Work, Share and Employ, Shopping, Take a breath of fresh air, Cultivate and engage yourself, Take care of your health, Mobility, Work out, and Eat well (translated by the author).

We can also see how this concept follows the strategies of the EPA with the separation of functions and the accent put on public transport, bicycles, and pedestrians rather than cars. Moreover, Moreno et al., add that the 15-min city is also focused on other dimensions: "promoting social interactions and citizen's participation and addressing automobile dependence by emphasizing on proximity of all basic services" (2021, p.97), but also ecological sustainability.

The two dimensions of sustainability

As this concept is important for the 15-min city, we need to look at it more in-depth. First, we define sustainability as "the limits placed on the use of ecosystems by humans, or more specifically to the way in which resources can be used to meet changing future needs without undermining the natural resource base" (Fresco & Kroonenberg, 1992). Furthermore, ecological sustainability is one of the two main dimensions of sustainability along with societal/human sustainability. Nilashi et al. separate the two, as one dimension considers "land, water, air, and biodiversity indicators", while, the other focuses

on "economical, social, educational, and political indicators" (2019, p.2). This is important for us as reaching sustainability is the major goal of Paris en Commun.

Paris en Commun is fully described in its brochure, written by Anne Hidalgo and Jean Jouzel, a climatologist, for the election of the mayor of Paris in 2020. The project is divided into several different dimensions: Ecology, Solidarity, Proximity, and Commitment. The first three dimensions address issues linked to ecological sustainability while the fourth one is more focused on societal sustainability.

Hidalgo defines ecology as the core of her project. In the brochure, she aspires for a greener city by adding more parks in each district of Paris to let the city breathe and give its inhabitants more places to walk and enjoy nature (see figure 6). Paris en Commun puts the accent on increasing the public transport network while promoting biking and giving more room to pedestrians. Indeed, leaving more room for bikes and pedestrians rather than for cars will drastically help to reduce pollution in the center. Even more in urban areas, motorized vehicles have serious and negative effects on the environment and its population, mainly because of air and noise pollution (Otero et al., 2018). Indeed, according to the European Environment Agency (2010), traffic is the most important source of noise pollution and is the cause of 70% of the environmental pollution in European cities.



Figure 6. Map of Paris in 2024 filled with bike lanes (dark green) or traffic-calm roads for bikes and pedestrians (light green), (Paris en Commun, Hidalgo, 2020).

The Solidarity dimension considers both ecological and societal sustainability. The main goals are to offer affordable housing to the population, especially for students and the elderly, to make Paris a zero-waste city, and to have more eco-friendly housing. The Proximity dimension is the one relating to the 15-min city concept explained previously. Finally, the Commitment dimension is fully directed toward societal and human sustainability as it promotes universal accessibility, equality of genders, more employment opportunities, a safe environment for the LGBTQIA+ community, and more... Even though

those goals do not participate in making the city more eco-friendly, they are essential components for the inhabitants of the city to feel safe.

However, Fresco & Kroonenberg (1992), specify that, when making decisions about sustainability, it is essential to consider different alternatives and scenarios in their context, spatial and temporal aspects. We see how the brochure presents the project with a biased and commercial point of view where the opinion of the inhabitants is not taken into account, nor are the possible negative side effects mentioned.

