

Appropriation of space: streetscapes of Anderlecht Influences on public domesticity

Research by Gabija Rutkunaite



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Anderlecht

Influences on public domesticity

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Influences on public domesticity

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"If places are indeed a fundamental aspect of man's existence in the world, if they are sources of security and identity for individuals <...>, then it is important that the means of experiencing, creating, and maintaining significant places are not lost." – Edward Relph, 1976, p.6.

1. Introduction

Relevance of the topic.

The street is a complex socio-physical network that reveals various layers of life in a city: its historical setting, planning, political and economic situation, and cultural mentality. Studying complexities of social life is important in order to understand the constantly changing identity of space. In the face of globalization, cities are being transformed into similar prototypes of each other and architecture has experienced placeness and loss of identity. Analysis of the context is relevant for the "localization" of new design interventions and it could help to avoid universal design solutions.

Connection to the design.

My design project addresses this issue by asking a question as such: how existing grid-like structure of former Leonida's factory can host a new function of Building Craft Centre without becoming neutral, contextless? In order to react to the existing, there is a need to define the context and ways of studying it. I have chosen to do so by looking at the streetscapes because the problem of universality and the global trends could be also seen in street design. Since the last century, automobiles have conquered streets around the world which resulted in wide lanes with little room for people. This triggered new universal design

guidelines to occur in order to return streets back to people and make them lively urban spaces. The focus was drawn towards minimizing auto-dependency and striving for sustainable alternatives. It was important to shift from auto-centric development, that was present in the 20th century, towards transit-oriented vibrant neighborhoods. In the face of urbanization and rapid technological development, the definition of the street is equally changing. Even though it is possible to indicate similar patterns, the change in every place happens differently. Thus, universal design strategies and their applicability could be questioned in terms of context sensitivity. I state that the same happens within architecture in general, especially with the hype of sustainable solutions, therefore, studying street life could be a starting point for understanding the context and the complex network behind it.

Problem statement.

Today sustainable design strategies are based on a "one size fits all" approach, meaning that they often do not take context into consideration. It could be speculated that the reason for this is that the local and regional contexts are too broad and too difficult to define. Unsuccessful projects also happen because of difficulties understanding community value and cultural mentality.

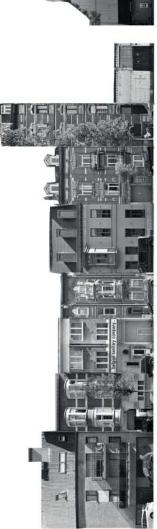
It is important to study not only the built environment but also economic, historical, technical, technological or social conditions on various levels to target larger influence within the design. Additionally, identifying users, their cultural mentality will help respond to specific place needs. In order to approach such a multilayered network, I suggest that the processes of appropriation and the influences behind it should be studied. Another problematic, that arise within the topic of appropriation is connected with architecture as the field in general. Jeremy Till states: "how difficult it is for the majority of architects to cope with what escapes their control, while architecture is typically defined by contingency and the uncertainty created by external factors - people, circumstances, events" in this way criticizing architecture's control and detachment.1 Architects should consider users within all design stages, therefore, studies of context (what is the setting) and appropriation (how the setting is claimed) are crucial.

Connection to the P1.

Space has the potential to provoke both positive and negative appropriation. Even though the conditions for the appropriation cannot only be created by architecture alone, it plays an important role if the broader: social, political, economic, etc. context is favourable.2 Before the P1 the topic of appropriation and architectural language were joined together in order to understand the identity and traditions of the place. Different modes of appropriation have been detected in a place and this has been studied through the identification of traces of appropriation of the street facades within the zoom-in of one residential house. The conclusion was drawn that the level of appropriation is tightly connected with the architectural typology, ownership, and usership. If the user has a feeling that space belongs to someone other than oneself, this results in the alienation of the facade and the space around it. However, the study was limited to the visual complexity analysis, which helped to identify the changes in dwellings made by occupants, but no deeper level of studying economic, technical, technological or social conditions has been conducted. Consequently, this study is a follow up P1 research.

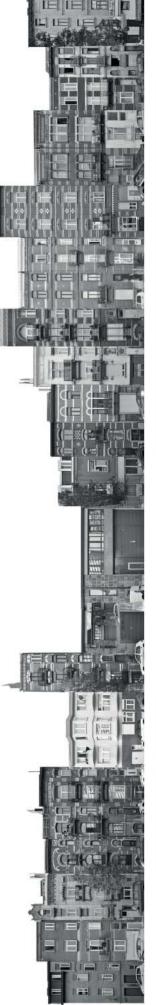
¹ "Social Poetics: The Architecture of Use and Appropriation," OASE Journal for Architecture 96 (2016).

² Kaj Noschis et al., "Appropriation of Space: A Method and Two Case Studies," Ekistics 45, no. 273 (1978): 451–66, http://www.jstor.org/stable/43623631.





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Connection to the P1 research



Connection to the P1 research

2. Research approach

Research questions

The main question:

• What are the economic, political, historical, technological, regulative and social conditions that could help localize the project?

The subquestions:

- Which conditions could be indicated by studying selected streetscapes?
- How could design react to those conditions?

Methodology

Until P1 the research has been conducted by using the technique of the combined method. The facades were being studied by doing visual analysis (identifying compositional logic of architectural elements and the ways people inhabit them), while zoom in into one house and its appropriation was being simulated (simulation technique) due to the lack availability of data. The critique towards such research could be that elements were identified but no relationship between them or processes how they are composed examined. was being Additionally, simulation led to predictive outcomes and was extensively subjective. Due to those reasons, further research should have acknowledged causal links between the elements and uncover unexpected patterns and conditions.

To examine selected streetscapes, the method of combined research strategy was being chosen as before. However, instead of using simulation and visual analysis, theoretical and case studies were being conducted. Case studies were being examined throughout the few data sources: fieldwork (observing, photographing, taking notes, and sketching) and online data

elements (technological, social, political, economic, etc. conditions and the human and non-human actors that create them) and represent the context as a thick situation in question. Different methods help to approach the issue on different scales and avoid the simplification of the social phenomena.

The theoretical study consists of literature reviews that are divided into two parts: literature that covers up appropriation and contextualism definitions; and literature that overlays street design trends, focusing on influences. For the latter, "Global Street Design Guide" by Global Designing Cities Initiative is studied and the definitions are collected from various authors. The contextualism topic is a cover up of "A Space for Place in Sociology" article of Thomas F. Gieryn. The appropriation and public domesticity problematic is reviewed within "Public and Private Space of the City" by Ali Madanipour (2003).

By paraphrasing Yin's definition, Groat and Wang state that a case study is "an empirical inquiry that investigates a phenomenon or setting." The attributes of the case study are being summarized as such: cases have

 $^{^3}$ Linda N Groat and David Wang, Architectural Research Methods, Second edi (Hoboken, New Jersey: Wiley, 2013) p. 418.

to be studied in real-life contexts with the causal links defined; considering the wide focus of the case, it should embody the theory that is being studied throughout and generalize it; lastly, the various data sources have to be used.4 Considering this, it is important to avoid over-complication. This research will cover three case studies – (1) Rue Eloy (low-income neighbourhood), (2) Boulevard Aristide Briand - Chaussée de Mons (middle-income neighbourhood), (3) Route de Lennik (high income neighbourhood). Those segments were chosen because they undergo various income parts of Anderlecht and connects within one road. The density, street layouts and adjacent services are also taken into account. Therefore, I state that the sectional analysis of this street is also an analysis of the society of Anderlecht.

To express the multilayeredness and complexity of the situation case studies resulted in thick maps. A thick mapping is a technique revised by Clarke that is based on ecological frameworks of Strauss.⁵ She states that "situational analyses can deeply situate the research individually, collectively, social organizationally and institutionally, temporally, geographically,

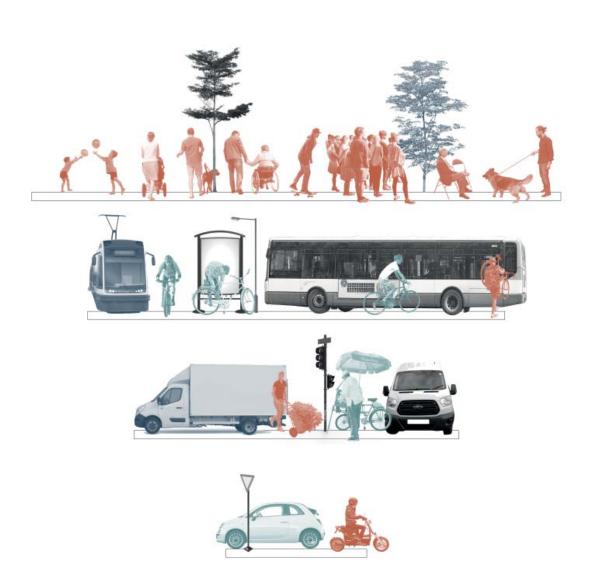
materially, culturally, symbolically, visually, and discursively. Their outcomes should be 'thick analyses' (Fosket 2002) paralleling Geertz's (1973) 'thick descriptions.' "6 Within this method, she freshens the traditional grounded theory method (coded data) in order to avoid simplifications of the social phenomena and "open up" the data within the matter of concern. The main basis of this method is to look at the human and nonhuman elements and their relations within the situation of concern. The questions should be asked as such: "Who and what are in this situation? Who and what matters in this situation? What elements "make a difference" in this situation?"7 The thick map is not a final analytical result, it is the never-ending process or exercise of adding, removing, reorganizing.

⁴ Groat and Wang p.418-430.

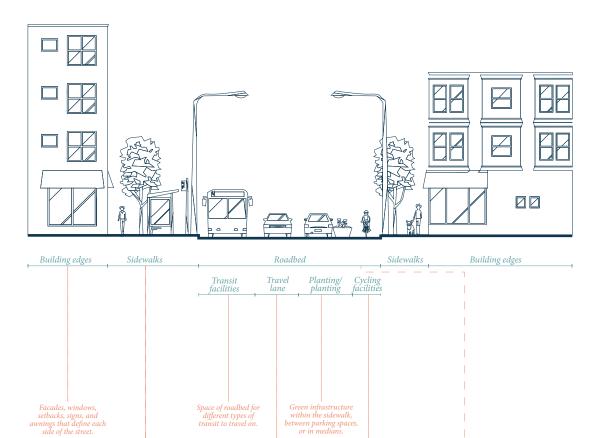
⁵ Adele E. Clarke, "Situational Analyses: Grounded Theory Mapping After the Postmodern Turn," Symbolic Interaction 26, no. 4 (2003): p.553–76.

