



After - Work

Planning Care Beyond Socio-Spatial Binaries

keywords: aging, reproductive labour, housing needs, communal care

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“an alien eye had transformed her to another being”

—

de Beauvoir (1973, p. 428)

Colophon

AFTER - WORK

Planning Care Beyond Socio-Spatial Binaries

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Figure 1, p. 1: Screenshot taken from
Howl's moving castle. Studio Ghibli
[screenshot] Anime Filme. <https://www.prosiebenmaxx.at/anime/anime-filme/studio-ghibli/5-fakten-ueber-das-wandelnde-schloss>

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01 *Introduction*

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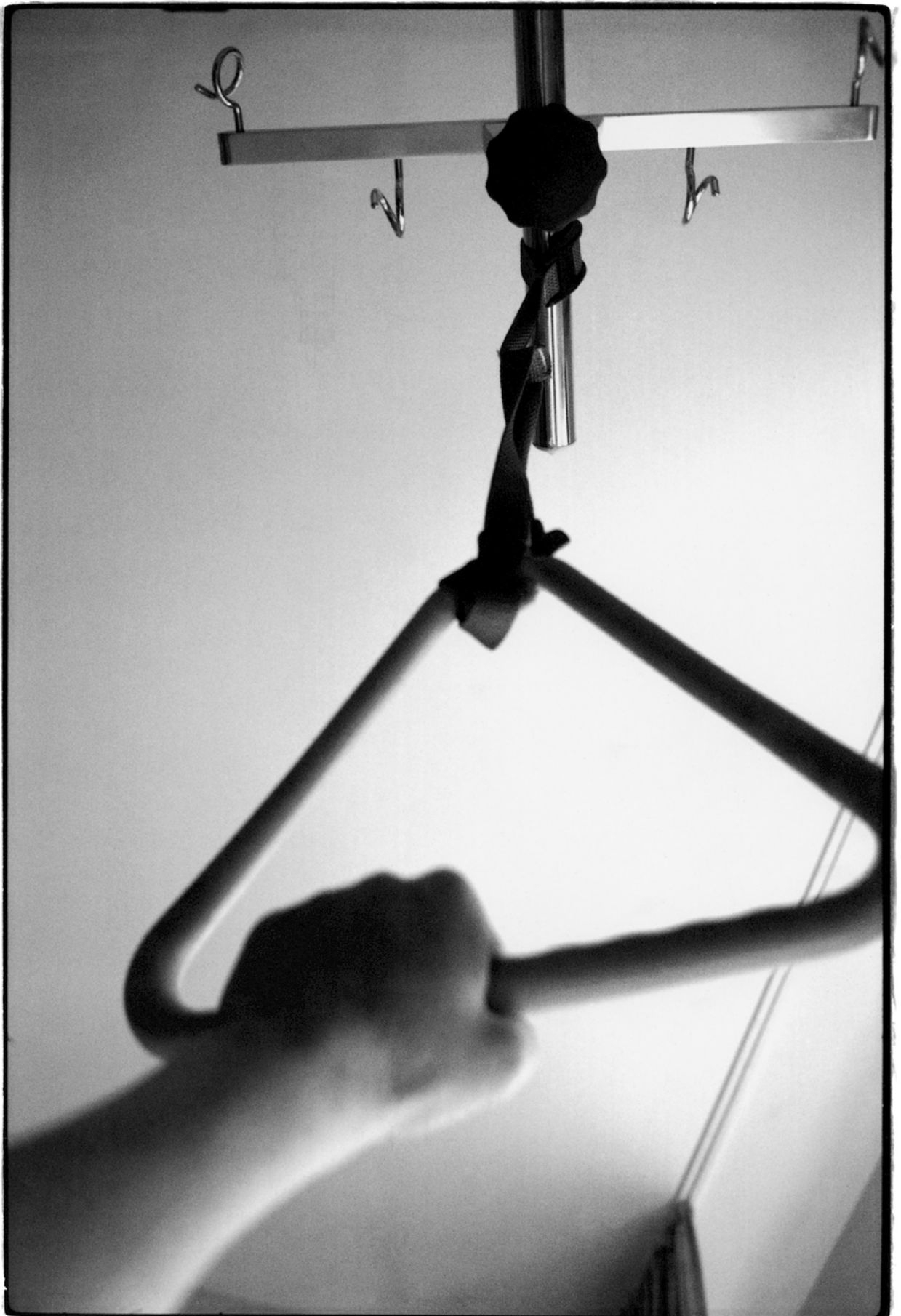
Abstract

The thesis critically examines existing dichotomies in the spatial and temporal aspects of (elder)care provision ranging from concepts of private and public space, over the family, the welfare state, and the private market as central units of care. Moreover, it actively questions the contemporary spatial representations of these three units because eldercare is often hidden in the private household, the nursing home in the urban periphery, or ageing is treated as a lifestyle for the affluent.

The theoretical repositioning of these aspects is then reflected in a spatial understanding through the scales: from the regional of the Grand Region Luxembourg to the neighbourhood level in Howald, Bonnevoie, and Hamm. The context shows a highly mobile labour market in general and in the field of health and long-term care. Currently, Luxembourg is dependent

8 on cross-border workers from its neighbouring countries. With the general ageing of European populations, the ageing of cross-borders will be a challenge for the labour market in the region. Next to this challenge, the thesis examines the relationship between care and the private household. Moreover, the family as an institution of care is becoming ever more heterogeneous regarding cultural background, composition, and size, which is often not reflected in policies and models of care provision and housing. Ranging from theory on social reproductive labour, gender, and spatial justice, the thesis uses utopian precedents to imagine new ways of communal life centred around care. It presents scenarios that explore future trends in mobility and technology and their application in care work. These scenarios function as imaginaries for a collective future beyond binary conceptions of care work and offer a new direction in the planning of housing and care provision. By later presenting the personal experience of the caregiver and receiver through speculative storytelling, the study advocates for more agency for both groups alike in planning and governing care.

Figure 2: Genzken, I. (1991). Krankenhausfotos [photograph] Museum für Moderne Kunst. <https://www.mmk.art/en/whats-on/crip-time/>



Motivation

My main motivation for this thesis lies in testing my role as an urban designer for socio-spatial but also political transformation in a way.

Especially the narrative of a declining labour force due to an ageing population in the European context often serves as a political tool to play generations against each other. Gen Z is depicted as lazy, while Boomers are responsible for the climate crisis. But considering this change, pension systems, and care in old age are so reliant on the workforce, that for many young people, they just seem unrealistic to attain in their old age, so what to even work for? Next to this picture of a dooming future, a waged job necessarily no more guarantees a good life, especially in old age.

However, wealth is often transferred through families, maintaining social inequalities across generations. In this respect, ageing and access to appropriate care can become a class issue.

Simultaneously this narrative of a declining labour force and economy is appropriated in right-wing politics to propagate nationalistic ideals, urging the increase of 'native' births. This to me is not only a racist claim but also a recall of nuclear male-led family ideals. Rather than fighting against the imminent demographic transformation, I think it is important to accept and prepare for it accordingly.

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Current European and national policies in this matter rely on the migration of a skilled labour force and new technologies to compensate for the declining workforce. Another development is the outsourcing of eldercare from the welfare state to private households. Initiatives such as 'Aging in Place' are an example of that, mainly to save money but various studies also show that ageing in the home benefits the elderly.

I see this demographic change as an opportunity to question the current economic system and to adopt new forms of economic activity, production and reproduction that are modelled on it rather than holding onto exploitative models (exploitative for humans and environment). In this regard, I find myself often drawn to utopian and socialist ideas of the past and feminist visions of the future which centre around communal economic life.

With this thesis, I essentially aim to test these visions and applications in a case study, what they would mean for inhabitants of old age and the urban fabric. From this, I wish to gain insight into the possibilities of my professional field to actively reshape social, spatial, and economic structures which often seem so entrenched in the European context.

The case area of Luxembourg is interesting for me to investigate because of its territorial and social conditions as well as its apparent universal care infrastructure which is led by the welfare state. My approach therefore is two-sided by learning from Luxembourg and its care network, critically examining its spatial performance, and learning from the projection of a new system onto it.

Problem Field & Context

Varying Old - Age Dependency

Across Europe, the demographic landscape is undergoing a significant transformation. While all countries will experience a rise in old age populations. Not all countries will be affected by this change equally. This is visible through the varying old-age dependency ratios per region (Figure 3). Factors such as declining birth rates, increased life expectancy, and changes in migration patterns contribute to this dynamic shift. Countries experience an ageing population, marked by a higher proportion of elderly individuals or a more balanced age distribution due to population influx. This variation in old age dependency has profound implications for the society, economy, and the access to professional care systems (Sievert et al., 2017). Regardless of the dependency ratio, an ageing population is likely to increase the demand for healthcare services, pension systems, and social

12 support, thereby straining public resources (Pohu, 2023). Compared with its neighbouring regions, Luxembourg's population structure is relatively young. This young population structure is mainly related to high rates of migration. According to Statec (2021), the population has grown by a quarter in the last decade. However, its labour force is also largely dependent on cross-borders from France, Belgium, and Germany, who account for almost half the labour force and are of a higher median age, as well as residents of non-Luxembourgish nationality, which account for almost half the population (LISER, 2015).

In the Grand Region, the old-age dependency ratio increases mostly with distance to Luxembourg, with Thionville and Merzig-Wadern in the closer realm. Within Luxembourg, the municipalities of Remich, Vianden, and Esch-sur-Alzette account for the areas with the largest ratio of people over 65 in 2016 (Figure 4).

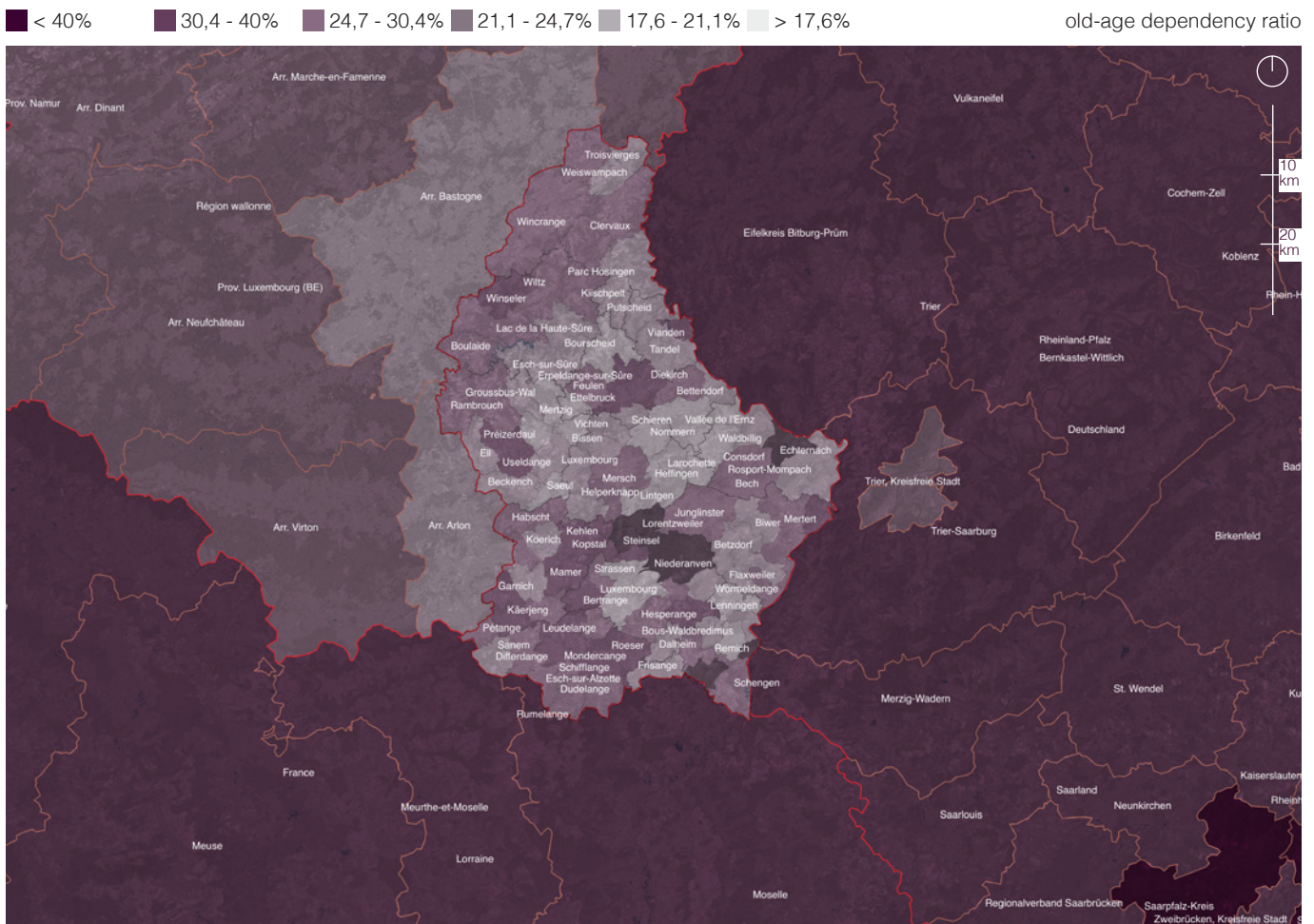
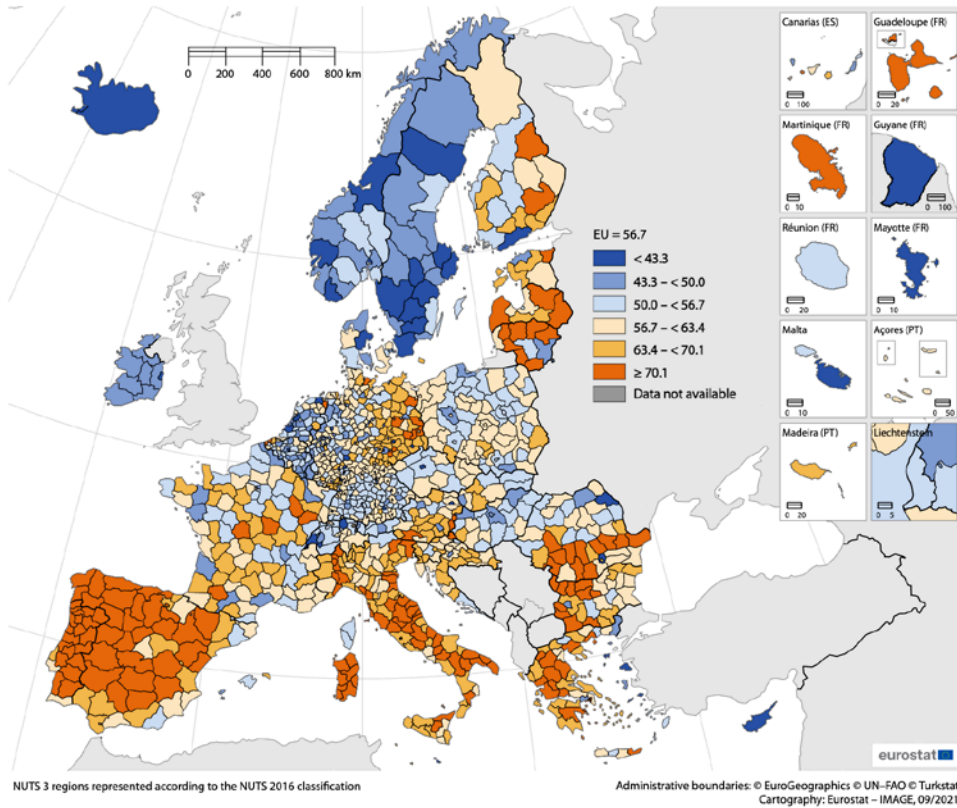
Reasons for a higher age dependency in certain regions can be traced to the relocation of younger populations to other regions due to job opportunities or lifestyle changes but also to an influx of older people due to better access to professional care, other services, access to recreational places or the will to live amongst people of the same age (Sievert et al., 2017). The European Commission (2021), therefore, contends that policies which address the social and emotional needs of the elderly will be necessary.

In Luxembourg, the juxtaposition of an increasing population through migration and high cross-border mobility on the one side and an ageing native population on the other poses intricate challenges (Kollwelter, 2017). Ensuring equitable access to care services is a multifaceted challenge. It involves not only the availability of healthcare facilities but also considerations of affordability, inclusivity, and cultural sensitivity.

Figure 3, top: Eurostat (2021). Projected old-age dependency [map] Eurostat. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210930-1>

Figure 4, bottom: Old-age dependency ratio in 2021, EU Nuts 3 and in 2016 for Luxembourg, Author's Work

(%, people aged ≥ 65 years / people aged 20-64 years, by NUTS 3 regions)



Housing Shortage

Due to its fast economic and demographic growth, Luxembourg is partially experiencing a huge increase in property prices and a housing shortage (Figure 7). Since the country's economic centres are mainly situated in the capital and southwards, population growth occurs mostly in these areas (Figure 6). This marks a strong contrast to the centre and north of the country being rather thinly populated. Domestic and foreign investors often view real estate as a secure asset, leading to increased demand for properties. Another factor, as proposed by Hilgert (2010), is that since the introduction of long-term care insurance and home aid, the elderly reside longer in their respective homes, only partially occupying family houses (Figure 5).

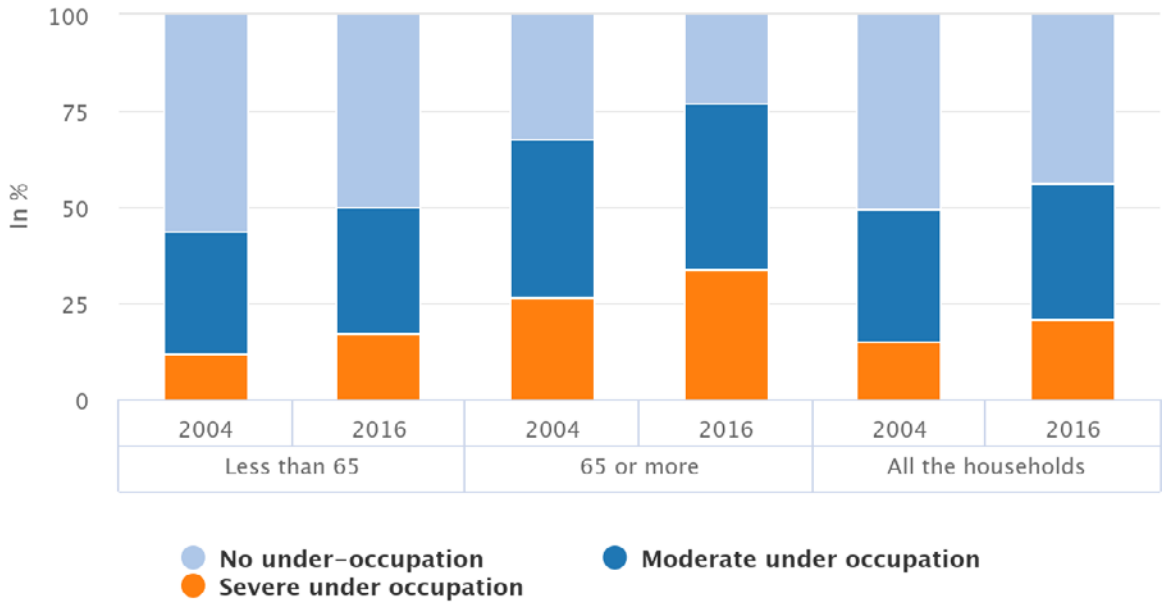
14 A limiting urban fabric, largely composed of single-family homes, and evolving living standards make the housing market in urban centres relatively competitive. The most affluent households, which are expats often supported by their companies or native Luxembourgish with high incomes, can afford to rent or buy on the private market. It is difficult for households supported by median income to finance their accommodation. They, therefore, develop different strategies, such as moving away from the most expensive centres, crossing the border, or applying for affordable housing (Kuzrsawa, 2023). The poorest are unable to buy or even rent in the private market. This contributes to increasing pressure on the most affordable housing, with a powerful impact on households in the lowest income brackets (Observatoire de l'Habitat, 2020). The unaffordability or general unavailability of housing in the urban centres of Luxembourg or Esch-sur-Alzette drives urban development outwards, often along main communication routes. This process of diffusion is not only visible within the borders but also in the neighbouring countries. The border regions are also impacted by a rise in housing prices due to their proximity to the Grand Duchy. However, Christmann (2018) remarks that housing prices in Luxembourg are around twice as high as in the respective border regions. This “discourages or prevents many cross-border commuters from ever moving to Luxembourg, and even causes Luxembourgish citizens and expats to move to the more affordable neighbouring countries. This increased mobility not only causes problems about infrastructure provision and severe traffic congestion, but also leads to speculation on land and housing in these regions” (Christmann, 2018).

Figure 5, top: LISER (2016). Under-occupation of housing increases with age [diagram] LISER. https://www.liser.lu/ise/display_indic.cfm?id=557

Figure 6, bottom left: Pigeron-Piroth et al. (2017). Structure spatiale selon les flux domicile-travail, d'après le zonage en aires urbaines 2010 de l'INSEE [map] Economie et Statistique. https://orbilu.uni.lu/bitstream/10993/31485/1/PDF_localisation_200617.pdf

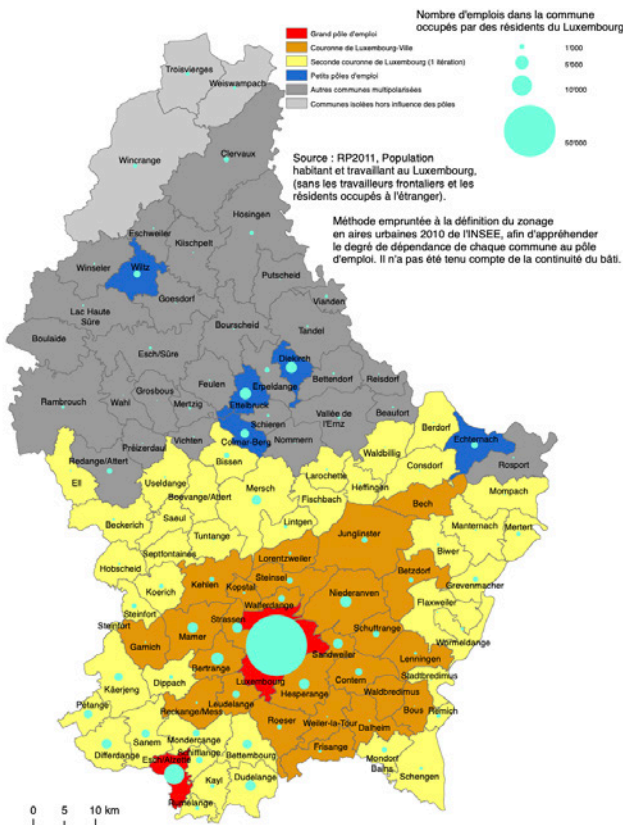
Figure 7, bottom right: Licheron, J. (2023). Ventes d'appartements existants [map] LISER. <https://www.liser.lu/?type=news&id=1947>

Proportion of households living in under-occupied housing according to age of the head of the household, in 2004 and 2016

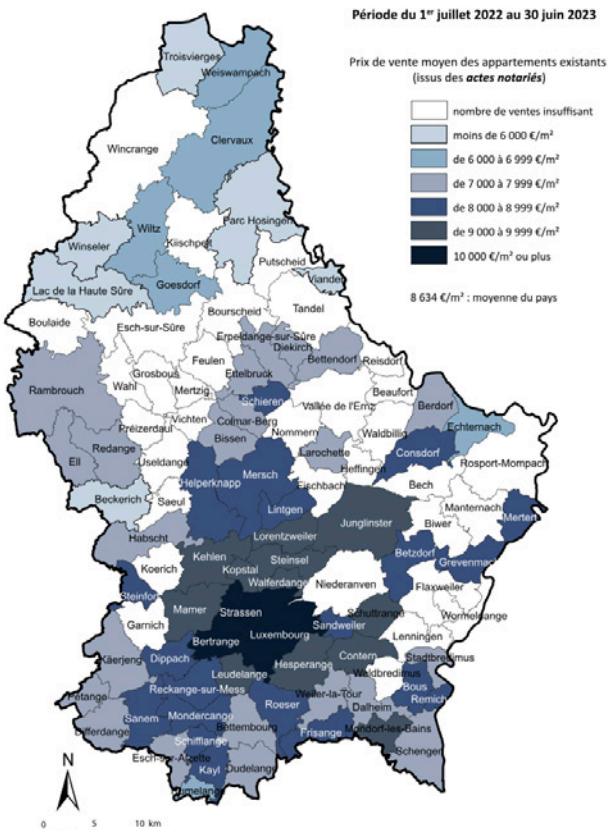


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Source : Données STATEC RP2011- Cartographie Université du Luxembourg



Auteur : J. Licheron, LISER, Septembre 2023
Fonds de carte : ACT, LISER, 2018
Données statistiques : Publicité Foncière, calculs STATEC-Observatoire de l'habitat
Note : Un minimum de 5 ventes d'appartements après sélection, rejet des extrêmes et traitements est requis pour afficher le prix moyen communal.

Changing Social Models

The country's fast demographic development also leads to changes in the social network. Kollwelter (2007) remarks that the country's dependency on labour inflows, which support the welfare economy, tests its social cohesion as some Luxembourgers fear "becoming a minority in their own country". Indeed, this notion is further expressed by Fred Keup, party leader of the ADR*, a right-wing party, who criticises the fast population growth as it, in his opinion, challenges access to housing, infrastructure, and healthcare (Carette, 2023).

Nevertheless, migration has influenced Luxembourg's social and cultural landscape primarily through the influx of workers from Italy, Portugal, and neighbouring countries employed in the steel industry from the 1950s onwards.

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Nowadays, foreign employees, whether residents or not, fill various jobs and shape the wide diversity of the country (Figure 8). Moreover, they settle in predominately different areas with French and Italians closest to the economic hubs, Belgians and Germans close to their respective borders and Portuguese throughout the country (Pigeron-Piroth et al., 2017; Appendix 02).

Another fundamental shift impacting the arrangement of care work in the private household is the emancipation of women through their participation in the job market (Figure 9). Fleury et al. (2011) present intergenerational solidarity within the Baby Boomer generation in Luxembourg. After their children come of age, many find themselves as their parents' caregivers. However, this solidarity is mainly maintained by women and largely dependent on the geographical proximity to parents or in-laws. Therefore, a continued rise in women's employment, geographical distance, and fragmentation in family models can threaten inter-family and intergenerational support systems. Traditional family structures have given way to diverse familial arrangements which challenge conventional biogenetic care relations that are often encouraged through policies. The European Commission (2021, p. 16) remarks, "Relying on informal carers is no more sustainable, as help from family members is increasingly difficult to ensure, with families having fewer children, living further apart, and women participating more in the labour market." The diversification of families and households leads to another phenomenon experienced by the elderly and young generations alike. The emphasis on individualism, accelerated by modernity, has ramifications for communal bonds and creates prejudices among age groups, which can be referred to as Ageism (Hagestad & Uhlenberg, 2005).

*The ADR holds five out of 60 seats after the parliamentary elections of 2023 and is part of the opposition. It seems therefore that right-wing populism has not risen as significantly in Luxembourg as in other European countries.



Figure 8, top: LISER (2011). Increasing numbers of foreign residents [diagram]
LISER. https://www.liser.lu/ise/display_indic.cfm?id=382

Figure 9, bottom: Simmons, L. (1989). Walking House (Colour) [photograph].
<https://www.lauriesimmons.net/artwork/walking-and-lying-objects>

Care Work & Post-Work

According to Hester and Srnicek (2023), the care sector is an immense and growing market of advanced capitalist countries. Since introducing universal long-term care insurance in Luxembourg in 1999, the care parent organisation COPAS (Confédération des organisations prestataires d'aides et de soins) has employed more people than the local steel industry in 2010. In the same amount of time, the number of people seeking professional care has tripled. Hilgert (2010) argues that social services are the easiest sector for the state to create new labour opportunities.

While it presents a growing sector in the realm of waged labour, in most industrialised countries, unwaged care work, which mainly occurs in private households, takes up almost half of devoted labour hours (Hester & Srnicek, 2023). Folbre (2001, p. 67) highlights this paradox embedded in

economic measurements of care work: “If you marry your housekeeper you lower GDP; if you put your mother in a nursing home you increase GDP”.

18 A dominant argument to reduce reproductive labour is to increase women in waged labour. The emancipation of women in the labour market, therefore, emancipates reproductive labour of its repressive nature. Gorz (1985) argues that post-work theory should extend the “non-economic rationality of these activities beyond the norm” instead of liberation through salaried reproductive labour. Care work is often monotonous and never done, and an emancipation of its gendered perspective would not necessarily change its oppressive nature (Hester & Srnicek, 2023; Figure 10). A study on long-term care by Eurofound (2020) also shows that caregivers and receivers experience frequent harassment, risking their mental health state.

In this respect, discussing the future of work concerning care work is quite complex. In common post-work theories, automation, machine learning, and other new technologies are argued to free individuals from traditional (industrial) labour. Robots will take over factories and offices (Benanav, 2020). If and how much full automation is possible or even desirable in reproductive labour remains a question to be answered.

Looking at the growing sectors of health and long-term care in public and private providers and an ageing society, the amount of necessary care work seems to increase. So, rather than relying on skilled migration and new technology to take over the tedious nature of this work, it is time to rethink its spatial confinement and emancipate care work from the private home and the nursery (Hester & Srnicek, 2023).

Figure 10: Simmons, L. (1976). Untitled. Woman Standing on Head. Laurie Simmons. [photograph] <https://www.lauriesimmons.net/artwork/early-black-and-white>



Problem

Statement

An ageing population in Europe is projected to increase the amount of care work necessary. The current performance of care work is mainly bound to governmental institutions and the private household as the institution of the family or through home aid. It is therefore important to understand the future of care work linked to other demographic challenges such as the housing shortage, a decreasing labour force, and changes in social and private life. A sole emancipation of reproductive labour into waged jobs will not eliminate its tediousness and withhold its gendered, ableist, ageist, and classist nature.



This thesis aims to disclose and challenge institutionalised perceptions, spatiality, and norms in social reproductive labour or care work in the European context of the welfare economy. It questions the role of family, the welfare state, and the private market as main institutions of care as well as the values and conditions imposed on caregivers and receivers alike, which are linked to their spatial configuration.

The thesis analyses these three units and their spatial performance considering significant demographic challenges such as ageing, housing affordability, and social cohesion. Through a queer-feminist perspective, it uncovers gendered, ageist, ableist, and classist conceptions and their spatial performativity of care in old age. Through this lens, the thesis later aims to illustrate speculative alternatives that centre around care as communal activities, employing concepts from utopian precedents on communal life away from capitalist compulsion and advocating for social justice.



main question

How can **alternative concepts of reproductive labour** contribute to a socio-spatial transformation of **existing spaces and networks** of aged care in Luxembourg?

24

SQ1 What are current spaces employed and norms imposed in the realm of social reproductive labour?

SQ2 How will demographic change affect existing spaces and networks of care in Luxembourg?

SQ3 What are alternative concepts on social reproductive labour and their spatial performance?

02 *Methodology*

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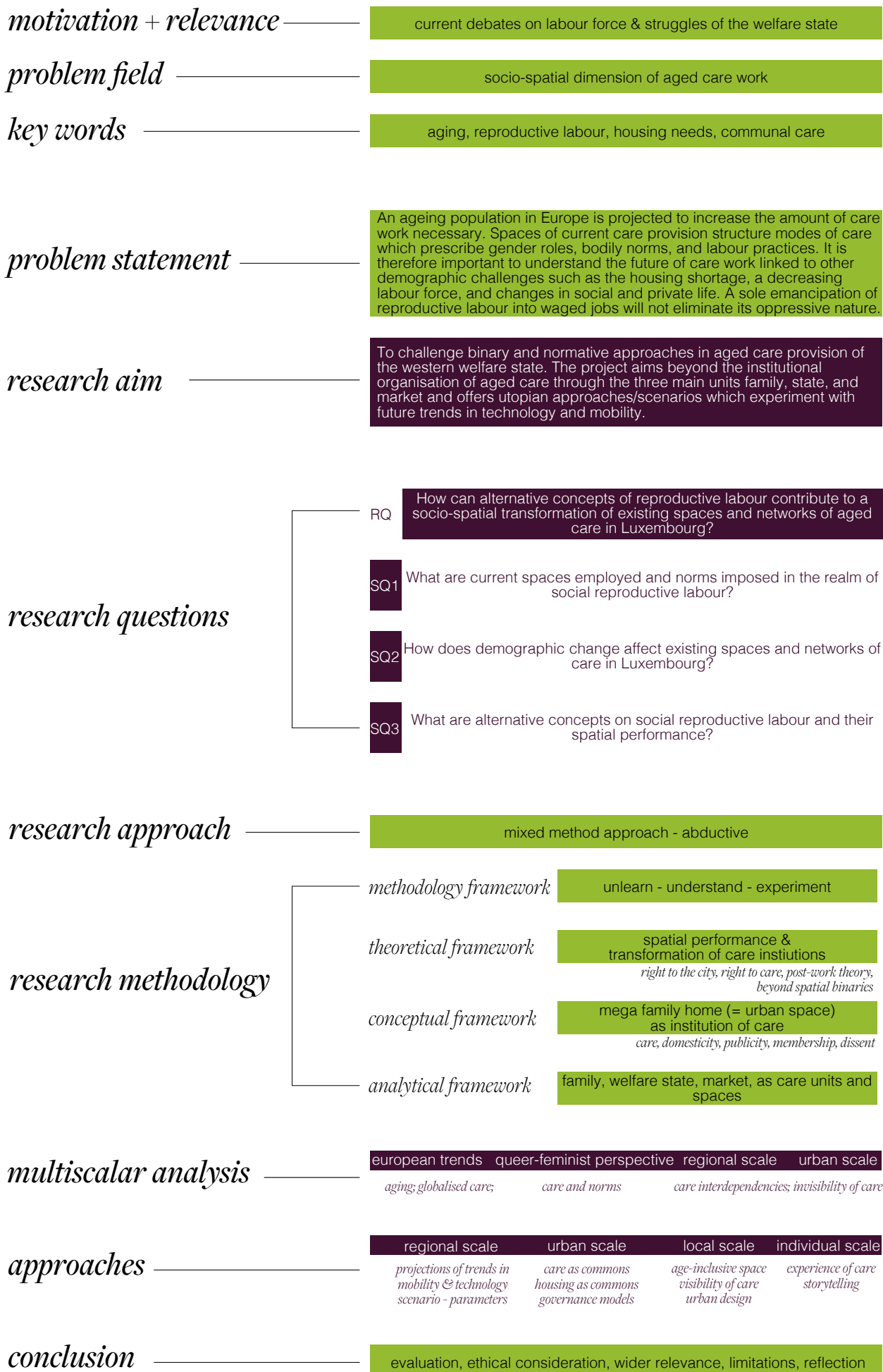
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Research

Framework

Relations of Inquiry

In this thesis, I follow an abductive research approach. I start with a theoretical framework and hypothesis, which is constantly re-evaluated through a more detailed analysis of the case study and later design applications. The main theories reflect the problem statement and the consecutive research questions. The main research follows a mixed-method approach, ranging between quantitative and qualitative analysis and an experimental research approach in the design stages of the project. All steps contribute to the end goal of the project to illustrate a communal future for care work through scenarios which are finally evaluated through indicators developed from the theoretical framework.



Methodology Framework

Lines of Inquiry

The main research is conducted through three main blocks and chapters, each with its respective methods, results, and connections.

The three main methods employed through means of:

- **Unlearning**
- **Understanding**
- **Experimenting**

All three are related to a specific research question. The conclusions of the various methods used in each section aim to answer the research questions (Figure 14).

Chapter 4, Unlearning Family constructs the theoretical base through an extensive literature review and is further employed in spatial analysis and scenario-building.

30 **Chapter 5, Understanding Homes** constructs the spatial framework through quantitative and qualitative spatial analysis. This analysis further influences the design experiments and reflects on the theoretical framework.

Chapter 6, Mega Experimenting builds a catalogue of utopian precedents, which have been referenced by the corresponding literature in a first step. It takes this catalogue and the previously constructed frameworks to frame scenarios and design experiments on the case study.

All research and design are then reflected in a few narratives which will be played out according to the experiments in **Chapter 7, Stories from Mega-Family Homes**.

Figure 14: Methodology Framework,
Author's Work

RQ: How can alternative concepts of reproductive labour contribute to a socio-spatial transformation of existing spaces and networks of aged care in Luxembourg?

mixed method-approach

SQ1: What are current spaces employed and norms imposed in the realm of social reproductive labour?

research by unlearning

in Chapter 4: Unlearning Family
(results are also used in Chapter 3: Mega Family Homes)

builds basis for

builds basis for

SQ2: How does demographic change affect existing spaces and networks of care in Luxembourg?

research by understanding

in Chapter 5: Understanding Homes

builds basis for

SQ3: What are alternative concepts on social reproductive labour and their spatial performance?

research by experimenting

in Chapter 6: Mega Experimenting

methods used

literature review on existing binaries in labour, gender, ability, age, and their spatial performance

- Literature Review
- Theoretical Review
- Theoretical Space-Time Mapping

spatial analysis of the socio-demographic situation & development in Luxembourg

- Statistical Data Analysis
- Policy Analysis
- Site Visit
- Mapping
- Space-Time Mapping
- Semi-Structured Interviews with Experts
 - field of aged care
 - field of spatial planning
- Informal Interviews on Site

design experimenting with alternative concepts of aged care provision on the case study and narratives of experience

- Analysis of (utopian) precedents
- Site Visit Familistère in Guise, France
- Setting of Design Strategies
- Design Experiments
- Creative Imagination
- Speculative Storytelling

intended outcomes

theoretical framework for design experiments

theoretical framework for spatial analysis

maps & diagrams of spatial performance of aged care

spatial framework for design experiments

catalogue of design precedents & strategies

design experiments on the case study

feeds back into

feeds back into

feeds back into

narratives of personal experiences in experiment

builds basis for

in Chapter 7: Stories from Mega-Family Homes

Methods of Unlearning

Chapter (3+) 4: Unlearning Family

Contemporary modes of organising care, such as the welfare state, the family, and the private market, and their spatial performance are ingrained in our social understanding and planning. The chapter and main method of Unlearning, therefore, present the theoretical framing of the thesis and the project. It is called Unlearning because, apart from understanding current paradigms in care provision, the main goal is to challenge and move away from them.

related sub-question

What are current spaces employed and norms imposed by social reproductive labour?

methods used

- Literature Review
- Theoretical Review
- Theoretical Space-Time Mapping

steps taken during the analysis

This chapter mainly focuses on the building of the theoretical framework, which is later used in spatial analysis and design experiments. The literature review is composed of books and essays which deal with notions of labour, gender, ability, and age. The main theories follow political theory such as Arendt and Foucault, as well as Marx's review on labour and value theory. These concepts re-emerge during a second wave of feminism with Federici and Dalla Costa who add a gendered perspective to Marx's understanding. Through the application of queer theory as well as notions of post-work theory, the understanding of reproductive labour is further enriched. This literature is laid out and connected via a theoretical review, linking main concepts and relations in the main theoretical framework of the thesis in Chapter 3.

The theoretical notions are explored through diagrams and time-space mapping, revealing the spatial performativity of care work. I see time-space mapping as an important method to bridge between theory and spatial analysis. Moreover, this method presents an opportunity to relate (im)mobility on the micro-level to planning on the regional level (Hägerstrand, 1970). Hägerstrand introduces his concept as a model for human behaviour which is not based on mass probabilistic behaviour but as a redefinition of social roles through acknowledging social organisation and technology available on the micro-level. He describes time as a critical aspect of when trying to make people meet and interact. Time geography, thus, can reveal "fundamental issues in public [...] by linking together micro- and macro-perspectives" (Ölberg, 2005, p. 344). Ölberg (2005) further describes

that Hägerstrand's methods and diagrams help us to understand "how individual persons both formed the structural conditions and became the servants of the structure" (p. 344).

intended outcome

The intended result for these chapters is a written text of the literature review which links several concepts and their spatial representation as well as diagrams to visualise these concepts. Moreover, it suggests theoretical frameworks for further spatial analysis as well as for the design experiments.

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Methods of Understanding

Chapter 5: Understanding Homes

Chapter 5 mainly focuses on spatial analysis through the framework given by Chapter 4. It mixes a variety of qualitative and quantitative approaches that are applied at different scales.

related sub-question

How will the demographic change affect existing spaces and networks of care in Luxembourg?

methods used

- Statistical Data Analysis
- Policy Analysis
- Site Visits
- General Mapping
- Ethnographic Mapping
- Semi-Structured Interviews with Experts in Urban Planning and Care Provision
- Informal Interviews with Locals
- Space-Time Mapping
- Storytelling

steps taken during the analysis

The statistical data analysis comprises themes of age dependence, population structure regarding age and nationality, labour market conditions in the long-term and healthcare sector, housing accessibility, and, lastly, predictions on further population development. This statistical data is then mapped on three scales, ranging from the Grand Region Luxembourg to the national and city scales of the capital, to accomplish a deeper understanding of its socio-spatial challenges.

A policy and stakeholder analysis of urban planning strategies, housing, and care provision will be conducted to further understand relations and barriers in current regulations on the national scale. The policy analysis is accompanied by semi-structured interviews with experts in urban planning and care provision, which were conducted in December as part of my first site visit to gain further insights into decision-making processes.

Another component of this research is a more exploratory mapping of the spatiality of families in housing conditions, welfare state in nursing homes and hospitals, and market in more privatised areas of care. This mapping will construct a spatial framework of the existing networks and spaces. The mapping intends to reveal interdependencies and flows that enable the provision of care on the national level.

Qualitative analysis was mainly conducted in the three neighbourhoods Howald, Bonnevoie, and Hamm. During the site visit, in addition to empirical observations, informal interviews were conducted with participants of

the target group, such as the elderly. These interviews will help to understand how care work is organised and what experiences affected people have. Furthermore, the neighbourhoods were explored by going on walks with a local resident. Insights from the conversations, walks, and observations are presented through the means of ethnographic mapping. This exploratory mapping is further developed through storytelling by creating two personas: an elderly person and a caregiver. Their daily routine is shown through space-time mapping, as already employed in Chapter 4. This time, space-time diagrams are based on empirical observation, semi-structured interviews, and informal interviews on-site. The scenes employed in the story built the spatial framework for speculative storytelling used in the design experiments.

35

intended outcome

This chapter crafts a spatial framework through maps and diagrams that showcase current caring spaces and networks and the challenges imposed by demographic development. These visualisations will critically reflect on the spatial performativity of care and build the basis for the design. Moreover, the narrative of the current status of care work and the spaces used, function as a framework for the design experiments.

Methods of Experimenting

Chapter 6+7: Mega Experimenting + Stories

Chapters 6 and 7 present the most experimental part of the research and are highly influenced by the outcomes of Chapters 4 and 5. Nevertheless, the outcomes of this chapter influence the theoretical and spatial framing of the thesis. This chapter mainly employs the research-by-design method and speculative storytelling.

related sub-question

What are alternative concepts on social reproductive labour and their spatial performance?

methods used

- Analysis of (Utopian) Precedents
- Site Visit of the Familistère in Guise, France
- Setting of Design Strategies
- Design Experiments
- Creative Imagination
- Speculative Storytelling

steps taken during the analysis

Chapter 6 starts by building the design experiments. The three experiments are based on the results of Unlearning and Understanding and the performance of care work in relation to the place of home examined. Each experiment is set up on a set of precedents which were observed on-site, including trends in labour, mobility, or existing organisations and a set of precedents from theoretical approaches and imagined utopian projects which have rethought care work in a communal sense. These utopias can be traced back to socialist and feminist theories (Hayden, 1981; Fourier, 1822; O'Brien, 2023). A further step of this research was to experience a built utopia by myself during the field visit to the Familistère in Guise, France. Through this, I gained an embodied experience of a built utopia. Next to the design precedent, each experiment also showcases a governance precedent which hints at the decision-making processes of the experiment.

All types of precedents lead to the setting of valuable design strategies for each experiment. The design strategies are then conceptualised on the case study of the three neighbourhoods. Additionally, for some experiments, the design is also conceptualised on a bigger scale, like the city or region. For all design experiments, the use of creative imagination is crucial. Creative imagination as a method fosters the exploratory character and helps in imagining something that does not yet exist (Hayes et al., 2015).

The spatial designs are further illustrated by utilising speculative storytelling which crafts a series of daily encounters centring around care. Speculative Storytelling, much like Creative imagination, is a tool to explore radical ideas for the future (AffectLab, 2023; Dunne & Raby, 2013).

intended outcome

The intended outcome of this chapter is first a catalogue of utopian precedents and design strategies identified within them. Second, a series of design experiments with their respective design applications and an exemplary narrative on a case study.

03 *Mega-Family Homes*

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Theoretical Framework

Mega-Family Homes

The Theoretical Framework unfolds the theories that construct the thesis' main concepts: the institutional relation between family, welfare state, and market and the spatial translation of their relation through space-time geography as well as their spatial transformation through design experiments and speculative storytelling (Figure 15).

The thesis starts by analysing the institutional relation between the three institutions of care through a critical literature review of its main theories. This literature review is spatialised through the means of space-time mapping.

40 The main theories also serve as a tool to critically investigate the spatial performance of these three institutions in Luxembourg. Moreover, they build the theoretical framework for the mega-family home as an alternative institution of care, which is further explored through scenarios. The mega-family home, in this regard, is used as a metaphor for a network of urban spaces in general that provide and enable care. The main theories are briefly explained on the following pages and put into a bigger network of existing theories, such as feminism, power relations, or spatial justice. The theories are further elaborated and spatialised through abstraction in Chapter 4—Unlearning Family.

Figure 15: Theoretical Framework, Author's Work

instrumental
approach

substantive
approach

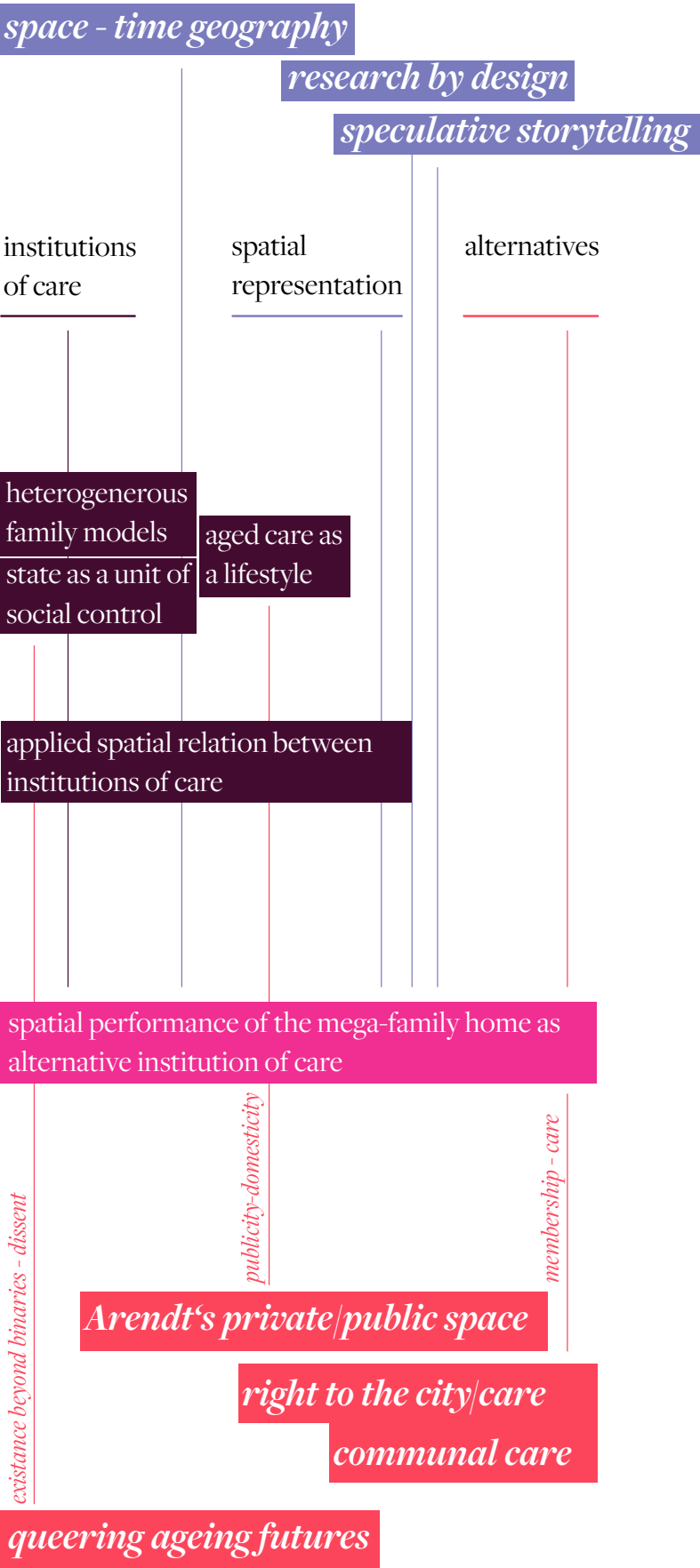
autonomous development:
Aging (as a lifestyle) &
Growing Care Demand

institutional performance
of the family, state, & market
within aged care

Spatial representation and relation
between family, welfare state, & market in
the context of Luxembourg

Spatial transformation of family, welfare
state, & market as units of aged care in
the context of Luxembourg

main
theories



Key Concepts

Relations of Theories

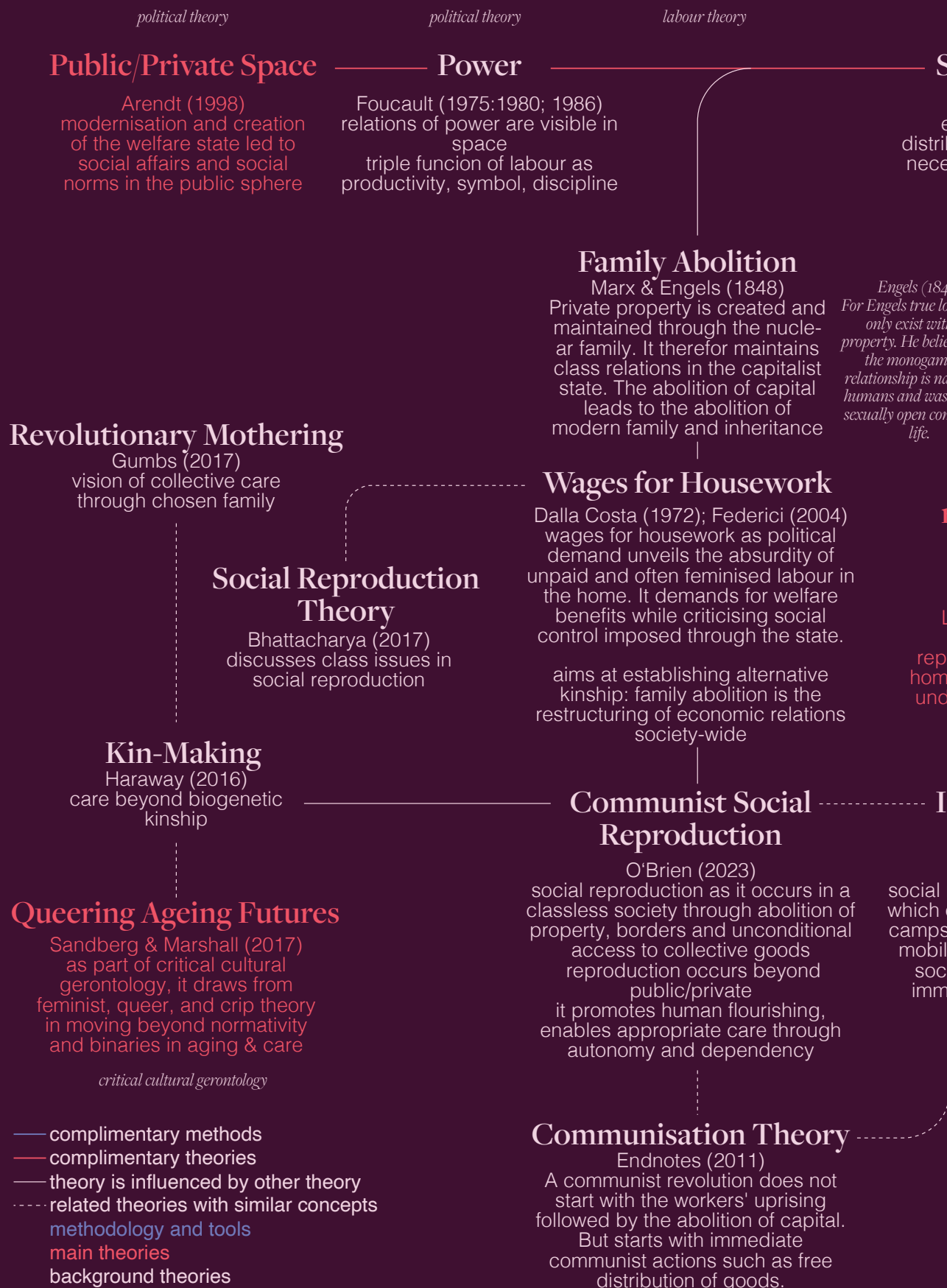


Figure 16: Theoretical Review, Author's Work



The presented theories find different applications throughout the thesis but vary according to the research question (Figure 17).

Most theories find application in the first sub-question as this is the most theoretical and builds the base for the following questions. The guiding theories of the first sub-question, therefore, are theories mainly coming from political theory, labour theory, gender and ageing studies which I see as crucial disciplines in questioning current structures of care provision as well as conceptions of space, age, labour, and gender. The first sub-question answers which spaces to investigate.

44

The main theories applied in the second sub-question are related to sociology and geography, which present more spatialised concepts than the other critical theories of the first sub-question. These theories mainly function as tools to critically investigate current spaces of care in Luxembourg. The second sub-question answers how to investigate.

The third sub-question uses similar concepts to the first sub-question. But rather than reading as a tool to question existing structures, this time the theories serve as inspiration and tools to create imaginaries which offer alternative approaches. They deal with new ways of governing, owning, and collective living.

How can **alternative concepts on reproductive labour** contribute to a socio-spatial transformation of **existing spaces and networks** of **aged care in Luxembourg**?

SQ1 What are current spaces employed and norms imposed in the realm of social reproductive labour?

main theories used

public/private space in Arendt (1998)

family abolition in Marx & Engels (1848) & O'Brien (2023)

Queering Ageing Futures in Sandberg & Marshall (2017)

Feminist Post-Work Theory in Hester & Srnicek (2023)

SQ2 How will demographic change affect existing spaces and networks of care in Luxembourg?

main theories used

Right to the City in Harvey (2003)

Right to the City = Right to care in Leinfelder et al. (2023)

Separation of Old/Young in Hagestad & Uhlenberg (2006)

Power & Heterotopia in Foucault (1980; 1986)

SQ3 What are alternative concepts on social reproductive labour and their spatial performance?

main theories used

Communal Care in Hester & Srnicek (2023)

Utopian Socialism in Fourier (1822)

City as Commons in De Angelis (2017)

Feminist Post-Work Theory in Hester & Srnicek (2023)

Insurgent Social Reproduction in O'Brien (2023)

Mega-Family Values

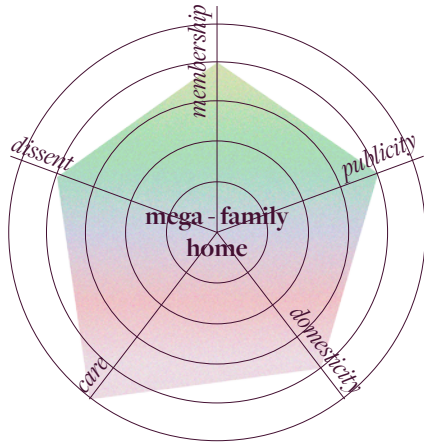


Figure 18: Performance Framework, Author's Work

Mega-family values are derived from the theories previously presented. They build the main concepts that span the mega-family home as an alternative institution of care. These values appear throughout most of the theories but are explained by a few main authors. The values serve as a base for the design but are mainly used to compare the performance of the experiments at the end of the thesis (Figure 18). While family values are often used in conservative politics to maintain and justify gender and class norms, these family values counteract this notion and aim to invite a variety of people, spaces, or initiatives which defy such norms.

46

Publicity refers to Arendt's understanding of public space as something common to all of us and between us like a table (Arendt, 1998). Modernisation brought private matters (working class, women, minorities) to the table of the public sphere and called for a new feminist typology of public space (Benhabib, 1993) "Such self-government can be said to occur only when diverse citizens have equal access to public spaces for such debate ..." (Villa, 2023, p.51). Publicity is also related to the concept of the right to the city introduced by Lefebvre (1968) further developed by Harvey (2003) which calls for a reclaiming of the city contrary to its increasing commodification. The right to the city also argues that marginalised groups are often not as represented in public space as dominant groups.

Publicity

Domesticity describes a difference between 'monogamous nuclear male-headed family' and 'home' as the concept of domestic partnerships. The patriarchal family is a normative and exclusionary system which maintains property and class relations across generations and is one unit of capitalism (Marx & Engels, 1848). However, for many, the family and their home present a net of comfort, safety, and care. Domesticity therefore refers to the positive aspects of the family or the home as a household which supports the flourishing of autonomous individualities. This unit is redefined as the 'room of one's own' (Benhabib, 1993). A space where people can seek rest and individual development.

Domesticity

Dissent

Dissent refers to the political and distributive organisation of the mega-family home. Young (2011) argues that the welfare capitalist society through its distributive function has rendered its citizens as client-consumers of the welfare economy and therefore de-politicised questions of distributive justice. This distribution of welfare also leads to certain political elements like public and private decision-making processes which reinforce disadvantages as unraised. Such notions can also be read in Arendt (1998) where she blames the rise of social matters taken over by the state as the reason for the decline of political life. Heindl (2022) adds to this argument that current political frameworks in neoliberal planning rely on consensus-making and ignore an essential part of political life which is dispute. She therefore calls for radical democratic planning in urbanism and architecture.

Care

Care or social reproductive labour includes “all the activities and attitudes, behaviors and emotions, and responsibilities and relationships directly involved in maintaining life, on a daily basis and intergenerationally” (Moebus, 2022, p. 244). Care work can occur formally through a contract or informally. Care is to be understood as an attitude of responsibility towards someone else and the caring practice. It ranges from bureaucratised systems of healthcare and long-term care, over home-aid, to daily reproductive tasks of the household. Care is currently provided by the family, the welfare state, and the private market which all impose normative behaviour onto the caregiver and receiver (O’Brien, 2023). Care in the mega-family home is emancipated from these three institutions and functions as a network of mutual aid apart from bio-genetic kinship (Hester & Srnicek, 2023).

47

Membership

Membership frees the individual from their ownership of property such as land or a car and enables flexible mobility between spaces regardless of age and concerning individual preference in a network of collective consumption (Bost & Höweler, 2019). Membership follows concepts of the commons (De Angelis, 2017) or the idea of public luxury (Hester & Srnicek, 2023). Commons are a pool of shared non-commodified resources which are maintained and governed through communities, also referred to as commoners. This action of maintaining, organising, and distributing is called commoning. They operate excluded from capitalist market or the welfare state (De Angelis, 2017).

Conceptual Framework

Mega-Family Homes

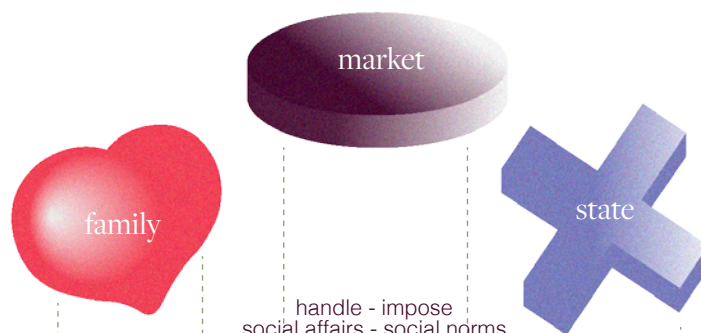
The thesis focuses on challenging the current institutional as well as spatial relations between the three institutions of care, the family, the welfare state, and the private market. These three institutions handle social affairs while simultaneously imposing norms on caregivers and receivers (Figure 19). These norms are reflected in binary concepts of gendered domestic labour, private and public space, degree of ownership over the home, and level of productivity through waged labour. They also include measures to segregate spaces between ages and abilities. Chapter 4 includes a theoretical review, and Chapter 5 includes an applied spatial review.

48

From this critical review of the spatial representations of institutions of care and their imposed norms (Chapter 5), the thesis seeks to develop alternative approaches which are reflected in the mega-family home. This alternative typology of urban space organises care beyond its binary conceptions and sees it among other family values as central for a collective future.

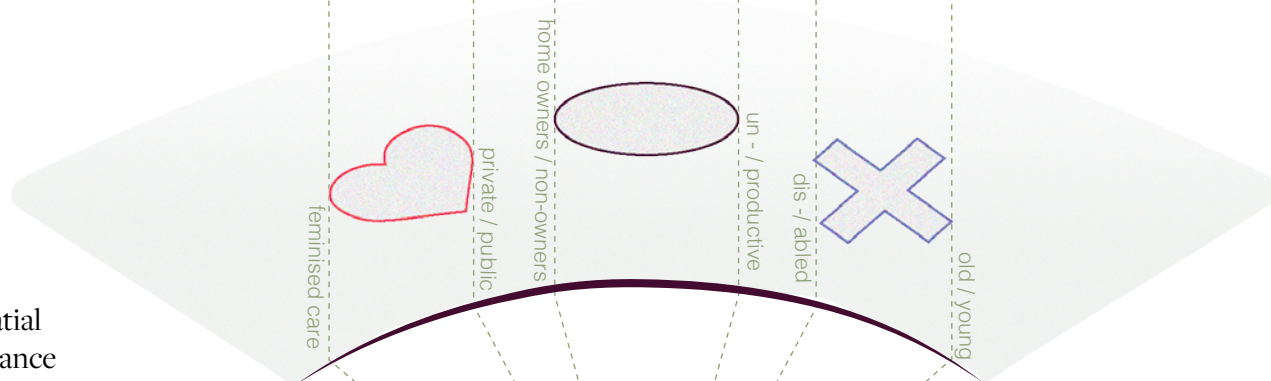
The mega-family home is characterised by a variety of spatial interventions which will be explored more deeply and experimented with in Chapter 6.

three main institutions
of care
(under capitalism)



handle - impose
social affairs - social norms

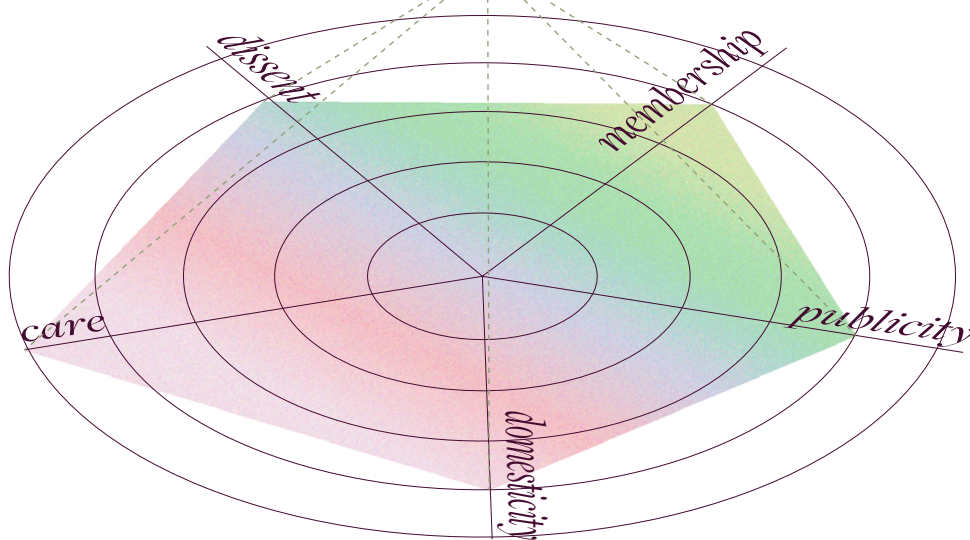
their spatial
performance



49

care beyond binaries

mega-family home



their spatial
transformation

04 *Unlearning Family*

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Private/Public Affairs

Arendt (1998) refers to the ancient Greek *oikos*, the household, as a place where everything happens to sustain our life cycle. It is characterised by the cycle of reproduction and production. On the contrary, the ancient *polis* represents the political and public space where man is free and can act among equals (Figure 20). She further argues that through modernisation the former private concerns of the ancient household were made public. This is especially visible with the creation of the welfare state which takes over formerly private affairs such as child-rearing, elder care, or social security programs (Figure 21).

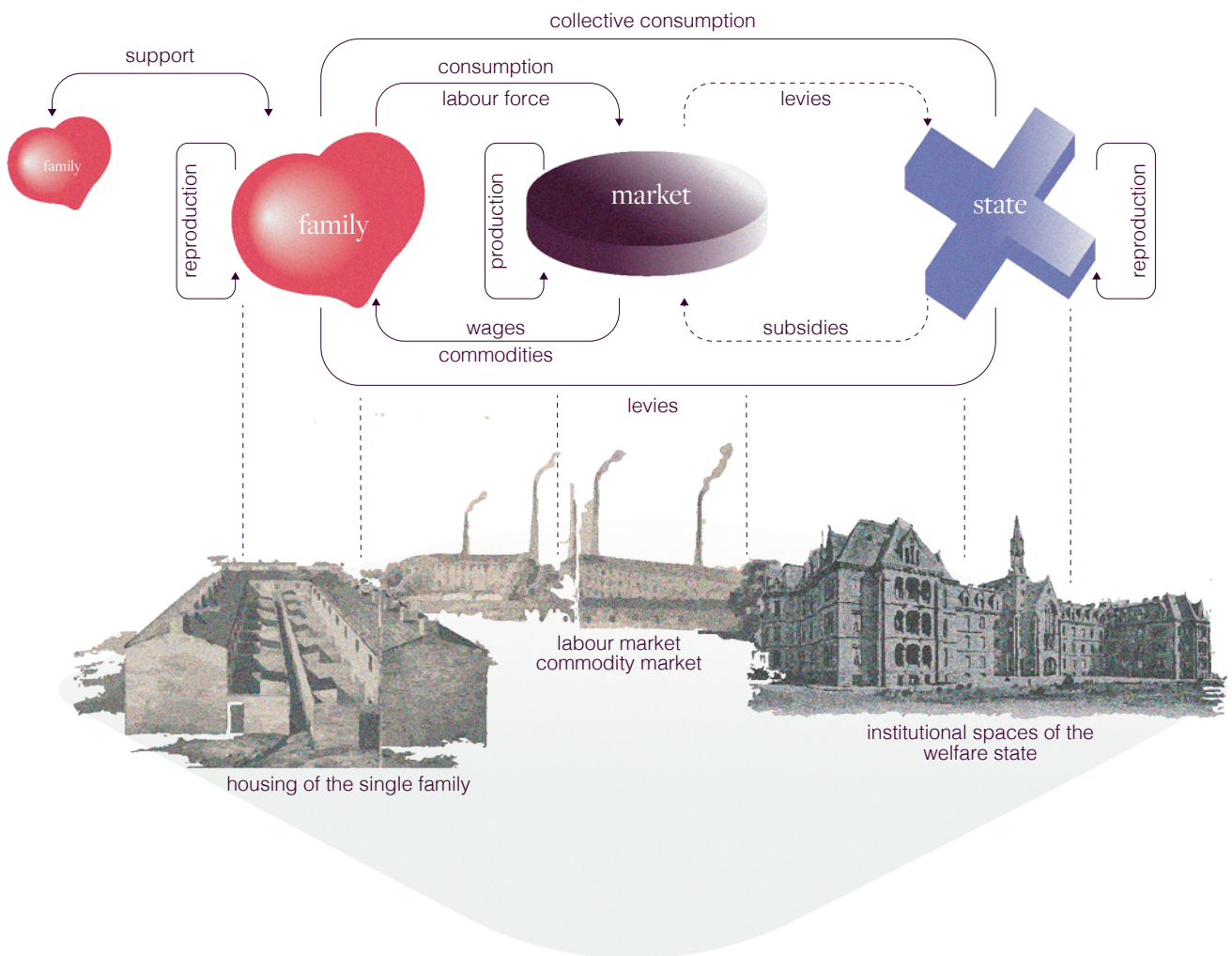
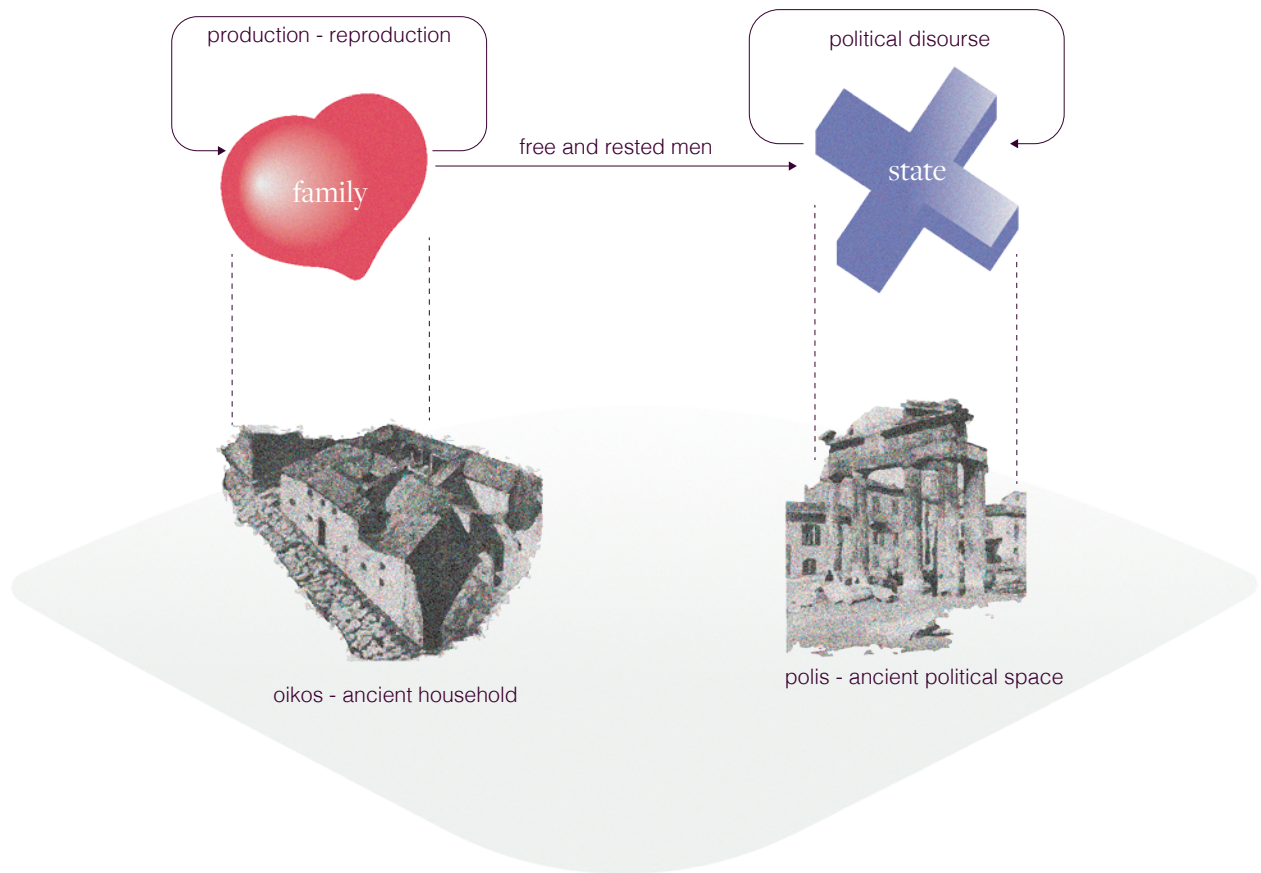
Following, the once political space became the social space of commodity. It is now characterised by the production-consumption cycle. Capitalist production mainly occurs in the labour market and consumption in the commodity market. However, some reproductive activities remain in the private household or have been reintroduced to it more recently through subsidised or privately paid home-aid services (O'Brien, 2023).

- 52 According to Villa (2023), Arendt's philosophy centres on the notions of freedom and autonomy of citizens under the nation-state. Freedom, in her view, is realised through active citizenship, emphasising civic participation in political life. Modernity with its shift in the production-reproduction cycle has created a society of labourers where waged labour becomes the only means available to sustain life (Arendt, 1998; Hester & Srnicek, 2023).^{*} In this regard, modernism imposes conformity and certain behaviours accepted in public spaces. These norms are dependent on society but can encompass rules on the main caregiver, the breadwinner, the importance of certain labour or the acceptance of certain physical conditions. In consequence, the freedom to participate in political life is limited to the norms someone meets.

^{*}This circumstance is apparently circumvented in the current trend of Trad-Wives in which women actively decide to take on care work at home and share this on social media. In reality, some women earn a lot of money doing this and are more in line with the internet phenomenon of a Girl-Boss than a traditional housewife. The biggest problem is that their glorifying content distracts from the dependency and control that many wives are still subject to by their husbands.