Conceptual Model

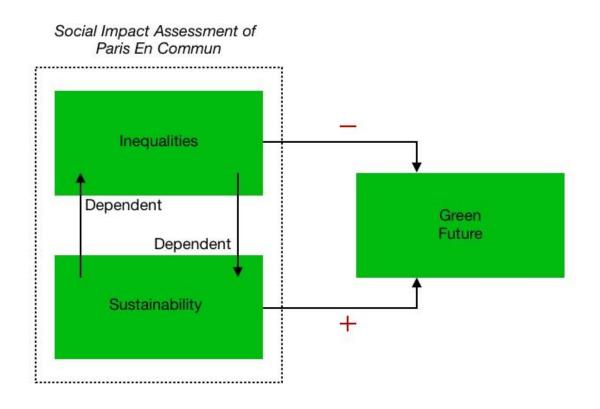


Figure 7. Conceptual Model, Author, 2022

The conceptual model (figure 7) above shows how each variable of this thesis is related to each other. The Social Impact Assessment of Paris en Commun is related to two dependent variables: inequalities and sustainability. This assessment will evaluate both variables, what defines them, and what can affect them, for the better or worse. However, one is positive, as we want Paris, and more specifically the 18th district, to be more green and healthy for its inhabitants, but the other is negative, accordingly, we want to have fewer inequalities in the future. The increase of one and decrease of the other should result in a Green Future for Paris and its districts' inhabitants.

Methodology

To answer the research question, qualitative data will be used through semi-structured interviews and a survey targeted at the inhabitants of the study area: the 18th district.

Interviews

For this thesis, interviews are needed to properly assess the impact of this project on the population of the 18th district. Compared to structured interviews, semi-structured interviews allow a more open discussion. McIntosh et al. (2015) defined semi-structured interviews as a way to "ascertain subjective responses from persons regarding a particular situation or phenomenon they have experienced" (p.1). The questions in semi-structured interviews are developed as the conversation with the participant goes on, which allows having various types of sub-questions and answers in each interview with, however, a prepared set of questions for a start. This set was prepared in the early stage of this thesis, and the questions were based on the IOCGP's (1994) "Guidelines and Principles For Social Impact Assessment". For this thesis, the interview questions will be based on the last two variables, Individual and Family Changes, Community Resources (IOGCP, 1994), as well as Wolf's (1982) model.

Question	Assessment Step
What is the problem? What is causing it?	Problem Identification
What is the system? Who is being affected?	Profiling
What is causing?	Projection
What difference does it make?	Assessment
How do you like it?	Evaluation
What can you do about it if you do not like it?	Mitigation
Who benefits and who loses?	Bottom line

Table 1. Wolf's (1982) model of SIA

A significant disadvantage of semi-structured interviews is, as Adams (2015) explains, that they are time-consuming as they ask the researcher a lot of work before the interviews, preparing the questions, and during the interview could last between 15 to 30 minutes. As for the analysis of the data,

the interviewees' answers will first be put into categories according to the question asked. Once every answer is grouped into themes, conclusions can be drawn.

As a French person myself, I will use my informal network to find suitable interviewees. I will send an email to someone I know for a first interview, and this same person will share a post about my need for more interviewees on their social media since they know more suitable people. I gathered 3 interviews. However, those interviews took place online as I could not make the trip to Paris during the process of my research. Those interviews will support my thesis in understanding how Paris en Commun would affect the daily life of the inhabitants of the 18th district. To act ethically, it is crucial to be transparent about the intentions and objectives of this research, in addition to the provision of transparency of the data collection process and data analysis. Before conducting the interviews, interviewees were asked for consent. The consent form can be found in Appendix 3. The interviews are not recorded but intensive notes are taken with the consent of the interviewee. The answers and the personal information of the interviewees must be handled with care, responses are therefore anonymized. Solely, general information about the interviewee is described. This does not affect the quality of the research, given that this information is not relevant. The information derived from the interviews will not be used for any other purpose that is stated beforehand.

Survey

To add to the interviews, I want to send surveys to get a general idea of what the inhabitants of the 18th district, and its close surroundings, think of Paris en Commun. To gather data, I sent the survey to my network which also relayed the survey to their network. This is referred to as snowball sampling, as Etikan et al. (2015) describe "This initial subject serve as 'seeds,' through which wave 1 subject is recruited; wave 1 subject, in turn, recruit wave 2 subjects; and the sample consequently expands wave by wave like a snowball growing in size as it rolls down a hill" (p.2). Later in the paper, the authors address the danger of snowball sampling. Since respondents are recruited through personal networks, they might have similar characteristics which would not be as interesting for my research. To counter this, I send the survey to two very different personal networks, that way the respondents' characteristics will be more varied.