⁶ Clarke p.554.

⁷ Ibid, p.561.



Universal design guidelines "one size fits all" approach



Street elements

Space of roadbed for motorized vehicles to move on.

Space for cyclists to travel. This can be within or separate from the roadbed.

Clear space for walking and access, also used for a variety of activities and functions. Space between the two sidewalks for various modes of transportation and their ancillary facilities.

3. Literature review and theoretical study

Street

A large and growing body of literature has defined "street", its components and role for over half century. Starting with Jane Jacobs's, Rudofsky's and Lynch's writings that looked at the street's social and cultural role, followed by Anderson's, Appleyard's and Moudon's redefinitions of the street being a public space.8 It highlighted that the street is not only the surface for movement and access but also a social space of interaction. This has been also claimed by Allan B. Jacobs in his book "Great Streets" (1993). He stated that the street is "more than linear physical space that permits people and goods to get from here to there", meaning that it expands the definition of being public utilities within the primary function of communication.9 Jacobs drew focus on the sociability of the street by saying that it is the place of never-ending encounter and exchange - social, political, commercial, symbolic and ceremonial. Additionally, streets could be defined vertically and horizontally by taking into consideration physical characteristics such as the width of the street, the height of the buildings, topography and visual intrusions. Within past two decades, few studies were carries as follows: "Images of the street" by Fyfes, "Streets and the shaping of towns and cities" by Southworth and Ben-Joseph, "Streets" by Celik et al., "Sidewalks" by Loukaitou-Sideris and Ehrenfeucht, and "The Street. A Quintessential Social Public space" by Mehta.¹⁰ Additionally, referring to recent literature, Global Designing Cities Initiative (2016) summarizes the street as a "basic unit of urban space through which people experience a city", that also draws attention towards the same issue - street being a

⁸ Jane Jacobs, The Death and Life of Great American Cities (New York: Random House, cop., 1961); Bernard Rudofsky, Streets for People: A Primer for Americans (Garden City, N.Y.: Doubleday, 1969); Kevin Lynch, Donald Appleyard, and John R. Myer, The View From the Road (Cambridge: Massachusetts Institute of Technology, 1965); Stanford Anderson, On Streets (Cambridge, Mass.: Massachusetts Institute of Technology, 1991); Donald Appleyard, Livable Streets (Berkeley u.a.: Univ. of California Pr., 1981); Anne Vernez Moudon, Public Streets for Public Use (New York: Columbia University Press, 1991).

⁹ Allan B. Jacobs, Great Streets (Cambridge, Mass.: MIT Press, 1993), p.3.

¹⁰ Nicholas R. Fyfe, Images of the Street: Planning, Identity, and Control in Public Space (London; New York: Routledge, 1998); Michael Southworth and Eran Ben-Joseph, Streets and the Shaping of Towns and Cities (Ann Arbor, Michigan: Washington Island Press, 2013); Zeynep Çelik et al., Streets: Critical Perspectives on Public Space (Berkeley u.a.: University of California Press, 1996); Anastasia Loukaitou-Sideris and Renia Ehrenfeucht, Sidewalks: Conflict and Negotiation over Public Space (Cambridge: MIT Press, 2012); Vikas Mehta, The Street. A Quintessential Social Public Space (New York: Routledge, 2013).

place for social interaction.¹¹ Thus, the street is purest representation of social life in a city even though its primary function remains being circulation.

Considering the relationship between social and physical, Mehta gives seven ways of defining the street that are borrowed from Gutman:

- (1) street reflects social and cultural life of the city
- (2) street is three-dimensional, taking into account vertical and horizontal elements that define it
- (3) street trigger communication between building and people
- (4) street is accessible, although there are some privatized ones
- (5) one part of the street is for people movement, another is for transportation
- (6) being a connector, the street is also a space of itself
- (7) considering the scale, it is an intermediate urban space

However, the political function of the street is not mentioned within those definitions. Mehta draws the attention to this weakness by stating that the street structures the community, thus the ownership of different elements has to be taken into account.¹²

Also, it overlays various stakeholders: government, policy makers, planners, businessmen, designers, developers, etc. Therefore, the street is a place to control the city, it is the site of domination.

On the other hand, the importance of physical elements cannot be diminished. The Global Street Design Guide states that street is defined by several planes: bottom, side and ceilings. ¹³ Each of those has its own elements. Bottom could be divided into setbacks of the buildings, sidewalks and roadbed (distance between two sidewalks). Roadbed consists of transit facilities, travel lanes, parking, planting and cycling facilities, sides are building edges (facades, setbacks and awnings), and ceilings are canopy planes.

¹¹ Global Designing Cities Initiative, Global Street Design Guide (New York: Island Press, 2016), p.4.

 $^{^{\}rm 12}$ Mehta, The Street. A Quintessential Social Public Space.

¹³ Global Designing Cities Initiative, Global Street Design Guide (New York: Island Press, 2016), p.4.

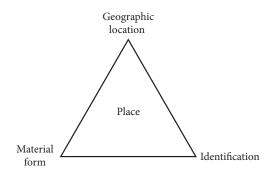
Context

Cities are changing rapidly under the influence of globalisation. Gieryn states that this phenomenon led to the places becoming clones of each other. "As places lose their distinctiveness, place loses its reality and significance" - the consequence he claims.¹⁴ This concern has caused the immense interest for research in various fields, however, here I would like to focus on sociological agenda.

In order to study the context, the definition has to be given. Taking into consideration various definitions presented in literature, Gieryn suggest extensive explanation of what the "place" is. A place has to be defined by geographic location without a matter of its scale. It could vary from an armchair to the neighbourhood. second defining element is a physicality of a space, meaning that it has to have material form. Gieryn quotes Habraken (1998) by drawing the attention that "social processes (difference, power, inequality, collective action) happen through the material forms that we design, build, use, and protest."15 However, it is important to mention that a place is not a space which is usually understood as a combination of various geometries. It should not be confused with

the geographical space. Lastly, the place has to be named, identified, or represented by people in order to be a place, because a spot in the universe is not a place unless it is mentioned or identified.¹⁶

There is a great amount of research carried on the concept of placemaking. Gieryn states that the placemaking is driven by few forces: power and wealth, professional practices and perceptions of people who experience the space and act upon.¹⁷ Within the study of appropriation, my first concern was the latter element – users, however, I realized that the study on other two factors is also crucial.



What makes a place a place? (A scheme made by me according to F. Gieryn article)

¹⁴Thomas F. Gieryn, "A Space for Place in Sociology," Annual Review of Sociology 26 (2000): p. 463.

¹⁵ Gieryn, p.465.

¹⁶ Ibid, p.463-96

¹⁷ Ibid.

Appropriation

Appropriation is generally understood as a physical action that one proceeds to take surroundings into possession.¹⁸ It is a prevailing multi-dimensional concept in studying urban-social landscapes and it is tightly connected with the theoretical framework of assemblage. Temporary appropriation could be understood as an identification of elements and actions through which people make something their own. While assemblage thinking is looking at the relations between those different components. Yet the term appropriation of the built environment is not completely defined in the research studies of the urban design. However, it is agreed that by the means of appropriation people inhabit the public space. The appropriation is what gives citizens the right to fully use and manage their everyday life within the urban environment.

There is also a legislative definition of appropriation being an act of making a private property, but this is not going to be examined here. Besides physical action, there is psychological appropriation that is interiorized at one's thoughts. If the regulations or various prohibitions does not allow the individual to take an action

of appropriation, the intention stops at one's thought level and it could result in "any further interest in the built environment" or even be expressed "through the forms of vandalism, destruction and so on".¹⁹

A place cannot be understood only as a combination of various physical objects, Madanipour states (2003). It is important to look at the social setting that contains those materials. In such sociophysical environments, "people recognize themselves as public", but also difference is maintained. Spaces has to be accessible and inclusive in order to encourage exchange notion between various publics. Therefore, it is important not only study traces of appropriation (physical objects), but also conditions and activities around them.

¹⁸ Noschis et al., "Appropriation of Space: A Method and Two Case Studies."

¹⁹ Noschis et al., 452.

²⁰ Ali Madanipour, Public and Private Spaces of the City (New York, N.Y: Routledge, 2003), p.186.

Modes of appropriation²¹

- Appropriation by personalization defining space as owned and appropriated by distribution of personal items.
- Appropriation by means of making space habitable. Reshaping the space according to the different requisites of the inhabitants.
- Appropriation by means of maintenance.
- Appropriation by means of distancing.
- Appropriation by social activities.
- Appropriation by locomotion.
- Appropriation by means of providing guidance defining space as owned by means of regulations of transport strategy.
- Appropriation by means of burglary prevention defining space as owned by means of marking off as possessed property and showing that it is being protected from vandalism and burglary attempts.
- Appropriation by means of indicating the location of a safety feature.
- Appropriation by means of marking off as possessed either temporarily or long term.
- Appropriation by means of decorating and domesticating.
- Appropriation by means of utilitarian purposes.
- Appropriation by means of the need of being informed, educated and entertained.
- Appropriation by means of place-marking (defining space as owned and appropriated by the means of signs).
- Appropriation by means of expressing reachability.
- Appropriation by means of conveying rules defining space as owned by means of regulations.
- Appropriation by means of laying waste.
- Appropriation by means of personalization of space. Defining space as owned and appropriated by distribution of personal items.
- Appropriation by means of rematerialisation.
- Appropriation by means of locomotion through the space.
- Appropriation by means of expropriating.

²¹ A list made from the P1 research based on Carl Friedrich Grauman, "The Concept of Appropriation (Aneignung)And Modes of Appropriation of Space," Appropriation of Space AP6, no. AP6 (1976), https://iaps.architexturez.net/doc/oai-iaps-id-iaps-00-1976-009.



