LAURA THOMAS

On the Activation of Border
Space to Enable Interaction and
Accommodate Inclusive Mobility

BORDER SCAPES

I can't say it's everything I planned when I was little. You know, when you are little, that you have this big heart. Your head is full with the future. You want to have the best future, live the best life. You know this, right? Sometimes I sit down and I say 'Wow, this is not the way I planned my life'.

excerpt from interview with refugee in Como

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Graduation studio
Design of the Urban Fabric

Image on cover by author.

Eritrean refugees walk in a trail near the Italian-French border in Ventimiglia, Italy. They had first tried to cross the border by train in the morning, but were caught by the French police that pushed them back to the Italian border. (2017). By Gianni Cipriano. Retrieved from: <https://www.giannicipriano.com/portfolio/les-debarques/>

INTRODUCTION

On why border space is relevant, what the specifics of the research location are and how the research will be performed.

INTRODUCTION

INTRODUCTION

Europe is in crisis. Or, at least, so state politicians and the media, referring to the influx of refugees that have entered Europe allegedly to endanger European values and agreements. In 2015, the amount of refugees - primarily Syrians, Afghans and Iraqis - who crossed the Mediterranean sea in the hope to find refuge in Europe tripled compared to the previous year, to more than a million registered arrivals[1]. The large increase lead media to speak of a real, European 'refugee crisis'.

So as the actual crises worldwide pushed people towards Europe, Europe pushed back. In order to protect our nations, proposals of walls, fences and other means to keep strangers out became the hobbyhorse of national leaders in their battle to make us (feel) safe again. The continuation of a European Union was questioned in favour of nationalist ideals. If Europe could not protect us, surely the nation could. On that account, the past decade has witnessed the rapid rise of nationalist movements that advocate closed-border policies - equating closing borders to securing identity[2].

A closed border, in these cases, does not mean really closed. Rather, 'closed border' means closing the border to those who are not and cannot be part of the national 'us' romanticised by nationalist leaders. For all of those who are expected to contribute to the economic growth of the nation, however, borders are wide-open and migration or 'being mobile' is stimulated. It can therefore be argued that migration in the Western society has two strongly distinguished faces. On the one hand, migrants who are expected to contribute to the growth of the national economy - such as expats and international students - are welcomed and even fought for as European

1   UNHCR, 'The Mediterranean Situation' <https://data2.unhcr.org/en/situations/mediterranean> [accessed 9 April 2020].
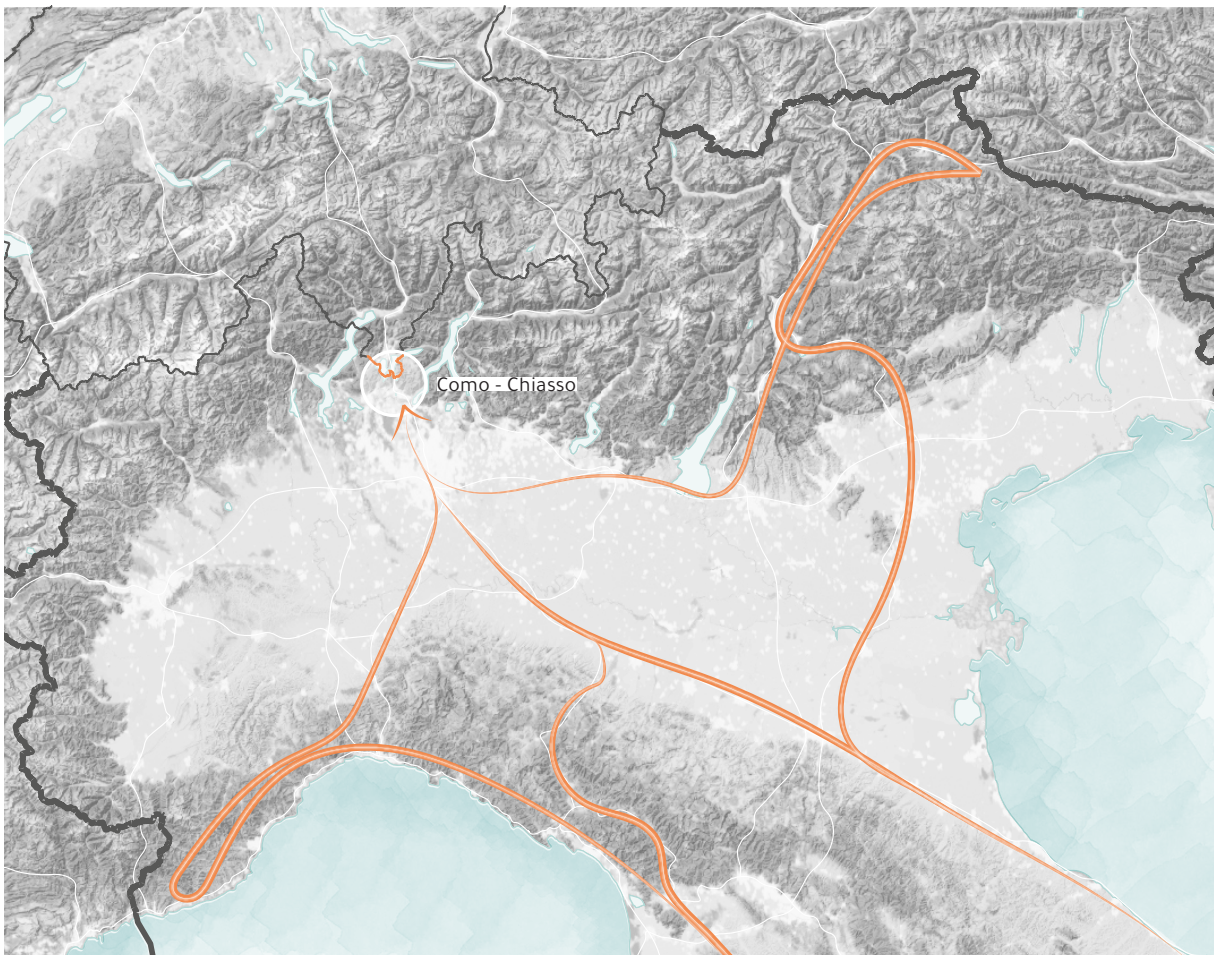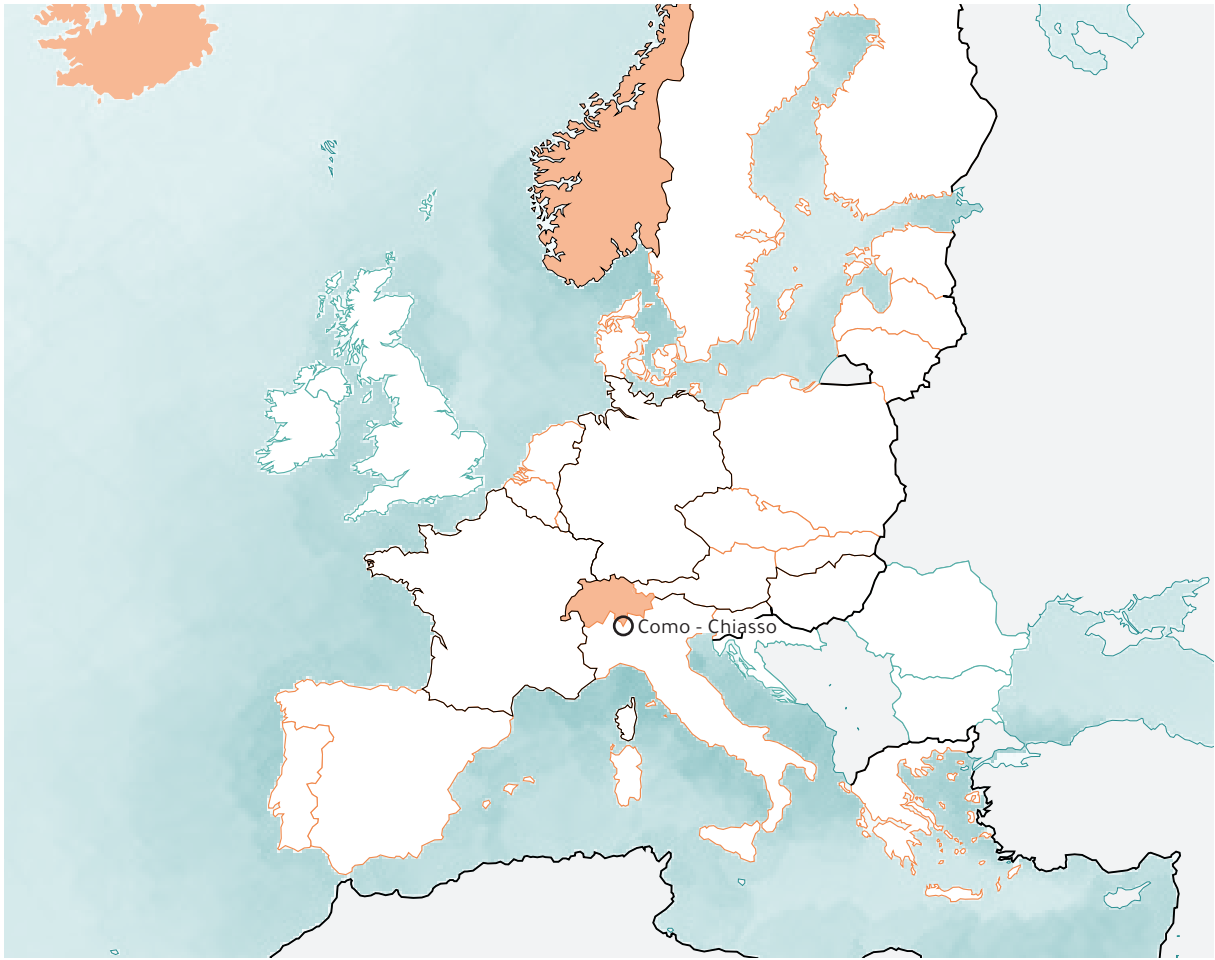
2   Michel Agier, Borderlands: Towards an Anthropology of the Cosmopolitan Condition (Cambridge: Polity Press, 2016).

