Is Brussels a 'Care city'? A gender investigation on the effects of the public transportation system on carers' lives¹

Scienza in azione

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Abstract. The aim of this paper is to explore the complex dynamics between issues of care, gender, and mobility, trying to reflect on the characteristics of an urban environment designed to meet the needs of women working in the care sector, regardless of their ethnicity, age, social status, physical condition, or sexual orientation and definition. By choosing the city of Brussels as an adequate case study we especially focus on the impact of the city's mobility sector on the daily life of migrant female care workers, and of vulnerable groups more generally. This ongoing research is based on a theoretical framework (stemming from existing literature) from which we have extrapolated a set of parameters to structure the data collection (by interviews) and the theoretical and graphical elaborations. To address and respond to the multiple crises we are facing today, in our view it is crucial to call for a radical change in our urban design processes, directing our efforts toward implementing more inclusive urban models and practices. Our methodology gave us an opportunity to critically reflect on the possibilities that gender-driven urban policies and practices could open for our cities (and societies) towards a more sustainable and inclusive future for all

Keywords: care; gender; mobility; care workers; migrants.

Introduction

Changes in the way we perceive and experience the city and its public spaces need to be adopted to create urban environments that are more resilient to future environmental and social challenges and that meet the needs of all population groups, particularly the most vulnerable (Gabauer et Al. 2022). Indeed, if we consider that migration studies have traditionally based their analysis of human interactions in public space primarily on the concepts of ethnicity and class, the need to broaden the level of understanding by considering a gender perspective jumps out at us. To fill this gap, concepts such as *diversity* have emerged to explore the relationship between different socio-economic divisions, similar to what intersectionality has done in feminist studies (Berg, Sigona 2013; Yuval-Davis 2006; Bilge 2009). In addition, it is important to change the narrative of migration, which is still perceived as a male-centred phenomenon that relegates women to the category of passive members of the family, suffering the migration process (Catarino, Morokvasic 2005).

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In Belgium, as elsewhere, migration remained predominantly male until the 1980s, while since the 1990s data have shown a feminization of migration flows (CATARINO, MOROKVASIC 2005). The reason for this change is a significant transformation in the structure of the European labour market, with an increasing demand for workers in the 'care' sector, as opposed to the traditional industrial workforce.

The inclusion of an increasing number of migrant women in the labour market, therefore, forces us to pay special attention to the gender-specific obstacles they may face in their integration process. Mastery of the host country's language and access to its labour market are two key steps in the integration process for all migrants. In addition, migrant women are often required to take on family and childcare obligations, which can impose significant constraints on this process. As a result, they are pushed to accept worse job opportunities than migrant men and native women (Fig. 1). Thus, it can be said that migrant women suffer from a 'double disadvantage' as migrants and women, which is consistently confirmed by existing literature.

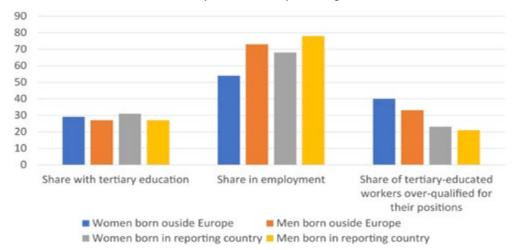


Figure 1. Comparing employment outcomes of women born outside Europe (2018, percentages). Source: authors' elaborations on Eurostat data.

In this paper, we aim to consider people's everyday lives, and especially women's use of time, as a key factor to rethink the city, its streets and its public spaces in order to ensure a safe collective life, guaranteeing mobility and accessibility, high-quality facilities and infrastructures that cater to the diverse range of citizens (KERN 2020; FALD 2018).

Our research aims to determine, in particular, whether Brussels can be considered a 'Care city', in relation to the social impact of the city's mobility sector on the lives of female migrant care workers, hoping to come up with conclusions that are also applicable to vulnerable population groups in general.

Through the urban and spatial analysis of the district of Uccle, the paper aims to provide an overview of the challenges that care workers face daily, during their homework commute. This neighbourhood was chosen because of its lack of direct connection to the city's metro network and its intermittent surface public transportation network, which is heavily influenced by traffic trends. It was also chosen because of the social disparities in the local population, which shows a majority of upper-middle class families who rely on the labour of caregivers living outside the neighbourhood's municipal boundaries.

In what follows, the paper sketches a conceptual and theoretical framework of what a 'Care city' can/could be (§ 1). After this, an overview of Brussels capital region with a focus on the mobility sector presents research materials (§ 2), a section introduces methodology and data collection (§ 3), and then results are summarised (§ 4). The paper wraps up with the conclusion (§ 5).

1. Defining a 'Care city'

With the term *care*, since the 1970s, political, philosophical, and economic alternatives that focus on the 'good life' and happiness have been developed and discussed (Chatzidakis *Et Al.* 2020). As Praetorius (2019, 79) stresses,

the English word 'care' does not only mean cure, but also attention, protection, and assistance; it refers on the one hand to the awareness of dependence, of the state of need and of being in relation as constitutive elements of human beings, and on the other hand to concrete care activities in the broad sense. It is about 'caring for the world' and not only through care activities and social or domestic work in the strict sense, but also through a commitment to cultural transformation.