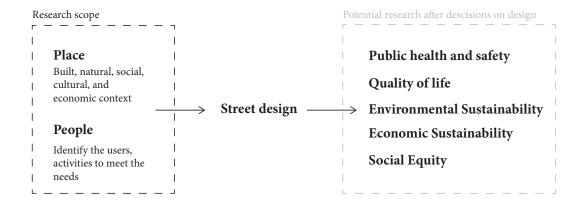
Appropriation of the site

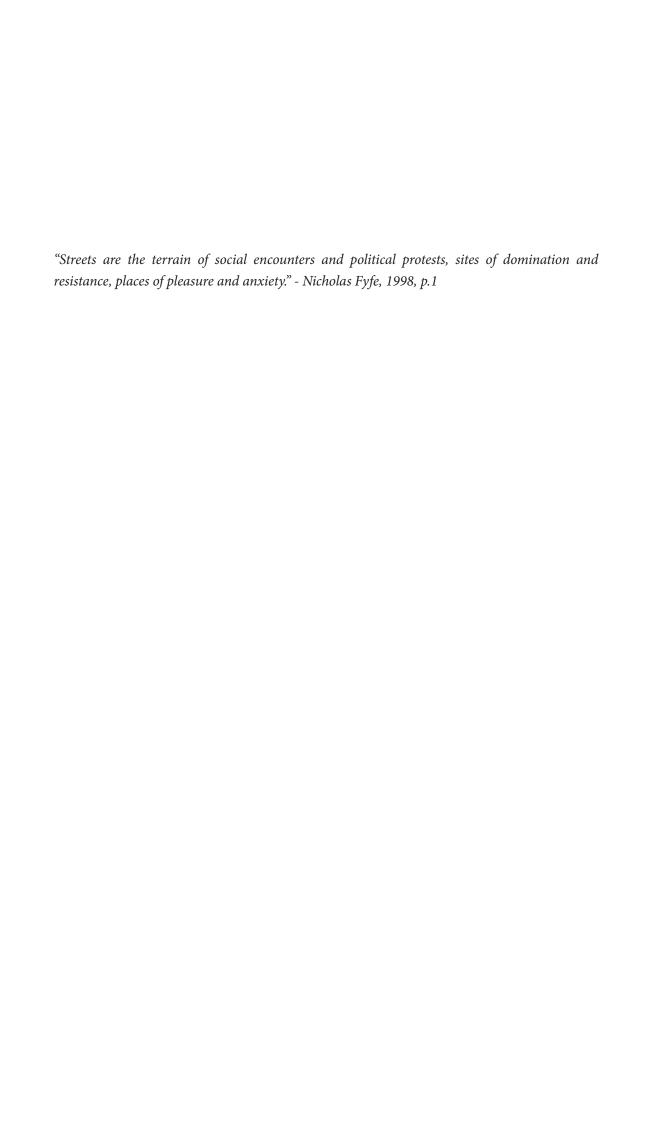
Conditions

"Streets are catalysts for urban transformation" states Global Street Design Guide. It also draws attention that street design is influenced by place and people because it defines the character of the street space. Additionally, street design itself has much impact on people's lives in terms of public health and safety, quality of life, environmental and economic sustainability and social equity.

Various agencies affect the way streets are shaped and many stakeholders are included. Those influences vary by place and are constantly changing. By using thick mapping technique, I bracketed my research to influences as such:

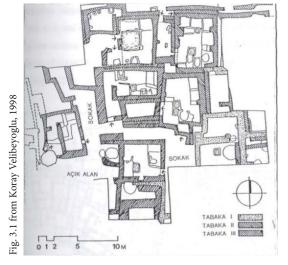
- -History of the street development
- -Streets typologies
- -Users
- -Actors
- -Regulations
- -Materials
- -Pollution
- -Real Estate
- -Employment
- -Income
- -Education



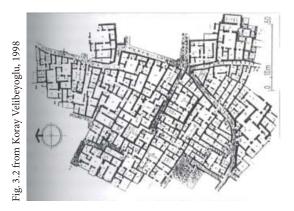


Street development

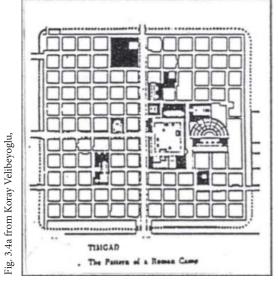
The brief historic ovierview of street development reveals how social, political, economic, and technical forces has impacted the way streets were shaped.



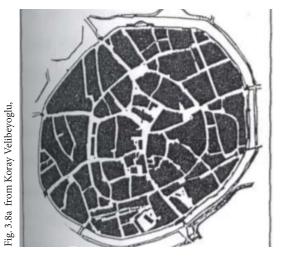
Bronze Age - Antolia (5790-5700 BC) Complex system of movement network appear in order to protect against intruders.



Mesopotamian zigzag streets were set for protection from the intense heat and enemies. The main street led to the religous monumental buildings.



The gridiron systems were created in ancient Egypt, Mesopotamia and Indus Valley in order to create rational circulation around the buildings.



The typical medieval towns had small-scale, narrow, accidental patterns. This was influenced by development period of town and changing conditions of life.



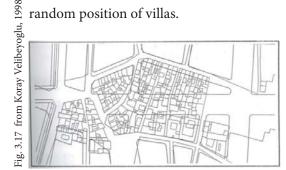


In the Rennaissance, there were some aesthetic notions taken into consideration. Simmetry has played an important role. During the Baroque period the idea of connecting monumental buildings with the ring of boulevard appeared. As Velibeyoglu summarizes, the development was influenced by the need for defence, ideology of rulers and changing tempo of life.²³

Fig. 3.15 from Koray Velibeyoglu, 1998

Industrialisation has led to the rise of mass transportation and walking distance had not longer limited the city extension. However, it also raised the concern for the hygiene and public health because of the overcrowdedness.

The grid patterns of the city continued in the suburbs in a curved manner, because of random position of villas.



Today's boulevards are largely connected with the time of Haussmann. The main reasons for this to develop were: wishes of Napoleon III, trafic and hygiene, and Bourgeoisie's pressure.²⁴

The 20th century development was based mainly on two city manifestos: Garden City and Charter on Athens. It was mainly the response to the living conditions of industrial city and resulted in suburbian development.

European Modernist rejected former patterns and focused on speed and efficiency. The strong separation between motorized traffic and pedestrians appeared.

²³ Koray Velibeyoglu, "Walkable Streets (Evaluation of Streets in the Context of Urban Theory, Life and Form)" (Izmir Institute of Technology, 1998).

²⁴ Velibeyoglu.

Street typologies

Global Street Design Guide suggest those types of streets such as:25

- Pedestrian-Only Streets
- Laneways and Alleys
- Parklets
- Pedestrian Plazas
- Commercial Shared Streets
- Residential Shared streets
- Residential Streets
- Neighbourhood Main Streets
- Transit Streets
- Large Streets with Transit
- Grand Streets
- Elevated Structure Improvements
- Elevated Structure Removal
- Streets to Streams
- Temporary Street Closures
- Post-Industrial Revitalization
- Waterfront and Parkside Streets
- Historic Street
- Streets in Informal Areas

This division is mainly based on different modes of transportation (pedestrians only, shared, transit streets). However, street types should vary within different contexts. In order to approach social problems, I have decided to do a case study of the three different streets that vary not by modes of transportation but economic context.

²⁵ Global Designing Cities Initiative, Global Street Design Guide, p.190.

Users



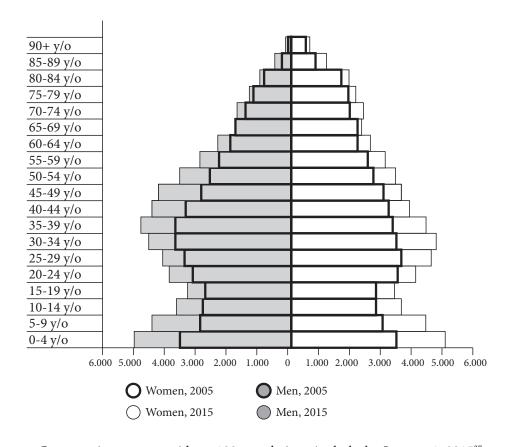
Population density by statistical sector, Anderlecht, January 1, 2013²⁶

People per sq.km:

- < 5000 **<** 5000
- 5000-8000
- 8000-14000
- 14000-18000
- > 18000

The site of intervention has high density (more than 18.000 people per sq.km.), which brings the population to around 800. The main reason for this is Les Goujons. The cases chosen for this research tried to overcome various density regions of Anderlecht.

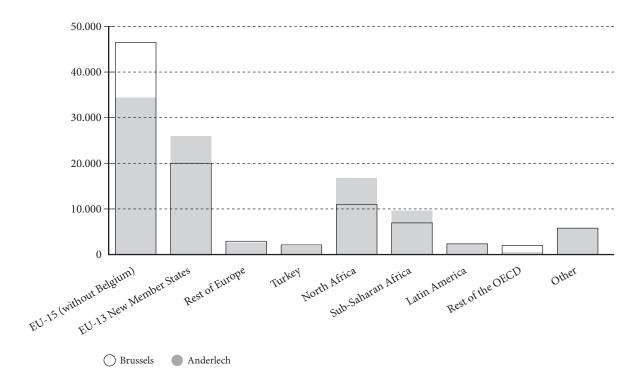
²⁶ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.



Comparative age pyramid per 100 population, Anderlecht, January 1, 2015²⁷

This could be understood as an indication for constant growth of population in the Anderlecht which will result in the high demand of housing, because the comparative age pyramid indicates that the number of men and women aged 0-14 and 35-50 increased highly in ten years.

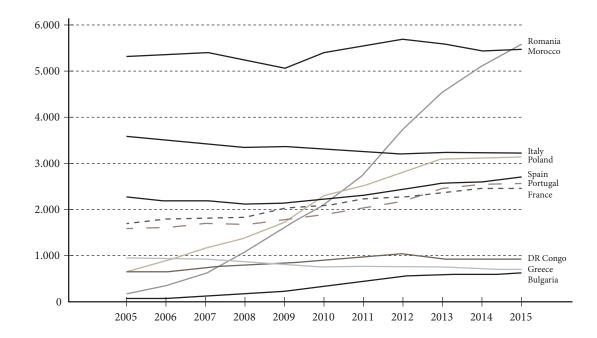
²⁷ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.



Distribution of foreign population by nationality group in Anderlecht and Brussels, January $1,2015^{28}$

The population of Brussels and Anderlecht mainly consits of people from from EU-15(without Belgium) and EU-13 form. However, when compared to Brussels, Anderlecht has more foreign residents from North Africa and Sub-Saharand Africa, but less residents from the rest of the OECD. People from Rest of Europe, Turkey, Latin America and Other contries remain mostly the same in Brussels and in Anderlech.