Figure 1   Left
Two refugees just expelled from Switzerland (August 2016). By Mattia Vaca.

Figure 2   Above
Border crossing Chiasso - Ponte-Chiasso (August 2017). By Harm Luiting. Retrieved from Flickr.

Como - Chiasso

Como - Chiasso

capitals compete for the optimal 'business climate'. Migrants who do not meet the demands of neoliberal growth, instead, are excluded. The political climate in Western societies is increasingly leaning towards excluding those who appeal to the safety and prosperity of the West, but who are not expected to contribute to it. It is this prejudiced, two-fold treatment of mobility, in which some migrants are desired and invited and others are undesired and excluded, that this thesis confronts.

The ever so human wish to move to where possibilities are grander or risks fewer will continue to push and pull people from and to different places across the globe. It is this fluctuating demand that our urban environment needs to adapt to. The interdependency of people across the globe and the increasing amount of people who identify with more than one nationality ask us to rethink what it still means to be protected by a nation-state border, how these borders influence our daily lives and the lives of others, and how and why - in a world in which we increasingly depend on people and functions across borders - **borders still separate, rather than integrate differences.** The aim of this thesis is to shed light on ways to adapt planning and design to an increasingly mobile world, taking border space as the lens through which to explore large phenomena such as (the spatial accommodation of) migration.

1.2 | Context

The project location that this thesis concerns is the border area of Como (Italy "IT") and Chiasso (Switzerland "CH"). The area, graced by beautiful lakes and mountainous landscapes, is famous for its tourism. Yearly, more than three million visitor nights are spent in the luxurious lake town of Como[3]. Tourism has also defined Como's history. Already around 1700, European intellectuals and nobles visited the villas on the lake as part of their Grand Tour. The city has thrived on temporary inhabitants ever since. But, when the year of 2015 saw a new group of strangers arrive to the city, these people were somehow received less hospitality.

Many refugees who cross the Mediterranean sea first set foot in Europe on Italian territory. This makes Italy one of Europe's arrival countries. In 2015, Italy functioned as a gateway for 153.842 registered refugees[4] - many of whom were on their way to Northern Europe. Countries bordering with Italy observed the soaring numbers and decided to take action to protect their nations. After both France and Austria 'temporarily' reintroduced border control to manage the 'unforeseen' arrival of refugees[5], the Como (IT) - Chiasso (CH) border crossing became the last channel towards a better future up North for refugees who had arrived to Italy.

When migrants massively changed routes to move towards Northern Europe through Switzerland, Switzerland also increased security along its border with Italy. The non-EU country increased control at border checkpoints, performed consistent train checks and sent out helicopters and drones with heat sensors to limit the amount of illegal refugees entering the country[6]. According to data from the Federal Customs Administration, in 2016 there were 34.000 attempts to enter the Swiss-Italian canton Ticino illegally, mostly at the border with Chiasso[7]. On the other side of the border, in the Italian city of Como, refugees who had not succeeded to cross started to accumulate in the park in front of the Como S. Giovanni station, in the station building and on the platforms. Over a hundred people were sleeping on the streets.

3   Compared to, for example, sixteen million nights in Amsterdam. Both numbers concern 2017. Retrieved from: http://dati.istat.it/ and https://data.amsterdam.nl/ [accessed 9 April 2020].

4   UNHCR, 'Sea Arrivals to Italy', 2016 <https://data2.unhcr.org/> [accessed 9 April 2020].

5   European Commission, 'Temporary Reintroduction of Border Control' <https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen/reintroduction-border-control_en> [accessed 9 April 2020].

6   USA Today, 'Switzerland Blocks Migrants Wanting to Pass-through from Italian Border', 2016 <https://eu.usatoday.com/story/news/world/2016/09/16/switzerland-blocks-migrants-italian-border/89955758/ > [accessed 9 April 2020].

7   OpenMigration, 'Como, an Endless Game of the Goose at the Expense of Migrants', 2017 <https://openmigration.org/en/analyses/como-an-endless-game-of-the-goose-at-the-expense-of-migrants/> [accessed 9 April 2020].

Above
'Temporarily' reintroduced border control in 2015. Map by author.
       EU Schengen state
       Non-Schengen EU state
       Non-EU Schengen state
       Schengen external border
       Schengen reintroduced
       internal border control

Figure 3   Below
Main refugee routes towards Northern Europe. Map by author.

Whether to offer shelter to people in need, or to relieve the unappealing pressure on public spaces, a refugee camp accommodating 300 people was opened in Como in 2016, tucked away between an old factory, a cemetery and the railway none of them was allowed to make use of. Then, in October 2018, the camp disappeared again - its inhabitants mysteriously redistributed to other centres[8].

At the same time, while a small, prejudiced part of society was stuck in the border of Como - Chiasso, thousands of people crossed this same border daily to get to work or to run errands. Each day, seventy-thousand Italians cross the border to go to work in Switzerland[9]. The large majority of them work in the city of Lugano, near Chiasso. The border of Como - Chiasso is defined by heavy infrastructures that allow thousands of people to move between Switzerland and Italy daily. For them, the border offers opportunities. More than just a line on the map, the border is a marker of changing conditions. Different taxation systems, laws and possibilities invite people to cross borders.

All in all, the border area between Como and Chiasso is home to various groups of people who are living in mobility: tourists, refugees and commuters, but also transport drivers for whom the Como - Chiasso crossing is the main border crossing between Italy and Switzerland. Each of these groups has their own network of places and spaces that they use - but the hypothesis of this thesis is that these networks hardly cross. **Opportunities for different groups to meet in border space and to benefit from each other's presence are minimal, because of the general focus on crossing, rather than staying**.

All of this makes the border between Como and Chiasso an exclusionary border: while some people are stimulated to cross, others stay stuck in formal or informal encampments in border space. The lives of different groups in border space are separate and chances for interaction and synergy are restrained. **By investigating the Como - Chiasso border area, knowledge will be developed on how to spatially organise border space that enables interaction an accommodates inclusive mobility**.

1.3 | Problem statement

Border space is a space with unique conditions. The different conditions on both sides of the border allow people who are able to cross this border to profit from opportunities on both sides. Their access to cross-border mobility allows them to develop socially and economically. Unfortunately, developments along borders rarely take into account the quality of the living environment. Instead, the developments are focused above all on improving efficiency of crossing, hereby economising time. But not everyone is able to cross borders. Refugees who are stuck in the margins of border space are often isolated from economic and social activity, making their waiting time a waste. People who can cross the border, instead, have no reason to halt in border space. The lives of different people in border space are entirely separate and chances for interaction and synergy are restrained.

8   QuiComo, 'Chiusura Del Campo Profughi Di Como, Migranti Trasferiti: Centro Sgomberato', 2018 <http://www.quicomo.it/politica/chiusura-campo-profughi-como-sgomberato.html> [accessed 9 April 2020].

9   G.P. Torricelli and S. Garlandini, 'La Frontiera e Le Mappe: Evidenze Demografiche e Socioeconomiche Tra Svizzera e Italia, 2010-14'. Quaderno I (Mendrisio: Dipartimento del territorio, Bellinzona, 2017).