Figure 20, top: Ancient Public and Private Space, Author's Work based on Arendt (1998)

Figure 21, bottom: The Neighbourhood as Social Factory, Author's Work based on Leinfelder et al. (2023)



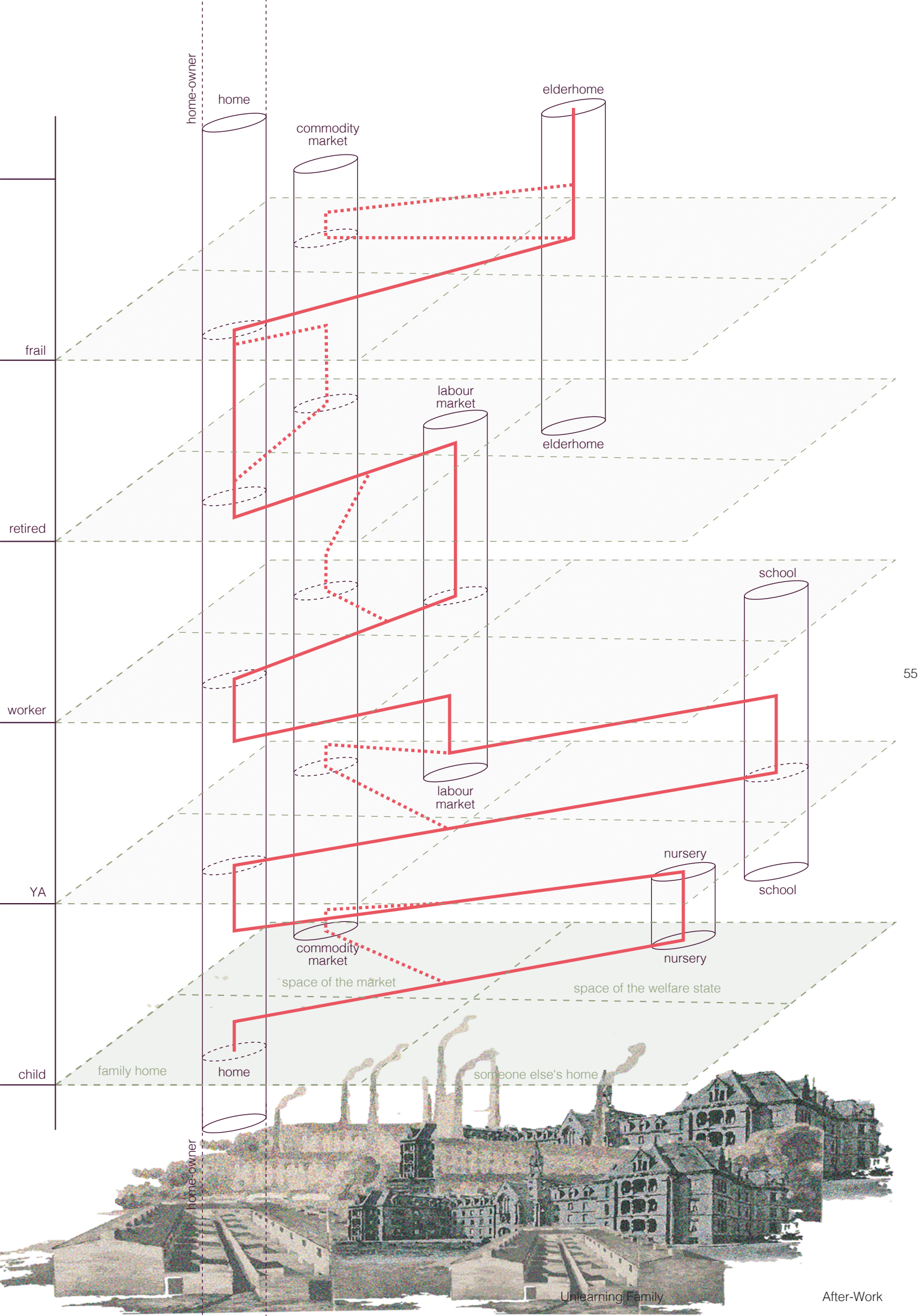
Spaces of Care

It is important to talk about private and public spaces and affairs in the realm of care work as it is present in both spaces. Despite, Arendt's concept of the creation of social affairs, a large part of reproductive labour today remains in the household whether done by oneself, purchased as a commodity, or initiated through the state (O'Brien, 2023). State-led spaces of care include schools, nursing facilities, elder homes, recreational facilities, and hospitals. These state-led spaces also appear as commodities on the market often for more affluent households and can be extended to spaces such as thermal baths, or retreats. These care facilities defy a simplistic understanding of private and public, considering they can exist in private homes or public institutions.

54 Benhabib (1993) brings a feminist perspective on Arendt's concept of private and public space. In her opinion, Arendt does not initially identify bodily functions and material matters as public concerns, but with the rise of emancipation, women bring the principle of material reality, that of reproductive labour, to the public sphere. The maxim, "the personal is political," or other slogans such as "wages for/against housework" were initiated by Marxist feminists to disclose the amount and absurdity of unpaid labour often left to feminised members of the household (Dalla Costa, 1972; Federici, 2004). The intersection of public and private thus emerges in the discussion of welfare-state societies, where issues like child-rearing, care for the sick, and reproductive freedoms become public matters. However, the involvement of a 'patriarchal capitalist-disciplinary bureaucracy' often disempowers women and ignores the emotional aspects of care work. Arendt (1998) places an importance on the home or the private sphere away from political life but the emancipation of women into public life makes it impossible to distinguish between public and private interests. Consequently, Benhabib (1993) argues that contemporary feminism thus requires a clearer concept of public space. Contemporary public space is marked by anonymity and individuality fostered by the commodity market and welfare state alike which create spaces available only to groups of certain ages, or levels of affluence (Figure 22).

O'Brien (2023) identifies the family, the market, and the welfare state as the main means of survival under capitalism. Simultaneously these three institutions are the main withholders of the capitalist economy in their proper ways. These three institutions also are the main providers of care. Their spatial performance in the realm of aged care*, as well as their function as capitalist entities, will be discussed in the following pages.

Figure 22: Theoretical Space-Time Mapping in a Person's Lifetime, Author's Work



Aged Care* for the Body

De Beauvoir (1973) states that old age often comes as a surprise. Moreover, old age is a characteristic imposed on someone who is identified as having an old face. It is a biological phenomenon which is projected onto someone regardless of their personal experience. It is projected by society through customs, behaviours and vocabulary used by others as well as through the state which excludes a person of a specific age from the labour market (Figure 23). Ageing has become a state of the body for policies (de Beauvoir, 1973). Port (2012, p. 3) notes that “the old are often, like queers, figured by the cultural imagination as being outside of mainstream temporalities and standing in the way of, rather than contributing to, the promise of the future.”

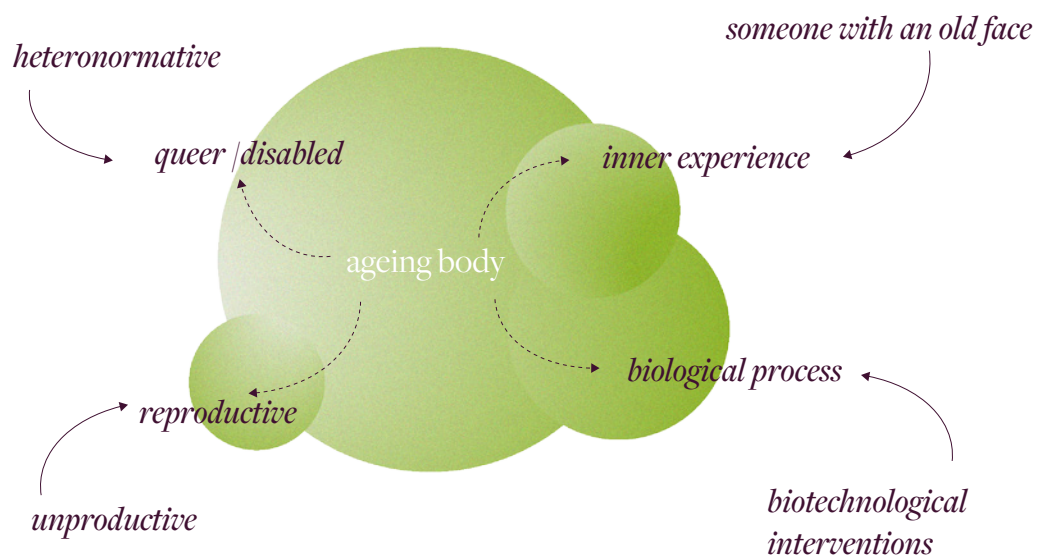
One narrative of ageing which also finds its reflection in policies and brochures, is the idea of active, healthy, positive, or happy ageing which is deemed as successful and less burdensome to future generations. This narrative follows assumptions on heteronormativity, able-bodied-ness, and able minded-ness. It often neglects structural inequalities and serves neoliberal notions of self-optimisation. The individual is responsible for managing their bodily resources with discipline to mitigate future risks (Sandberg & Marshall, 2017). This discipline is reflected in the commitment to regular sports activities and nutrition. According to Andres and Duff (2019), the ageing body becomes entangled in technology through assistive technologies for safety, fitness, or medication which enable more independent lives but are also part of a bigger network of surveillance and monitoring. Moreover, anti-ageing products and treatments implant technologies and manipulate the ageing body. Through these biotechnological interventions, the human body is no longer separate from the artificial but can be understood as a cyborg (Haraway, 1985). This kind of self-optimisation of the body is related to Foucault’s concept of biopolitics or biopower through which authority regimes achieve control over the body with means such as public health but also through the general behaviour of societies (Foucault, 1975). Although the ageing body, as in retired, is no longer part of the cycle to ensure a healthy workforce, it remains subject to biopolitics to limit public expenditure on long-term care.

Another aspect of successful ageing is its portrayal through old heteronormative couples or spending time with grandchildren which point “to (hetero)kinship as that which makes later life meaningful” (Sandberg & Marshall, 2017, p.3). Sandberg and Marshall (2017) thus suggest that queering ageing futures is necessary to move beyond images of successful ageing of the normative and other stories of ageing deemed as failures. Queering ageing futures in this case lies in accommodating otherness, such as non-normativity and structural inequality. It can actively challenge the perception induced by neoliberal governments which assume the presence of a feminised caretaker in the family.

*Aged care, elderly care, or eldercare entails assisted living, adult day-care, long-term care, nursing homes referred to as residential care, hospice care, home care and health care. This care predominately serves old adults in maintaining daily life as independently as possible. Long-term care is also provided to adults with disabilities independent of their age. It is part of the NACE Rev.2 section Q. (Eurofound, 2020)

Figure 23, top: Reality of the Ageing Body and Projections by other onto it, Author's Work

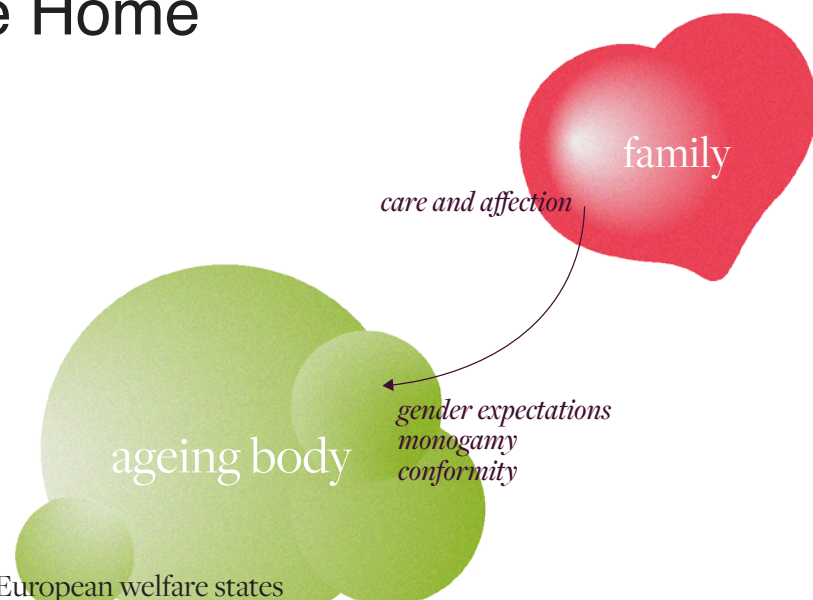
Figure 24, bottom: Pfammater, D. (2021-2022). Installation View Museum MMK of works by Cady Noland and Isa Genzken in Crip Time [photograph]. Museum für Moderne Kunst. Crip Time. <https://www.mmk.art/en/whats-on/crip-time/>



Unlearning Family

After-Work

Aged Care in the Home



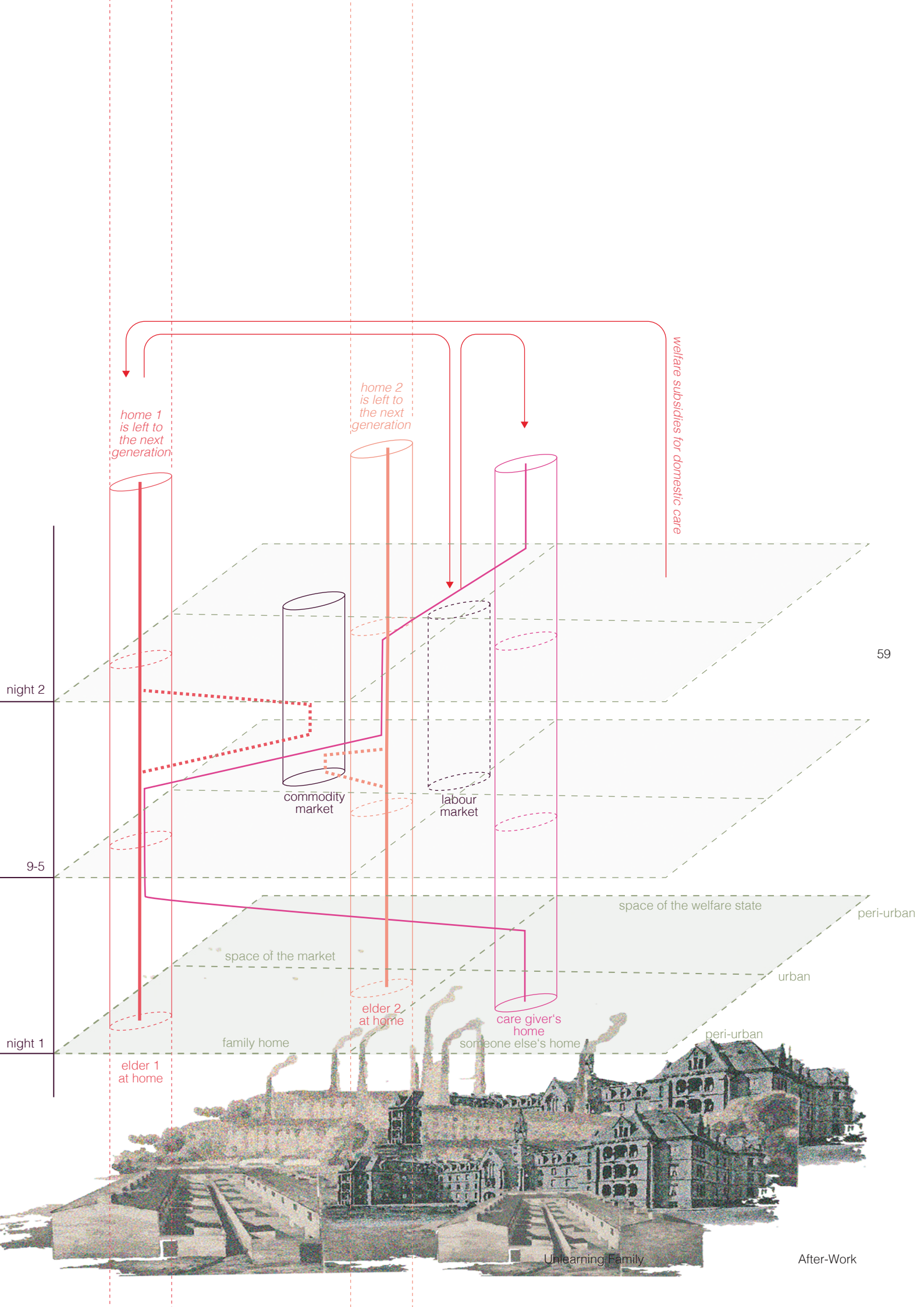
Despite the creation of the welfare state, in many European welfare states the family still serves as the primary unit of care. When looking at the aspect of ageing this becomes especially clear for governmental initiatives such as Aging in Place. Here elderly are responsible for organising an age-appropriate living space and organising a network which can support them in times of need (Gabauer et al., 2021). Meanwhile the welfare state mostly only acts on the provision of care when the family is unable to (Knijn & Kremer, 1997).

This reliance on the family as a caregiver underscores the entanglement of family dynamics with the provision of care for the ageing population: the family can provide care when we are at our most vulnerable. Through the language of the family, we articulate affection and a need for care. The family is often the first to access material support, safe housing, and mobility services (O'Brien, 2023). The family understood as a capitalist institution (Marx & Engels, 1848; Engels, 1845) serves as a vehicle for capitalist accumulation through the accumulation of property and the transmission of inheritance to the next generation. As such it maintains class relations across generations. The nuclear family, at first a bourgeois family model, became an ideal of the proletariat imposing privacy, monogamy, abstinence, and commitment to romantic love (Figure 25).

The family is understood as a private household that operates separately from other households to reproduce capitalist society from one generation to the next (O'Brien, 2023). Divided by architecture it acts as a social factory for reproduction dependent on waged labour produced outside of it (Leinfelder et al., 2023). In this respect, the private home is part of a bigger network of monetised and material forms which all support its survival. Leinfelder et al. (2023) identify four configurative elements which influence the amount and intensity of social reproductive labour possible in the home: housing size, spatial arrangement of housing, availability of collective resources, and the distance to the city centre. A non-spatial aspect is the amount of capital available to externalise care tasks. In the case of aged care, these material flows include the presence of the caregiver (formal or informal), as well as pensions available through previous waged labour, private savings, and state-provided care insurance, next to daily necessities like food or hygiene products purchased as commodities (Figure 26).

Figure 25, top: Norms imposed by the Family, Author's Work

Figure 26, right: Theoretical Space-Time Mapping of Care in the Home, Author's Work



Aged Care in the State



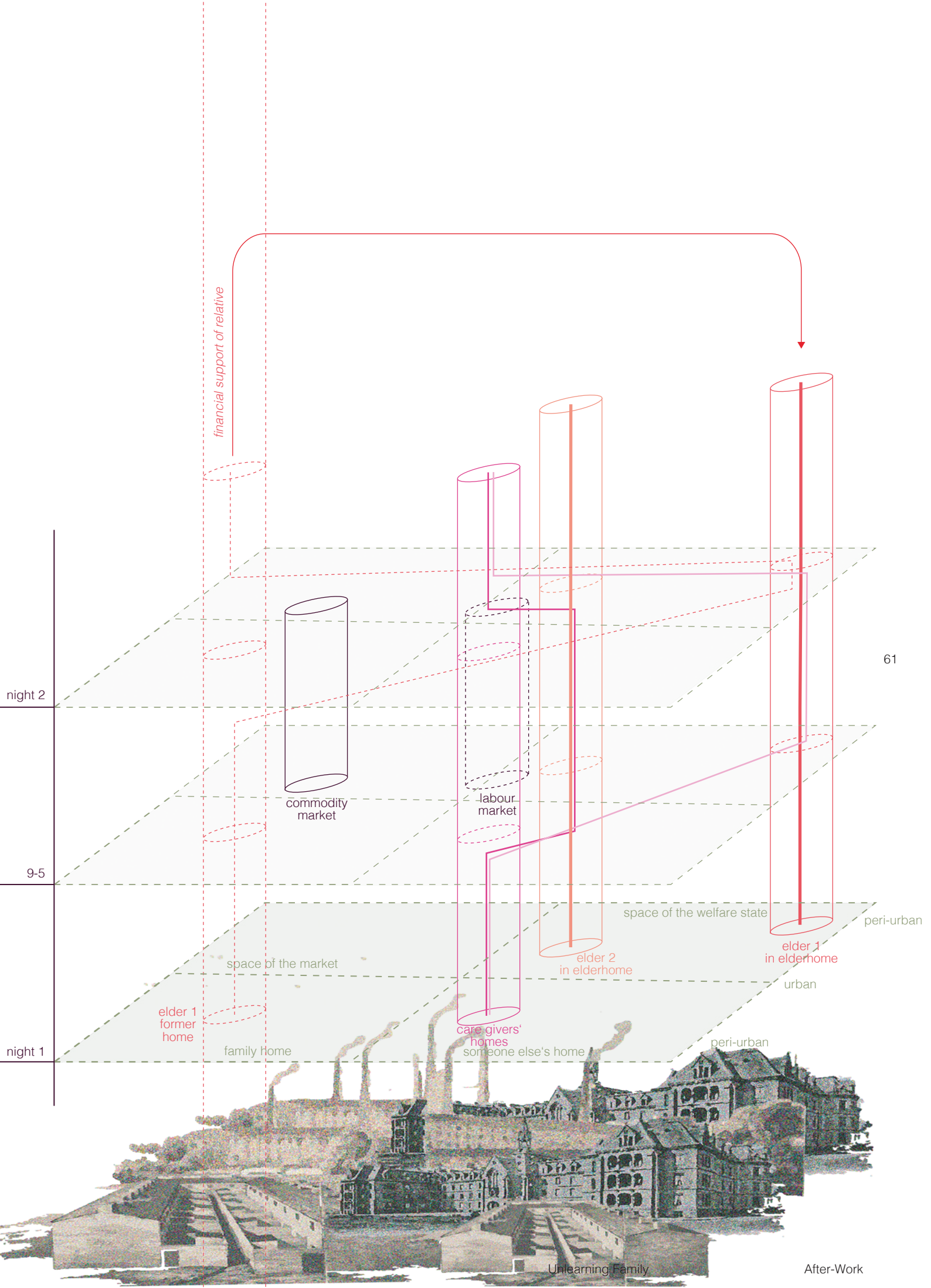
Modernisation also focused more on the individual and created a specific course of life to follow. This course chronically predicts actions at certain moments in time and makes us belong to a group of peers, of the same age who go through a similar course. Non-family networks are often strongly age-homogeneous due to institutional segregation implemented throughout this course of life. Due to this segregation of ages, stereotypes, prejudices, and discrimination towards other age groups arise and can be referred to as ageism (Hagestad & Uhlenberg, 2005; Figure 27).

These prejudices also hinder the formation of inter-generational relationships which are not dependent on the biogenetic kinship of the family and thus maintain property, wealth, and means available to one family relation (O'Brien, 2023). O'Brien (2023) argues that this maintenance is welcomed and fostered by the welfare state to keep class relations and the dependency of households on waged labour. The institutional segregation of ages through the welfare state in nurseries, schools, universities, and elder homes also is argued to influence the phenomenon of predominately age-exclusive neighbourhoods as people are trained to relate most to their peers thus influencing the area of housing and availability of care services in respective areas (Hagestad & Uhlenberg, 2005).

The welfare state divides between age groups in its care provision. Next to this ageist approach, this also entails certain conceptions of ability and disability. The risk of disability rises with old age and long-term care becomes necessary. Foucault (1986) rightfully identifies the elder home as a heterotopia of crisis as well as deviation. In our common society old age is referred to as a crisis. The unproductivity of retirement or idleness, as Foucault writes, is deviant from the norm of labour and leisure or work-life balance. Often nursing homes are placed in the peripheries of urban centres or rather rural areas because of the availability or prices of land (De Decker, 2019). On the one hand, this might suggest a calm place of rest for adults in old age. On the other hand, this disables their access to the city and therefore to be seen or act in public space and ultimately can become a question of the right to the city (as understood by Harvey, 2003) in old age (Figure 28).

Figure 27, top: Norms imposed by the State, Author's Work

Figure 28, right: Theoretical Space-Time Mapping of Care in the State, Author's Work



Aged Care in the Market



With the creation of the welfare state, aged care is not necessarily an issue of class in terms of access or quality but rather in terms of lifestyle, luxury and convenience (Figure 29).

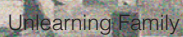
As previously mentioned, higher wages offer the opportunity to externalise care work which does not only entail home aid regardless of personal needs but also the purchasing of services such as food delivery (O'Brien, 2023; Hester & Srincek, 2023).

Both home aid and home delivery services often function as global care chains as introduced by Hochschild (2001). Global Care Chains (GCC) refer to care workers mainly women of less affluent societies who act as professional caregivers, sometimes for a few months in more affluent, societies leaving the care work in their homes to other family members (Figure 30). Spanger et al. (2017), argue that these care dependencies are actively shaped through welfare states.

Another area where ageing as a lifestyle is visible is the creation of retirement communities for the young-old, those retired but not necessarily in need of long-term care. These communities mainly attract more affluent and white adults as they are often related to the purchasing of a vacation home in warmer and more scenic regions like coastal areas (Simpson, 2015). With an ageing population, the market for products and services which support aged care is projected to grow making the elderly population an important target group for the commodity market. Under the current market paradigm, however, new technologies in aged care will mainly focus on individual needs and allow for optimising the home or the self. As stated in the introduction of this thesis, it is also an open question on how wanted technologisation in care work is (Hester & Srnicek, 2023).

Figure 29, top: Norms imposed by the Market, Author's Work

Figure 30, right: Theoretical Space-Time Mapping of Care in the Market, Author's Work



Aged Care in the Experiments

Concluding from this theoretical review on care and its respective spaces, current structures of care as they are offered by the family, the welfare state, and the private market differ between ages, affluence, ability, and gender in the realm of care provision. Social reproductive labour to a large part remains unpaid (O'Brien, 2023) despite efforts of the welfare state and offers by the market. To enable care work despite personal ability many means are necessary, for example, consecutive income through a job or pension, proximity and transport to the commodity market, proper housing, a network of often bio-genetic kinship and most importantly available time. Care work therefore and aged care in respect can never happen independently from these flows which occur outside the (nursing) home (Figure, 31; Leinfelder et al., 2023). The three institutions place a set of norms on the ageing body as well as the labour practice of the caregiver forming a particular combination of coercion and care (O'Brien, 2023).

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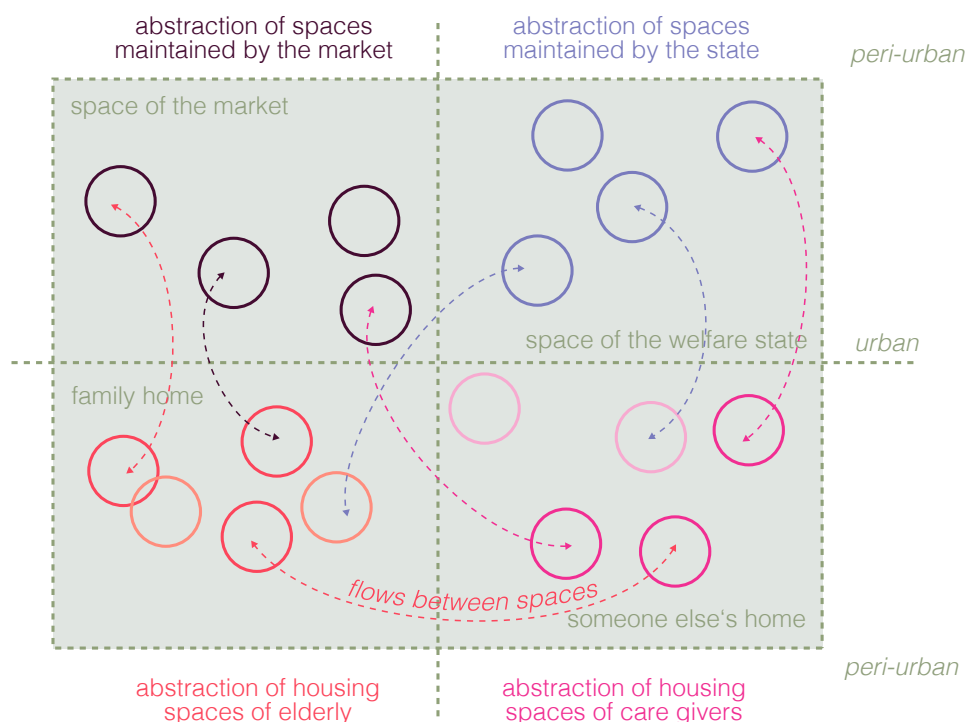


Figure 31: Theoretical Framework for Spatial Analysis, Author's Work (This framework builds the 'ground floor' to the space-time diagrams previously shown and serves to analyse spatiality of care in Luxembourg later on)

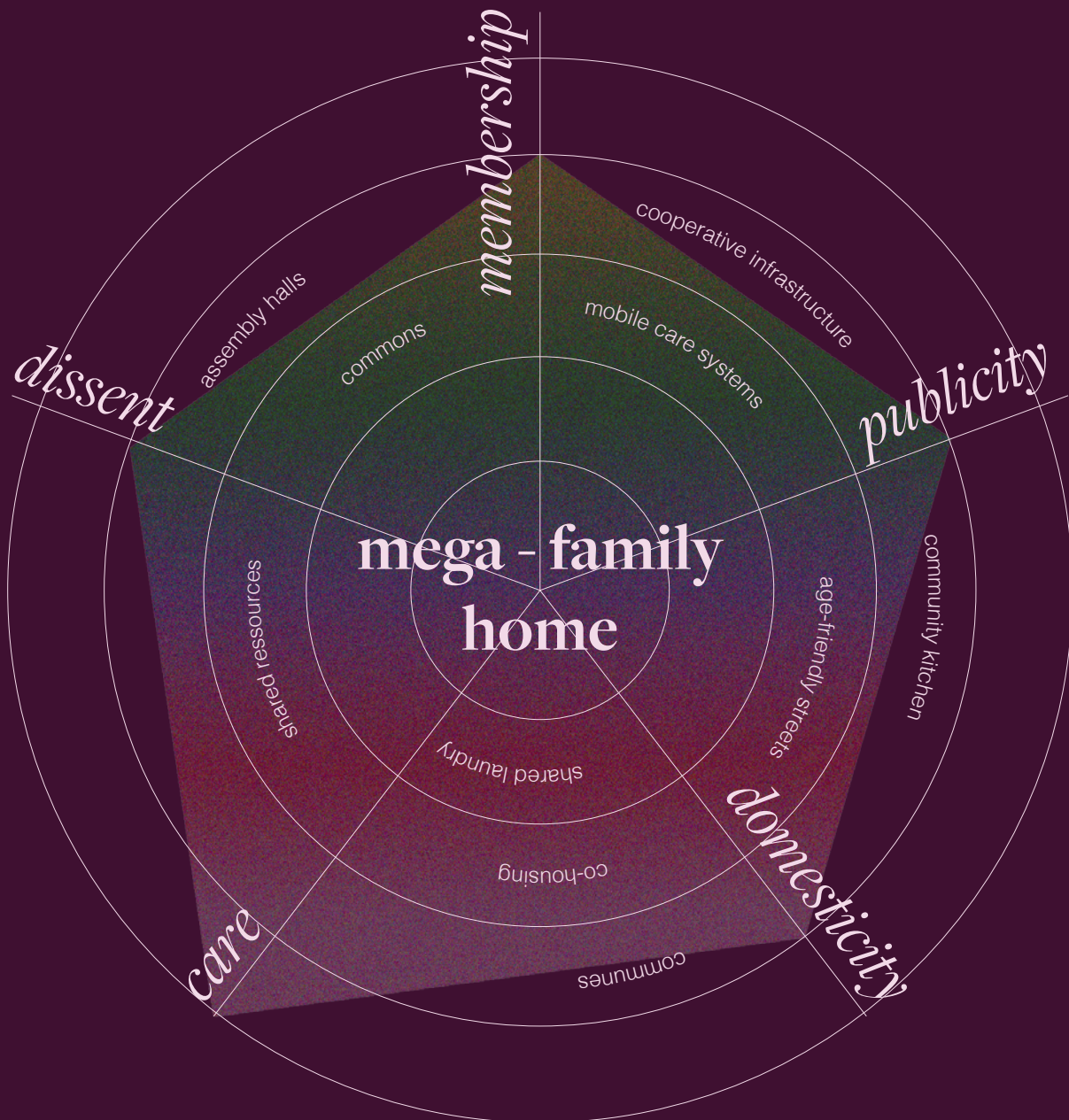


Figure 32: Theoretical Framework for the scenarios which shows spatial design elements and their main impact extracted from the literature, Author's Work

Care is reflected as communal action in the design presented later in Chapter 6. Communal care as referred to by Hester & Srnicek (2023) follows a long line of family abolitionist theories but is a less radical term. It speaks of care as mutual aid which exceeds bio-genetic kinship such as the family and forms alternative institutions of care. Care is no longer coupled with private income and relationships but part of a public or common luxury. It is communally organised ranging from the concept of the city as commons (De Angelis, 2017; Stavrides & De Angelis, 2016). Communal care functions after the principle “from each according to [their] ability to each according to [their] needs” (Marx, 1875). Communal care is freed of its binary conceptions and enables autonomy while acknowledging dependencies to accomplish daily tasks. Its institutions and spatial performance are a collective part of the urban fabric. A wide range of services is available to everyone without pre-imposed conditions.

A further exploration of communal care and its spatial performance in the mega-family home is part of Chapter 6 where I investigate precedents and their concepts of communal life and project onto my case study. By employing means of communal care the relations are understood as co-dependent between people rather than the typical carer-patient relation.

05 *Understanding Homes*

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| 5.1 Introduction to Understanding | 68 | |
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Introduction to Understanding

Understanding through the Scales

The following chapter aims to understand the spatial conditions of and for care work in Luxembourg and its surrounding regions through a variety of scales. Depending on the scale, different spatial, social, economic, and demographic themes are analysed and related to each other (Figure 33). The analysis starts at the regional scale, which showcases the economic interdependency of the Grand Region and its common challenges. Later, the challenges observed within Luxembourg are examined. Important here is the country's immense economic growth in financial and political industries, which puts pressure on the built environment and guides its current spatial development.

These circumstances are further exemplified by zooming into the capital, followed by a more thorough ethnographic analysis of three neighbourhoods at the southeastern edge of the capital. I then move further into the context by presenting an everyday story of two personas through time-space mapping and storytelling.

HAMM, BONNEVOIE, HOWALD [neighbourhood scale]

- spatial experiences
- public transport
- functions and amenities
- housing typology
- places of most care and attraction
- story from a home

CITY OF LUXEMBOURG [city scale]

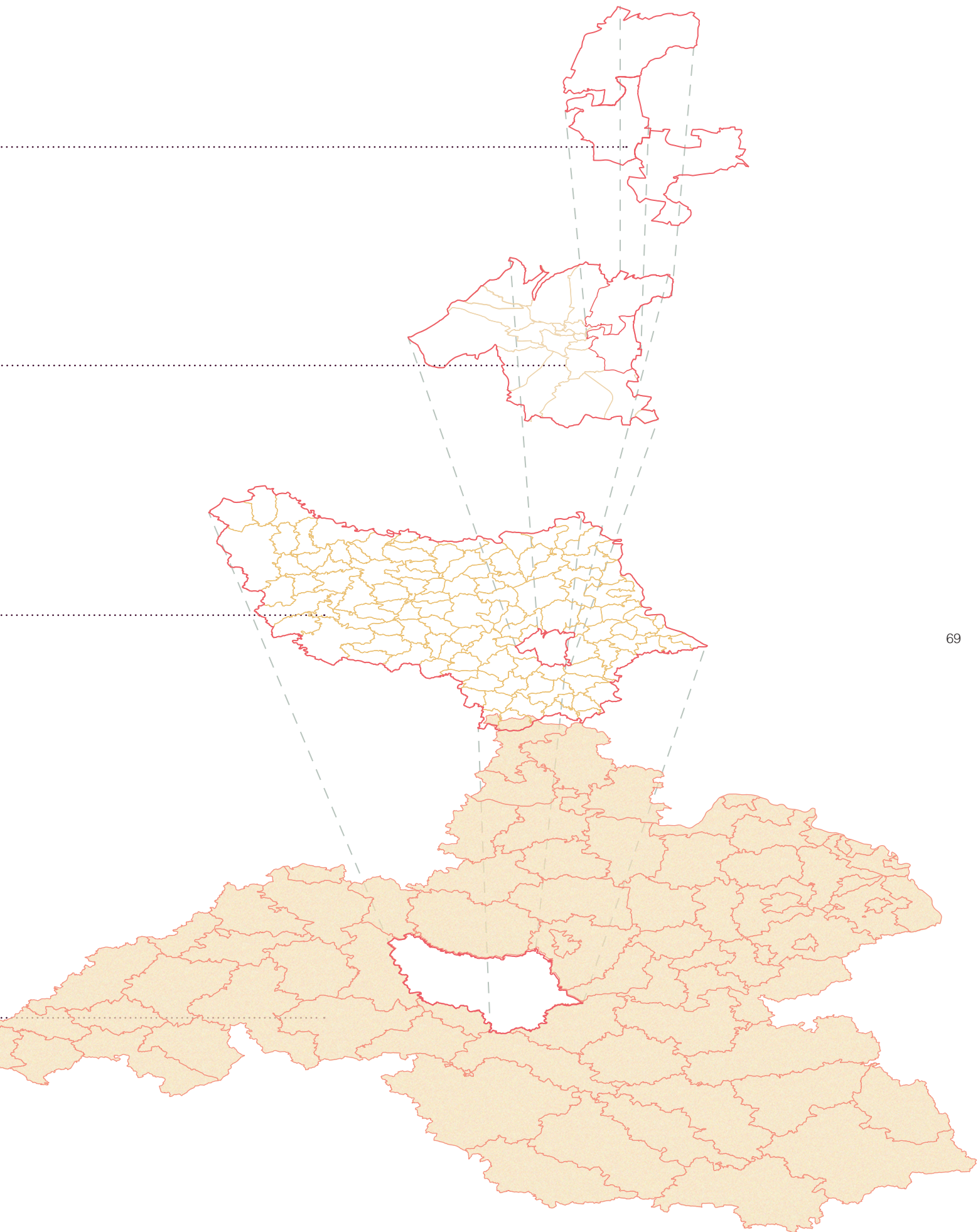
- urban development
- neighbourhood profiles
- health and care status
- functions

GRAND DUCHY LUXEMBOURG [national scale]

- urbanisation
- housing
- public care spaces
- market care spaces
- care stakeholder
- spatial and economic care relations

GRAND REGION LUXEMBOURG [regional scale]

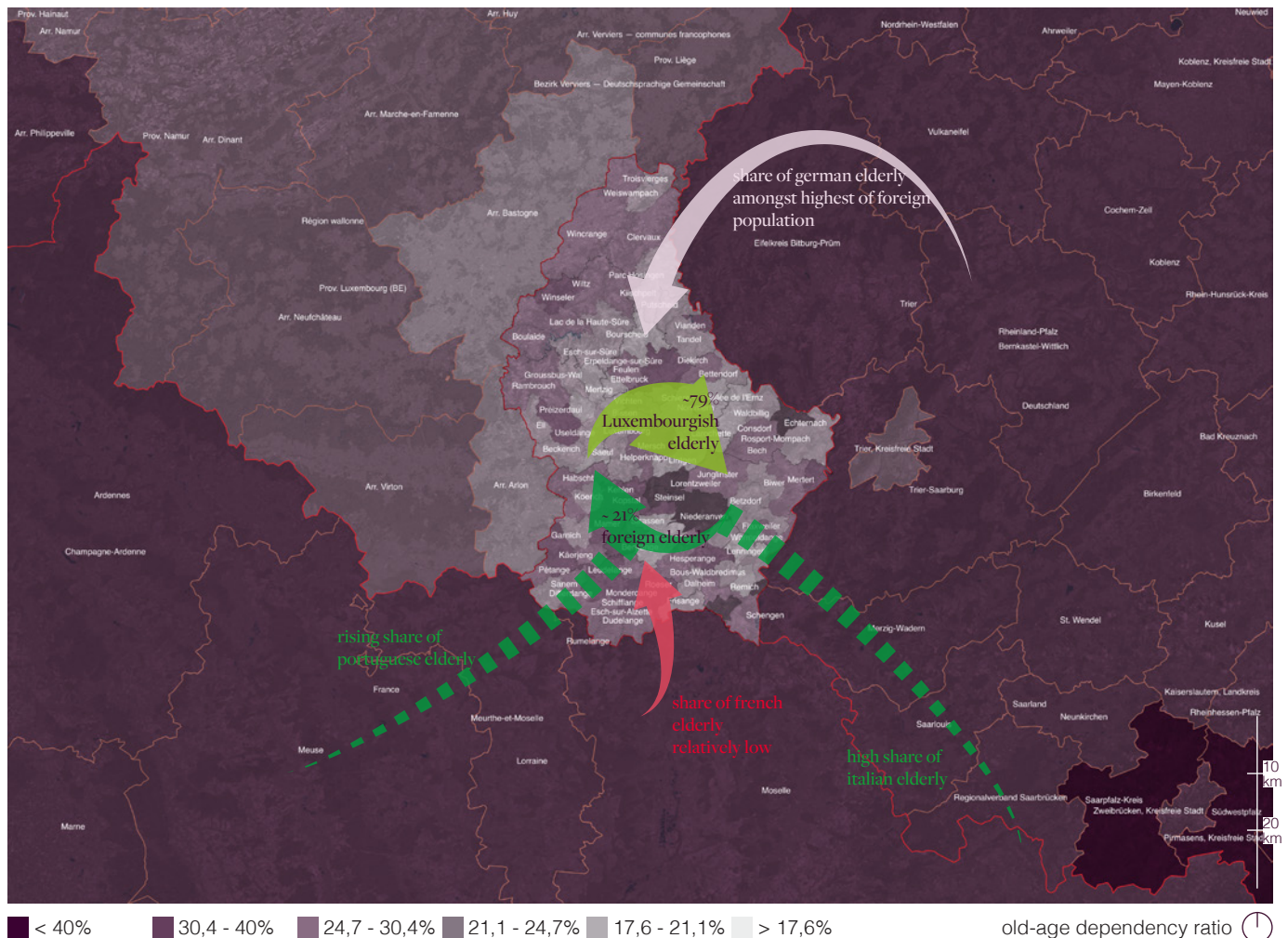
- age dependency
- access to healthcare
- labour dynamics
- regional transport



Regional

Scale

Age, Health Care, and Labour



Old-Age Dependency

Luxembourg stands out with its relatively youthful population, characterised by a substantial number of individuals in the working age group. While old-age dependency is expected to increase European-wide, Luxembourg is anticipated to experience a milder impact compared to its neighbouring countries (Figure 34). A reason for such low old-age dependency is often pointed to the elderly with a migration background leaving Luxembourg once retired. This might be true for some, however many stay in the country or regularly switch between homes (Albert & Murdock, n.d.). Foreign elderly which make up 21.4%, in this case, are more likely to remain in their private home as compared to their Luxembourgish counterparts who are more likely to live in a collective environment like a nursing home. A similar difference can be observed between men and women, where women are

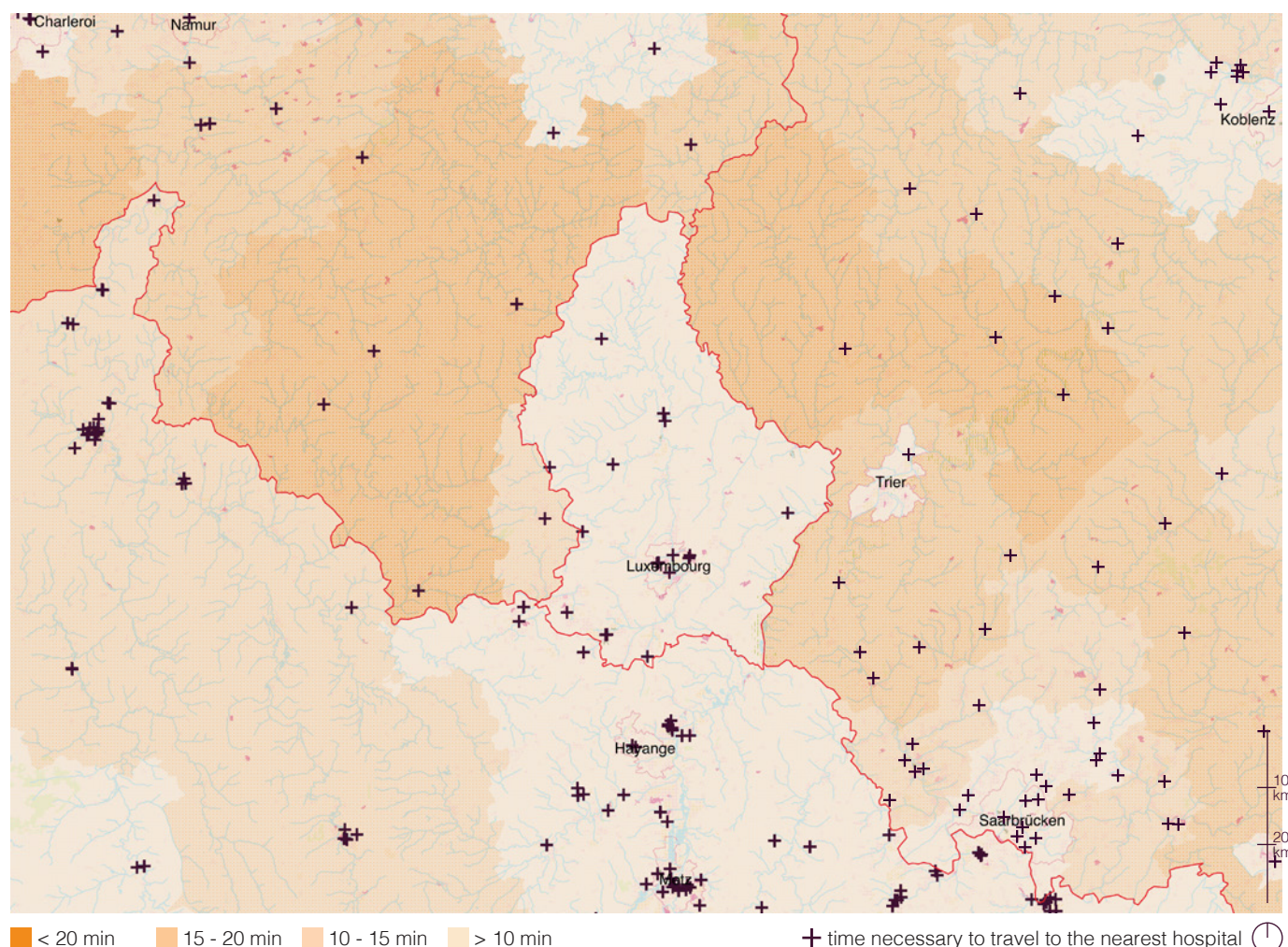


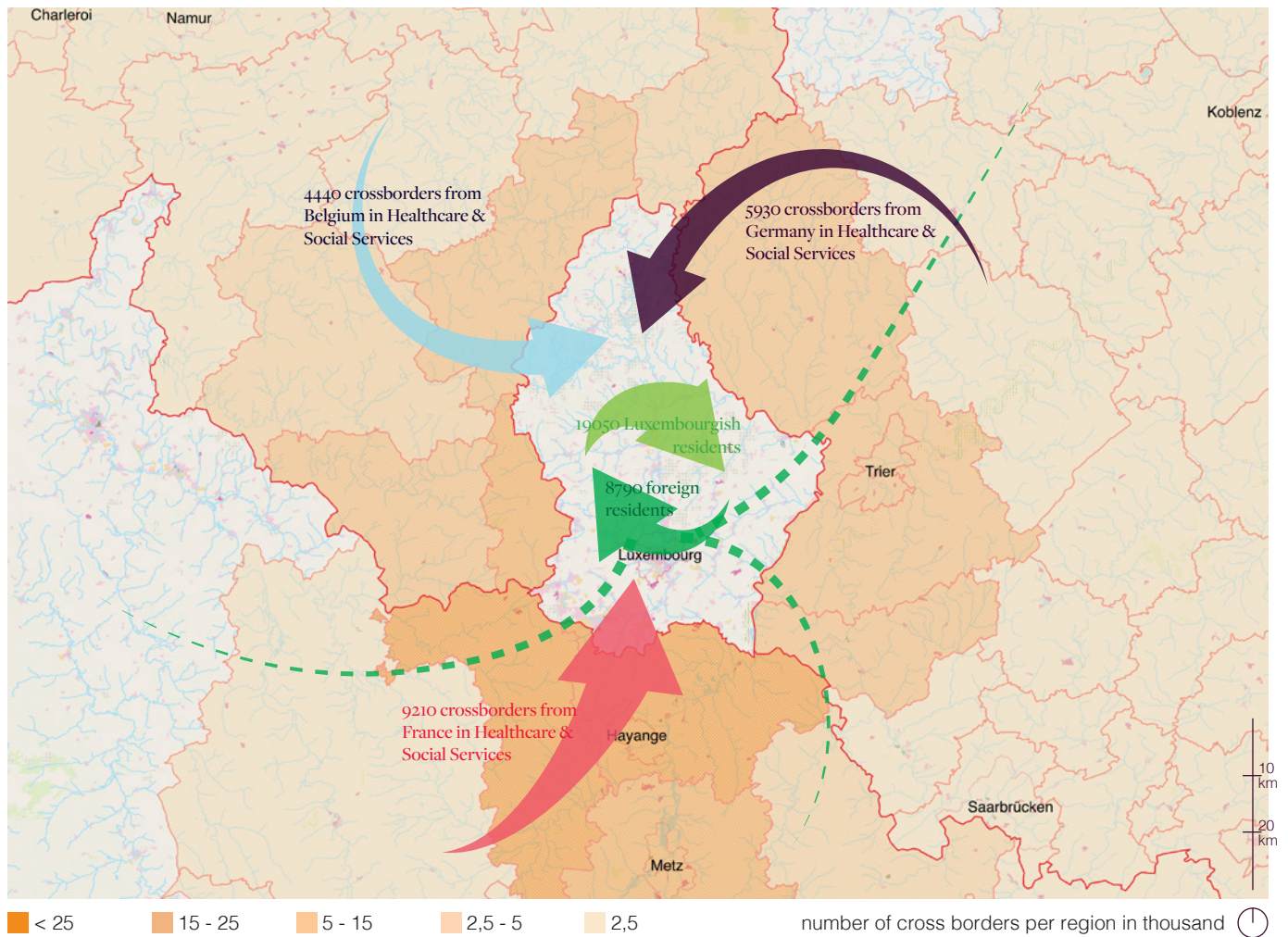
Figure 34, left: Old-age dependency ratio in 2021, EU Nuts 3 and in 2011 for Luxembourg, Author's Work

Figure 35, right: Access to nearest Hospitals in the Grand Region, Author's Work

more likely to live in nursing homes. The highest shares of elderly are among Luxembourgish, Italian, and German with French relatively low and Portuguese rising (Ferring et al., 2013). Some foreign elderly perceive loneliness due to cultural identity conflict but even more due to intergenerational conflict since their children often grow up in a different environment and do not share the same values (Albert, 2021).

Health Care

Access to healthcare in Luxembourg is not necessarily related to the distance to services but rather to local access. This concern is particularly pronounced in the sparsely populated northern regions. Examining neighbouring regions, challenges in accessing hospitals are evident, notably in Wallonia and the rural areas of Rheinland-Pfalz and Grand-Est (Figure 35).

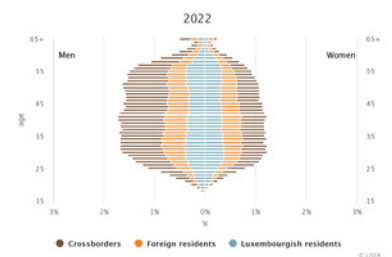


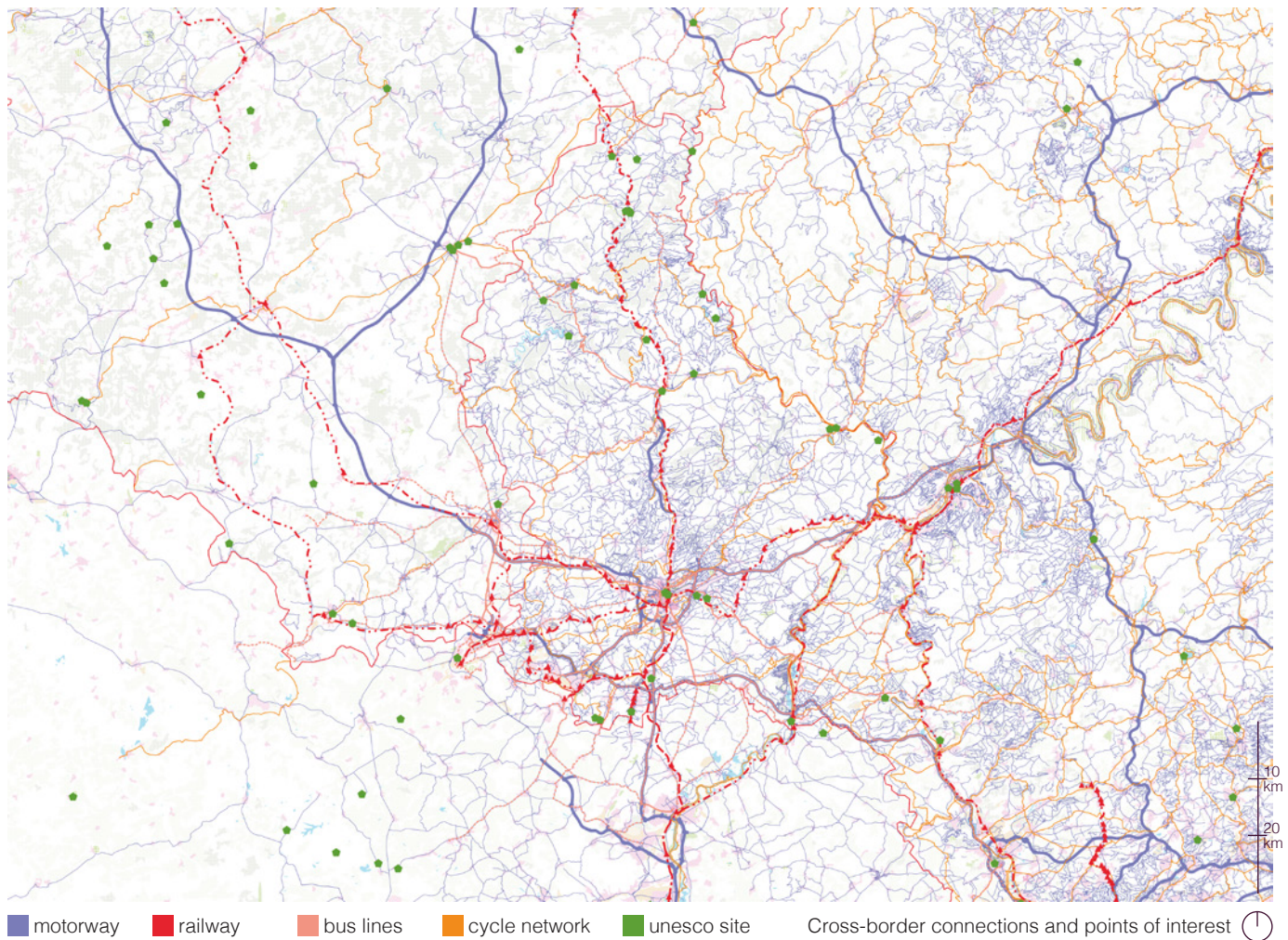
Labour Force

Luxembourg's economic vitality relies significantly on daily cross-border commuters who contribute to the workforce (Figure 35). However, this dependency shifts a little bit when examining the healthcare and social services sector, specifically in long-term care, where approximately 30% of workers come from neighbouring countries.

Notably, the largest proportion of these cross-border workers resides in France, predominantly in the Grand-Est region (Figure 36). During the COVID-19 pandemic, France threatened to close the borders which would have limited these workers from entering. Luckily, they decided against this at last, according to one interviewee.

In the healthcare and social services domain, Germany and Belgium share similar dependency rates, drawing primarily from Rheinland-Pfalz and the Belgian province of Luxembourg. The workforce composition reflects a cross-border collaboration that underlines the interconnected nature of healthcare provision in this region. While foreign residents in Luxembourg encompass diverse nationalities such as Portuguese, Italian, and French, it is not clear how this is reflected in this particular sector. Nevertheless,





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Figure 36, bottom left: LISER (2023). Employment boosted by influx of cross-border workers [diagram] LISER. https://www.liser.lu/ise/display_indic.cfm?id=655

Figure 37, top left: Crossborders total rate and in Healthcare and Social Services, Author's Work

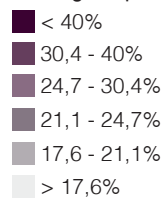
Figure 38, right: Crossborder Transportation and Points of Interest, Author's Work

the phenomenon of Global Care Chains is also visible in Luxembourg. Fischbach, President of COPAS recently warned of a future lack of staff in health and long-term care linking it to the limited educational opportunities within the country (Gantenbein, 2023). While care workers from surrounding border areas enjoy working in Luxembourg because of higher wages and better working hours, undergoing education within Luxembourg is less attractive.

Transport

The region is internationally connected through regional train lines as well as cross-border bus lines. The only fast train line is the TGV to Paris. Commutes via public transport thus often take a lot of time and endorse the use of private cars despite being free of charge within Luxembourg. Many cross-borders travel back and forth by car every day which leads to congestion during rush hour. As remarked by Hesse (2016) the current infrastructure also considering passenger transport does not accommodate the large number of daily commuters hailing from a high amount of jobs and a small amount of residents in many Luxembourgish municipalities.

I old-age dependency ratio



I an internationally connected region

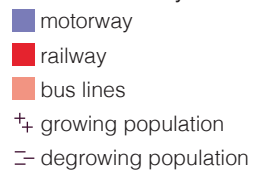
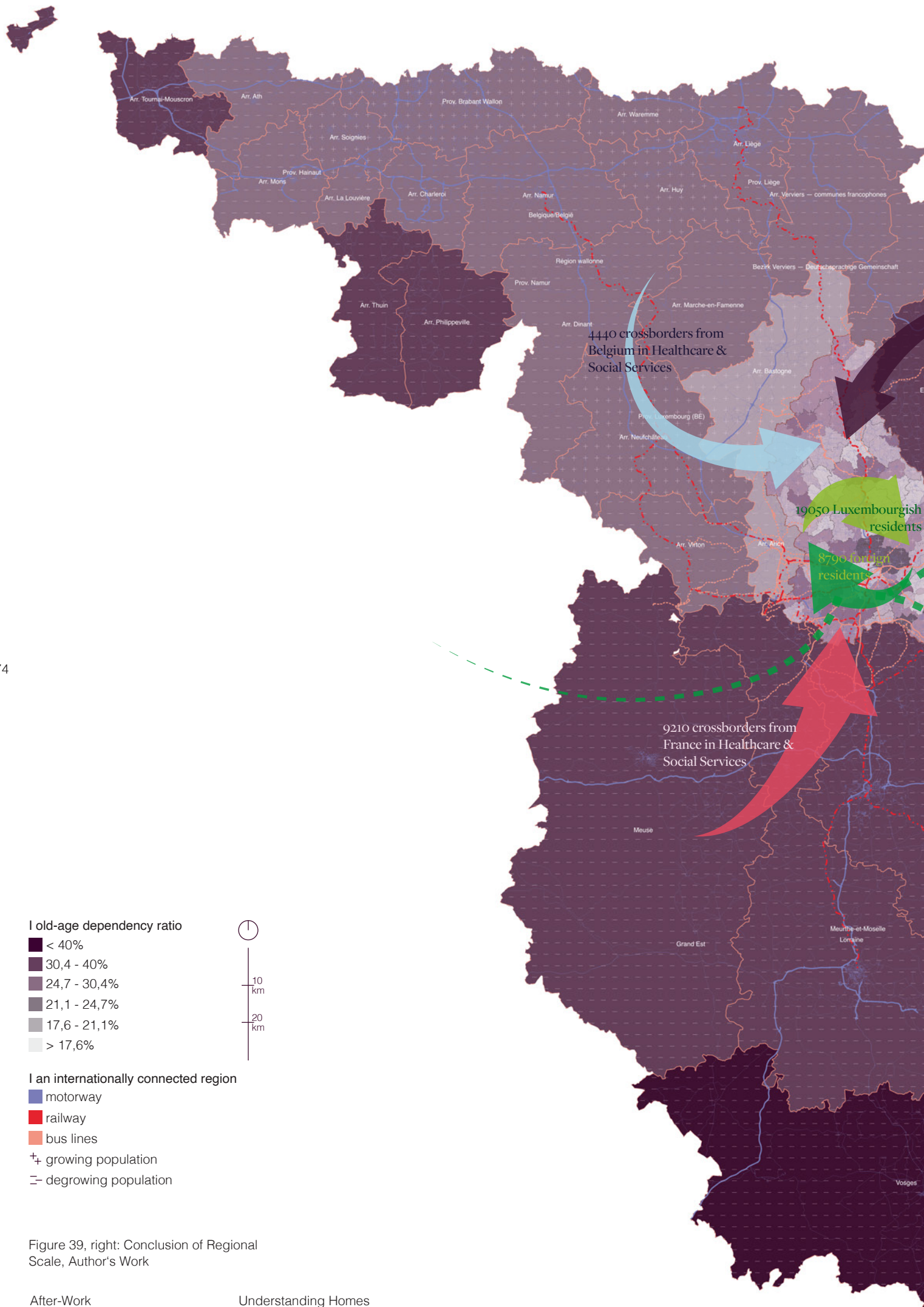
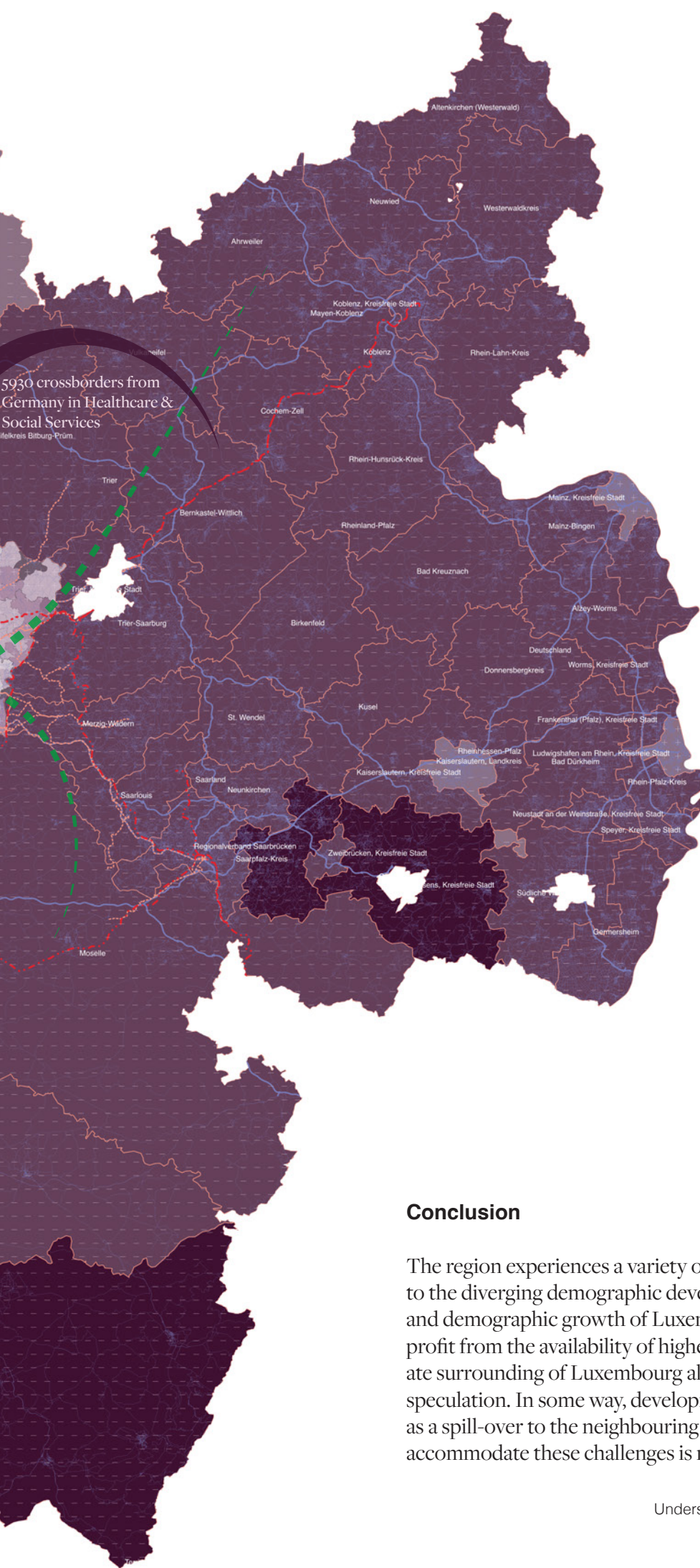


Figure 39, right: Conclusion of Regional Scale, Author's Work





Conclusion

The region experiences a variety of future challenges which mainly amount to the diverging demographic development and the accelerated economic and demographic growth of Luxembourg. Although surrounding regions profit from the availability of higher paying jobs, the areas in the immediate surrounding of Luxembourg also experience a rise in land prices and speculation. In some way, developments observed in Luxembourg play out as a spill-over to the neighbouring regions. Cross-border cooperation to accommodate these challenges is necessary.

National

Scale

Spatial Planning, Family, State, and Market

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urban centre semi-urban rural cluster rural, low density not inhabited economic zones

I urbanisation

Figure 40: Degree of Urbanisation and main economic zones Luxembourg, Author's Work

Urbanisation

The housing shortage and high prices are among the most pressing issues of Luxembourg's population growth. Luxembourg's population generally does not have a particular urban society, but many prefer peri-urban zones (Figure 40). Therefore, they lack identification with the city and oppose further densification (Hertweck, 2020).

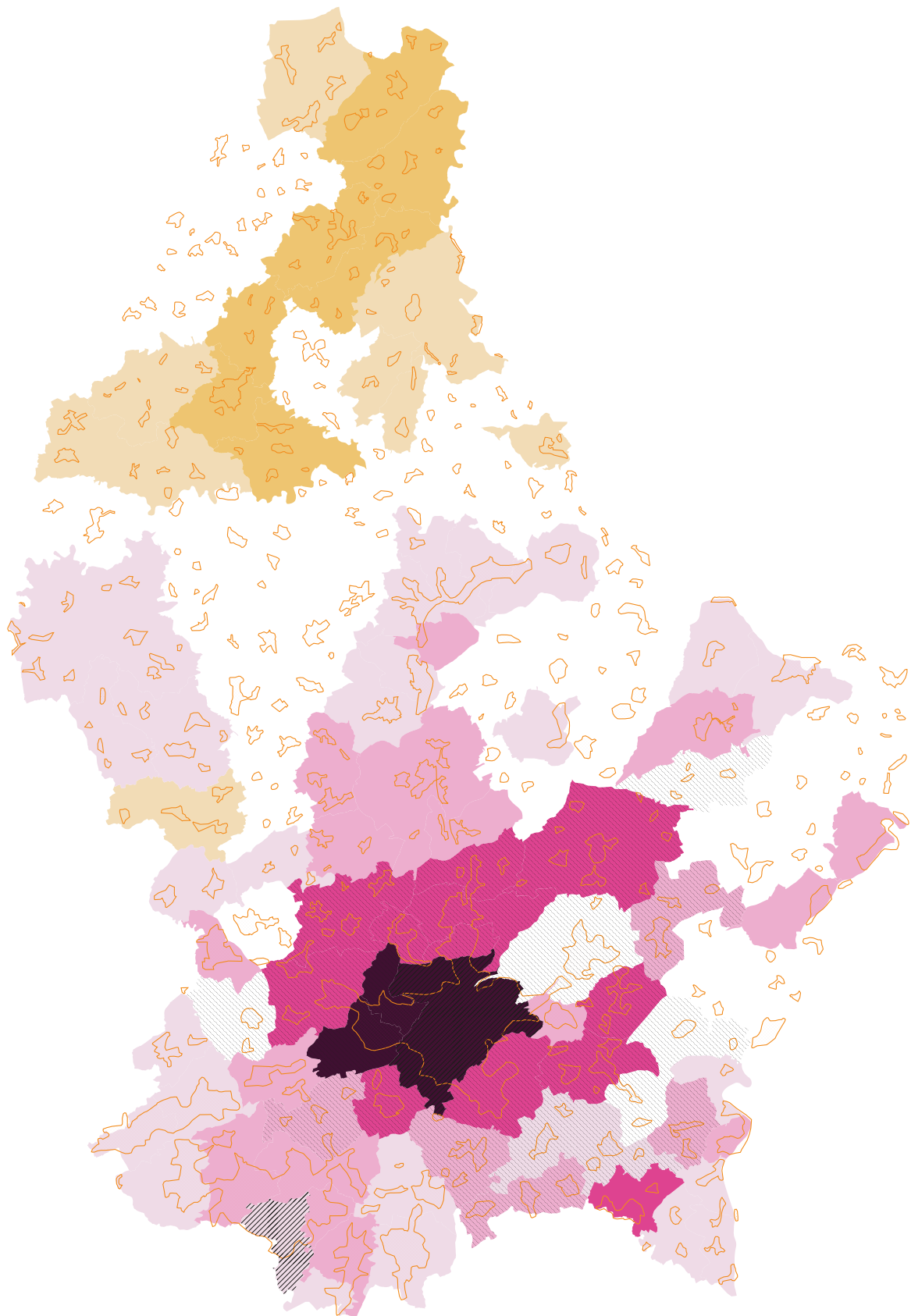
Especially the north of the country is less inhabited as well as less economically strong when compared to its southern counterpart where also the capital is located. This imbalance can mainly be traced back to less productive soil for agricultural production and the presence of iron in the southern edge of the country which makes part of the Minett Region, of the mining and steel-producing industry. Although the steel industry has largely decreased, many of the former industrial sites are still visible. Esch-sur-Alzette is the second-largest city in the country and the urban fabric being rather dispersed, is still one of the densest inhabited areas in Luxembourg.

Hesse (2016) classifies the urbanisation of Luxembourg as "flawed" considering its mismatch between spatial development and population. This development has mainly been occurring since the 1960s with the creation of enclave spaces for the financial and political industries like Kirchberg. Such enclave spaces shift the economic powers from the urban centre (of the capital) to emerging micro-districts in the periphery. In said periphery, smaller municipalities are often overwhelmed with large-scale projects and are more likely to give in to developers' interests considering a lack of capacity and knowledge. This only further increases the mismatch between jobs, residents, and available infrastructure in many communities.

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Spatial Planning

The current paradigm in spatial planning is characterised by and devoted to the economic growth model. According to Hesse (2016), maintaining a high standard of wealth is an important factor within the current Luxembourgian society model. To maintain the current level of welfare state provision an annual growth of GDP of 4% is needed (Schroeder, 2007). This growth-oriented development thus puts enormous pressure on the dispersed "built environment, infrastructure, and natural resources" (Hesse, 2016, p.622). Two meta-narratives exist within the country whereas one promotes welfare in some areas and growth in other areas. Moreover, there is a necessity in spatial planning to re-assess power relations, foster cooperation between municipalities, the national government, and most importantly between citizens and governments to allow for a variety of interests to come in conflict with each other and defy the hegemonic discourse of the state (Hesse, 2016).



I housing prices



Figure 40, left: Housing Prices in relation to economic activity and urban areas based on Pigeron-Piroth et al. (2017) and Licheron, J. (2023), Author's Work

Figure 41, top: Collage of typical housing in Luxembourg, Author's Work

Access to Care through the Private Household (Family)

When looking at the private home as an immediate place for care the difficulty to access housing for a large group of people in the country also limits their access to care within the home but also in their immediate surroundings if they are unable to afford a home in a central location (Leinfelder et al., 2023). In recent years, it has been impossible for most people of low to higher-medium income to afford accommodation in the capital. An average rent of 23€ (from 2015) per sqm or purchasing costs starting from one million, make it impossible to stay close to the city, especially to non-owners. On average, renters spend around 38% of their income on their accommodation. The ownership quota among residents was 73% in 2015 (Hertweck, 2020). The share of social housing is only 3% of all housing and thus in high demand. Moreover, the public holding of ground written for new housing development accounts for 10% of all suitable land. Most suitable land is managed privately, and new housing projects are undertaken by private real estate developers (Hertweck, 2020). Undertaken developments simultaneously often follow market-driven aspirations and cater to higher-income groups mainly of native background. According to Mezaros and Paccoud (2022), the housing market and policies strengthen the position of the most advantaged who are residents born in Luxembourg and over 45 years old. This population group shows the highest rate of second home ownership at 22%. First and secondary home ownership is heavily supported through policies such as interest rate subsidies, tax deductions on loan interest, or low property taxes among other incentives. As observed in Dudelange, but similar country-wide, the housing market is advantageous for Luxembourg-born individuals over 55, followed by natives of 18 to 54 years old due to their higher incomes in comparison to those born elsewhere regardless of age (Mezaros & Paccoud, 2022). In consequence, these characteristics pass from one generation to the next because of the joint capacity of inheritance and high income. Therefore, access to housing is dependent on the family, property wealth and access to high-paying jobs (Bohle & Seabrooke, 2020; Mezaros & Paccoud, 2022).