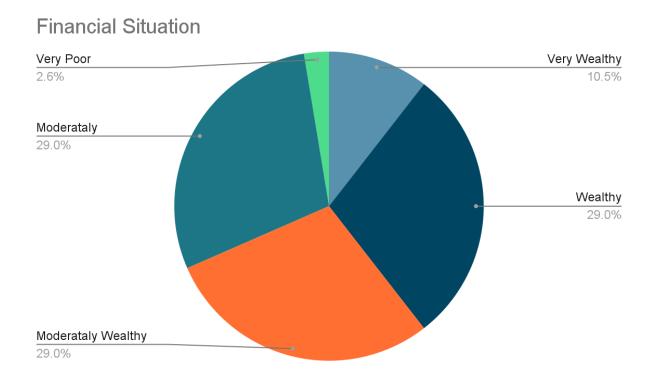
However, the main disadvantage of open-ended questions in surveys is the loss of opportunity to ask clarifying questions (Hennink et al., 2020). On the other hand, it takes less time to receive answers and can have more data to make conclusions. I received 40 answers from the various category of people which was interesting for me to analyze. Once the data was collected, I had to create graphs describing my respondents with different criteria: their age, gender, and financial situation. Later on, I sorted the open-ended answers with similar ideas to have a general idea of what the inhabitants think of Paris en Commun and then draw a conclusion.

Results

In this section, the results from the survey and the three interviews will be analyzed and discussed. The details of the question can be found in Appendix 1 (Interview Guide) and Appendix 2 (Survey Questions).

Presentation of the respondents

Out of 38 answers in the survey, 75% of them lived in the research area, the 18th district, or its close surroundings. Even though the age category is not a variable necessary for this assessment, it was interesting to see that people of all ages answered this questionnaire, meaning that it reached people with different characteristics. To link Paris en Commun to social inequalities, the fourth question was about the financial situation of the respondents. In the graph below, we can see how the respondents all come from different social classes.



Graph 1. Respondents' financial status (Author, 2022)

This graph is important as we want to assess the population's opinion on Paris en Commun in regard to the presence of social inequalities in the 18th district. We see here that most of the answers are between Moderetaly and Wealthy, so we have to consider that the opinion following is about this category of people, and we cannot overlook that the other social classes might have a different point of view towards this plan.

As for the three interviewees, one considered themselves moderately wealthy, another one moderately, and the last one answered they viewed themselves as "I would say I am in the middle to low class" (Respondent 3). As they wished to keep their anonymity, they will be referred to as Respondents 1, 2, and 3 (or R1, R2, and R3).

The importance of social inequalities in the 18th district

When the interviewees were asked about the presence of social inequalities, they all referred to the prominent gap between the rich and poorer areas in the district. R2 pointed out that the clear cut is between Montmartre and the rest of the 18th district while R3 stated that "you can feel it when walking around, from one street to another, there can be a clear difference". However, none of the interviewees noticed another prevalent type of inequality within the 18th district. When asked if they thought of any reason why this was the case, they all agreed that the 18th district is the largest and most densely populated district in Paris, and each area is separated from the other one. Being close to the Northern suburbs, known to be less wealthy than the rest, was also, according to them, a factor in the importance of social inequalities in the area.

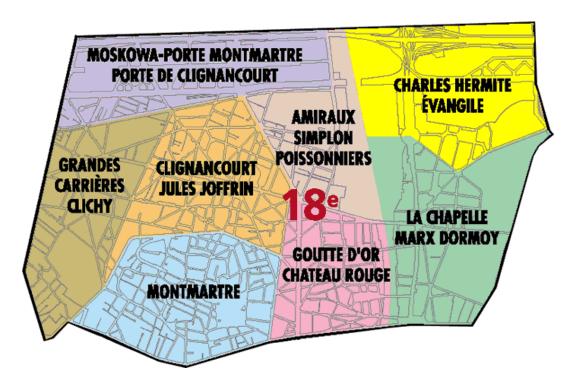


Figure 8. Map of the 18th district (Etchebers, 2014)

Finally, they were asked if they had any thoughts on how those social inequalities could be reduced. Both R1 and R3 could not find an answer but R2 expressed that helping those in poor housing

conditions could already improve the condition of most areas in the 18th district. Moreover, they added that improving the aesthetic quality of the northern areas could maybe make them cleaner, thus safe.