²⁸ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.



Evolution of the number of nationals of the 10 foreign nationalities most represented in Anderlecht, January 1, 2005-2015²⁹

In the chart, showing evolution of the number of nationals of the 10 foreign nationalities most represented in Anderlecht, the number of Romanian people is the most striking with the increase of around 5300 inhabitants and the number of Polish increasing from around 700 to 3000. Aditionally, Romanian and Moroccan population has remained the highest, compared with the population of the other 9 foreign nationalities in Anderlecht.

²⁹ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.

Actors

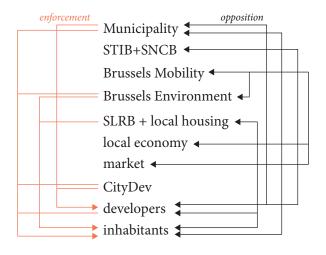
Body	Influence	Role	Objective
Regional Admin Urban Development	Brussels	Gov Managing and Funding	Sustainable managemen
BCR - Analysis and Planning Department	Brussels	Gov Planning and Regulation	Ensures proper develop
BCR - Urban Renewal Department	Brussels	Gov Monitoring and Coordination	Proposes regulatory cha urban renewal tools
BCR - Urbanism Department	Brussels	Gov Regulating	Implements the plannin
Brussels Mobility (BM)	Brussels	Gov Consulting and Initiating	Responsible for equipme
Brussels Environment (IBGE)	Brussels	Gov Monitoring and Consulting	Monitors environmenta
CityDev	Brussels	Gov Initiator and Funding	Help enterprises to appr
Brussels Region Housing Society (SRDB)	Brussels	Gov Umbrella and Funding	Manage the daily herita
Inter-environment Brussels (IEB)	Brussels	Umbrella Association	Unites active inhabitant
Municipality	Anderlecht	Gov Managing and Funding	Manages the everyday li
Urbanism Department	Anderlecht	Gov Regulation	Manages urban affairs fo
Public Centre for Social Action (CPAS)	Anderlecht	Gov Initiator and Funding	Guarantees dignified liv disadvantaged
Platform Kanal (PK)	Area along the river	NGO	Manages the network of concretise their commo
Housing Corporations	Anderlecht	Non-profit	Connects tenants and d
Local SME	Brussels	Private	Profile dependent
Residents	Kuregem	Locals	Locals
Developers	Brussels	External	Enterprises for developr
Experts	Brussels	External	Architects, planners, aca

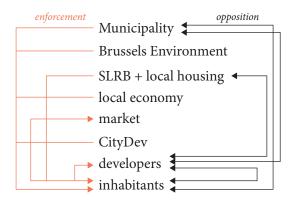
Stakeholders of Anderlecht, 2015 30

³⁰ Graphics by me, original image: Daniels Radai, "Towards a DiverCity: Multiscalar Planning Tools Seeking Socio-Spatial Integration" (Delft University of Technology, 2015), http://resolver.tudelft.nl/uuid:e6d8fd05-9630-4474-90ec-7a5e943af23e

	Task	Power
t of urban developement	Planning, regulating, managing housing, urban renewal, conserving built heritage	Medium
ment planning	Strategic and regulatory planning, planning evaluations. Communication with public and supra-regional authorities	Medium
nges and optimise the	District contracts, renovation of isolated public buildings, fights against abandoned buildings, monitoring public housing, financial monitoring of renewal operations	Medium
g instruments	Managing regulations, Brussels Code of Planning (CoBAT)	Medium
ent, infrastructure and travel	Mobility strategies, development projects, reneval and maintenance of public squares and roads	Medium
l aspects, public education	Ivestigate air, water, soil, waste, noise, nature. Develope and support projects for environmental education	Low
opriate sites. Builds social housing	Manages 25 industrial parts, 4 research parks and several buildings for business with added value. Monitors land for sale or rent.	High
ge of social housing	Provides with admission to public housing, buys, renovates, maintains buildings for lease and finances social housing in Brussels	High
s for environmental and social actions	Unites neighbourhood committees and collectives for life quality	Low
fe of the area	Communal regulations, public facilities, public space maintenance, social services	High
or the municipality	Connection to real estate agents, planning permit applications, planning certificates. Develops plans and municipal regulations.	High
ing conditions for the most	Fundings: income, premiums, payments. Assistance in food, clothing, transportation, medical assistance, etc. Aditionally, training and employment.	Low
individuals who want to n goals	Increasing the visibility aof the canal's chalanges by ongoing local and supra-local projects of existing possibilities and capacities of the inhabitants and the urban space	Low
wellings	Providing with housing opportunities to those in most need	Medium
	Local spatial and social demands, economy generation	Low
	Locals	Low
nent	Private firms, offices with for-profit developing potential	High
ıdemics	External knowledge with potential for improvements	Low

The graph shows the actors that takes care of the urban environment of Anderlecht. Clearly, Brussels has a complex governance system, however, the NGO initiatives are also numerous. It is important to indetify all stakeholders to ensure their engagement in design process and long-term success of the project afterwards.

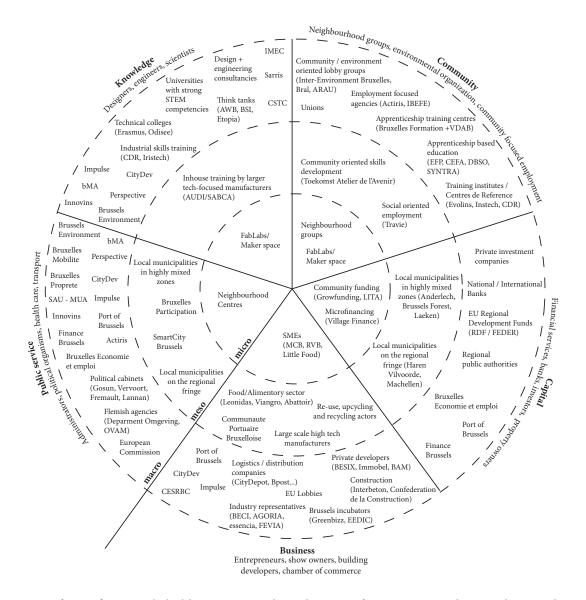




Spatial (above) and societal (below) conflicts between the actors, 2015³¹

Governmental agencies are not common features between main spatial and societal conflicts. Here the main role plays municipality. Main spatial conflicts happen because of the mobility and landuse reasons. Additionally, conflicts between habitants and local government are due to the public spaces and housing related issues.

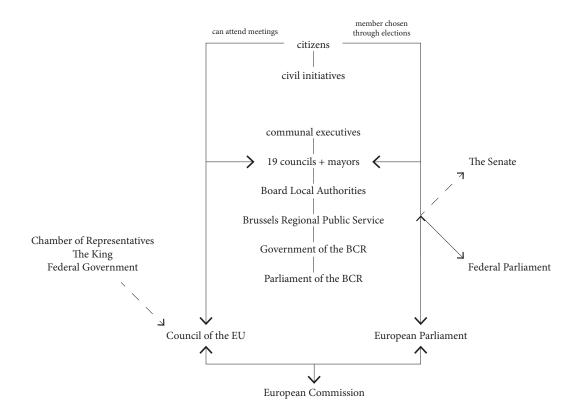
³¹ Graphics by me, original image: Daniels Radai, "Towards a DiverCity: Multiscalar Planning Tools Seeking Socio-Spatial Integration" (Delft University of Technology, 2015), http://resolver.tudelft.nl/uuid:e6d8fd05-9630-4474-90ec-7a5e943af23e



Map of significant stakeholders connected to the manufacturing in and around Brussels between the actors, 2018³²

The chart shows stakeholders associated with place-based development. It is divided according to the scale of interest.

 $^{^{32}}$ Graphics by me, original image: Cities of Making, "Cities Report: Brussels, Be" (Brussels, 2018), https://citiesofmaking.com/wp-content/uploads/2018/05/CoM_CityReport-0523-HR.pdf.

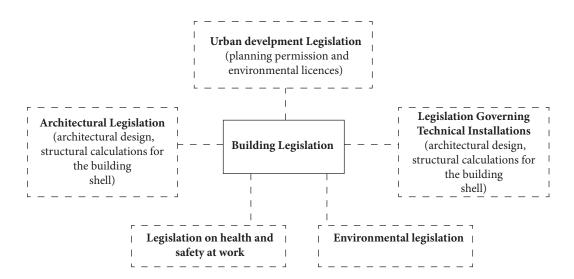


Demographic bodies represented in Brussels, 2017³³

The main idea of electoral democratic system is citizens having direct or indirect power of governance. This system is applied in Brussels. In this way, the abilty for people to control the country they are living in.

³³ Graphics by me, original image: Vera Kuipers, "Fostering Democracy: Through Integration, Self-Organization and Facilitation in Public Space." (Delft University of Technology, 2017), http://resolver.tudelft.nl/uuid:e82ef737-7a71-4fa6-88ef-45ebcb2de913.

Regulations

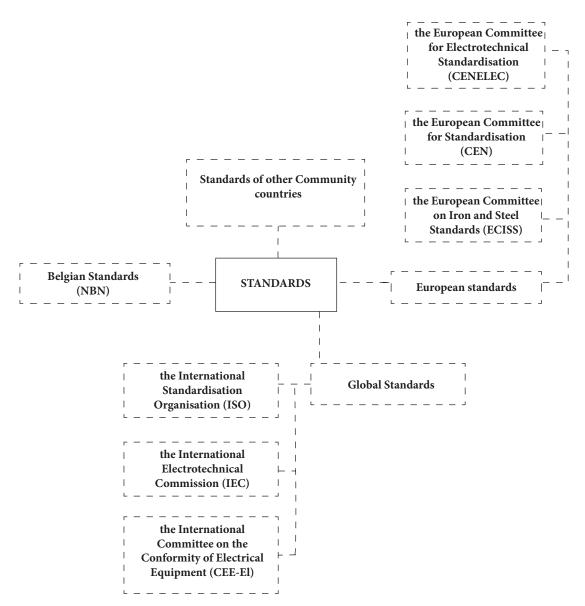


Building legislation categories in Brussels, 2011³⁴

Every building must be design according to legislation of the country it is located. European directive applies in case country's legislation are less strict. European commission states, that such policies arose considering economic interests (ensuring budgets), technical interests (specialist

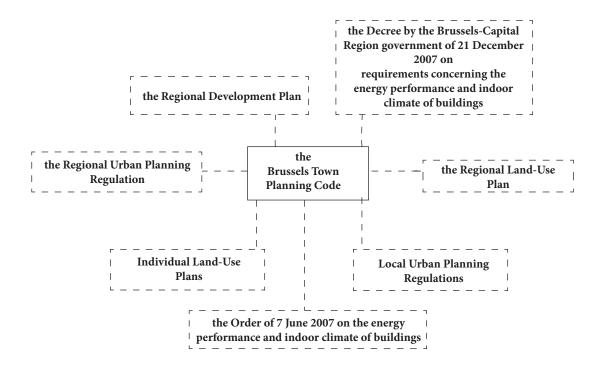
and their responsibility to ensure safty standards), users' interests (ensuring their comfort and safety) and environmental interests. Legislation is being set in order to avoid conflicts between those interests.