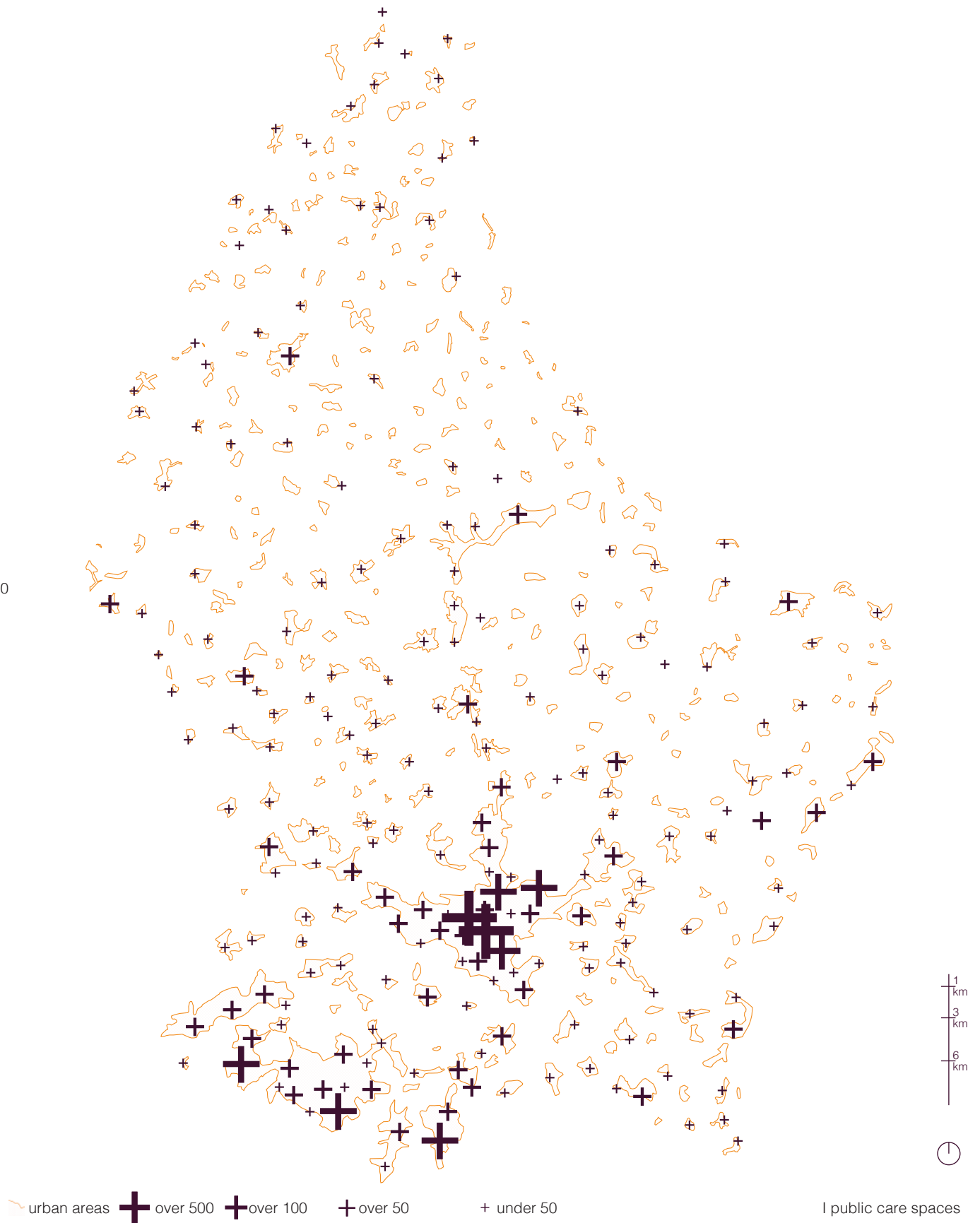




Figure 42, left: Distribution of Hospitals, Health and Long-Term Care Facilities in Luxembourg, Author's Work

Figure 43, top: Collage of Nursing Home SERVIOR Op de Rhum, Author's Work

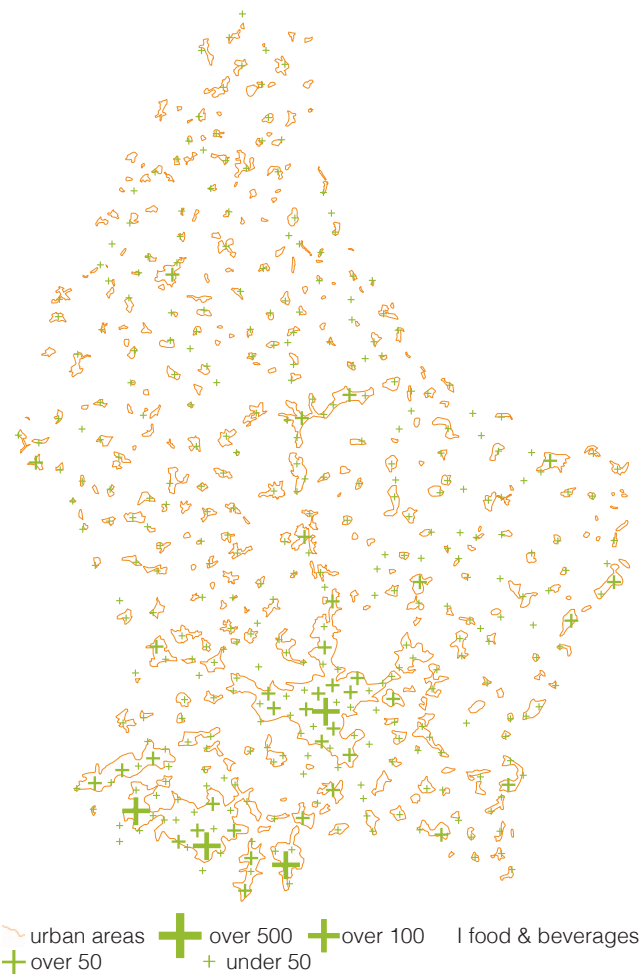
Access to Care through the State

Important care facilities such as hospitals, medical, or daycare centres are found mainly within larger urban areas and are rarer in the sparsely populated north (Figure 42). Most of the nursing homes are composed of a hotel-like building surrounded by green areas which function as a park. Many employ this character of being retracted from the urban fabric and urban life. Whether protected by fortifications on top of a plateau, at the edges of sparsely populated suburban and peri-urban areas, or hidden in the courtyards of a residential area, most nursing homes stand out amongst their environments. This classifies them as heterotopia in the Foucauldian definition (Foucault & Miskowiec, 1986). The sense of retraction and partial isolation from public life raises questions surrounding the autonomy and mobility of its inhabitants. For example, SERVIOR 'Op der Rhum' is embedded in a former military exercise camp and current UNESCO architectural heritage. Part of the facility functions as a museum. Moreover, the home offers a scenic view over the city of Luxembourg. Remarkable is the character of the home as a fortress, being surrounded by fortifications from the Middle Ages (Figure 43).

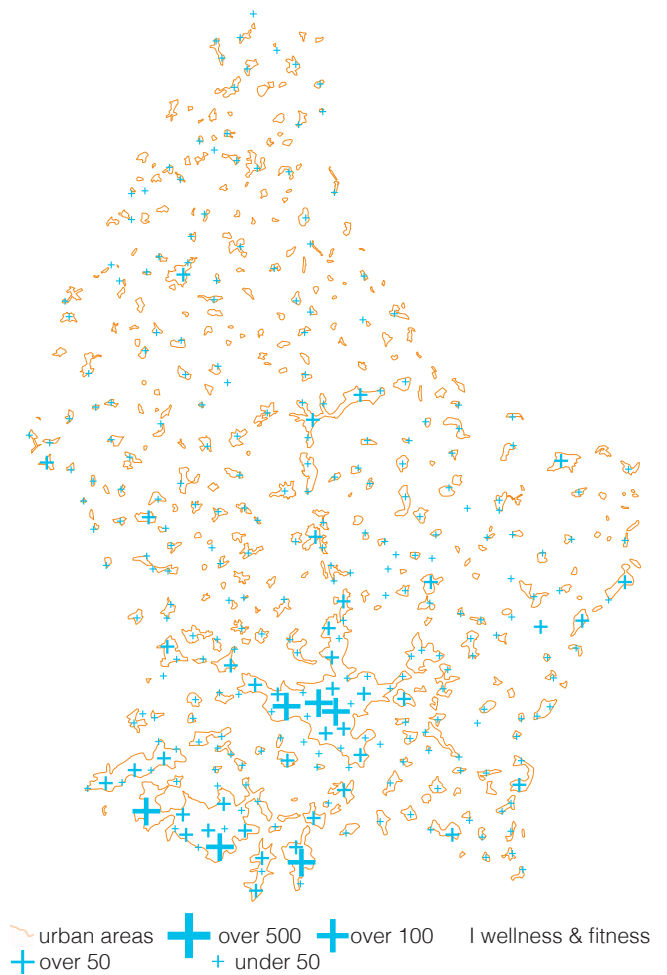
Such care homes are not necessarily integrated into strategic spatial planning but rather their location is decided because of the availability of a larger and affordable lot. Another aspect remarked by one interviewee is that these hotel-like buildings often impose long paths from private to collective rooms which are difficult for some residents to achieve. The interviewee also shared earlier aspirations to combine elder homes and facilities for children similar to Denmark which was in the end not done.



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After-Work



Understanding Homes



Access to Care through the Market

In contrast, to the innocent spaces of the public nursing homes and the luxury of market-provided living spaces, two other ‘care’ institutions stood out to me during my site visits. The corner café was present in almost all urban areas (Figure 45). They seem more prevalent in working-class neighbourhoods. This café usually opens in the morning and stays open until 1 AM, offering mainly beverages throughout the day. Most cafés contain one or several TVs and slot machines of the national and other lotteries. The cafés are mainly visited by older men. They are not necessarily exclusive to certain nationalities or cultures but seem rather like a place often administered by Portuguese or Italians and visited by Luxembourgish residents alike. The shopping centre, often newly built, seems also a place where many older citizens spend time and meet their friends for a chat (Figure 46). Some shopping centres even combine the shopping function with consumption and offer corner cafés inside the shopping centres, which seemed to be quite popular with older residents on a usual working day morning. As Figure 44 shows, the market’s care spaces are also rather concentrated in the main urban areas, although more dispersed in comparison to the state spaces.

Simpson (2015) describes the growing market of residences catered to young-old and affluent adults offering a ‘young-old utopia’. Such housing developments are also visible in Luxembourg. For example, one of the most central nursing homes is currently extended to offer facilities for people over 60 who can live independently (Fondation Pescatore, 2016).

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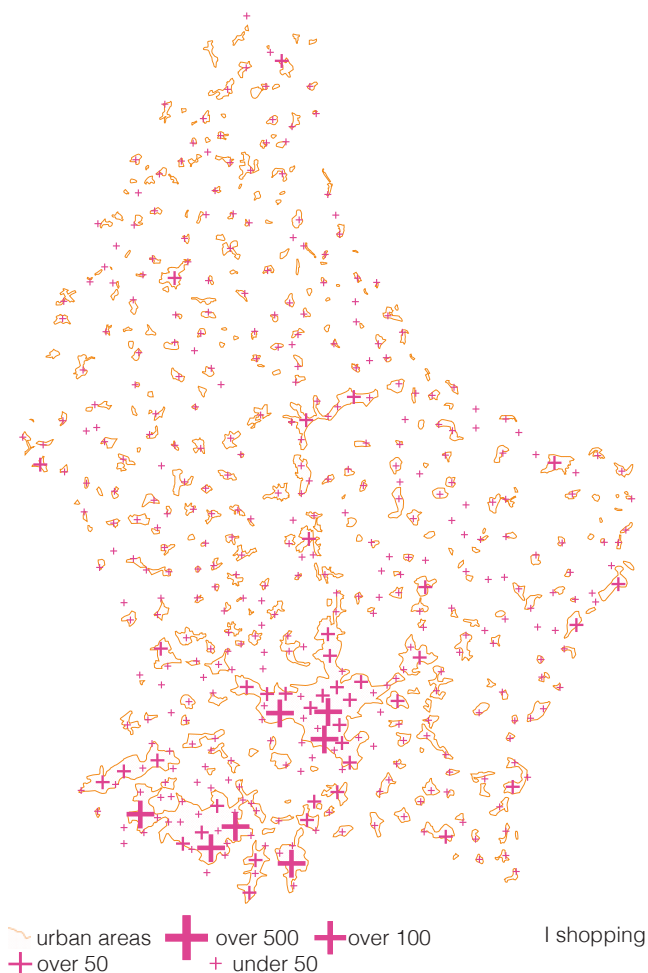
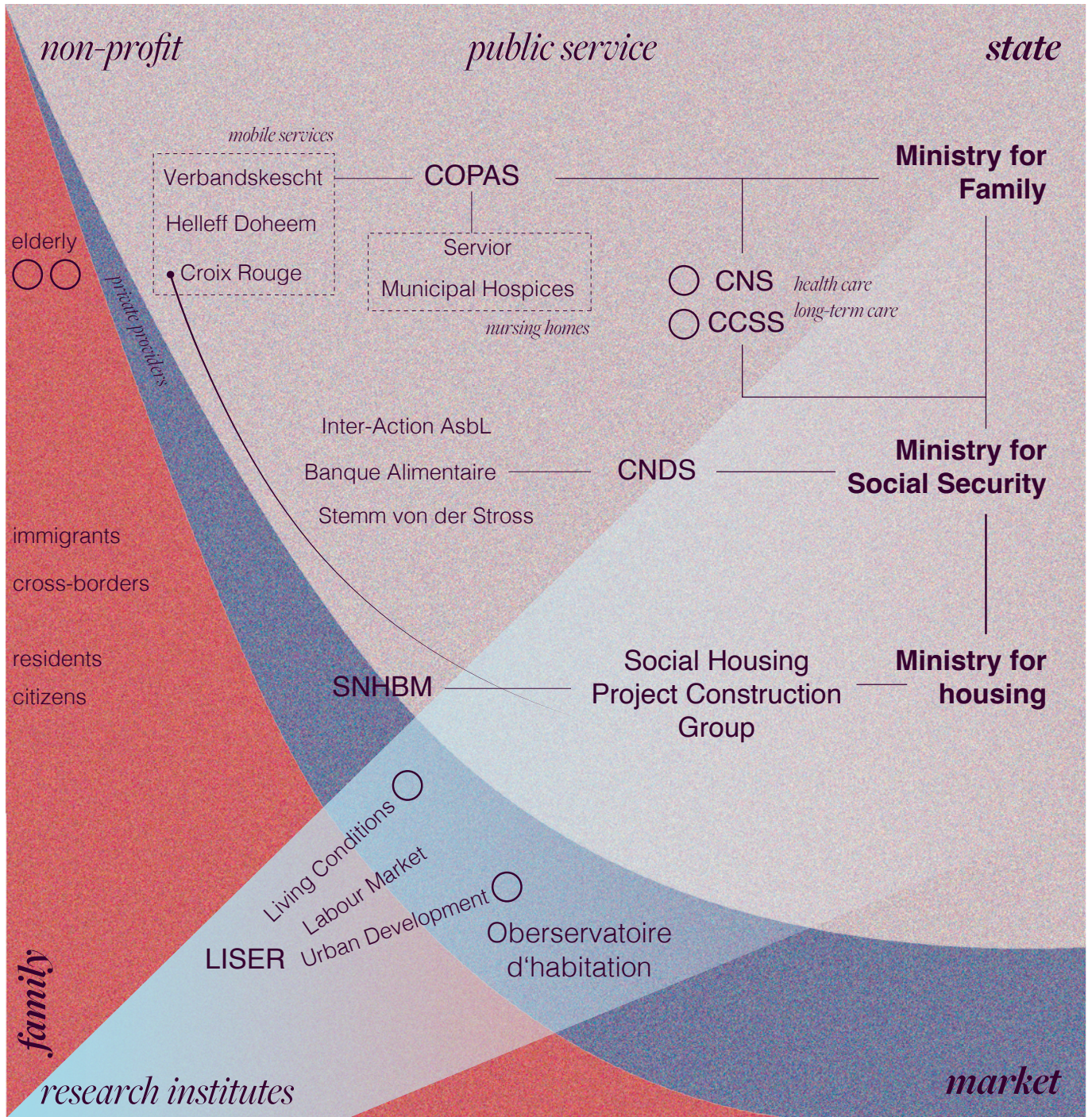


Figure 44, top right: Distribution of Wellness, Fitness, Shopping Facilities, and Food and Beverage Spaces in Luxembourg, Author's Work

Figure 45, top left: Collage of Shopping Centres, Author's Work

Figure 46, bottom, right: Collage of Corner Cafés, Author's Work



○ interviewed

Figure 47: Analysis of Stakeholder in the Care and Housing Sectors, Author's Work

Networks of Care

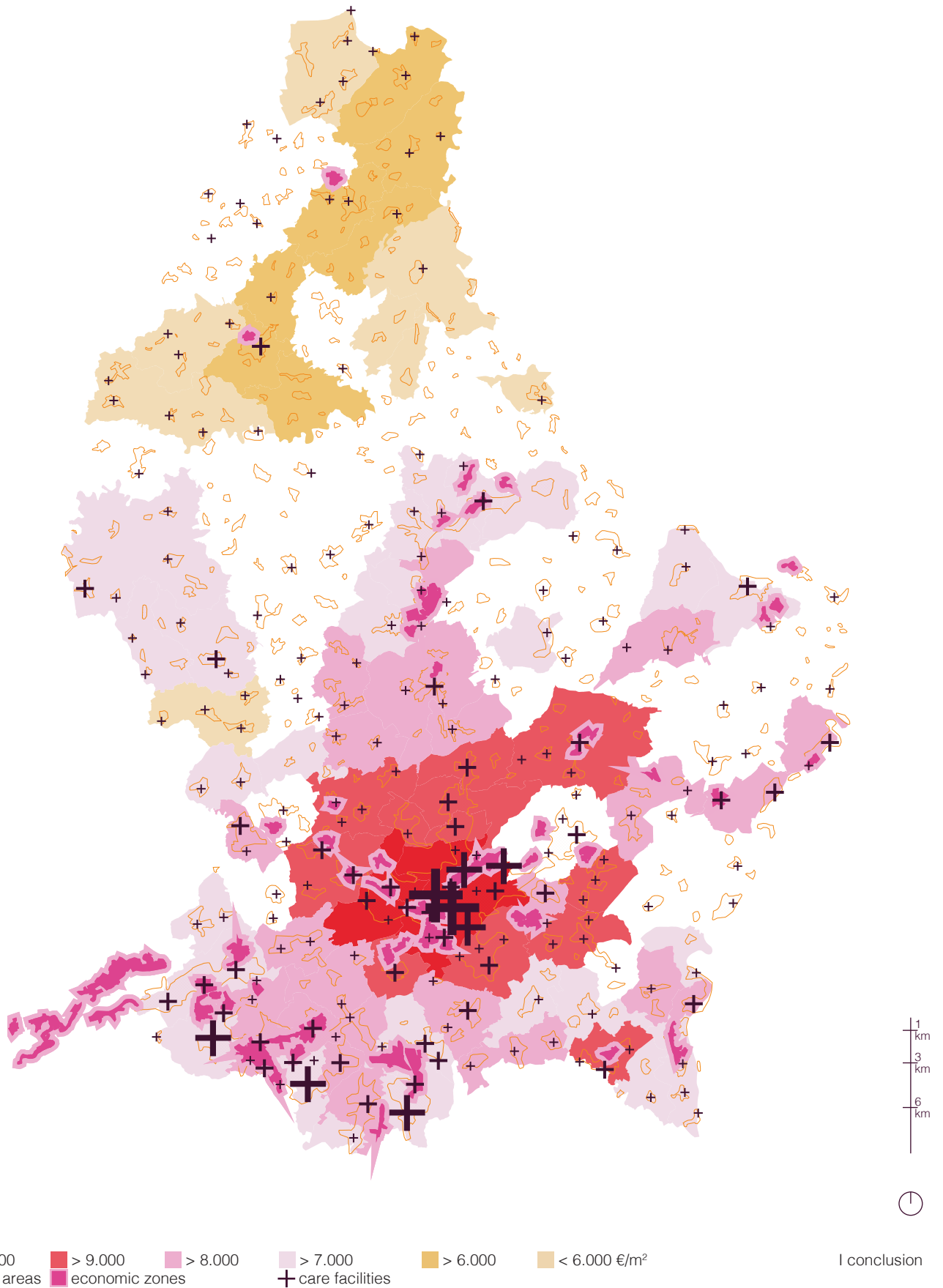
As described earlier, the housing sector is mainly played by private actors. However, the Ministry of Housing and Spatial Planning has recently voiced its aspirations to provide more affordable homes through the partnership with municipalities in the Pact de Logement 2.0 (Ministère du Logement et de l'Aménagement du territoire, 2024). One of the main partners in this realm is the SNHBM (Société nationale des habitations à bon marché). Contrary to the housing market, the state is a very active provider in the realm of care provision. Public health as well as long-term care insurance are available to anyone working in the country. Next to other insurances, both are provided by the CNS. For people residing outside of Luxembourg, these services are usually settled between the national insurance providers. This works quite seamlessly despite some unclarities with the French long-term care insurance according to one interviewee. These services are mainly handled through the Centre Commun de la sécurité sociale (CCSS; Centre commun de la sécurité sociale, 2024) which is directly subject to the Ministry of Social Security (Ministère de la Santé et de la Sécurité sociale, 2024).

85

Healthcare is one of the most generous in Europe and includes a cost-sharing program for low-income groups (Tchicaya & Lorentz, 2011). However, even such care provision does not guarantee unrestricted access to healthcare. From 2004 to 2008, the number of people not seeking out healthcare due to financial reasons slightly rose. Moreover, often, women and less educated people are of lesser health than men or people with higher education (Tchicaya & Demarest, 2011).

Most care service providers are organised under the parent organisation COPAS (COPAS, 2024). This includes the main public provider of nursing homes, SERVIOR, other public providers of nursing homes, daycare centres, or domestic care services such as the Croix Rouge, related to the Catholic Church, and Helleff Doheem, related to the Protestant Church. Most political decisions relating to ageing and the provision of care are formulated by the Ministry of Family (Ministère de la Famille, des Solidarités, du Vivre ensemble et de l'Accueil, 2024).

In addition to these care providers, several associations deal with the inclusion of socially disadvantaged people. A main non-profit organisation in this realm is the CNDS (Comité National De Défense Sociale), which offers inclusion in the labour market, medical aid, and housing (CNDS, 2021). Another non-profit organisation is Inter-Action ASBL, which holds a variety of site-specific initiatives throughout the country (Inter-Actions, 2024).



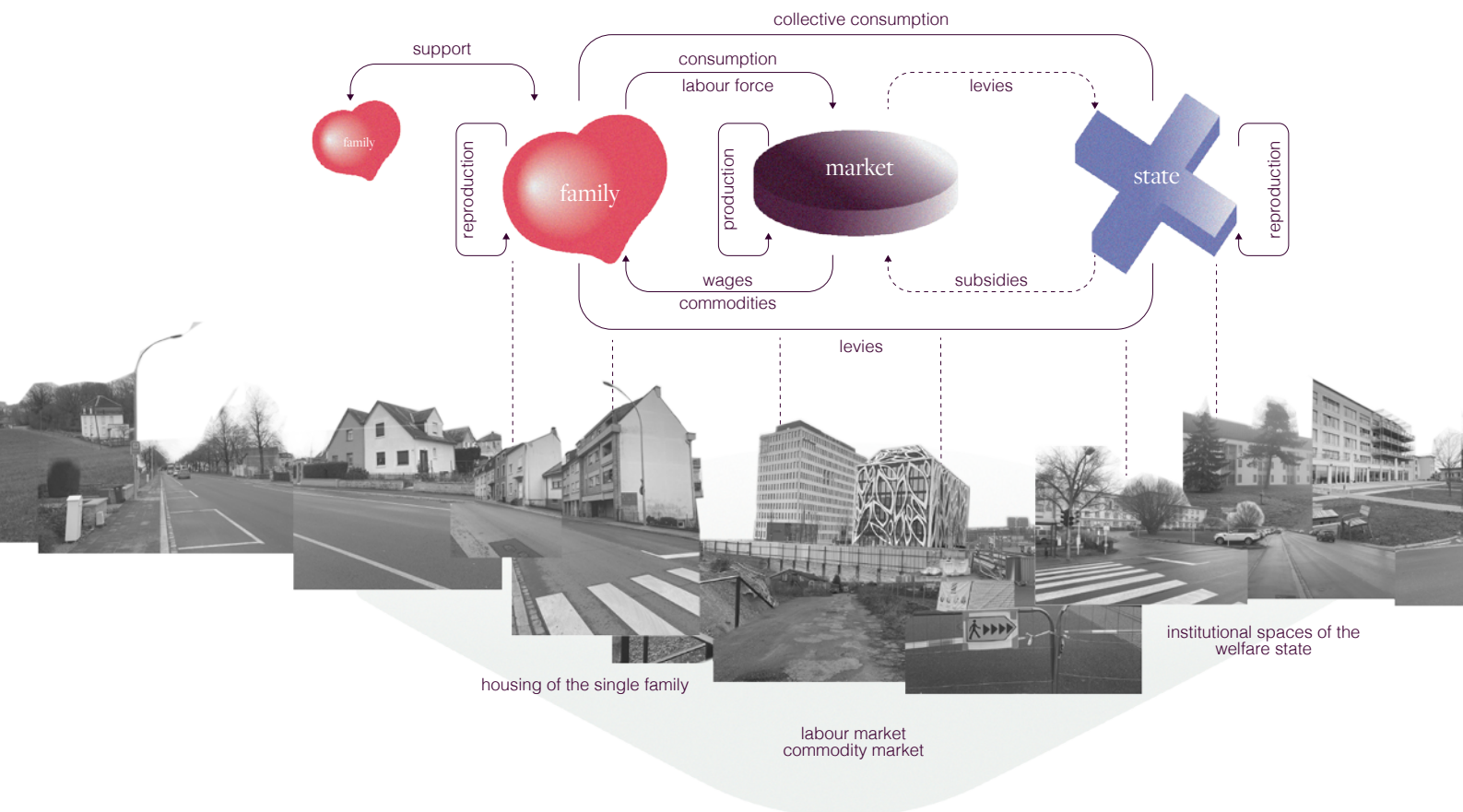


Figure 48, left: Conclusion of National Scale spatial arrangement, Author's Work

Figure 49, top right: Conclusion of National Scale flows, Author's work

Conclusion

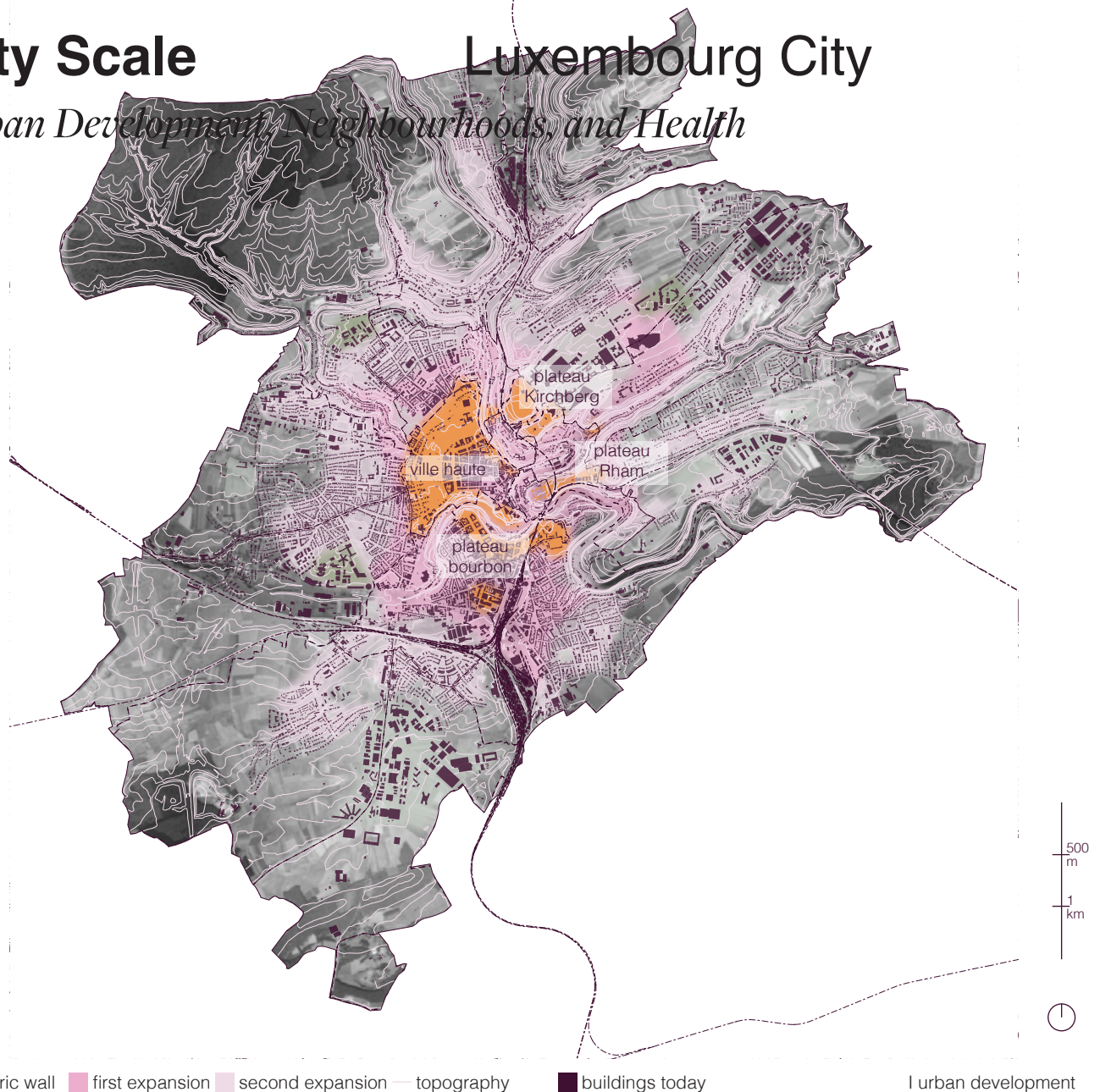
The interconnectedness between the welfare state and economic growth is prevalent and shapes the urban and peri-urban fabric of the country (Figure 48). The Luxembourgian welfare state is not as strong in providing housing as a form of welfare provision in comparison to its provision of LTC and healthcare. Access to housing is very dependent on the fortune of the family or private household and thus more difficult to attain for new residents, especially those with lower income since many policies and the economic model still favour high-income and native groups (Figure 49). Additionally, it's difficult to spatially integrate anything in Luxembourg's urban-regional landscape because of its disintegrated fabric, its non-urban self-perception, and its dependency on individual traffic.

In the realm of decision-making, the care sector is mainly governed by decisions of the national government. Subordinate to it is the COPAS which regularly comments on the government's new policies or gives advice but is not directly included in legislative actions. The government has recognized the need for more affordable housing and is making an effort to cater to lower-income groups as they see the negative impacts of the land pressure. Despite these efforts, there is no open aspiration to drop from the growth paradigm.

City Scale

Luxembourg City

Urban Development, Neighbourhoods, and Health

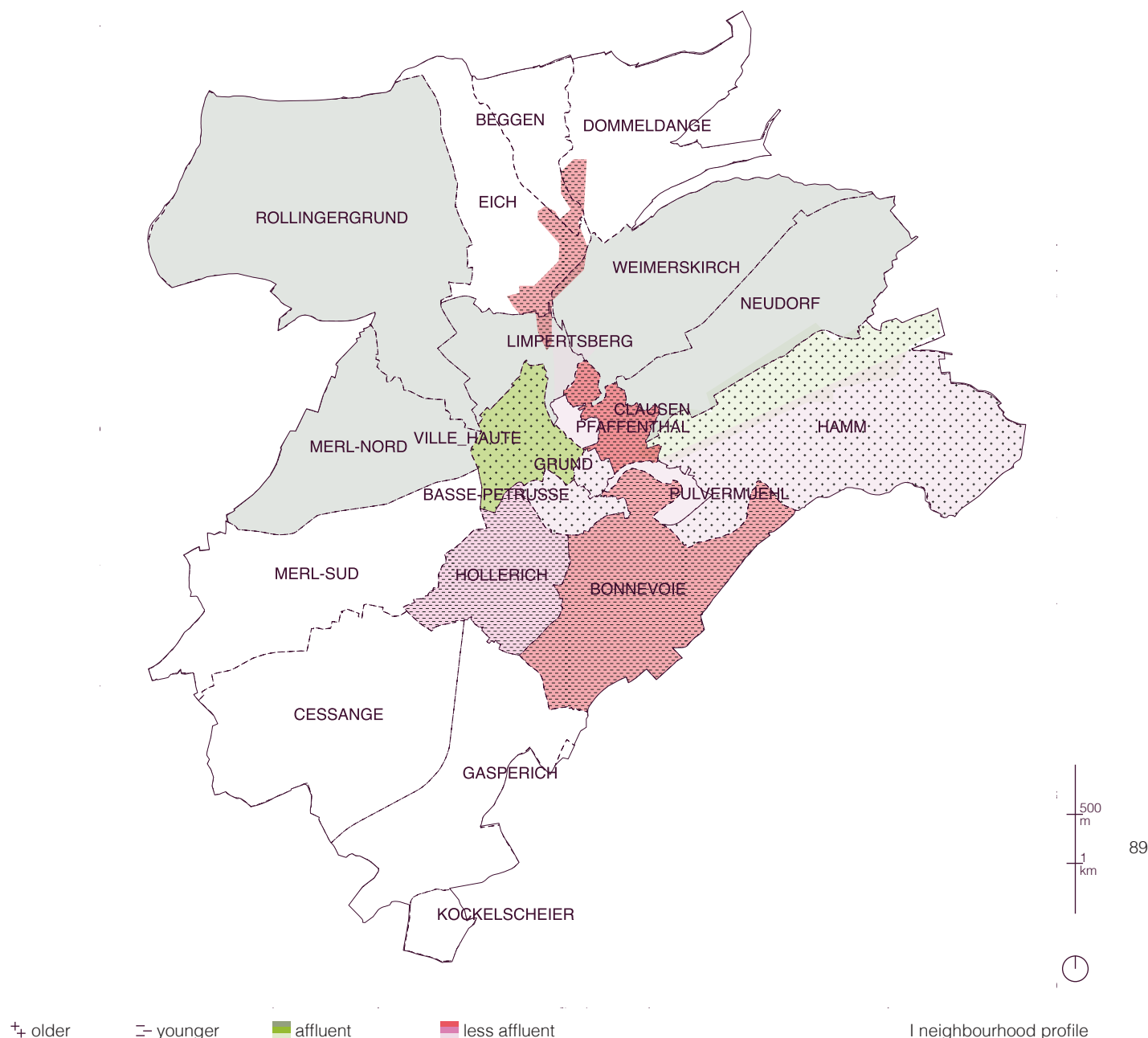


Urban Development

Luxembourg City is the capital of the country and also its most inhabited urban area with around 160.000 residents. Its past as a strategic military location and fortification due to its topographic qualities is still visible today (Figure, 50). The main city wall was built in the 14th century and enclosed Ville Haute until the 19th century from the surroundings. Today's neighbourhoods grew only later with the biggest extensions from the 1950s onwards when many workers settled to work in the steel and train industries. Additionally, since the 1960s the city became an important hub for the administration of the European Union and finance industries which mainly reside in Kirchberg. Amongst newer developments is also the Cloche D'Or close to Gasperich. As mentioned by Hesse (2016) the attention from the centre of the city as a main business place shifts more and more to the outskirts and business enclaves.

Figure 50, left: Historical Development Luxembourg City based on LuxAtlas (2024), Author's Work

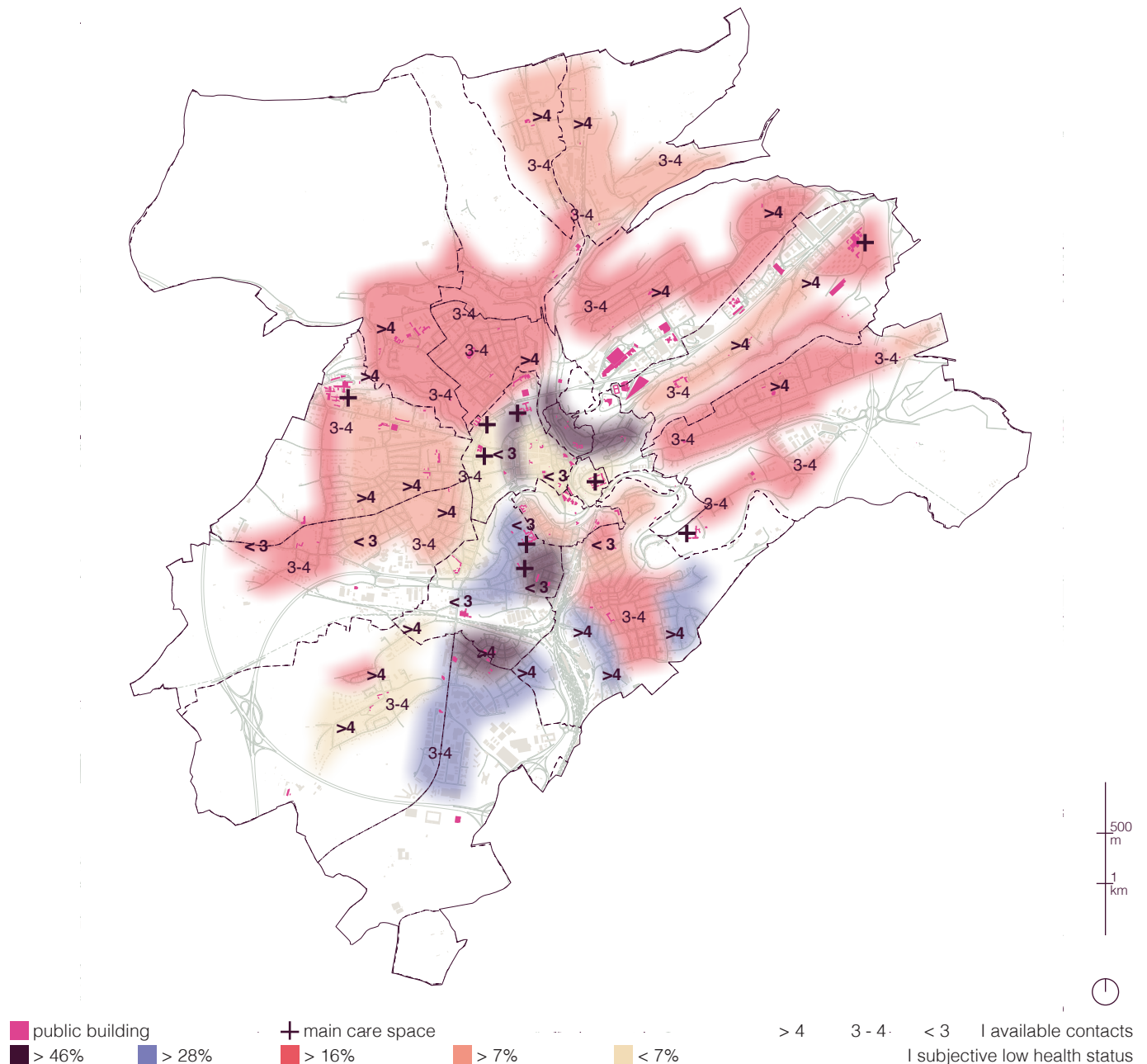
Figure 51, right: Neighbourhoods Luxembourg City based on Zdansowska (2023), Author's work



Neighbourhoods

In addition to historic and topographic segregation, the neighbourhoods of the capital show a variety of social inequalities. According to Zdansowska (2023), these inequalities are less dependent on migration backgrounds, education, or demographic characteristics of a certain neighbourhood but can mainly be traced through the ratio of people dependent on social benefits and income level.

On the one hand, affluent neighbourhoods (Figure 51) consist of residents with higher incomes, a higher share of well-paying jobs in the public sector, a higher average age, and residents with a Luxembourgish nationality. Some of them also show a high rate of residential turnover and children in private education. These neighbourhoods are Belair, Limpertsberg, Kirchberg, and Ville Haute. The latter shows a high rate of LTC recipients as this neighbourhood employs some of the biggest nursing homes but also very high median income. On the other hand, less affluent neighbourhoods are characterised by a high share of social benefits such as the REVIS, strong residential mobility and more residents living below the poverty line which



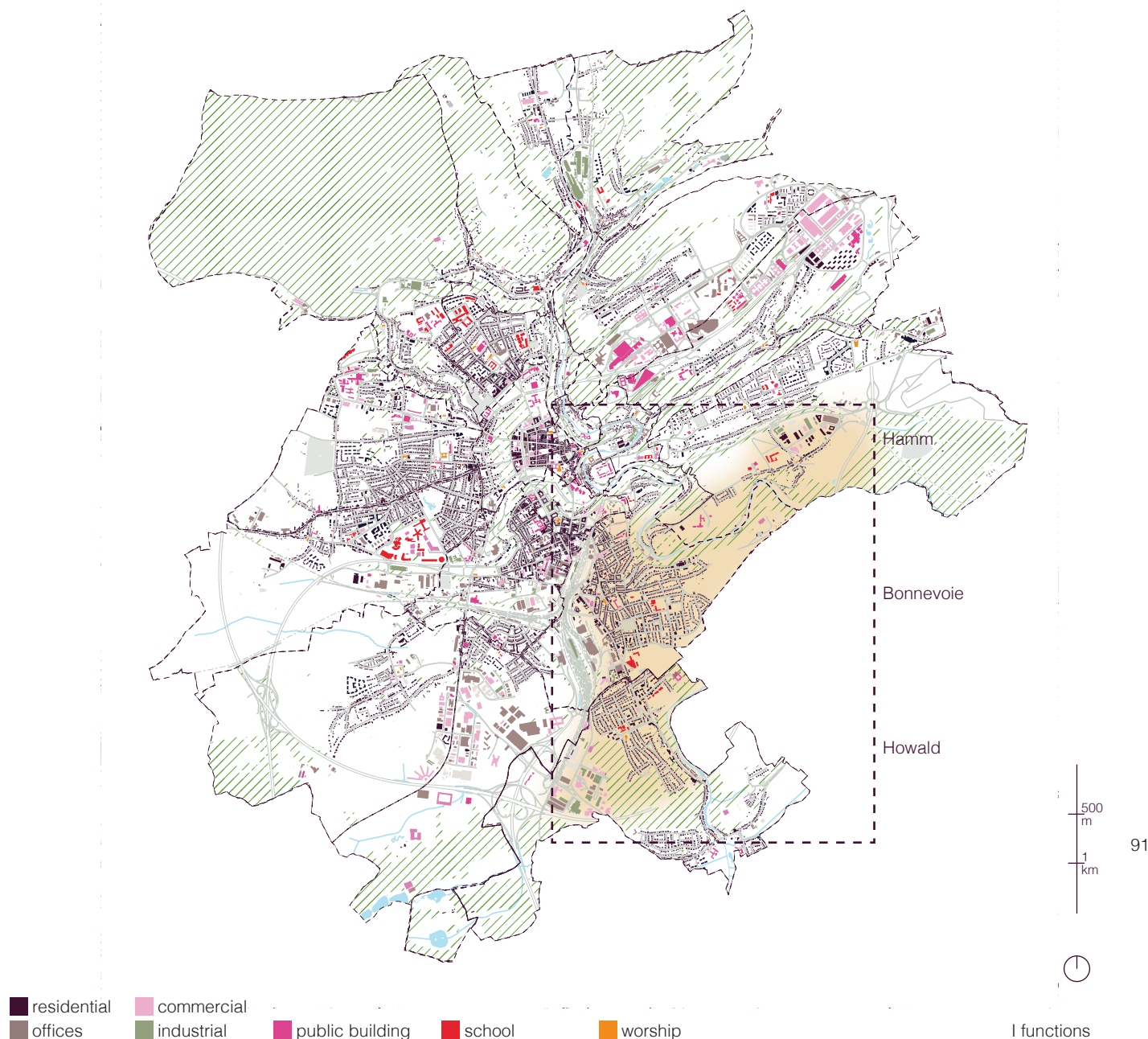
is 60% of the median income. Amongst these are Gare and Bonnevoie, the most diverse neighbourhoods, with a large share of Portuguese and Italian residents. Both are also the youngest neighbourhoods with most children in public schools. Amongst the oldest and least affluent neighbourhoods are Grund, Pulvermühle, Pfaffenthal and Hamm with a higher share of Luxembourgish residents (Zdanowska, 2023). There are also socioeconomic differences apparent within neighbourhoods (Feltgen, 2011). General for the whole capital, the residential turnover is very high with 40.000 people moving house in 2020 of which 16.000 were new residents but also 14.800 left the capital. Half of them moved within the country (Zdanowska, 2023).

Health Care

Next to socioeconomic differences the neighbourhoods also show differences in a variety of health-related aspects (Figure 52). While most elderly in Luxembourg and their city perceive their health as good, this perception declines with age but is also related to someone's place of residence

Figure 52, left: Health and Care Status Luxembourg City based on Gerber, Fleuret & Schneider (2009), Author's Work

Figure 53, right: Functions and Buildings Luxembourg City, Author's work



(Gerber, Fleuret & Schneider, 2009). The elderly residing in the northern neighbourhoods of the capital report better health than people residing around and south of the central station like Bonnevoie or Gasperich. Another aspect important concerning the elderly' health is their capability to mobilise needed help. This factor is lower in the central areas of the capital mainly in Ville Haute, Gare, and north Bonnevoie. Available help to the elderly grows with distance to the urban centre and is the highest in suburban areas. As mentioned earlier, most and often historic elder homes are located in Ville Haute whereas some newer homes are built in the periphery such as the Hospice in Hamm or the Servior beim Klouschter in Howald. General Practitioners, pharmacies and medical centres are usually located in every neighbourhood although their accessibility may vary in each neighbourhood. For further analysis I am zooming into three Neighbourhoods: Bonnevoie, Hamm (municipality of Luxembourg) and Howald which is already part of the municipality of Hesperange, but its urban fabric continues almost seamlessly into the capital (Figure 53).

Scale

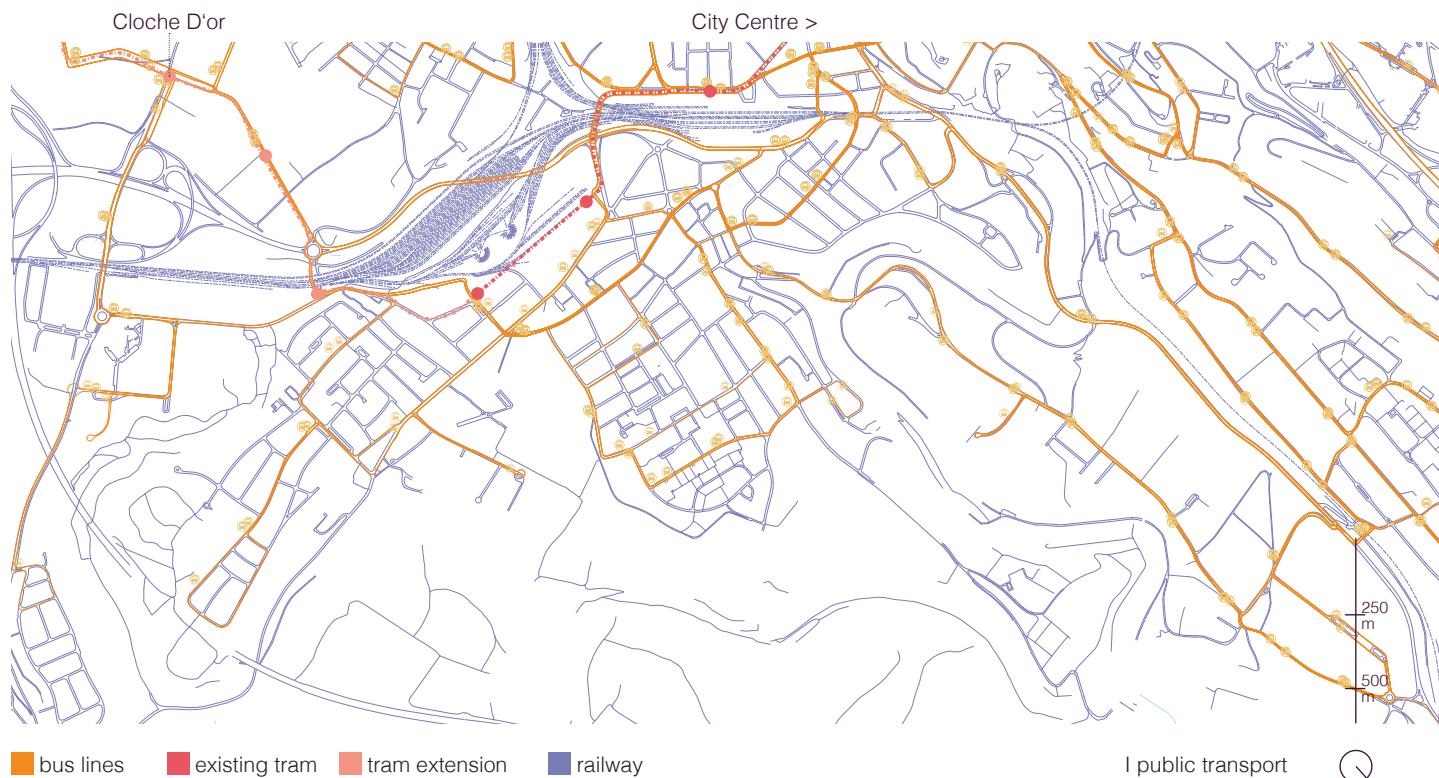
Urban Fabric



Narrative Map

As explained earlier, Bonnevoie and Hamm are less affluent, diverse, or rather Luxembourgish neighbourhoods. Howald has a rather affluent population, especially on the Howald Plateau, where most people live in single-family houses. Figure 54 was assembled after two walks with a Bonnevoie local and their experiences in the respective and other neighbourhoods.

Figure 54: Narrative Map of Howald, Bonnevoie, and Hamm, Author's work



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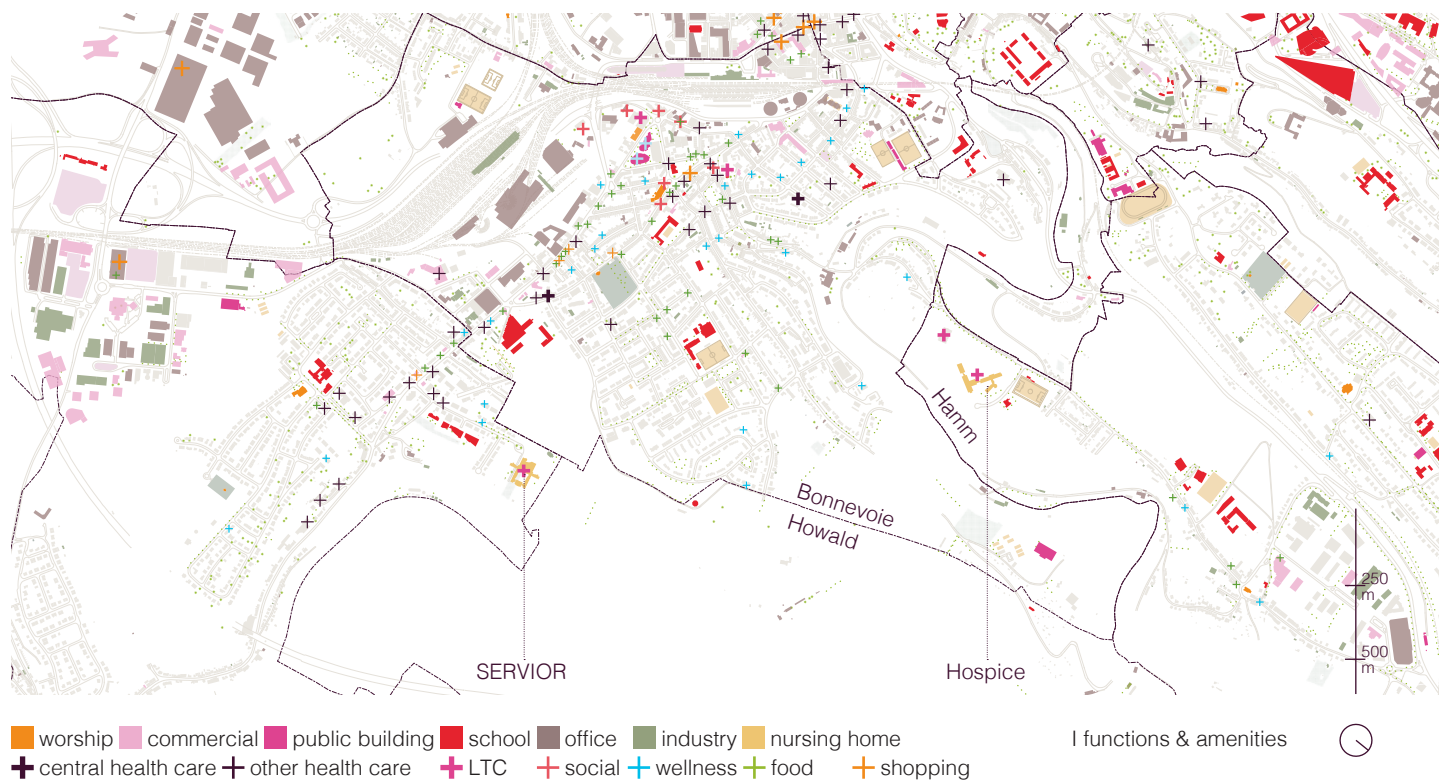


Figure 55: Public Transport in the three Neighbourhoods, Author's work

Figure 56: Care and other facilities in the three Neighbourhoods, Author's Work

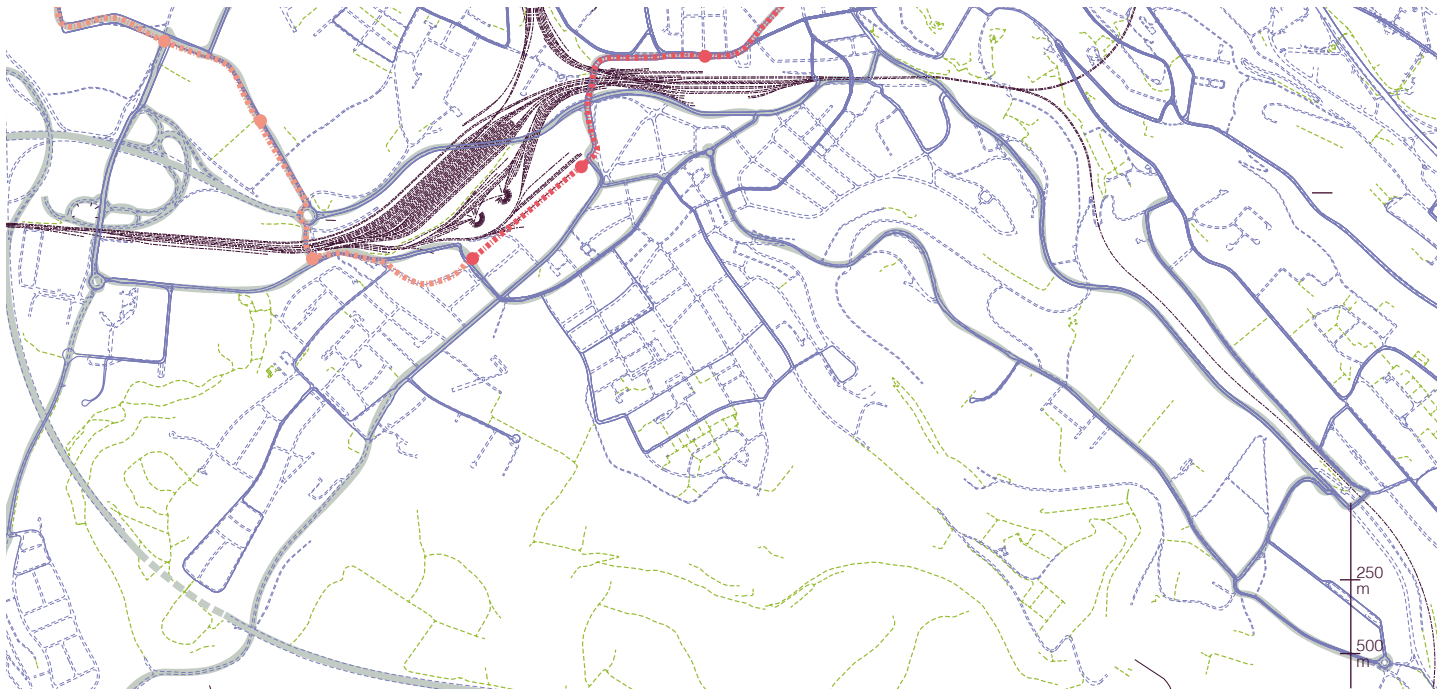
Connection to Public Transport

As seen in the historical mapping of the capital city, the three neighbourhoods lie originally outside of the historic city wall but also on the southern side of the railway tracks (Figure 55). A variety of bus lines serve and connect all neighbourhoods but also to the city centre and the newer shopping centre Cloche D'or. Buses run frequently except on Sundays when especially in Hamm people have to wait longer in between buses. The tram line connects the edges of Bonnevoie and will in the future also connect two spots in Howald although these lie mostly outside of the current main residential area.

95

Social and Care Infrastructure

Most services for healthcare or social functions are located in the centre of Bonnevoie and extend along roads towards Howald (Figure 56). Hamm lacks in amenities. A few restaurants are positioned along the main road but there are no shops or supermarkets. The elder home in Howald is maintained by the public provider SERVIOR whereas the city of Luxembourg maintains the hospice in Hamm. Both are positioned at the edge of suburban (Howald) to peri-urban (Hamm) urban environments with wide streets reaching the main entrance. In Howald, the nursing home is embedded in a park, with animals such as sheep around. In Hamm, the hospice offers a scenic view over Luxembourg City which is visible in the distance.



■ worship
 ■ commercial
 ■ public building
 ■ school
 ■ office
 ■ industry
 ■ nursing home
+ central health care
 + other health care
 + LTC
 + social
 + wellness
 + food
 + shopping

I street hierarchy



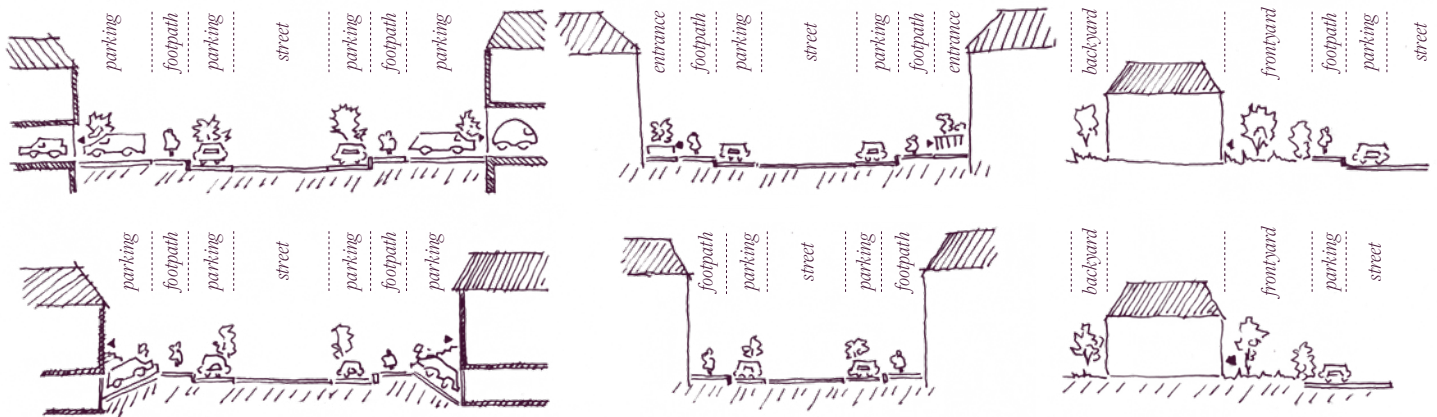
96



■ mainly apartment
 ■ apartment or rowhouse
 ■ row house
 ■ semi-attached or detached house

I housing typology





mainly found in Howald and the edges of Bonnevoie and Hamm. Typical for row or semi-detached houses.

mainly found in the central areas of Bonnevoie and Hamm. Typical for apartment blocks, row or semi-detached houses.

mainly found in Howald and the very edges of Bonnevoie. Typical for single houses.

Figure 57: Street Typology in the three Neighbourhoods, Author's Work

Figure 58: Housing Typology in the three Neighbourhoods, Author's Work

Figure 60: Sketches Residential Street Typology, Author's Work

Street Typology

The three neighbourhoods are connected by two main spines: the Route de Thionville which connects Bonnevoie to Howald in one and to the city centre in the other direction, and the Rue Auguste Charles which connects Bonnevoie to Hamm. For local connection the Rue de Cimétiere is also important since many buses travel here. Residential areas are very accessible by car with little exceptions in the centre of Bonnevoie and near Kaltreis Parc. Most residential roads offer on-street parking and a footpath on each side but no biking paths.

Housing Typology

The main housing types range from multi-family row houses (Bonnevoie, closer to the Central Station) forming a consecutive urban block to more suburban semi-detached houses or even single houses (outer edges of Hamm and Howald; Figure 57). Important, is the presence and space occupied by cars. Many houses hold private semi-underground parking, or garages completely occupy the ground floor. Mainly houses built pre-war, have direct access to the street (Figure 60). A large-scale project, titled 'Brooklyn', is being developed near the Central Station, promoting the 'rough-urban' character of the environment (Figure 78; Figure 79).

Places of most

Care & Attraction

Overview

The following pages feature an investigation of places of most care and most attraction of each neighbourhood, as well as photographs of a few other places of local interest. I investigated these places during my fieldtrip many of which were proposed to me by locals.

Figure 60: Overview Places of Most Care & Attraction, Author's Work

98



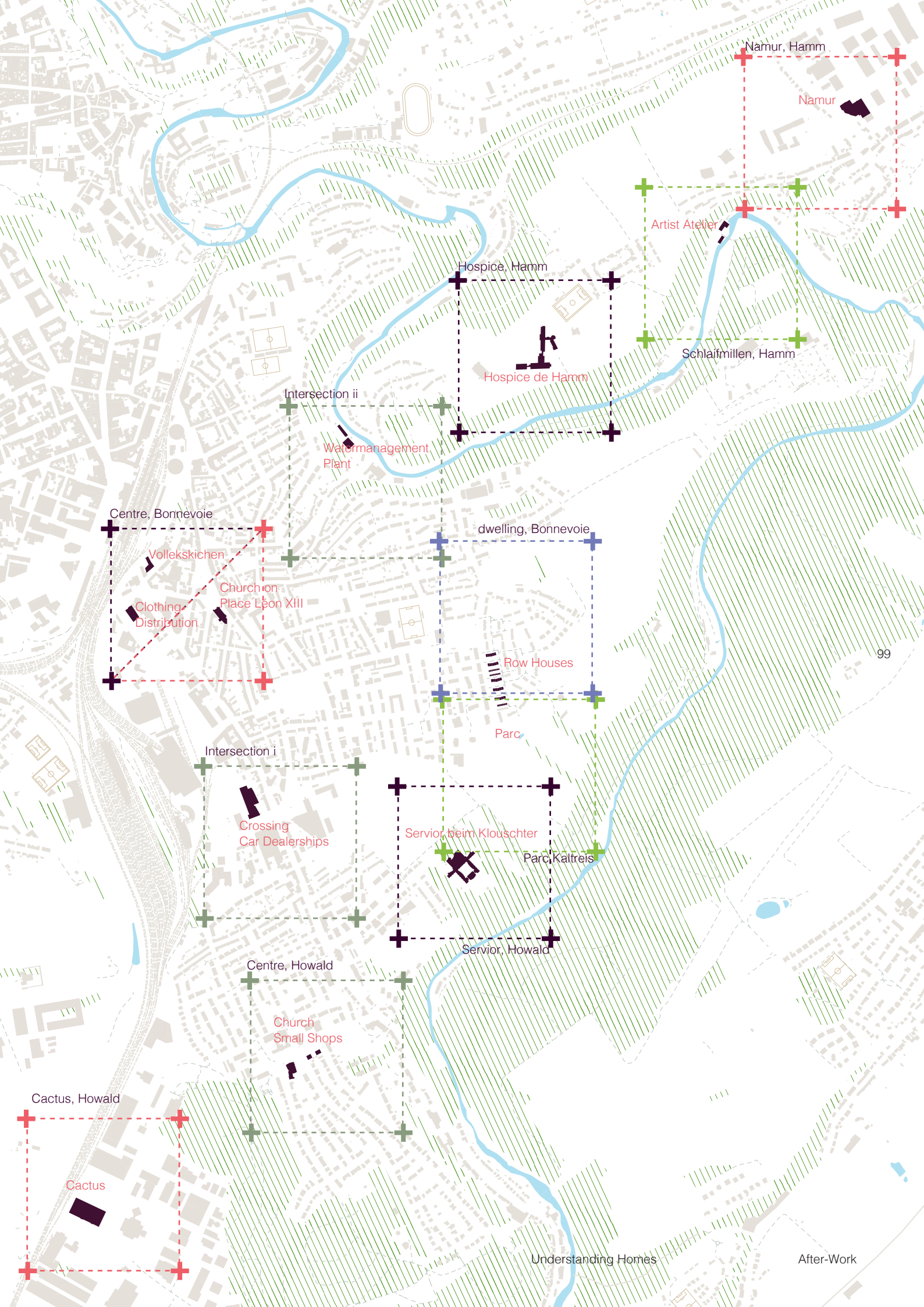
Places of most care include the nursing homes in Hamm and Howald, as well as the Vollekskichen (Figure 80) which is located at the western edge of Bonnevoie Centre along side other social infrastructure such as the shelter Ulysses or a place which distributes free clothing (Figure 81).

Places of most attraction include the Centre of Bonnevoie surrounding Place Léon XIII (Figure 76; Figure 77), the Cactus in Howald, a supermarket in an industrial area (Figure 71; Figure 72; Figure 73), and the Namur in Hamm, equally located in an industrial area (Figure 82).

Places of leisure include the parc in Bonnevoie Kaltreis (Figure 67) which also offers a path across agricultural fields towards the nursing home in Howald, and Schlaifmillen located in the Alzette valley of Hamm, a former mill, now an artist atelier (Figure 65; Figure 66). The paths leading to Schlaifmillen are popular for biking or strolling on weekends. Kaltreis Parc was visited during late afternoon and evenings for walking or playing.

As a place of home, this site in Bonnevoie near Kaltreis Parc was chosen since it features the main typology of row houses and is located further from a commercial area, similar to other places in the three neighbourhoods (Figure 68).

Places of neighbourhood intersection or local centrality without specific function include the intersection between Howald and Bonnevoie, which is characterised by a large and difficult to cross junction (Figure 61; Figure 62) and the intersection of Bonnevoie and Hamm which is again located in the Alzette valley and features a water management plant (Figure 63). The Centre of Howald features smaller shops, a church and community centre but does not have other important amenities (Figure 64).



Intersection i: Bonnevoie - Howald



100



Figure 61, top left: Tram Station at the Intersection of Bonnevoie - Howald, Author's Work

Figure 62, bottom left: Gas Station at the Intersection of Bonnevoie - Howald, Author's Work

Figure 63, top right: Intersection of Bonnevoie - Hamm, Author's Work

Figure 64, bottom right: Centre of Howald, Author's Work

Intersection i: Bonnevoie - Hamm



101



Centre, Howald

Schlaifmillen, Hamm



Figure 65, top left: Bridge at Schlaifmillen, Author's Work

Figure 66, bottom left: Path towards Schlaifmillen, Author's Work

Figure 67, right: Parc of Kaltreis, Author's Work



Kaltreis Parc, Bonnevoie



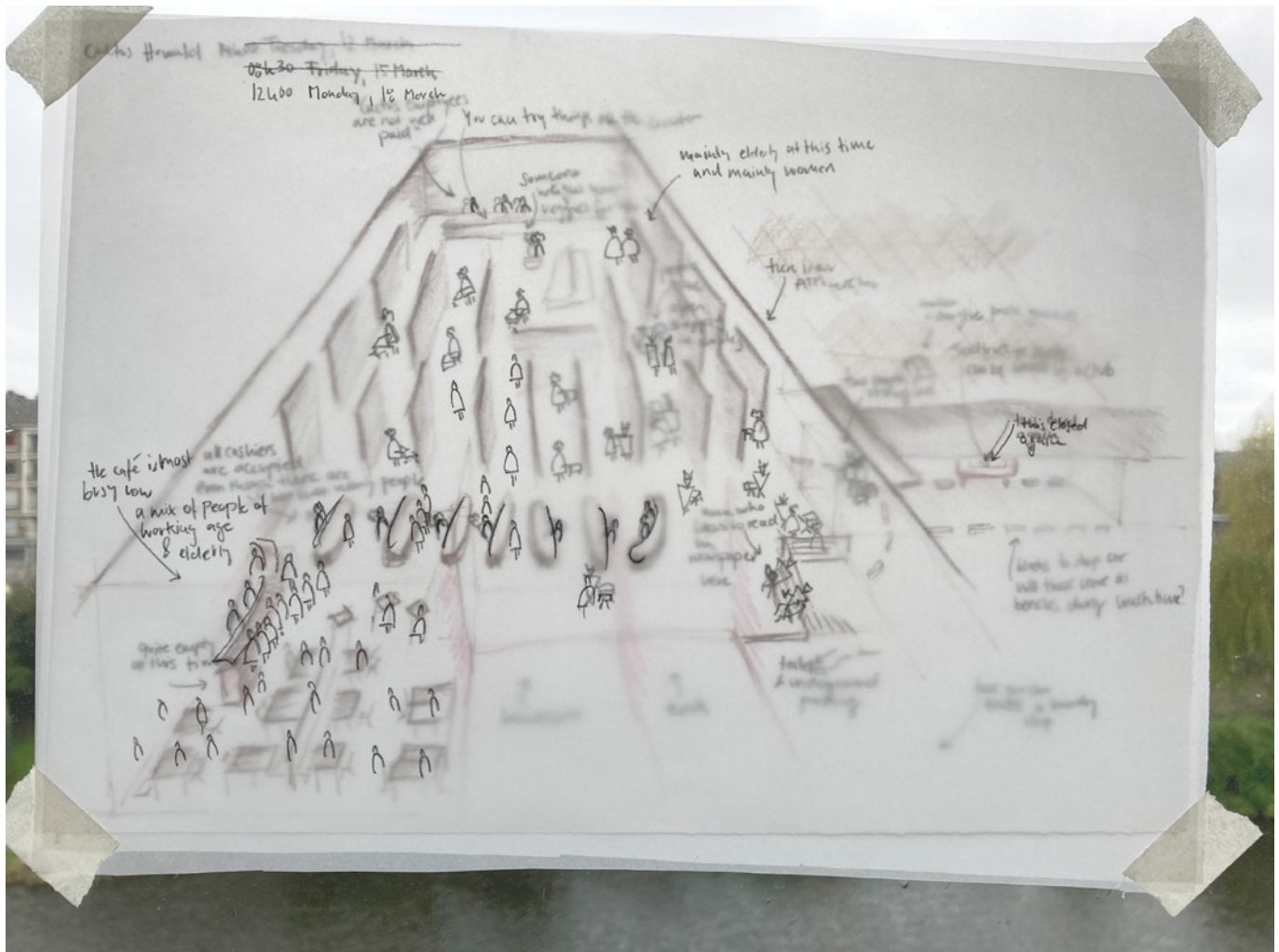
Dwelling, Bonnevoie

Figure 68, left: Dwelling in Bonnevoie, Author's Work

Figure 69, right: Empty Plot in Bonnevoie, Author's Work



Empty Plot, Bonnevoie



■ industry ■ commercial

I building function

Cactus, Howald

This supermarket in an industrial area was most busy during lunchtime. People like this supermarket because employees take time for them at several counters and the checkout. The supermarket also has a canteen that serves warm meals. People mainly use the car to get there.

Figure 70, left: Place of most attraction in Howald, Cactus, Author's Work

Figure 71, right: Parking Lot Cactus, Author's work



Parking Lot Cactus, Howald



Construction in the Industrial Zone, Howald

Figure 72, left: Industrial Zone in Howald, Author's Work

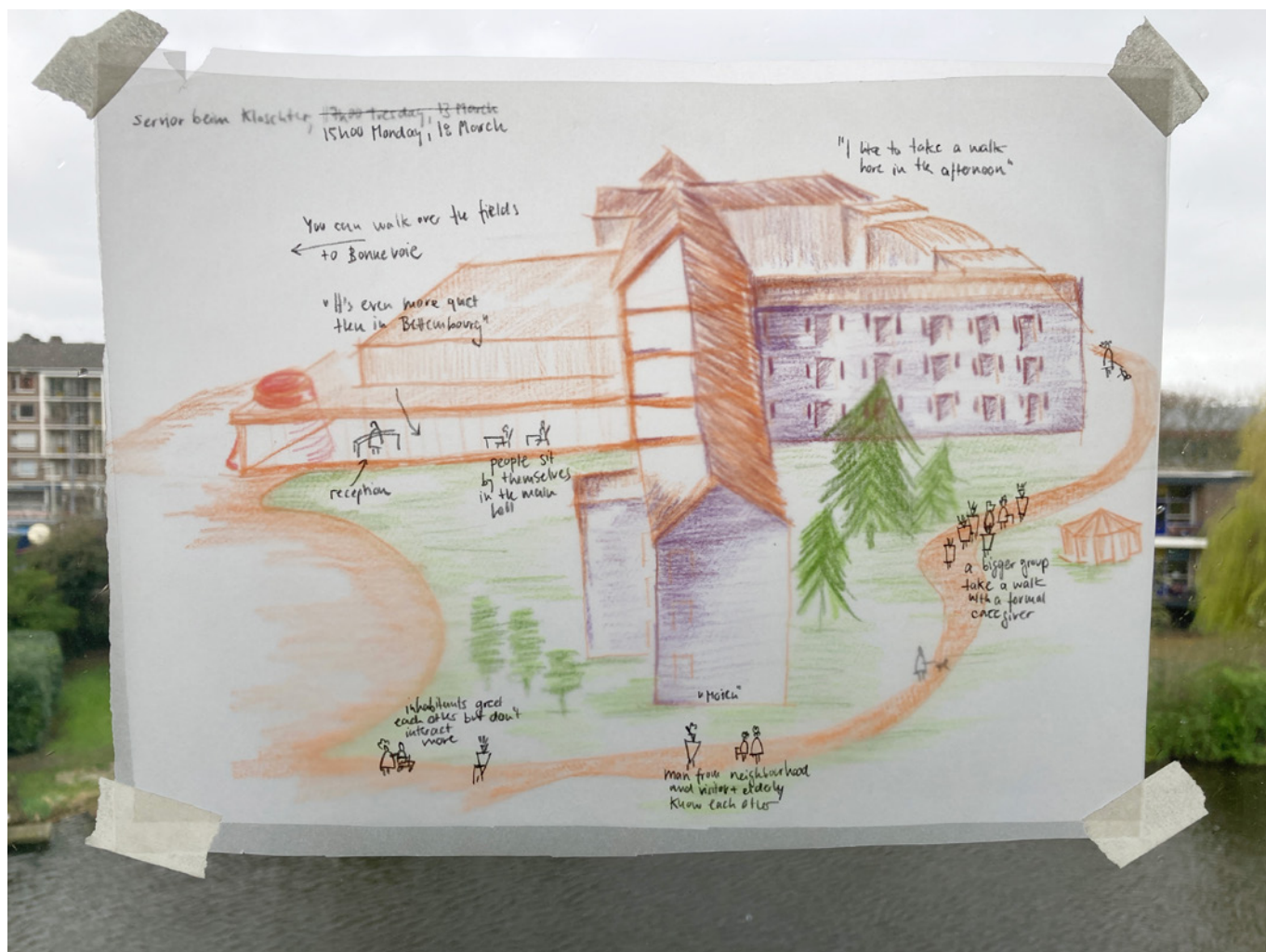
Figure 73, right: Residential Road Howald, Author's Work



Roads towards the Nursing Home, Howald



Surrounding Parc, Servior beim Klouschter, Howald



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■ dense dwelling ■ public building ■ worship

I building function

Figure 74, left: Parc at Servior beim Klouschter, Author's Work

Figure 75, right: Place of most care in Howald, Servior beim Klouschter, Author's work

Servior beim Klouschter, Howald

This nursing home is located on the edge of Howald with a view towards Bonnevoie. It is on some people's walking route coming from Bonnevoie with or without their dog. Residents of the home use the surrounding park to take a walk, too.