The notion of care is relevant in the discourse of urban and spatial planning, as it accentuates the different types of uses and practices of urban space, which differ between men and women (Damyanovic et Al. 2013; IWPR 2015; Fraser, Vogel 2017; Mc Dowell 1982; Federici 2004). Because of the sexual division of labour and their role as caregivers, women have a more complex relationship with the urban environment than men, who generally make trips as part of more linear routines, moving from one point to another (Tanyildiz et Al. 2021). Taking public transportation sometimes means waiting under flimsy covers, in the cold or in the sun (due to the poor condition of the network's public facilities), unpredictable buses with no clear schedule. Transportation can also be inaccessible due to extreme weather events or the condition of the pedestrian network, which particularly affects women and men with reduced mobility (due to age or health problems) (Sánchez de Madariaga, Zucchini 2019). A disconnected network also involves making multiple, different, interconnected trips, often carrying children and/or weights. These trips are not only related to women's work status, but also to work errands, family, education, and provisions (Falù 2018).

In Europe, 'gender mainstreaming' approaches to urban planning have a long history (Irschik, Kail 2013; Sturm et Al. 2019). In essence, these approaches mean that every planning, policy and budgetary decision should be considered with the goal of gender equality as a starting point (Kern 2020). Some European cities, such as Vienna or Barcelona, have implemented 'gender mainstreaming' approaches in different administrative areas, such as health and education policies. However, the most noticeable change is found in urban policies, which now focus on how planning decisions can support or counter care work and how the structure of modern cities can affect the daily lives of caregivers and care receivers. The city of Vienna has adopted gender mainstreaming approaches since the early 1990s, becoming a pioneer city in this field. This approach has had deep effects on the way administrators, architects and designers have conceived the city, leading to a radical change in urban planning policies and to the implementation of the concept of care as a design tool in daily practice (Hunt 2019).

Following the example of Vienna, the City of Barcelona has (since the 1990s) implemented at the institutional level policies to facilitate and promote the participation of women in society, contrasting all kinds of sex-based discriminations and enhancing the feminist transformation of the city (Barcelona City Council 2021). However, change does not occur only in institutional environments but also thanks to the work of activist groups like Collectiu Punt 6, promoting community driven, bottom-up experiments and design projects that successfully contribute to a cultural transformation of the city. Outside Europe, specifically in Latin America, we also find relevant intersectional urban experiments. Examples like the self-managed experience of "Plaza and Casas Pioneras"

(Montevideo, Uruguay)² or the "Care Blocks" project (Bogotá, Colombia) promote a dialogue between local communities and public institutions, bringing societies one step forward to a more inclusive and democratic city.

However, gender mainstreaming has its limitations, since assuming gender as the primary category for equality may be limiting. While the typical urban citizen has too often been imagined as a white, able-bodied, middle-class, heterosexual man, the female citizen imagined for gender-sensitive planning has been similarly limited: a married, able-bodied mother with a white-collar job has usually been the imagined beneficiary of gender-sensitive planning. It is increasingly likely that this woman represents a minority in most contemporary cities, which suggests the existence of large groups of women whose needs may not be met by gender mainstreaming (Kern 2020; Ortiz Escalante, Gutiérrez Valdivia 2015). In addition, there is a lack of in-depth literature on urban approaches to gender equality in space and a lack of common sources and archives. This leads to difficulties when trying to get a comprehensive view of gender- and care-oriented practices in Europe, as studies and research are often specific to only one country or city or focus on only one aspect of the complex spectrum of gender-related urban issues (women's sense of insecurity being the most treated among them) (Tanyildiz ET AL. 2021). This may be associated with the lack of collaboration between different administrative entities, which affects not only care and gender issues, but all aspects of life in general (Gabauer et Al. 2022).

2. Mobility in the Brussels Capital Region

Brussels is mostly famous as the 'Capital of Europe', the city being home to the European Union institutions (the European Commission, the European Council, the Council of the European Union, and, shared with Strasbourg, the European Parliament). However, Brussels is first of all the bilingual capital of Belgium, the second most densely populated country in Europe (with 368 people per km²), surpassed only by the Netherlands.

The Brussels Capital Region (BCR) is inhabited by more than 1 million people, speaking both French and Dutch as official languages. In fact, the BCR agglomeration, divided into 19 different municipalities, with almost one-tenth of the total Belgian population, has a density typical of large urban concentrations, exceeding 6,200 inhabitants per km².

The economic development in Belgium in the aftermath of World War II attracted substantial flows of foreign labour. Today, according to the latest estimates, these flows would exceed one million: the largest community is Moroccan, followed by Italian, Turkish, French, and Dutch. One in five Belgians has non-Belgian ancestry, and about two million Belgians have immigrants among their ancestors.

The institutional structure of Belgium as defined by the 1993 constitutional reform has three levels:

- the Federal state, which retains powers in matters of strict national interest (e.g., defence);
- the language Communities (Dutch, French and German), which have legislative powers in linguistic, cultural, educational and social matters;
- the three territorially based Regions (Wallonia, Flanders and the BCR) with mainly economic attributes.

²See Charmain Levy's article in this same issue [editor's note].

Belgium's political system is thus based on a complex federal structure: each language-based Community and each Region have their own parliament and government and enjoy a certain amount of decision-making autonomy in the areas of scientific research and international relations.