³⁴ Graphics by me, information source: European Commission and Office for Infrastructure and Logistics Brussels, "Manual of Standard Building Specifications" (2011).



Building standards in Brussels, 2011^{35}

³⁵ Graphics by me, information source: European Commission and Office for Infrastructure and Logistics Brussels, "Manual of Standard Building Specifications" (2011).



Urban planning Aspects in Brussels, 2011³⁶

³⁶ Graphics by me, information source: European Commission and Office for Infrastructure and Logistics Brussels, "Manual of Standard Building Specifications" (2011).

Materials

Coated Flat-	Hot- Rolled	Cold-Rolled Iron	Copper
Rolled Iron		4.0%	3.4%
	7.2%	Iron Structures	Iron
10%	Flat Flat- Rolled	3.6%	2 22/
Large Flat-Rolled		Raw Zinc	3.2%
Stainless Steel	6.1%	3.6%	Aluminium
	Refined Copper	Scrap Iron	2.5%
0 70/			Other Iron Products
8.7%	4.8%	3.5%	1.9%

Belgium export in terms of metals, 2017³⁷

Scrap Iron	Raw Copper Raw Aluminium		Other Iron Products
		3.0%	2.6%
8.1%	5.2%	Raw Zinc	Large Flat-Rolled Stainless Steel
-	Scrap Copper	2.8%	2.4%
Coated Flat- Rolled	3.6%	Iron Structures	Aluminium Plating
6.4%	Ferroalloys	2.7%	2.1%
U. 4 /0		Cold-Rolled Iron	Iron Fasteners
Hot-Rolled Iron	3.4%	2.6%	2.1%
	Flat Flat-Rolled Steel	Semi-Finished Iron	Metal Mountings
6.0%	3.2%	2.6%	2.0%

Belgium import in terms of metals, 2017³⁸

³⁶ Retrieved from https://oec.world/en/visualize/tree_map/ ³⁷ Ibid.

Ethylene Polymers	Polyacetals	Styrene	Vinyl Chloride Polymers
	8.1%	5.6%	3.2%
	0.170	Amino-Resins	Acrylic
	Raw Plastic		rici y dici
16%		4.4%	2.6%
Propylene	7.0%	Plastic Lids	Plastic Floor Coverings
Polymers	Rubber Tires	4.2%	2.5%
		Other Plastic Products	Self- Adhesive
12%	6.0%	3.6%	2.1%

Belgium export in terms of plastics, 2017³⁹

Ethylene Polymers	Raw Plastic Sheeting	Propylene Polymers	Vinyl Chloride Polymers
	7.2%	6.4%	4.1%
	Polyacetals	Plastic Lids	Polyamides
4E 0/	6 =0/		3.1%
15%	6.7%	5.9%	Silicone
Rubber Tires	Other Plastic	Synthetic Rubber	2.9%
			Other Plastic Sheetings
7.5%	6.6%	5.0%	2.9%

Belgium import in terms of plastics, 2017^{40}

³⁹ Ibid. ⁴⁰ Ibid.

Glass Fibers	Float Glass	Laboratory Ceramic Ware	Asphalt
		4.5%	2.4%
100/	11%	Rock Wool	Abrasive Powder
18%	Cement Articles	4.4%	Plaster Articles
Safety Glass	6.8%	Ceramic Bricks	Porcelain Tableware
		3.2%	1.3% Building Stone
160/	Glass Bottles	Asbestos Cement Articles	1.3%
16%	5.1%		1.1%

Belgium export in terms of stone and glass, 2017^{41}

Safety Glass	Glass Fibers	Interior Decorative Glassware 4.5%	Glass Mirrors
	8.5%	Laboratory Ceramic Ware	3.5%
13%	Unglazed	4.3%	2.3%
Glass Bottles	7.00/	Building Stone	Other Stone Articles
	7.8%	4.2%	1.9% Milling Stones
	Cement Articles	Abrasive Powder	1.6%
11%	5.8%	3.9%	Ceramic Tableware

Belgium import in terms of stone and glass, 2017^{42}

⁴¹ Ibid. ⁴² Ibid.

Wood Fiberboard	Particle Board	Wood Carpentry
26%	13%	7.4%
Sawn Wood	Rough Wood	Fuel Wood 4.0%
17%	9.8%	Shaped Wood

Belgium export in terms of wood products, 2017^{43}

Sawn Wood	Wood Fiberboard	Rough Wood
	9.7%	
	Plywood	7.6%
27%	8.6%	Other Wood Articles
Wood Carpentry	Fuel Wood	3.9%
		Shaped Wood
11%	8.5%	3.3%

Belgium import in terms of wood products, 2017^{44}

⁴³Ibid. ⁴⁴Ibid.

Pollution

Pollution in Brussels, Belgium	
Air Pollution	High
Drinking Water Pollution	Low
Dissatisfaction with Garbage Disposal	High
Dirt	Moderate
Noise and Light Pollution	Moderate
Water Pollution	Moderate

Pollution in Brussels, Belgium, 2017⁴⁵

	Household heating	Road transport	Energy	Industry	Agriculture	Other	
PM ₁₀	42%	11%	10%	17%	15%	5%	
PM _{2.5}	57%	11%	12%	10%	4%	6%	
NO _x	14%	39%	31%	3%	5%	8%	
SO _x	13%		78%	7%		2%	

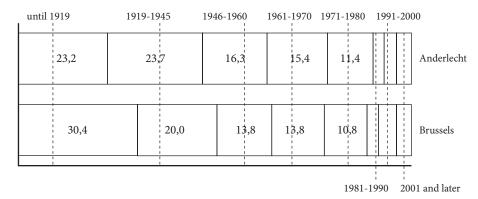
Sources of air pollutants in the EU, 2017^{46}

Household heating and road transport are the main contributors to emissions of air pollutants. Energy use in industry, inindustrial processes, agriculture and waste also contributes on a great extents. To avoid air pollution impacts on health, Brussels

Region authorities establishes various measumerments - limiting speed of trafic or changed some streets to pedestrians-only. Since 2018 in Brussels the Low Emission Zone (LEZ) has been applied.

⁴⁵ Graphics by me, original image: European Environment Agency, "Air Quality in Europe - 2017 Report," 2017. ⁴⁶ Ibid.

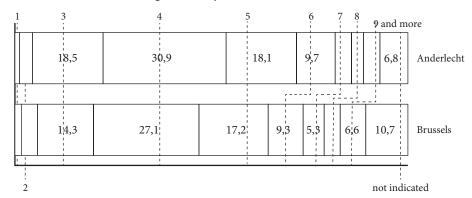
Real Estate



Distribution of conventional housing by construction period, January 1, 2011⁴⁷

Generally, Anderlecht has not many new houses. Before 1919, slightly less than 25% has been built, meaning that they are over 100 years old. Three thirds of houses were built before 1970, meaning that they

are over 50 years old. In comparison with Brussels, Anderlecht has lower number of old houses bult before 1919. The new built houses are almost the same Anderlecht and in Brussels.

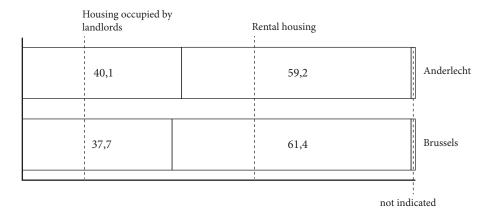


Distribution of conventional housing by number of rooms, January 1, 2011⁴⁸

One third of Anderlecht's houses have 4 rooms and almost one fifth has three rooms. Almost 20% of houses have 5 rooms and almost 10% have 6 rooms. Compared

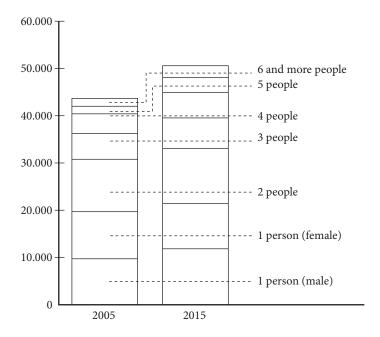
with Brussels, Anderlecht has more three-rooms, four-room, five-room, six-room houses, but less than houses with more than 7-rooms.

⁴⁷ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.
⁴⁸ Ibid.



Distribution of conventional housing by ownership, January 1, 2011⁴⁹

Almost 60% of houses are rented in Anderlecht. The number is just slightly lower than in Brussels.

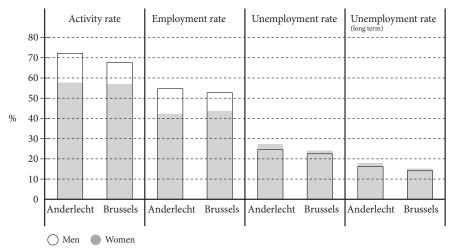


Evolution of the number of private households by size, Anderlecht, January 1, 2005 and 2015⁵⁰

50 Ibid.

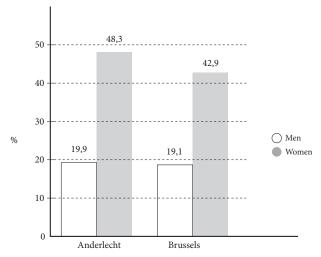
⁴⁹ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur $Ander lecht, "2016, http://statistics.brussels/files/publications/bru19/ander lecht_fr.pdf.$

Employment



Rates of activity, employment, unemployment and long-term unemployment by sex, 2013⁵¹

When comparing to Brussels, Anderlecht has higher numbers in activity and employment rates, however, access to employment is difficult, which results in higher unemployment rates, both total and long-term.