I building function

The centre of Bonnevoie offers a variety of services. On some weekdays, the area around the church is occupied by charity services for unhoused people who stay nearby or the distribution of food by the food bank. In the afternoons, the main activity switches to the side where cafés and small shops are located. Children leave the school.

Figure 77, right: Church in Bonnevoie Centre, Author's work



Church in the Centre of Bonnevoie



Construction near the Centre of Bonnevoie

Figure 78, left: Construction near Bonnevoie Centre, Author's Work

Figure 79, right: Construction near Bonnevoie Centre, Author's Work

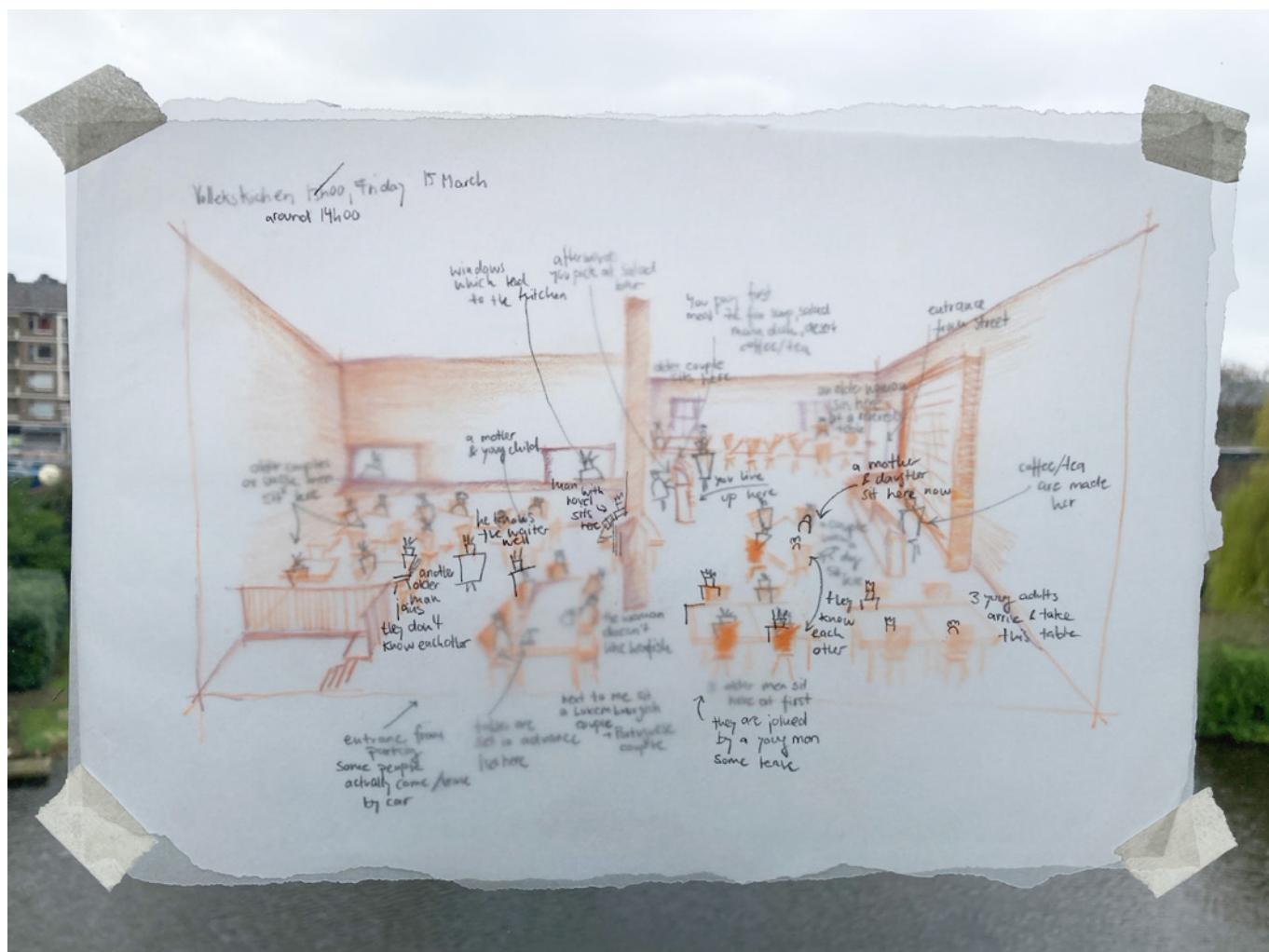


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Construction near the Centre of Bonnevoie



Clothing Distribution Centre, Bonnevoie



public building commercial

I building function

Figure 80, left: Distributive Clothing Centre, Bonnevoüe, Author's Work

Figure 81, right: Place of most care in Bonnevoie, Vollekskichen, Author's work

Vollekskichen, Bonnevoie

The Volleksskichen is a restaurant or canteen which serves food at low prices. People either come alone or in a small group. Usually, places have to be shared with strangers as space is limited. The atmosphere is rather convivial. Despite the centre of Bonnevoie, this was the only place children were present during lunchtime.

I building function

This bakery is located at the edge of an industrial area within walking distance of the centre of Hamm. During lunch, the bakery and adjacent restaurant are mainly sought out by elderly or employees from nearby.

Figure 83, right: Road in Hamm, Author's work



Main Road of Hamm



Small Path leading towards Schlaifmillen, Hamm

Figure 84, left: Path towards Schlaifmillen, Author's Work

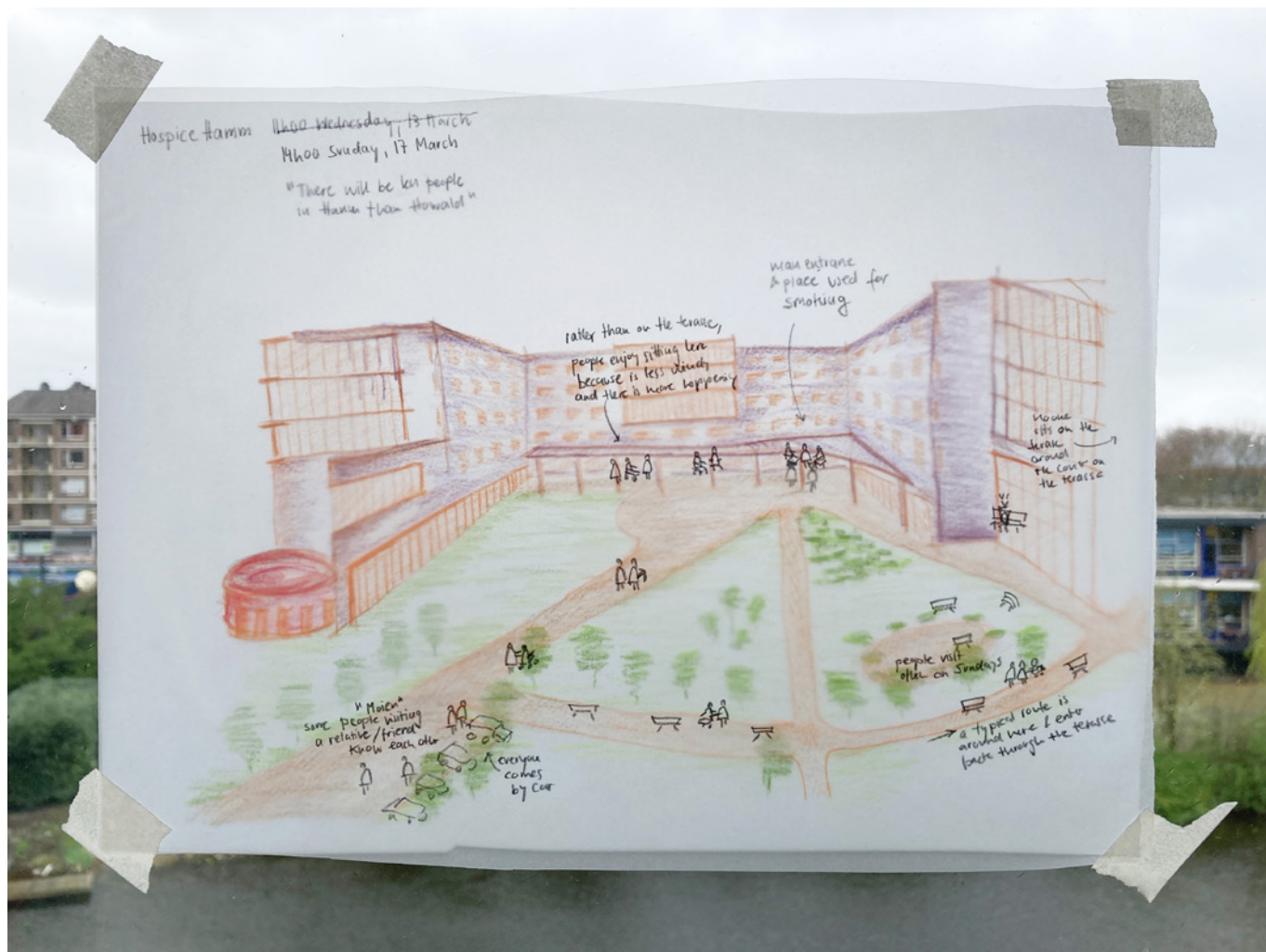
Figure 85, right: Main Road Hamm, Author's Work



Main Road leading towards the Nursing Home, Hamm



Terrace of the Nursing Home, Hamm



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■ dense dwelling ■ public building ■ worship

I building function

Figure 86, left: Terrace at Hospice Hamm, Author's Work

Figure 87, right: Place of most care in Hamm, Hospice de Hamm, Author's Work

Hospice de Hamm

This nursing home was busiest on Sunday afternoons, when many people visited friends and family who reside there. Most take a walk around the nursing home. Contrary to the nursing home in Howald, this one is not well connected to any other person's walking route who is not in any way associated with the nursing facility.

Story from a Home

Stages

STORY FROM A HOME explores caregiving and receiving in the current setting. It aims to share the joys and frustrations people might experience while giving or receiving care in the current setting. The personas are inspired by information gathered through statistical research, interviews with professionals and locals, and my observations on site. They do not directly relate to any real person I encountered.

The places the two personas travel to and from are the places of most care and attraction as well as the other points of interest identified in the three neighbourhoods and presented on the previous pages.

The following storyline follows two personas:

- Marguerite is an elderly woman who is mainly seeking care. She lives by herself in a row house near Kaltreis Parc. Her mother resides in the care home in Howald.
- Noel is a care worker, who is mainly giving care. They live in France at the moment.

Figure 88, right: Stages for the Storylines, Author's Work

Figure 89, pp. 128 - 129: Time-Space Mapping Story from a Home, Author's Work

Figure 90, pp. 130 - 133: Story from a Home, Author's Work

[all people drawn in figure 90 were inspired by Bär Kittelmann for Missy Magazine, 2023]



Namur, Hamm

Hospice, Hamm

Schlafmiller, Hamm

Intersection ii

Centre, Bonnevoie

dwelling, Bonnevoie

Intersection i

Paro Kaltreis

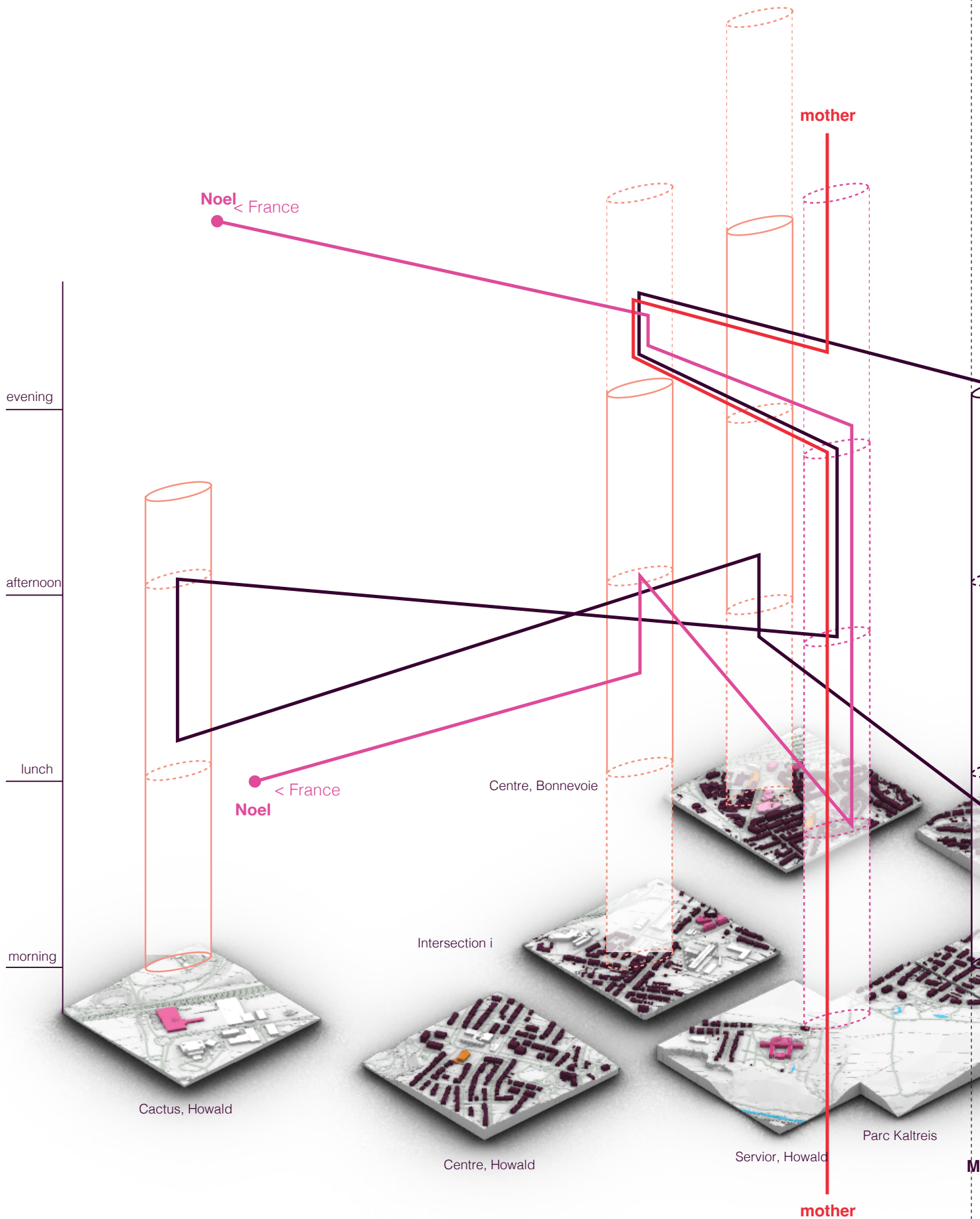
Centre, Howald

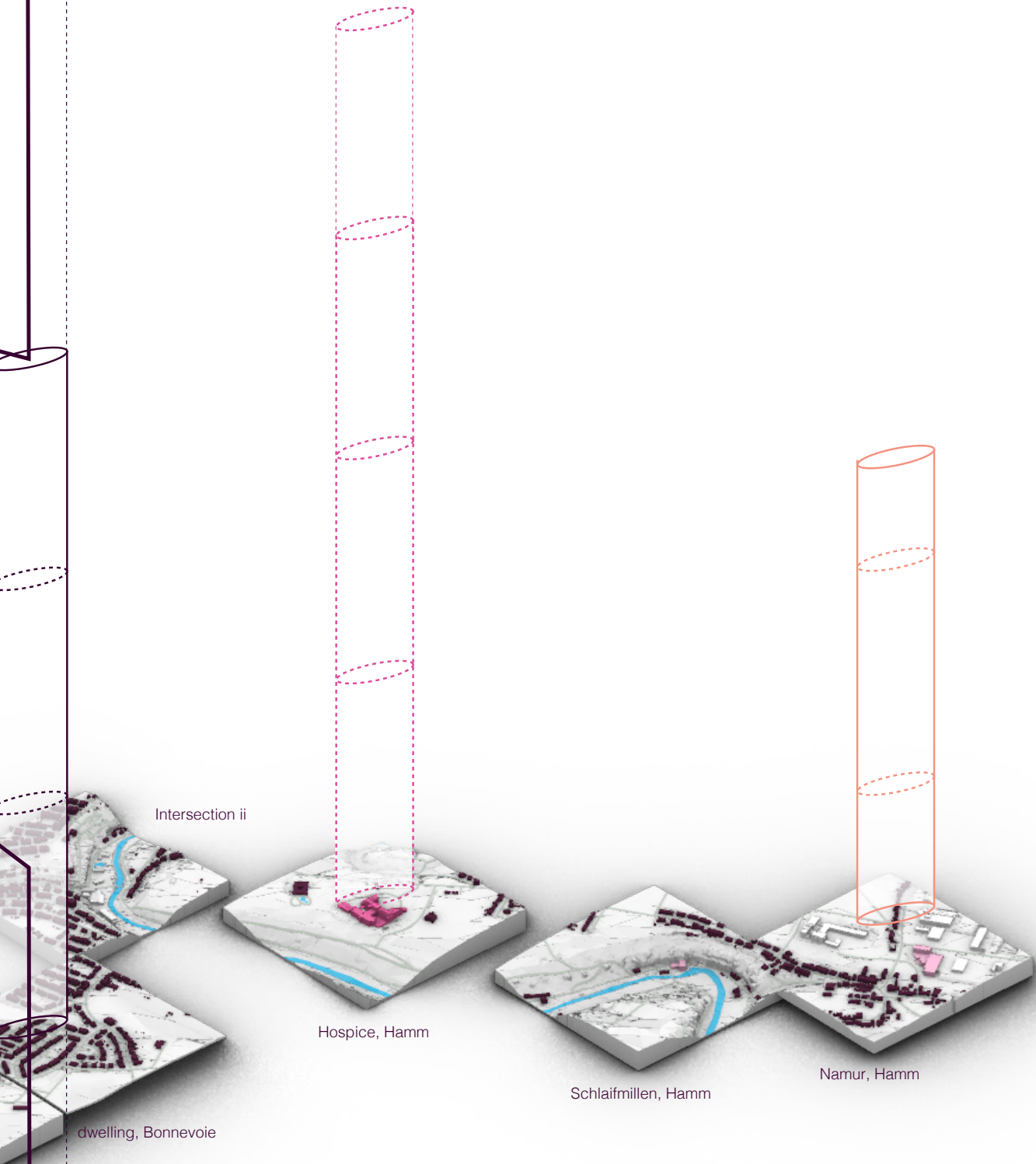
Servior, Howald

Cactus, Howald

Story from a Home

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DWELLING BONNEVOIE

Marguerite is waiting for her household help to come by to clean . Her helper is running late.



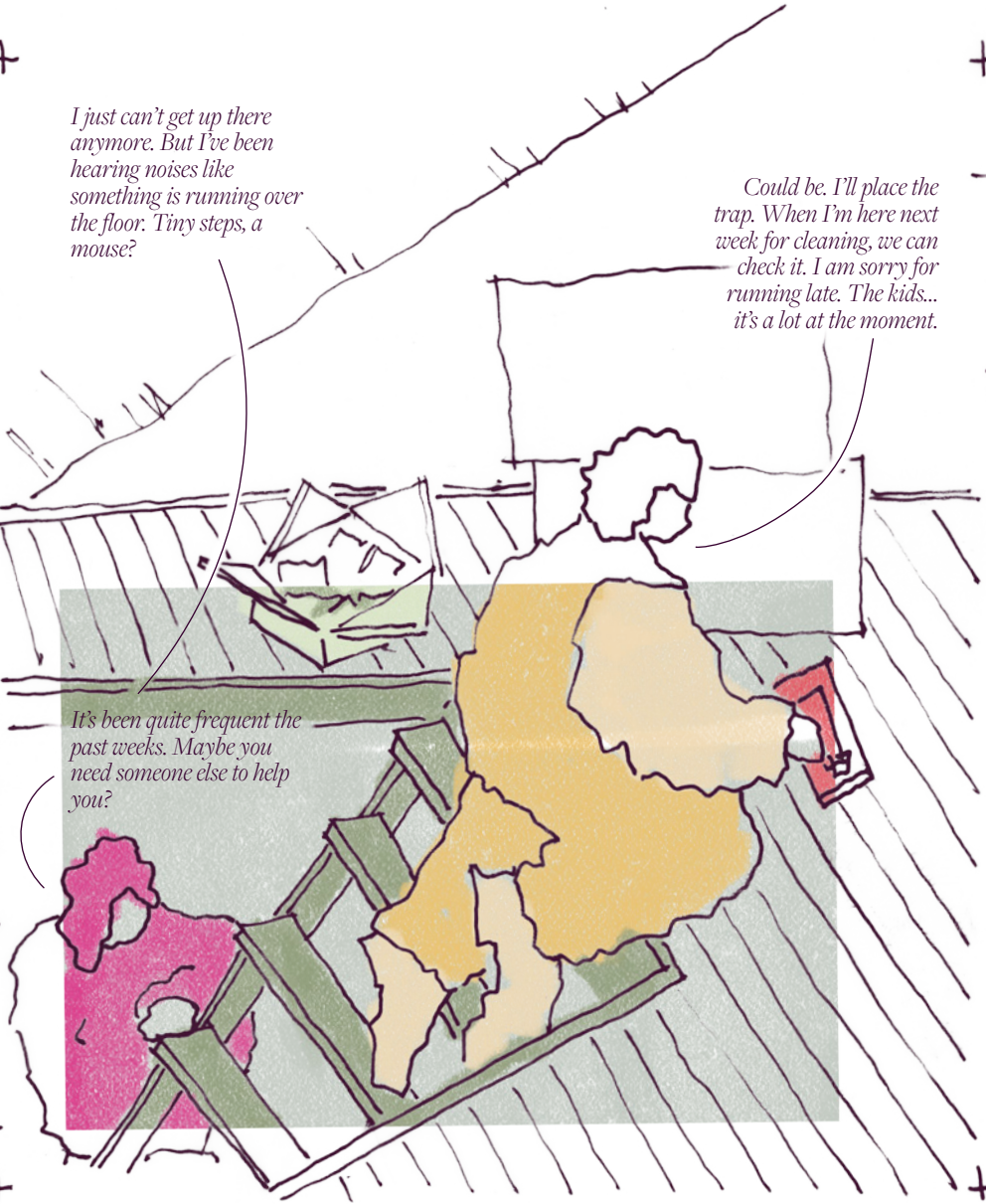
I just can't get up there anymore. But I've been hearing noises like something is running over the floor. Tiny steps, a mouse?

Could be. I'll place the trap. When I'm here next week for cleaning, we can check it. I am sorry for running late. The kids... it's a lot at the moment.

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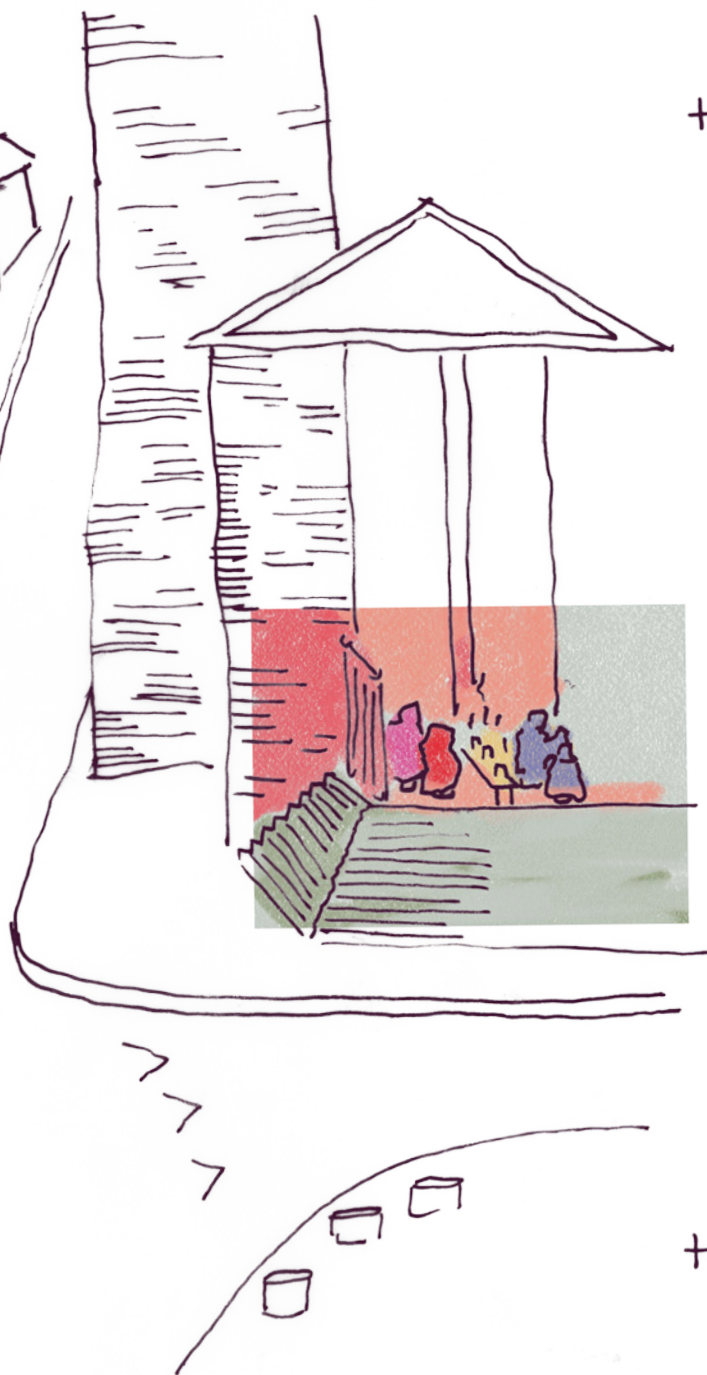


It's been quite frequent the past weeks. Maybe you need someone else to help you?



CENTRE BONNEVOIE

Marguerite is in the centre of Bonnevoie to withdraw money. She sees some friends handing out free coffee.



129

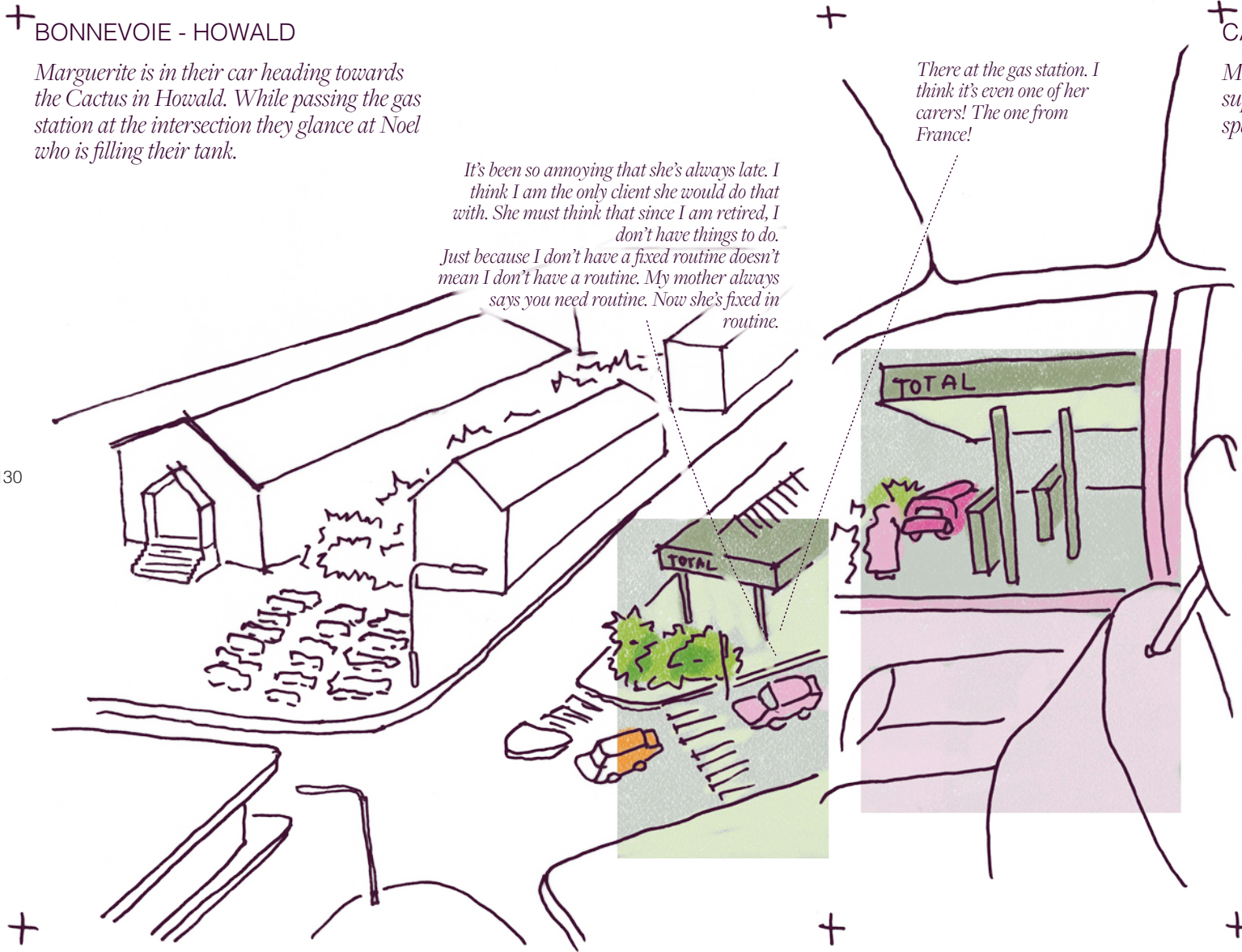
+ BONNEVOIE - HOWALD

Marguerite is in their car heading towards the Cactus in Howald. While passing the gas station at the intersection they glance at Noel who is filling their tank.

It's been so annoying that she's always late. I think I am the only client she would do that with. She must think that since I am retired, I don't have things to do. Just because I don't have a fixed routine doesn't mean I don't have a routine. My mother always says you need routine. Now she's fixed in routine.

There at the gas station. I think it's even one of her carers! The one from France!

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ACTUS HOWALD

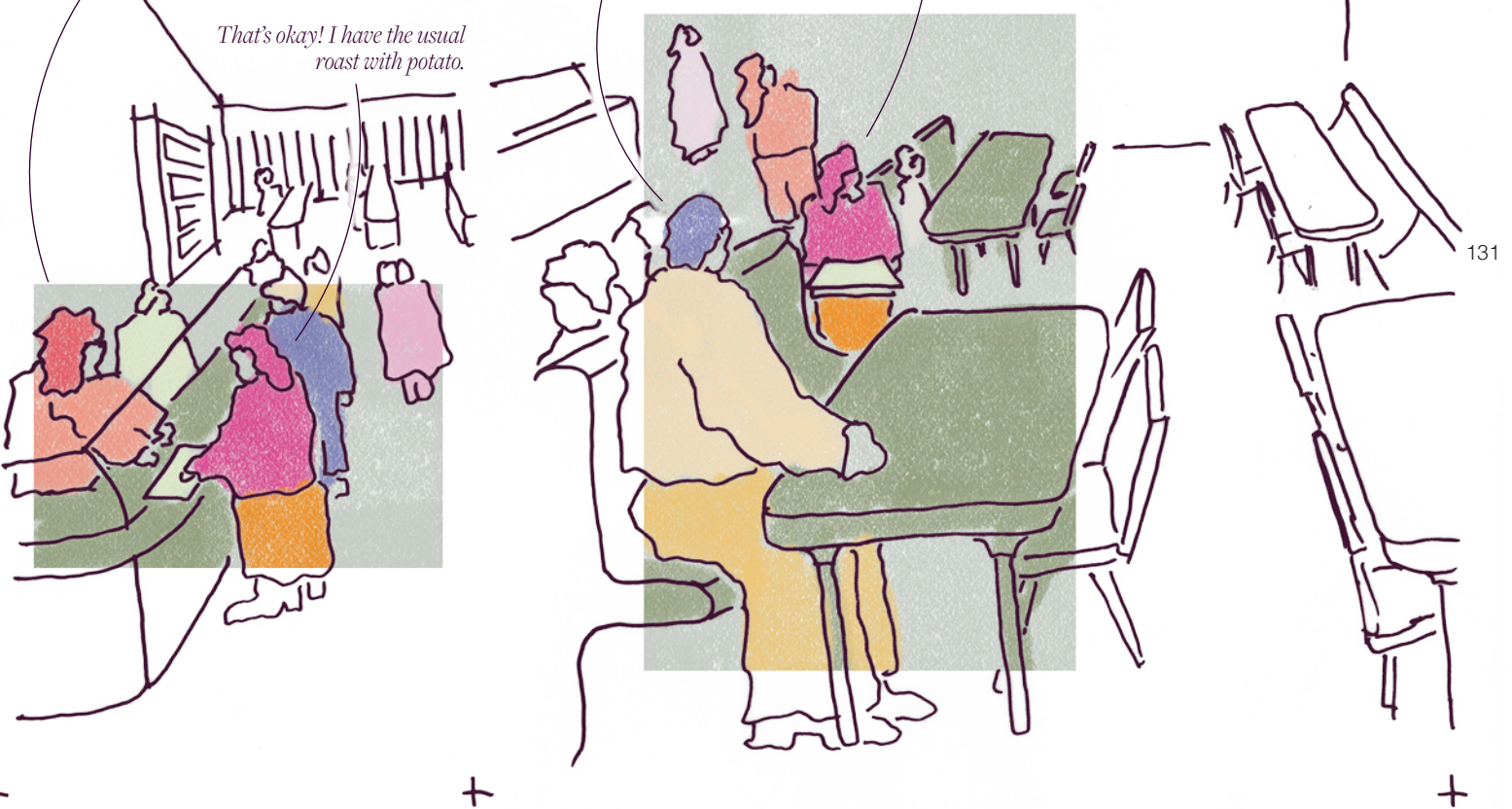
Marguerite finishes their groceries at the
supermarket and proceeds to the canteine
space.

What can I do for you?
Today's special is already
out.

That's okay! I have the usual
roast with potato.

Oh sure, please sit.

Can I sit here?



†SERVIOR HOWALD

Marguerite is visiting her mother at the nursing home.

*It's very quiet today.
Sometimes there are children
playing in the park, no?*

*Yes, I think the ones from the
neighbourhood all grew up now.
I haven't seen them in a while.*

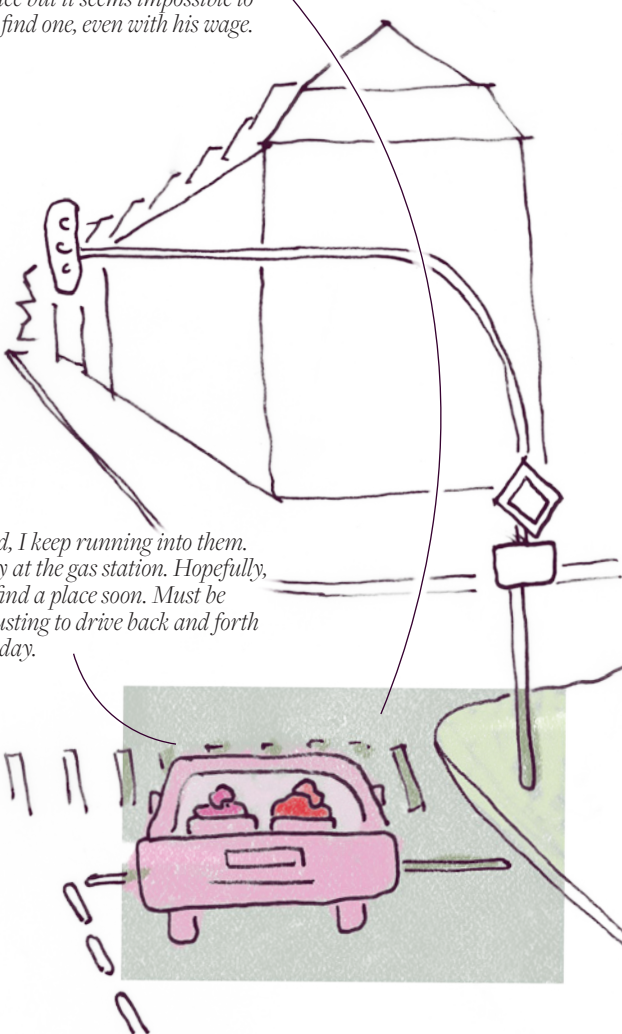
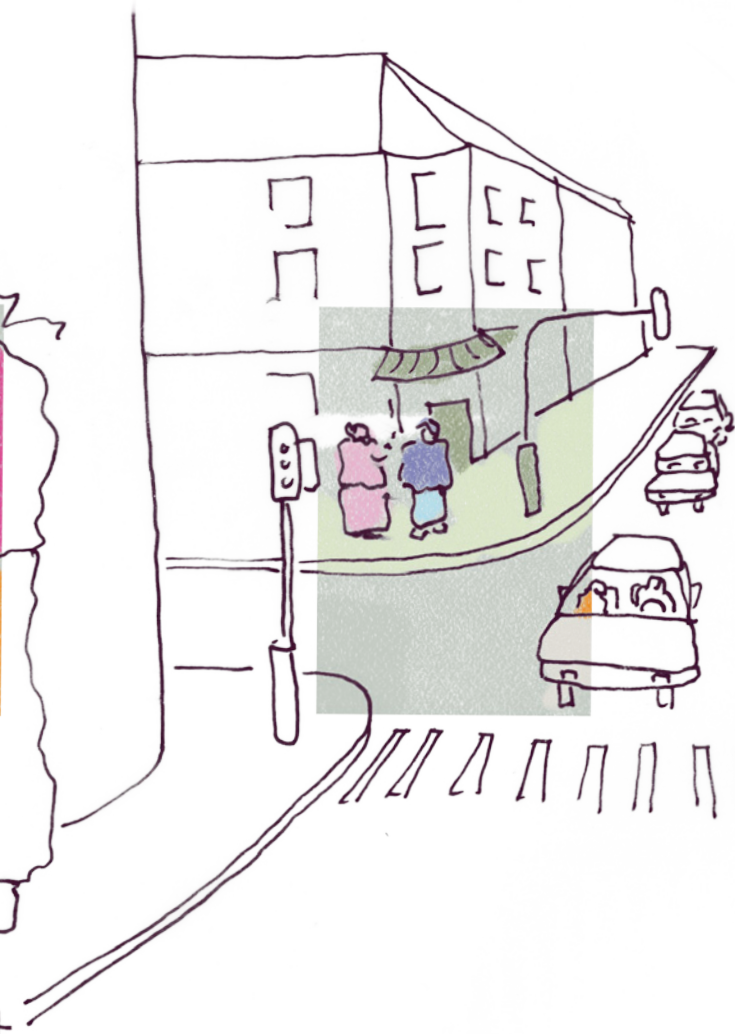
132



BONNEVOIE - HOWALD

Marguerite and her mother drive for dinner to a restaurant.

Oh look! That's the new caretaker.
Seems like they're adjusting to the neighbourhood. I think they're looking for a place but it seems impossible to find one, even with his wage.



Weird, I keep running into them.
Today at the gas station. Hopefully,
they find a place soon. Must be
exhausting to drive back and forth
everyday.

06 *Mega Experimenting*

| | |
|--------------------------------|-----|
| 6.1 Building the Experiments | 136 |
| 6.2 Experiment i: Commune | 140 |
| 6.3 Experiment ii: Cooperative | 150 |
| 6.4 Experiment iii: Nomad | 162 |

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Building the Experiments

Relation of Systems

To facilitate a critical elaboration of the current care context and inspire future planning of care provision, I conducted a series of design experiments which play on existing spatial and governmental aspects of planning care by minimising, maximising, or transforming them. All design experiments are envisioned in the three presented neighbourhoods of Howald, Bonnevoie, and Hamm. While the first experiment investigates the organisation of care on a neighbourhood level, the second and third experiments suggest the organisation on a municipal and regional level respectively.

Drawing from “Understanding Homes”, I conclude that the current care system is set up as a combination of the home as a fixed variable and care as a mobile service on the one hand and the home as a mobile variable and care as a fixed service (Figure 90). These two modes of organisation are mainly visible in the settings of the elderly staying at home and receiving domestic care services or the elderly moving to a nursing home and receiving care on-site. Both instances can be translated to the concepts of “Ageing in place” and “Moving in time” respectively and in general.

In Luxembourg and the three neighbourhoods, mobile care is mainly provided by organisations such as the Croix-Rouge, Helleff Doheem, and other providers who visit people’s homes regularly to help with daily tasks or provide medical treatment. Another form of mobile care is the food bank, which regularly stops in the centre of Bonnevoie and provides free food. Statuary care is mainly performed in the nursing homes of Howald and Hamm, as well as in the medical centres or doctor’s offices throughout all neighbourhoods. Another instalment of statuary care is the Vollekskichen or similar spaces which are mainly found in Bonnevoie like the emergency shelter Ulysse, the café Courage, or the local youth centre.

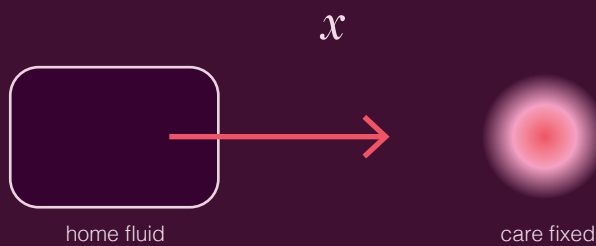
The three design experiments therefore play with these two variables of the home and care in their feature of being fixed or mobile while making use of existing spaces and organisations (Figure 90).

Figure 90: Experiment Building,
Author's Work

Current System



This is mainly possible due to long-term care insurance and many mobile care services. This type of care also limits public expenditure and is advantageous for homeowners.



This mainly depends on the care receivers care needs. Often moving to a nursing home also entails having the necessary financial means to afford often high rents.

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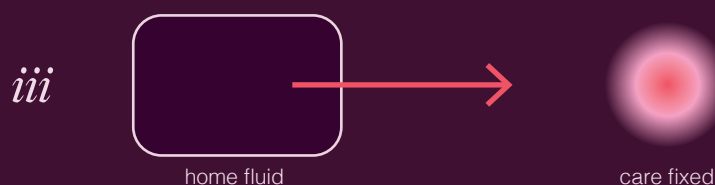
Experiments



Care is communally organised within a community or neighbourhood.

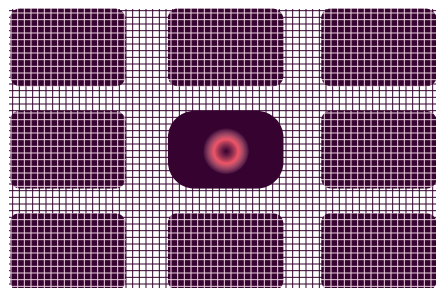


Care is communally organised within a municipality or through the cooperation of different neighbourhoods.

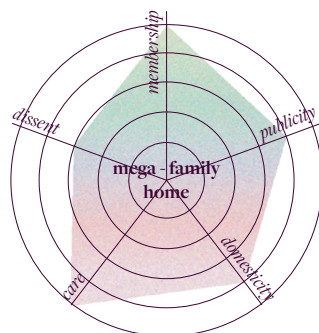


Care is communally organised on a regional and international level through an online platform and participatory program.

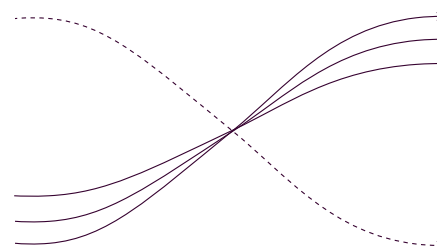
Experiment Set-Up



systematic diagram of spatial layout



spatial performance



relation to site specific spaces and services

Each Experiment is portrayed through three introductory diagrams which visualise the systemic layout, the spatial performance according to the mega-family values and its relation to specific elements of the existing aged care system (Figure 91). Moreover, each Experiment consists of a Catalogue of Precedents which serve as inspiration for the design strategies and application (Figure 92).

Figure 91: Experiment Overview, Author's Work

Figure 92: Catalogue Overview, Author's Work

Figures 93, 94, 102, 103, 112, and 113 are presented on the following pages.

Experiment i

The commune plays on both variables being fixed and calls for a localised approach to receiving care within a neighbourhood (Figure 93). It uses current strategies present in concepts of the age-inclusive city or communal spatial setting (Figure 94). The mega-family home is made of neighbours, and care is found close by.

Experiment ii

The cooperative plays on the home being fixed and care being mobile in various services (Figure 102). The cooperative is organised on a municipal level but services act in different spatial distances depending on frequency and intensity of service. It is mainly inspired by the wide variety of existing mobile care services as well as precedents from theory including the cooperative housekeeping society (Figure 103). The mega-family home is extended to the city and professionalised.

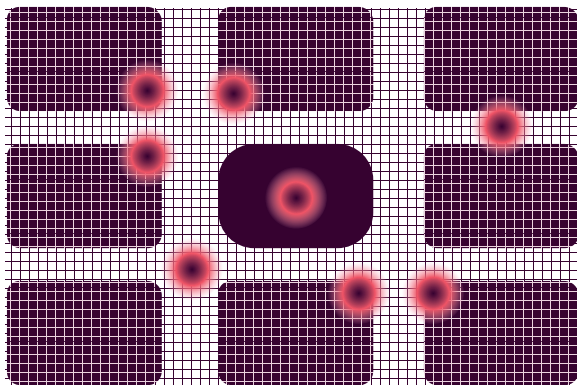
Experiment iii

The nomad plays on the home being mobile and care being fixed (Figure 112). In the general spatial setting, mobility is very important in Luxembourg due to its dependency on the consecutive influx of outside labour through foreign residents and cross-borders as well as part of the urban environment with its dispersedly inhabited fabric (Figure 113). On a theoretical level, this experiment follows ideas by Archigram such as the Suita-loon and Cushicle. The mega-family home is extended to the regional scale of the Grand Region as a holistic online program.

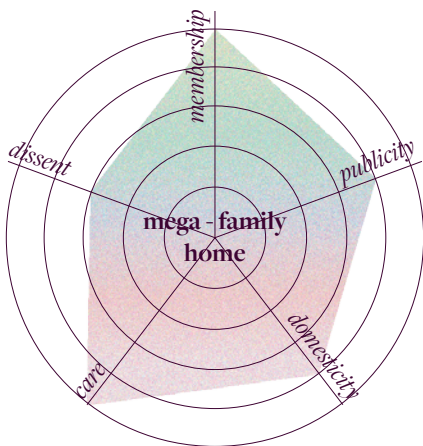
| | | | | | | | |
|-----------------------------------|--|--|---|--|--|---|--|
| <div>precedents on-site</div> | <div>which promote care</div> | <div>which promote membership</div> | <div>which promote publicity</div> | <div>which promote membership</div> | <div>These are practices, places, or services which I found on-site and which already promote specific value(s) of the mega-family home (see Chapter 05).</div> | | |
| <div>precedents from theory</div> | <div>-description-</div> | <div>-image-</div> | <div>-description-</div> | <div>-image-</div> | <div>These are practices, places, or services which were referenced in the consulted theory (see Chapter 03). They were analysed according to their spatial qualities.</div> | | |
| <div>spatial elements</div> | <div><div>which promote care</div><div>which promote dissent</div></div> | <div><div>which promote publicity</div><div>which promote membership</div></div> | <div><div>which promote domesticity</div><div>other</div></div> | <div><div>which promote care</div><div>which promote dissent</div></div> | <div><div>which promote publicity</div><div>which promote membership</div></div> | <div><div>which promote domesticity</div><div>other</div></div> | <div>These are spaces specifically mentioned in the layouts of the precedents from theory.</div> |
| <div>governance examples</div> | <div>-description-</div> | <div>which promote dissent</div> | <div>-description-</div> | <div>-image-</div> | <div>These are governance models which were referenced in the consulted theory (see Chapter 03). They were analysed according to their organisational set-up.</div> | | |

Experiment i Commune

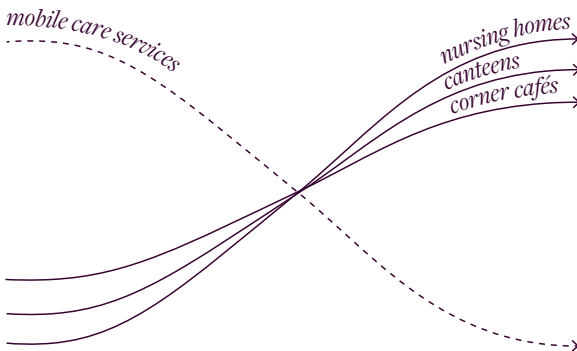
Overview i



The home and care are fixed.
Thus, care is integrated within the
neighbourhood.



This scenario performs with mem-
bership and care highest since
purely your place of residence
is dependent on you receiving
care. Dissent might sometimes
be difficult to overcome in a local
setting.



Mobile care services will become
nearly extinct in this scenario.
Contrary localised and stationary
care approaches become more
important and shape the urban
environment.

Figure 93, left: Commune Overview,
Author's Work

Figure 94, right: Commune Catalogue
of Precedents

Public Nursing Homes as centralised places of care

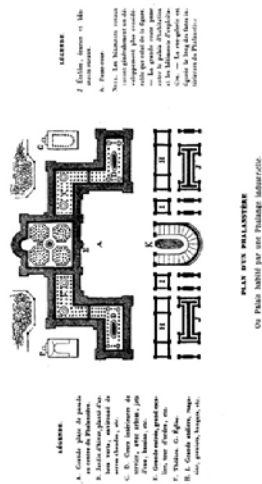
Vollekskichen in Bonnevoie

Corner Cafés in Working Class Neighbourhoods

densification of suburban fabric in 2001 et al. (n.d.)

Phalanstère developed by Charles Fourier:

single building with a wing for noisy and a wing for silent activities
apartments and social functions in between, occupied by 1600 people near arable land and next to a bigger city



Streets for Life in Burton & Mitchell (2006):

Primary services and facilities should be within 500 m of older people's housing and secondary services should be within 800 m.



schools, nurseries, dining rooms

gallery streets, heated pathways

private apartments, studies, libraries

social halls, ballrooms, meeting rooms

workshops, laboratories

services within walkable distance, public bathrooms

seating every 150m, readable signs and furniture

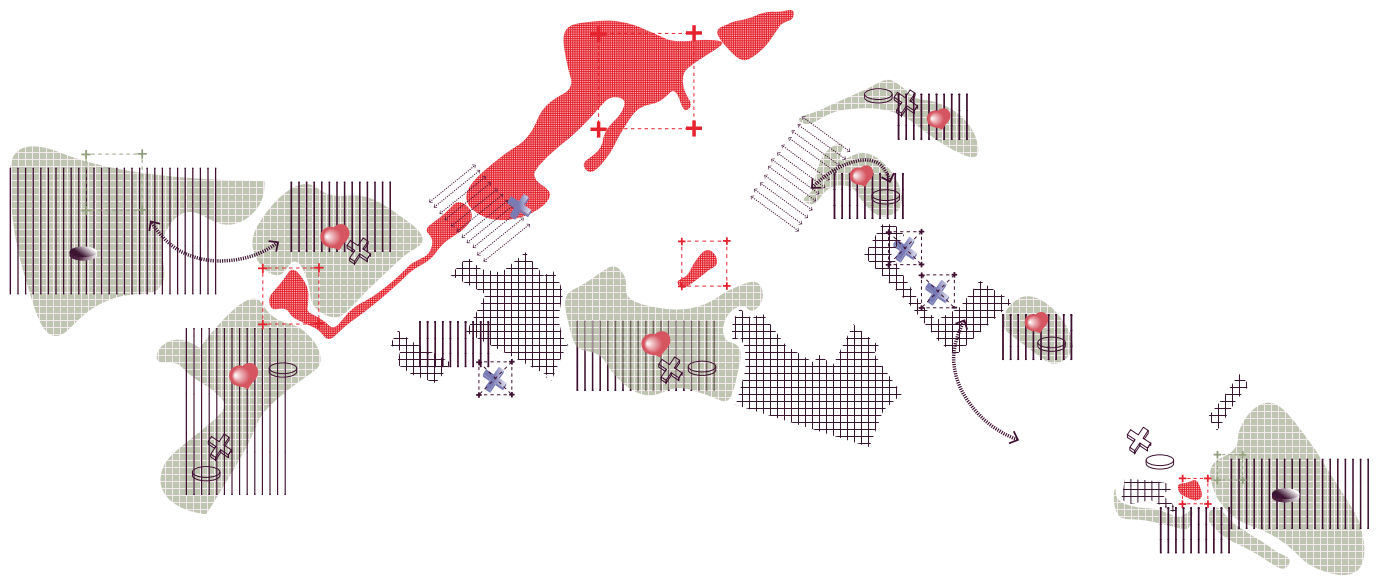
city council

cafés, restaurants

City as Commons in Stavrides & Angelis (2016):

governance of common goods including care on a neighbourhood level

assembly halls



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The main challenges for the Commune in the neighbourhood context lie in a loose urban fabric in Howald and Bonnevoie South, the single function of residential and economic zones and a lack of services in some areas, especially in Hamm (Figure 95). The Zoning Plan proposes new housing development outside the current urban fabric, further intensifying the sprawl and distances to services. Both intersections between Bonnevoie-Howald and Bonnevoie-Hamm currently have no specific public function but are the edges of each neighbourhood.

The existing residential areas must be densified to accommodate nearby services (Figure 96). This can be done by transferring the development rights of the zoning plan to identified areas within the urban fabric (2001 et al., n.d.).

Chances & challenges

- mixed use area
- existing centre
- housing zoning plan
- single function
- low density
- unclear orientation
- bad walkability
- lack of services
- decentral location



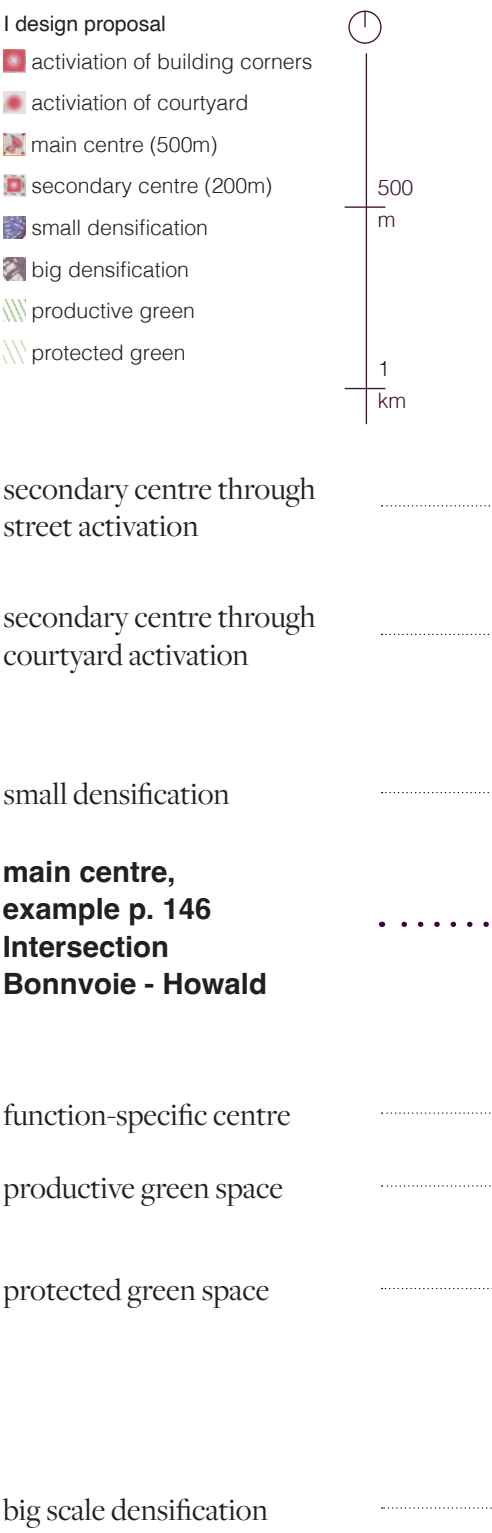
Figure 95, left: Chances & Challenges
Commune, Authors'Work

Figure 96, right: Design Strategies
Commune, Author's Work

| | | | |
|--|--|--|---|
|  | <p><i>care facilities at a central and familiar location</i></p> |  | <p><i>densification following Transferable Development Rights</i></p> |
|  | <p><i>services within walking distance of 200 to 500m</i></p> |  | <p><i>mix of functions within an urban block</i></p> |
|  | <p><i>seamless urban fabric between inside and outside space</i></p> |  | <p><i>governance of the commons through general neighbourhood and professional councils</i></p> |

Design Concept i

Next to existing urban centres, the intersection between Bonnevoie-Howald becomes a main centre in the Commune (Figure 97). All main centres are distributed within a radius of 500m and connected by secondary centres. The intersection of Bonnevoie-Hamm becomes a function-specific centre catered to the productive green spaces around it. Function-specific centres are also created in the former nursing homes and are reappropriated for multigenerational living in gardening communities. Residential zones are densified on a small scale, whereas economic zones are densified on a big scale. Secondary centres are created by activating street corners or courtyards every 200m.



secondary centre through street activation

secondary centre through courtyard activation

small densification

main centre, example p. 146

Intersection

Bonnvoie - Howald

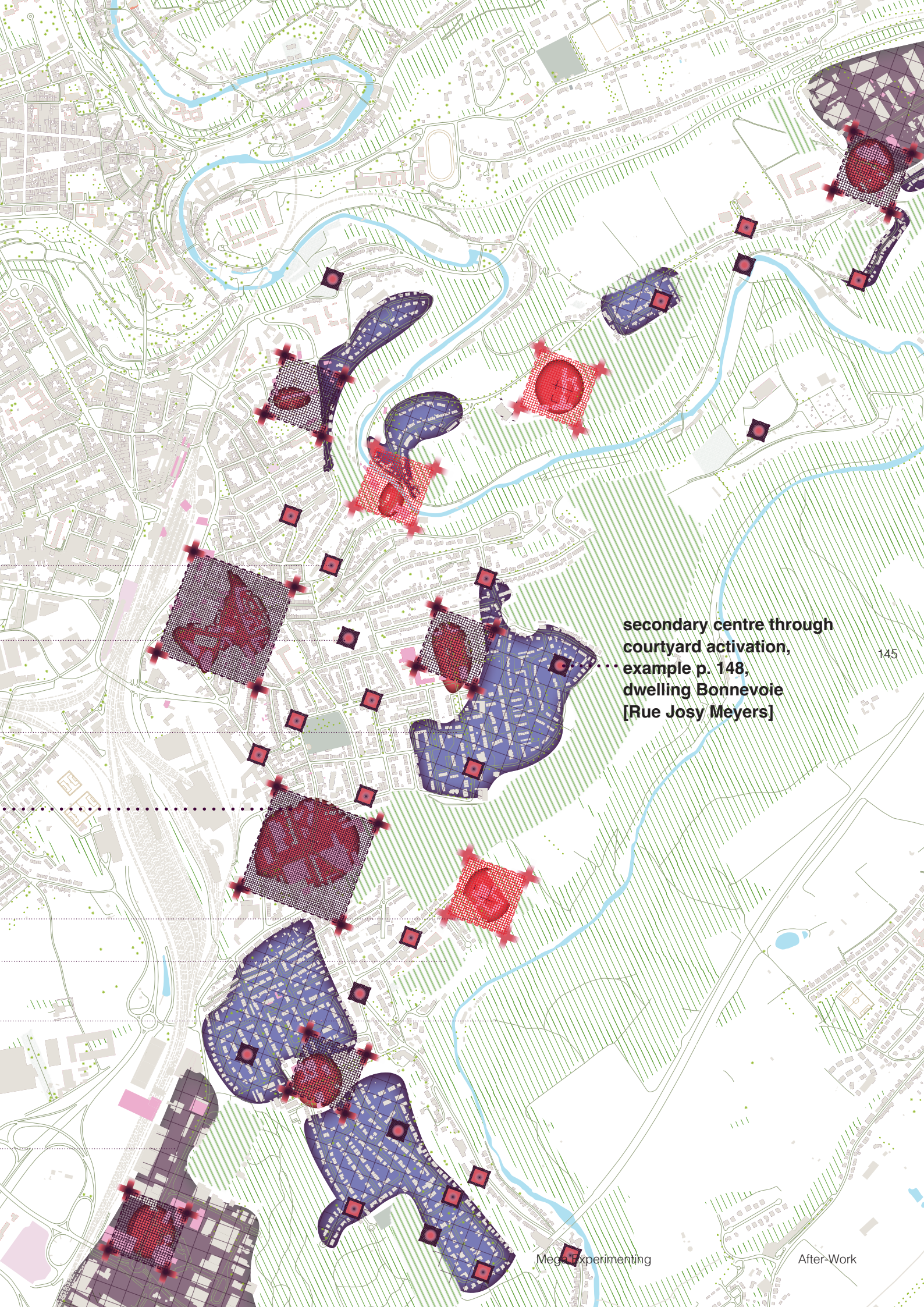
function-specific centre

productive green space

protected green space

big scale densification

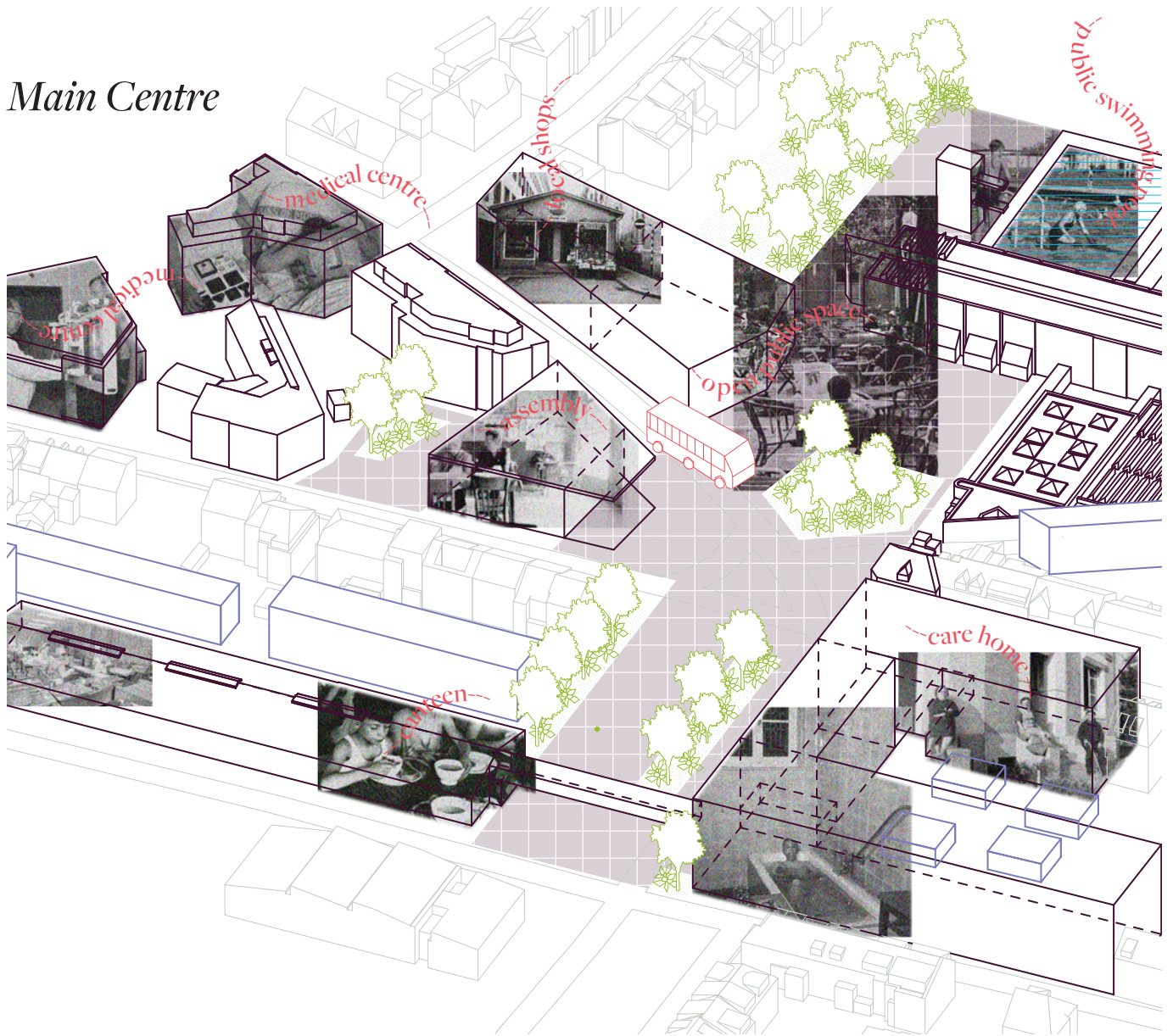
Figure 97: Design Concept Commune Neighbourhood Scale, Authors'Work



secondary centre through
courtyard activation,
example p. 148,
dwelling Bonnevoie
[Rue Josy Meyers]

145

Main Centre



146

Intersection Bonnevoie-Howald

In a typical main centre, the care home and other care facilities are close to the canteen and connected through a covered pathway to allow all residents easy access. Densification happens by redividing existing parcels to accommodate new housing within an urban block. Studies and libraries are found close to the schools but are open to anyone. Roads which formerly segregated urban blocks are unified through uniform paving.

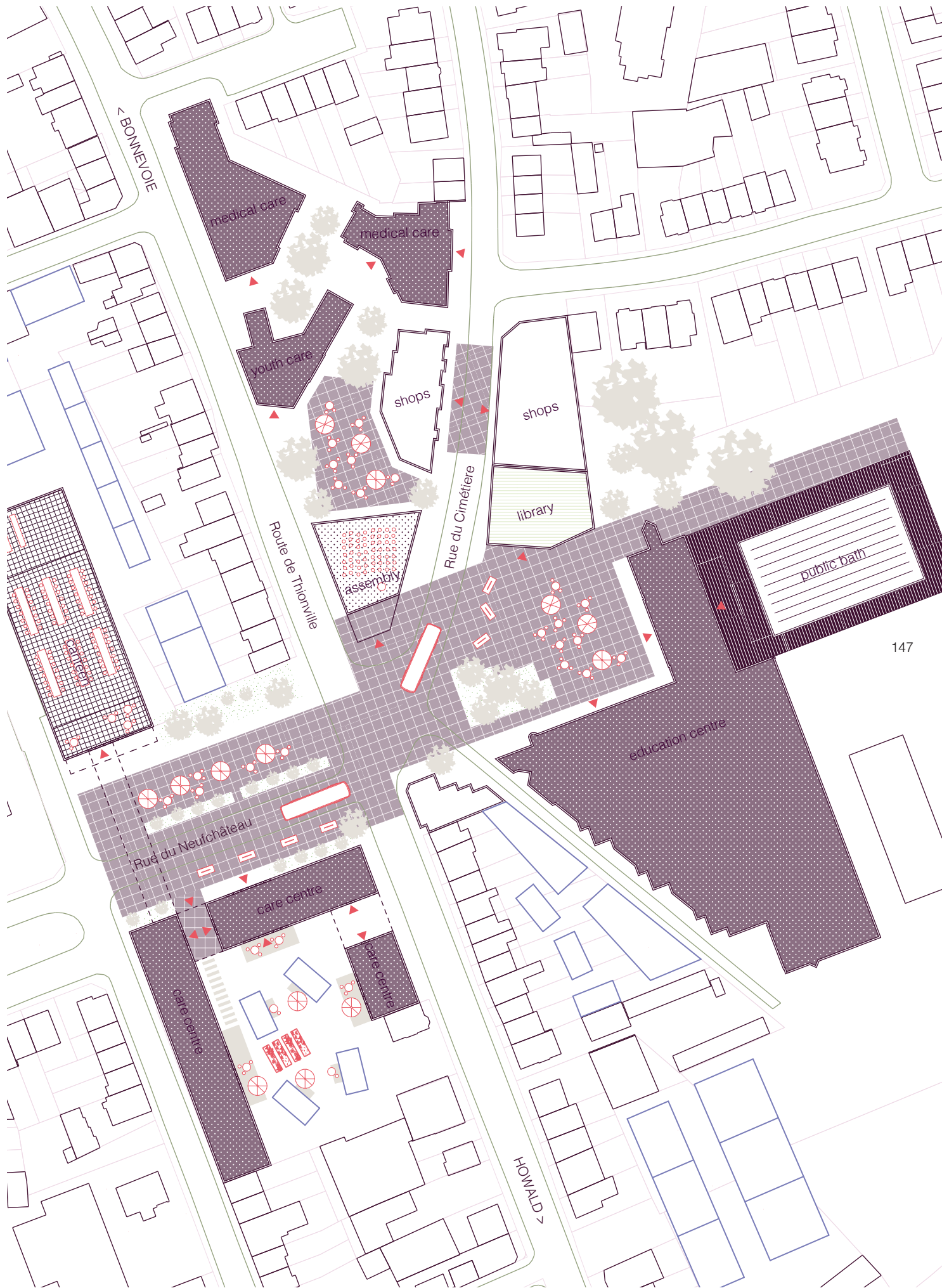
For example, at the intersection between Bonnevoie and Howald, the former busy road is now only accessible by buses, allowing a seamless main centre and for the surrounding interior functions to spill outwards and occupy outdoor spaces (Figure 98; Figure 99).

- 1 floor plan main centre
- specific care facility
 - new housing
 - ▨ canteen
 - ▤ assembly hall
 - public bath
 - library study
 - small businesses
 - uniform paving
 - overhead construction

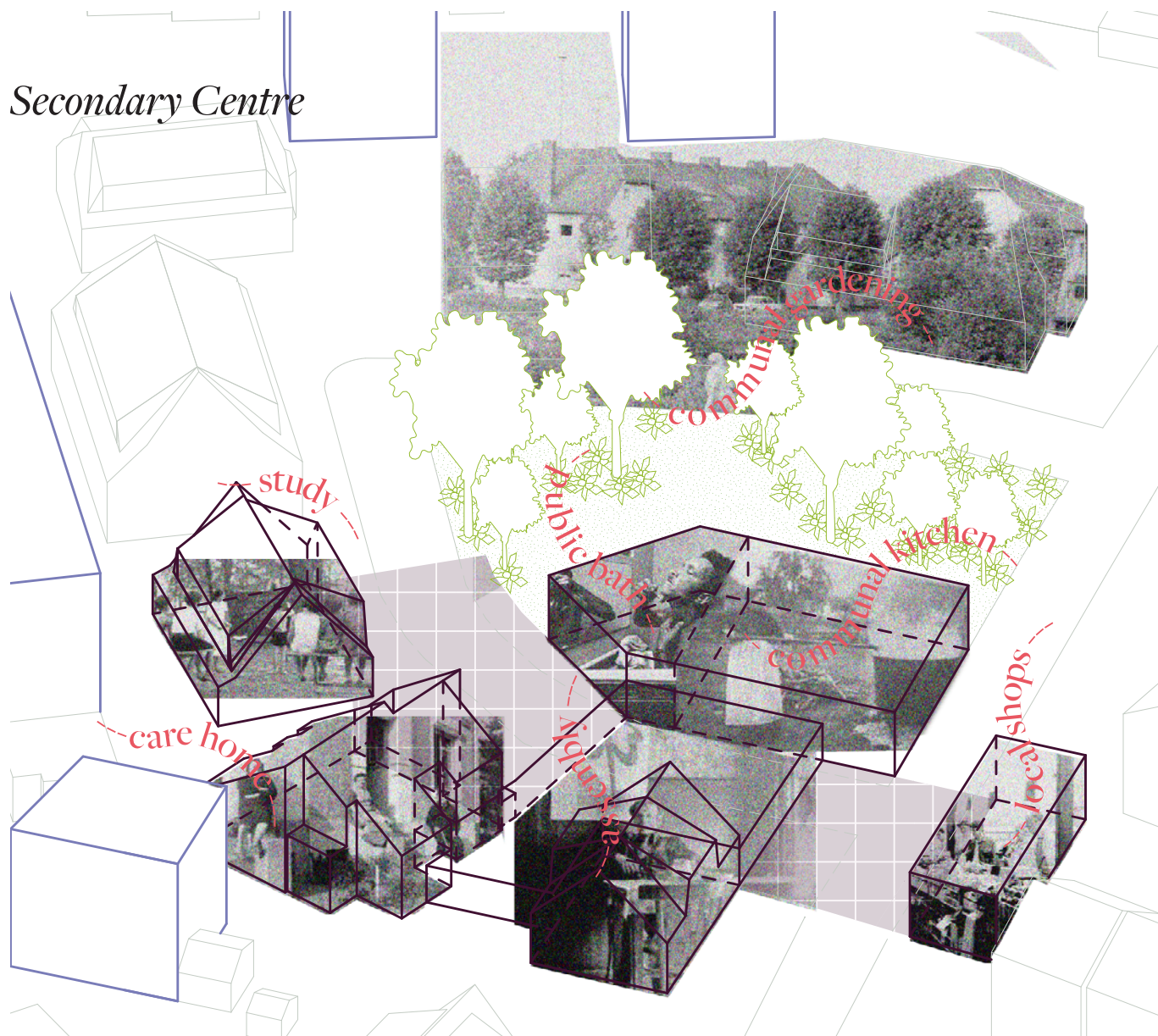


Figure 98, left: Isometric Collage of a Main Centre, Author's Work

Figure 99, right: Floorplan of a Main Centre



Secondary Centre



148

Dwelling Bonnevoie [Rue Josy Meyers]

A typical secondary centre has amenities such as a public bathroom, a small spa, and laundry next to other amenities. It has a smaller care home, which allows specific groups to live together when they want to remain independent.

Near the presented dwelling in Bonnevoie, the assembly hall functions as a connector between the care home, care centre, and neighbourhood kitchen (Figure 100; Figure 101). Uniform paving connects the remaining buildings, which house a small study and open space for small shops. The garden behind the communal kitchen is used as a communal garden.