Commuting in Paris

An important factor in the daily life of the inhabitants of the 18th distinct is their daily commute. In the survey, respondents were asked which transport they use the most in their daily commute. As expected, the subway is the main transport used (60%) but, as the question was multiple choice, 58% of the respondents answered that they walked most of the time to reach their needed destination. Moreover, a very small percentage of them used a car: 5% said they used their car, and 8% used a taxi for their daily commute. Finally, 43% of the respondents replied they used the bike. This percentage is quite high as, in 2014, only 1,6% of trips were made by bike in Île-de-France (the region in which Paris is located) (Eloy & Derré, 2014). Indeed, compared to other European countries, France still scores low in the daily usage of bikes. In the European Union, France is 12th on the ECF's (European Cyclists' Federation) Cycling Barometer (Mispelon, 2015). This cycling barometer takes into account five variables: cycling usage, road safety, cycling tourism, the state of the market, and the size of the recognized cycling advocacy organizations. Moreover, Eloy & Derré (2014) note that 92% of bike trips are made for a distance of less than 5km which is mostly due to the lack of proper infrastructure in the center. Following this, respondents affirm that most of their daily trips last less than 20 minutes and essentially stay within the center rather than in the suburbs.

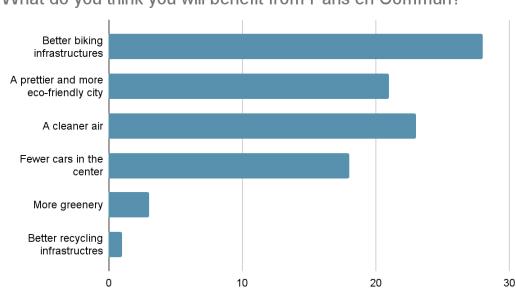
The hope for a greener 18th district

Seeing how the use of cars is little compared to the use of public transport, bike, or even walking, we would expect the opinion of the respondents to be rather positive concerning Paris en Commun.

Only one interviewee knew about Paris en Commun. After a short explanation of the plan, they all had a positive answer towards the plan, saying it would be good to have more greenery in the 18th district. R3 adds that having a new park next to where they live could be useful, especially as they have children. Indeed, most of the parks in the 18th district are centered around Montmartre, the wealthier area, while the other areas only have access to smaller parks, with less greenery.

In the final part of the survey, respondents were asked if they knew about this plan. Surprisingly, only a few knew about Paris en Commun thanks to the news or Anne Hidalgo's campaign in 2020. After briefing and explaining the plan, the answers were partly positive: "Excellent project", "Good intentions, Paris is loud and lacks greenery", and "There is indeed a lack of parks in the 18th district" (Anonymised respondents, translated by the author from French to English, 2022). If the answers were positive, many of them were skeptical and even though they agreed that the plan was a pleasant and needed idea for Paris, they doubted its implementation. Similarly, when asked about the increase of public transport and bike infrastructures despite the use of cars, they largely expressed content. As we can see in Graph 2,

better biking infrastructures are what they think will be the most beneficial for them. With this, we can expect then an increase in bicycle usage in the future.



What do you think you will benefit from Paris en Commun?

Graph 2. Benefits of Paris en Commun according to the respondents (Author, 2022)

The many doubts of the inhabitants of the 18th district

Despite their clear interest in this plan, the respondent all had doubts regarding Paris en Commun. The most recurrent one is that it would be hard to put in place. They often described it as a "utopian project" and that it did not take into account the suburbs enough. Indeed, if Paris banishes cars from the center, the periphery would then be very congested (Berroir et al., 2018). According to this Berroir et al.,'s study case, Parisiens, and people living in the close suburbs, are strongly attached to their cars as it is the fastest and most efficient way of transport while also being able to choose when to use them. The authors explain in their article that most Parisiens value their time, thus choosing the car over public transport will bring them quicker to their destination. We see how the use of the car is an individual choice, even when acknowledging the advantages of a city center without cars (less pollution, more space for other means of transport), efficiency and speed are preferred (Berroir et al., 2018).