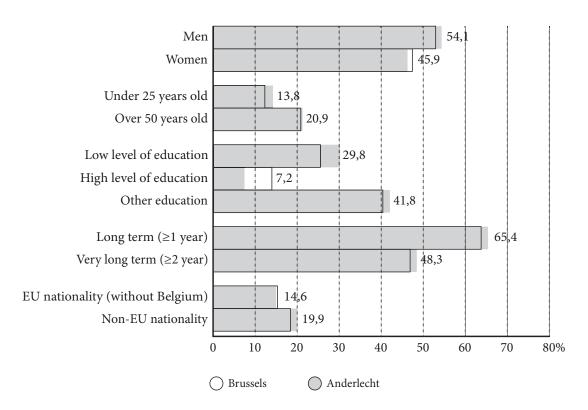


Women are more affected than men in terms of part-time employment in Anderlecht and Brussels region. This means that sex-based discrimination is prevailing.

Proportion of part-time employees in total employees, by sex, 2013⁵²

52 Ibid.

⁵¹ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.



Distribution of unemployed jobseekers by various characteristics, 2014⁵³

The number of unemployed men seeking for job is higher than women both in Anderlecht and Brussels. One forth of citizens that are over 50 years old are unemployed both in Anderlecht and Brussels. 41,8% of people who obtain other education (diploma

non-recognized in Belgium) also suffer from unemployment. Non-EU nationality citizens are more unemployed than EU. This suggest prevailing discrimination by nationality.

⁵³ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.

Income



Average after-tax income per consumption unit, Anderlecht, 2012⁵⁴

eur/year:

- <11.500
- 11.500-14.000
- 14.000-16.000
- > 16.000

The average income varies within neighbourhood. In the western part of the Anderlecht the income is higher than in the eastern part. The site of intervention is marked with being lower than 10.000euros and its considered as being low.

⁵⁴ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.

	Anderlecht		Brussels	
		%	%	
Age 18-24	10538	100,0	100,0	
Social integration income or equivalent of the CPAS	1068	10,1	10,6	
Unemployment or insertion allowance	921	8,7	6,9	
Age 25-64	70475	100,0	100,0	
Social integration income or equivalent of the CPAS	4276	6,1	4,9	
Unemployment or insertion allowance	10599	15,0	12,9	
Disability allowance	3771	5,4	3,9	
Age 65 and older	15351	100,0	100,0	
Income guarantee for the elderly	1773	11,5	10,7	
Disability allowance	1171	7,6	6,5	

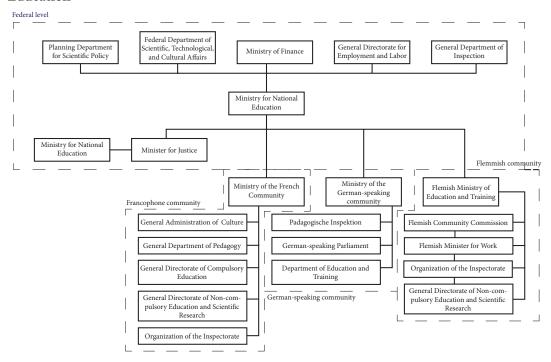
Number of persons living with unemployment, disability or social assistance allowance by age group, January 1, 2014⁵⁵

Almost 30% of people in Anderlecht are living on unemployment, disability or insertion allowance. This means that those people are living under limited income or close to the poverty line. This number

is higher in Anderlecht than in Brussels. Among the elderly (65 and over), 11.5% perceive the income guarantee for the elderly in Anderlecht, a percentage slightly higher than regionally (10.7%).

⁵⁵ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.

Education



Overlapping Sectors in the Belgian Education System⁵⁶

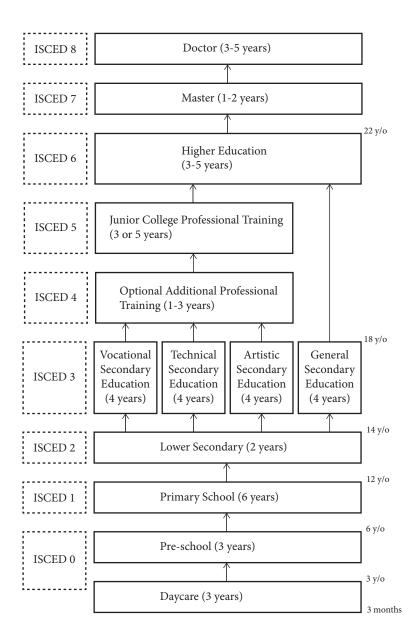
Belgian Education system is separated due to the language communities. The federal level influences all of them.

Community	Schools	Students
French 2015/16	163	100174
Flemish 2014/15	122	182358
German-speaking 2015/16	5	1151

Number of Belgian schools - VET students in a dult education $\ensuremath{^{57}}$

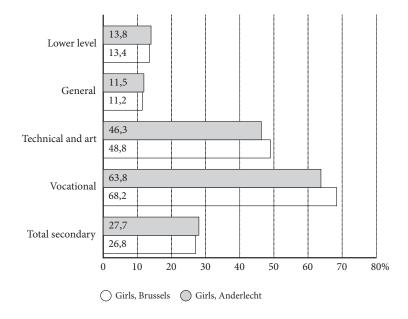
⁵⁶ Graphics by me, source: Jenna Tidwell, "Sectors," Belgian Education System A Country Case Study, 2013, https://belgianeducationsystem.wordpress.com/sectors/.

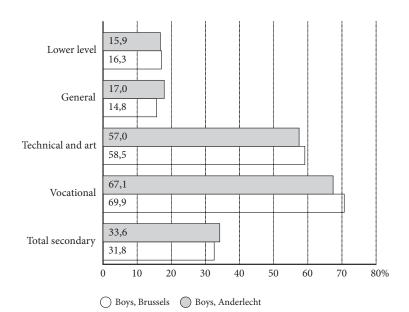
⁵⁷ Graphics by me, source: Isabelle Allinckx and David Monico, "Vocational Education and Training in Europe – Belgium," 2016, https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_CR_BE.pdf.



Education structure in Belgium⁵⁸

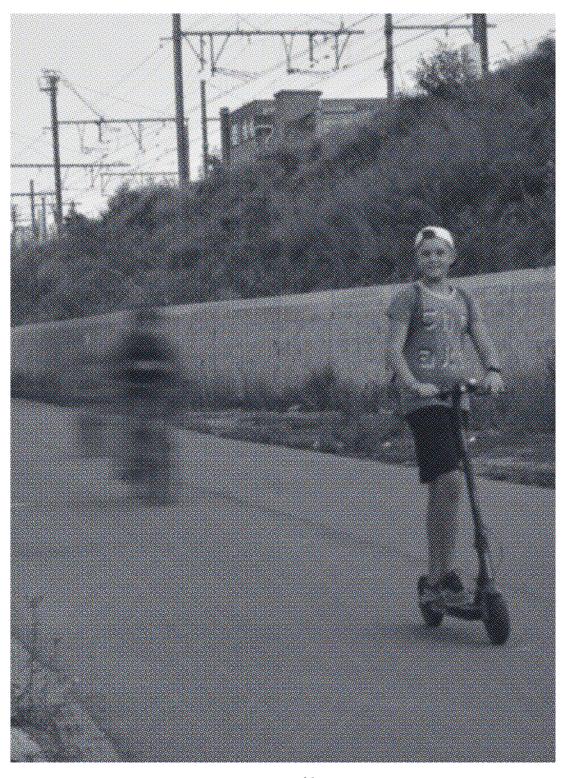
⁵⁸ Graphics by me, source: Jenna Tidwell, "Structure," Belgian Education System A Country Case Study, 2013, https://belgianeducationsystem.wordpress.com/structure/.





Proportion of two-year backward students by subjects and sexes of secondary education, $2013-2014^{59}$

⁵⁸ Graphics by me, original image: Institut Bruxellois de Statistique et D'Analyse and Observatoire, "Zoom Sur Anderlecht," 2016, http://statistics.brussels/files/publications/bru19/anderlecht_fr.pdf.

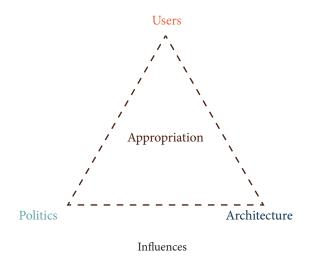


Appropriation of the site

4. Case studies: section of Anderlecht

- 1. Boulevard Aristide Briand Chaussée de Mons (middle-income neighbourhood)
- 2. Route de Lennik (high-income neighbourhood)
- 3. Rue Eloy (low-income neighbourhood)

The framework of influences on public domesticity are divided into three layers: users, politics and architecture. They all result in different colours on the maps.



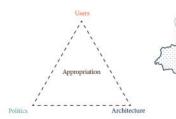
Appropriation of space: streetscapes Influences on public domesticity

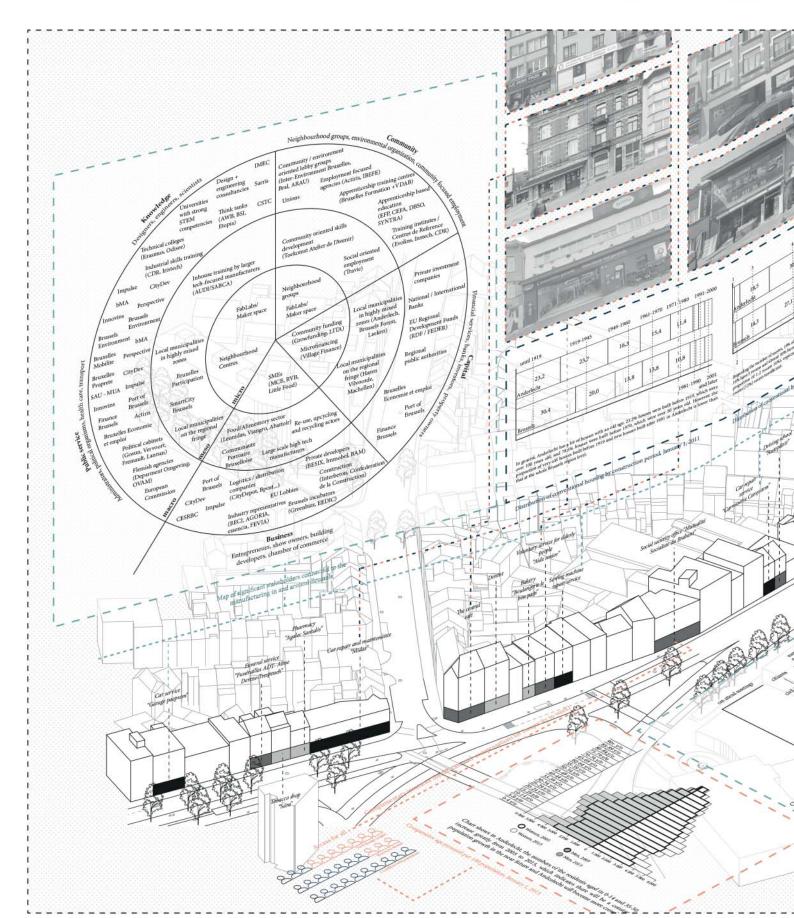
Map no.1 - Boulevard Aristide Briand - Chaussée de Mons