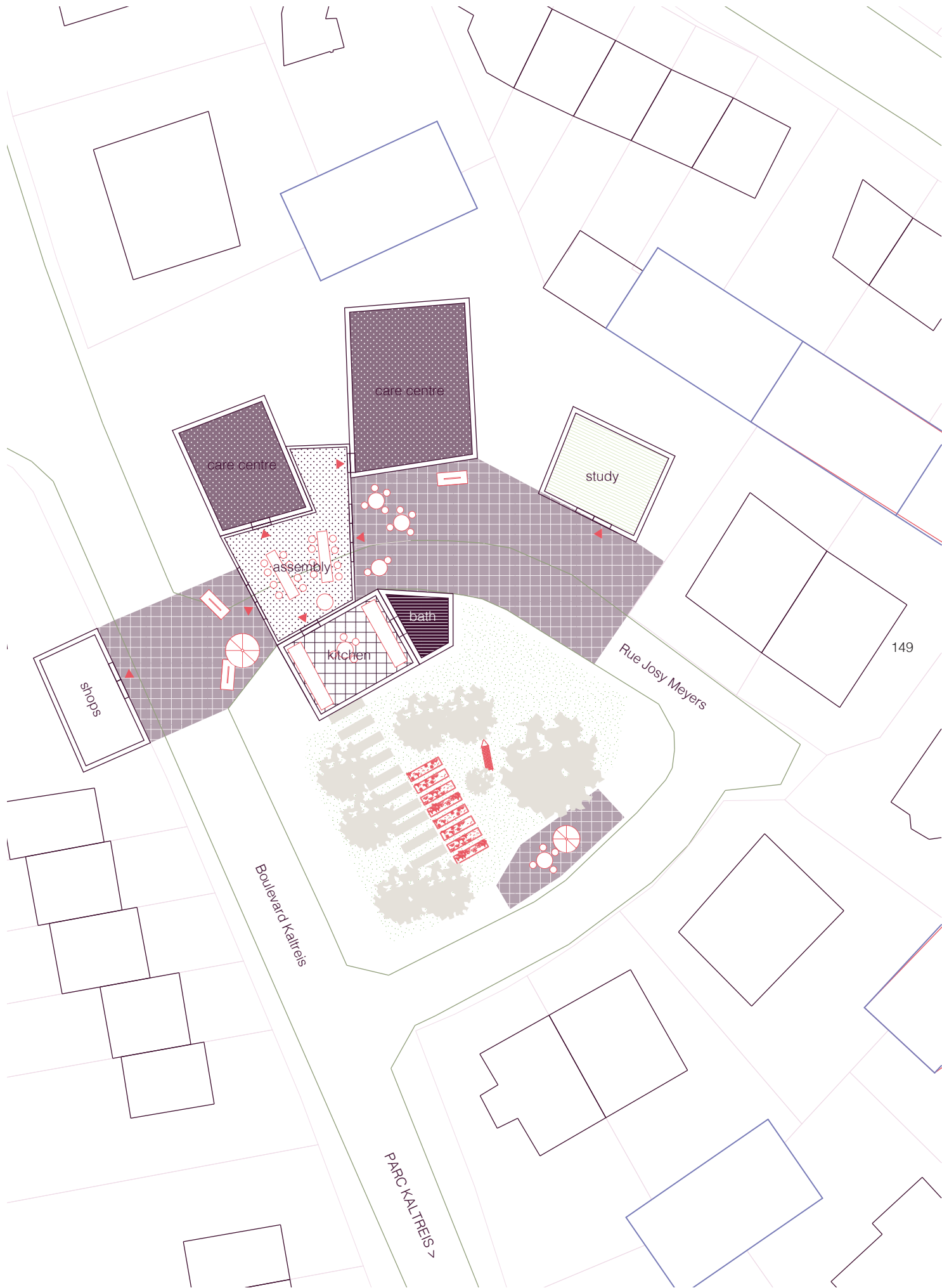
I floorplan secondary centre

- specific care facility
- new housing
- ▨ canteen
- ▤ assembly hall
- public bathroom
- library study
- small businesses
- uniform paving
- overhead construction



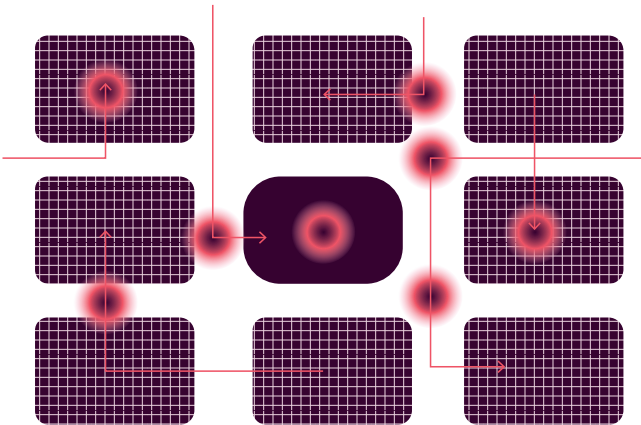
Figure 100, left: Isometric Collage of a Secondary Centre, Author's Work

Figure 101, right: Floorplan of a Secondary Centre, Author's Work

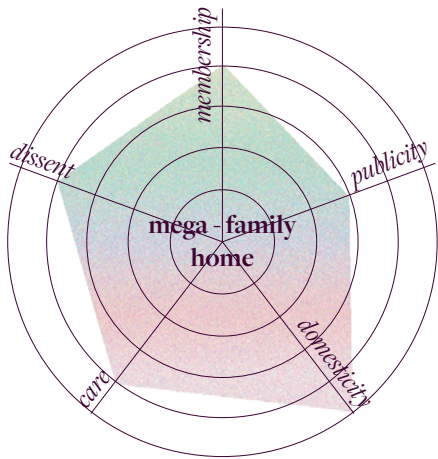


Experiment ii Cooperative

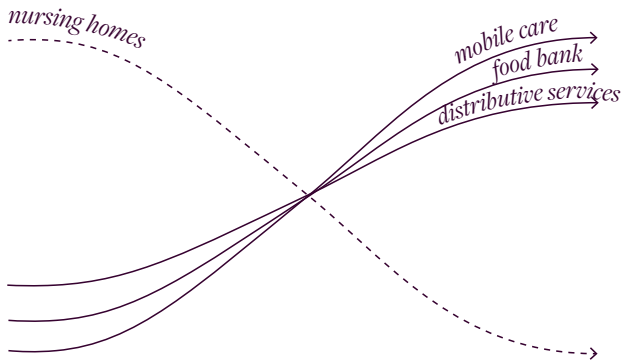
Overview ii



The home is fixed while care services are fluid. Thus, care services occupy streets and public squares depending on frequency and intensity of service.



This scenario performs with membership and publicity lowest. Since some of the services will be held inside someone's house, contact between different groups can be limited. To receive care, participants also have to commit to give a service in return.



Stationary care services such as present in nursing homes will become nearly extinct in this scenario. Contrary mobile care approaches become more important and shape the urban environment in their constant travel.

Figure 102, left: Cooperative Overview, Author's Work

Figure 103, right: Cooperative Catalogue of Precedents

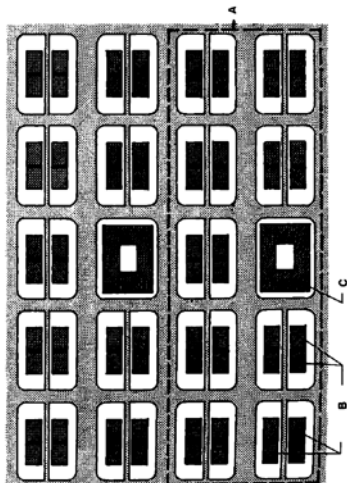
Mobile Care Services

Banque Alimentaire /
Foodbank

Distributive places for coffee,
tea, and clothing

**Cooperative Housekeeping
by Melusina Fay Peirce:**

36 kitchen less houses are organised in a block, they also don't have backyards in the middle of the block is a cooperative unit managed by the housewives who sell reproductive services to their husbands in Hayden (1981)



Protest Camps and Marches in general:

Occupation of public squares and streets, distribution of free food and other services, people are free to come and go as they wish in O'Brien (2023)



kitchen, bakery,
laundry, sewing
room, bathtubs,
fitting rooms

courtyards with
fountains and
grass

kitchen less
houses

consulting room

lounges,
ballrooms

sales room

communal
kitchen,
nursing services

street, square,
and building
occupation

tent villages,
barricades,
improvised
shelter

signs and
shouting

free distribution
of essentials

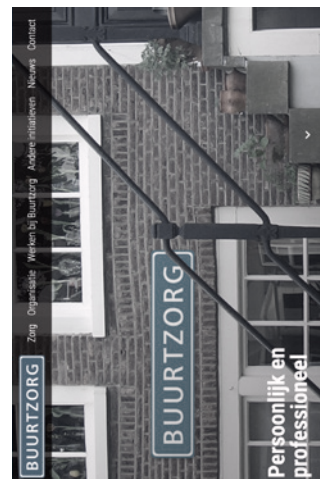
**Diffused Governance for social
and ecological reproduction
in Angelis (2022):**

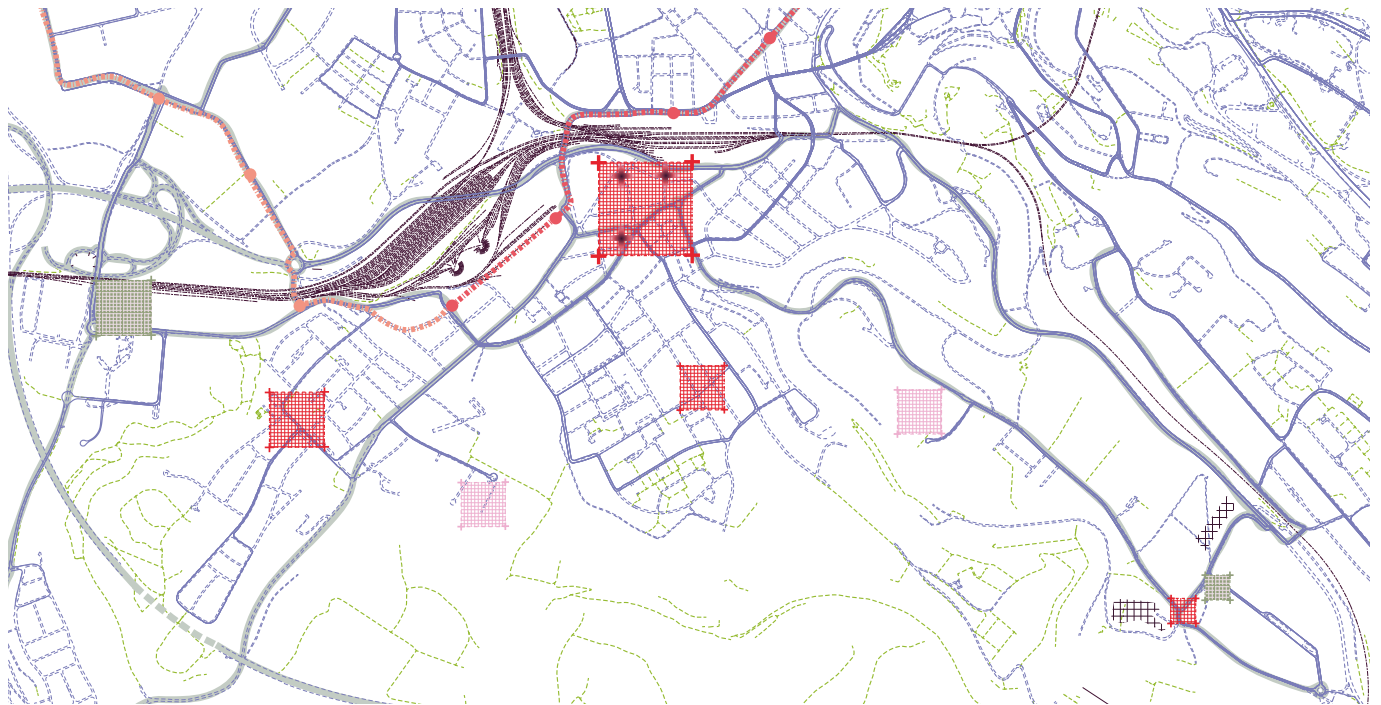
governance of common goods including care through care professionals on several levels



Buurtzorg in the Netherlands:

cooperative service made up of nurses and social workers who operate within a neighbourhood.





The main chances for the Cooperative in the neighbourhood context lie in the existing and extensive street network (Figure 104). The neighbourhood has a few major car roads and an extensive bus network which connects all three neighbourhoods to each other. Moreover, while many streets are mainly used by residents, these streets are often wide due to parking places and could easily be occupied. However, since care is a main mode of transportation, the street network must be reimagined by placing priority roads for essential and other services and connecting them to distributive or collective hubs (Figure 105).

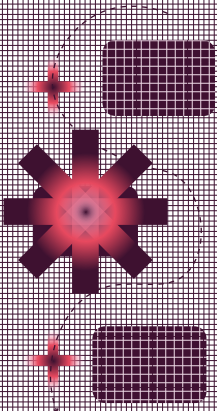
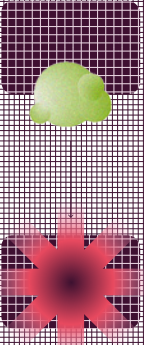
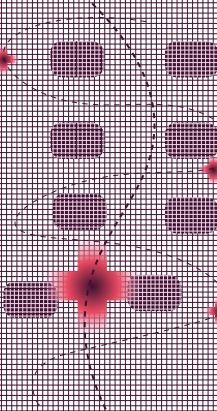
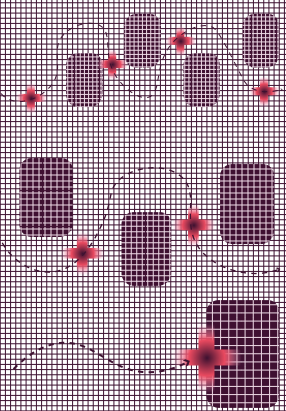
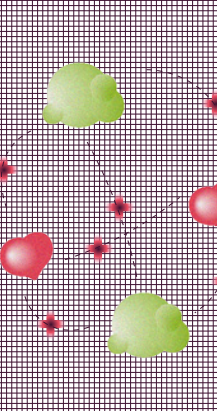
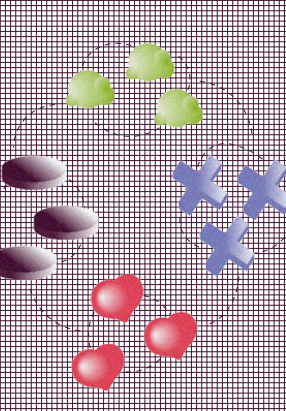
chances & challenges

- main street
- street: bus line
- residential street
- path
- railway
- tram connection
- central points
- care points
- economic points



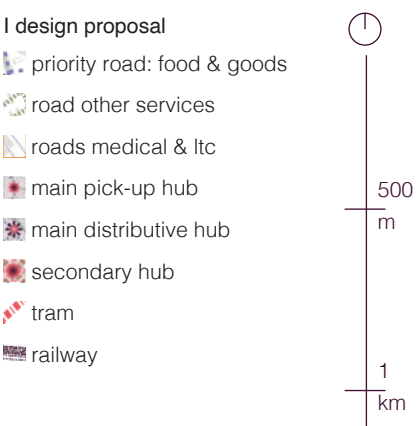
Figure 104, left: chances and challenges of the Cooperative

Figure 105, right: Design Strategies Cooperative

| | | | |
|--|---|--|---|
|  | <p><i>collective hubs along cooperative routes</i></p> |  | <p><i>distributive hubs for essentials within 500 and 200m walking distance</i></p> |
|  | <p><i>priority routes for emergency services</i></p> |  | <p><i>cooperative routes and radius depending on frequency and intensity of service</i></p> |
|  | <p><i>creation of a timebank to exchange cooperative services</i></p> |  | <p><i>governance of the commons through professional councils</i></p> |

Design Concept ii

Several main hubs are strategically placed in the neighbourhoods. These hubs are either places to collect goods or places to distribute them. Hubs for collection are located near regional transport connections like the Central Station of Luxembourg or in industrial zones like Hamm and Howald. Furthermore, secondary distributive hubs are created within residential neighbourhoods to accommodate services like cooking, nursing, teaching, physiotherapy, cleaning, or a library (Figure 106). All main hubs are connected via a main route, prioritising essential services such as food distribution. Secondary hubs are connected via a secondary road network. Medical and long-term care services have access to all residential roads and all superimposed networks.



main collective hub at the central station

secondary hubs for other services

distributive hub at the intersection between Bonnevoie and Howald

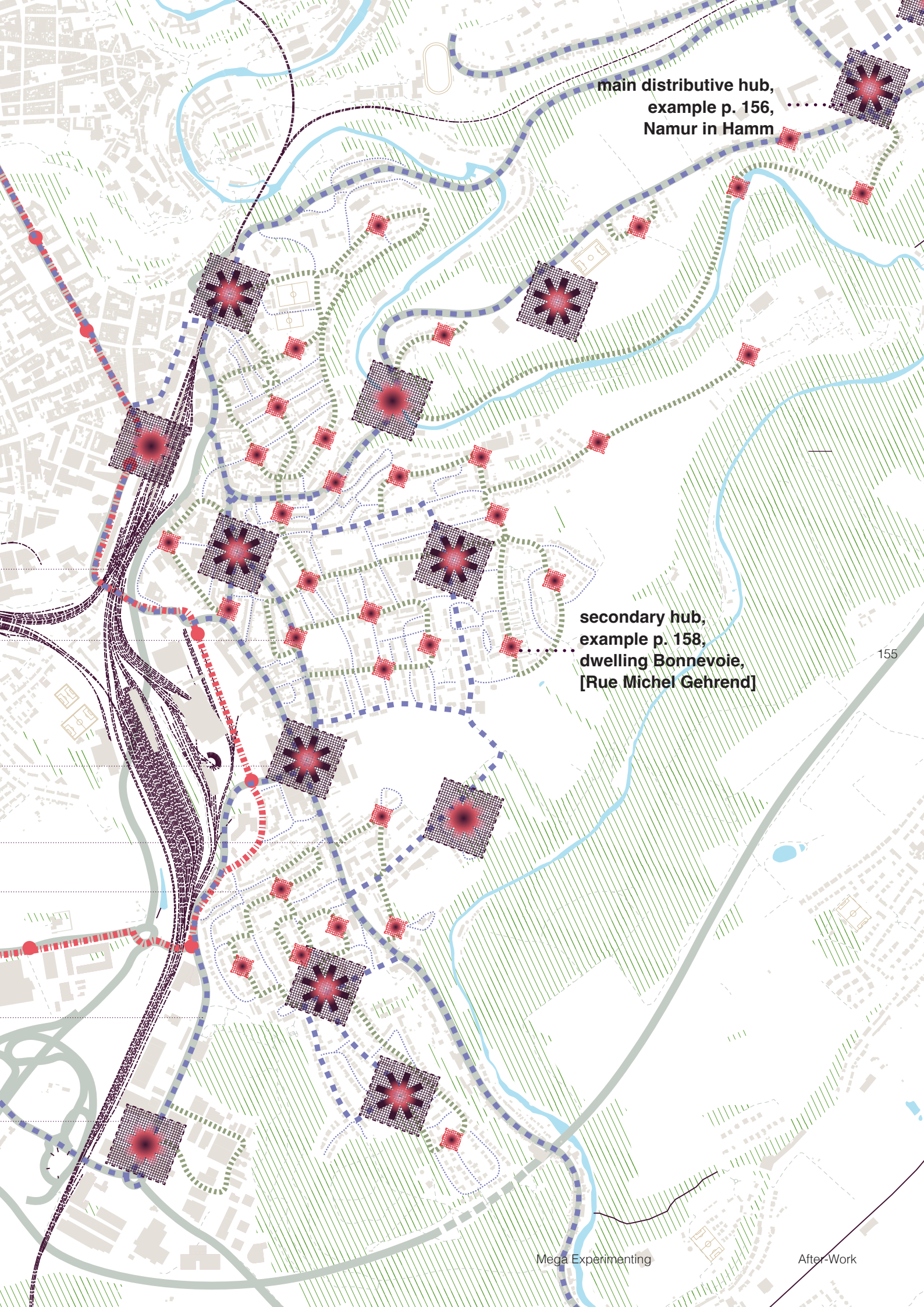
roads mainly reserved for other care services

roads mainly reserved for medical or long-term care

priority road for essential services

collective hub at the Cactus, Howald

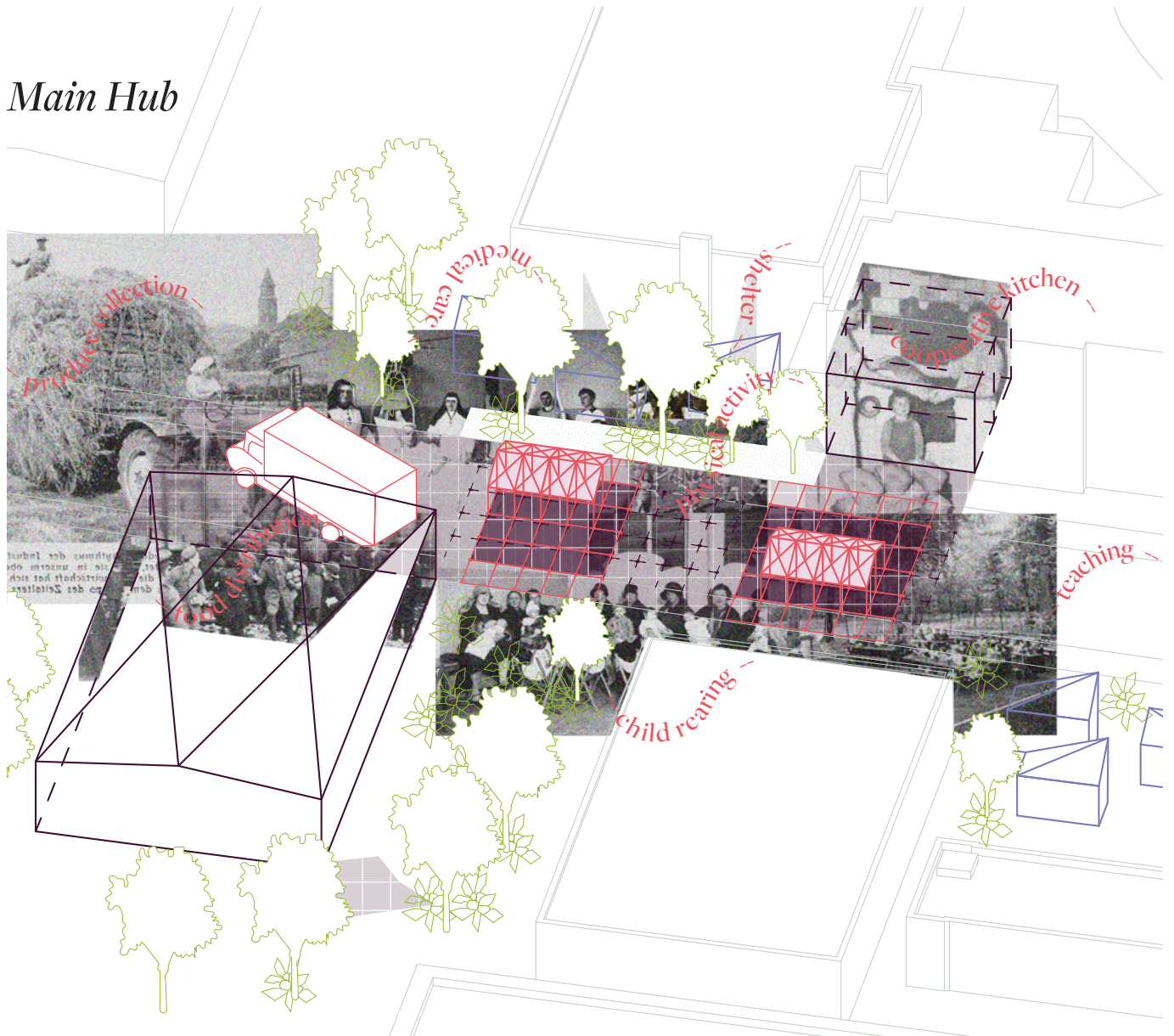
Figure 106: Design Concept Cooperative Neighbourhood Scale, Author's Work



main distributive hub,
example p. 156,
Namur in Hamm

secondary hub,
example p. 158,
dwelling Bonnevoie,
[Rue Michel Gehrend]

Main Hub



156

Namur in Hamm

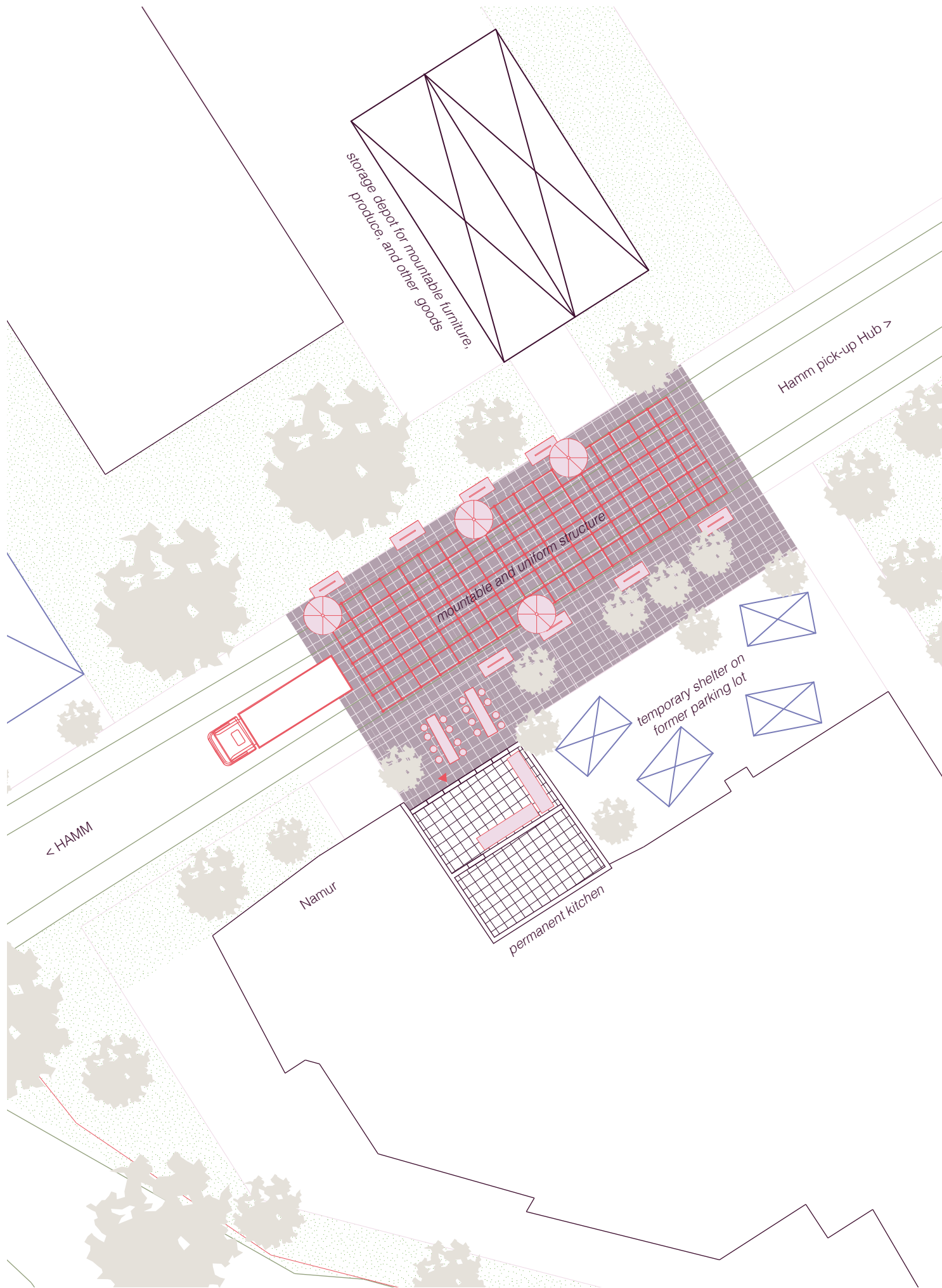
The Namur in Hamm is partially transformed into a main distributive hub (Figure 117; Figure 118). Goods and produce can be stored in an adjacent warehouse. The former cafeteria part of the Namur has been reappropriated into a permanent cooperative kitchen and food distribution centre. Other cooperatives can take over the available structural street grid, which can be assembled and disassembled for specific purposes. The housing cooperative has built temporary shelters on the former parking lot.

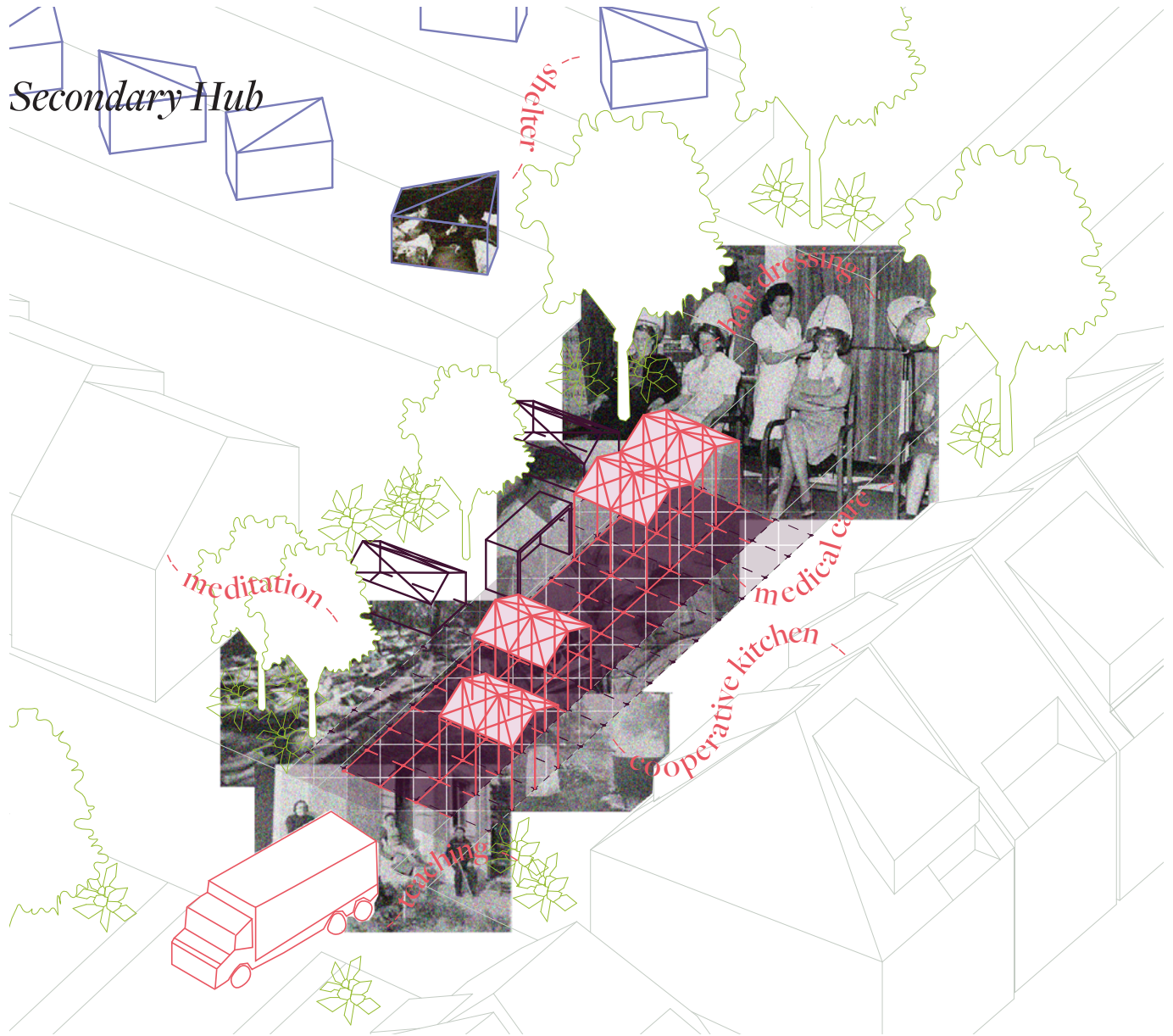
- I floorplan main hub
- storage depot
 - movable housing
 - interior space
 - mountable structure
 - mountable furniture



Figure 107, left: Isometric Collage of a Main Hub, Author's Work

Figure 108, right: Floorplan of a Main Hub, Author's Work





Dwelling Bonnevoie [Rue Michel Gehrend]

The secondary hubs function similarly to the main distributive hubs. However, they do not have a permanent kitchen space. Several temporary elements can be built and plugged into the street's grid. These elements are stored in smaller depots nearby (Figure 109; Figure 110).

I floorplan secondary hub






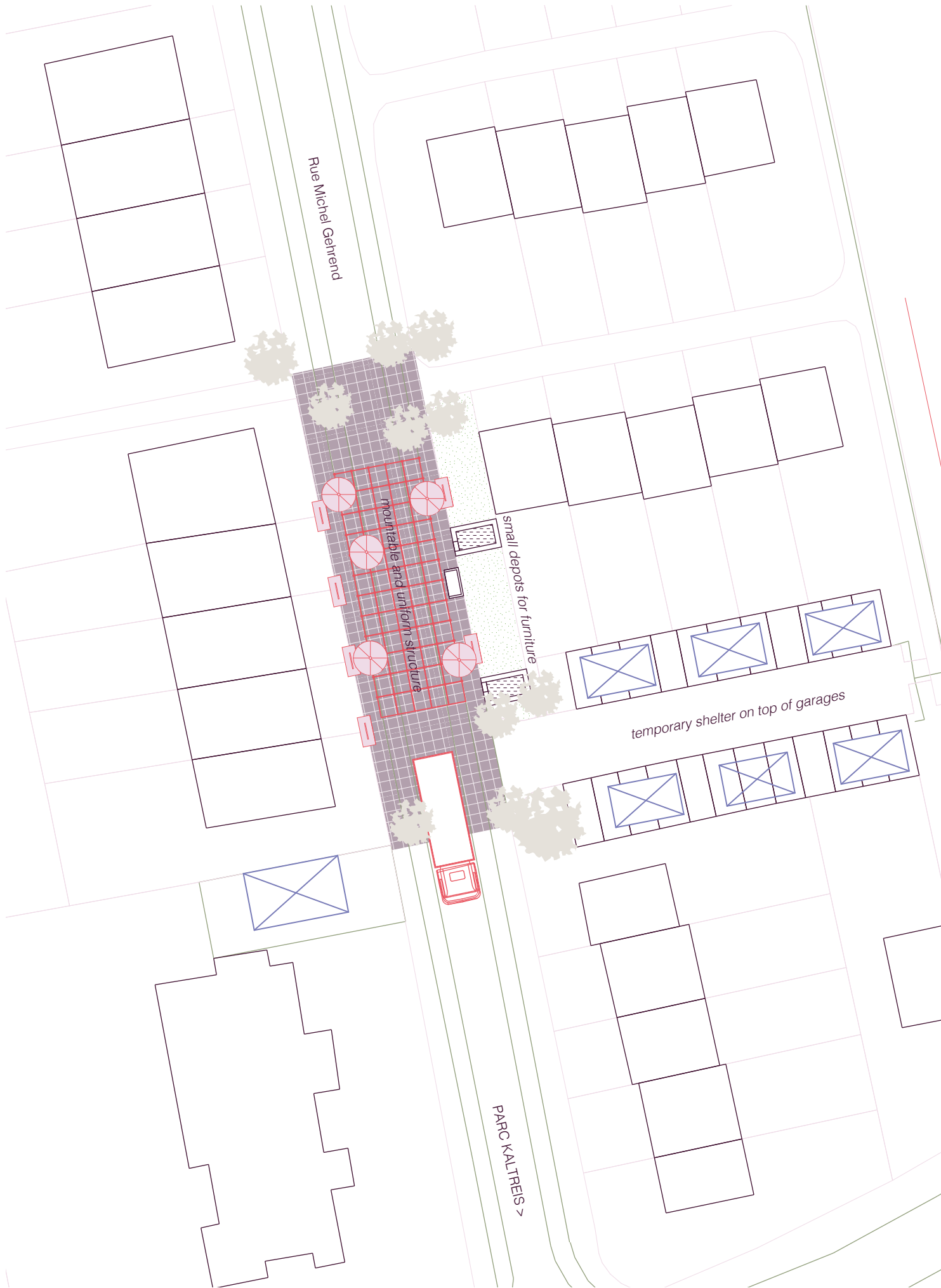
-  storage depot
-  movable housing
-  interior space
-  mountable structure
-  mountable furniture



Figure 109, left: Isometric Collage of a Secondary Hub, Author's Work

Figure 110, right: Floorplan of a Secondary Hub, Author's Work



Rue Michel Gehrend

mountable and uniform structure

small depots for furniture

temporary shelter on top of garages

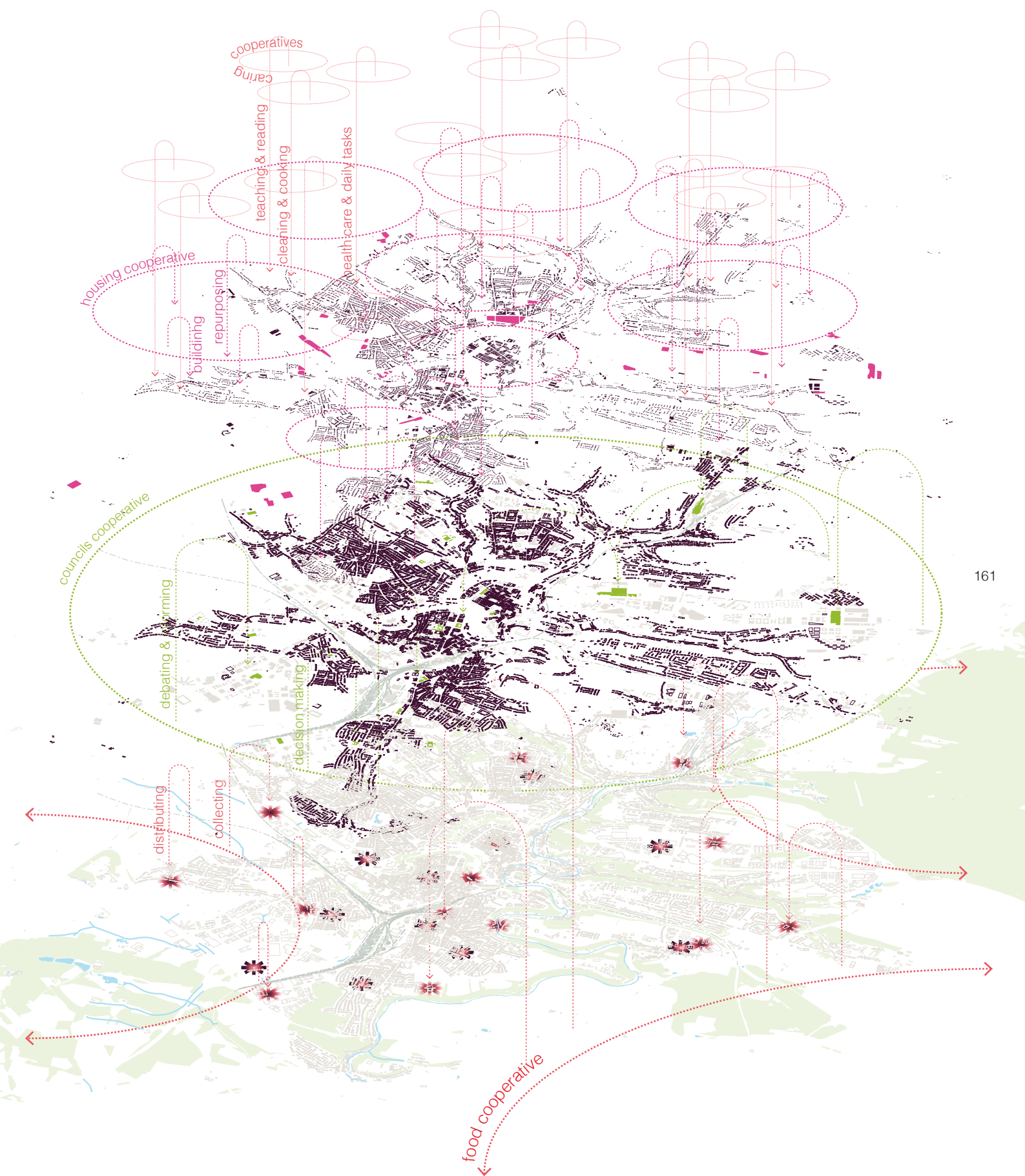
PARC KALTREIS >

Municipal Network

All cooperatives have varying sites of action depending on the frequency and intensity of their given service (Figure 121). The food cooperative is connected to the surrounding production landscapes and operates along the main collective and distributive hubs.

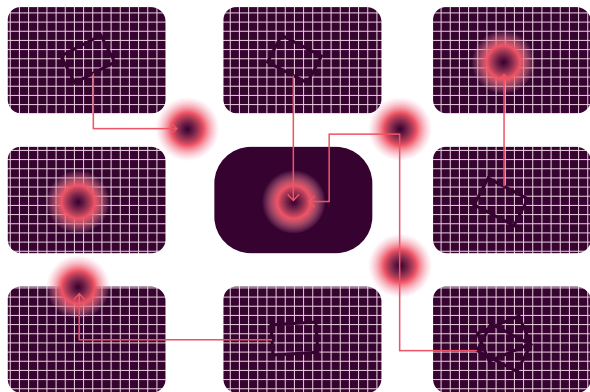
The council's cooperative travels throughout the city, occupying local neighbourhood centres. It functions as a binding agent between all other cooperatives.

The housing cooperative works on the neighbourhood level, looking for parking spots or vacant buildings to develop and occupy. Caring cooperatives have the smallest radius and operate within smaller areas of a single neighbourhood.

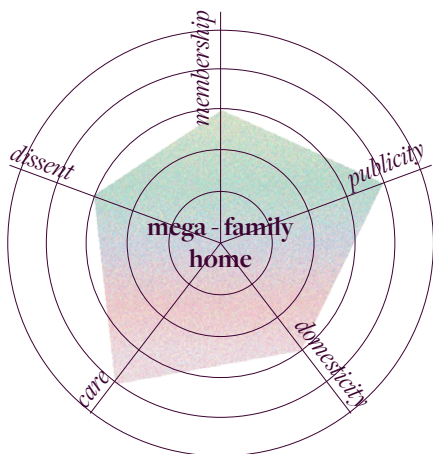


Experiment iii Nomad

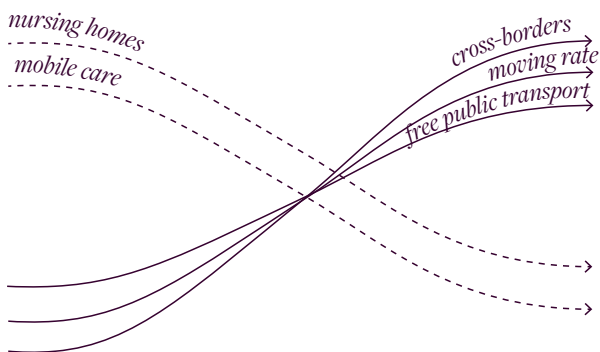
Overview iii



The home is fluid while care services are fixed. These services are placed at strategic points of interest that people in need of care seek out.



This scenario performs best with publicity and care since all care services are abolished from the private space. Domesticity is low since people in need of care must leave their homes. Dissent also performs low since the main interaction is performed on a regional platform with no direct local representatives.



Existing care through mobile and statutory services will be transformed. Cross-border mobility and movement rates are accelerated.

Figure 112, left: Nomad Overview, Author's Work

Figure 113, right: Nomad Catalogue of Precedents

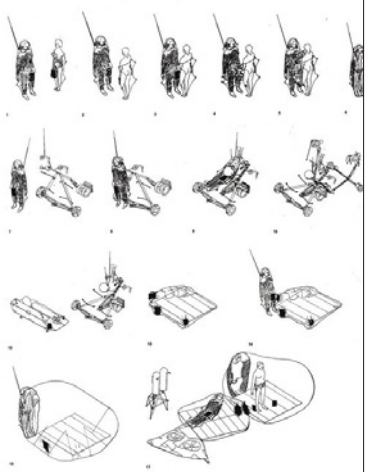
High rate of moving place of residence

High rate of cross borders

emergency dormitories

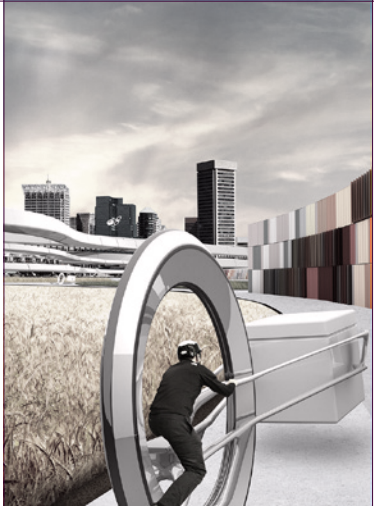
Cubicle and Suitaloon by Archigram 1967 in Hidden Architecture (2017):

Within this frame, Webb's projects are the maximum expression of this new dogma: a suit that covers all the basic necessities for living and it can become an inflatable chamber for living. The minimal house is the extreme version of a capsule, the radical room.



Shareway 2030 in Höweler & Yoon (2012):

Shareway is a mobility platform and operating system that restructures the relationships between property and access, allowing users to move along efficient mobility networks while remaining free of car and home ownership.



plug-in city as network

Suitaloon as vehicle

Cubicle as inflatable room

accompanying infrastructure

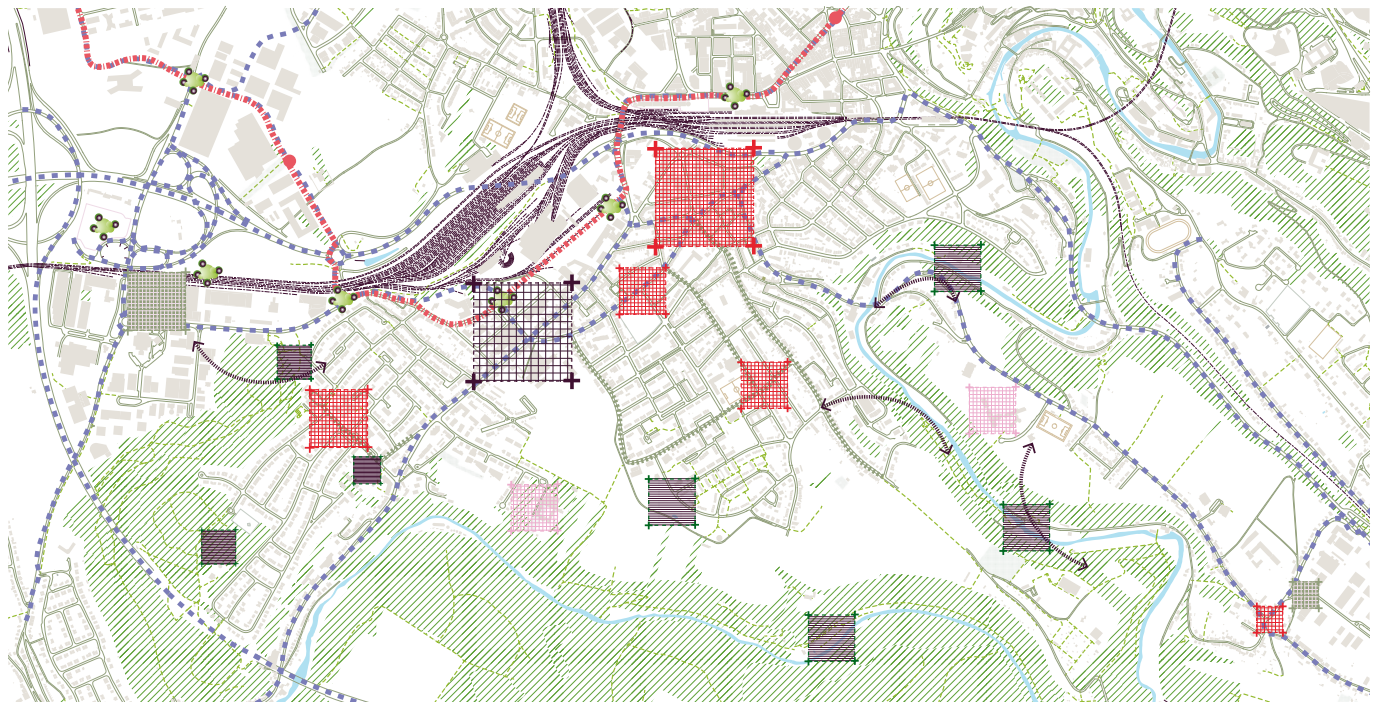
changing homes

online mobility platform

House Sitting Platforms:

online platforms which mediate between home owners and house sitters who stay for a limited time to take care of the house and often pets.

(open-source and accessible) online platform



The main chances for the Nomad in the neighbourhood context lie in the existing and extensive street network, the existing public spaces, and other points of interest (Figure 114). However, many paths which lead to leisure places in the surroundings are not fastened and are sometimes very steep. While plug-in places can be created in existing points of interest, their connection must be improved or can be overcome by gear catered towards uncertain terrain (Figure 115).

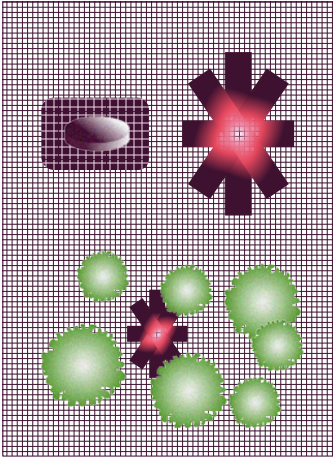
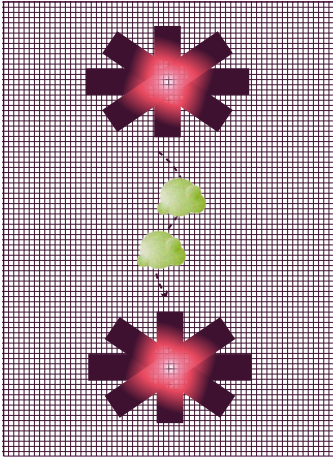
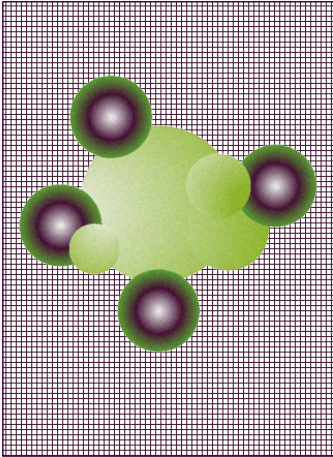
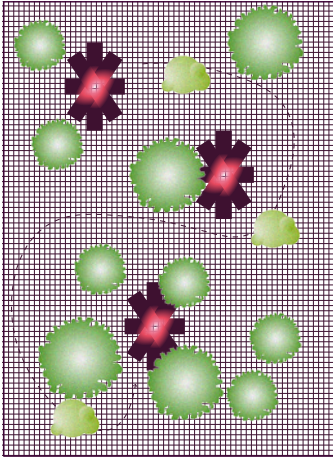
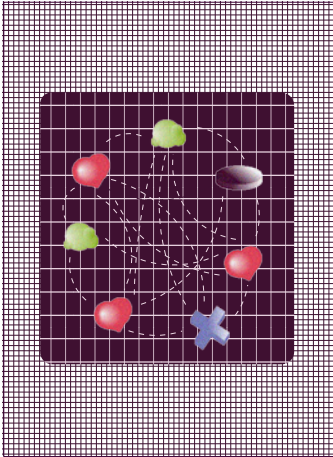
Chances & challenges

- public space
- existing care
- leisure/sport
- shopping
- main street
- secondary street
- bad walkability
- path
- public transport connection



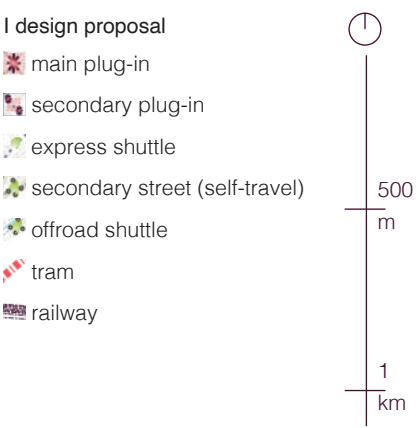
Figure 114, left: chances and challenges Nomad

Figure 115, right: Design Strategies Nomad

| | | | |
|---|--|--|--|
|  | <p><i>main and secondary care plug-ins near points of interest</i></p> |  | <p><i>speed routes and connections between main points of interest</i></p> |
|  | <p><i>adequate gear to travel which can overcome heights and difficult paths</i></p> |  | <p><i>scenic routes between secondary points of interest</i></p> |
| | |  | <p><i>open-source and publicly administered platform</i></p> |

Design Concept iii

The existing central squares, which show a variety of functions, as well as the existing nursing homes and spaces of market care, are turned into main plug-ins (Figure 116). Leisure and more decentral places become secondary plug-ins that offer specialised care. Care seekers can use shuttle services on the main streets and offroad paths. Secondary streets are adequate for self-travel by local public transport or foot.



main plug-in point with wider city connection

secondary plug-in point at a park

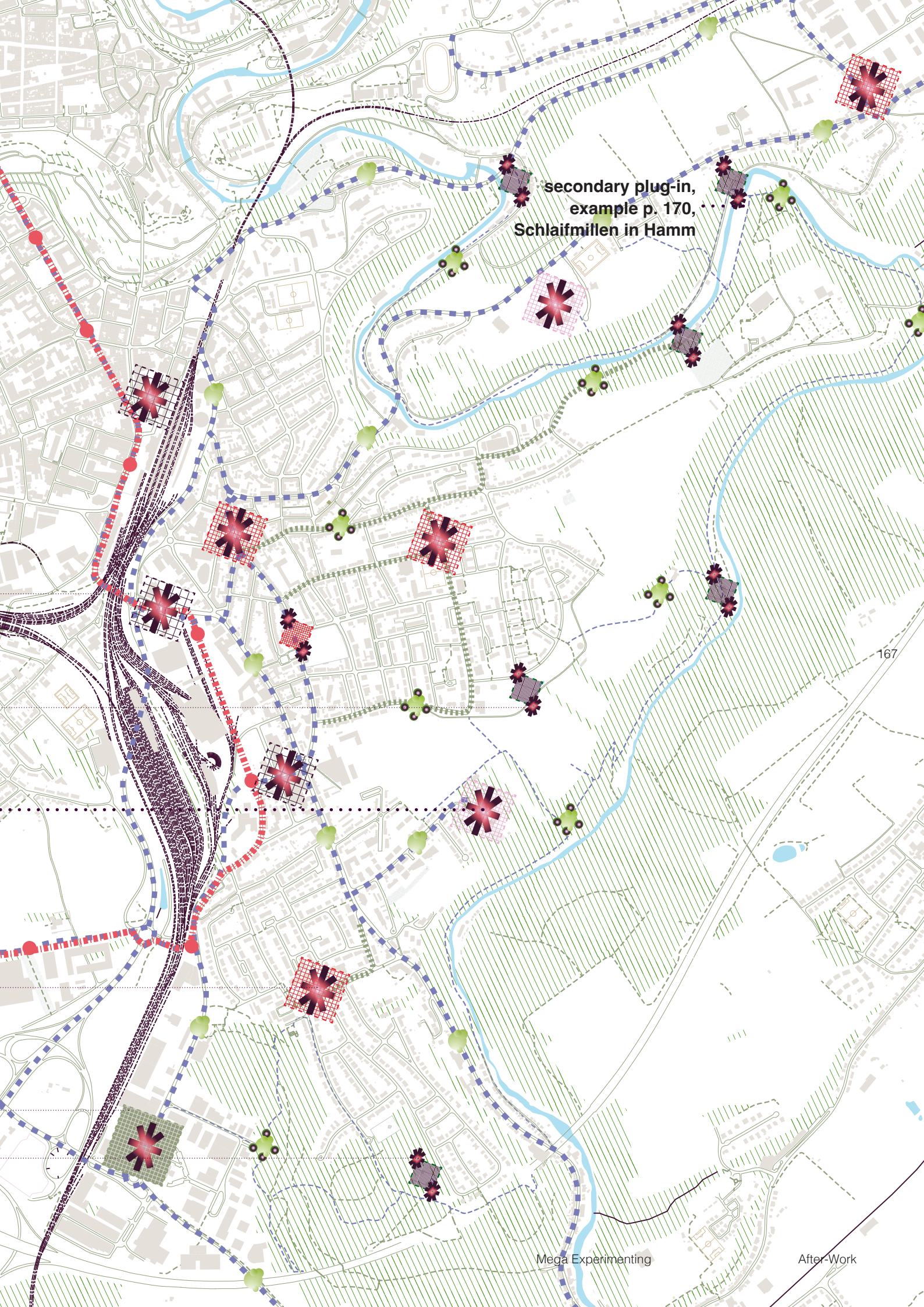
main plug-in, example p. 168, Servior beim Klouschter Howald

main plug-in point at the neighbourhood centre

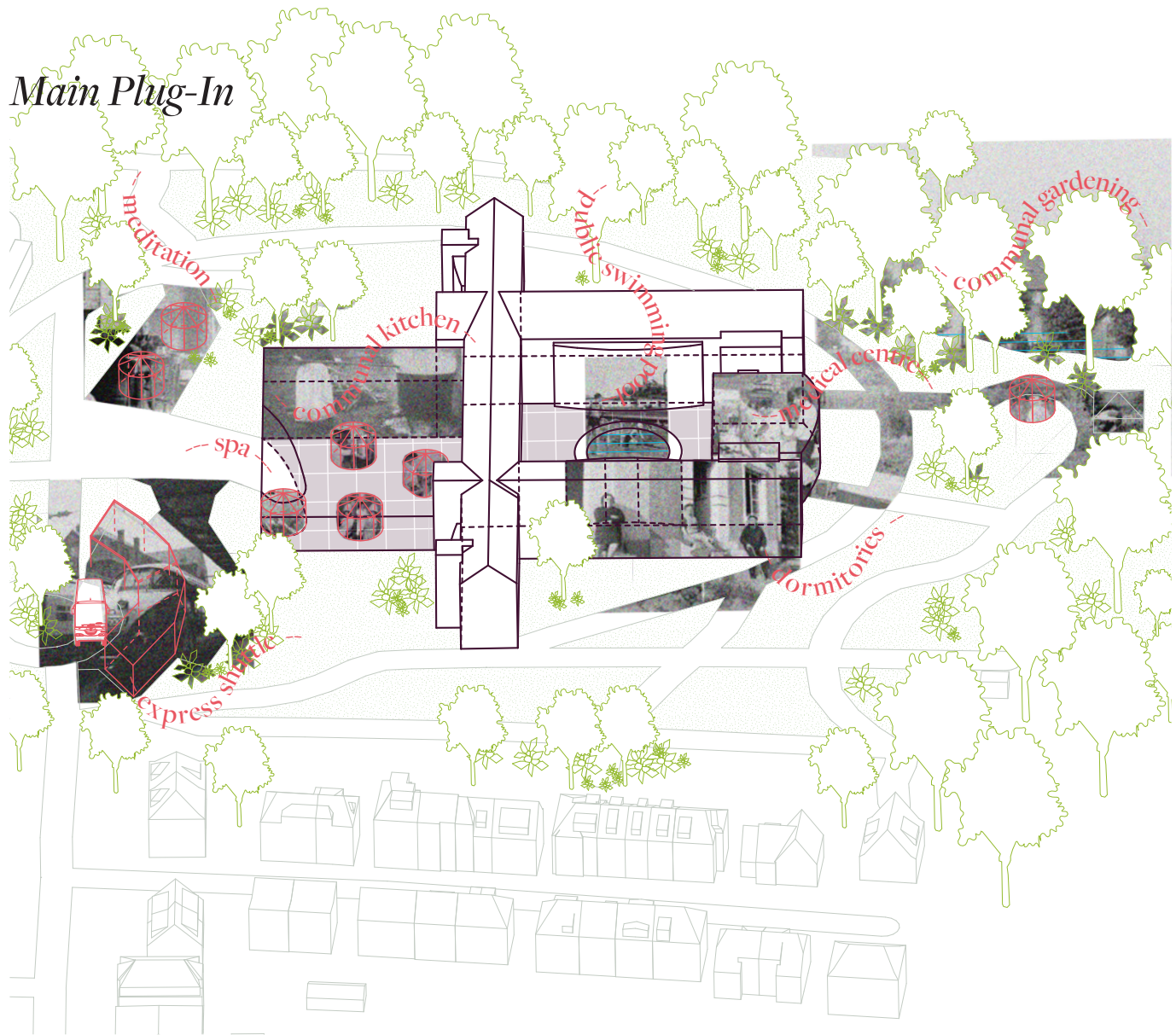
main plug-in near shopping facilities

secondary plug-in point at a Scout centre

Figure 116: Design Concept Nomad Neighbourhood Scale, Authors'Work



secondary plug-in,
example p. 170,
Schlaifmiller in Hamm



Servior beim Klouschter Howald

Every main plug-in has one or more dormitories where people can stay as long as they want. Small pavilions inside and surrounding the main plug-in are used for care or other leisure activities. Several public bathrooms are also available.

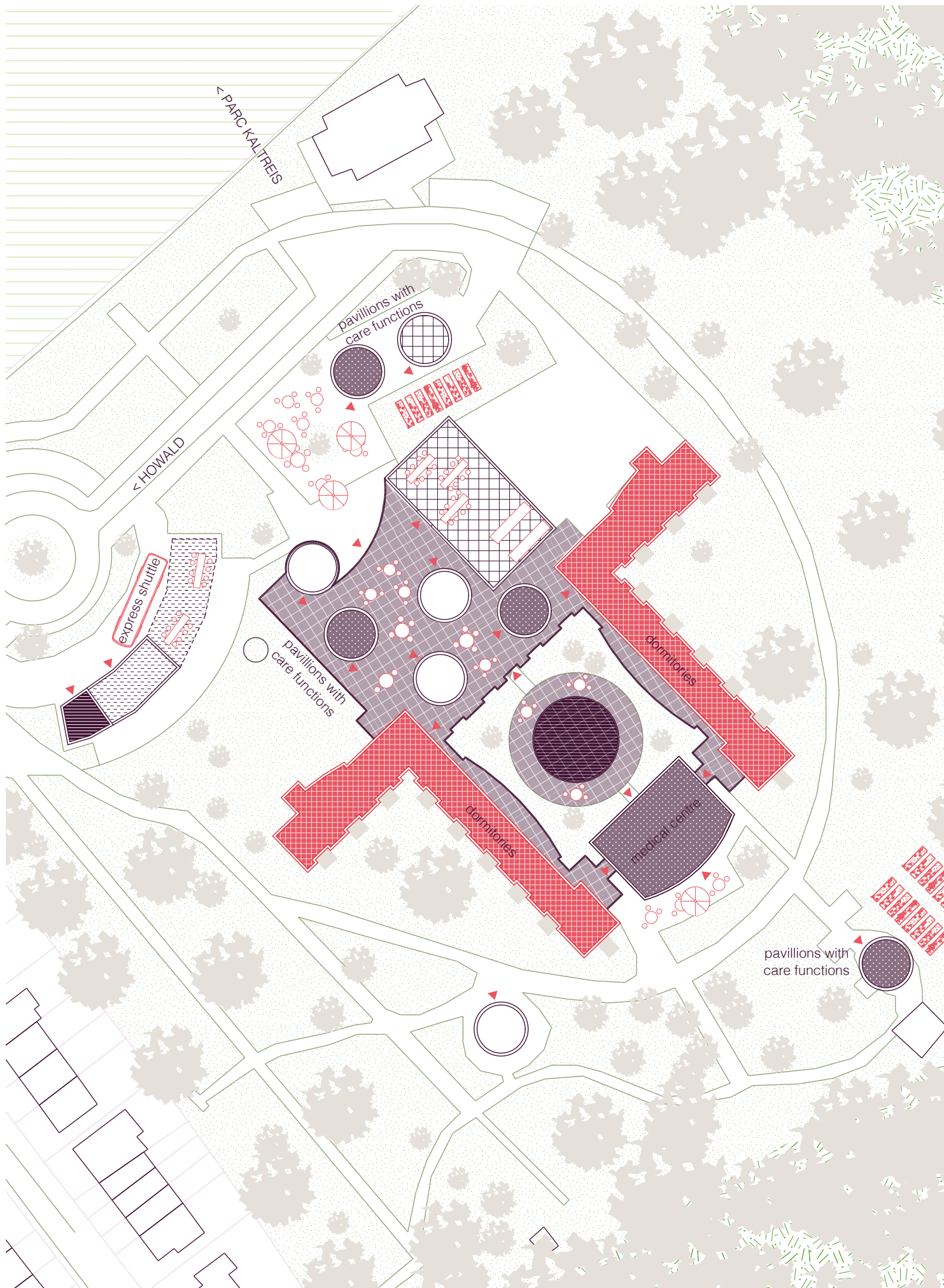
The nursing home in Hamm has been appropriated as a main plug-in. The main hall, with an adjacent restaurant, is turned into a canteen and care pavilions. An express shuttle guarantees easy access to other main plug-ins in the surrounding area (Figure 117; Figure 118).

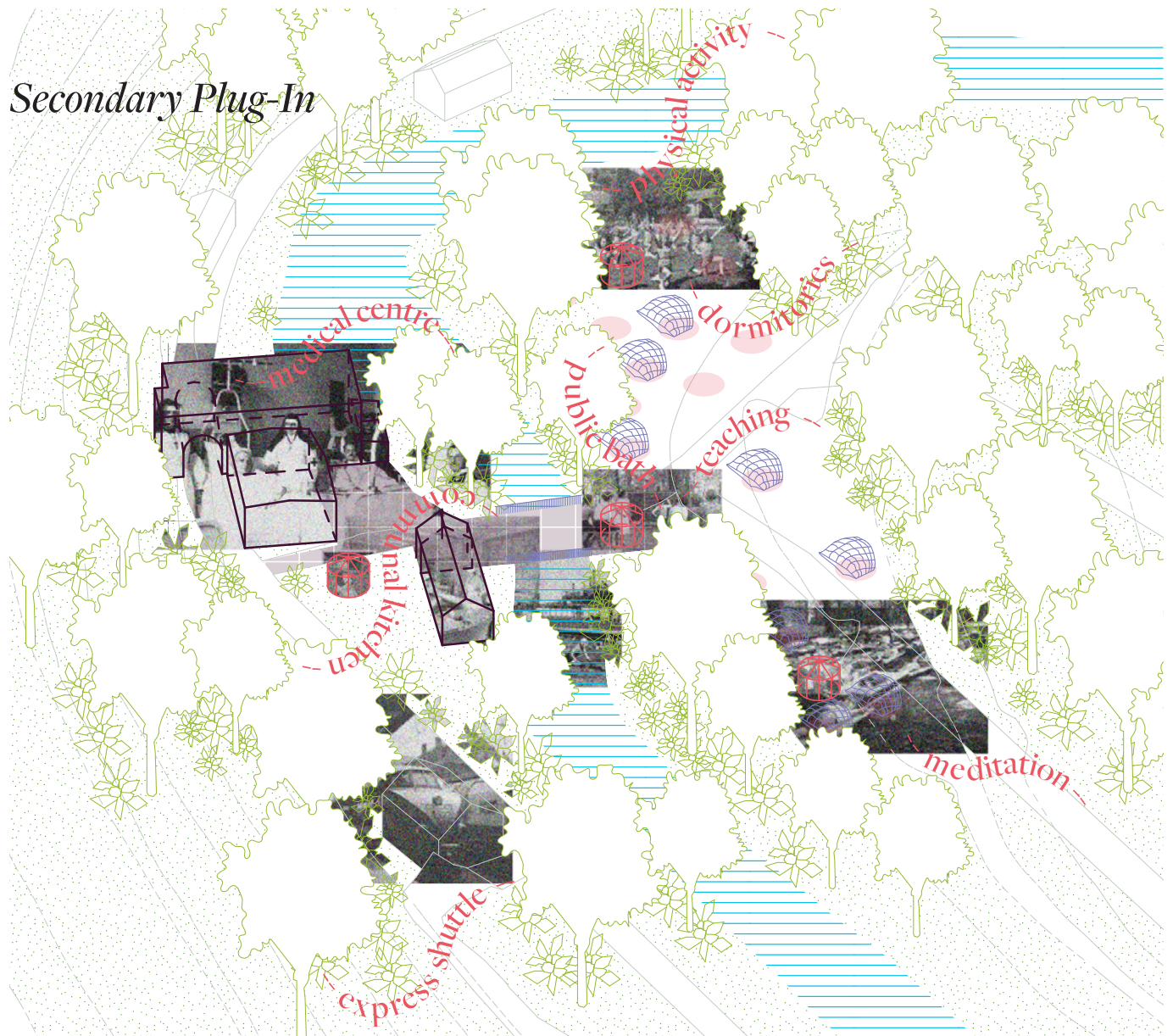
- I floorplan main plug-in
- care facility
 - cooking facility
 - dormitory
 - teaching facility
 - public bath
 - express shuttle pick-up
 - uniform paving



Figure 117, left: Isometric Collage of a Main Plug-In, Author's Work

Figure 118, right: Floorplan of a Secondary Plug-In, Author's Work





Schlaifmillen Hamm

Secondary plug-ins offer places to camp with adequate gear. Other facilities, such as bathrooms, care, and leisure spaces, are plentiful. Caregivers who work in secondary plug-ins can stay in the homes nearby.

In Schlaifmillen's secondary plug-in, the local artist centre offers art classes, meditative practices, and basic long-term and healthcare services. The services are provided in smaller pavilions, outside if the weather allows, or in the historic buildings. Care seekers camp in their inflatable tents in designated spots (Figure 119; Figure 120).

I floorplan secondary plug-in








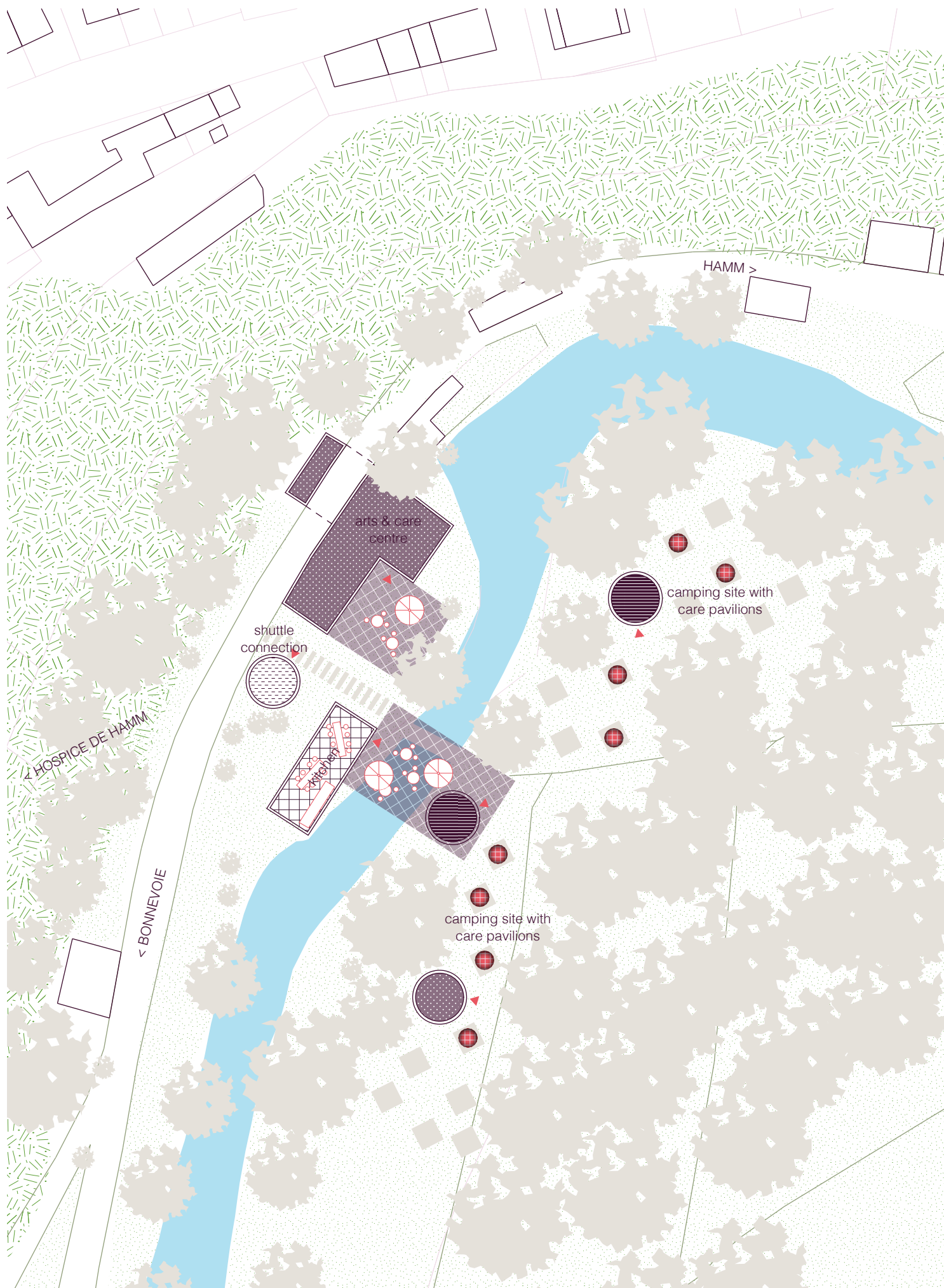
-  care facility
-  cooking facility
-  camping spot
-  teaching facility
-  public bath
-  offroad shuttle pick-up
-  uniform paving



Figure 119, left: Isometric Collage of a Secondary Plug-In, Author's Work

Figure 120, right: Floorplan of a Secondary Plug-In, Author's Work












Regional Network

The Nomad experiment functions on a regional scale. While neighbourhood plug-ins were presented, the program offers several plug-ins in the Grand Region of Luxembourg. These plug-ins are located near points of interest, including natural and historic sites in cities or rural areas and shopping opportunities like the Ikea in Arlon (Figure 121). The plug-in points are connected by scenic train routes if not already connected by regional trains, so nomads can travel easily from place to place.