Additionally, the interviewees doubted the feasibility of the plan, affirming that "it looks good on paper, I wonder how it will actually look like in real life" (R3). R1 and R2 answered that Paris en Commun is very utopic and that the goals might be too ambitious to implement in a city like Paris. R3 added that, as someone that uses the car daily to travel between Paris and the suburbs, they feared that it might

make their daily commute more complicated and that more congestion will only lead to more pollution, which would counter the main purpose of Paris en Commun.

Another concern respondents expressed was how the implementation and maintenance of this plan would affect their daily lives. First, the construction work can block many roads, but also create noise pollution. And, later on, the maintenance of the project would ask a lot of time, which could engender high costs.

Finally, another crucial worry was how Paris en Commun could easily lead to another wave of gentrification. As seen previously in this essay, gentrification has been an issue for the 18th district which created important gaps in the population between rich and poor.

- A: "It would create an area in favor of the rich and tourists"
- B: "increase in rents and/or social inequalities"

C: "the city could easily turn into an attraction and become a city of tourists rather than a city for its inhabitants"

Undeniably, it has been seen that when an area becomes more attractive, the rents will increase, forcing the current inhabitants to leave. As Rigolon & Németh (2019) explain, there is an effect called "environmental or ecological gentrification" (p.404). This means that often when the environmental quality is improved in middle-to-low-class areas, it will attract a wealthier population which will push the rents to increase. Due to this, the current living population, not being able to afford their housing anymore, will cause them to leave. Another consequence is the "sense of psychological displacement, as many of their social support networks are erased from their neighborhood" (Rigolon & Németh, 2019, p.404). Gentrification is already an issue for the 18th district that is slowly becoming more popular, so Paris en Commun could encourage this gentrification if precautions are not taken.

In the last part of the interviews, they were asked who they thought would benefit the most and who would be the 'losers'. One common answer was that they hoped there would not be such a contrast. R1 argued that the poorer population of the 18th district should be the ones to benefit the most as they are more in need: "Creating more green spaces in those areas might make it less dense, thus give more room for the people living there" (R1). R2 and R3 had similar answers, saying that the richer areas like Montmartre might be the 'winners' in this plan, as they will be able to adjust more quickly, while the poorer areas, more used to car travel, will need more time. R3 hoped that, if public transport is well structured enough, deserving the 18th district equally, then the switch towards a no-car-city might be easier. Finally, a respondent of the survey noted that Paris, and France in general, is not yet used to having many cyclists in the center, like the Netherlands or Denmark. Because of this, they feared some collusion could happen, so a time of adjustment, and rules should be quickly added so that the streets are safe for pedestrians and cyclists.

Conclusion

We saw through this thesis how delicate the case of the 18th district was. As they have been dealing with more social inequalities than other districts, the plan of Paris en Commun gave very mixed feelings to the respondents of the survey and interviews. Indeed, this project is focused on Paris itself, forgetting the different identities of each district. For Paris to still be sustainable while not increasing, or even reducing social inequalities, the population needs to be listened to. As everyone's needs are varied, priorities might also not be the same. We understood how the inhabitants of the 18th district were pleased with this plan and all agreed that sustainability was important for the city and greenery should be more present in the center. Moreover, they all agreed that a city without a car would be beneficial and that, as long as the public transport network is well structured enough, commuting in Paris would become more ecologically friendly and more pleasant. However, the fact that most of the respondents agreed that it was a utopian plan is worrying. As seen in the brochure, Paris en Commun is presented as a commercial good, only expressing its good sides. The risk of increasing social inequalities is still here. As Moreno et al. (2021) and Pisano (2020) explain in their articles, Paris en Commun first has to facilitate the transition from a car-centric to a cyclist/pedestrian type of city.

However, we do think there is hope for Paris to become a greener city, and its inhabitants also are wishing for such a plan to work properly.