More specifically, regions have strong powers in the areas of economy, employment, agriculture, energy, transportation (except for state railways), environment, trade, urban planning, supervision of provinces, municipalities and intermunicipal companies. Language-based Communities, on the other hand, set cultural policies, administer the education and health (medical care and prevention) sectors, and promote welfare initiatives, including immigrant assistance and services, family aid, and youth protection. In this context, the BCR has to face three main challenges: the growing population, which directly influences the expansion of economic activities, the accessibility to the city, and the organisation of public spaces (Hubert et Al. 2013). All these challenges are intertwined, from a territorial point of view, with mobility issues, highly dependent from the structure of the urban and metropolitan territory, as from the development necessities of the economic and tourism sectors (Bruxelles Mobilité 2020).



	RBC	1 ^{ère} Périphérie	2 ^{ème} Périphérie	La Péripherie	Zone d'étude Iris I	Zone d'étude lris II
Zonc	1	2	3	2+3	1+2	1+2+3
Communes	19	33	83	116	52	135

Before describing the structure of Brussels mobility system, it is important to understand the structure of the Belgian territory in terms of accessibility and governance. Apart from the BCR (1), we can distinguish the First outskirts (2), which comprise 33 municipalities of the Walloon and Flemish Brabant (known as zone Iris I, from the name of the first regional mobility plan in 1998), and the Second outskirts (3), which comprise 83 municipalities, also known as zone Iris II (designed in 2010) or the RER area (Fig. 2). Based on these two mobility plans, the new Brussels regional mobility plan for 2020-2030, also known as 'The Good Move Plan', was developed focusing particularly on sustainable mobility. The considerable population and urban sprawl growth of the Brussels Region has brought to an economic expansion generating travel toward the city (Hubert *ET AL*. 2013).

Figure 2. Belgium, the different spatial divisions. Source: authors' elaboration based on LEBRUN *ET AL*. 2012. Mixed techniques of digital drawing.

The internal urban territory of the Region, together with the expanding villages and cities in the outskirts, create a vast, heterogeneous, and intermittent polycentric metropolis, in which travelling from outskirts to outskirts and from outskirt to the centre becomes a real challenge, especially for the non-motorised population (Fig. 3).

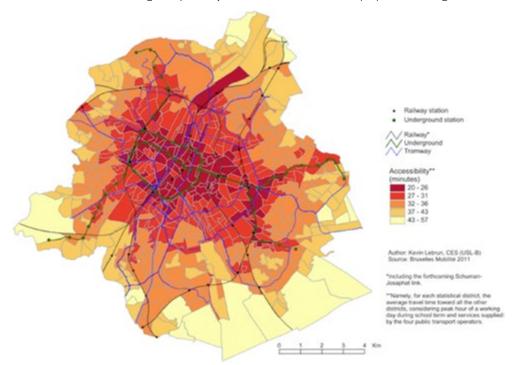
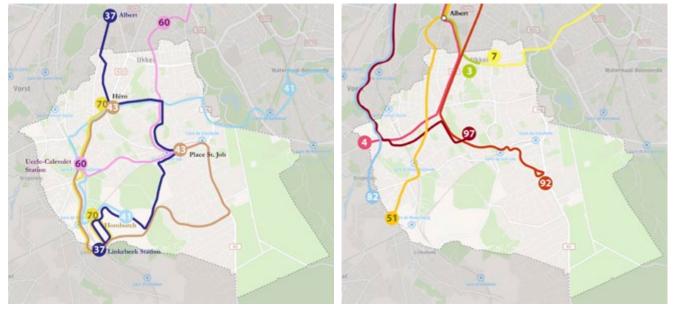


Figure 3. Accessibility by public transport in Brussels Capital Region. Source: HUBERT *ET AL.* 2013.

Below, left to right: **Figure 4a**. Uccle's bus network; **Figure 4b**. Uccle's tram network. Source: authors' elaboration based on Koot 2019. Mixed techniques of digital drawing.

For our case study, we have chosen to concentrate on the district of Uccle, since it is one of the less served areas, and one of the less connected in terms of public transport accessibility (Fig. 4, a and b). The main problem is the lack of a metro connection, which leaves the district dependent on an insufficient network of trams and buses (often delayed or suppressed). The configuration of the district street and circulation network itself has its flaws, making the coexistence between bus/trams and cars very difficult for the users (Koot 2019).



Similar mobility problems can be found also in other districts (Schaerbeek, Forest, ...). The common denominator of all these is the absence of the metro, which emphasises the flaws of the surface public transport network. Even the metro would not always be a suitable solution for all areas and could distract from much needed improvements in the urban context and global transport network.

3. Methods and data collection

Our research is based on a methodological framework concerning the interrelations between spatial and physical urban transformations, fed by a specific interest about sustainable transportation in a gender perspective.

From the analysis of a few examples of 'Care cities' (i.e., Vienna, Barcelona, Montevideo and Bogotá) we extrapolated a set of parameters, considered as fundamental starting points for designing more inclusive urban environments and mobility networks (Tab. 1). These parameters were used to construct and filter the information acquired during the data collection phase of our research, conducted through interviews.

Cooperation and coordination	this refers to the level of cooperation between different transportation companies operating under separate administrative entities.
Frequency	this refers to the frequency of the transportation network, often favoring certain types of users with stable-hours jobs.
Time	this refers to the amount of time the subjects spend on transports and how it affects their routines and relations
Security in the Public space	this section refers to the perception and experience of the subjects in the public space and in the semi-public environment of the chosen transportation mode.
Conditions and accessibility of the Network facilities	this refers to the quality conditions of the transportation networks, and how it affects different subjects based on factors like age and ability of movement. Difficulties linked to weather effects on the mobility network are also considered in this section.
Alternative transportation	this refers to the possibility of accessibility to alternative modes of transportation.