172

I regional network of plug-ins

-  main plug-in
-  travel route
-  train connection
-  existing train connection
-  new train connection
-  train station
-  historic or natural site
-  cross-border bus connections
-  motorways

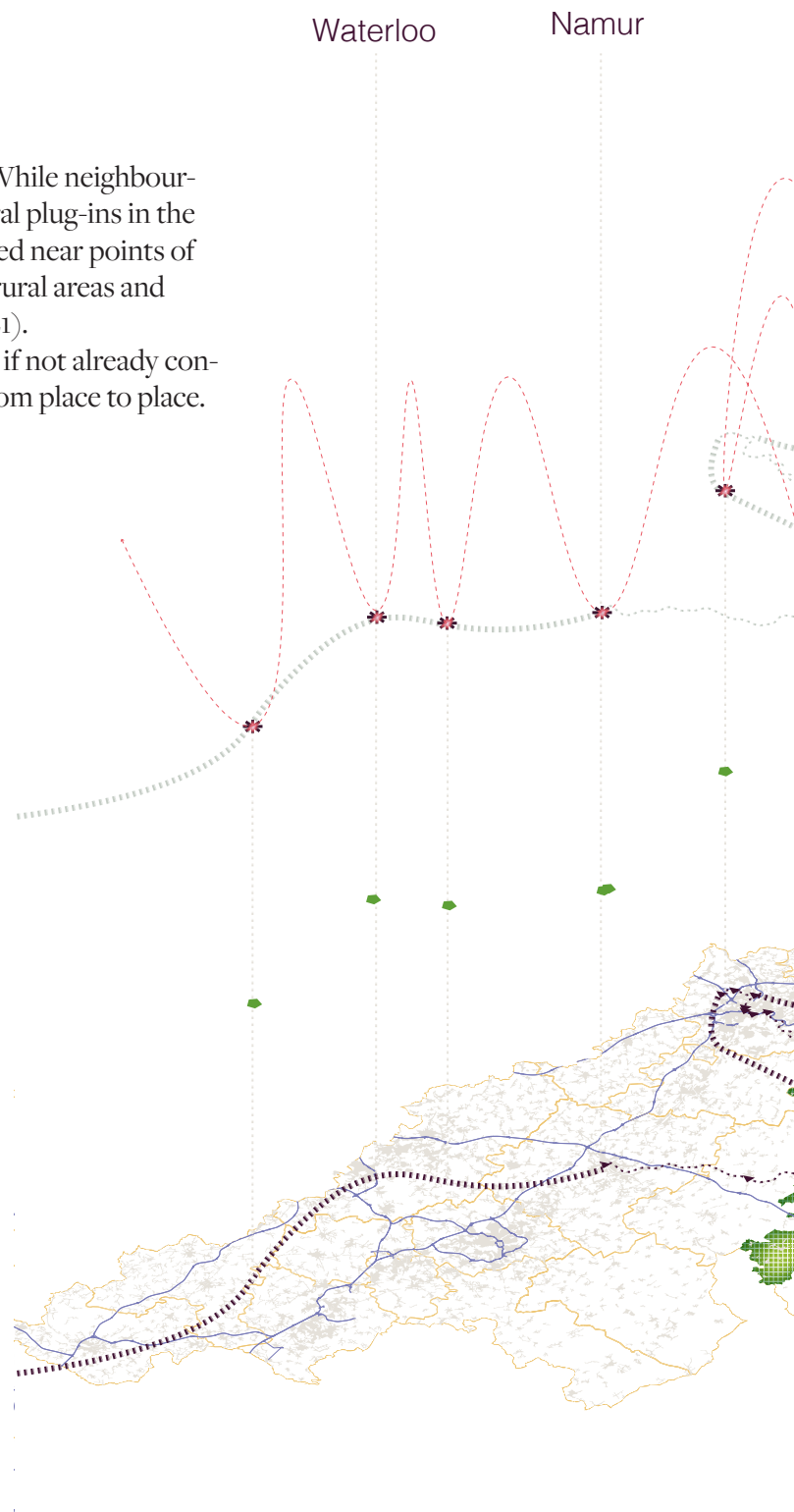
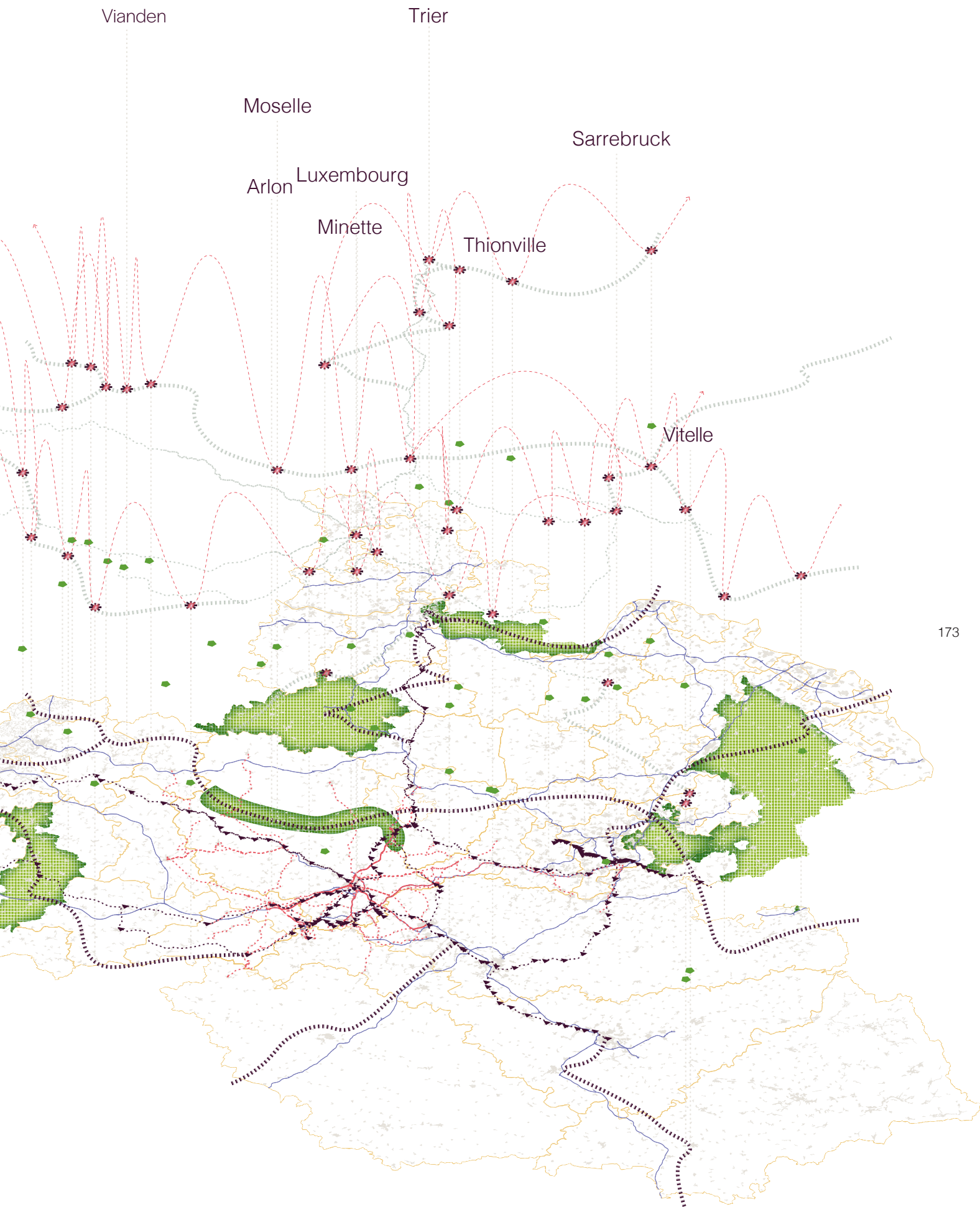


Figure 121: Regional Network of Plug-Ins, Author's Work



07 *Stories from Mega-Family Homes*

| | |
|------------------------------|-----|
| 6.1 Building the Stories | 176 |
| 6.2 Story from a Commune | 178 |
| 6.3 Story from a Cooperative | 184 |
| 6.4 Story from a Nomad | 192 |

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Building the Storylines

Stages

STORIES FROM MEGA-FAMILY HOMES explore caregiving and receiving in an alternate setting. The stories are built on the same spaces identified as important in Chapter 05 Understanding and transformed in Chapter 06 Experimenting. Thus, the stages are composed of the places of most attraction and most care, as well as surrounding leisure spaces such as Kaltreis Park or Schlaifmillen. The intersections Bonnevoie-Howald and Bonnevoie-Hamm also find purpose in the narratives (Figure 122).

All stories follow the same persona, Marguerite and Noel, who have the same characteristics as in the STORY FROM A HOME although their care relationship changes throughout each scenario revealing expectations, frustrations, and emotions of each new care approach.

- **STORY FROM A COMMUNE** (Figure, 123; Figure 124) explore caregiving and receiving in a localised approach within a neighbourhood. It's based on current care practices observed on-site at the nursing homes, in the Vollekskichen, and the corner cafés.
- **STORY FROM A COOPERATIVE** (Figure, 125; Figure 126) explores caregiving and receiving through cooperative services organised in a city-wide network. It's based on current care practices observed on-site like the mobile care services, the food bank and food distribution in front of Bonnevoie Church
- **STORY FROM A NOMAD** (Figure, 127; Figure 128) explores caregiving and receiving through a house-swap platform combined with a network of care centres. It's based on current care practices observed on-site like free public transport, leisure routes and spots as well as the high share of cross-border labour and mobility.

Figure 122: Stages for the Storylines, Author's Work

Figure 123, pp. 178 - 179: Time-Space Mapping Story from a Commune, Author's Work

Figure 124, pp. 180 - 183: Story from a Commune, Author's Work

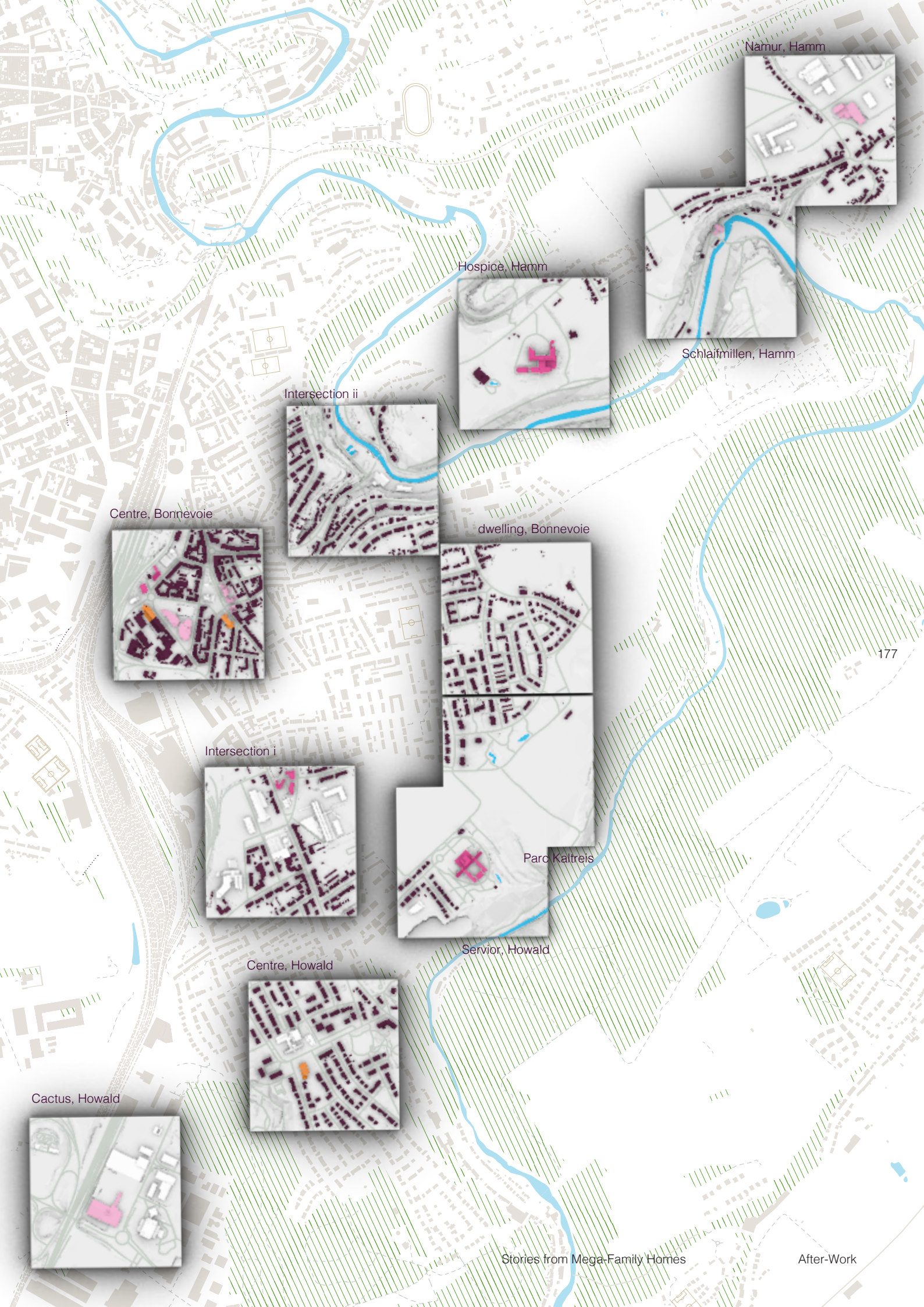
Figure 125, pp. 184 - 185: Time-Space Mapping Story from a Cooperative, Author's Work

Figure 126, pp. 186 - 191: Story from a Cooperative, Author's Work

Figure 127, pp. 192 - 193: Time-Space Mapping Story from a Nomad, Author's Work

Figure 128, pp. 194 - 199: Story from a Nomad, Author's Work

[all people drawn in the figures 124, 126, and 128 were inspired by Bär Kittelmann for Missy Magazine, 2023]



Namur, Hamm

Hospice, Hamm

Schlafmiller, Hamm

Intersection ii

Centre, Bonnevoie

dwelling, Bonnevoie

Intersection i

Parc Kaltreis

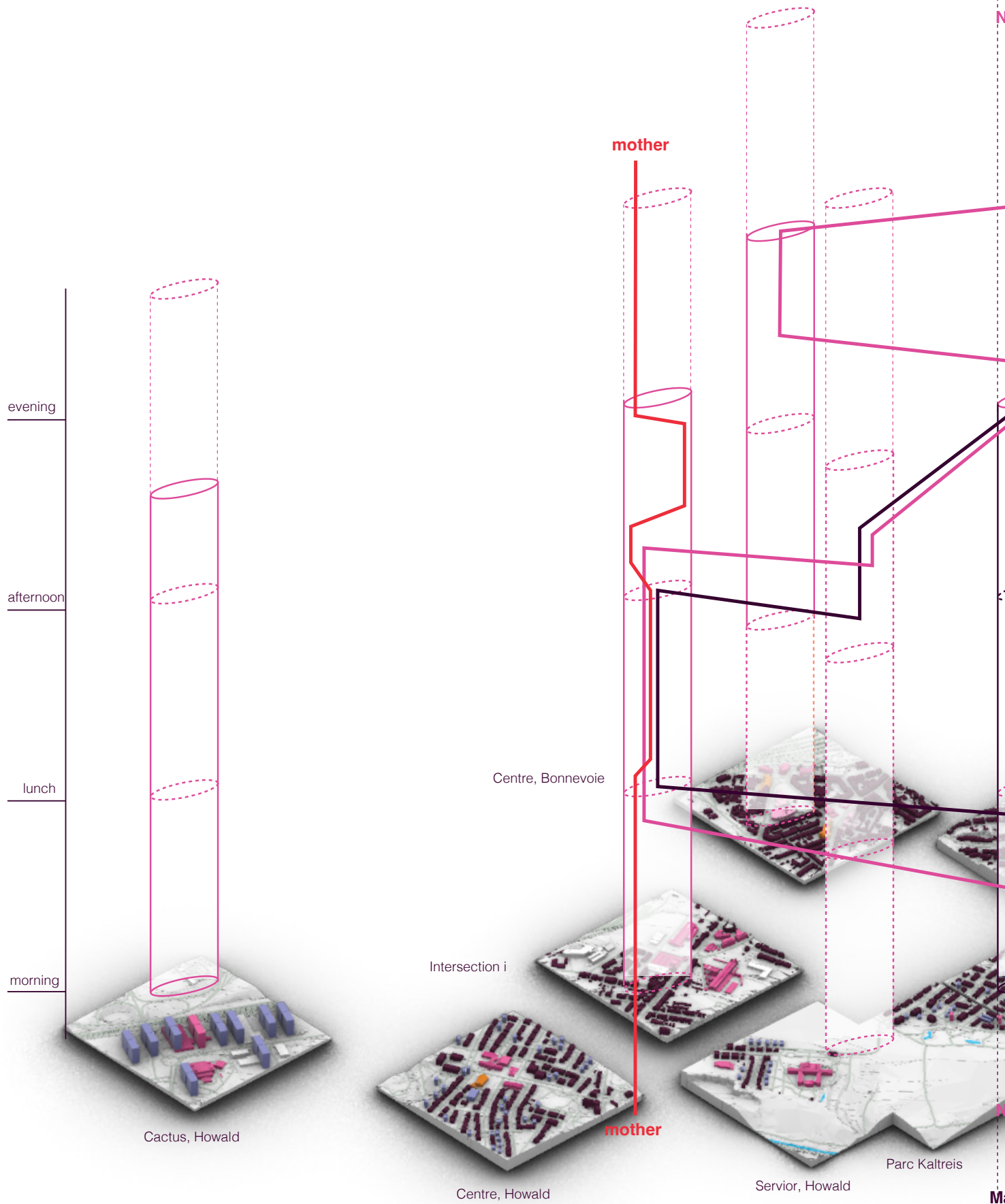
Servior, Howald

Centre, Howald

Cactus, Howald

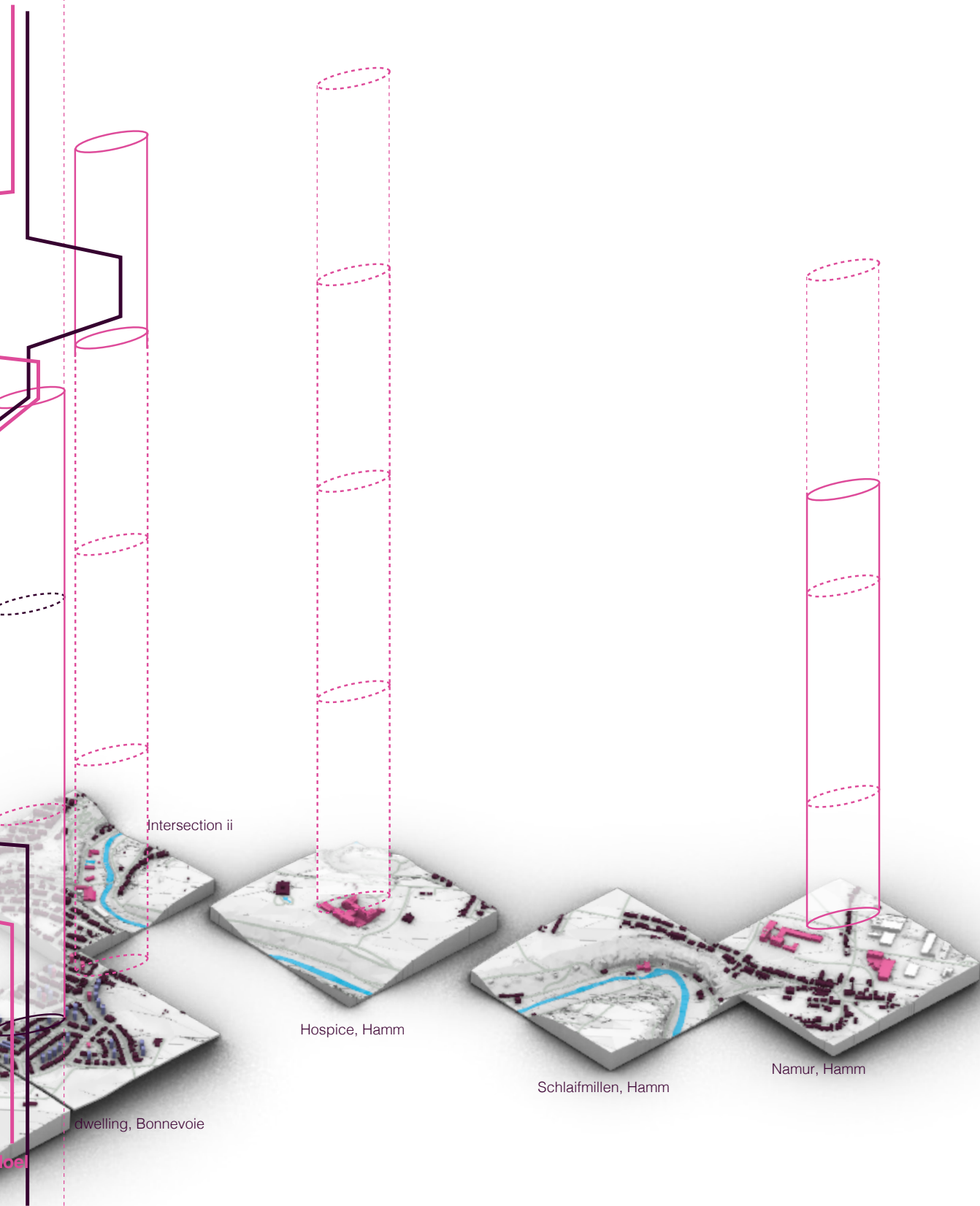
Story from a Commune

178



arguerite

loel



dwelling, Bonnevoie

loel

arguerite

+ DWELLING BONNEVOIE

Marguerite is at home looking critically at their neighbour Noel and their friends who are rearranging her back garden which has been quite neglected.

I really felt ashamed asking for help in the beginning. Since I can't buy care services this easily anymore, I had to ask my neighbours. Especially the new ones were weird, and the older ones often needed more aid themselves.

It's been getting easier now. It also seems more natural to people to offer help regardless of whether they have a close relationship or just know each other from passing by at the canteens or community meetings.

180



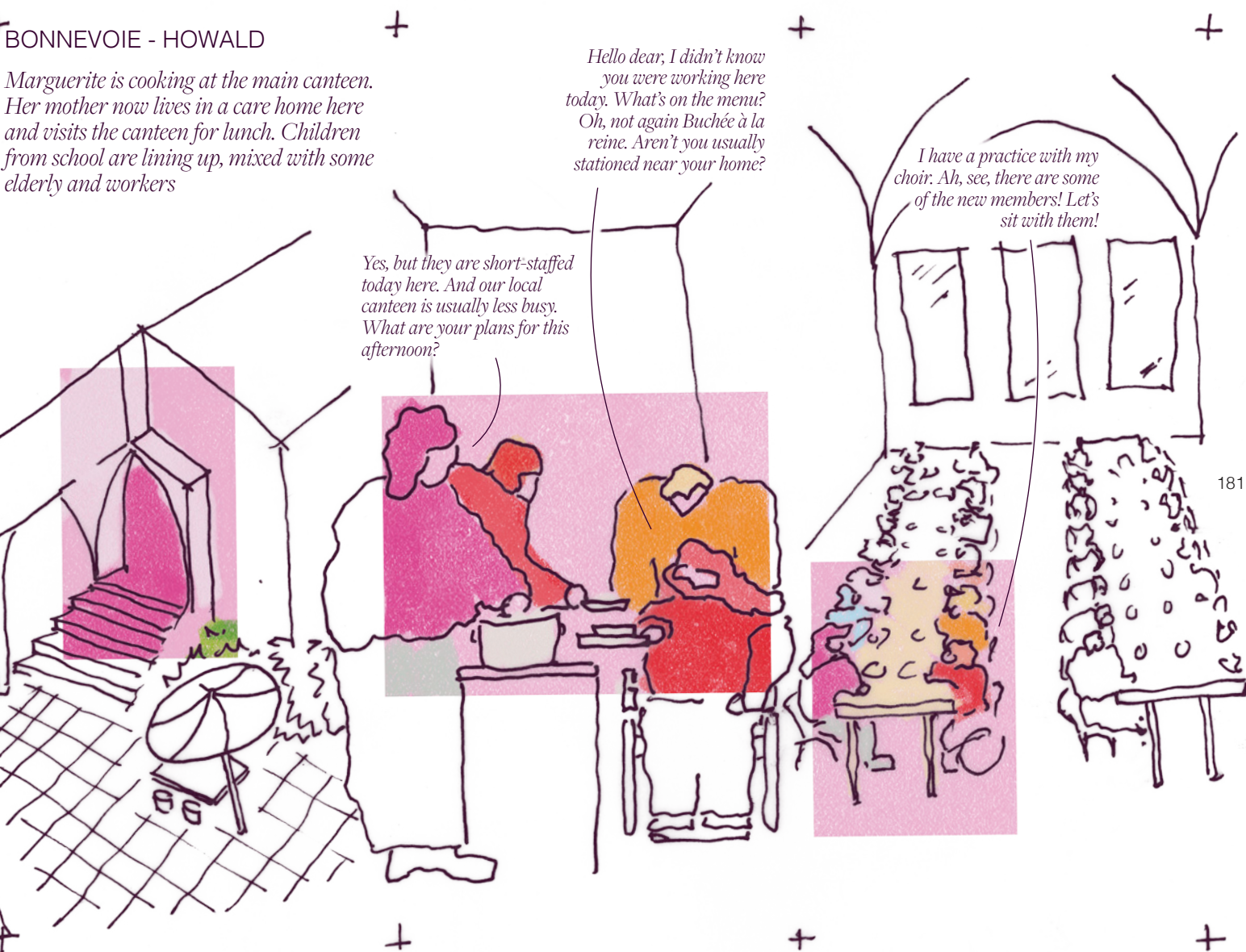
BONNEVOIE - HOWALD

Marguerite is cooking at the main canteen. Her mother now lives in a care home here and visits the canteen for lunch. Children from school are lining up, mixed with some elderly and workers

Hello dear, I didn't know you were working here today. What's on the menu? Oh, not again Buchée à la reine. Aren't you usually stationed near your home?

Yes, but they are short-staffed today here. And our local canteen is usually less busy. What are your plans for this afternoon?

I have a practice with my choir. Ah, see, there are some of the new members! Let's sit with them!



+ SERVIR HOWALD

Marguerite is taking an afternoon walk around the Howald care centre. The old care centre has recently been occupied by a garden community.

On their way back home she spots again her neighbour doing their afternoon service on the new crop fields.

I see you really like gardening. Any more projects after you dismantle my, I mean ours?

I've been meaning to tell you. I heard today that there are some dormitories open in the old care centre. I am thinking about moving.

Oh, that's nice though. I am happy for you! But who will take of my garden then? I just got used to having you around.

Actually, I know of a small family, a parent and two children. They didn't like their community in Hamm.

There haven't been children in this garden for ages. I like the way it looks now. I'm not sure. Let me think about it.

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CENTRE BONNEVOIE

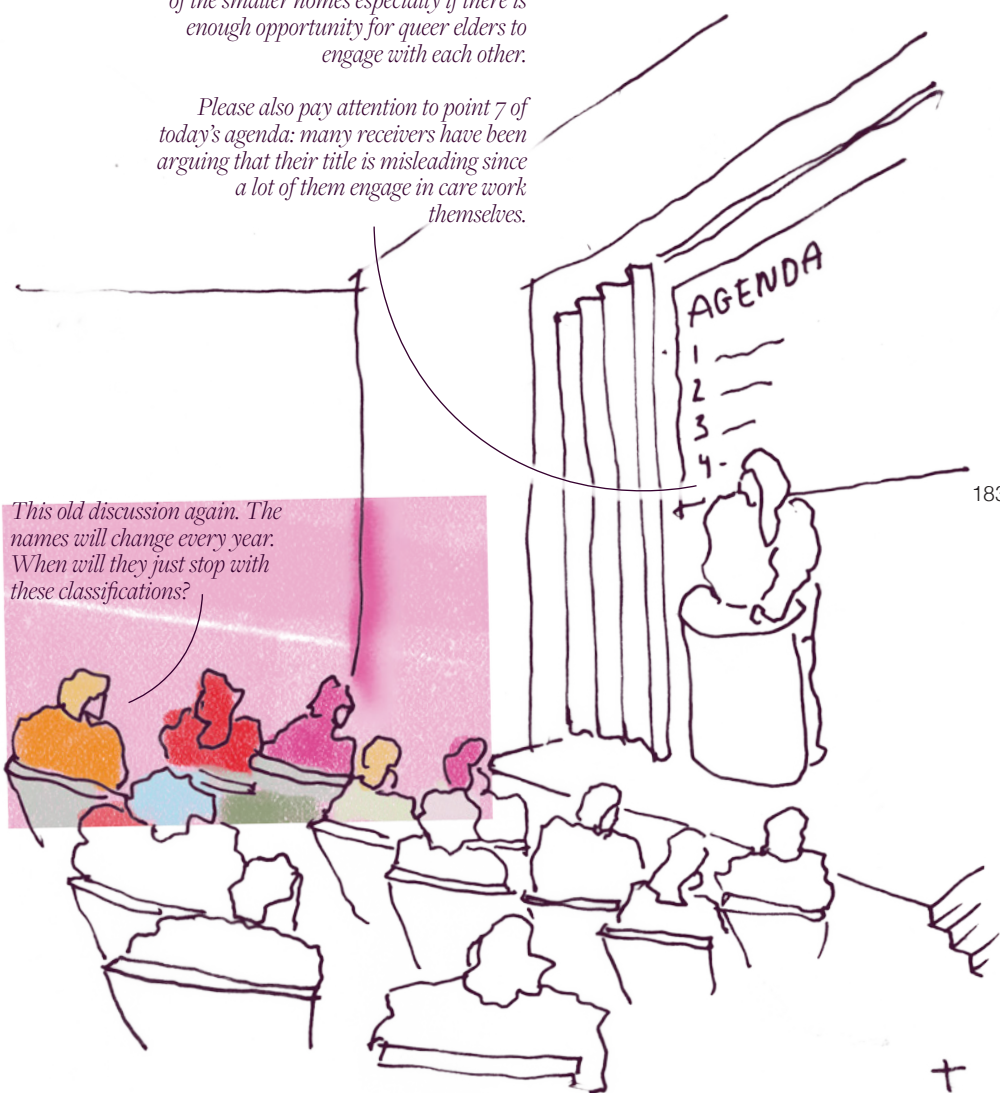
Noel is at the assembly at Bonnevoie Centre.



After a discussion about the state of the main care homes, we will discuss the status of the smaller homes especially if there is enough opportunity for queer elders to engage with each other.

Please also pay attention to point 7 of today's agenda: many receivers have been arguing that their title is misleading since a lot of them engage in care work themselves.

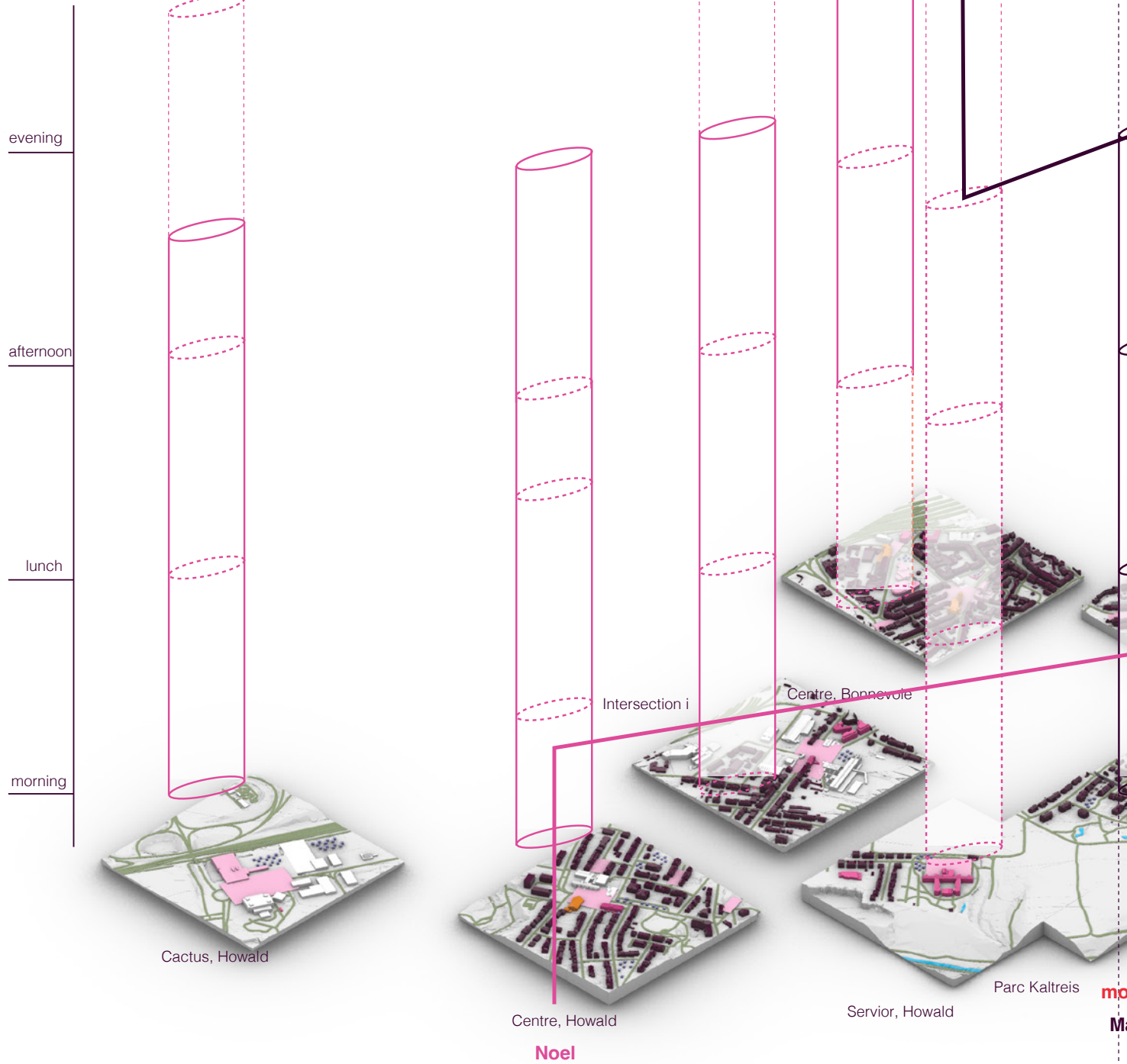
This old discussion again. The names will change every year. When will they just stop with these classifications?

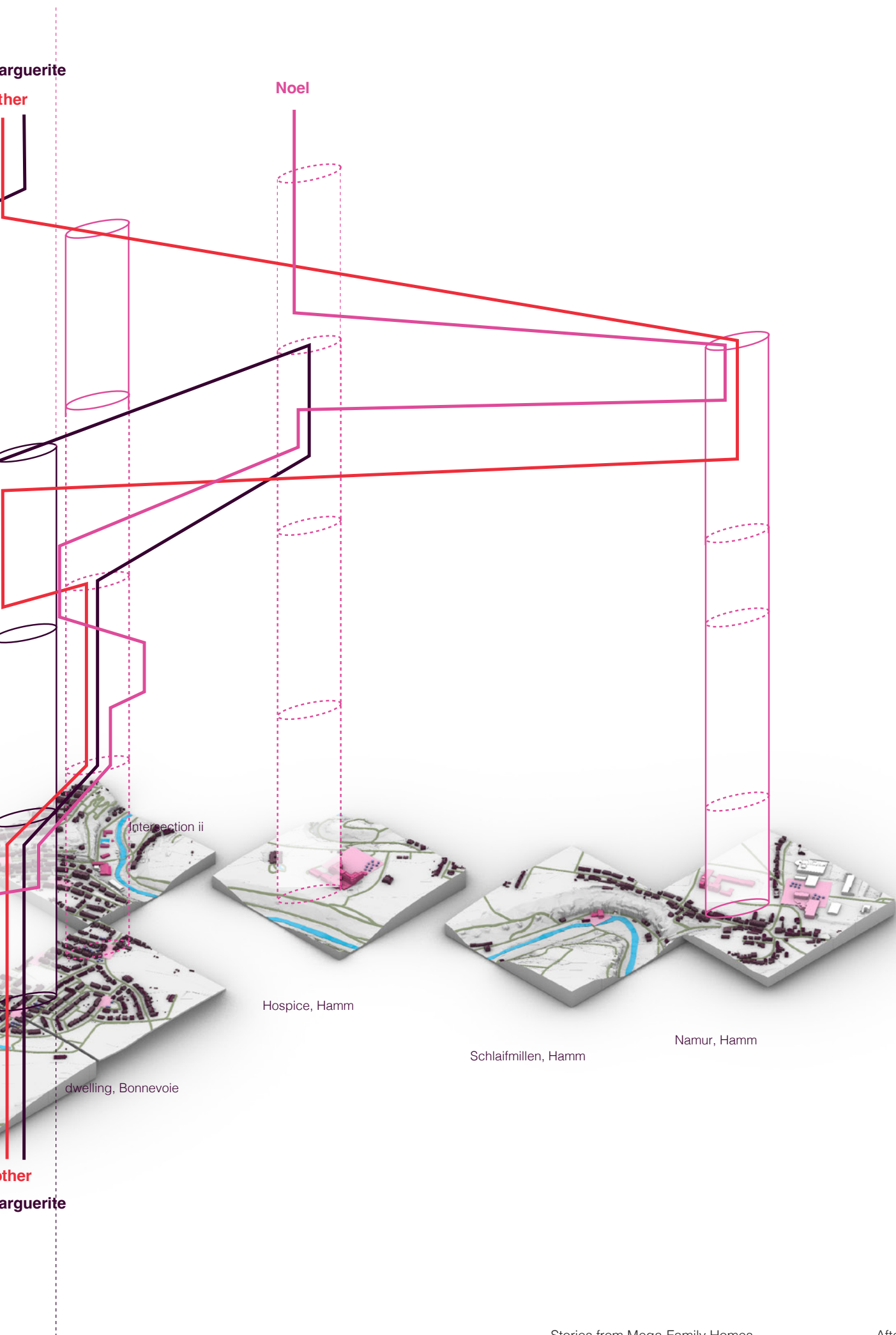


183

Story from a Cooperative

184

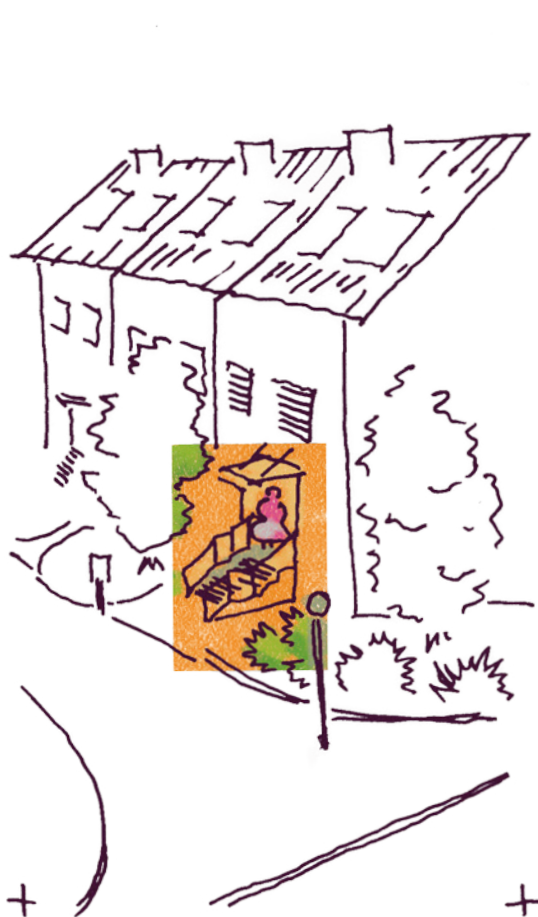




+ DWELLING BONNEVOIE

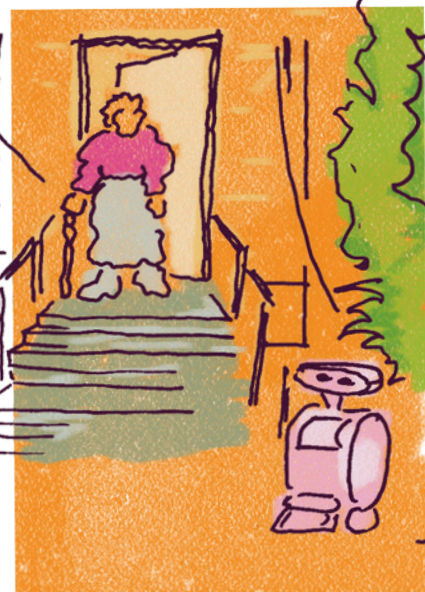
Marguerite is waiting for the cleaner's cooperative. She suspects there could be mice in her attic.

I am sorry, but your usual cleaner couldn't come today. She is taking a hiatus to focus on her children. How can I help you today?



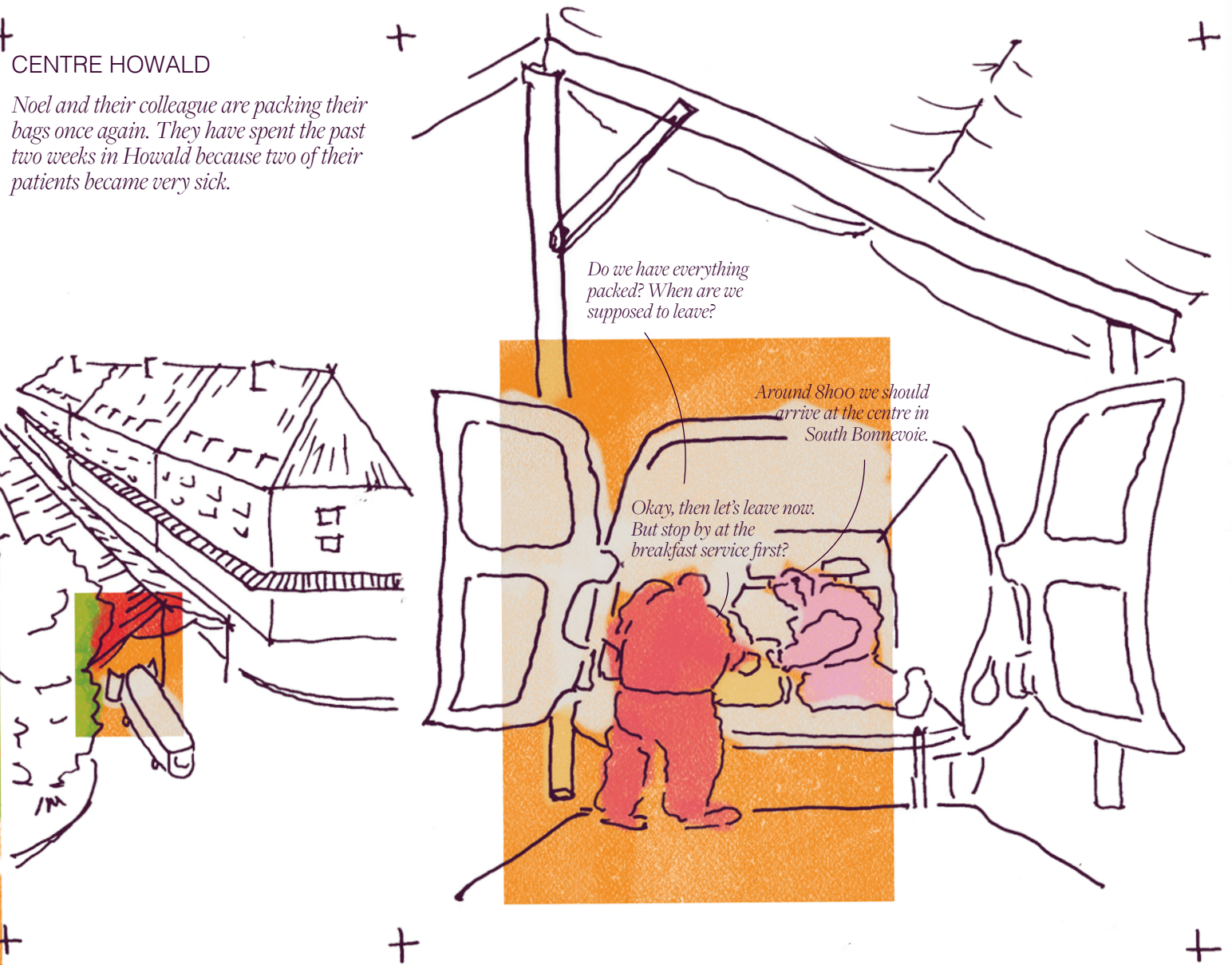
Well, it's the usual cleaning service. I also want someone to check the attic. Can you do that?

I will have to try. Otherwise, I can always call a colleague.



+ CENTRE HOWALD

Noel and their colleague are packing their bags once again. They have spent the past two weeks in Howald because two of their patients became very sick.



+ DWELLING BONNEVOIE

I wouldn't have to be here, but I enjoy helping them and making sure my mother is comfortable.

I hope they'll have more time today. My back has been feeling worse. I think the exercises they showed me last time are not helping.

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+ AROUND THE CORNER

I've heard today that the kitchen is organised by a group of new arrivals. When I checked the menu online, I didn't understand a word.

I am still sceptical about this concept with the changing kitchens. I think it's too much with all the other cooperative services. I am losing track.

Oh lovely, so I'll be seeing you again this evening. It's our next stop.

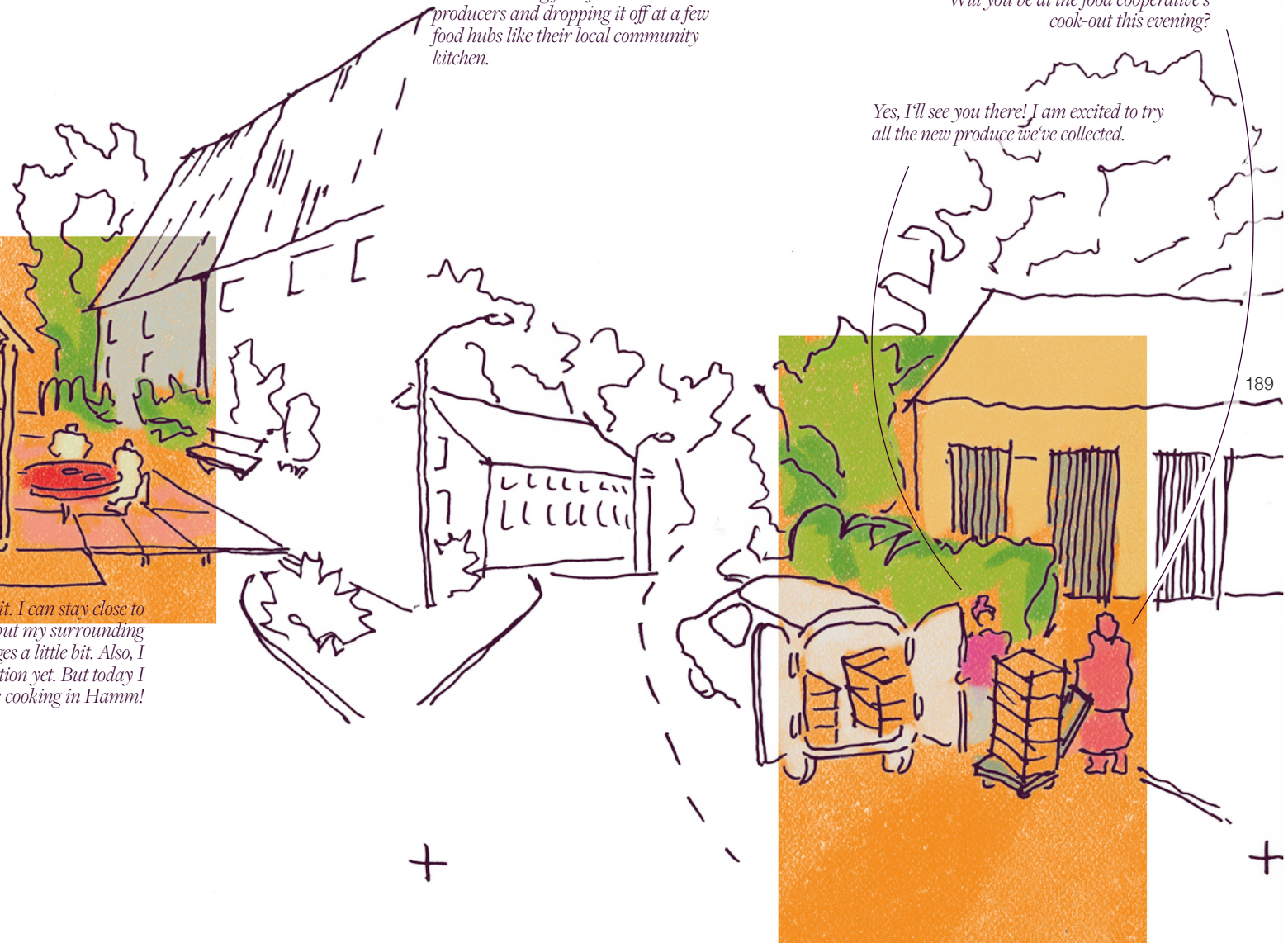
I quite enjoy home b... always chang... did not men... will be

+ BONNEVOIE - HAMM +

Marguerite is part of a food cooperative that is collecting food from local producers and dropping it off at a few food hubs like their local community kitchen.

Will you be at the food cooperative's cook-out this evening?

Yes, I'll see you there! I am excited to try all the new produce we've collected.



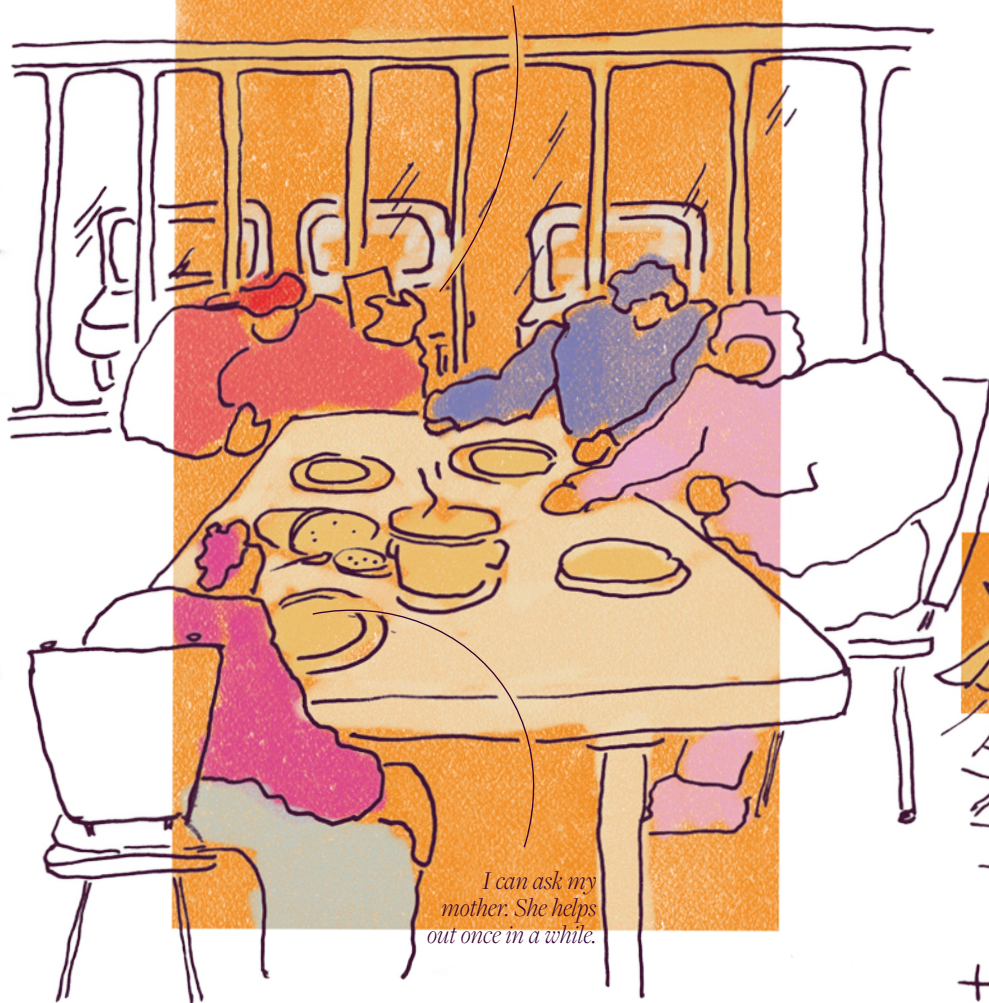
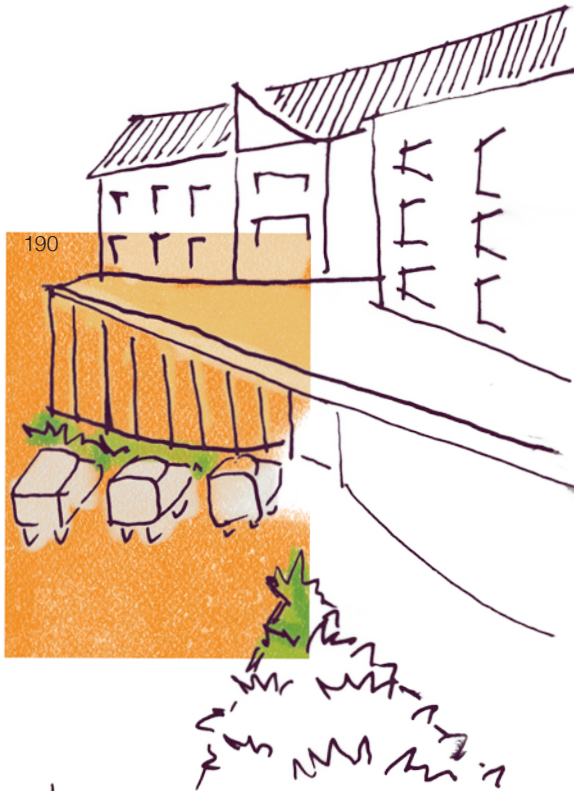
*it. I can stay close to
out my surrounding
ges a little bit. Also, I
tion yet. But today I
cooking in Hamm!*

+ SERVIROR HOWALD

Marguerite is having dinner with some of the members from her food cooperative at the hub in Howald.

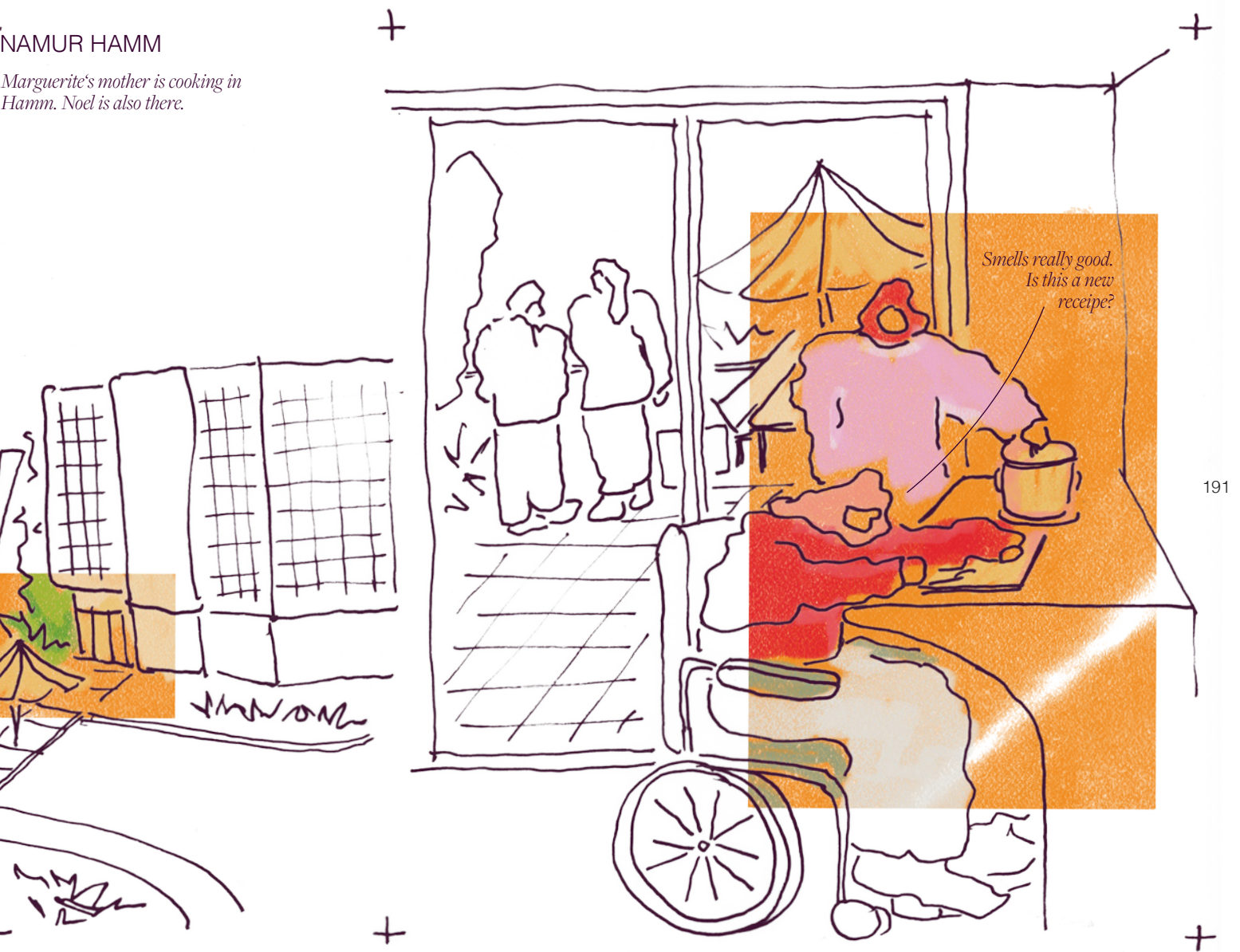
We have to think about how to distribute the new produce! Does anyone have good connections to cooking cooperatives?

I can ask my mother. She helps out once in a while.



NAMUR HAMM

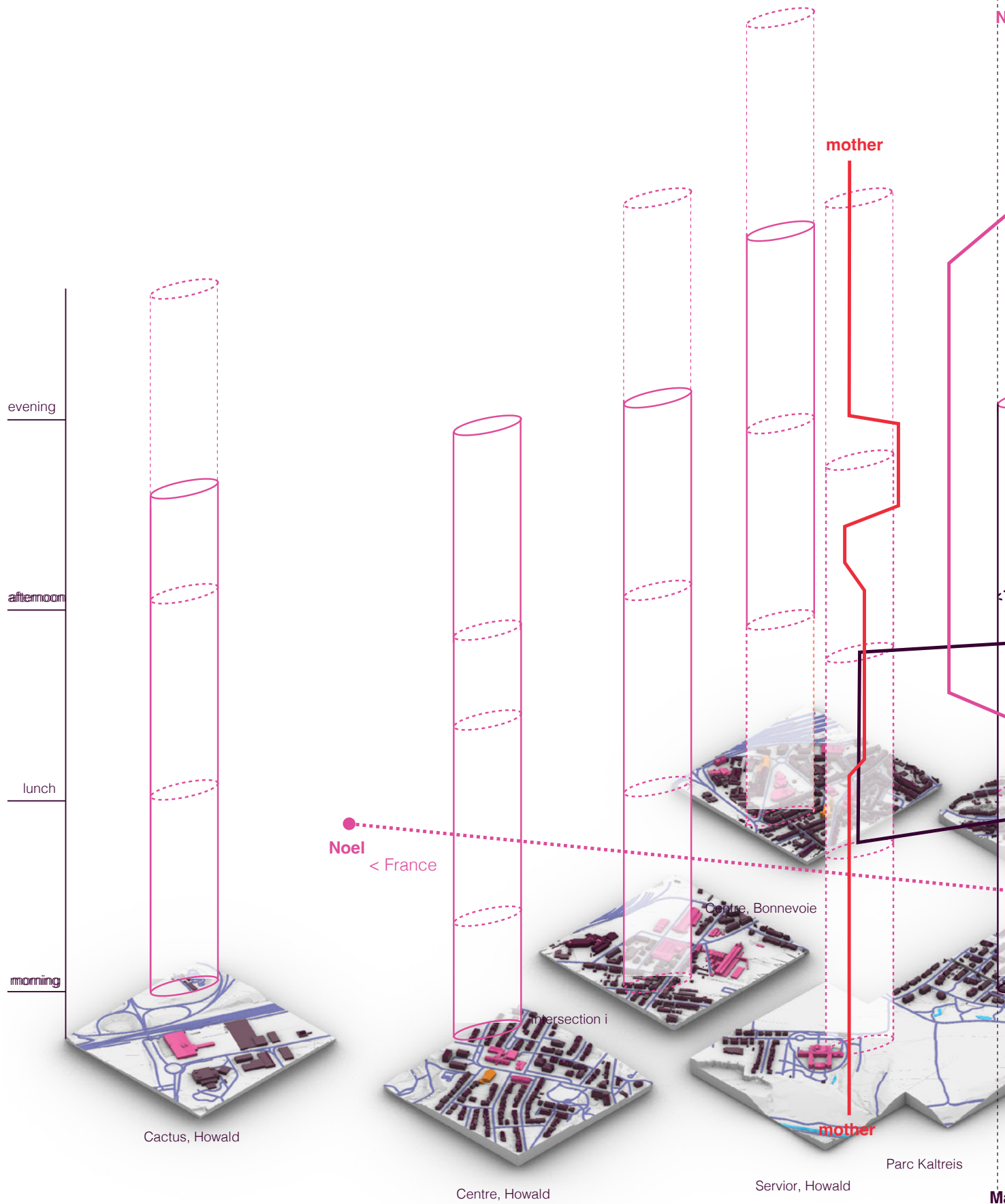
Marguerite's mother is cooking in Hamm. Noel is also there.

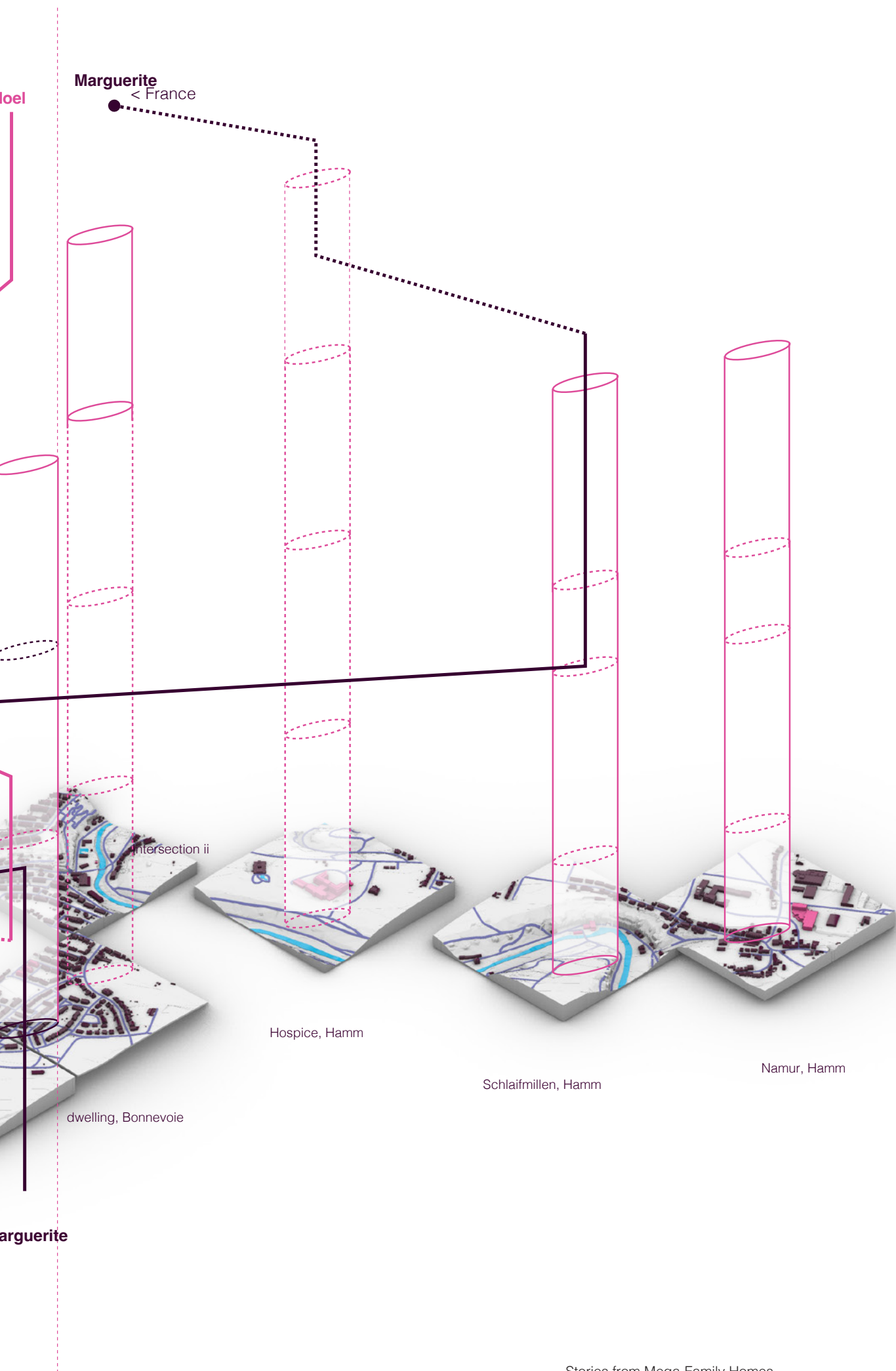


191

Story from a Nomad

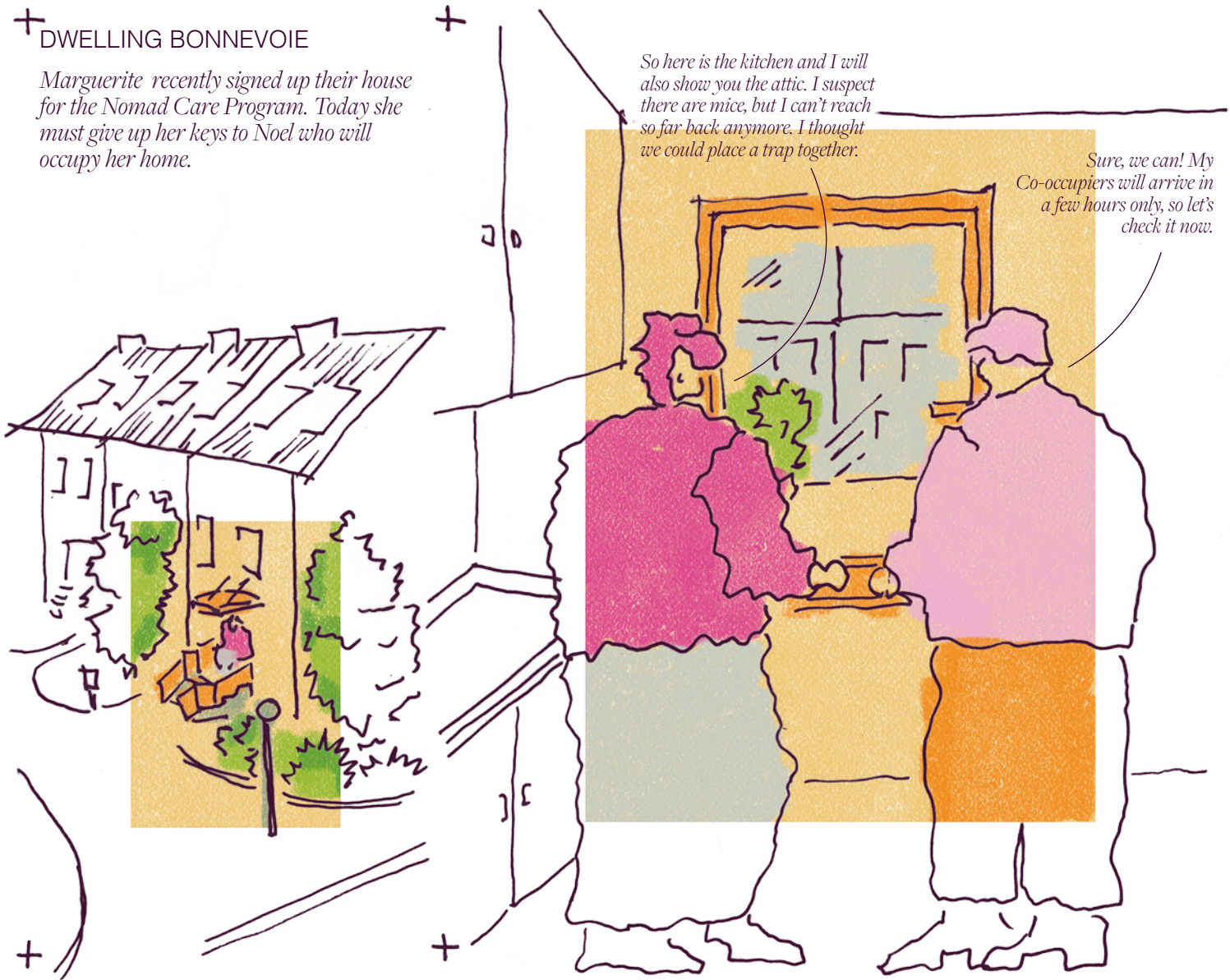
192





+ DWELLING BONNEVOIE

Marguerite recently signed up their house for the Nomad Care Program. Today she must give up her keys to Noel who will occupy her home.



KALTREIS BONNEVOIE

Noel is starting their shift at the Kaltreis care park.



Welcome everyone! Now, we are a small team here in Kaltreis but there are still lots of things to do! In a minute I will show you all our facilities! But first, let's introduce ourselves!



+ SERVIROR HOWALD

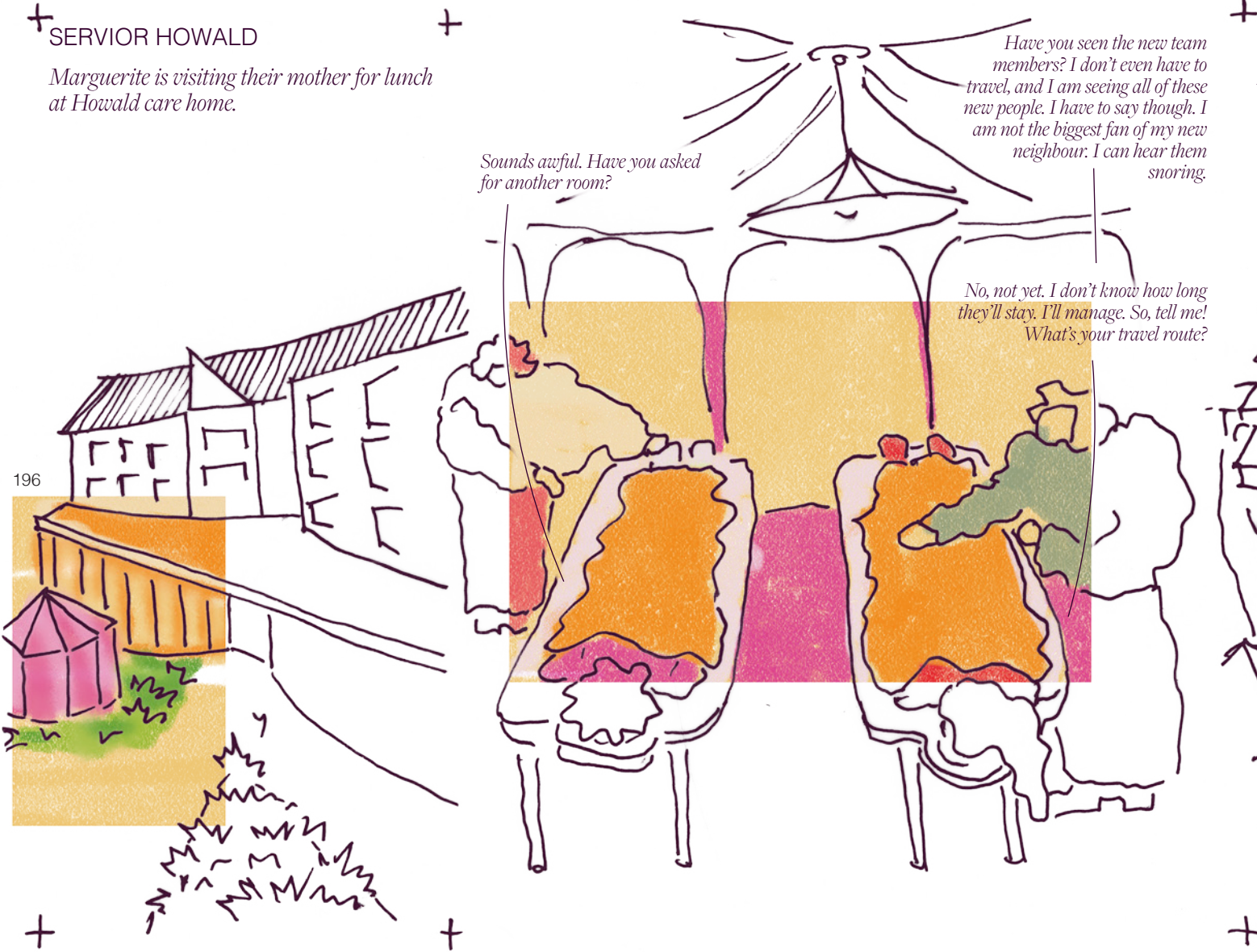
Marguerite is visiting their mother for lunch at Howald care home.

Sounds awful. Have you asked for another room?

Have you seen the new team members? I don't even have to travel, and I am seeing all of these new people. I have to say though. I am not the biggest fan of my new neighbour. I can hear them snoring.

No, not yet. I don't know how long they'll stay. I'll manage. So, tell me! What's your travel route?

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SCHLAIFMILLEN HAMM

Marguerite is unpacking their gear at the
Schlaifmillen Arts & Care Centre.