Figure 4   Above
Young Italian women arriving at the railway station in Chiasso (1950). By SBB Historic. Retrieved from: < https://blog.nationalmuseum.ch/en/2019/07/the-italian-girls-of-migros/>

Figure 5   Below
Refugee waiting for train from Como S. Giovanni station to Chiasso (August 2016). By Mattia Vaca. Retrieved from: http://reportage.corriere.it/cronache/2016/italia-svizzera-con-i-migranti-lungo-i-sentieri-dei-contrabbandieri/>

1.4 | Working hypothesis

Fostering the integration of social groups in border space through mobility - by making paths cross - can produce social and economic opportunities that are greater than the sum of opportunities achieved within groups individually. Enhancing the interaction between refugees who are stuck in border space and those who can cross and are mobile, can help refugees to be involved in economic and social activities, making their waiting time in border space worthy. For border crossers and border inhabitants, redesigned border space offers unique facilities and stimulates slowing down, improving the experience and living quality of border space and allowing for interaction between and awareness of diverse identities. Borders as markers of different identities and cultures can then be a place where differences meet.

1.5 | 'Como - Chiasso', 'Ponte-Chiasso' or 'Chiasso - Ponte-Chiasso' ?

Throughout this thesis, several terms are used to describe the research location. The term 'Como - Chiasso' refers to the larger border region that consists of the two municipalities Como (IT) and Chiasso (CH) (marked with a black outline). 'Ponte-Chiasso' is a comune ('*frazione*') within the municipality of Como that is attached to the Swiss-Italian border (marked in light grey). The term 'Chiasso - Ponte-Chiasso' refers to the area along the Swiss-Italian border in Chiasso and Ponte-Chiasso (marked with a dashed circle). These terms will be used throughout the booklet and strategies and designs will address these different scales.

Chiasso - Ponte-Chiasso

CHIASSO

Ponte-Chiasso

LAGO DI COMO

COMO

1 km

2 km

3 km

4 km

5 km

Figure 6   Left Above
Early twentieth century Italian migrants on their way to France (6.400 people), Germany (13.500), Luxembourgh (6.570) and Switzerland (15.400). Retrieved from: < http://www. settimanalediocesidi como.it/2019/02/12/ quando-gli-emigranti-partivano-per-lestero-dalla-nostra-diocesi-alla-ricerca-di-un-futuro-migliore/

Figure 7   Left Below
Refugees waiting to be let into the camp in Como (August 2016). By Mattia Vaca. Retrieved from: < http://reportage.corriere.it/ cronache/2016/italia-svizzera-con-i-migranti-lungo-i-sentieri-dei-contrabbandieri/ >

Figure 8   Right Below
Definition of different design scales. Map by author.

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INTRODUCTION

METHODOLOGY

The methodology chapter makes transparent the research methods that have been used to come to the presented findings.

The chapter presents the research questions, sets out the research aim, the expected outcomes and the way in which the research will be approached to achieve the desired result.

The conceptual framework and methodological flowchart offer a comprehensive overview of the theories consulted and the methods used respectively.

The chapter concludes with a reflection on the societal and scientific relevance of the research and personal, ethical considartions.

2.1 | Research questions

How to design **border space** that allows the spatial and social mobility of all actors, and that functions as an integrative edge for people from different backgrounds?

SQ1. What are the impacts of the various forms of **spatial mobility** on border space?

SQ2. How can **planning and design** in border space be adapted to do justice to cross-border lifestyles? What **cross-border networks** are at stake?

SQ3. What are the **spatial consequences** of the presence of a nation-state border?

SQ4. What kind of urban design interventions could contribute to making border space an **inclusive and inhabitable space**?

SQ5. How can **refugee integration** be stimulated through interventions in urban form?

SQ6. How can the **dynamics of permanence and temporality** inherent to border space be addressed by design?

Figure 9
Security cameras at the Swiss-Italian border (August 2017). By Mattia Vaca. Retrieved from: http://reportage. corriere.it/cronache/2016/ italia-svizzera-con-i-migranti-lungo-i-sentieri-dei-contrabbandieri/ >

2.2 | Research aim

The aim of this research is to challenge European nation-state territoriality and the corresponding perception that borders are fixed lines that function as an 'in between' rather than a space of opportunities. The intention of this project is to reveal that borders are three-dimensional spaces that are more than smoothened spaces of crossing and/or hard barriers. Planning and design should adapt to the idea that a large amount of people actually live in border space, because of the conditions a border creates on both sides. This means border space deserves a planning and design approach that makes more out of border space than a place of the border's by-products. The aim of this research is to turn border space into a high quality living environment where people of diverse backgrounds have the opportunity to meet. Border space will become a space that is flexible in its adaptation to changing needs of people inhabiting border space.

2.3 | Expected Outcomes

Drawing from extensive literature research, mapping, site visits and interviews, three statements about the meaning and desired direction of border space will form the guidelines along which to develop a design for the border space of Como-Chiasso. The three statements are: (1) borders are defined by movements of people, products and information; (2) border space has overlapping networks and belongs to multiple territories and (3) borders mark changing conditions that have a spatial output. The statements on border space are universal, making the research transferable to other border regions.

Based on the three statements, design principles are developed for the Como-Chiasso border area that would contribute to realizing an inclusive, inhabitable border space. The principles focus on three 'hows': (1) how to design affordable, incremental housing, (2) how to design diverse public spaces and (3) how to build slow networks; all in border space. The design principles will in turn inform urban plans, sections and strategic maps on various scales that visualize a potential future for an inclusive, adaptive and ecological Como-Chiasso border area. Two zoom-ins into specific sites along the Como-Chiasso border will be used to represent the ideas guiding this thesis.

2.4 | Research approach

SQ1. WHAT ARE THE IMPACTS OF THE VARIOUS FORMS OF SPATIAL MOBILITY ON BORDER SPACE?
The research starts from the personal observation that mobility in the border of Como-Chiasso is unbalanced. Having been part of the intense traffic accross the Swiss-Italian border, I wondered what the impact of such an amount of traffic could be on space. The research thus starts from a personal experience and takes off from there with a theoretical exploration of the concepts 'spatial mobility' and 'social mobility'. Documentary research and mapping lead me closer to an understanding of the unfair nature of the different movements that occur in border space. It introduces me to a distinction between different border typologies that occur simultaneously, but are experienced differently depending on who you are and where you are from: hard and smooth borders. This brings me to develop a new, desired typology: a slow border.

SQ2. HOW CAN PLANNING AND DESIGN IN BORDER SPACE BE ADAPTED TO DO JUSTICE TO CROSS-BORDER LIFESTYLES? WHAT CROSS-BORDER NETWORKS ARE AT STAKE?

Theory research into cross-border planning supports an understanding of how current planning and design is nation-oriented. The written text gives a hint of what nation-transcending planning and design could be like. Theory research into mobility introduces me to the topic 'cosmopolitanization' and cross-border lifestyles. The desired border typology transforms from 'slow border' into 'complex border'.Spatial analysis and mapping is used to visualize the different cross-border networks. The different user groups in border space are reduced to four typical users that frequent the Como-Chiasso border: (1) refugees; (2) commuters; (3) transport drivers and (4) commuters.

SQ3. WHAT ARE THE SPATIAL CONSEQUENCES OF THE PRESENCE OF A NATION-STATE BORDER?

Mapping and spatial analysis bring forward the idea of a border as a three-dimensional space that currently exists solely of the border's by-products, but that is actually a daily living environment for many people. Mapping of the so-called 'border effects' help to understand the implications of a national border on space. The desired border typology transforms from 'complex border' into 'border space'.

SQ4. WHAT KIND OF URBAN DESIGN INTERVENTIONS COULD CONTRIBUTE TO MAKING BORDER SPACE AN INCLUSIVE AND INHABITABLE SPACE?

From the three statements reached after literature research and site visits, design ambitions were generated that are expected to contribute to making the border space of Como-Chiasso into an inclusive, inhabitable space. Research by design has reinforced the design principles, going back and forth between the abstract design of schemes, theory research, consulting design references and precise, measured design on various scales and by various means (maps, sections, 3D, ...).

SQ5. HOW CAN REFUGEE INTEGRATION BE STIMULATED THROUGH INTERVENTIONS IN URBAN FORM?

Literature study combined with spatial analysis and research by design gives insight into how adaptations in urban form can influence the social and economic integration of refugees. Different visualisation methods, such as axonometries and eye-level drawings are used to test the spatial quality of such changes.

SQ6. HOW CAN THE DYNAMICS OF PERMANENCE AND TEMPORALITY INHERENT TO BORDER SPACE BE ADDRESSED BY DESIGN?

Research by design up until an architectural level reveals the integration of permanence and temporality into the design. Different visualisation methods, such as axonometries and eye-level drawings are tested to get a grip on what the dynamic character of border space actually looks like.