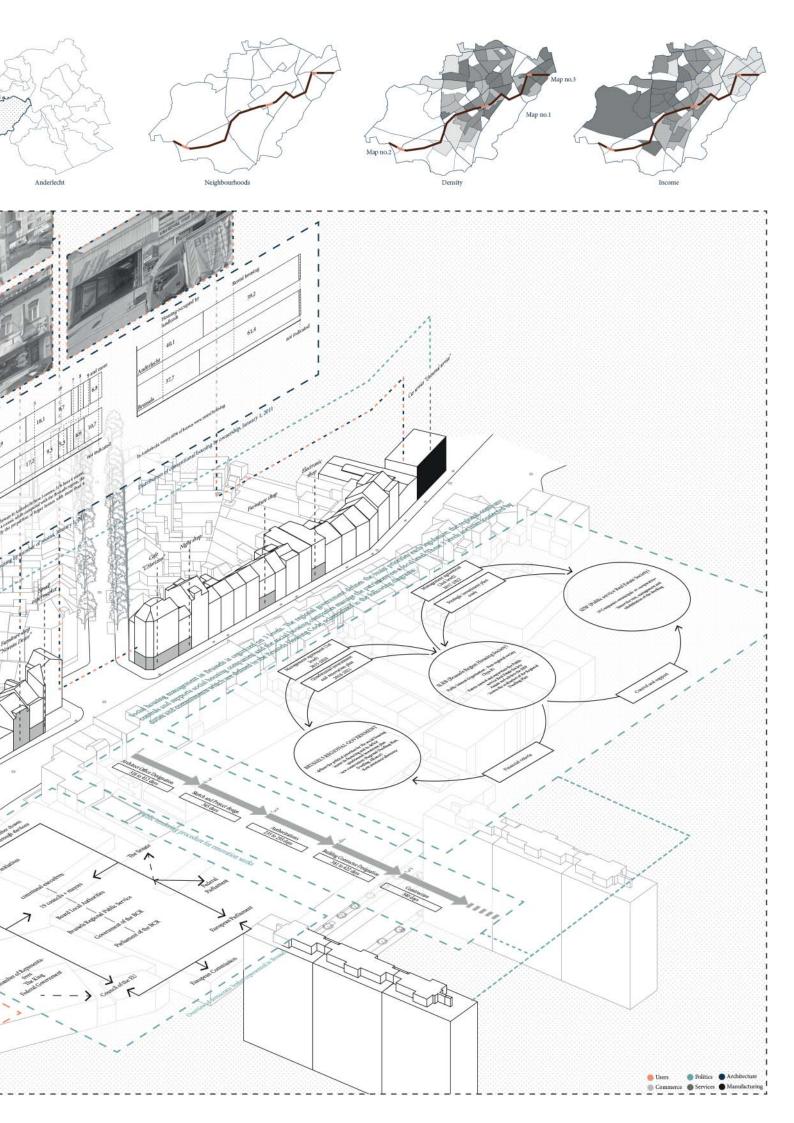
Today sustainable design strategies are based on a "one size fits all" approach, meaning that they often do not take context into consideration. It could be speculated that the reason for this is that the local and regional contexts are too broad and too difficult to define. Unsuccessful projects also happen because of difficulties understanding community value and cultural mentality. It is important to study not only the built environment but also economic, historical, technical, technological or social conditions on various levels in order to target larger influence within the design. Additionally, identifying users, their cultural mentality will help respond to specific place needs. In order to approach such a multilayered network, I suggest that the processes of appropriation and the influences behind it should be studied. The framework under appropriation could be divided into three layers: users, politics and architecute. They all result in different colours on the map.

The street is a complex socio-physical network that reveals various layers of life in a city; its historical setting, planning, political and economic situation, and cultural mentality. Studying such complexities of social life is important in order to understand the constantly changing identity of space. In the face of globalization, cities are being transformed into similar prototypes of each other and architecture has experienced placeness and loss of identity. Analysis of the context is relevant for the "localization" of new design interventions and it could help to avoid universal design solutions.

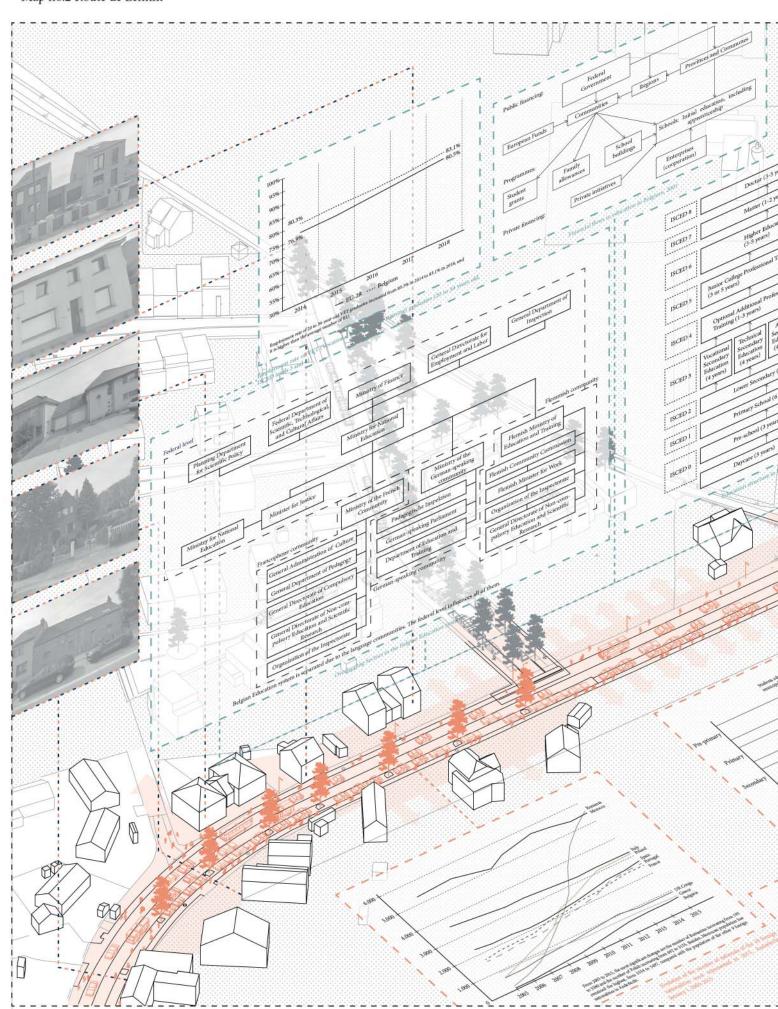
"Think of a city and what comes to mind? Its streets. If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull." – Jane Jacobs, 1961, p.37"