Discussion & Recommendations

It is important to note that this research was only made on a small portion of Paris about their opinion on the project Paris en Commun. As every district has its own identity, characteristics, and needs, further research should be done on each district and the opinion of its inhabitants. Moreover, Paris en Commun is well presented in the brochure but is omitting a lot of crucial points like the maintenance of the project, the effect it will have on the population, and its negative sides. More should be said on how exactly the plan will work and how it will be implemented.

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Appendix 1

Interview guide (translated by the author from French to English)

This interview is based on the Social Impact Assessment Guide by the IOGCP (1993) and Wolf's model (1982).

Introduction

Hello, thank you for taking the time to answer my questions. This interview will help me assess the possible effects of Paris en Commun on the population of the 18th district, as well as their opinion. This interview will last between 5 and 10 minutes, and your identity will be kept anonymous to the readers of this thesis. I will not record this interview, but if you allow me, I will take intensive notes about our discussion. There is a consent form you can sign if you agree to the terms. As we are not physically meeting, I will send it to you via email and you can sign it before we start the interview. Now that it is signed I can start asking my questions.

About Social Inequalities

First of all, as my study is not only focused on the environmental impact of Paris en Commun, but also the impact on social inequalities, I need to ask, if you are comfortable with the answer, how would you define your financial situation? (about *Individual and Family changes*)

Would you say, the 18th district is facing inequalities? If yes \rightarrow what type do you notice the most?

Do you think the 18th district is facing more social inequalities than other districts? If yes \rightarrow why do you think so?

Have you ever thought of a way of fixing, or at least reducing social inequalities in the district?

Within the 18th district, who would you say is benefiting the most? Bottom Line

Now that we defined social inequalities and their impact on where you live, I want to ask you questions about Paris en Commun.

About Paris en Commun

Firstly, have you ever heard of this project? *Problem Identification* If yes \rightarrow how?

If not \rightarrow give a short description of the plan: This project aims to transform Paris into a green and eco-friendly city. By creating new parks, urban forests, and vegetable gardens throughout the capital, the air will be clearer and pedestrians will enjoy walking closer to nature. In addition, the project aims to make Paris a city of cyclists by reducing the possibility of traveling by car in the center. Other objectives are also: a zero-waste city, universal accessibility, priority to working-class neighborhoods, affordable housing, etc.

What is your first thought about this plan? *Problem Identification* Could be negative or positive \rightarrow how so?

How will it affect you personally? *Profiling* (about *Individual and Family changes*)

Could be negative or positive → how so? *Projection*

Do you have any doubts about Paris en Commun? Assessment

Do you think this plan is a priority for the 18th district? Evaluation (about Community Resources)

What could be possible alternatives? Mitigation

What do you think you could benefit from this plan? Bottom line

Appendix 2

Survey questions (translated by the author from French to English)

Nice to meet you, my name is Maya, I'm a third-year student at the Royal University of Groningen, in the Netherlands, and I'm preparing my Bachelor thesis (Spatial Planning and Design). My thesis aims to evaluate the perception of Paris en Commun (explained further in the questionnaire). More specifically, I want to study the 18th district and the opinion of its inhabitants. If you live in this district, or even in the close surroundings, this little questionnaire will take you 5 to 10 minutes maximum, and will be very useful for me to continue my research.

This research concerns the 18th and its three bordering districts (17th, 19th, and 9th districts), if you do not live in one of these four districts, I thank you for your interest and would be grateful if you would share this link.:)

Also, if you are interested in the results of this survey, or you think someone else would be, you can give me an email address, and I will gladly inform you.

Sincerely,

Maya Perdriel

In which district do you live?

- 18th
- 17th
- 19th
- 8th

What category represents you?

- Less than 18 years old
- Between 19 and 25 years old
- Between 26 and 35 years old
- Between 36 and 45 years old
- Between 46 and 55 years old
- More than 56 years old

What gender represents you the most?

- Male
- Female
- Non-binary
- Other:

How do you define your financial situation?

- Very wealthy
- Wealthy
- Moderately wealthy
- Moderate
- Poor

- Very poor

What mean of transport do you use most often?