2.5 | Research methods

EXPLORATORY RESEARCH
Helps to identify a problem or question

SITE VISIT
Getting to know the area by inhabiting it for half a year has been the first step to identify the question of this thesis.

DOCUMENTARY RESEARCH
Documentary research is made use of by consulting documents such as newspapers, maps, government statistical publications and photographs to identify problems in border space. The documentary research helps to identify the scope and indicate the first direction of the research.

MAPPING AND SPATIAL ANALYSIS
Mapping of the areas in which exclusion and privilege prevail helps to understand how and if these phenomena mean something spatially. Spatial analysis of the produced maps results in recognized structures and recurring spatial elements that are inherent to border space and mobility.

CONSTRUCTIVE RESEARCH
Tests theories and proposes solutions to a problem or question

THEORY RESEARCH
The analysis of scientific papers on the themes of mobility, border space and nation-state territoriality help to identify established opinions in the field and shape a personal position on the subjects studied.

DESIGN REFERENCE ANALYSIS
The analysis of executed designs provides the research with 'proof' from practice. Reference analysis is a strong addition to theory analysis, because it can ground the abstract theories.

EMPIRICAL RESEARCH
Tests the feasibility of a solution using empirical evidence

FIELD WORK
Site visits for personal observation of the situation helps the designer to grasp reality. Consulted theories and imagined designs need to land in reality. Field work is crucial in order for the designer to understand the scale and possibilities of the site, as well as to get an idea of the use of spaces.

INTERVIEWS
Face-to-face interviews or online conversations with people who live in the selected site are valuable to offer an insider perspective. Within the scope of this project, I have spoken to refugees, inhabitants and employees in the area and volunteers who have worked with refugees.

Tests the feasibility of a solution using design

DIAGRAMATIC DESIGN
Designing in diagrams helps to explore concepts and helps to understand how complex themes can work together in space. Diagramatic design can happen in the form of schematic maps, but also in sections, in collages or in scaleless schemes.

SITE-SPECIFIC DESIGN
The integration of concepts and ideas into measurable space through site-specific design tests helps to understand how concepts could work spatially.
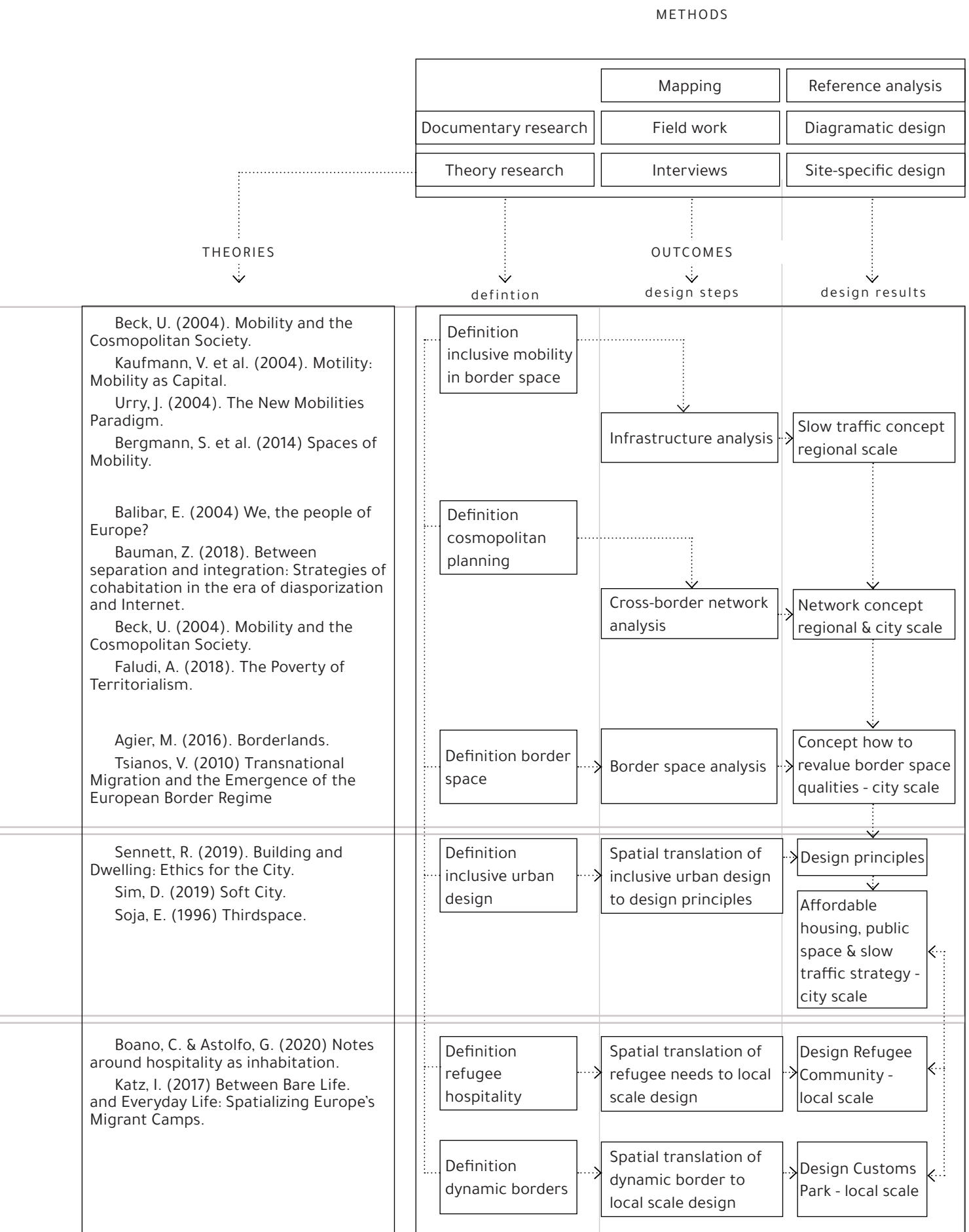
RESEARCH QUESTIONS	SITE VISIT	DOCUMENTARY RESEARCH	MAPPING AND SPATIAL ANALYSIS	THEROY RESEARCH	REFERENCE ANAYSIS	FIELD WORK	INTERVIEWS	DIAGRAMATIC DESIGN	SITE-SPECIFIC DESIGN
SQ1. What are the impacts of the various forms of spatial mobility on border space?	●	●	●	●		●	●		
SQ2. How can planning and design in border space be adapted to do justice to cross-border lifestyles? What cross-border networks are at stake?		●	●	●			●		
SQ3. What are the spatial consequences of the presence of a nation-state border?	●	●				●			
SQ4. What kind of urban design interventions could contribute to making border space an inclusive and inhabitable space?	●		●	●	●	●		●	●
SQ5. How can refugee integration be stimulated through interventions in urban form?	●				●	●	●	●	●
SQ6. How can the dynamics of permanence and temporality inherent to border space be addressed by design?	●				●	●	●	●	●
	EXPLORATORY			**CONSTRUCTIVE**		**EMPIRICAL**		**BY DESIGN**	

2.6 | Methodological summary

How to design border space that allows the spatial and social mobility of all actors, and that functions as an integrative edge for people from different backgrounds?

	SUBQUESTIONS	AIMS	
THREE OBSERVATIONS	SQ1. What are the impacts of the various forms of spatial mobility on border space?	1. To define inclusive mobility as a form of capital that creates accessible opportunities in border space. 2. To explore how spatial mobility can be designed and planned inclusively.	
	SQ2. How can planning and design in border space be adapted to do justice to cross-border lifestyles? What cross-border networks are at stake?	3. To explore how planning and design could adapt to global cosmopolitanization of lifestyles. 4. To define and map the cross-border networks that are at stake.	
	SQ3. What are the spatial consequences of the presence of a nation-state border?	5. To explore and graphically represent the effects of borders on surrounding space and inhabiting local and floating populations.	
TOWARDS A BORDER SPACE DESIGN	SQ4. What kind of urban design interventions could contribute to making border space an inclusive and inhabitable space?	6. To use research by design as a way to study how to build affordable incremental housing, diverse public spaces and inclusive slow traffic networks.	
ZOOM-INS	SQ5. How can refugee integration be stimulated through interventions in urban form? SQ6. How can the dynamics of permanence and temporality inherent to border space be addressed by design?	7. To develop an urban design method that fosters the integration of refugees in central urban areas. 8. To determine how the dynamic nature of borders can be addressed.	