Our investigation was aimed to monitor the actions, needs, and difficulties in the daily lives of migrant female care workers and was developed by constructing the interviews on the basis of the 'everyday route check' practice, a tool used to assess the suitability of master plans with a specific focus on the everyday needs of different users (Damyanovic ET AL. 2013).

Table 1. Key parameters to analyse the case study of the City of Brussels and the impact of its mobility system on the life of female care workers.

This method, through map visualisations, allows even non-experts to understand the daily routines of a variety of user groups. In fact, putting together the different routes, highlighting sites of interest (public spaces, schools, kindergartens, public transport stops, shopping and service locations) gives rise to different everyday trip patterns with typical daily routines and trip chains. Wherever possible, this tool has also been enriched by a 'go-along interview' also referred to as 'walking interview' (Carpiano 2009; Holgersson 2017). This method allows the researcher to ask questions and observe the emotions, feelings, and practices during the itinerary that the interviewee normally takes. This is a way to examine how the physical, social and mental dimensions of place and space interact within and across time for individuals (Lynch 1960; Lefebyre 1991) (Fig. 5). Interviews were carried out with female members of different migrant communities (Filipino, Latin American, Italian, Spanish, Portuguese, and Polish), all working in the care sector (house cleaning mainly), and between 23 and 60 years of age (Tab. 2). Women were chosen because they lived or worked in Uccle and were contacted thanks to a personal connection to the Filipino community, and then through a

snowball effect between employers and personal connections.

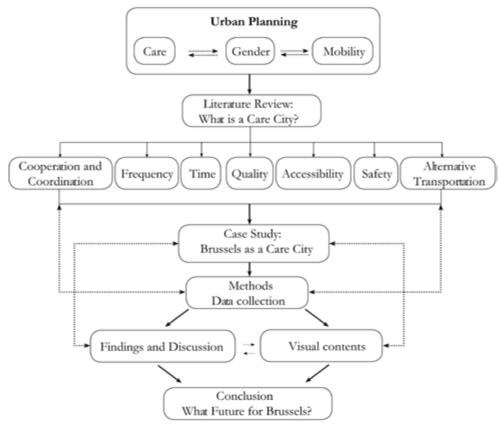


Figure 5. Methodology chart. Source: authors' elaboration.

In total it was possible to carry out 13 interviews. All interviews were structured following the set of parameters mentioned in Table 1, related to topics like time, frequency and quality of the transportation network, comfort, and security in the public space and in the transport network, accessibility, and choice of alternative transportation. The interviews were carried out by phone or video call, due to the CoViD-19 restrictions, and it was possible to organise an online focus group to have a choral discussion on the investigated issues. In a few cases we performed 'walking interviews', accompanying selected women on their home-work commute, to have a deeper understanding of their personal stories as migrant female workers in Belgium (Tab. 3).

- In which district do you live?
- · In which district does your employer live?
- How do you move into the city when going from your home to your workplace?
- . How much does it take to go there? Does the transit time have an impact on your daily routine?
- . What do you think about the actual transport system (is it fine like this or do you think it can be improved)?
- Do you feel comfortable in the tram/bus/metro? Have you ever assisted to episodes of racism in the transports?
- Have you ever been discriminated against because of your origin or because you didn't speak the local language?
- As a woman, how do you experience the public space when walking in the city? Do you feel secure? Do you
 feel represented? Have you ever wished for something to change?
- Do you ever take a stroll in your employer's neighbourhood? Do you think it is a nice area? Would you live there if you had the possibility of?
- Would you prefer to have an employer closer to your house? Why do you go far from your neighbourhood to work?
- Do you have some reference point in your journey to your workplace? It could be a nice building that caught
 your attention, or a park...
- Have you ever considered alternative ways of transportation (bicycle, electric scooter...)?
- How did the Covid pandemic affect your work and the way you move around the city?
- How many years have you been in Belgium? Do you feel at home here or would you like to go back to your country of origin someday?

Table 2. Interviews: list of questions.

NAME	AGE	COUNTRY	DISTRICT	DISTRICT	CHILDREN	MODE	LONGEST
			OF	OF		OF	TRIP
			RESIDENCE	EMPLOYMENT		TRANSPORTATION	(total time)*
Grace	40	Philippines	Uccle	Tervuren,	Yes	Tram, bus (STIB, De	3h (up to 6
				Wemmel		Lijn), metro	changes)
Nary	60	Philippines	Uccle	Woluwe-Saint-Pie	No	Tram, bus, metro	2h (3
				rre			changes)
Marisol	46	Philippines	Uccle	Ixelles	Yes	Tram, bus	1h10 (2
				(Flagey/Port de			changes)
				Namur)			
Amy	40	Philippines	Forest	Watermael-	Yes	Tram	2h (2
				Boitsfort			changes)
Sabrina	30	Italy	Schaerbeek	Ixelles, Etterbeek,	No	Tram, bus (STIB, De	2h20 (2
				Krainem, Evere,		Lijn), Trotinette	changes)
				Schaerbeek			
Maria	50	Italy	Auderghem	Woluwe-Saint-Pie	Yes (and	Bus, metro	3h (2
				rre/Ixelles	grandchildren)		changes)
				(Chatelain)			
Fabiana	23	Italy	Saint-Gilles	Ixelles (Germoir)		Tram, trotinette	1h (no
							change)
Erika	60	Poland	Etterbeek	Watermael-Boitsf	Yes	Bus, tram, metro	2h (2
				ort, Etterbeek,			changes)
				Ixelles, Rhode St			
				Genese,			
				Woluwe-Saint-Pie			
				rre (Gribemont),			
				Zaventem			
Fina	70	Spain	Forest	Uccle	-	Tram	15 min
							(no change)
Isabella	54	Portugal	Etterbeek	Rhode St. Genese	-	Tram, bus (STIB, De	3h
			(Petillon)			Lijn), metro	
Bianca	35	San	Brussel 1000	Brussels 1000,	-	Tram, bus, metro	1h20
		Salvador		Auderghem,			(3 changes)
				Forest, Uccle,			
				Overijse			
Magdalena	39	Paraguay	Schaerbeek	Brussels 1000,	Yes	Tram, bus, metro	2h (2
				Ixelles (Chatelain)			