- Bus
- Subway
- Personal car
- Bike
- Foot
- Taxi
- Other:

How many times do you need to use a means of transport per day?

- One way-round
- Multiple times
- Multiple different means

In your daily travels, how many are within the center of Paris?

- One way-round
- Multiple times
- Multiple different means

How long are usually your daily trips?

- Less than 20 minutes
- Between 20 and 40 minutes
- Between 40 and 60 minutes
- More than an hour

"Paris en Commun" explained in less than a minute: This project aims to transform Paris into a green and ecological city. By creating new parks, urban forests, and vegetable gardens throughout the capital, the air will be clearer and pedestrians will enjoy walking closer to nature. In addition, the project aims to make Paris a city of cyclists by reducing the possibility of traveling by car in the center. Other objectives are also: a zero-waste city, universal accessibility, priority to working-class neighborhoods, affordable housing, etc.

Have you ever heard of this plan? If yes, how?

After reading this short description, what do you think of this plan in its global context?

What do you think you will benefit from this plan? Check all that apply

- A city with cleaner air
- A prettier and more ecological city
- Better infrastructures to bike in the city
- Fewer cars in the center and more public transport
- Other:

Do you have any fears or doubts concerning Paris en Commun?

Appendix 3

Consent forms filled by the interviewees

Consent Form

Consent form for the research project: "Paris en Commun, an uncertain green future for Paris: a study case of the 18th district"

By signing this form, I agree that I:

- I fully understand the research project. I had enough time to decide whether I wanted to participate. I had the opportunity to ask questions and my questions were clearly answered. I understand which data is being collected in this study.
- I understand that all personal data will be made untraceable to me as a participant. I also
 understand that the data will be pseudonymized in the form of numerical data.
- I know that my participation is voluntary. I understand that I can withdraw from the study at any time without having to provide a reason.
- I give my permission to the processing and use the interview data for educational purposes.
- I declare that I want to participate in this study.

Date: May, 10th 2022

Name & Signature of research participant: Milena Ilieva

Declaration Researcher Maya Perdriel:

- I declare that I fully informed the participant.

- If more information comes forward during the investigation that influences the consent form of the participant, I will timely inform them.

Signature of researcher:

Date: May, 10th 2022

Consent Form

Consent form for the research project: "Paris en Commun, an uncertain green future for Paris: a study case of the 18th district"

By signing this form, I agree that I:

- I fully understand the research project. I had enough time to decide whether I wanted to participate. I had the opportunity to ask questions and my questions were clearly answered. I understand which data is being collected in this study.
- I understand that all personal data will be made untraceable to me as a participant. I also understand that the data will be pseudonymized in the form of numerical data.
- I know that my participation is voluntary. I understand that I can withdraw from the study at any time without having to provide a reason.
- I give my permission to the processing and use the interview data for educational purposes.
- I declare that I want to participate in this study.

Date: May, 13th 2022

Name & Signature of research participant: L*** Pa*****

Declaration Researcher Maya Perdriel:

- I declare that I fully informed the participant.
- If more information comes forward during the investigation that influences the consent form of the participant, I will timely inform them.

Signature of researcher:

Date: May, 13th 2022

Consent Form

Consent form for the research project: "Paris en Commun, an uncertain green future for Paris: a study case of the 18th district"

By signing this form, I agree that I:

- I fully understand the research project. I had enough time to decide whether I wanted to participate. I had the opportunity to ask questions and my questions were clearly answered. I understand which data is being collected in this study.
- I understand that all personal data will be made untraceable to me as a participant. I also understand that the data will be pseudonymized in the form of numerical data.
- I know that my participation is voluntary. I understand that I can withdraw from the study at any time without having to provide a reason.
- I give my permission to the processing and use the interview data for educational purposes.
- I declare that I want to participate in this study.

Date: May, 14th 2022

Name & Signature of research participant: O**** K*****

Declaration Researcher Maya Perdriel:

- I declare that I fully informed the participant.
- If more information comes forward during the investigation that influences the consent form of the participant, I will timely inform them.

Signature of researcher:

Date: May, 13th 2022