METHODS

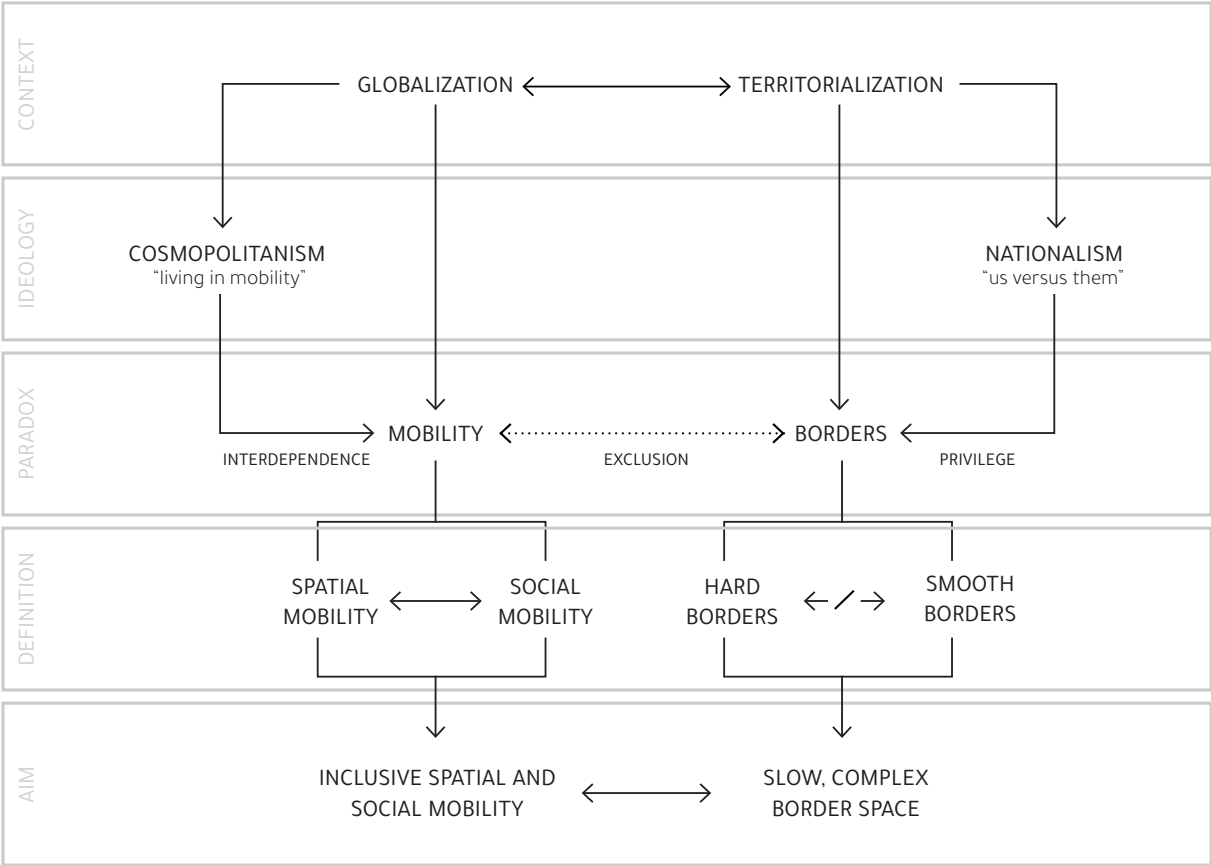| | Mapping | Reference analysis |
| Documentary research | Field work | Diagramatic design |
| Theory research | Interviews | Site-specific design |

THEORIES

OUTCOMES

defintion   design steps   design results

Beck, U. (2004). Mobility and the Cosmopolitan Society.
Kaufmann, V. et al. (2004). Motility: Mobility as Capital.
Urry, J. (2004). The New Mobilities Paradigm.
Bergmann, S. et al. (2014) Spaces of Mobility.

Balibar, E. (2004) We, the people of Europe?
Bauman, Z. (2018). Between separation and integration: Strategies of cohabitation in the era of diasporization and Internet.
Beck, U. (2004). Mobility and the Cosmopolitan Society.
Faludi, A. (2018). The Poverty of Territorialism.

Agier, M. (2016). Borderlands.
Tsianos, V. (2010) Transnational Migration and the Emergence of the European Border Regime

Sennett, R. (2019). Building and Dwelling: Ethics for the City.
Sim, D. (2019) Soft City.
Soja, E. (1996) Thirdspace.

Boano, C. & Astolfo, G. (2020) Notes around hospitality as inhabitation.
Katz, I. (2017) Between Bare Life and Everyday Life: Spatializing Europe's Migrant Camps.

Definition inclusive mobility in border space

Infrastructure analysis

Slow traffic concept regional scale

Definition cosmopolitan planning

Cross-border network analysis

Network concept regional & city scale

Definition border space

Border space analysis

Concept how to revalue border space qualities - city scale

Definition inclusive urban design

Spatial translation of inclusive urban design to design principles

Design principles

Affordable housing, public space & slow traffic strategy - city scale

Definition refugee hospitality

Spatial translation of refugee needs to local scale design

Design Refugee Community - local scale

Definition dynamic borders

Spatial translation of dynamic border to local scale design

Design Customs Park - local scale

2.7 | Conceptual framework

CONTEXT

GLOBALIZATION ←→ TERRITORIALIZATION

IDEOLOGY

COSMOPOLITANISM
"living in mobility"

NATIONALISM
"us versus them"

PARADOX

MOBILITY ⟵·····⟶ BORDERS

INTERDEPENDENCE   EXCLUSION   PRIVILEGE

DEFINITION

SPATIAL ←→ SOCIAL
MOBILITY   MOBILITY

HARD ← / → SMOOTH
BORDERS   BORDERS

AIM

INCLUSIVE SPATIAL AND ←→ SLOW, COMPLEX
SOCIAL MOBILITY   BORDER SPACE

Figure 10   Above
Via Belinzona in Ponte-Chiasso
(1939). By Comocomera &
Gianfranco Nitti. Retrieved
from: < https://www.
famigliacomasca.net/como-
comera-e-come/>

Figure 11   Below
Via Belinzona in Ponte-Chiasso
(today). By Comocomera &
Gianfranco Nitti. Retrieved
from: < https://www.
famigliacomasca.net/como-
comera-e-come/>

THREE OBSERVATIONS

Drawing from extensive literature research, mapping, site visits and interviews, three statements about the meaning and desired direction of border space can be made that will form the guidelines along which to develop design principles for the border space of Como-Chiasso.

1

Borders are defined by movements of people, products and information.

The first in a sequence of three observations suggests that Como-Chiasso's border area is strongly shaped by mobility.

The chapter shows how the Como-Chiasso border area is defined by large-scale infrastructures and identifies a two-faced border condition, which is on the one hand smoothened to the utmost to increase efficiency of crossing, and on the other completely hardened to prohibit crossing.

The chapter suggest that, in order to reach a border condition that offers equitable opportunities for all actors in border space, inclusive mobility should be persued. Inclusive mobility as an objective encompasses the ambition of equitable access to opportunities, by securing the possibility to be mobile for all people.

3.1 | Exclusive cross-border mobility

Cross-border mobility is a specific form of mobility that is driven by different circumstances that are created because of the presence of a nation-state border. The border, in other words, creates conditions that make people want to cross - whether this is because of lower petrol prices, higher salaries or a social system that can offer safety and comfort to those from a country without.

For those who are entitled to participate in the movement of capital, product and people across a relatively borderless world, borders are smoothened and ease of crossing is facilitated in order to reach optimal economic efficiency[10]. For those who are not expected to contribute to the growth of the nation, instead, the border functions as a waiting space in which life is put on hold as one waits for the unlikely approval to cross[11]. This distinguishes two types of borders: smooth and hard borders.

While the establishment of the European Union suggests the development of smooth borders throughout Europe to improve the freedom of movement within the EU, ever since the so-called European 'refugee crisis', Europe's nation-state borders have become hard borders for a small part of society. This means borders are often both smooth and hard borders at the same time - depending on who is asking. This is also the case in Como-Chiasso.

The Como-Chiasso border area is a mobility hot-spot. Each day, seventy-thousand Italians cross the border at the Como-Chiasso border control points to go to work in

10 Ulrich Beck, 'Mobility and the Cosmopolitan Society'. Mobility and the Cosmopolitan Perspective (2004).

11 Michel Agier, Borderlands: Towards an Anthropology of the Cosmopolitan Condition (Cambridge: Polity Press, 2016).

Figure 12   Above
Aerial photo of Chiasso, looking towards the Como lake. By Foto CdT/BP e Zocchetti. Retrieved from: < https://www.cdt.ch/ticino/chiasso-si-riprende-il-suo-cuore-EJ1469336 >

Switzerland[12]. For them, the border is a smooth border. The extreme focus on the development of heavy infrastructures has lead to unattractive spatial conditons for the Como-Chiasso area. Hiding away between highways and railways, **the housing possibilities and public facilities in the Como-Chiasso border area are scarce and the area is better hurried through than dwelled in.** This is fine for those who can race past borders, but for those for whom the border is hard, this has become a problem.