Data from the interviews were translated into visual contents to complement the discussion of the findings. For the cartographical contents, the geographical software QGIS was used for carrying out a first spatial analysis of the structure of the city of Brussels and its mobility system. Subsequently, based on the results from the interviews and on the method of the 'everyday route check', a first document was elaborated giving a practical overview of the daily distances travelled by the workers and of the diversity of spaces within the city that they pass through (Fig. 6).

To deepen the relation between the interviews and the cartography a second document was produced, a mental map of the daily route of the most representative among the workers (Grace), spending the longest time and travelling the longest distance (from the district of Uccle to the extreme peripheries of the city) (Fig. 7).

Table 3. Data collection.

- (*) For total time the authors intend the time of a round trip from the place of residence to the workplace and back, in a working day.
- (**) But if there are construction works on the street it can go up to 35/45 min (with 3 changes).

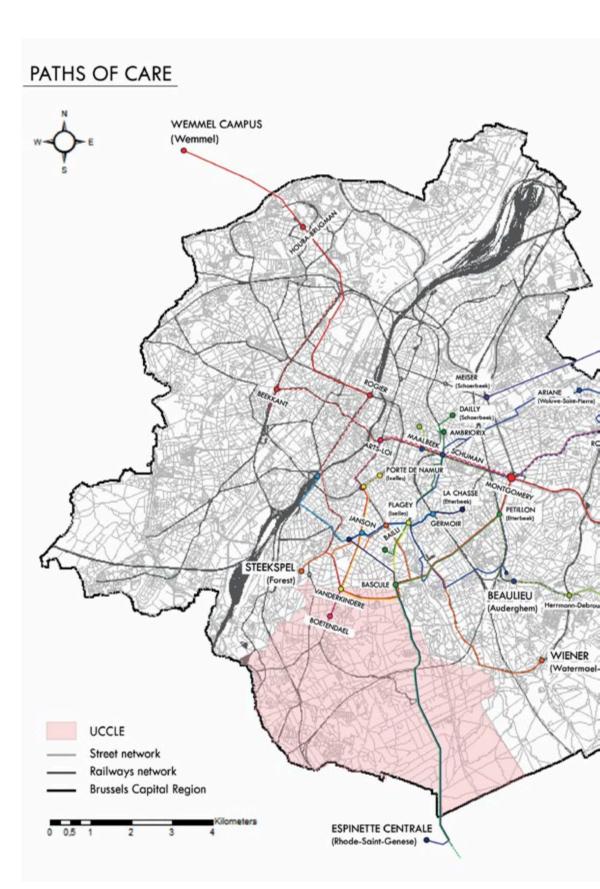
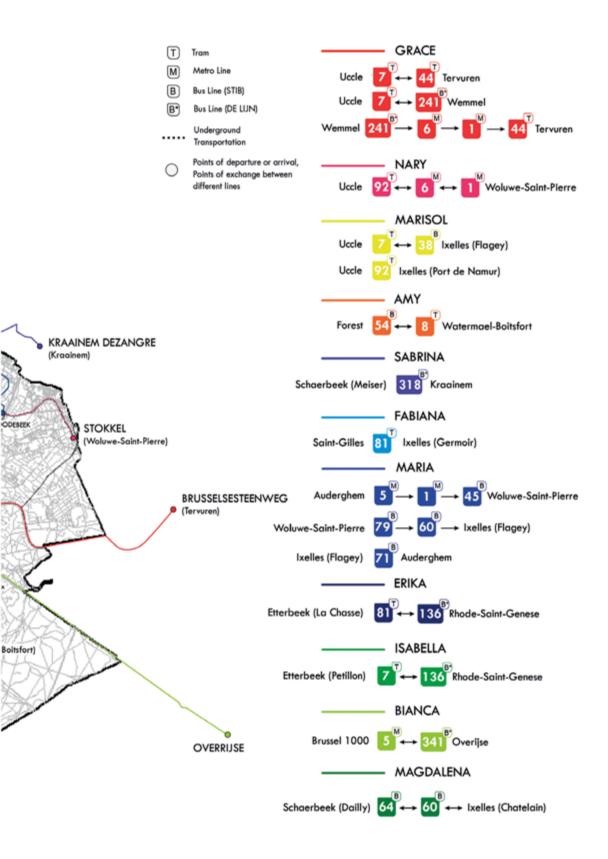


Figure 6. Analysis of the workers daily travel routes. Source: authors' elaboration based on the results of the data collection. Mixed techniques of digital drawing.