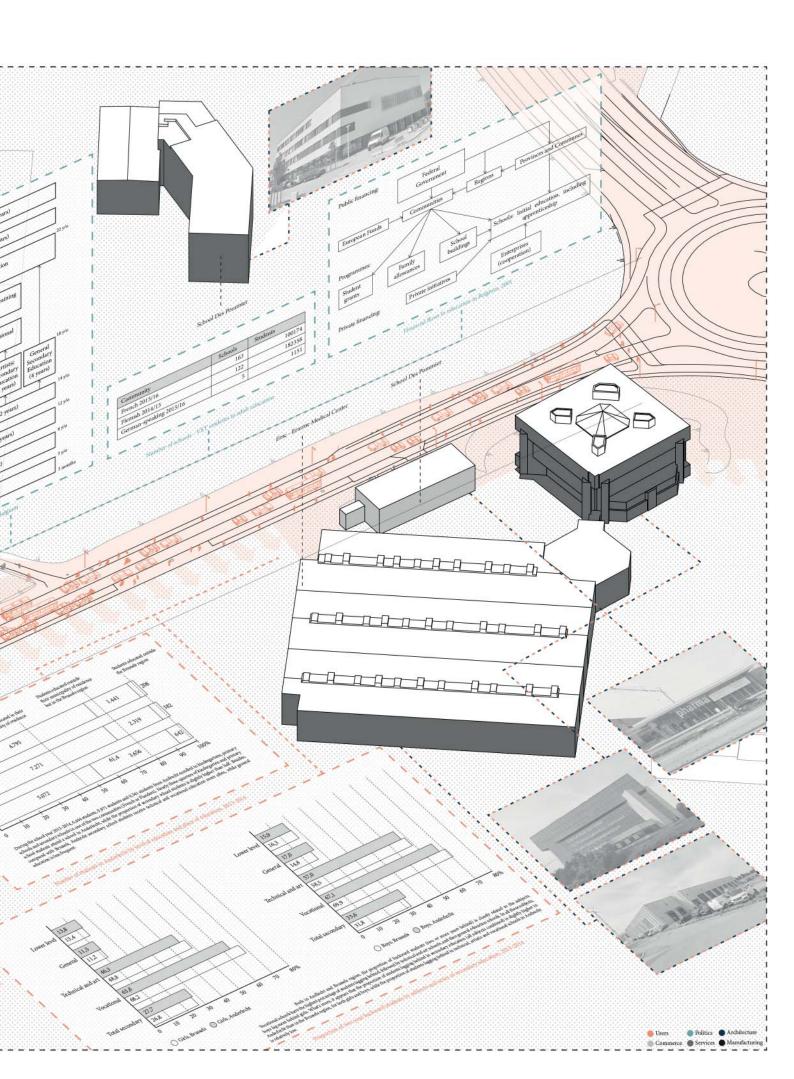




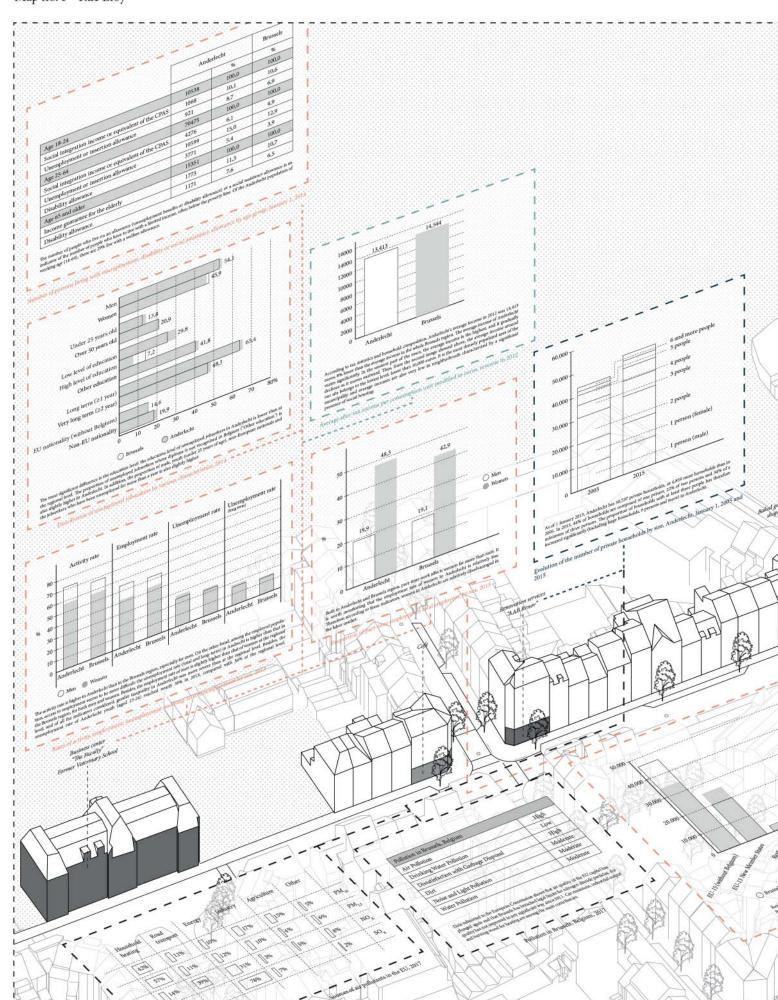


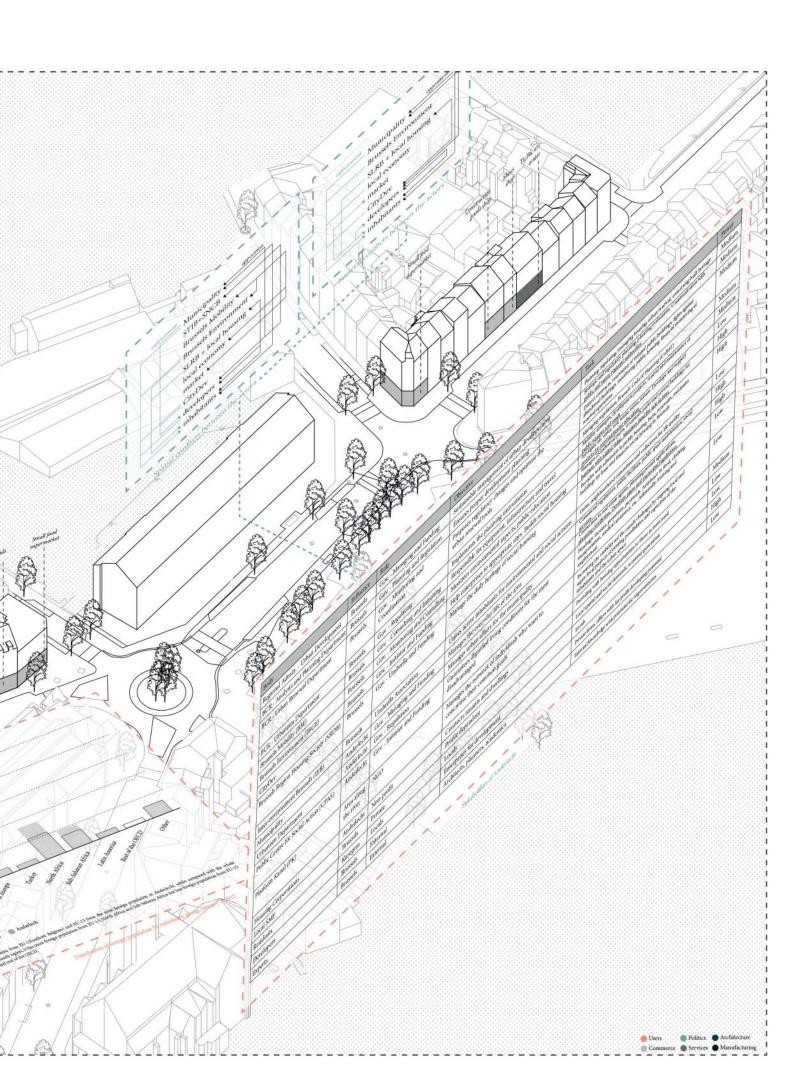
Appropriation of space: streetscapesInfluences on public domesticity Map no.2 Route de Lennik



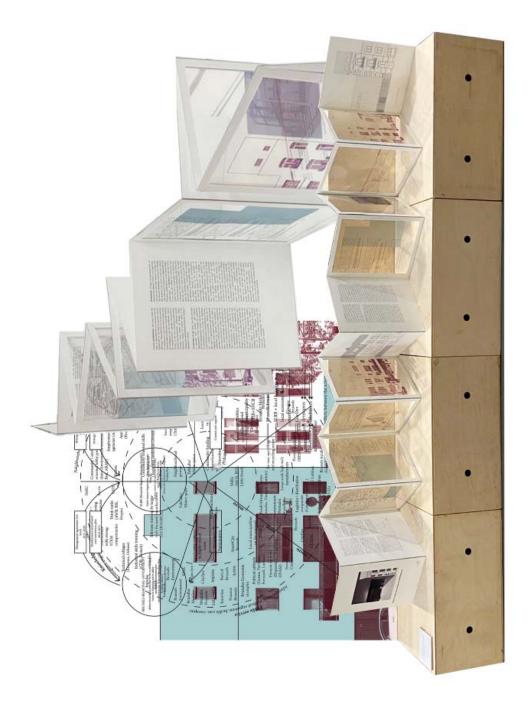


Appropriation of space: streetscapesInfluences on public domesticity Map no. 3 - Rue Eloy





5. Making research site-specific



The same technique has been used for street fragments adjacent to site (Rue des Bassins). Leporella with transparent segments has been made in order to express the multilayerdness of the question.



Traces of appropriation , Anderlecht

6. Conclusions

- -Streets support various cultural, economic, political and social activities and reveals multiple layers of the life of a city. Studying such complex networks help understand context and avoid placelessness.
- In order to make new intervention fitting into the context it is important not to use "one size fits all" approaches. Neutral descisions could be avoided by doing indeph analysis of the existing setting and understanding the cultural traditions and the id¬entity of the place.
- Since context is very broad term, it is difficult to study and define. Due to this, few methodological techniques were used to conduct the research (literature study and cases studies). In terms of case studies, three streetscapes were chosen and studied throughout multilayredness technique that resulted in thick maps within looking at conditions as many-things-in-relations.
- The three case studies were done in such manner: firstly, the personal interest in appropriation set the topic which wanted to be expanded. Then the limits of scale were determined in order to bracket the research. Afterwards, within the associative manner, conditions were presented one-by-one and relations were defined. Consequently, the data has been put on a geographical location, which resulted in another layer of relations. In this way, situated perspective has been formed on the place throughout

- the knowledge and intuition. Three maps introduce and locate Anderlecht spatially and geographically and a number of issues and aspects are identified that could be addressed with the design.
- Politics, users and architecture are the main influences for appropriation. The conditions that could help localize the project in Anderlecht could be divided into those categories: typologies, history, population, actors, regulations, material flows, pollution, real estate, employment, income, and education.
- From the first map (middle-income)
- street encounters facadism, but the active ground makes the street attractive; active grounds destroys the continuity of architectural language; making (production) is hidden inside the blocks, however, it is affected by the various stakeholders that operates on various scales; the houses are mainly built until 1919 and usually consist of 3-5 bedrooms, this trend prevails in the whole Brussels region; more than a half houses in Anderlecht are rented identifying the neighbourhood as the place of transition, as well as Anderlecht being a low income neighbourhood in comparison with the whole Brussels. There is much social housing in the neighbourhood and is being managed on 3 levels. Many social housing buildings are obsolete and are in the urge of renovation, which takes around

5 years.

- From the second map (high-income) - public realm of the street is way bigger than in middle-income street, additionally, there are many empty sites present. Situated almost on the outskirt of Anderlecht, the street is still relatively active in terms of motor traffic and residents' circulation. This is due to the public functions located down here - medical centre and schools. In terms of education system, it differs from other European countries because of separation into three language communities: Francophone community, German-speaking community and Flemish community. In Anderlecht, almost threequarters of kindergarten and primary school students attend school in Anderlecht, others are being educated outside their municipality of residence. In Anderlecht many people choose to go to technical and vocational schools rather than general education. This could be related to the high employment rate of vocational education graduates. However, there is not much variety of vocational education schools in the neighbourhood.
- From the third (low income) map there are many people living on allowance in the neighbourhood due to the unemployment. The income, generally, varies throughout whole Anderlecht with an average income of 13,413eur per year, 8% lower than in Brussels region. Our site belongs to the highly dense populated area with the low

income (lower than 10 000).

- -Thick maps are not the final result of the research, because the technique of multilayering suggest it being never-ending process. The critique towards this method could be that it is rather personal and based on intuition.
- The new project should be grounded into context and trigger dialogue with the neighborhood and local industries; highlight the industry in the neighbourhood; triggers positive ways of appropriation of space in the surroundings, because people value if they feel that they belong to space and has the power to transform it; introduces production as a collective process; make production visible; host environment where students are motivated to learn new skills (vocational training education)

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