Welcome, I see you're making
yourself comfortable. Our art
meditation class starts in 10
minutes. For the statistics, I'll
just need to know where you're
from.

Actually, I am from Bonnevoie.
I just wanted to see what they
made out of this place. I haven't
been here, since they made all
these new paths.



Marguerite packed her gear and headed towards the express shuttle point in Hamm on the next day.

You look well equipped. Where are you heading?
I am visiting an old friend who moved here years ago with the program and then just stayed.

I am actually heading to France first. My new occupier gave me some addresses, they previously worked at. I am hoping I'll make it to the South at some point. But I am taking it slow.



KALTREIS BONNEVOIE

Noel is cheering an inclusive basketball team at the Kaltreis Park.

Could you quickly check the bathrooms? Some people have been complaining that the tap is leaking.

I've never fixed such a thing.

Yes, sorry. See, we are a small team. You can ask one of the nomads. They need physical help, but they can repair everything they'll know.



08 *Discussion*

| | |
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| 7.1 Comparison Experiments | 202 |
| 7.2 An Embodied Utopia | 205 |
| 7.3 Answering the Research Question | 208 |

Comparison Experiments

Today and Three Alternate Scenarios

As visible in *STORIES FROM MEGA-FAMILY HOMES*, the design implications of Chapter 06 have various consequences on the daily trajectories, radius of activity, relationships, daily annoyances, or joys of the presented persona. In the following section, these personal experiences are summarised and related to the three original institutions of care: the family, the state, and the market. This comparison aims to highlight the transformation of these institutions and their translation into the mega-family home by the experiments. Additionally, the comparison presents the consequences such transformations have on the ageing body and how it is treated and seen by others residing in the mega-family home.

In the institution of the family and its respective space the home, or private house, the experiments perform differently in the following sense: Concerning experiment i, the Commune, the ageing body is asked to share their available resources and land if they already occupy a home in a broader plot with a garden. Their home is parted or shared with newcomers because the home is being densified as a necessity in maintaining a close connection to mutual aid. Thus, these newcomers become part of their home. In this case, housing policies intrude on personal space. Property and the question of homeownership are given up and given to the community as a form of mutual aid.

In the Cooperative, the home for people already residing in their desired neighbourhood stays the same. However, due to nursing homes becoming extinct, multi-generational dwellings will become more common because families will remain together or other living models between chosen families will emerge. Additionally, housing is maintained through a cooperative, which takes over unoccupied territory such as parking lots and vacant buildings and repurposes old structures. In that case, housing is dealt with as a professional service and as an emergency or temporary means like squatting.

In the Nomad experiment, the body gives up the home to receive care elsewhere. Thus, the home becomes part of the program and the platform. The home is no longer a place assigned to a specific person or family but a location in a network of care maintained on a digital platform.

In the institution of the market and its respective spaces like cafés, restaurants, economic zones, and shopping malls, the three experiments perform differently in the following sense:

In the Commune, the market care components are replaced by a solidarity economy on the neighbourhood level or cross-neighbourhood collaboration in specialised health care services, for example. Current market spaces function as accelerators and meeting places but have become more open. Small businesses like local cafés, shops, or restaurants remain but are owned and organised through neighbourhood groups. Economic zones

Figure 129: Comparison Design
Experiments with today, Author's work

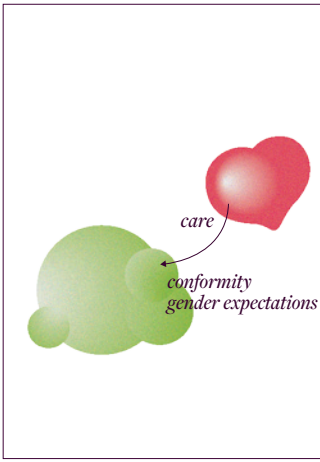
family

market

state

body

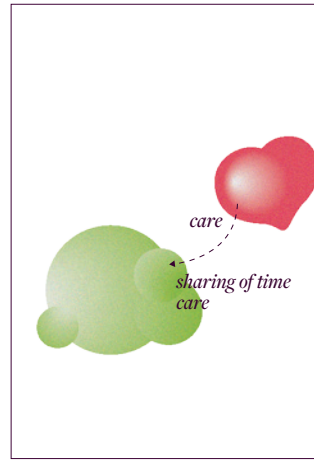
o today



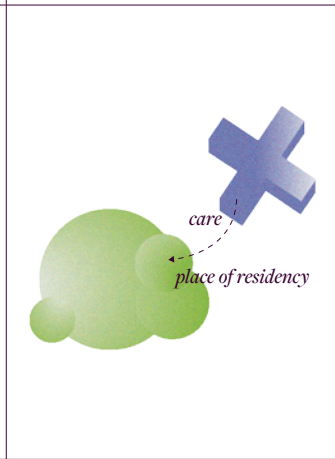
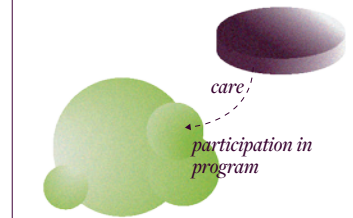
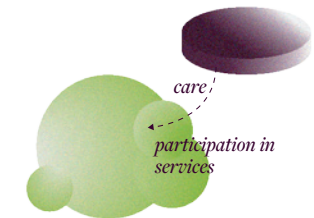
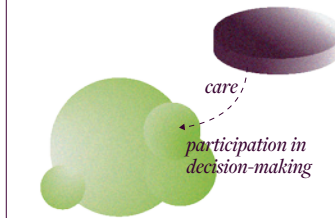
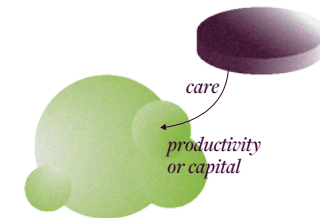
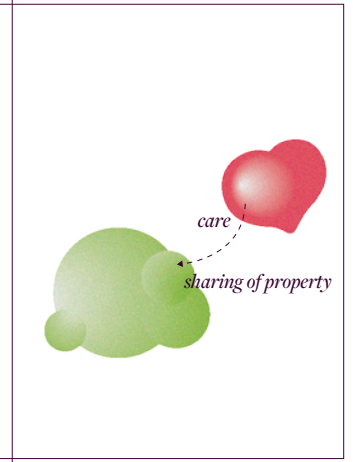
i commune



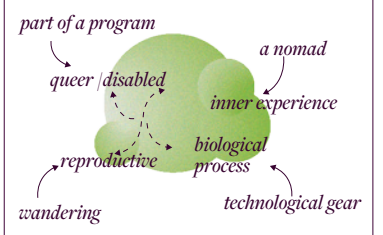
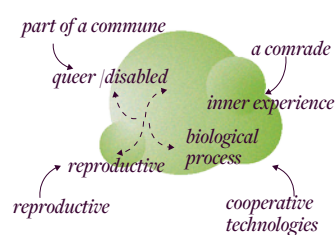
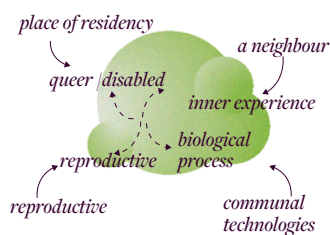
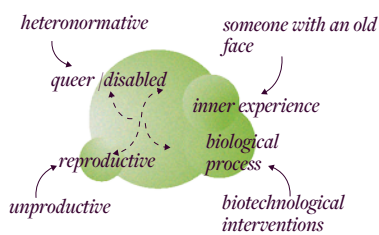
ii cooperative



iii nomad



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Discussion

After-Work

are transformed into mixed-use zones to accommodate new residents. All residents commit to community service while they are still agile. In the Cooperative, cross-neighbourhood collaboration is essential as the economy is organised on a municipal level. Cooperative businesses are owned and organised by workers. In some areas, these workers are professionals; in other places, they help where they can. Services can be exchanged via a Timebank. The cooperative maintains existing market spaces like cafés, shops, or restaurants and travels from hub to hub and occupies next to public streets and squares, dedicated market spaces. For the Nomad, the care economy is maintained through a regional platform that promotes the exchange between professional care workers and people needing care. Housing is traded for care.

In the institution of the state and its respective spaces like nursing homes and other public buildings, the three experiments perform differently in the following sense:

On a governmental level, the Commune makes decisions on a variety of residential levels, from councils in smaller centres to neighbourhood centres, as well as cross-neighbourhood councils. The common types of state care, such as nursing homes, become central locations of the urban fabric, whereas mobile services go extinct. These care homes are maintained and owned independently by each neighbourhood.

In the Cooperative, decisions are made in professional councils. Due to each profession operating on different scales, these councils also operated on different scales. A political cooperative acts as a mediator between different professional councils. This political cooperative travels from neighbourhood centre to neighbourhood centre to facilitate discussion and decision-making.

For the Nomad, services and spaces are integrated into a regional network. Spaces are maintained on-site, but ownership and primary agency lie in the hands of an overarching international body.

Consequently, the ageing body is included in the mega-family home on different preconditions in all three experiments. These conditions also suggest how the ageing body is seen by other residents of the mega-family home.

In the Commune, the ageing body becomes part of the mega-family home due to their place of residency. For the commune to function, they are expected to give up a certain independence over the private sphere. The ageing body is seen as a neighbour.

In the Cooperative, the ageing body provides services to the mega-family. While the type of service is unimportant, being part of a cooperative is essential to being part of the mega-family home.

Finally, the nomad almost entirely gives up their personal space to become part of the mega-family home. The ageing body is constantly between places and has only institutionalised spaces to retreat provided by the platform. In both the Commune and the Cooperative, the switch from the current carer-patient relationship to a more co-dependent relationship is visible since services are provided through mutual neighbourly or cooperative aid. For the nomad, this co-dependency is not as prevalent and might differ from plug-in to plug-in place.

In conclusion, while all three alternatives propose the organisation of communal care, the concept is understood at a variety of scales: from the neighbourhood (Commune), over the municipal (Cooperative), to the regional (Nomad). In all scenarios, the current main power of the state in the provision of care is replaced by respective councils. While such a replacement diminishes current norms imposed on the ageing body, the three alternatives are not free of expectations on the same body. By exposing these expectations, the three alternate scenarios further emphasise that planning care in current and alternative systems can be used as a tool to control. It is thus important that these decisions are openly discussed and made with a wide range of people to reintroduce agency to the ageing body, which often diminishes because of care needs. This further exemplifies that dissent as a value is a crucial component in the realm of planning with care beyond binaries.

An Embodied Utopia

The Purpose of this Thesis

With this in mind, the purpose of this thesis is not necessarily to propose an improved care system that I wish to implement but to accelerate the discussion surrounding by who, why, and how care work is being done now and in the future.

The use of utopian precedents has two reasons. One is my personal fascination for projects such as Fourier's phalanstère or the designs by Archigram and my willingness to learn from them. The other and more important one is their capability to expose, criticise, and transcend current paradigms. Because Utopia is not only a fantasy of another place and time but proposes emergence in a moment of crisis (Paris, 2024). While the rise in care needs is not an immediate crisis, this study has revealed its relation to economic growth and social coercion, which puts the environment and many members of society in constant crisis. Consequently, how we plan care in the future is an essential question and challenge. As revealed, the current system is often corrupted, so understanding its ideology and function is crucial.

Moreover, ageing bodies are often excluded from existing built utopian projects (Hester & Srnicek, 2023). This study thus uses an idea of embodied utopia (Zorach, 2001) and aims to expose bodily experience in different scenarios and what it tells us about the agency of someone who needs care over the decisions they can or cannot make. As argued, while the three alternate scenarios diminish existing norms, they raise other expectations. In my judgment and from my experience on-site, the intrusive strategies of some experiments in private family spaces such as the home are the most difficult to translate. This is especially visible in the effort and care some residents put on their private homes and gardens (Figure, 140). One such intrusive strategy is most exaggerated in the experiment of the Nomad in

which the ageing body gives up their home to receive their needed care. The ageing body is thus asked to bow out from its known surroundings which may cause additional stress or feelings of non-belonging. Simultaneously, this is already happening to some people who must move to nursing homes at the current time.

Depending on the familiarity of someone with a certain system, they might not be able to see these norms or expectations. By exposing them to alternative scenarios, these norms become more prevalent. This concept of ambiguous utopia is often used by Ursula K. Le Guin in her literature (Theall, 1975). For example, in “The Dispossessed”, the main character Shevek is confronted with a different understanding of freedom than what he is used to. On his home planet society is classless and does not have or even refer to property in language. When he is sent to another planet with a class system and he encounters the freedoms of the riches he is very overwhelmed. He never saw the inflicted community service on his home planet as a restriction to his personal freedom but mainly as a duty to the community (Le Guin, 1974).

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I encountered a similar instance on my site visit to the Familistère in Guise (Appendix 08) which I had idealised as a built form of Utopia. The familistère was built following the concepts of Fourier as a communal workers’ dwelling. In the exhibition, contemporary witnesses outline their appreciation for the conviviality in the Familistère but also reveal its imposing structures or practices of exclusion. One woman describes that once the husband, who worked for the factory or cooperative, died, their non-working wife was expected to move out. Such a practice of inclusion through devotion to a community is also present in the scenarios of the Commune and the Cooperative, where members are expected to share space or time with the community.

In conclusion, this study exposes existing and alternative structures. In all structures, the notion of agency, as in the ability to craft our own lives and make decisions that shape our collective future, is central. Yet, as the thesis explores, the concept of current planning paradigms or utopian alternatives is not without its critiques. The study thus highlights the importance of self-emancipation and collective planning.

I further want to conclude this research by formulating three guiding principles crucial to progressing in the realm of urbanism, spatial planning, and reproductive labour:



Figure 130: Carefully Maintained Lawn outside of a Home in Howald, Author's Work

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Access to Land and Care: Land and property should be explicitly addressed as communal and local assets, serving as means for intergenerational care. Ownership and governance of land must be sustained through collective decision-making within the mega-family home.

The Capability of Space and Care Economics: Space must be understood in relation to the prevailing economic system. Spatial transformations have the potential to reshape the economic system, particularly when it is on the verge of collapse. Moreover, space can bring to light and amplify hidden economic practices, such as many reproductive activities, making them more visible and acknowledged.

Temporalities of Care: Time is a crucial element in planning. Care needs vary greatly over different time frames, daily, monthly, yearly, or over a lifetime, and must be considered. By addressing these evolving needs and shifting away from the notion of permanence, urban design and economic models can be reimagined to provide diverse options for everyone engaging in care work.

Answering the Research Question

main question

How can **alternative concepts of reproductive labour** contribute to a socio-spatial transformation of **existing spaces and networks** of aged care in Luxembourg?

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Developing Alternative Concepts of Reproductive Labour

By envisioning alternative concepts on reproductive labour in the realm of aged care the thesis employs and scrutinises aspects of the current system. All alternative visions are based on existing spaces and networks of care which have been reutilised, maximised, or minimised according to each scenario. By relating them to an imaginary experience through the means of speculative storytelling, the reader is forced to reflect on the alternatives as well as the existing structures. This reflection is meant to provoke the reader and their possible familiarity with the welfare state and economy while sparking inspiration for further research or experiments. The thesis examines how economy and culture influence individuals' perspectives, lifestyles, and caregiving strategies. It draws on historical analyses, interviews, and field trip observations to gather narratives. By envisioning potential futures, the study underscores the significance of justice and dissent and aims to spark discussions that lead to meaningful change.

Contributing to Socio-Spatial Transformation

Rather than propose a plan that is to be implemented, this study aims to change the way we understand the world and the way we live, thereby initiating societal transformation. To truly plan care beyond existing binaries is not possible for someone like me and many others who are so used to these binaries, and thus, this cannot be fully addressed in this study. Ableism, ageism, and classism are so engrained in planning, culture, and economy as well as in people's thinking that planning beyond that will take much unlearning through many generations. A major aspect of this unlearning is to acknowledge social interdependence between generations and to overcome prejudices towards other generations on the one hand. On the other hand, this transformation can only occur when resources such as access to land or care are equally shared amongst existing and future generations. The alternatives presented in this thesis offer a first glimpse as to how such sharing of resources could look, in the form of densification (Commune), professionalisation and repurposing (Cooperative), or increased mobility (Nomad).

Since maintaining a certain level of wealth and welfare is at the forefront of current spatial and economic planning, it is questionable to what extent more independence and power will be given to workers and care receivers. However, protests in Luxembourg concerning recent changes in care education, as well as the threat of a lack of staff, may induce different ways of thinking about care. At the same time, people are starting to question the growth paradigm because they see the effects it has on their built environment, infrastructure, and nature.

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09 *Reflection*

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Reflection

On the Project and the Studio

The topic of my graduation project aligns very much with concepts employed in the studio of Planning Complex Cities. On the one hand, the case study of Luxembourg represents a complex region in transformation. Challenges such as the competing housing market and the security of public social systems due to migration and ageing represent complex issues to deal with in the realm of spatial planning. Moreover, the project engages with the concept of planning as a critically engaged method, through its active questioning of current structures in care provision and governance. The thesis discloses binary conceptions in social reproductive labour imposed by family, welfare state, and market paradigms alike. Lastly, the thesis with its method of design experimenting through scenario-building and designing based on former utopian precedents aligns with the understanding of urban planning as a future projective discipline.

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On the Project and the Master Program

The thesis further aligns with the approach of the Urbanism Master Track to integrate social, cultural, economic, and political perspectives into urban design and planning. The thesis references a large variety of concepts based on political and labour theory, as well as gender studies and critical cultural gerontology. It thus employs extensive research on aspects that concern local trends in housing, mobility, and care needs, combined with a larger perspective on the general ageing of the European population. A main component of the graduation project is the critical analysis of current spaces of care in general, as well as the application of the case study, which is a main component of the master track. It proposes a sustainable solution for aged care provision through the rethinking of current models and spaces. The methods used also reflect the skills used in design practice and social sciences and thus correlate with the MSc AUBS in its blended research.

On the Scientific Relevance

There is a wide range of information on challenges and problems presented by demographic change and an ageing society. However, there is a lack of concrete strategies at various levels of politics, economy, and society to address these challenges (IZAH, 2023). While my project does not deliver concrete strategies, it presents the translation of strategies depending on a scenario into an alternate reality. The thesis explores the role of speculative scenarios in revealing structures of past and present spatial planning and how to seek inspiration and find a vision for a future aim of spatial planning. This study precedents a review of a variety of communal strategies in urban models and builds on the concept of Communal Care as introduced by Hester and Srincek (2023) or O'Brien (2023). Additionally, the thesis highlights challenges encountered when dealing with care provision through communal organisation in different spatial settings. Moreover, many contemporary concepts of ageing centre around a form of active ageing which hides certain aspects inherent to ageing. Rather than making old age fit into current economic systems of efficiency and optimisation, my thesis explores possibilities to learn from non-normative experiences of ageing and thus builds on the concept of Queering Ageing Futures as introduced by Sandberg & Marshall (2017). Additionally, this study reveals the interconnectedness between the home and care building on Leinfelder et al. (2023).

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On the Social Relevance

This study highlights the significance of care in an ageing society. By firstly analysing the often-opposing definitions of private and public space with Arendt (1998) and later understanding both the welfare state, the family, and the market, as institutions of care provision, as introduced in O'Brien (2023), I explore alternative concepts. Both areas of analysis are deep space- and culture-bound, in for example more individual or collective environments. From an understanding of these areas, I present scenarios that foster and/or renounce local concepts of care provision, moving from a substantive way of planning care services to a more procedural and contextualised approach. The thesis therefore deals with organising care differently from contemporary societal notions and binaries. It actively questions social norms in the realm of aged care provision. By this, the thesis reveals not only the existing paradigm present in care provision but also challenges the reader and raises more questions concerning individual rights and aspirations in a communal setting as well as agency and independence while ageing or in need of care.

On the Transferability

The thesis deals with questions that are apparent in a variety of contexts, cultures, and countries. However, the context of a strong welfare state in care and social services as present in Luxembourg is unique even when compared to other countries within the EU. In many other similar countries, such as Germany, France, or the Netherlands, larger parts of long-term healthcare services have been and continue to be privatised. The same process is occurring in Luxembourg although not as strongly. Compared to other countries it is easier to gain an overview of important actors in this field. The welfare state presents certain elements that accelerate urban sprawl and unhinged urban growth, such as the pension coupled with the index and small tax policies (Hesse, 2016). This makes the growth paradigm very present in this context but similarities can be found in other regions. Also, international connections and collaboration in certain matters are not unique but at least special: for example, cross-border workers and bus lines or just the amount of cross-border traffic. Therefore, the nomad experiment is one that is more context-specific. However, the main results of the thesis, which expose norms and current and alternative care scenarios, are more or less transferable to other north-western European or even North American countries, whereas the spatial implications are more specific in the context.

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On Research and Design

Research by Unlearning & Understanding

Unlearning built the theoretical research, while Understanding built the spatial analysis through a variety of different methods, including qualitative and quantitative analysis. By starting with the literature review, shaped the approach and outcome of the spatial analysis (Figure 141).

By analysing the norms which are apparent in the current spatial setting of care work about the elderly along three to four main themes, including the body, the family, the state, and the market, this theoretical approach built the basis for the spatial analysis. Linking a variety of different spaces to the aspect of care allowed me to explore and include a variety of aspects on-site, such as housing typology and the critical reflection on the typology of care homes.

This moment of unlearning in the beginning was crucial in my thesis, and it shaped further analysis and the outcome. On the other hand, interacting with the site and with people during the field trip made the thesis topic more grounded and limited in a good way. The case study was relatively clear in terms of the main actors in care provision, as well as the economic and spatial settings, which made dealing with such a broad topic attainable.



Figure 131: Reflection on Methods used, Author's Work

Research by Unlearning & Experimenting

Speaking of the outcome, the early theoretical research also made me realise that I am shaped by my biases and expectations growing up with a welfare state and its care systems. From the beginning of engaging with the theory, I knew that reflecting all concepts in a designerly outcome would be difficult. Looking back now, I am not sure I did the theory complete justice. I still found it challenging to spatially apply some of the radical concepts presented in O'Brien (2023), which discuss a post-revolutionary status. Imagining this scenario was particularly difficult for me, as I do not want to envision anyone in crisis and I do not think I have the ability to do any revolutionary act justice with a master thesis.

Thus, quite early on, I wanted the design part, so to speak, the Experimenting, to be as open as possible and reflect my struggle of unlearning. I wanted to push myself from continuous small improvements in designer interventions to understand and denounce the bigger picture. Although I think I am still far from that, the three alternate scenarios are a first step and already raise important questions on agency, individuality, and collectiveness when giving or receiving care.

Research by Understanding & Experimenting

In this case, exploring the topic on-site was important. On the one hand, the spatial context of Luxembourg was very valuable in forming my aspiration to work with alternate and speculative scenarios. On the other hand, the spatial setting of the country shows such a variety, and even in the three neighbourhoods I investigated further, it also made me realise that working with common concepts such as the city as commons would not be sufficient because of the low density of some areas. This was also mentioned in one of the interviews I did. Cross-border mobility was also an aspect

that fascinated me, and I wanted to be reflected in a designerly outcome. Since the welfare economy in Luxembourg is rather broad, the site allowed me to move beyond visions of distributive justice and look at alternative scenarios that question the power of the welfare state and its relation to the economic growth paradigm. Linking both approaches through the means of storytelling was important because it is a critical reflection of someone's personal experience.

Lessons for Education

I am grateful for the opportunity to develop this thesis. My mentors provided the time and patience needed to immerse myself in the theory, grapple with the context, and struggle with the design. When I started engaging with the topic, I received many comments, excluding my mentors, suggesting I pick a target group. However, I never wanted to design for a specific person but rather for an activity that involves everyone. The lessons I learned from engaging in these methods emphasise the importance of creating space and time for students to explore. Additionally, it is crucial to allow daily life's complexity and intricacy to inform analysis, design, and research. If I had picked a single target group, I would not have been able to address the interconnectedness of family, state, and market when it comes to addressing care work. Education should allow for struggle, failure, and the unexpected because meaningful critiques of today and visions for the future can emerge mainly through these. Especially in the context of polycrises, when business as usual has proven not to solve the causes of these, education should be give the space for trial and error, and additionally should allow for conflicting opinions.

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On the Limitations of the Research

The research faced limitations stemming from the challenge of conceiving alternative scenarios that would radically transform current systems, a task advocated by some of the literature referenced. This difficulty is compounded by the study's focus on an existing context rather than on the creation of entirely new structures, as seen in certain utopian socialist (and colonial) models such as Fourier's Phalanstère.

Much of the literature delves into the concept of communal care within a post-revolutionary framework (especially in O'Brien, 2023), when property has been abolished through workers' revolts. They often advocate not only for the abolition of the family but also for that of the state and borders.

While these ideas are intriguing, they extend beyond both the scope of this thesis and my own imaginative capacity being deeply socialised in concepts of family, welfare, and nation-state.

In this regard, witnessing my student colleague's thesis on the purpose of nation-building to gain independence in the context of ongoing geopolitical conflict, I found it very difficult to include border-abolitionist concepts

in this study. While I personally have an interest in anarchist movements, I did not find it necessary to explicitly include them in this project. Consequently, I saw a limit in implementing the theoretical research fully into the design outcome of an urbanism project.

This study also does not dive deeper into specific care relations which are prevalent in dealing with dementia or mental disabilities but investigates care work on a general level of a generic receiver and giver.

On Ethical Considerations Encountered

During the research

Arendt (1998) claims bodily matters as the most private ones and the most difficult to communicate. This is one crucial element in my project, as for many people the need for care is considered private and people may often feel ashamed of it. I am aware that I developed this project as an able-bodied and young person. At the same time, I wish to contribute to a different understanding of care needs. However, I am aware that such a change in understanding takes time or may never occur because of biases.

I struggled sometimes with doing interviews because I was overwhelmed by the amount of information people were willing to share. This information was often on their vulnerable position, which I had not specifically asked for. I think a method such as interviewing could be integrated in the graduation trajectory for example as an Intensive Course since many students use it and its an important aspect of urban-social research.

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During the design

Another aspect is by building scenarios based on local social behaviour and necessary changes; I actively suggest behaviour change. It is yet unclear how change of behaviour is influenced, enforced, or appreciated by local actors. Benhabib (1993) raises the concern that when dealing with private as political matters one may lead in feminist thinking to “authoritarian utopias” (Benhabib, 1993, p. 100). In the thesis, I actively use utopian precedents to showcase a possible future through scenarios. These scenarios are first and foremost tools for me to test my role as a designer and do not intend to cause any outside action. Moreover, as mentioned before, I use these alternatives to reveal the norms and expectations of both existing and alternative settings.

*On The Purpose of the Thesis**

The purpose of this thesis is not necessarily to propose an improved care system that I wish to implement but to accelerate the discussion surrounding by who, why, and how care work is being done now and in the future.

The use of utopian precedents has two reasons. One is my personal fascination for projects such as Fourier's phalanstère or the designs by Archigram and my willingness to learn from them. The other and more important one is their capability to expose, criticise, and transcend current paradigms. Because Utopia is not only a fantasy of another place and time but proposes emergence in a moment of crisis (Paris, 2024). While the rise in care needs is not an immediate crisis, this study has revealed its relation to economic growth and social coercion, which puts the environment and many members of society in constant crisis. Consequently, how we plan care in the future is an essential question and challenge. As revealed, the current system is often corrupted, so understanding its ideology and function is crucial.

Moreover, ageing bodies are often excluded from existing built utopian projects (Hester & Srnicek, 2023). This study thus uses an idea of embodied utopia (Zorach, 2001) and aims to expose bodily experience in different scenarios and what it tells us about the agency of someone who needs care over the decisions they can or cannot make. As argued, while the three alternate scenarios diminish existing norms, they raise other expectations. In my judgment and from my experience on-site, the intrusive strategies of some experiments in private family spaces such as the home are the most difficult to translate. This is especially visible in the effort and care some residents put on their private homes and gardens (Figure, 142). One such intrusive strategy is most exaggerated in the experiment of the Nomad in which the ageing body gives up their home to receive their needed care. The ageing body is thus asked to bow out from its known surroundings which may cause additional stress or feelings of non-belonging. Simultaneously, this is already happening to some people who must move to nursing homes at the current time.

Depending on the familiarity of someone with a certain system, they might not be able to see these norms or expectations. By exposing them to alternative scenarios, these norms become more prevalent. This concept of ambiguous utopia is often used by Ursula K. Le Guin in her literature (Theall, 1975). For example, in "The Dispossessed", the main character Shevek is confronted with a different understanding of freedom than what he is used to. On his home planet society is classless and does not have or even refer to property in language. When he is sent to another planet with a class system and he encounters the freedoms of the rich he is very overwhelmed. He never saw the inflicted community service on his home planet as a restriction to his personal freedom but mainly as a duty to the community (Le Guin, 1974).

I encountered a similar instance on my site visit to the Familistère in Guise (Appendix 08) which I had idealised as a built form of Utopia. The familistère was built following the concepts of Fourier as a communal workers' dwelling. In the exhibition, contemporary witnesses outline their

*this section is copied from the section "Embodied Utopia" in Chapter 08 Discussion, page 205. From the reading flow of the thesis this part made more sense to include in the Discussion section. It is copied here for reasons of completeness.

appreciation for the conviviality in the Familistère but also reveal its imposing structures or practices of exclusion.

One woman describes that once the husband, who worked for the factory or cooperative, died, their non-working wife was expected to move out. Such a practice of inclusion through devotion to a community is also present in the scenarios of the Commune and the Cooperative, where members are expected to share space or time with the community.

In conclusion, this study exposes existing and alternative structures. In all structures, the notion of agency, as in the ability to craft our own lives and make decisions that shape our collective future, is central. Yet, as the thesis explores, the concept of current planning paradigms or utopian alternatives is not without its critiques. The study thus highlights the importance of self-emancipation and collective planning.

I further want to conclude this research by formulating three guiding principles crucial to progressing in the realm of urbanism, spatial planning, and reproductive labour:

Access to Land and Care: Land and property should be explicitly addressed as communal and local assets, serving as means for intergenerational care. Ownership and governance of land must be sustained through collective decision-making within the mega-family home.

The Capability of Space and Care Economics: Space must be understood in relation to the prevailing economic system. Spatial transformations have the potential to reshape the economic system, particularly when it is on the verge of collapse. Moreover, space can bring to light and amplify hidden economic practices, such as many reproductive activities, making them more visible and acknowledged.

Temporalities of Care: Time is a crucial element in planning. Care needs vary greatly over different time frames, daily, monthly, yearly, or over a lifetime, and must be considered. By addressing these evolving needs and shifting away from the notion of permanence, urban design and economic models can be reimagined to provide diverse options for everyone engaging in care work.



Figure 132: Carefully Maintained Lawn outside of a Home in Howald, Author's Work

10 *Bibliography*

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AffectLab. (2023). A City Eating Itself. (In Less than 10 Minutes). Drukkerij Raadraaier SSP.

Albert, I. (2021). Perceived loneliness and the role of cultural and intergenerational belonging: The case of Portuguese first-generation immigrants in Luxembourg. *European Journal of Ageing*, 18(3), 299–310. <https://doi.org/10.1007/s10433-021-00617-7>

Albert, I., & Murdock, E. (n.d.). Kulturelle Diversität im Alter, Zugehörigkeitsgefühle und intergenerationale Transmission. Vor-druck. Universität Luxemburg. Retrieved 21 February 2024, from https://orbilu.uni.lu/bitstream/10993/55210/1/Kulturelle%20Diversit%C3%A4t%20im%20Alter_Au-thor%20PrePrint.pdf

Andrews, G., & Duff, C. (2019). Understanding the vital emergence and expres-sion of aging: How matter comes to matter in gerontology's posthumanist turn. *Journal of Aging Studies*, 49, 46–55. <https://doi.org/10.1016/j.jaging.2019.04.002>

Angelis, M.D. (2022). The City as a Commons: Diffused Governance for Social and Ecological Reproduction. In *Post-Growth Planning*. Routledge.

Angelis, M. D. (2017). *Omnia Sunt Communia*. On the Commons and the Transformation to Postcapitalism. Zed Books.

Arendt, H. (1998). *The Human Condition*. The University of Chicago Press.

Bhattacharya, T. (Ed.). (2017). *Social Reproduction Theory: Remapping Class, Re-centering Oppression*. Pluto Press. <https://doi.org/10.2307/j.ctt1vz494j>

Benanav, A. (2020). *Automation and the Future of Work*. Verso Books.

Benhabib, S. (1993). Feminist theory and Hannah Arendt's concept of public space. *History of the Human Sciences*, 6(2), 97–114. <https://doi.org/10.1177/095269519300600205>

Bohle, D., & Seabrooke, L. (2020). From asset to patrimony: The re-emergence of the housing question. *West European Politics*, 43(2), 412–434. <https://doi.org/10.1080/01402382.2019.1663630>

Bost, T. K., & Höweler, E. (2013). Ownership to Membership. *Collective Consumption as Urban Strategy*. MONU. Communal Urbanism., 18.

Burton, E., & Mitchell, L. (2006). *inclusive urban design*. Streets for life (first edition). Elsevier Ltd.

Carette, J. (2023). Fred Keup: «Une im-migration sélective serait une bonne piste de solution». *virgule-online*. <https://www.virgule.lu/luxembourg/fred-keup-une-immi-gration-selective-serait-une-bonne-piste-de-solution/3755545.html>

Centre commun de la sécurité sociale. (2024). Organisation. <http://ccss.public.lu/fr/ccss/organisation.html>

Christmann, N. (2018). How are recent housing trends in the Greater Region perceived in the respective cities? <https://www.science.lu/my-research-90-seconds/how-are-recent-housing-trends-greater-re-gion-perceived-respective-cities>

CNDS. (2021). CNDS | Comité national de défense sociale. <https://cnds.lu/>

COPAS. (2024). Membres – COPAS. <https://www.copas.lu/a-propos/membres/>

Dalla Costa M. & James S. (1972). *The power of women and the subversion of the community*. Falling Wall Press.

De Beauvoir, S. (1973). *The Coming of Age*. Warner Paperback Library.

De Decker, P. (2019). Ik woon, dus ik ben. [Webpage]. <https://www.weliswaar.be/welzijn-zorg/ik-woon-dus-ik-ben>

Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. The MIT Press.

Endnotes. (2011). *Communisation and Value-Form Theory* by Endnotes. <https://endnotes.org.uk/articles/communisation-and-value-form-theory>

Engels, F. (1845). *Conditions of the Working-Class in England*. <https://www.marxists.org/archive/marx/works/1845/condition-working-class/>

Eurofound. (2020). *Long-term care workforce: Employment and working conditions*. Publications Office of the European Union.

European Commission. (2021). *Green Paper on Aging. Fostering Solidarity and Responsibility between Generations*.

Federici, S. (2004). *Caliban and the Witch. Women, the Body and Primitive Accumulation*. Penguin Books.

Feltgen, V. (2009). Sozialräumliche Unterschiede in Luxemburg-Stadt. In *Der Luxemburg Atlas / Atlas du Luxembourg* (pp. 160–161). Emons Verlag. <https://liser.elsevierpure.com/fr/publications/le-vieil-lissement-au-luxembourg>

Ferring, D., Heinz, A., Peltier, F., & Thill, G. (2013). *Ältere Menschen in Luxemburg*.

Fondation Pescatore. (2016). *Résidence Berlaimont*. <https://www.fondation.lu/fr/Residence-Berlaimont/>

Foucault, M. (1975). *Society Must Be Defended. Lectures at the Collège de France*. <https://cpb-us-e1.wpmucdn.com/sites.psu.edu/dist/d/37602/files/2016/01/Foucault-Society-must-be-defended14032016.pdf>

Foucault, M. (1980). *The Eye of Power. A Conversation with Jean-Pierre Barout and Michelle Perrot*.

Foucault, M., & Miskowiec, J. (1986). *Of Other Spaces*. *Diacritics*, 16(1), 22. <https://doi.org/10.2307/464648>

Fourier, C. (1822). *Traité de l'association domestique-agricole*. Bossange.

Fleury, C., Borsenberger, M., Cassilde, S., & Lorentz, N. (2011). *Solidarités intergénérationnelles. Le cas de la génération pivot*.

Folbre, N. (2001) *The Invisible Heart. Economics and Family Values*. The New York Press.

Gabauer, A., Knierbein, S., Cohen, N., Lebuahn, H., Trogal, K., Viderman, T., & Haas, T. (2021). *CARE AND THE CITY: Encounters with Urban Studies* (p. 236). Scopus. <https://doi.org/10.4324/9781003031536>
Gorz, A. (1985). *Paths to Paradise: On the Liberation from Work*. Pluto Press.

Gantenbein, M. (2023). Copas befürchtet akuten Personalmangel „in zwei bis drei Jahren“. *luxemburger-wort-online*. <https://www.wort.lu/politik/copas-befuerchtet-akuten-personalmangel-in-zwei-bis-drei-jahren/1403008.html>

- Gerber, P., Fleuret, S., & Schneider, M. (2009). Quel Bien-être pour les personnes âgées? In *Der Luxemburg Atlas / Atlas du Luxembourg* (pp. 160–161). Emons Verlag. <https://liser.elsevierpure.com/fr/publications/le-vieillissement-au-luxembourg>
- Gumbs, A. P., Martens, C., & Williams, M. (2016). *Revolutionary Mothering: Love on the Front Lines*. PM Press.
- Hagestad, G. O., & Uhlenberg, P. (2005). The Social Separation of Old and Young: A Root of Ageism. *Journal of Social Issues*, 61(2), 343–360. <https://doi.org/10.1111/j.1540-4560.2005.00409.x>
- Haraway, D. J. (1985). *Cyborg Manifesto*.
- Harvey, D. (2003). The right to the city. *International Journal of Urban and Regional Research*, 27(4), 939–941. <https://doi.org/10.1111/j.0309-1317.2003.00492.x>
- Hayden, D. (1981). *The Grand Domestic Revolution*.
- Hayes, M. T., Sameshima, P., & Watson, F. (2015). Imagination as Method. *International Journal of Qualitative Methods*, 14(1), 36–52. <https://doi.org/10.1177/160940691501400105>
- Hägerstrand, T. (1970). What about people in regional science. *Regional Science Association*, 24. <http://courses.washington.edu/cee500/What%20about%20people%20in%20regional%20science.pdf>
- Heindl, G. (2022). *Stadtkonflikte. Radikale Demokratie in Architektur und Stadtplanung*. mandelbaum.
- Hertweck, F. (2020). *Architektur auf gemeinamen Boden. Positionen und Modelle zur Bodenfrage*. Lars Müller Publishers.
- Hesse, M. (2016). On borrowed size, flawed urbanisation and emerging enclave spaces: The exceptional urbanism of Luxembourg, Luxembourg. *European Urban and Regional Studies*, 23(4), 612–627. <https://doi.org/10.1177/0969776414528723>
- Hester, H., & Srnicek, N. (2023). *After Work. A History of the Home and the Fight for Free Time*. Verso.
- Hidden Architecture. (2017). *Cushicle and Suitaloos*. Hidden Architecture. <http://hiddenarchitecture.net/cushicle-and-suitaloos/>
- Hilgert, R. (2010). *Boombranche Pflege*. D'Letzeburger Land, 8.
- Hochschild, A. (2001) Global care chains and emotional surplus value. On the edge. *Living with global capitalism*, eds W Hutton & A Giddens, Vintage, London, pp. 130–146.
- Inter-Actions Asbl. (2024). *A propos*. Inter-Actions. <https://inter-actions.lu/a-propos/>
- IZAH (2023) *Interdisziplinäres Zentrum für Altern Halle*. <https://www.izah.uni-halle.de/>
- Knijn, T., & Kremer, M. (1997). Gender and the Caring Dimension of Welfare States: Toward Inclusive Citizenship. *Social Politics: International Studies in Gender, State & Society*, 4(3), 328–361. <https://doi.org/10.1093/oxfordjournals.sp.a034270>
- Kollwelter, S. (2007). Immigration in Luxembourg: New Challenges for an old Country. <https://www.migrationpolicy.org/article/immigration-luxembourg-new-challenges-old-country>

Kurzawa, C. (2023). Les Luxembourgeois de plus en plus nombreux à quitter le pays. <https://paperjam.lu/article/luxembourgeois-2e-nation-a-qui>

Le Guin, U. K. (1974). *The Dispossessed*. Orion.

Leinfelder, H., Pannecoucke, I., Van Damme, W., & Verstraete, J. (2023). De Politisch Economische Rol van Huisvesting. Wonen uit de schaduw. Liber amicorum Pascal De Decker. Gompel & Svacina.

LISER. (2015). Increasing numbers of foreign residents. https://www.liser.lu/ise/display_indic.cfm?id=382

LISER. (2023). Le LISER publie deux rapports sur la problématique du logement abordable au Luxembourg. Retrieved 22 January 2024, from <http://www.liser.lu/index.cfm?type=news&id=1947>

Marx, K. (1857). Critique of the Gotha Programme. <https://www.marxists.org/archive/marx/works/1875/gotha/ch01.htm>

Marx, K. & Engels, F. (1848). Manifesto of the Communist Party. <https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf>

Mezaroş, M., & Paccoud, A. (2022). Accelerating housing inequality: Property investors and the changing structure of property ownership in Luxembourg. *International Journal of Housing Policy*, 0(0), 1–21. <https://doi.org/10.1080/19491247.2022.2106540>

Ministère de la Famille, des Solidarités, du Vivre ensemble et de l'Accueil. (2024). The Ministry [Text]. <http://mfsva.gouvernement.lu/en/le-ministere.html>

Ministère de la Santé et de la Sécurité sociale. (2024). The Ministry [Text]. <http://m3s.gouvernement.lu/en/le-ministere.html>

Ministère du Logement et de l'Aménagement du territoire. (2024). The ministry [Text]. <http://mlogat.gouvernement.lu/en/le-ministere.html>

Moebus, K. (2022). 'Matters of Care' in Spaces of Commoning. Designing In, Beyond, and Against Capitalism. In *Design Commons: Practices, Processes and Crossovers*. https://web-p-ebSCO-host-com.tudelft.idm.oclc.org/ehost/ebookviewer/ebook/bmxlYmtfXzMyODc4NzJfX0FOO?sid=ee495bed-4947-4beb-9efb-081f5351f5d5@redis&vid=0&format=EB&lpid=lp_221&rid=0

Nickels, M. (2008). Fondation Pescatore: Das Altenheim „à la carte“. *Tageblatt*. Lu. <https://www.tageblatt.lu/nachrichten/luxemburg/fondation-pescatore-das-altenheim-a-la-carte-97705409/>

Öberg, S. (2005). Hägerstrand and the remaking of Sweden. *Progress in Human Geography*, 29(3), 340–349. <https://doi.org/10.1177/030913250502900313>

O'Brien, M.E.: (2023) *Family Abolition. Capitalism and the Communizing of Care*. Pluto Press.

Paris, W. (2022). Crisis Consciousness, Utopian Consciousness, and the Struggle for Racial Justice. *Puncta*, 5(4), Article 4. <https://doi.org/10.5399/PJCP.v5i4.10>

Pigeron-Piroth, I., Geoffrey, C., & Heinz, A. (2017). Localisation résidentielle de la population étrangère selon la nationalité et la structure urbaine au Luxembourg [Working Paper]. https://orbilu.uni.lu/bitstream/10993/31485/1/PDF_localisation_200617.pdf

- Pohu, C. (2023, October 10). Luxembourg: Les challenges économiques qui attendent le prochain gouvernement. Trends-Tendances. <https://trends.levif.be/a-la-une/international/luxembourg-les-challenges-economiques-qui-attendent-le-prochain-gouvernement/>
- Port, C. (2012). No Future? Aging, Temporality, History, and Reverse Chronologies.
- Rhydderch, A. (2017). Scenario Building: The 2x2 Matrix Technique.
- Sandberg, L., & Marshall, B. (2017). Queering Aging Futures. *Societies*, 7, 21. <https://doi.org/10.3390/soc7030021>
- Schroeder, G. (2007) La pension de vieillesse à Luxembourg, une garantie ou un souci? In: Ferring D, Thill J and Lehnert J-P (ED) Ist Altern noch zu bezahlen? Perspektiven für Luxemburg (Berichte der Forschungseinheit INSIDE No. 1). Luxembourg: University of Luxembourg, pp. 5–11.
- Sievert, S., Neubecker, N., & Klingholz, R. (2017). Europas demografische Zukunft: Wie sich die Regionen nach einem Jahrzehnt der Krisen entwickeln (Originalausgabe Juli 2017). Berlin-Institut für Bevölkerung und Entwicklung.
- Simpson, D. (2015). Young-old : urban utopias of an aging society. Lars Müller.
- Spanger, M., Dahl, H. M., & Peterson, E. (2017). Rethinking Global Care Chains Through the Perspective of Heterogeneous States, Discursive Framings and Multi-Level Governance. *Nordic Journal of Migration Research*, 7(4), 251–259.
- STATEC. (2021). Evolution of the population. <http://statistiques.public.lu/en/recensement/evolution-de-la-population.html>
- Stavrides, A. P. S., & Angelis, M.D. (2016). *Common Space: The City As Commons*. Bloomsbury Academic & Professional. <http://ebookcentral.proquest.com/lib/delft/detail.action?docID=4707855>
- Tchicaya, A., & Demarest, S. (2011). Comparaison internationale des inégalités sociales de santé en Europe: Cas du Luxembourg avec 23 autres pays.
- Tchicaya, A., & Lorentz, N. (2011). Inégalités sociales dans le renoncement aux soins de santé et dans leur utilisation.
- Theall, D. F. (1975). The Art of Social-Science Fiction: The Ambiguous Utopian Dialectics of Ursula K. Le Guin. *Science Fiction Studies*, 2(3), 256–264.
- Villa, D. (2023). Hannah Arendt. A very short introduction.
- Young, I. M. (2011). CHAPTER 3. Insurgency and the Welfare Capitalist Society. In CHAPTER 3. Insurgency and the Welfare Capitalist Society (pp. 66–95). Princeton University Press. <https://doi.org/10.1515/9781400839902-006>
- Zdanowska, N. (2023). Socio-spatial Inequalities in a Context of “Great Economic Wealth” Case study of neighbourhoods of Luxembourg City.
- Zorach, R., Bingaman, A., & Sanders, L. (Eds.). (2001). *Embodied Utopias: Gender, Social Change and the Modern Metropolis*. Routledge. <https://doi.org/10.4324/9780203451540>
- 2001, LOLA, 2001, 51N4E, 2001, TUK, ETHZ, Transsolar, Yellow Ball, OFC, Gregor Waltersdorfer, & Systematica Endeavour. (n.d.). Soil And People. Luxembourg in Transition. Stage 3. Retrieved 8 May 2024, from https://luxembourgtransition.lu/wp-content/uploads/2023/06/2001_lit_soil-and-people_stage-3-report_pages_compressed.pdf

Table of Figures

background data maps

Figures 4, 34:

Eurostat. (2023). Old-Age Dependency Ratio, NUTS3 regions, 2023. [dataset] https://ec.europa.eu/eurostat/databrowser/view/PROJ_19RDBI3__custom_700209/bookmark/table?lang=en&bookmarkId=f196dbec-c429-4b96-a669-8a4dfc864c91

Ferring, D., Heinz, A., Peltier, F., & Thill, G. (2013). *Ältere Menschen in Luxemburg*.

STATEC - Population et logement. (2019). Rapport de dépendance des personnes âgées, 2018 [dataset]. https://wms.geoportail.lu/public_map_layers/service

Figure 35:

European Environment Agency (2022). Average travel time to the nearest hospital in minutes, NUTS3 regions, 2020. <https://sdi.eea.europa.eu/catalogue/climate-health/api/records/de17ed31-7474-4ff5-8f8c-bdd50c690a0a>

Eurostat. (2020). Healthcare services in Europe [dataset]. <https://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/healthcare-services>

Information und Technik Nordrhein-Westfalen. (2019). WMS KRANKENHAUSATLAS DE [dataset]. <https://www.geoportal.de/Metadata/d5f30c96-52fa-440c-85b8-d70f395b7ba2>

Figure 37:

SIG-GR - Ministère de l'Energie et de l'Aménagement du territoire - Département de l'aménagement du territoire. (2023). Commuters to Luxembourg 2021. [dataset]. <https://geocatalogue.gis-gr.eu/>

geonetwork/gis-gr/eng/catalog.search#/metadata/a170bc2a-f6bd-4124-87ed-91a73f5da6e4

Portail de l'emploi. (2023). Emploi salarié par secteur d'activité, genre, âge, lieu de résidence et nationalité, statut (salariés non-fonctionnaires non-intérimaires, fonctionnaires, intérimaires). [dataset]. <https://adem.public.lu/fr/marche-emploi-luxembourg/statistiques/statistiques/igss/Tableaux-interactifs-stock-emploi.html>
degree of urbanisation

Figure 38:

GeoFabrik GmbH (2018) Europe. Available at: <https://download.geofabrik.de/europe.html> (Accessed: March 10, 2023)

Système d'information géographique de la Grande Région. (2022). Cross-border bus lines 09/2015—Portail Open Data [dataset]. Retrieved 22 April 2024, from <https://data.public.lu/en/datasets/cross-border-bus-lines-09-2015/>

Système d'information géographique de la Grande Région. (2022). Cross-border railway lines 09/2015—Portail Open Data. <https://data.public.lu/en/datasets/cross-border-railway-lines-09-2015/>

Système d'information géographique de la Grande Région. (2022). European and cross-border cycle paths 2021—Portail Open Data. <https://data.public.lu/en/datasets/european-and-cross-border-cycle-paths-2021/>

Système d'information géographique de la Grande Région. (2022). UNESCO sites 2020—Portail Open Data. <https://data.public.lu/en/datasets/unesco-sites-2020/>

Figure 39:

SIG-GR - Ministère de l'Energie et de l'Aménagement du territoire - Département de l'aménagement du territoire. (2023). Commuters to Luxembourg 2021. [dataset]. <https://geocatalogue.gis-gr.eu/geonetwork/gis-gr/eng/catalog.search#/metadata/a170bc2a-f6bd-4124-87ed-91a73f5da6e4>

Portail de l'emploi. (2023). Emploi salarié par secteur d'activité, genre, âge, lieu de résidence et nationalité, statut (salariés non-fonctionnaires non-intérimaires, fonctionnaires, intérimaires). [dataset]. <https://adem.public.lu/fr/marche-emploi-luxembourg/statistiques/statistiques/igss/Tableaux-interactifs-stock-emploi.html> degree of urbanisation

GeoFabrik GmbH (2018) Europe. Available at: <https://download.geofabrik.de/europe.html> (Accessed: March 10, 2023)

Système d'information géographique de la Grande Région. (2022). Cross-border bus lines 09/2015—Portail Open Data [dataset]. Retrieved 22 April 2024, from <https://data.public.lu/en/datasets/cross-border-bus-lines-09-2015/>

Système d'information géographique de la Grande Région. (2022). Cross-border railway lines 09/2015—Portail Open Data. <https://data.public.lu/en/datasets/cross-border-railway-lines-09-2015/>

Système d'information géographique de la Grande Région. (2022). European and cross-border cycle paths 2021—Portail Open Data. <https://data.public.lu/en/datasets/european-and-cross-border-cycle-paths-2021/>

Figure 40:

Administration du Cadastre et de la Topographie. (2023). Degree of urbanisation. [dataset]. <https://geocatalogue.geoportail.lu/geonetwork/srv/fr/catalog.search#/metadata/409e0940-6c92-49a7-84b0-3b064cf41e30>

Corine Land Cover (CLC) 2018: European Environment Agency (2019) "Corine Land Cover (CLC) 2018." Coperni-

cus Land Monitoring Service. Available at: <https://land.copernicus.eu/pan-european/corine-land-cover/clc2018?tab=download>.

Figure 41:

LISER. (2023). Le LISER publie deux rapports sur la problématique du logement abordable au Luxembourg. Retrieved 22 January 2024, from <http://www.liser.lu/index.cfm?type=news&id=1947>

Pigeron-Piroth, I., Geoffrey, C., & Heinz, A. (2017). Localisation résidentielle de la population étrangère selon la nationalité et la structure urbaine au Luxembourg [Working Paper]. https://orbilu.uni.lu/bitstream/10993/31485/1/PDF_localisation_200617.pdf

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Figure 42:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du Cadastre et de la Topographie. (2015). Points d'intérêt POI officiels de la société Editus [dataset]. <https://geocatalogue.geoportail.lu/geonetwork/srv/fr/catalog.search#/metadata/ae1bc422-5751-4efa-92af-c24287609dbb>

Figure 44:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du Cadastre et de la Topographie. (2015). Points d'intérêt POI officiels de la société Editus [dataset]. <https://geocatalogue.geoportail.lu/geonetwork/srv/fr/catalog.search#/metadata/ae1bc422-5751-4efa-92af-c24287609dbb>

Figure 48:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/>

en/datasets/bd-l-tc-2000/

Administration du Cadastre et de la Topographie. (2015). Points d'intérêt POI officiels de la société Editus [dataset]. <https://geocatalogue.geoportail.lu/geonet-work/srv/fre/catalog.search#/metadata/ae1bc422-5751-4efa-92af-c24287609dbb>

LISER. (2023). Le LISER publie deux rapports sur la problématique du logement abordable au Luxembourg. Retrieved 22 January 2024, from <http://www.liser.lu/index.cfm?type=news&id=1947>

Pigeron-Piroth, I., Geoffrey, C., & Heinz, A. (2017). Localisation résidentielle de la population étrangère selon la nationalité et la structure urbaine au Luxembourg [Working Paper]. https://orbilu.uni.lu/bitstream/10993/31485/1/PDF_localisation_200617.pdf

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Corine Land Cover (CLC) 2018: European Environment Agency (2019) “Corine Land Cover (CLC) 2018.” Copernicus Land Monitoring Service. Available at: <https://land.copernicus.eu/pan-european/corine-land-cover/clc2018?tab=download>.

Figure 50:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du cadastre et de la topographie, Service Topographie et géomatique, & Archives nationales de Luxembourg. (n.d.). LUXATLAS. Retrieved 7 May 2024, from <http://luxatlas.lu/>

Figure 51:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Zdanowska, N. (2023). Socio-spatial Inequalities in a Context of “Great Economic

Wealth” Case study of neighbourhoods of Luxembourg City.

Figure 52:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Gerber, P., Fleuret, S., & Schneider, M. (2009). Quel Bien-être pour les personnes âgées? In *Der Luxemburg Atlas / Atlas du Luxembourg* (pp. 160–161). Emons Verlag. <https://liser.elsevierpure.com/fr/publications/le-vieillissement-au-luxembourg>

Figure 53:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Figure 55:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du cadastre et de la topographie. (2024). Transport et voies de communication (TRP-VC)—Portail Open Data. <https://data.public.lu/en/datasets/transport-et-voies-de-communication/>

Figure 56:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du Cadastre et de la Topographie. (2015). Points d'intérêt POI officiels de la société Editus [dataset]. <https://geocatalogue.geoportail.lu/geonet-work/srv/fre/catalog.search#/metadata/ae1bc422-5751-4efa-92af-c24287609dbb>

Figure 57:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Administration du cadastre et de la topographie. (2024). Transport et voies de communication (TRP-VC)—Portail Open Data. <https://data.public.lu/en/datasets/transport-et-voies-de-communication/>

Figure 58:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Figure 98:

Unkown (1958) Cure à Mondorf-les-Bains [photograph]. Photothèque de la Ville de Luxembourg, Luxembourg.

Kutter, E. (1963). Les cafés de la place d'Armes [photograph]. Photothèque de la Ville de Luxembourg, Luxembourg.

Mey, T. (1960). Epicerie fine, rue Louvigny [photograph]. Photothèque de la Ville de Luxembourg, Luxembourg.

Bisenius, F. (n.d.). Dudelange) [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Rinaldi, J. (n.d.). Esch/Alzette [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories <https://minett-stories.lu/en/archive>

Schroeder, M. (n.d.). Swimming pool in Audun-le-Tiche, adjacent to the Terres-Rouges plant (Esch/Alzette) Archives nationales de Luxembourg. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Differdange [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Figure 100:

Bisenius, F. (1980). Food Cultivation [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (n.d.) Quetschekraut (plum jam) being prepared. Women at work (house-

work) [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Market in front of the Cactus in Lallange [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Differdange [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Dudelange) [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Figure 107

Unkown (1953). Bakery Pierre Reiser [photograph]. Amies de l'histoire de Petange. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (n.d.). Women at work (housework) [photograph]. Minett Stories. <https://minett-stories.lu/en/story/but-we-women-also-have-to-fight-hard>

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (n.d.). First World War. Women at work (wage labour) [photograph]. Minett Stories. <https://minett-stories.lu/en/story/but-we-women-also-have-to-fight-hard>

Unknown (1918). When the German troops withdrew, the supply wagons were looted [photograph]. André Schoup, Europeana. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1960). Biller aus dem Minett, 09/07/1960 [Newspaper Article]. Luxemburger Wort. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

stories.lu/en/archive

Matsas, P. (1986). Esch, a home for migrant workers. Centre National de l'Audiovisuel (CNA). Minett Stories. <https://minett-stories.lu/en/archive>

Figure 109:

Matsas, P. (1986). Esch, a home for migrant workers. Centre National de l'Audiovisuel (CNA). Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1943) Beauty Shop Oak Ridge [photograph]. Raw Pixel. https://www.rawpixel.com/search/hair%20salon?page=1&path=_topics%7Cvintage&sort=curated

Unknown (1958) Cure à Mondorf-les-Bains [photograph]. Photothèque de la Ville de Luxembourg, Luxembourg.

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (n.d.) Quetschekraut (plum jam) being prepared. Women at work (housework) [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Dudelange) [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Figure 111:

Administration du cadastre et de la topographie. (2021). BD-L-TC 2000—Portail Open Data [dataset]. <https://data.public.lu/en/datasets/bd-l-tc-2000/>

Figure 117:

Aschman, P. (1957) Train TEE à la gare de Luxembourg [photograph] Photothèque de la Ville de Luxembourg. <http://luxatlas.lu>

Bisenius, F. (n.d.). Differdange [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (n.d.) Quetschekraut (plum jam) being prepared. Women at work (house-

work) [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Schroeder, M. (n.d.). Swimming pool in Audun-le-Tiche, adjacent to the Terres-Rouges plant (Esch/Alzette) Archives nationales de Luxembourg. Minett Stories. <https://minett-stories.lu/en/archive>

Rinaldi, J. (n.d.). Esch/Alzette [photograph]. Photo Club Esch. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (n.d.). Dudelange) [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Bisenius, F. (1980). Food Cultivation [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1958) Cure à Mondorf-les-Bains [photograph]. Photothèque de la Ville de Luxembourg, Luxembourg.

Unknown (1943) Beauty Shop Oak Ridge [photograph]. Raw Pixel. https://www.rawpixel.com/search/hair%20salon?page=1&path=_topics%7Cvintage&sort=curated

Figure 119:

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Photo Club Esch (n.d.) A portrait [photograph]. Archives de la Ville d'Esch-sur-Alzette. Minett Stories. <https://minett-stories.lu/en/archive>

Aschman, P. (1957) Train TEE à la gare de Luxembourg [photograph] Photothèque de la Ville de Luxembourg. <http://luxatlas.lu>

Unknown (1964) Forest school in Dudelange [photograph]. Archives de la Ville de Dudelange. Minett Stories. <https://minett-stories.lu/en/archive>

Unknown (1964) Forest school in Esch/Alzette [photograph]. Archives de la Ville d'Esch-sur-Alzette. Minett Stories. <https://minett-stories.lu/en/archive>

Schroeder, M. (n.d.). Swimming pool in Audun-le-Tiche, adjacent to the Terres-Rouges plant (Esch/Alzette) Archives nationales de Luxembourg. Minett Stories. <https://minett-stories.lu/en/archive>

Rinaldi, J. (n.d.). Esch/Alzette [photograph]. Minett Stories. <https://minett-stories.lu/en/archive>

Figure 121:

GeoFabrik GmbH (2018) Europe. Available at: <https://download.geofabrik.de/europe.html> (Accessed: March 10, 2023)

Système d'information géographique de la Grande Région. (2022). Cross-border bus lines 09/2015—Portail Open Data [dataset]. Retrieved 22 April 2024, from <https://data.public.lu/en/datasets/cross-border-bus-lines-09-2015/>

Système d'information géographique de la Grande Région. (2022). Cross-border railway lines 09/2015—Portail Open Data. <https://data.public.lu/en/datasets/cross-border-railway-lines-09-2015/>

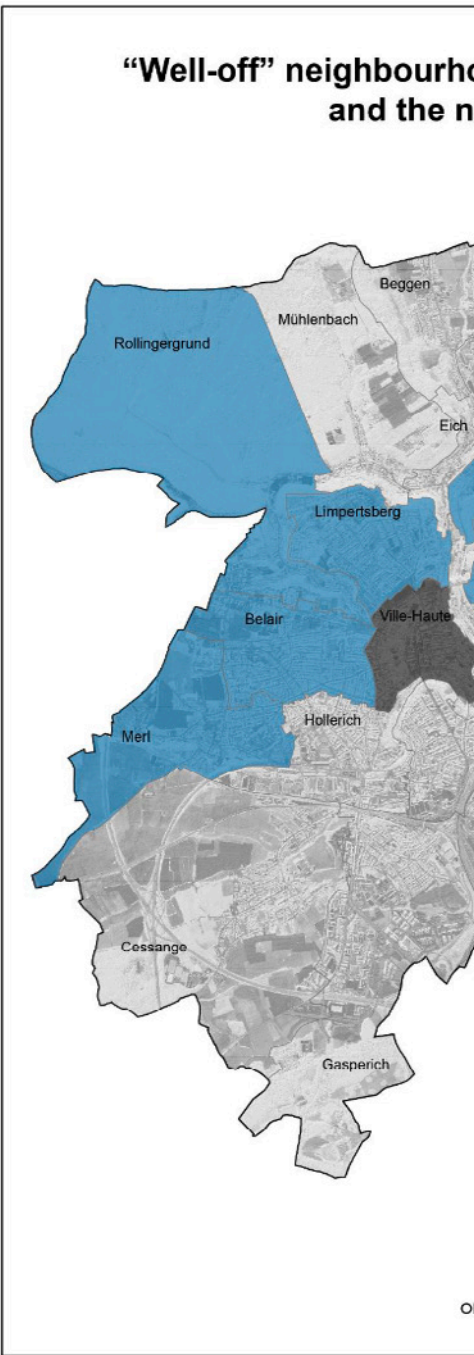
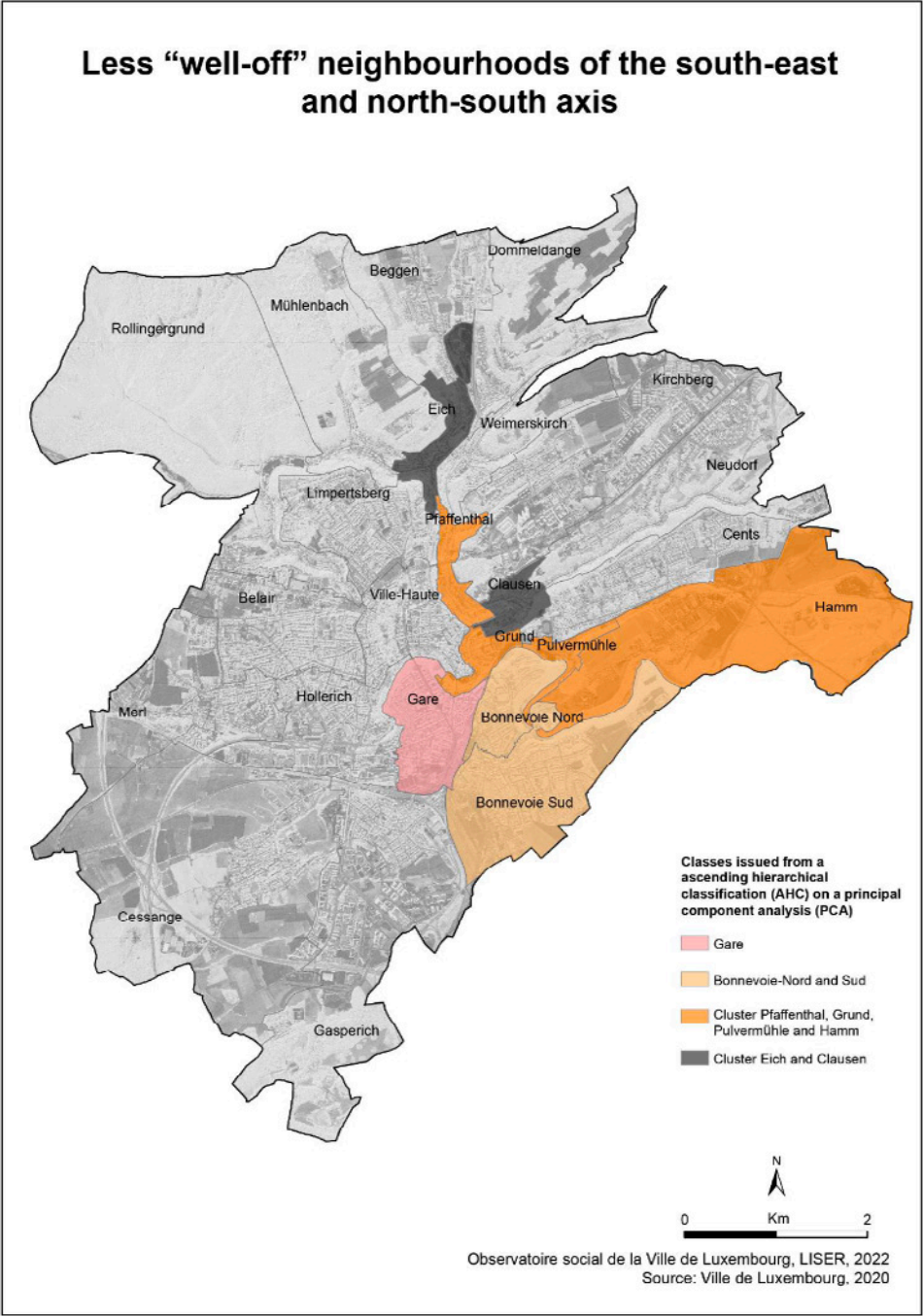
232 Système d'information géographique de la Grande Région. (2022). European and cross-border cycle paths 2021—Portail Open Data. <https://data.public.lu/en/datasets/european-and-cross-border-cycle-paths-2021/>

Système d'information géographique de la Grande Région. (2022). UNESCO sites 2020—Portail Open Data. <https://data.public.lu/en/datasets/unesco-sites-2020/>

Appendix

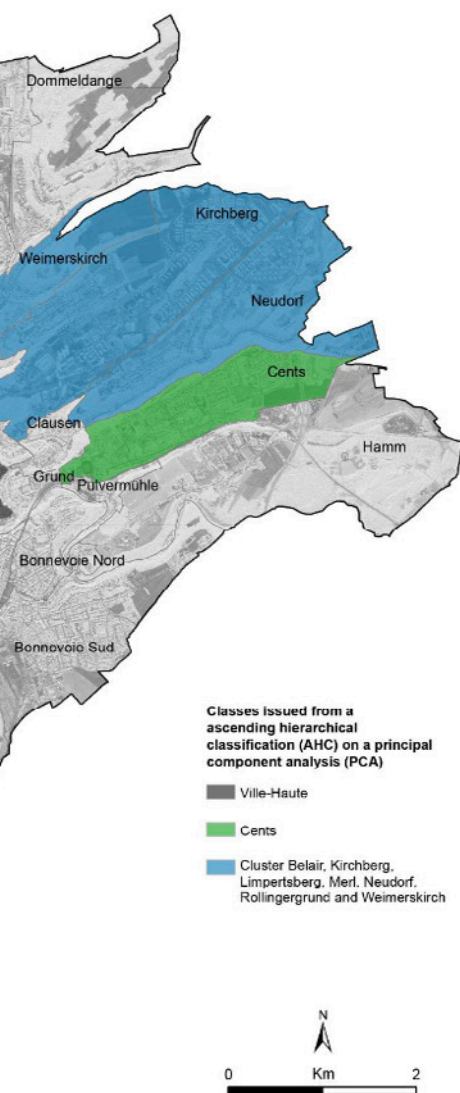
Appendix

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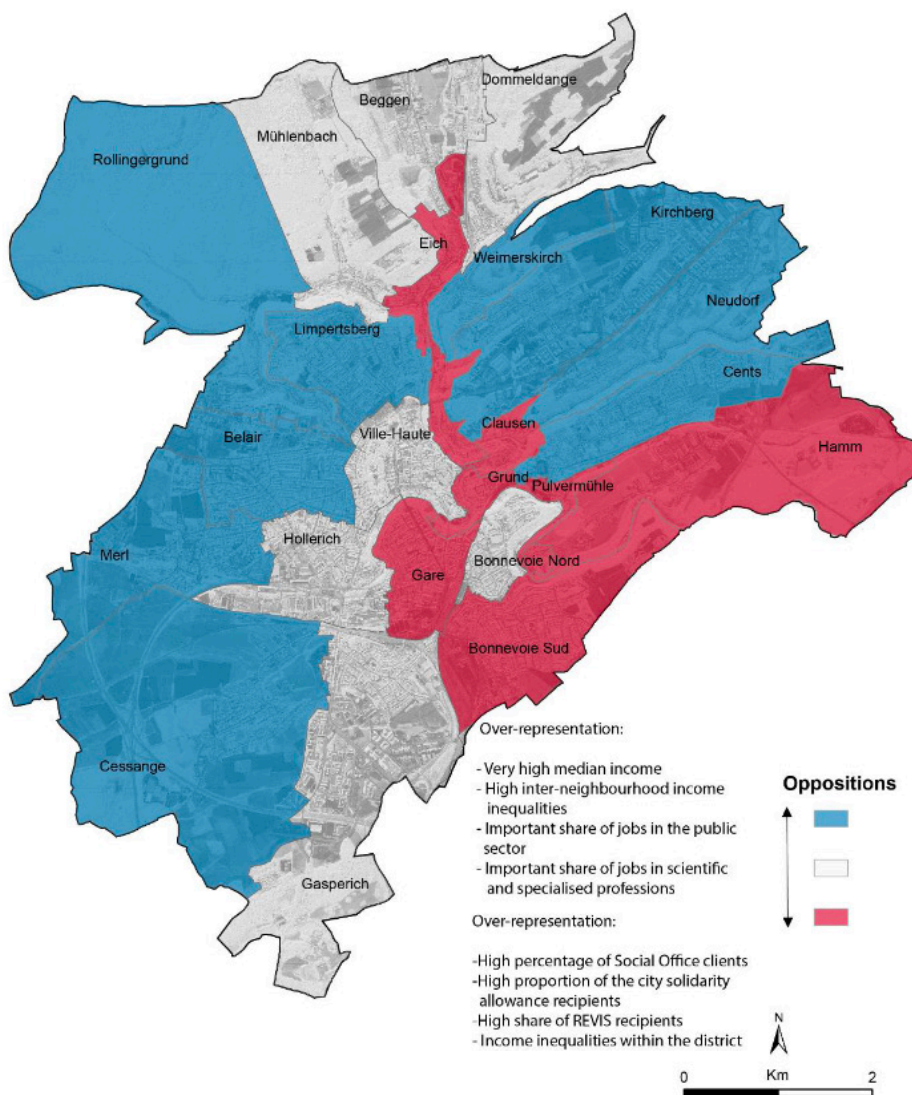
Appendix 01: Figures from Zdanowska (2023)

oods of the north-west north-east



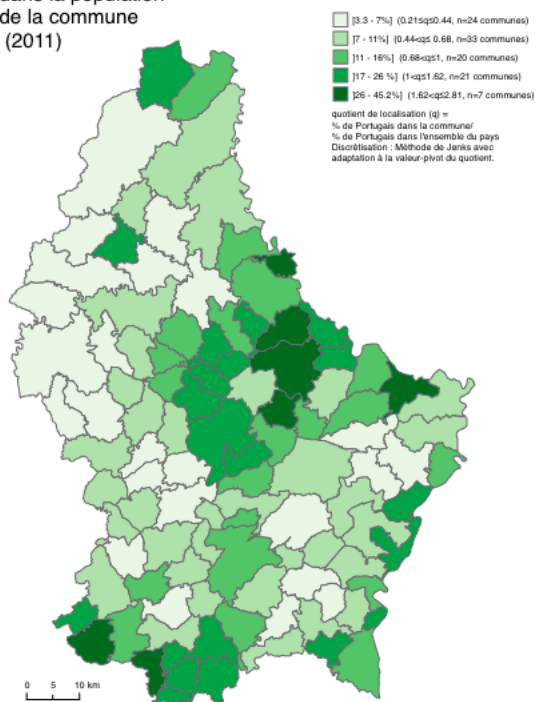
Observatoire social de la Ville de Luxembourg, LISER, 2022
Source: Ville de Luxembourg, 2020

Socio-economic Axis (1) High incomes / social benefits

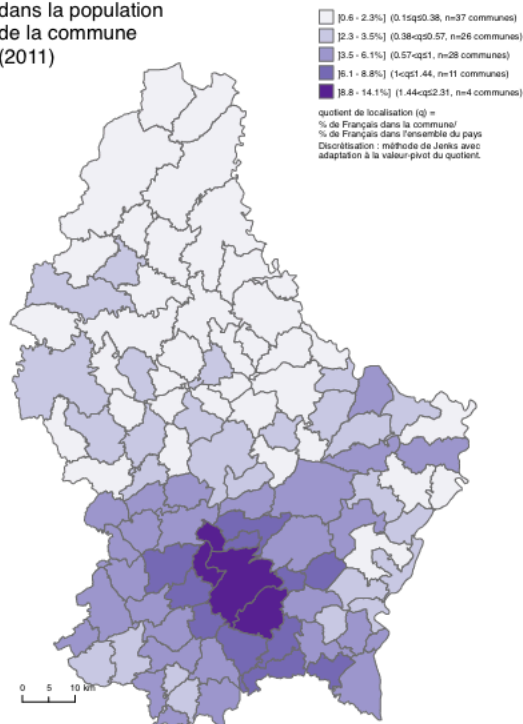


Observatoire social de la Ville de Luxembourg, LISER, 2022
Source: Ville de Luxembourg, 2020

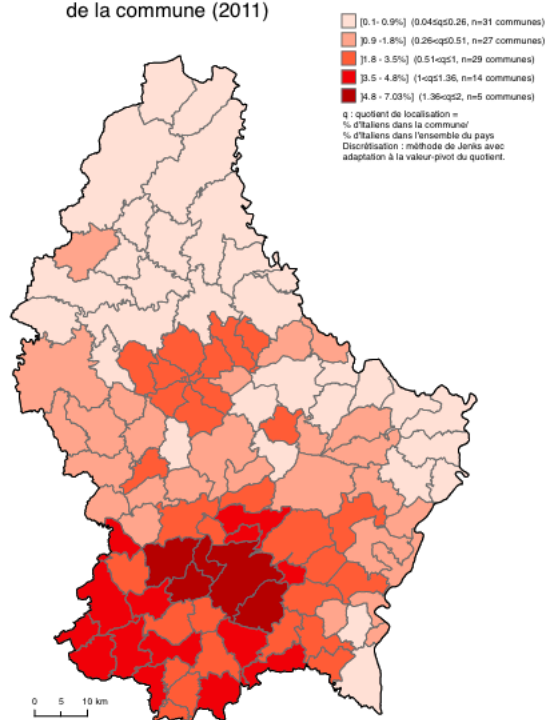
Part des Portugais
dans la population
de la commune
(2011)



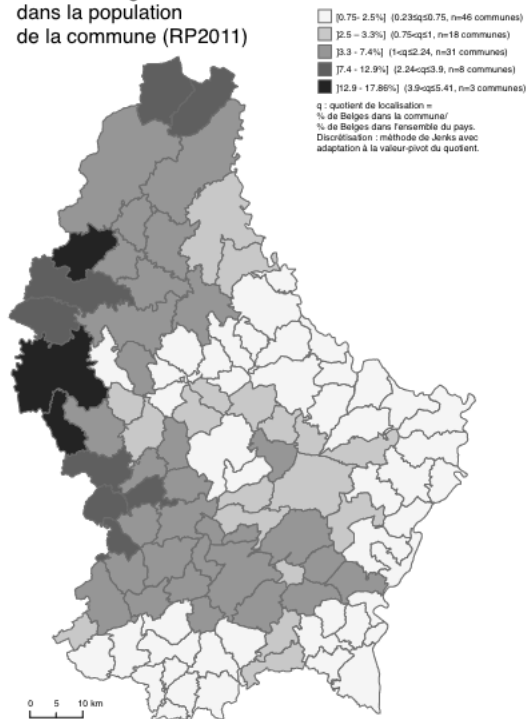
Part des Français
dans la population
de la commune
(2011)



Part des Italiens dans la population
de la commune (2011)



Part des Belges
dans la population
de la commune (RP2011)



Part des Allemands dans la population de la commune (RP2011)

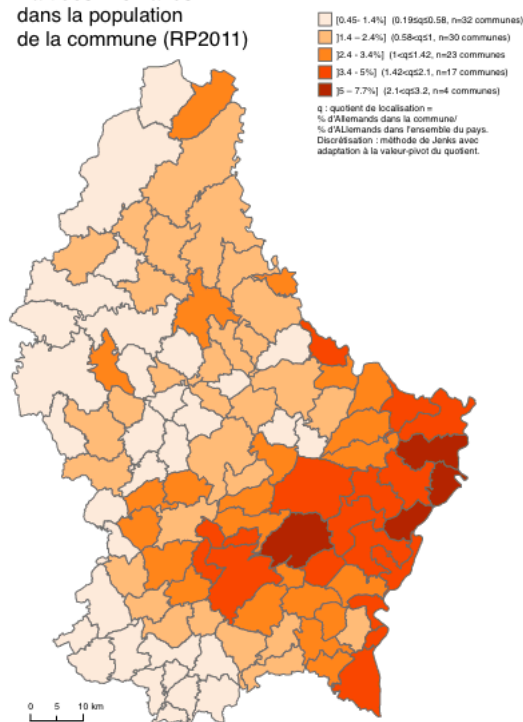
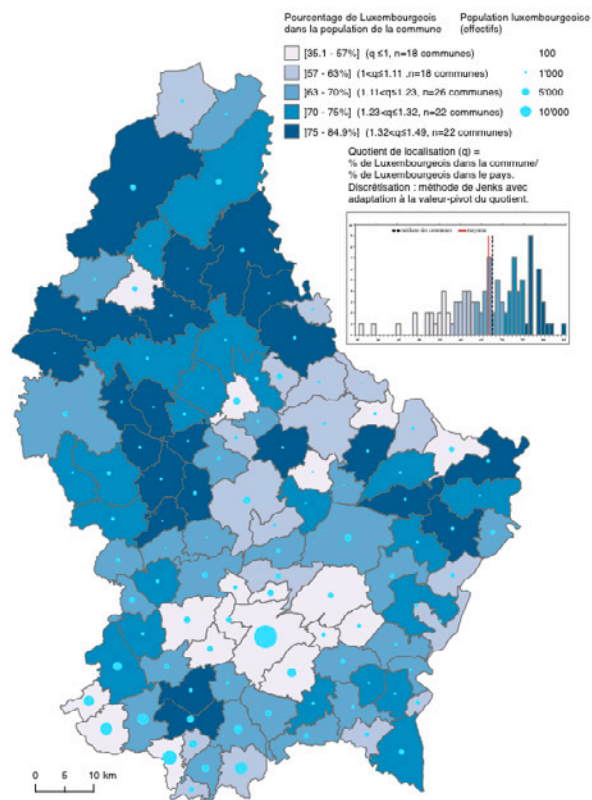


Figure 4 : Pourcentage de Portugais, Français, Italiens, Belges et Allemands dans la population de la commune

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Source : Données STATEC RP2011, Cartographie Université du Luxembourg

Figure 3 : Pourcentage de Luxembourgeois dans la population de la commune (en 2011)

DEMOGRAPHIC DEVELOPMENT OF LUXEMBOURG

What do you see as the main demographic challenges of the country in the next decades?