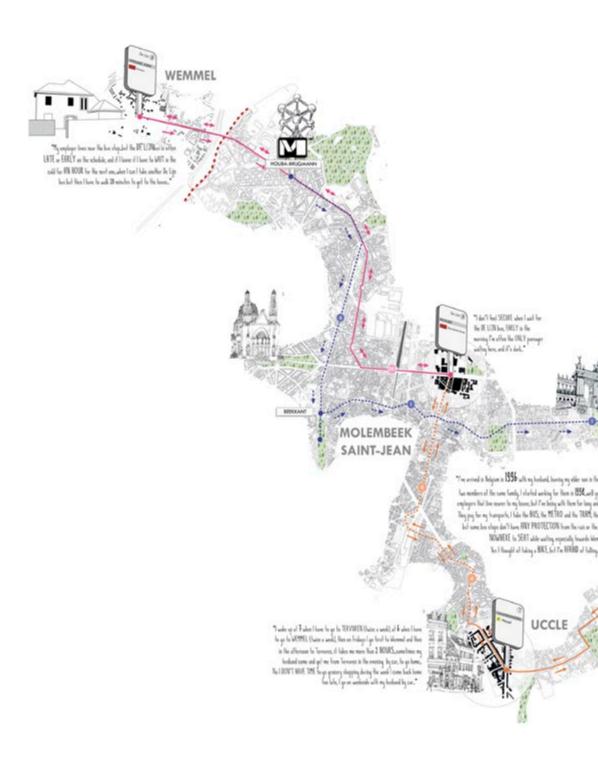
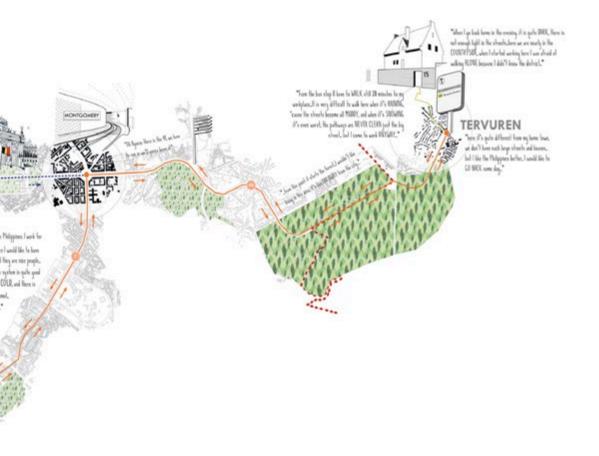


Figure 7. Walking with Grace. Source (for this picture and its details, Figures 8-11): authors' elaboration based on the interview by Agnese Marcigliano with Grace, December 7, 2020. Mixed techniques of digital drawing.



MEETING GRACE



This mental map is based on the "moving" interview with Grace, one of the care workes cited in the paper. The graphic content is made by the author, thanks to a mix of technics form GIS data collection to digital drawing. However some of the elements have been taken from other sources:

^{1.} Zdenek Sosek, Caroon sketch drawing likulration of Ahomium in Brussels, 2018, digital sketch, occessed January 2, 2020, https://www.clany.com/carton-sketch-of-the-atomium-brussels-belgium-image178896342.html.
2. Author not known, Logo of Metro Brussels, date not known, digital drawing, occessed January 2, 2020, https://seekloga.com/veto-logo/91619/metro-brussels
3. Phillippe Daro (www.phillippedoro.be), Brussellee, Beallique de Kokelberg, 2011, digitalised pencil hand drawing, occessed January 2, 2020, https://www.pinterest.h/pin/637259416005657327/
4. Author not known, Cartoon sketch of the triumphol are of the Cinquantenaire Parc, 2007, digital sketch, in Juliete Barbier, Jeon Cloudo Mouton, Benoit Jacques and Giangoolo Pagni, "Centet de jeux «YOUS ÉTES YCI, UI BENT HERA", edited by Patrimoime à Roulettes asbi, 17, (2007), accessed January 2, 2020, https://pot/moinecroulettes.org/portfolio/vou-etes-id-2/.
5. Phillippe Daro (www.philippedoro.be), Bruxellee : café La feaille en pagier doré, 2019, digitalized pencil hand drawing, (November 24, 2019) accessed January 2, 2020, https://www.pinterest.h/pin/81135230774627944/.

4. Walking in their shoes

In what follows we summarise the main outcomes of our interviews and 'walking interviews', by considering several aspects of Brussels' mobility framework and narrating them through the parameters presented in Table 1.

4.1 Cooperation and coordination

Before the 1988 reform and the creation of the Flanders and the Wallonia regions (1980) and of the Brussels Capital Region (1989), mobility was a national affair. After the reform, the management of public works and transport was moved to the regions and public transport development became an active strategy for the improvement of the city's quality of life.

The Société des Transports Intercommunaux Bruxellois (STIB) was transferred under the supervision of the Brussels region, and the Société Nationale des Chemins de fer Vicinaux (SNCV) was replaced by the Flanders and Wallonia para-regional companies, De Lijn and Société Régionale Wallonne du Transport (SRWT), which oversees the TEC public transportation company (Hubert et Al. 2013). Since mobility does not stop at regional borders, a cooperation agreement between the regions and the federal state was signed in 1991, to regulate public works and the responsibility of intervention in those areas where the different networks overlap, allowing different regional operators to circulate in the Brussel region and vice versa.