3.2 | Inclusive mobility

Generally, when thinking of mobility, the geographic displacement of people and products comes to mind. This type of mobility can be referred to as 'spatial mobility'. Mobility, however, also incorporates social aspects. This means apart from understanding mobility solely as 'spatial mobility', 'social mobility' should be considered[13].

Changing spatial mobility can influence social mobility. The integration of spatial and social mobility follows the idea that the way in which resources are distributed and accessed, influences a person's potential to benefit from opportunities[14]. Having less access to resources, such as is the case in hard borders, makes one less apt to climb the social ladder. As resources are made accessible partially through spatial mobility, improving the inclusive accessibility of spatial mobility can lead to an improved, equally distributed social mobility. In this, it is not only the actual physical displacement that is relevant to social mobility, but rather the potential to move. Knowing how to (and deciding to) 'be mobile' gives a person access to other opportunities to develop.

3.3 | Lack of slow traffic networks

Currently, car-traffic is dominant in the Como-Chiasso border area. But not all inhabitants in border space can afford to own a car. In order to reach optimal inclusive accessibility to opportunities, various means of mobility should be developed along the Como-Chiasso border.

As stated before, the infrastructures that are currently at place in the Como-Chiasso border area are organized as such, that opportunities to pause are scarce. The main objective of the infrastructures in border space is to move people through it as quickly as possible. Moving people through border space with such a speed leads to a decline in possibilities for different people in border space to interact. The development of a slow traffic network could enhance the chances of running into one another in border space.

In the upper map on the next page, the current cycling network is shown. There is clearly no cross-border cooperation concerning the development of a slow traffic network. The cycling path coming from Switzerland goes up until the border, and not beyond. The map below reveals a first attempt to create a slow traffic network that is comprehensive and connects multiple places, taking into account the height differences of the area. Locations along the network are a suitable location for the development of spaces that could bring into contact diverse people in border space.

12   Torricelli & Garlandini

13   Vincent Kaufmann, Manfred Max Bergman, and Dominique Joye, 'Motility: Mobility as Capital', International Journal of Urban and Regional Research, 28.4. (2004) 745-56.

14   Robert Cervero, 'Integration of Urban Transport and Urban Planning', The Challenge of Urban Government: Policies and Practices. (2001) 407-272.

integration of spatial and social mobility

Figure 13   Above Refugees waiting for the train to Switzerland (August 2016). By Mattia Vaca. Retrieved from: < http://reportage. corriere.it/cronache/2016/ italia-svizzera-con-i-migranti-lungo-i-sentieri-dei-contrabbandieri/ >

Figure 14   Below Traffic Jam on the highway from Switzerland towards Italy (June 2014). By Keystone. Retrieved from: < https://www.rsi.ch/news/ svizzera/Fondo-stradale-da-cambiare-1139224.html >
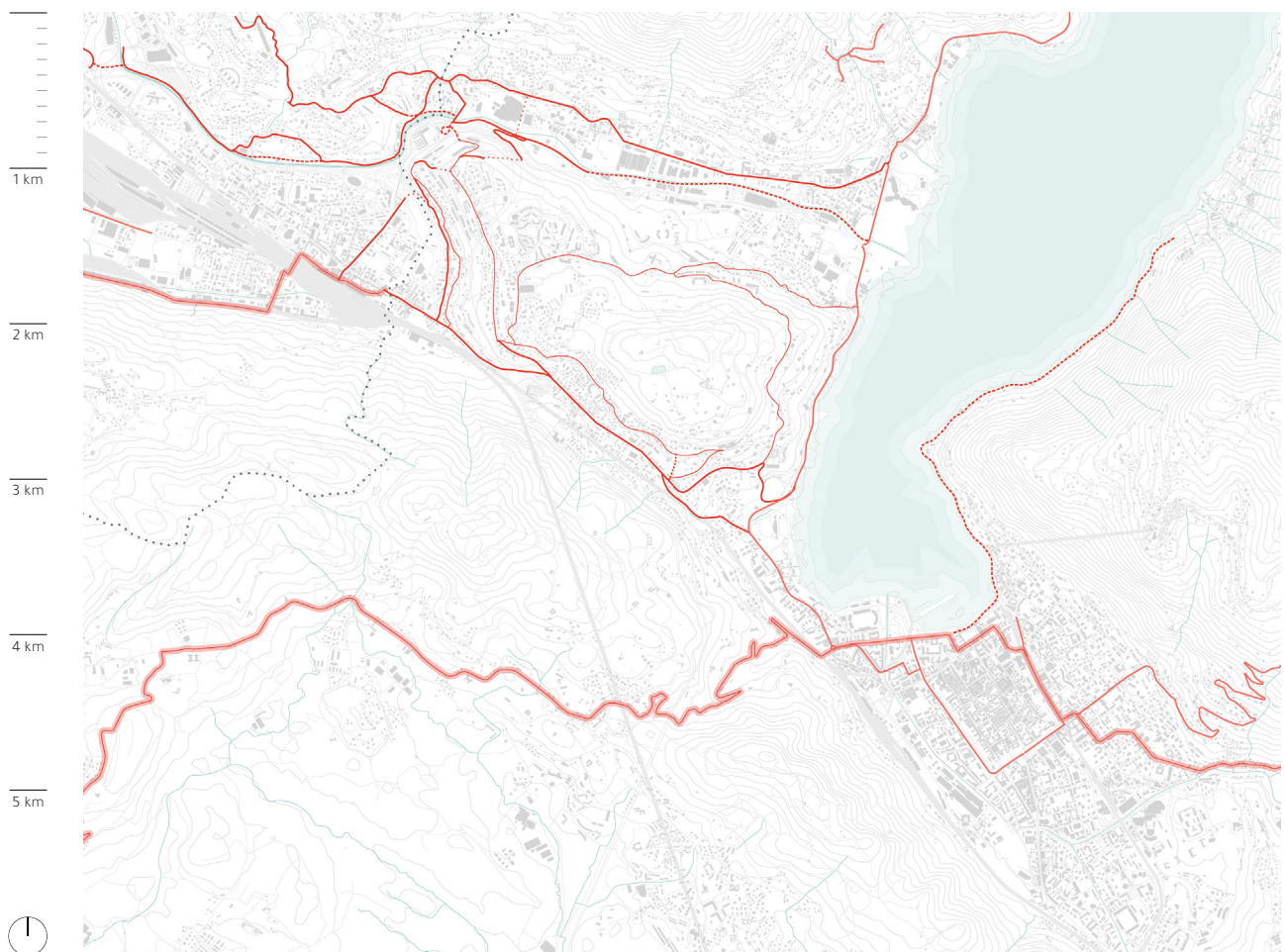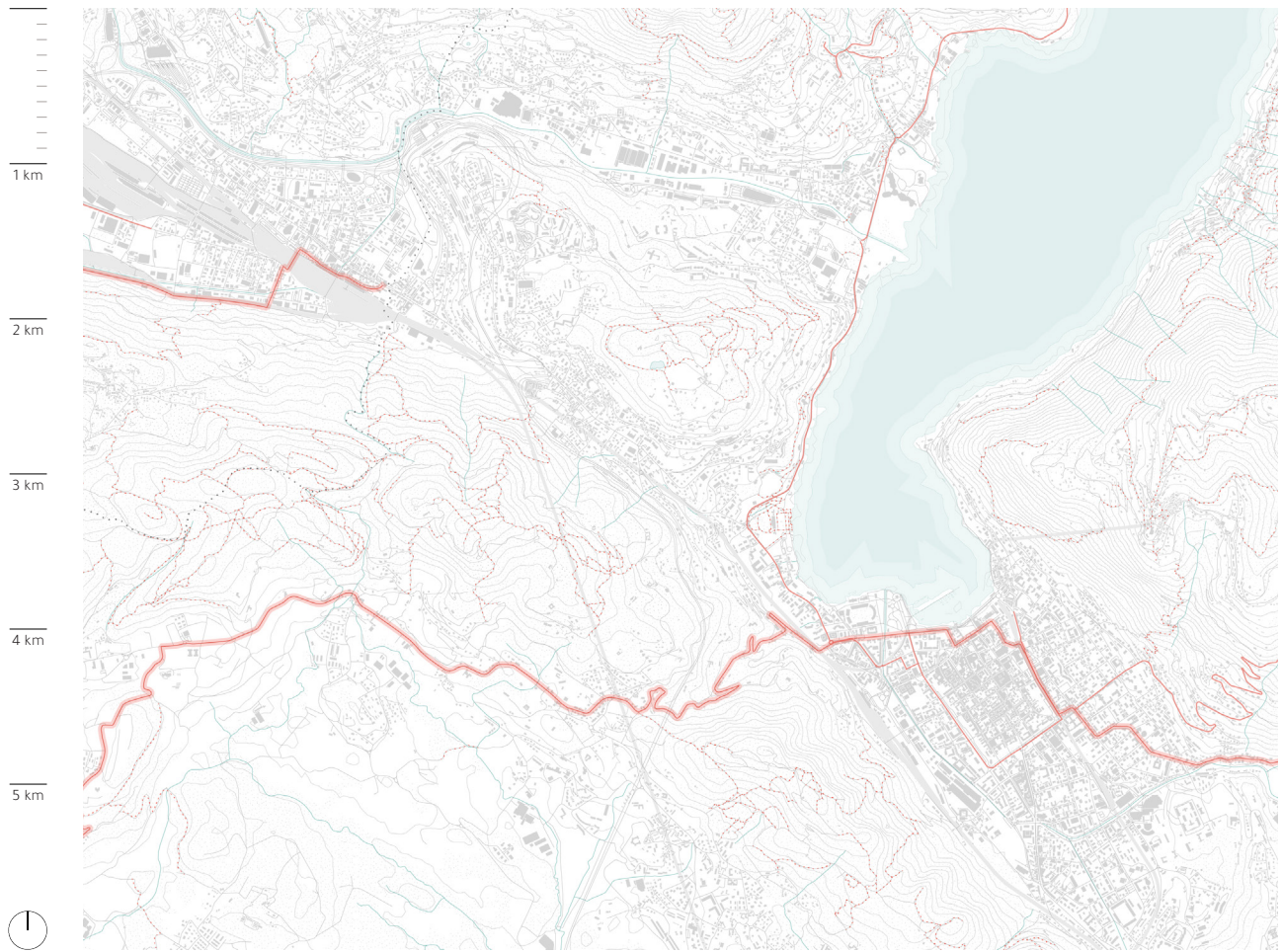
3.4 | Towards a new border typology