- ⇒ Social model
- ⇒ Integration
- ⇒ housing
- ⇒ infrastructure (transport, networks)
- ⇒ services (hospitals, doctors, nurseries, etc.)
- ⇒ pension funding

In Luxembourg, as in other European countries, immigration, together with the growth in cross-border workers, is partly a response to the problem of an ageing population: increased activity, tax revenue, financing of pensions, etc. At the same time, demographic growth raises more difficult problems to deal with in the long term. At the same time, demographic growth raises more difficult issues to deal with, such as housing shortages and infrastructure needs. In the longer term, this development also has a dark side, such as cultural evolution and changes in the social model.

- ⇒ Juliette Carette, Une immigration sélective serait une bonne piste de solution, Virgule, octobre 2023 - <https://www.virgule.lu/luxembourg/fred-keup-une-immigration-selective-serait-une-bonne-piste-de-solution/3755545.html>
- ⇒ Serge Kollwelter, Immigration in Luxembourg: New Challenges for an Old Country, MPI, Mars 2017 - <https://www.migrationpolicy.org/article/immigration-luxembourg-new-challenges-old-country>
- ⇒ Uni-Lu & ILRES, Polindex 2023 - <https://www.chd.lu/sites/default/files/2023-07/POLINDEX%202023-%20Premiere%20etude-%20Medias-%20Juillet%202023.pdf>
- ⇒ Charly Pollu, Les challenges économiques qui attendent le prochain gouvernement, Tendances Trends, novembre 2023 - <https://trends.levif.be/a-la-une/international/luxembourg-les-challenges-economiques-qui-attendent-le-prochain-gouvernement/>

Useful links

*<https://statistiques.public.lu/dam-assets/catalogue-publications/luxembourg-en-chiffres/2023/luxembourg-in-figures-2023.pdf>

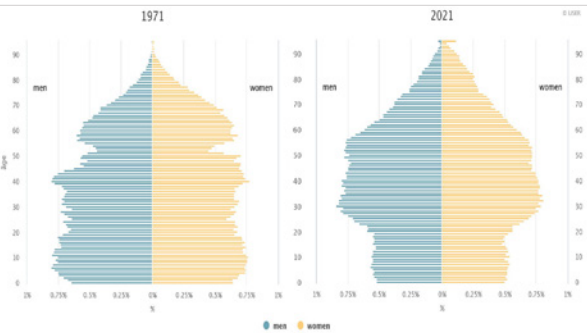
| POPULATION STRUCTURE | | | | | |
|-----------------------|-------|-------|-------|-------|---------|
| Population censuses | 2001 | 2011 | 2021 | 2023* | |
| Total population | 439.5 | 512.4 | 634.7 | 669.8 | x 1,000 |
| of which: Women | 223.0 | 257.4 | 315.3 | 328.4 | |
| Luxembourgers | 277.2 | 291.9 | 335.3 | 347.4 | |
| Foreigners | 162.3 | 220.5 | 299.4 | 313.4 | |
| of which: Portuguese | 58.7 | 82.4 | 94.3 | 92.1 | |
| French | 20.0 | 31.5 | 48.5 | 49.1 | |
| Italians | 19.0 | 18.1 | 23.5 | 24.7 | |
| Belgians | 14.8 | 16.9 | 19.6 | 19.2 | |
| German | 10.1 | 12.0 | 12.8 | 12.7 | |
| Spaniards | 2.8 | 3.7 | 7.7 | 9.1 | |
| Romanians | - | 1.6 | 6.1 | 6.6 | |
| Poles | - | 2.7 | 4.9 | 5.1 | |
| Greeks | 1.1 | 1.5 | 3.8 | 4.3 | |
| Dutch | 3.7 | 3.9 | 4.1 | 4.0 | |
| Other EU-28 countries | - | - | - | 1.9 | |
| Other EU-27 countries | - | - | 1.9 | - | |
| Other | 22.5 | 28.7 | 55.3 | 67.7 | |
| Foreigners in % | 36.9 | 43.0 | 47.2 | 47.4 | |

| Population by age groups | 2001 | 2011 | 2021 | 2023* |
|-------------------------------|------|------|------|-------|
| | | | | in % |
| Children (0 to 14 years) | 18.9 | 17.3 | 16.0 | 15.9 |
| Working age (15 to 64 years) | 67.2 | 68.7 | 69.4 | 69.3 |
| Third age (65 years and more) | 13.9 | 14.0 | 14.6 | 14.8 |

| Population movement | 2000 | 2010 | 2020 | 2022 |
|----------------------|-------|-------|-------|-------|
| Live births | 5,723 | 5,874 | 6,459 | 6,495 |
| of which: | | | | |
| Luxembourgers | 2,917 | 3,029 | 3,416 | 3,457 |
| Foreigners | 2,806 | 2,845 | 3,043 | 3,038 |
| Total fertility rate | 1.78 | 1.63 | 1.37 | 1.31 |

*On LISER.lu (section fact and figures → living condition → population structure)
<https://www.liser.lu/ise/index.cfm?mid=176>

Total resident population of Luxembourg at the 1st January from 1971 to 2021 (according to age and gender)

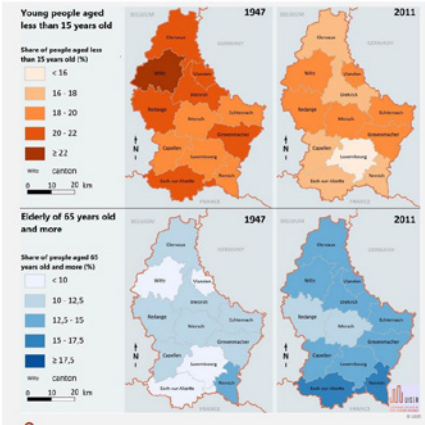


Source: https://www.liser.lu/ise/display_indic.cfm?id=535

P70 sur le plan « bien vieillir » : Accord coalition gouvernement Luxembourg 2023-2028: <https://gouvernement.lu/dam-assets/documents/dossier/formation-gouvernement-2023/accord-coalition.pdf> (see also p84)

One of the emerging challenges faced by many developed countries, including Luxembourg, is the aging population. This demographic shift is likely to increase the demand for healthcare services, pension systems, and social support, thereby putting a strain on public resources.

Ageing of the population varies by canton



Source: https://www.liser.lu/ise/display_indic.cfm?id=340

Another issue that contributes to an aging population is low fertility rates, which, if persistently low, can lead to a shrinking workforce. Encouraging family policies and work-life balance measures may be important to address this issue.

Migration Dynamics: Luxembourg possesses a varied population, and migration dynamics could impact demographic trends. It is essential to strike a balance between the demands of the existing population and the newcomers while also addressing challenges of social integration.

Workforce Challenges:

SHORTAGE : The labour market may encounter difficulties related to skill shortages or imbalance in the future. In Luxembourg, the shortage of skilled workers has become a serious issue for Luxembourg's economic development (IT sector mainly).

OLDER WORKER:

Employment rate of older workers, age group 55-64 --> Luxembourg far away from the EU objective of 50% and well behind a lot of countries (21e pays en 2009 et dernier pays en 2022 see table below)

<https://ec.europa.eu/eurostat/databrowser/view/tesem050/default/table?lang=en>

| TIME | 2009 | 2014 | 2019 | 2020 | 2021 | 2022 |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Sweden | 68.6% | 72.8% | 76.5% | 76.3% | 76.9% | 77.3% |
| Estonia | 60.3% | 64.0% | 71.9% | 71.3% | 71.6% | 73.7% |
| Germany | 55.3% | 64.6% | 71.6% | 70.6% | 71.8% | 73.3% |
| Netherlands | 51.6% | 59.6% | 69.5% | 70.8% | 71.4% | 73.1% |
| Denmark | 54.7% | 60.7% | 71.3% | 71.4% | 72.3% | 72.9% |
| Czechia | 46.8% | 54.0% | 66.7% | 68.2% | 69.8% | 72.9% |
| Finland | 54.8% | 58.5% | 65.9% | 66.6% | 68.3% | 71.2% |
| Lithuania | 51.2% | 56.2% | 68.4% | 67.6% | 68.0% | 69.8% |
| Latvia | 52.2% | 56.3% | 67.3% | 68.4% | 67.8% | 69.5% |
| Bulgaria | 45.4% | 49.3% | 63.5% | 63.4% | 64.8% | 68.2% |
| Ireland | 51.2% | 52.6% | 61.7% | 60.7% | 62.8% | 66.7% |
| Portugal | 43.0% | 43.3% | 58.5% | 59.0% | 63.4% | 65.9% |
| Hungary | 31.9% | 41.8% | 56.7% | 59.6% | 62.8% | 65.6% |
| Cyprus | 55.7% | 46.9% | 61.1% | 61.0% | 63.4% | 65.0% |
| Slovakia | 40.4% | 46.0% | 58.8% | 60.2% | 60.6% | 64.1% |
| European Union - 27 countries | 43.2% | 49.7% | 58.6% | 59.0% | 60.5% | 62.3% |
| Spain | 44.0% | 44.3% | 53.8% | 54.7% | 55.8% | 57.7% |
| France | 40.2% | 48.2% | 54.5% | 55.2% | 55.9% | 56.9% |
| Belgium | 35.3% | 42.7% | 52.1% | 53.1% | 54.5% | 56.6% |
| Austria | 39.4% | 45.1% | 54.5% | 54.2% | 55.4% | 56.4% |
| Poland | 29.5% | 40.5% | 48.3% | 50.4% | 54.7% | 56.4% |
| Slovenia | 35.3% | 35.1% | 48.2% | 49.9% | 52.7% | 55.2% |
| Italy | 35.3% | 45.9% | 54.0% | 53.4% | 53.4% | 55.0% |
| Malta | 29.1% | 39.5% | 51.1% | 52.7% | 52.3% | 54.5% |
| Greece | 42.3% | 33.9% | 42.9% | 42.6% | 48.3% | 51.9% |
| Croatia | 39.4% | 36.2% | 43.9% | 45.5% | 48.6% | 50.1% |
| Romania | 32.6% | 33.0% | 40.4% | 41.5% | 43.8% | 46.7% |
| Luxembourg | 38.2% | 42.5% | 43.1% | 44.0% | 46.6% | 46.6% |

→ Ensuring a flexible and adept workforce by providing education and transversal training programs is crucial. Not only to older workers but to people well before their end of career especially in painful job (see also the disparities according to gender, qualification, and the two classes of old age 55-59 and 60-64)

New law facilitates the recruitment of third-country nationals →

<https://adem.public.lu/en/actualites/adem/2023/09/metiers-penurie.html>

Housing: price / affordability rate / construction crisis

How is the fast population growth affecting the access to housing, and (health) care services comparing between Luxembourgish residents and newly migrated workers?

- ⇒ housing shortage
- ⇒ lack of doctors
- ⇒ lack of nursing staff

The shortage of housing, as well as differences in living standards, accentuate competition between households, whether between residents or in relation to immigrants with high incomes. The most affluent households, or those supported by their companies, find accommodation on the private market, or even buy their own homes. Households on median incomes, whether native-born or not, find it difficult to finance their housing. They therefore develop different strategies, such as moving away from the most expensive centres, crossing the border, renting while waiting, applying for affordable housing, etc. As for the poorest, they find themselves unable to buy or even rent on the private market. Among other things, this contributes to increasing pressure on the most affordable housing, with a particularly strong impact on households in the lowest income brackets.

- ⇒ Catherine Kuzrsawa, Les Luxembourgeois de plus en plus nombreux à quitter le pays, Paperjam, avril 2023 - <https://paperjam.lu/article/luxembourgeois-2e-nation-a-qui>
- ⇒ Marc Fassone, 700.000 habitants au Luxembourg fin 2026, Paperjam, mars 2022 - <https://paperjam.lu/article/700-000-habitants-fin2026>
- ⇒ Observatoire de l'Habitat, L'évolution du taux d'effort des ménages résidents du Luxembourg selon leur mode d'occupation et leur niveau de vie entre 2010 et 2018, Note n°25 juillet 2020 - <https://www.liser.lu/?type=news&id=1947>
- ⇒ Observatoire de l'Habitat, Le « Logement abordable » au Luxembourg : définition, offre et bénéficiaires potentiels, Note n°26, juillet 2020 - <https://www.liser.lu/?type=news&id=1947>
- ⇒ Mélodie Mouzon, Il y a 20.000 logements vides au Luxembourg: pourquoi ne sont-ils pas loués?, Virgule, juin 2023 - <https://www.virgule.lu/luxembourg/il-y-a-20-000-logements-vides-au-luxembourg-pourquoi-ne-sont-ils-pas-loues/1576138.html>
- ⇒ Gouvernement, État des lieux des professions médicales et des professions de santé au Luxembourg, communiqué, octobre 2019 - https://gouvernement.lu/fr/actualites/toutes_actualites/communiques/2019/10-octobre/08-presentation-professions.html
- ⇒ Pablo Garcia-Sanchez & Olivier Pierrard, Uncertain lifetime, health investment and welfare, BCL, Cahier d'étude n°178, novembre 2023 - https://www.bcl.lu/fr/media_actualites/communiques/2023/11/WP178/index.html
- ⇒ State of Health in the EU: Luxembourg, OCDE, 2017 - https://health.ec.europa.eu/system/files/2017-12/chp_lu_french_0.pdf

How does the population growth in Luxembourg reflect on the border regions of Belgium, France, and Germany?

- ⇒ Impact on neighboring countries linked to economic growth
- ⇒ The level of income of the crossborderers is higher.
- ⇒ Moreover, the crossborderers contribute to the rise in housing costs.
- ⇒ The frontaliere's losses are linked to the costs and access to Luxembourg.
- ⇒ Non-crossborder households without high incomes move away.
- ⇒ The impact is a spatial redistribution of populations along an economic gradient.

Overall, the population is increasing slightly in Wallonia, while it tends to remain stable in Rheinland and is decreasing in Lorraine. In detail, the situation is more complex. In Lorraine, the areas close to the Grand Duchy, as well as the Moselle trench, are recording an increase in population, while the areas further away are recording a decrease in population. The economic attractiveness of Luxembourg in relation to the dynamics of the border regions is leading to population movements in the border areas, according to their proximity to Luxembourg.

- ⇒ Evolution démographique, n°12, Rapport de l'Observatoire Interrégional du marché de l'Emploi, janvier 2021
- ⇒ Pierre-Yves Berrard & Philippe Debard, La population lorraine en 2030, INSEE N°275, février 2012
- ⇒ Paul Zahren, Regard sur l'évolution de la population de la Grande Région, Statec, n°20, novembre 2020 - <https://statistiques.public.lu/dam-assets/catalogue-publications/regards/2012/regards-20-12.pdf>
- ⇒ Claude Gengler, Economie : frontaliers et Luxembourg, un destin lié, Le Quotidien, mars 2018 - <https://lequotidien.lu/politique-societe/economie-frontaliers-et-luxembourg-un-destin-lie/>
- ⇒ Tom Haas & François Peltier, Projections macroéconomiques et démographiques de long terme : 2017-2060, Statec, novembre 2017 - <https://statistiques.public.lu/dam-assets/catalogue-publications/bulletin-Statec/2017/bulletin-3-17.pdf>
- ⇒ Michaël Vollot & Virginie Lang-Karevski, Quels effets de la croissance démographique en Lorraine Nord, Info Observatoire, Agape, juillet 2015 - https://www.agape-lorrainnord.eu/uploads/tx_dklibrochures/InfObservatoire_35_recensement_maj_201507.pdf

What are the main internal demographic differences within the country considering population density, age, nationality, and median income?

- ⇒ High concentration in Luxembourg City and nearby municipalities
- ⇒ Increasing density in the south of the country
- ⇒ Opposition between urban and rural areas in the north

The various analyses show a high concentration of the population in Luxembourg City and nearby communes. The south is also marked by an increase in population and density. The result is a marked contrast with rural areas in the north and center of the country. At the same time, a process of diffusion is taking place, taking advantage of communication routes.

- ⇒ Geoffrey Caruso, Kerry Schiel, Yann Ferro, Isabelle Pigeron-Piroth & Philippe Gerber, La distribution spatiale de la population, recensement, Résultats 2021, n°07, Statec - <https://statistiques.public.lu/fr/recensement/structure-urbaine.html>
- ⇒ Emilie Dias, Comment est répartie la population luxembourgeoise ?, Le Quotidien, novembre 2023 - <https://lequotidien.lu/a-la-une/comment-est-repartie-la-population-luxembourgeoise/>
- ⇒ Pigeron-Piroth Isabelle, Heinz Andreas & Caruso Geoffrey, Localisation résidentielle de la population étrangère selon la nationalité et la structure urbaine au Luxembourg, Working

paper, Statec n°94, juin 2017 - https://orbilu.uni.lu/bitstream/10993/31485/1/PDF_localisation_200617.pdf

CHALLENGES OF AN AGING SOCIETY

How will the increasing age of cross-border workers influence the labour market in Luxembourg?

Ageing of the domestic workforce according to the three categories of workers (1994, 2003, 2007-2023): https://www.liser.lu/ise/display_indic.cfm?id=657

Age pyramid (numbers) on domestic employment in Luxembourg (1994, 2003, 2007-2023) - Employment boosted by influx of cross-border workers (https://www.liser.lu/ise/display_indic.cfm?id=655)

What are the main characteristics of cross-border workers and what is their reason of commuting for work (closeness to relatives, affordability of housing)?

Demographic characteristics: see https://www.liser.lu/ise/display_indic.cfm?id=657

Other:

[The gap in the middle: Luxembourg attracts low and high-skilled cross-border workers \(policy brief of 2022\)](#)

Vincent Fromentin (2021) Cross-border workers in the Greater Region of Luxembourg and financial instability: a non-linear approach, Applied Economics, 53:27, 3171-3192, DOI: [10.1080/00036846.2021.1877251](https://doi.org/10.1080/00036846.2021.1877251)

[Thibaut Martini, Sophie Villaume, Le travail frontalier dans le Grand Est : en 2018, 182 000 habitants de la région travaillent dans un pays voisin, Insee](#)

Which sectors are the most popular for cross-border workers to work in? Is there a difference between workers from Belgium, France, and Germany?

You can make calculation from these tables: <https://adem.public.lu/fr/marche-emploi-luxembourg/statistiques/statistiques/igss/Tableaux-interactifs-stock-emploi.html>

And for your question specifically : <https://adem.public.lu/dam-assets/fr/marche-emploi-luxembourg/faits-et-chiffres/statistiques/igss/Tableaux-interactifs-stock-emploi/salaries-sect-act-natio-det.xlsx>

I made the table for 2023 (march 31):

| | 2023 | | | | | Total |
|--|---------------|---------------|----------------|--------------------------|---------------------|-------|
| | Frontaliers B | Frontaliers D | Frontaliers FR | Résidents luxembourgeois | Résidents étrangers | |
| A - Agriculture, sylviculture et pêche | 240 | 210 | 120 | 480 | 620 | 1670 |
| B - Industries extractives | 20 | 30 | 100 | 40 | 70 | 260 |
| C - Industrie manufacturière | 4560 | 6100 | 11920 | 3570 | 5930 | 32080 |
| D - Production et distribution d'électricité, de gaz, de vapeur et d'air conditionné | 110 | 240 | 220 | 1050 | 240 | 1860 |
| E - Production et distribution d'eau, assainissement, gestion des déchets et dépollution | 100 | 240 | 710 | 780 | 250 | 2080 |
| F - Construction | 6610 | 8910 | 14670 | 4650 | 16580 | 51420 |
| G - Commerce, réparation d'automobiles et de motocycles | 8060 | 6100 | 18360 | 9380 | 11310 | 53210 |
| H - Transports et entreposage | 4260 | 4920 | 6060 | 7740 | 10530 | 33510 |
| I - Hébergement et restauration | 1450 | 830 | 6050 | 2760 | 11030 | 22120 |
| J - Information et communication | 3140 | 1530 | 6890 | 4040 | 6350 | 21950 |
| K - Activités financières et d'assurance | 5750 | 6800 | 12590 | 9440 | 19100 | 53680 |
| L - Activités immobilières | 290 | 190 | 810 | 1120 | 1100 | 3510 |
| M - Activités spécialisées, scientifiques et techniques | 6840 | 4780 | 11210 | 6900 | 18770 | 48500 |
| N - Activités de services administratifs et de soutien | 2950 | 1560 | 15350 | 2880 | 12110 | 34850 |

| | | | | | | |
|--|-------|-------|--------|--------|--------|--------|
| O - Administration publique | 860 | 1910 | 1320 | 46950 | 3880 | 54920 |
| P - Enseignement | 370 | 490 | 990 | 1730 | 2320 | 5900 |
| Q - Santé humaine et action sociale | 4440 | 5930 | 9120 | 19050 | 8790 | 47330 |
| R - Arts, spectacles et activités récréatives | 190 | 300 | 610 | 1020 | 780 | 2900 |
| S - Autres activités de services | 510 | 470 | 1520 | 2530 | 2070 | 7100 |
| T - Activités des ménages en tant qu'employeurs, activités indifférenciées des ménages en tant que producteurs de biens et services pour usage propre | 150 | 210 | 470 | 670 | 4170 | 5670 |
| U - Activités extra-territoriales | 60 | 30 | 170 | 130 | 420 | 810 |
| Z - Non déterminé | 100 | 90 | 190 | 700 | 1740 | 2820 |
| Total | 51060 | 51870 | 119450 | 127610 | 138160 | 488150 |

Are there specific areas or municipalities in the neighbouring countries with a large share of cross-border workers to Luxembourg?

How do workers travel or move within Luxembourg to do or find a job within the country?

Are there other cantons or districts in for example Luxembourg City which show a higher age dependency? What are the main challenges for these cantons in terms of care provision?

What are main characteristics of the elderly in Luxembourg in terms of their living, family, and financial situation? Are there differences between national identities or an urban/rural place of residence?

CARE PROVISION IN LUXEMBOURG AND THE GREATER REGION

What are other characteristics of LTC workers but also practitioners and nurses involved in healthcare in Luxembourg? Is the share of female and older workers similar to the general European percentage?

Population growth and aging are leading to an increasing demand for personnel, as observed by Marc Fischbach. "The shortage can no longer be denied. Without a 'rapid and adequate' response from policymakers, the care and assistance sector may face a collapse within two to three years," he warns. "For now, the personnel needs are still largely met. Therefore, it is still time to sound the alarm," according to the officials at COPAS. The potential workforce from neighboring countries of Luxembourg is almost non-existent, and there is a call for an initiative in terms of awareness, training, and working conditions in the next government, as stated by Marc Fischbach, President of COPAS (Confederation of Organizations Providing Care and Assistance). The difficulty of recruiting qualified individuals, whether in Luxembourg or the Greater Region, is increasing. "The potential from neighboring countries is almost non-existent." The professions in question are i) nursing assistants and ii) nurses. An intermediate level, equivalent to a Bac+2/BTS, could help address the shortage of nurses with shorter training programs that better align with the needs of long-term care.

Long-Term Care (LTC) is defined as "a range of services and assistance designed for individuals who, due to prolonged mental and/or physical fragility and/or disability, rely on assistance for activities of daily living and/or require certain ongoing nursing care." This definition excludes palliative care (in hospices), hospital or primary care (even though, in some countries, these services may function in practice as community/residential care providers), childcare (except for LTC for disabled children), and addiction rehabilitation/addiction treatment.

LTC workers encompass individuals who provide these LTC services. Approximately 10,500 people work in four major types of facilities, with LTC workers potentially also being employed by private households.

Number of employees by type of establishment

| | 2019 | 2020 | 2021 |
|---|------|------|------|
| Aid and care networks | 2779 | 2899 | 3138 |
| Semi stationary centers | 446 | 426 | 444 |
| Continuous-stay aid and care establishments | 5521 | 5633 | 5797 |
| Intermittent-stay aid and care establishments | 1119 | 1157 | 1193 |

Source : IGSS reports 2019-2022

Regarding the various professions in the long-term care sector, the key professions for each of the three major categories of residence are as follows:

- Residential Framework (Nursing Homes, Elderly Homes, etc.):
 - Nurse: Responsible for medical and nursing care for residents, including medication administration, monitoring medical conditions, and general care.
 - Caregiver/Nursing Assistant: Assists nurses in daily care for residents, such as personal hygiene, mobility assistance, and emotional support.
 - Occupational Therapist: Helps residents maintain or regain independence by providing strategies and tools for daily activities.
 - Psychologist: Provides emotional and psychological support to residents, especially in cases of cognitive or emotional disorders.
- Home Care Framework:
 - Home Care Assistant: Assists the elderly or disabled individuals with daily tasks at home, including toileting, dressing, meal preparation, etc.
 - Home Care Nurse: Provides medical nursing care at home, such as health monitoring, injections, and dressing changes.
 - Social Worker: Helps coordinate the services and supports that elderly individuals need to remain at home, collaborating with families and other healthcare professionals.
- Family Care Framework:
 - Family Caregiver: Family members who take care of an elderly or disabled relative at home. They provide personal, emotional, and medical care.
 - Home Care Nurse: If the family caregiver requires more advanced medical assistance, a home care nurse may be hired to provide medical care.

⇒ Guichet public, <https://guichet.public.lu/fr/entreprises/creation-developpement/autorisation-etablissement/autres-professions-liberales/profession-sante-reglementees.html>

⇒ IGSS, Rapport national, 2022, <https://igss.gouvernement.lu/dam-assets/publications/rapport-g%C3%A9n%C3%A9ral-sur-la-s%C3%A9curit%C3%A9-sociale/r-g-2020.pdf>

⇒ COPAS, Présentation du secteur d'aides et de soins,

Distribution of personnel by types of profession and providers

| Type of providers | 2019 | 2020 | 2021 |
|--|----------------|-----------------|-----------------|
| Aid and care networks | 2 779,7 | 2 889,4 | 3 137,9 |
| Assistance and care staff | 2 555,1 | 2 658,1 | 2 882,7 |
| Socio-educational staff | 22,2 | 21,9 | 25,7 |
| Administrative staff | 159,0 | 156,5 | 168,5 |
| Technical and logistics staff | 43,4 | 53,0 | 61,0 |
| Semi stationary centers | 445,8 | 426,0 | 443,8 |
| Assistance and care staff | 269,9 | 243,4 | 251,0 |
| Socio-educational staff | 106,0 | 105,8 | 113,7 |
| Administrative staff | 23,0 | 24,6 | 25,7 |
| Technical and logistics staff | 47,0 | 52,2 | 53,4 |
| Continuous-stay aid and care establishments | 5 520,7 | 5 632,7 | 5 796,7 |
| Assistance and care staff | 3 811,1 | 3 946,2 | 4 054,6 |
| Socio-educational staff | 222,9 | 250,5 | 300,9 |
| Administrative staff | 306,5 | 313,8 | 319,7 |
| Technical and logistics staff | 1 180,2 | 1 122,2 | 1 121,5 |
| Intermittent-stay aid and care establishments | 1 118,9 | 1 157,3 | 1 193,2 |
| Assistance and care staff | 469,9 | 509,3 | 559,2 |
| Socio-educational staff | 453,2 | 444,5 | 450,6 |
| Administrative staff | 71,6 | 70,6 | 62,2 |
| Technical and logistics staff | 124,3 | 133,0 | 121,2 |
| TOTAL | 9 865,1 | 10 105,4 | 10 571,5 |
| Variation (%) | 2,2% | 2,4% | 4,6% |
| Number of LTCs providing care | 7 105,9 | 7 356,9 | 7 747,4 |
| Number of LTCs providing care (% of total) | 72,0% | 72,8% | 73,3% |

CNS, 2020-2022, <https://igss.gouvernement.lu/fr/statistiques/assurance-dependance/serie-statistique.html>

Regarding gender, age, and origin, obtaining data requires an administrative procedure with the IGSS (General Inspectorate of Social Security).

- Gender: The overwhelming majority of long-term care workers are women. In 2019, according to the LFS, 88% of long-term care workers in the EU were women. Traditionally, the long-term care sector in Luxembourg is dominated by women. Nurses, nursing assistants, and caregivers, among others, are predominantly women.
- Age: The long-term care sector has a diverse age distribution. While the average age is 41.4 years in 2021, there is a combination of newly qualified young professionals and older workers with considerable experience. With the aging population, the increased demand for jobs in this sector has also attracted younger individuals, leading to a slight decrease in the average age (42 years in 2017, compared to 41.4 in 2021).
- Migration origin/country of origin: Luxembourg is a multicultural country with a workforce coming from various regions and countries. This also applies to the long-term care sector. Nearly 45% of workers come from the Greater Region. In addition, there are workers from other European Union (EU) countries and non-EU countries. These nationalities potentially contribute to the long-term care workforce in Luxembourg.

⇒ Eurofound, Topic guide – Eu member states, 2023

⇒ CNS, 2020-2022, <https://igss.gouvernement.lu/fr/statistiques/assurance-dependance/serie-statistique.html>

How does the informal support system of an elderly residing in Luxembourg generally look? What are the differences between relatives of Luxembourgish or foreign national identity?

Informal carers are people in the family or social/family circle of a dependent person, who take charge of or care for this person in part or in full at home. The care of a loved one often spans years, and becomes a defining part of his or her own life. Hardly any "other" job is so differentiated, so complex, so demanding and so difficult to distinguish emotionally and physically.

Informal carers tend to restrict their own needs and feel guilty when they think only of themselves once. The risk is that they increasingly limit their social contacts and leisure activities, and even neglect their own health. Dependency insurance covers the cost of pension insurance contributions for people providing care to a dependent person, if the latter does not have a personal pension.

Care networks offer courses for informal carers:

<http://www.shd.lu/Services/Assistance,-conseil-et-soutien>

<http://www.help.lu/informations-et-conseils/>

<http://ala.lu/fr/services-de-conseil/>

As part of the European INNOVAGE FP7 project, a web platform offering support services for carers was implemented in 27 EU member states. As a member of the Innovage carers association, GERO-Kompetenzzentrum für den Alter developed and coordinated the Luxembourg version in German and French, in collaboration with INCRA and Eurocarers (http://www.eurocarers.org/userfiles/files/PR%20material/LU_INNOVAGE%20%20Dissemination%20National%20level_FR.pdf). If the dependent person lives at home, the law stipulates that a person who participates in care and assistance on a regular basis, and at least once a week, can be retained, under certain conditions, as a caregiver. This person may be a relative or a private individual you have hired. For in-kind benefits (assistance provided by an aid and care network) to be replaced by a cash benefit, the caregiver must be identified and assessed by the "Administration d'évaluation et de contrôle".

Only benefits in kind for the essential acts of life and for assistance with household maintenance can be replaced by a cash benefit. There are 10 different cash benefit packages, depending on the extent of care provided by the carer: Art. 354. On the basis of the care summary drawn up by the Administration d'évaluation et de contrôle de l'assurance dépendance under article 350, paragraph 8, the benefits in kind for the essential acts of life and for activities to assist with household maintenance provided by the carer under article 350, paragraph 7 may be replaced by a cash benefit. The cash benefit is received by the dependent person and is intended to remunerate the person who provides assistance and care outside an assistance and care network.

It is also possible to take leave to accompany a person at the end of life. This leave is available to anyone whose 1st-degree relative in the ascending or descending line (mother/father, mother-in-law/father-in-law or daughter/son, daughter-in-law/son-in-law); or 2nd-degree relative in the collateral line (sister/brother, sister-in-law/brother-in-law); or spouse (wife/husband) or partner (legally recognized), is terminally ill.

No difference according to the resident's nationality.

- ⇒ Prestations en espèce - <https://aec.gouvernement.lu/fr/l-assurance-dependance/prestations/prestations-en-especes.html>
- ⇒ Guide assurance dépendance - <http://www.sante.public.lu/fr/publications/g/guide-description-prestations-assurance-dependance-fr-de/index.html>

What are the main strategies proposed by the national government and cantons to accommodate rising needs of care?

The need for personnel has been a significant concern for many years. Labor unions and professionals express this need due to a significant increase in life expectancy, despite a substantial net migration flow. The proportion of people aged 65 and older is expected to increase from 14.4% in 2019 to 25.5% in 2050, which is a doubling, while the total population will increase by one-third over the same period. The number of potential dependents is projected to increase from 55,700 in 2019 to 68,500 in 2030 and 88,700 in 2050 (STATEC).

In 2022, Pierre Gramegna, former Minister of Finance, proposed the creation of a healthcare professions training center that involves Luxembourg and interested neighboring countries. In the 2023-2024 academic year, new higher education programs will be implemented as part of the University of Luxembourg, in addition to those created in collaboration with the Technical High School for Health Professions.

Furthermore, the government is also banking on medical and technological advancements, such as those developed by the startup ViewMind, which can detect early signs of Alzheimer's disease. Home-based care is also an area where optimistic advances are possible.

The problem of healthcare does not really arise from a spatial point of view, as the country is small and the healthcare network relatively well-developed and supported by the health plan. What's more, health coverage and reimbursement by the CNS is relatively high, ranging from 60% to 100%. Some people benefit from 100% coverage, i.e. those with a disability or serious chronic illness chronic illness, children and pregnant women, or if the pregnant women, or if total out-of-pocket expenses exceed 2.5% of gross annual income. However, certain sections of the population are not covered and have very limited access limited access to healthcare, namely the homeless, residents at the residents at the end of their social security benefits and undocumented migrants. In 2013, Luxembourg launched a social third-party payment model for people from vulnerable groups who have difficulty difficulties in advancing the cost of outpatient care. From 2023, a third-party payment scheme will be extended to the entire the entire population.

- ⇒ State of Health in the EU: Luxembourg, 2021 - https://health.ec.europa.eu/system/files/2022-01/2021_chp_lu_french.pdf
- ⇒ Eurofound, Topic guide – Eu member states, 2023

What role does the neighbourhood play in terms of care provision and what is the status of community-based care services in Luxembourg?

Health care is structured on several levels to ensure proximity to patients. In terms of structures, a health map organizes care by region. On a finer scale, local care is provided by family doctors and on-call medical centers. Services such as nursing and home help are also available.

Several private players are also involved, such as ZithaMobil. This company offers home help and care, with branches throughout the country and coordination centers in Luxembourg City, Contern, Pétange and Consdorf. The home assistance service includes nurses, care assistants, occupational therapists, physiotherapists, psychologists and social workers, providing comprehensive care for all aspects of care and daily life, in line with the legal framework of the Dependency Insurance scheme and the Caisse Nationale de Santé (CNS), which focuses on preventive measures.

- ⇒ Système de santé <https://www.cleiss.fr/docs/systemes-de-sante/luxembourg.html>
- ⇒ Carte sanitaire <https://sante.public.lu/fr/publications/c/carte-sanitaire-2021-document-principal.html>

Tchicaya & Lorentz (2011) report a slight rise in financial reasons to not seek healthcare from 2004 – 2008 whereas the healthcare sector is generally very accessible to all residents. What are current developments considering the accessibility of care provision?

To reply, you must have authorization to access SILC data.

As some of the neighbouring regions experience shortages in care provision, do you witness people from France, Germany, or Belgium seeking professional care in Luxembourg?

To access healthcare in Luxembourg, you need to be affiliated to the Luxembourg National Health Fund (Caisse nationale de Santé luxembourgeoise). Cross-border commuters can therefore access care and services in Luxembourg, as well as in their country of residence, with coverage provided by Luxembourg. Non-affiliated persons, particularly residents of neighboring countries, can also access care in Luxembourg. Costs will be covered by the health insurance funds of their respective countries.

People who are not affiliated to a health fund can only access care under certain conditions linked to their status, e.g. Ukrainian refugees.

The reverse is also possible, i.e. CNS-affiliated persons can claim reimbursement for treatment carried out abroad.

In practical terms, the majority of cross-border workers (35% of CNS insured) seek treatment in their country of residence, and the CNS covers part of this cost. Among the treatments carried out abroad by residents and non-residents affiliated to the CNS, 8677 patients requested treatment outside Luxembourg, mainly in Germany, i.e. 20% of total CNS expenditure. As regards the number of people from neighboring countries who receive care in Luxembourg, no data is available without specific request to the health insurance companies.

- ⇒ State of Health in the EU: Luxembourg, 2021 - https://health.ec.europa.eu/system/files/2022-01/2021_chp_lu_french.pdf
- ⇒ Santé.lu, Nouvelles mesures pour accéder aux soins - <https://sante.public.lu/fr/campagnes/2018/systeme-de-sante.html>
- ⇒ Le système de santé luxembourgeois, Ministère de la Santé, 2022 - <https://sante.public.lu/fr/publications/s/systeme-de-sante-2021-brochure-fr-de-en-pt.html>
- ⇒ Médecin du Monde, Accès aux soins au Luxembourg : les laissés-pour-compte, 2021 - <https://sante.public.lu/fr/publications/s/systeme-de-sante-2021-brochure-fr-de-en-pt.html>

FIELDNOTES – DECEMBER 2023

From a conversation with a physiotherapist:

- adapting flats for old people, residential homes that are being remodelled is a main task
- care homes were historically existing
- high density in the city of care spaces
- partly cut off in the north, difficult to reach
- residential homes inside with long distances that are difficult to manage for residents
- carers from Germany think that the working conditions are better in Luxembourg
- home carers from Poland who stay for a few months (money goes to the carer who pays the carer)
- day centres where elderly people can go to be cared for

From a conversation with an employee of the LTC-insurance:

- old people's homes are not urban planning, but a question of land prices
- there are private providers, but SERVIR is the main state provider
- cross-border carers from France, risk of border closure during Corona
- housing crisis as a major crisis
- care law since 1999, 6000 people in need, now 13,000, many more providers
- market with large profits
- approx. 2/3 of people are cared for at home, 1/3 in a home
- France has no care insurance and problems with communication
- changes in the family and therefore also problems with payments, e.g. child benefit (which parent?)
- single elderly people often live in large houses, these are not vacant for new residents
- most people are homeowners and there is little tenant protection

FIELDNOTES – MARCH 2024

12 March 2024

12h00 First try to go to Cactus Howald failed, went through Howald a little bit then took a bus to Cloche d'Or

Lunch at Cloche d'Or

14h00 arrived at Cactus Howald, Food truck and benches closed, big parking, elderly with partner + child, older man with newspaper
Walking through the forest etc.

13 March 2024

10h00 Walking from Bonnevoie over Schlaiffmillen towards Hamm etc.

11h30 Observations at Namur, Hamm etc.

13h00 observing a very awkward convo between two teenagers in english
she lives in kapellen, he gets off at hâmillius, he has kind of slavic accent, she more british
properly going to the international school

14 March 2024

11h00 older man with a camera at the bus stop

two older men standing on a fence talking, one with a walking aid.
third men moving past me.

woman walking past me.

I walk past the church, there is a group of elderly people (mainly Ukrainian-speaking - as told by one of the participants) who first speak to a man in French who doesn't understand me

From a conversation with someone waiting:

- every day food is handed out here from the food bank, she says Ukrainians always come early to be the first to arrive.

- she says Luxembourg wants you to work or your assets.

- she then met someone, a man who lived in a hotel in Remich (I think a retirement home), he moved in with her but had a weak bladder, the doctors took him back to the retirement home, she thinks the doctors and health insurance companies are all in cahoots and just want property/money?

- she says there is a lot of poverty, if you have no money you are ignored, it is very unfair, people work for their family but not for others.

further observations: church gates open at 11.30 am, people meet in the square in front of it, mood is lightened while food is distributed to the needy at the crypt.
unclear what people are meeting there for?

17h00 Parc Kaltreis

Appendix 04: Fieldnotes from December and March including notes from conversations

15 March 2024

8h00 at Auchan and der Cloche d'Or: old men iiiii ii, couple ii, women i

8h50 at Cactus Howald: men iiiii, couple ii, women couple I, women iiiii iiiii, men sitting i (on phone), many people at the p+r howald, also ppl walking by foot to cloche d'or, two older women on bus

10h00 at Pomme Cannelle: ii men having coffee on their own

Creamisu - raconte sans-abri

be one - old men iii

pavilion - sleeping place for two homeless

Amiperas closed

11h00 at Bonneweger Stuff: ii younger ppl, woman on her laptop, man who looks at me

weird, seems to know the server

old man who ordered to cola, wears football jersey, orders in luxembourgish

woman who smoked outside, calls someone in french, leaves, seems to know other people,

says goodbye

older man with newspaper

football walks out

other men comes in, eats croissants

13h00 at Vollekskichen (from CNDS): gemischte leute, va ältere

wenn man rein kommt ältere frau an einer art stammtisch, dann paar am nächsten tisch

links daneben ist kasse und salatbar

dann kommt größerer essensbereich, werde angewiesen mich an einen tisch mit gedeck zu setzen

vor mir sitzen iii ältere herren, unterhalten sich auf luxembourgisch, dann paar + mit kleinem

hund, werden später zu frau mit kind, dann frau (zum ersten mal dort)

hinter der säule man mit buch

dann ich + ein luxemburgisches und portugiesisches paar (frau mag fisch nicht) sprechen

lux, port, franz mit dem server, dann frau mit kind (deutsch?)

dann paar +, dann paar, dann zwei männer die sich nicht kennen (alle älter)

teilweise kennen sich leute, andere nicht, manche kommen mit dem auto

vestiaire, junges paar mit kinderwagen holen viel kleidung

vor islamischem zentrum, viele männer warten auf gebet

hauptplatz: ältere frau beobachtet schulkinder

20h00 conversation at dinner: Hamm ist schwierig, so lang kein richtiges zentrum, kein

wirklicher bezug dazu, ältere häuser am ortseingang

früher reha zentrum dort, jetzt bei kirchberg, es gibt fast nichts mehr dort, es gab mal nen

Metzger

howald: reicher vorort, aber reiche sind oft nicht spendabel, am plateau sind große

bungalows mit weiten eingängen

cactus ist für rentner, werden schlecht bezahlt, auch in gastronomie, krankenpfleger werden gut bezahlt

bonneweger stuff, gehen eher schickere und lehrer, nicht richtige bonneweger

in bonneweg ist es nicht so anonym, man kennt sich, ist vertraut

es ist multikulti und auch noch viele andere sachen, aber er mag es und versteht sich mit allen eigentlich ganz gut

23h00 Lord Nelson's at Gare

24h00 in the tram towards home: "they put everything in Bonnevoie but I like that"

16 March 2024

14h30 Walk through Bonnevoie (+Gare) with local resident: in Notebook

gutt versuergt – mobile medical aid

16h00 Sofitel

17h30 Cozy Bonnevoie: good Portuguese coffee

17 March 2024

14h00 Centre Hospitalier Hamm:

15h00 at the Alzette: junges paar, junger radfahrer andere richtung, junge familie mit

kinderwagen und oma, ältere radler, alter mann, alter mann mit fahrrad, mann beim zeitung

lessen, jogger iiiii ii, familie mit kind auf fahrrad I, familie mit krassen rädern I, mutter mit

kinderwagen, fahrradfahrer iiiii, ältere frau ii, familie mit kind ii, couple having picknick, mit

hund ii, älteres paar ii, junger mann ii, männer mit vater I, 3 ältere frauen mit gehstöcken

16h00 Centre Culturelle Bonnevoie: reception of Children's Choir

18 March 2024

12h00 at Howald Cactus: Observations during lunch time

Trying to walk over Hesper back to Howald Neighbourhood, failed, was too far

13h30 Howald downhill side walking upwards to the parc

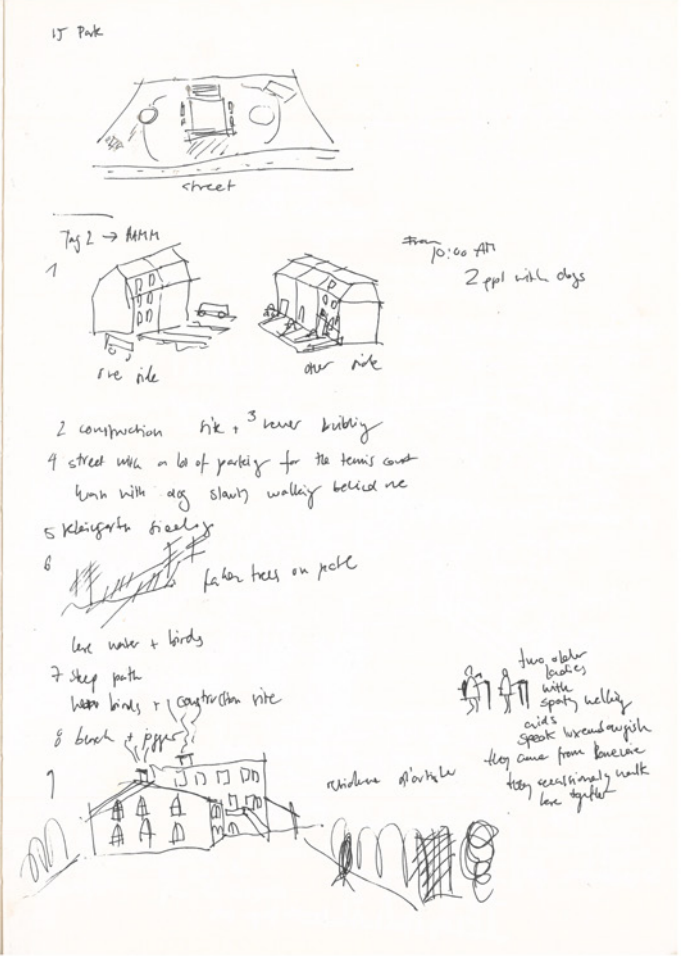
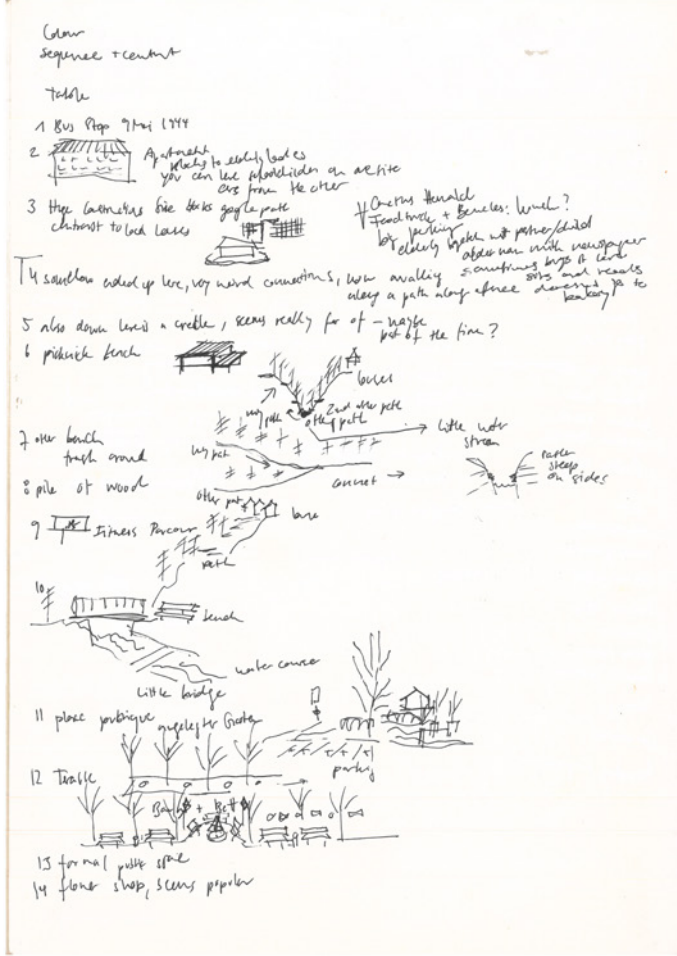
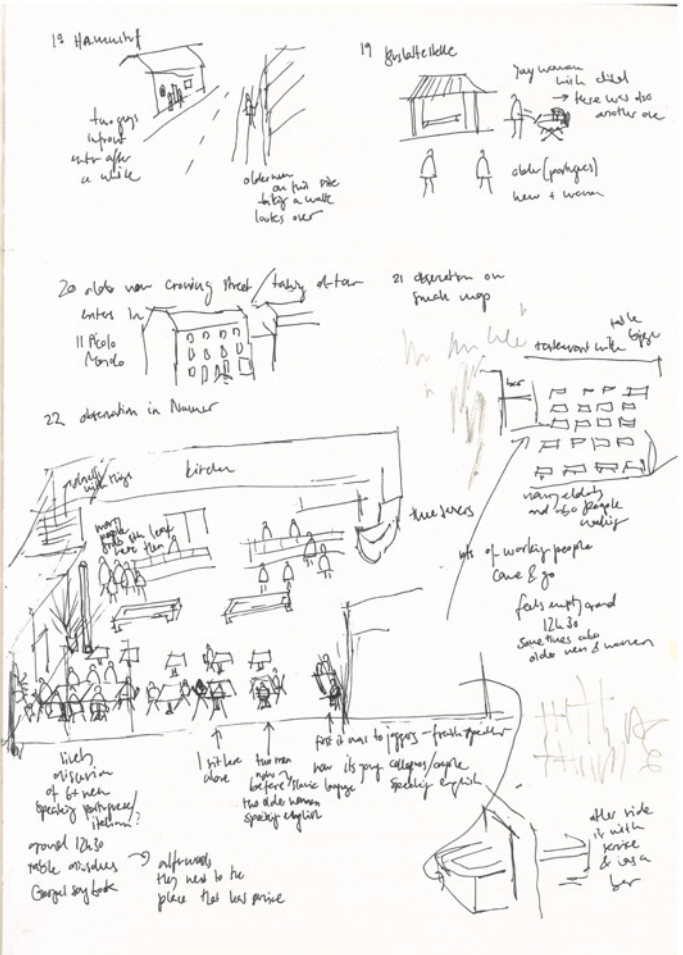
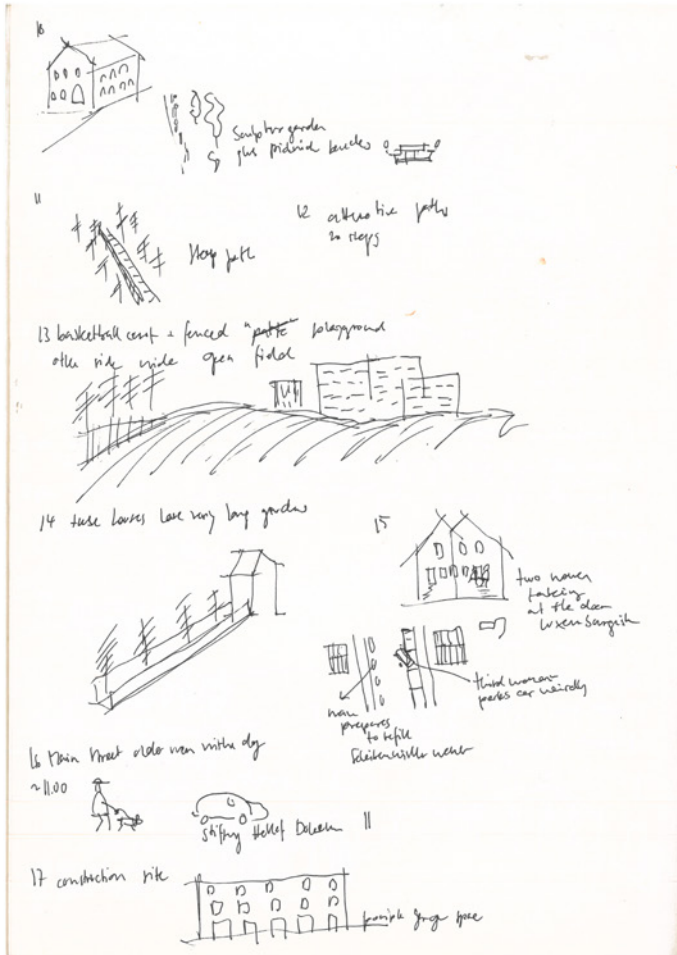
14h00 Meeting with local resident in front of La Rusticana, walk towards Howald Plateau,

then Cemetery

Walking back to Howald and then to the elder home ("It is even quieter here as in

Bettembourg)

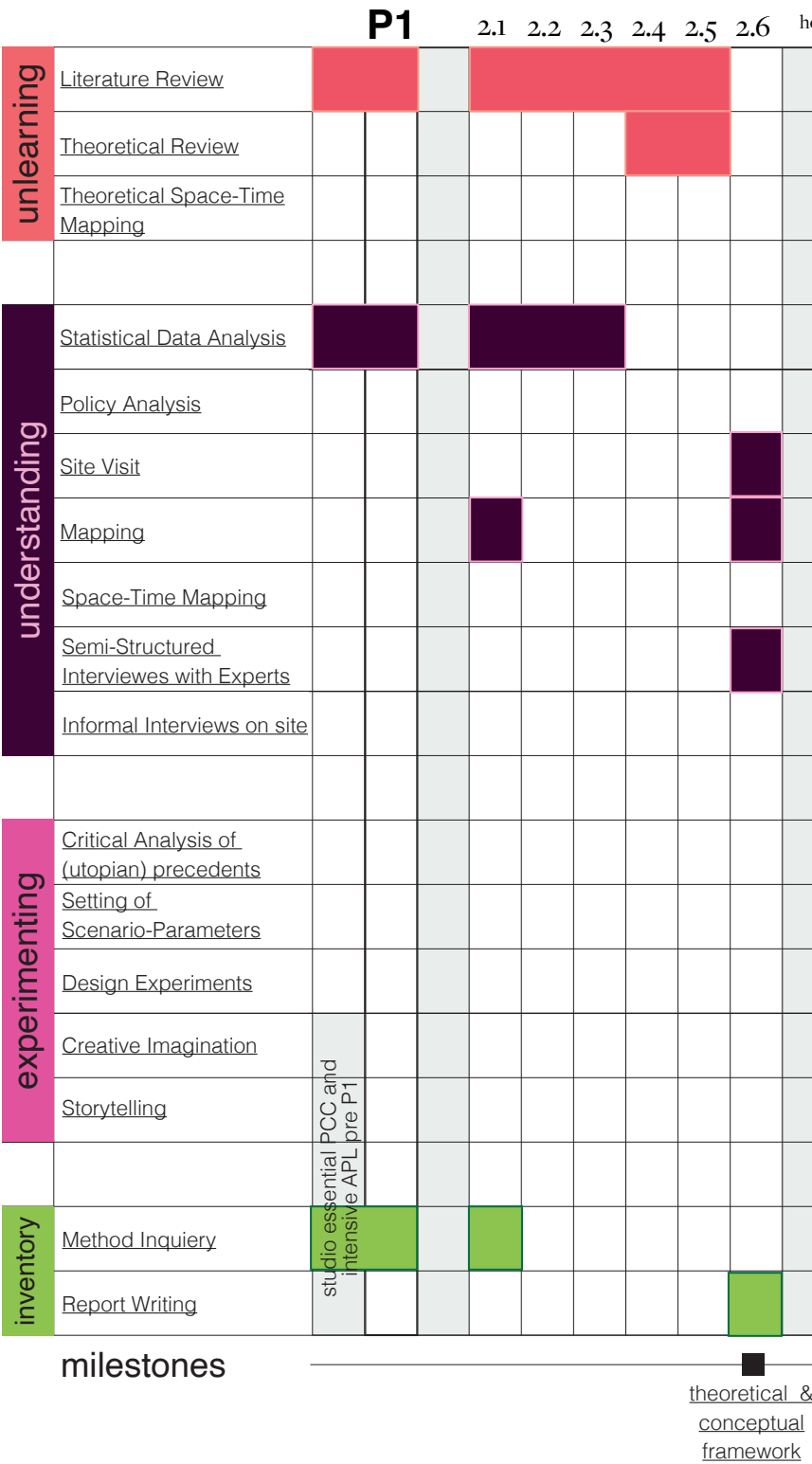
Walking back to Bonnevoie



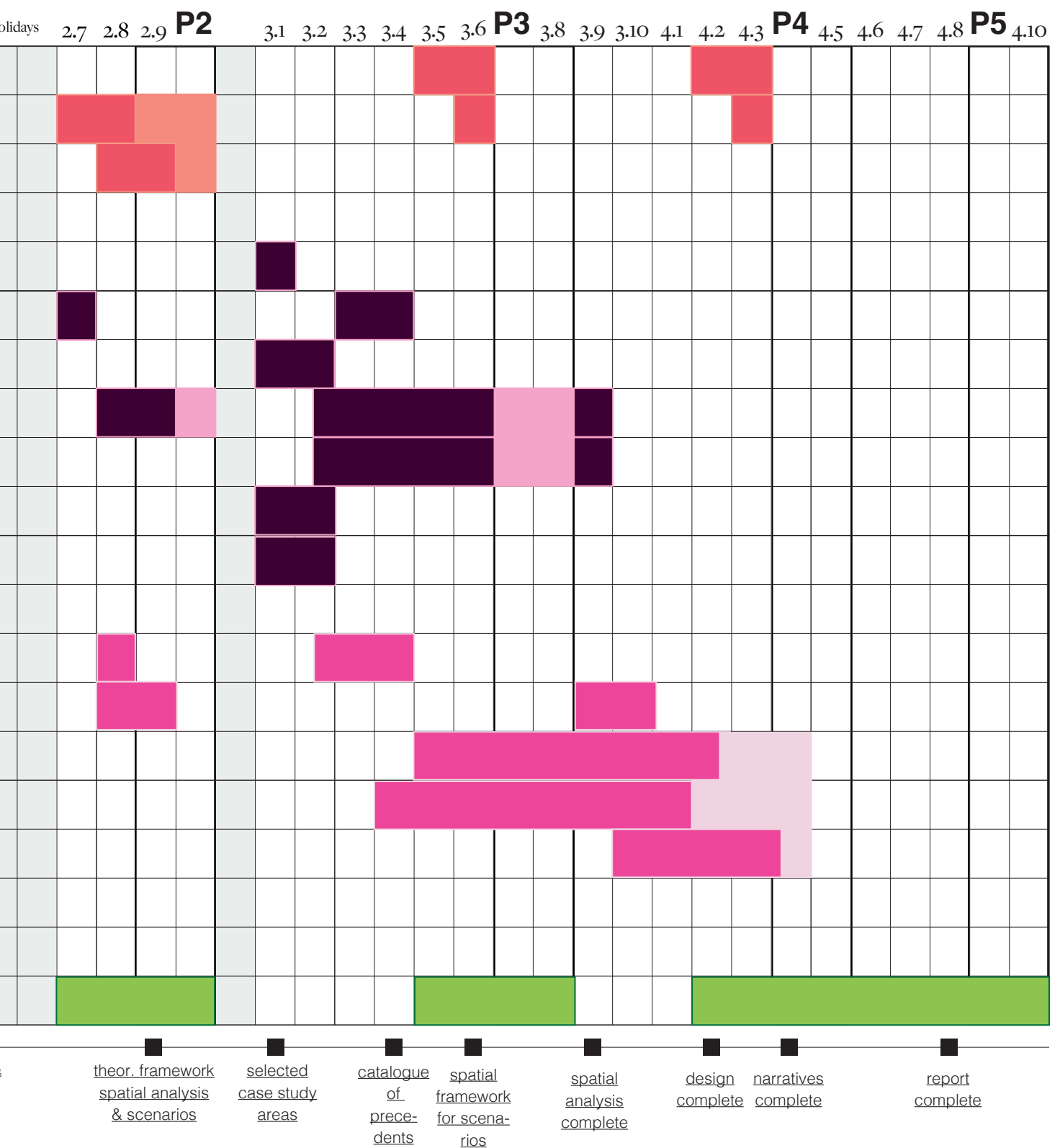
Appendix 06: Notes taken during my own walks

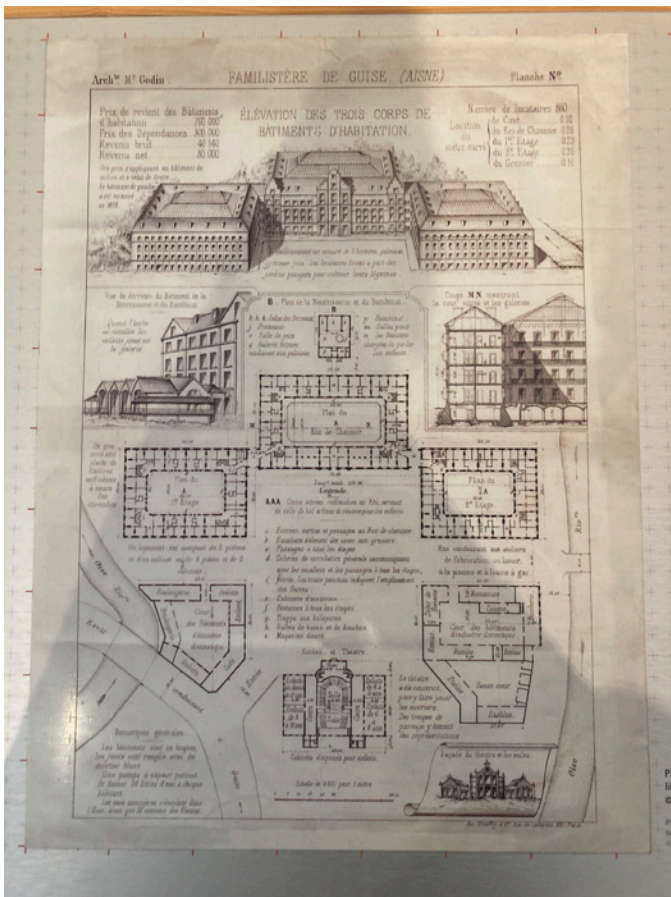
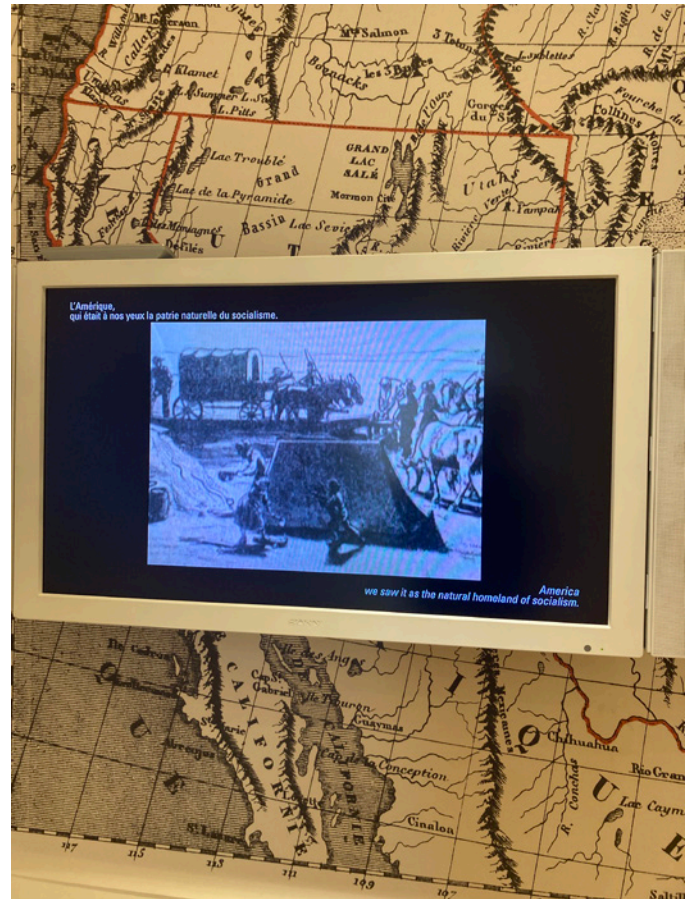
The time plan of this thesis is characterised by the three main chapters of the research (Figure 15). The first phase until P2 mainly focuses on literature review and spatial analysis. After P2, a more extensive field trip will follow to further develop the spatial analysis, especially in its qualitative components until P3.

Simoultaneously, the weeks until P3 will be occupied the compilation of the catalogue of precedents as well as the building of scenarios. Some designs, will already be tested but further developed after P3. While in the finishing phase of design, the narratives will be constructed. Before P3 and P4, moments are kept open for further literature review if investiogations of other methods unveiled gaps in the existing theoretical framework.



Appendix 07: Time planning from P2 moment (some methods/terms have changed)





Appendix 08: Photographs from my Visit to the Familistère in Guise

CHRIST EN CROIX

“ La croix, elle vient des parents de Marie à Flavigny. On ne va pas tous les dimanches à l'église. Souvent, Charles va à la pêche avec ceux du moulage. On a quand même voulu qu'Eugène soit baptisé. Le curé de Guise, quand il a su que c'était un enfant du Familistère, a dit : faut voir comment il nous a sermonnés. Pourtant, le baptême, la messe ou les fêtes religieuses c'est pas interdit aux habitants du Familistère. On est libre de croire ou pas.

C'EST VRAI QUE LE PATRON, IL VOUDRAIT UNE MORALE SANS LES CURÉS. LA SOLIDARITÉ ET LA FRATERNITÉ.

CRUCIFIX

Alors en ville, on dit du mal des écoles du Familistère parce qu'il y a pas de catéchisme. On dit aussi que les nouvelles fêtes, qui sont pas les fêtes d'un saint patron, c'est une débauche.

EN FAIT, ON N'OSE PAS TROP SE MONTRER RELIGIEUX AU FAMILISTÈRE. ”

The cross comes from Maries' parents in Flavigny. We don't go to church every Sunday. Often Charles goes fishing with his mates from the casting shop. We still wanted Eugène to be christened. The priest at Guise gave us a right talking-to when he found out he was a Familistère baby. And yet people who live in the Familistère are free to go to mass, have their children baptised and celebrate religious festivals.

You can be a believer or a nonbeliever. THE BOSS, IT'S TRUE, WOULD LIKE THERE TO BE MORALS WITHOUT PRIESTS. SOLIDARITY AND BROTHERHOOD. So people from the town criticise the Familistère schools because they don't teach the catechism. They also say that our new festivals are immoral because they aren't dedicated to some saint. IN FACT, YOU HAVE TO BE CAREFUL NOT TO BE TOO RELIGIOUS IF YOU LIVE IN THE FAMILISTÈRE.

Oiseaux en cage

“ LES LAPINS, LES POULES ET LES PIGEONS, ON N'A PAS LE DROIT D'EN AMENER CHEZ SOI.

Il paraît que c'est pour la propreté des appartements. À l'économat, il y a bien une porcherie, un clapier, une basse-cour mais c'est pas pareil. C'EST PAS À NOUS. C'est pour la boucherie du Familistère.

Au début, ils ont parlé d'un jardin zoologique où des animaux pourraient être soignés pour l'agrément de tout le monde. Mais au bout du compte, LES PETITS OISEAUX EN CAGE comme les pinsons ont été acceptés à l'intérieur des logements. ”

CAGED BIRDS, RABBITS, CHICKENS AND PIGEONS – WE'RE NOT ALLOWED TO HAVE THEM AT HOME.

It's to do with keeping the flats clean. At the 'Economat' there's a pigsty, rabbit hutches and a poultry yard, but that's not the same. They don't belong to us. They're for the Familistère butcher's shop. At the beginning there was some talk of having a zoological garden with animals that everyone could enjoy. But, in the end, they agreed to let people keep LITTLE BIRDS, like finches, in cages inside the flats.

DU LINGE ET DES CORPS PROPRES

“ C'EST PAS PERMIS DE LAVER SON LINGE DANS LES LOGEMENTS À CAUSE DE L'HUMIDITÉ SURTOUT.

Dans le premier pavillon d'habitation, on a fait une buanderie dans une salle du rez-de-chaussée. Maintenant on est trop nombreux à habiter, alors on parle de faire une nouvelle construction pour la lessive de l'autre côté de la rivière.

Comme Marie elle est à la filature toute la semaine, c'est la voisine qui s'occupe de notre lessive. Le repassage, Marie s'en occupe le dimanche après-midi. Pour se laver soi, il y a les salles de bain au rez-de-chaussée de l'aile gauche.

GRÂCE À LA MACHINE À VAPEUR QUI FAIT MONTER L'EAU JUSQU'AU GRENIER, ON A DE L'EAU CHAUDE GRATUITEMENT.

Mais il y a encore beaucoup de gens qui les fréquentent pas souvent et qui préfèrent une petite toilette chez eux. ”

CLEAN CLOTHES AND CLEAN BODIES

YOU ARE NOT ALLOWED TO WASH CLOTHES IN THE FLATS. MAINLY BECAUSE IT WOULD MAKE THEM DAMP.

There is a laundry room on the ground floor of the first residential building. There are too many people living here now so they are talking about opening a laundry building on the other side of the river. With Marie at the mill, it's one of our neighbours who does the washing for us. Marie does the ironing on a Sunday afternoon. As for washing ourselves, there are bathrooms on the ground floor of the left wing.

THERE'S A STEAM ENGINE THAT PUMPS HOT WATER RIGHT UP TO THE ATTIC. SO WE GET FREE HOT WATER.

Lots of people don't use the bathrooms very often, they prefer to have a wash at home.