As stated by Grace, the De Lijn buses that she uses when going to Wemmel are not coordinated with the time schedule of the STIB network, causing many inconveniences to the travellers (Fig. 8).

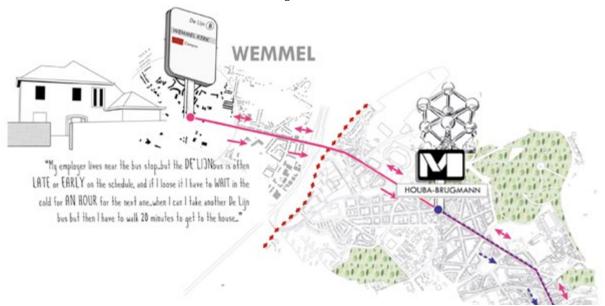


Figure 8. Section 1 of Grace's mental map.

Isabella as well testimonies on the discontinuity of the network and on the reduced frequency of the De Lijn buses, especially during the weekends:

the worst is when I have to go to Rhode St. Genese. I take the tram to Bascule and then the De Lijn bus (136-137) which is very bad, in particular on Saturdays.... De Lijn is a disaster! It is not reliable, because it does not respect timetables. On Saturdays, waiting time can be up to 2 hours because there are just a few buses during the weekend. The waiting time is too long! (Isabella, December 7, 2020).

4.2 Frequency Scienza in azione

Public transport frequency is highly dependent on users' demand.

As shown in the Cahiers de l'Observatoire de la mobilité de la Région de Bruxelles-Capitale (Lebrun et Al. 2012), there is an intense number of displacements during peak hours on working days and a reduction of movement linked to work or school during non-school working days, weekends and holidays, causing a reduction of transport frequency.

Different work timetables should also be taken into consideration, since public transport frequency is currently mainly based on white-collar or blue-collar jobs schedules, leaving out all those workers that do not fit into their standard.

Many care workers, as Maria for example, have different timetables for different days and return home after the canonical Belgian 6pm:

I spend at least 3 hours per day on public transport, considering the time to go and come back from my workplaces. It depends on the day, but for example on Mondays, I have to go to Woluwe in the morning and then in the afternoon I have to move to Chatelain. I work in Chatelain every afternoon, so I usually wake up at 8 am and I come back home, if I manage, by 8pm. I also work on Sunday mornings.... During the week the metro is guite regular in the morning, but in the evening it is less frequent and for people like me that go back home late, waiting times can be longer (Maria, December 14, 2020).

4.3 Time

Even if the internal transportation network of Brussels Region covers more or less homogeneously the metropolitan territory, connections between different parts of the city are insufficient and care workers, in the majority of cases, have to change transport multiple times to reach their destinations. This is true, in particular, for those travelling to the outskirts of the city, while distances are more manageable in more central areas. In most cases, workers living in those areas (for example Fabiana or Bianca) are satisfied with the mobility services and succeed in managing their personal life and necessities with their work schedule. By contrast, for Maria or Grace the amount of time they pass on the transports deeply affects their daily life to the point that they can attend to their necessities only on the weekend (Fig. 9).

Service speed is one of the factors affecting waiting times and it is highly dependent on car circulation. In Brussels, the structure of the urban fabric is often not adapted to the passage of both cars and public transports, causing congestions and delays that affect the workers' experience:

Figure 9. Section 2 of Grace's mental map.



the tram network is not good enough because there are no dedicated lanes to trams and traffic has a strong impact on their travelling. The combination cars/trams is a disaster! Public works also influence travelling, for example to go to my workplace I take the tram 97 until the terminus, it takes 5 minutes really, plus another 5 minutes of walking, with no changes. However, if there are works in the street, it can take up to 30/45 minutes with 3 changes plus an overall 15 minutes of waiting time (Fina, December 7, 2020).

4.4 Security in the public space

In the comparative study performed by Farina and colleagues (2022), 48% of the respondents reported feeling unsafe in Brussels during night-time displacements on foot. In particular, 28% of the respondents reported feeling unsafe when using public transports at night-time, and 69% while waiting at bus stops or in metro stations at night. The results of our interviews align with such evidence (Fig. 10). Even if most interviewees consider Brussels a safe city, the intermittent frequency of the transportation network, the lack of public illumination in certain areas (i.e., Malbeek, Schaerbeek, Wemmel, ...) and the reduced presence of other passengers at key times during the day (early in the morning, late at night) contribute to a sense of insecurity in the public space, which is less persistent in the semi-public space of the transportation itself.

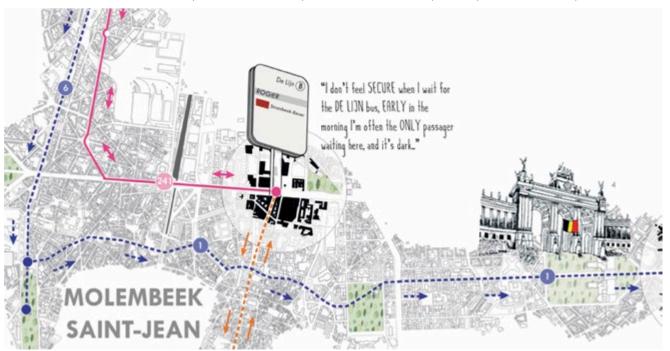


Figure 10. Section 3 of Grace's mental map.