In order to improve the unequal conditions of the Como-Chiasso border, a third type of border will be conceptualized, next to the smooth border and the hard border that are currently experienced. This border typology is neither completly smooth nor hard, but somewhere in between. This new border typology accommodates places to stay. **It is a border typology in which slowing down the speed of crossing is stimulated by creating a slow traffic network with attractive places to pause.** The development of attractive public spaces will activate the border area and will help those who are stuck in border space to develop socially and economically because of improved access to opportunities and people in the newly developed places. Imagining this new typology, border space could function as an edge where different cultures interact and where interaction can stimulate economic and social activity[15].
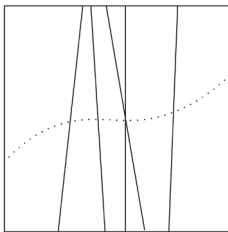
SMOOTH BORDER
networks run parallel and efficient
crossing time is minimized
opportunities accessible by crossing
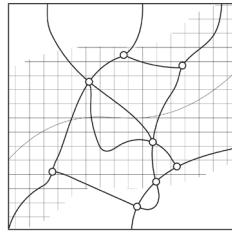
SLOW BORDER
networks cross and overlap
crossing time is interrupted
opportunities are fairly distributed
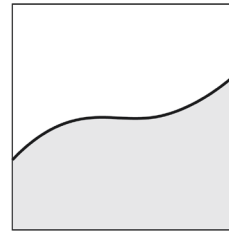
HARD BORDER
networks end at the border
crossing is impossible
there are no opportunities

Figure 15   Upper Left
— Current cycling network

Figure 16   Lower Left
— Proposed slow traffic
   network

Figure 17   Right page, left image: square in Ponte-Chiasso dominated by car parking. Elevated highway is visible in background. Photograph by author

Figure 18   Right page, right image: picture taken from Ponte-Chiasso (IT looking towards Chiasso (CH): border is defined by car and lorry traffic. Pedestrian path leads to nowhere. Photograph by author.

2

Border areas contain overlapping networks and belong to multiple territories.

The second observation involves a glance backwards into the history of nation-state borders.

In order to understand the current impact of nation-state territorialist thinking on spatial planning and design, the chapter starts from the exploration of the origin of the nation-state. Thereupon, the chapter reveals the limitations of nation-bound planning in border space and proposes a nation-transcending planning alternative, in which territorialism achieves a whole different meaning.

The new perspective suggests an approach to border space that acknowledges the ongoing complex movements of diverse people accross and along borders, leading to the overlapping of territories and the intermingling of hybrid cultures.

4.1 | Nation-state borders

Most theories about the history and origins of the nation state see the nation state as a nineteenth century European phenomenon, encouraged by developments such as nation-wide education and mass literacy. Along with the instruction of a common education and a common language, the formation of nation states went hand in hand with defining the territory, teaching about it and imposing shared ideals or a shared national personality, essential for the unity of the nation.

What keeps nation states together, argues Faludi[16], is most of all the representative democracy, for which a space is required within familiar borders, in which citizens feel confident to enter into dialogue with one another. It is in this condition that citizens can feel ownership over their shared territory - a sense of national belonging. But while nation-state territorialism stands for ownership and security, it also stands for exclusion and privilege[17]. Faludi explains it best himself:

> 'the ultimate case for territorialism rests on democratic legitimacy being produced in and by assemblies representing the people of a territory. (...) what results is the feeling that we, the general public bound by our belonging to the same territory - are in this together. This sense of belonging can strengthen love for the country and for fellow citizens to the point where we are willing to pay taxes and to otherwise rally to the defence of the inviolability of our common territory, if necessary at the peril of excluding others - a strong case, indeed, for territorialism.

16 Andreas Faludi, The Poverty of Territorialism: A Neo-Medieval View of Europe and European Planning (Cheltenham: Edward Elgar Publishing Lt., 2018).

17 Etienne Balibar, We the People of Europe? (Princeton University Press, 2004); Faludi.

Figure 19   Above Spectacular views from Italy overlooking large infrastructures and mountainous landscapes. Photograph taken by author.

4.2 | Nation-state planning and design

The governance of nation states favours divisions that are orderly and hermetic, in which control and compliance are easy to obtain[18]. This results in the borders of nations being treated as outlines. Often, the representations of designs reveal precisely this: the plan ends where the territory ends. The same goes for digital data that is used by planners and designers for mapping and analysis: the data is controlled on a national level. **And even though cross-border cooperations and plans are increasingly common, these plans are often 'space-blind', to avoid fuss about losing control over territories[19].**

The occupation of all planetary spaces by different authorities, where is defined who is responsible, which language is to be spoken, how is to be behaved, and so on, is what Faludi refers to as territorialism: the world as divided into separate planes that are governed, planned for and dreamt for separately - each nation with its own interests put first. But as people's lifestyles are becoming increasingly global, and people are increasingly loyal to more than a single nation, the survival technique of the nation is under pressure. The unity of a nation can no longer be defined in the same, absolute way, as there is no longer such a thing as 'the national'.

The era of territorialism and colonization can be defined as the first era in modern times in which people travelled largely and purposefully across national borders. Paradoxically, the expansion of territories globally, in a way, initiated the endangerment of the national territories themselves, as **the multi-ethnic societies that have since then been established can no longer be cast into one national body**[20].

To conclude, nation-state territorial planning, in which a border is percieved as a line between two territories, does not correspond with the reality of cross-border lifestyles.

defined territories   national identities   cross-border lifestyles   cross-border territories
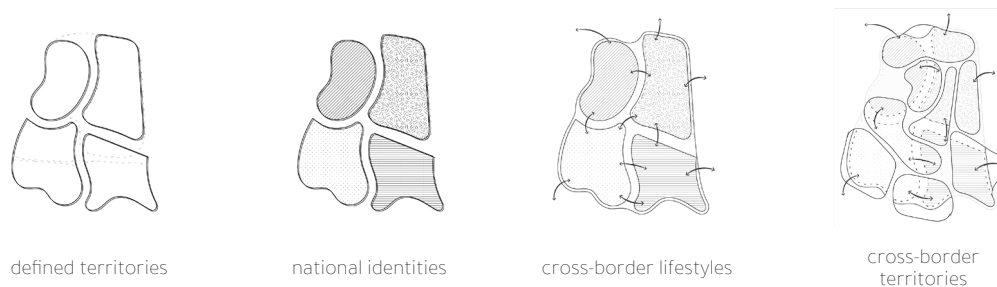
4.3 | Nation-transcending planning models

An attempt to follow up to interests that transcend nations, was the establishment of the European Union after World War II, with the idea that only collaboration could finally put an end to war and conflicts in Europe. But even in comprehensive governance systems such as the European Union, the subunits are always nations[21]. And as nations do not like to give up their control in fear of losing the right to democratic participation, the European Union is now questioned.