Sabrina (November 29, 2020) shared her experience:

once there was a guy on the tram that was trying to touch me improperly.... After a while the entire bus started shouting at him in my defence and he was forced to leave.

Fabiana (December 15, 2020) shares her experience as a mother of a 19 months-old baby:

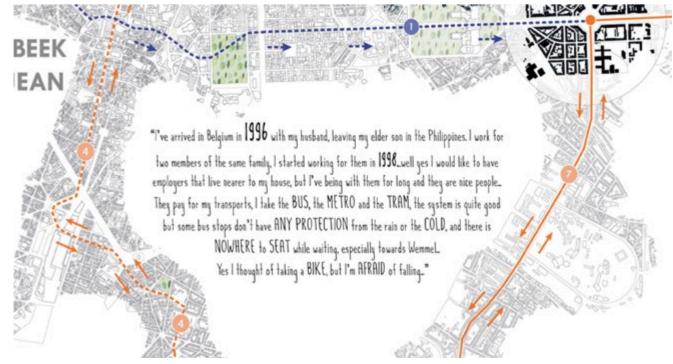
each morning before work, I bring my daughter to kindergarten; I live and work on the same tram line so for me it's quite easy. When I am with my daughter, the only problem is that tram 81 is still one of the old ones, so the stairs are too high, and the doors too narrow to enter with a stroller... but I have to say that there is always someone ready to help me!

4.5 Conditions and accessibility of the Network facilities

Statistics show that up to a third of the Brussels population has problems connected to reduced mobility. The proportion is similar to other European cities representing from 30% up to 40% of the population. The tendency is expected to increase in the next few years due to a progressive increase of the elderly population (Bruxelles Mobilité 2020).

The interviews reflected this tendency (Fig. 11), showing that problems of accessibility do not concern just mothers, but also elderly women like Fina (70 years old), who has difficulties entering the tram, or more in general people with more or less important mobility disabilities (i.e., many trams do not have an access platform for wheelchairs, yet).

Figure 11. Section 4 of Grace's mental map.



Accessibility of the transportation network can be influenced also by weather conditions. Both rain and snow can exacerbate pre-existing challenges and put emphasis, for example, on the lack of transportation waiting facilities. As Grace stated in her interview in Tervuren it is very difficult for pedestrians to move, because the pathways are not cleared in case of snow and only the streets are, favouring car circulation to the disadvantage of pedestrians.

4.6 Alternative transportation

The new mobility plan (2020-2030) accords a lot of importance to the development of the bicycle network within the city, as part of its strategy for a more sustainable transport network (Bruxelles Mobilité 2020).

However, from what emerged from the interviews (Fig. 11), the majority of women workers, in the age range of 40 to 70, are not willing to use a bike for reasons of safety or mobility difficulties (Fig. 11). On the contrary, younger workers (i.e., Fabiana or Sabrina) chose to use more contemporary modes of transportation, like electric scooters (*trotinette*), which they consider a good alternative to public transport, especially in terms of time saving.

Conclusion

Evidence collected by our research has highlighted a series of mobility issues in the Brussels capital region, which affect female care workers, but also the majority of the non-motorized working population. Brussels still has a long way to go to become an inclusive Care city, although the new mobility plan (2020-2030) addresses some crucial issues, making many promises for a better and more sustainable transport network.

However, if we look at the global vision for the future of the city proposed by the plan, we still see a city based more on economic concepts like efficiency and performance, more than a suitable urban model able to bring a more humane perspective to the urban planning discourse. In our view, the relationship with the environment is still seen as a 'commodity' and social relationships between communities are not enhanced enough. By contrast, the Care city model could open multiple possibilities for the creation of an accessible, inclusive and community driven living environment (Fig. 12).

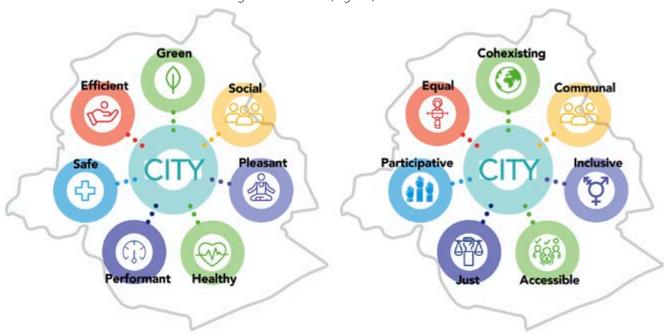


Figure 12. The City Vision vs. the Care City Vision. Source: Authors' elaboration based on BRUXELLES MOBILITÉ (2020). Mixed techniques of digital drawing.

Finally, as far as the aspect of gender is concerned, a gender adaptive design is briefly introduced in the new mobility plan, but still does not seem to be a real priority, at least not to the level of other European cities. As Elke van den Brandt (Minister of the Government of the BCR, responsible for Mobility, Public Works and Road Safety) points out,

there is a deliberate general lack of attention on gender issues in the Brussels administration, and those issues are often limited to women's notion of insecurity in the public space, while there is much more to be considered in terms of urban planning, from the requalification of public space and transport networks to streets snow clearing patterns and schedules (Brandt 2020).

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