One of the main problems of the European Union, according to Faludi, is that we want Europe to be a bigger version of a nation state, with the same type of institutions

Figure 20   Above Barrialfa Karavate, 21, a migrant from Guinea, at Lake Como (June 2017). By Gianni Cipriano for The New York Times. Retrieved from: < https://www.nytimes.com/2017/06/24/world/europe/italy-immigration-elections.html>

Figure 21   Below Tourist couple at Lake Como. Retrieved from: < https://travelfoodpeople.com/blog/2017/8/22/the-weekly-gateway-breath-taking-views-and-timeless-elegance-in-lake-como>

on a bigger scale. The origins of these institutions lie in the creation of nation states and the invention of a national 'us' and their ideas are not intended for dealing with fluidity and border-crossing.

As the main problem with nation-state territoriality is fixedness in a world that is increasingly fluid, the question for urban planning and design should be: **how to plan and design without the ulterior goal of control and definition?** Therefore, this chapter aims to explore how designers and planners can avoid feeding into territoriality.

What we should be doing, instead of fostering privilege and exclusion in Europe, is to see Europe as a 'highly developed regional organisation and political system'[22][23], of which the ultimate purpose is not to exclude others, but rather to make borders soft. **Planners and designers should be challenging nations' border spaces, drawing maps in which political entities become equally important as the lived networks of people, which almost always cross borders**[24]. Reasoning this way, border space becomes of high interest for the European Union, because it might be the space where forerunners of a new, 'unanchored subject'[25] emerge: people who do not feel more part of their country than of Europe.

To design for inclusive border spaces, we need a paradigmatic shift from the dominant national gaze to a perspective of global interdependence and an awareness of social relations. But who do we design for, if not for nationals?

4.4 | Identities without nations: the cosmopolitan perspective

The development of mobile lifestyles along with global interdependence - lifestyles of people having multiple places of belonging - is referred to by academics as 'cosmopolitanization'[26]. In the understanding of the cited theorists, cosmopolitanization does not just happen among the globalized elite. Rather, it describes the development of the common contemporary state of living in mobility, whether in one or many of its forms.

> Cosmopolitanism may be an elite concept, cosmopolitanization is not an elite concept. Cosmopolitanization, for example, derives from the dynamics of global risks, of migration or from cultural consumption (music, dress styles, food), and the media impact leads (…) to a shift of perspective, however fragile, and growing awareness of relativity of one's own social position and culture in a global arena. [27]

A cosmpolitan perspective to design and planning recognizes that people belong to different backgrounds in almost any combination, a kind of cultural 'hybridity'[28], in which we combine traits derived from different contexts, without repressing any of the other traits. It is this **multiplicity and layering** of cultures that allows us to distinguish ourselves, rather than one national identity.

From this point of view, it no longer makes sense to plan and design for a nation and its nationals. **Considering the cosmopolitan perspective allows us to see beyond nationalism as the main distinctive feature of relations and to consider relations based on multiple types of distinctions.** For designers and space, this means that instead of designing for a national type and for national interests, cosmopolitan qualities should become much more important, such as the way in which an actor uses space for the relations he or she forms, the extent to which a person is (able to

22 Faludi.

23 Cormac Walsh, 'Brexit Geographies: Spatial Imaginaries and Relational Territorialities on the Island of Ireland. Irish Geography, 52(2). (2019) 137 - 152.

24 Zygmunt Bauman, 'Migration and identities in the globalized world'. Philosophy and Social Criticism, 37(4) (2011), 425-435.

25 Agier.

26 Agier; Bauman, 'Migration and Identities in the Globalized World'; Ulrich Beck, 'Mobility and the Cosmopolitan Society', in Mobility and the Cosmopolitan Perspective, 2004.

27 Beck, 2004; p. 38

28 Bauman, 'Migration and Identities in the Globalized World'., 2011.

Figure 22
Informal refugee camp in front of Como S. Giovanni station. (August 2016). Retrieved from: <http://debetsphotography.com>

Figure 23   Below
Tourist camping 'Rivabella' at lake Como. Retrieved from: < https://www.rivabellalecco.it/>

be) mobile because of how the place is organized, the different social groups a person is part of and can get in touch with, the global processes a person takes part in, etc.

29 John Urry, 'The New Mobilities Paradigm', Mobility and the Cosmopolitan Perspective, 2004.

30 Beck.

4.5 | Towards a cosmopolitan border typology

Design for cosmopolitanization takes into account the boundless movements of people across complex, manifold spaces. It fosters inclusive (cross-border) mobility to do justice to an increasingly mobile world. **Rather than seeing the world as built up out of separate, limited and authentic places, cosmopolitanism offers a perspective on space that emphasizes that all places are part of a system of connections and that no place can function by itself.** This does not mean that all will be fluid, however. Cosmopolitan lifestyles also need places to halt. Rather than fixed places, cosmopolitan places are 'places of movement'[29] in which places and people are connected through various networks. The spaces where people halt and are on the move are central to mobility.

Cosmopolitan border space implicates multiplicity. It differs from nationalist border space in its overlapping of frames of reference. Where one national space ends where the other begins, cosmopolitan border space can have overlapping identities and belong to multiple territories. Furthermore, cosmopolitan border space is a space in which engagement with 'the other' is unavoidable[30].

SMOOTH BORDER
networks run parallel and efficient
crossing time is minimized
opportunities accessible by crossing
+ territories are smoothened out
+ places to stay are non-existent
+ people move past each other

COMPLEX BORDER
networks cross and overlap
crossing time is interrupted
opportunities are fairly distributed
+ territories overlap
+ places to stay are complex; diverse
+ people meet and exchange

HARD BORDER
networks end at the border
crossing is impossible
there are no opportunities
+ territories end at the border
+ places to stay are homogeneous
+ people are unmoved and unmixed

Figure 24   Above
Sandra Obodo, 26, a Nigerian migrant, has a friend braid her hair in Father Della Valle's center where more then 50 migrants stay at night. By Gianni Cipriano for The New York Times. Retrieved from: < https://www.nytimes.com/2017/06/24/world/europe/italy-immigration-elections.html>

Figure 25   Below
The Rev. Giusto Della Valle runs a center on the outskirts of Como where more than 50 migrants sleep (June 2017). By Gianni Cipriano for The New York Times. Retrieved from: < https://www.nytimes.com/2017/06/24/world/europe/italy-immigration-elections.html>
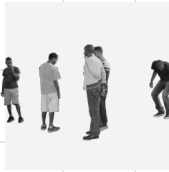
REFUGEES

16 m² [31]

Refugees are the ones stuck in the hard border of Como-Chiasso. They are attracted to the border because of the brighter conditions on the other side. Many refugees in Como-Chiasso are or were on their way to Northern Europe - in search for better opportunities. The Como-Chiasso border area, instead, offers very few opportunities. Time is wasted as refugees wait for their moment to cross. Refugees would benefit from the development of slow, complex border space because it increases opportunities for them to develop, build social relationships and profit from the increased acitivity in border space.

TOURISTS
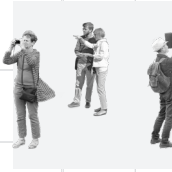
16 m² [32]

Tourists are neither very temporary, nor very permanent dwellers of the Como-Chiasso border area. Usually staying no longer than a couple of days, the affinity with a place generally remains rather superficial for tourists. As a group, however, tourists are permanently present and very much welcomend, as a large part of Como's economy depends on tourism. Increasingly, tourism is becoming an industry of superficial, fleeting encounters. Tourists would profit from more lingering visits in slow, complex border space, that could activate places for other actors.

COMMUTERS

32 m² [33]

Commuters have a double relation to Como-Chiasso's border space. On the one hand, they want to pass through as quickly as possible in order to minimize traveling time. On the other, they (would) benefit much from living in border space. However, border space is currently unattractive to live in. The development of an attractive residential climate in border space would be a large improvement for commuters in border space.

TRANSPORT DRIVERS

80 m² [34]

Transport drivers are the least connected to border space. According to current logic, they benefit from borders that are as smooth as possible. In border space, however, they require a relatively large amount of space. This space is generally isolated and does not contribute to the local surroundings. Could there be a way in which to shape space for transport drivers, so that it adds something to the local environment?

4.6 | Target groups

Drawing from the observation that border space is home to overlapping networks and belongs to multiple territories, and wanting to work with this knowledge, it makes sense to map who uses which spaces in border space. Four groups have been distinguished that each have a different relationship to the Como-Chiasso border. The four groups are explained on the left page.

Defining four typologies for whom to design networks and spaces helps to become more specific than to say 'let's design for a diverse audience'. Further study into the way networks might unfold for people who can identify with these labels will follow accordingly.
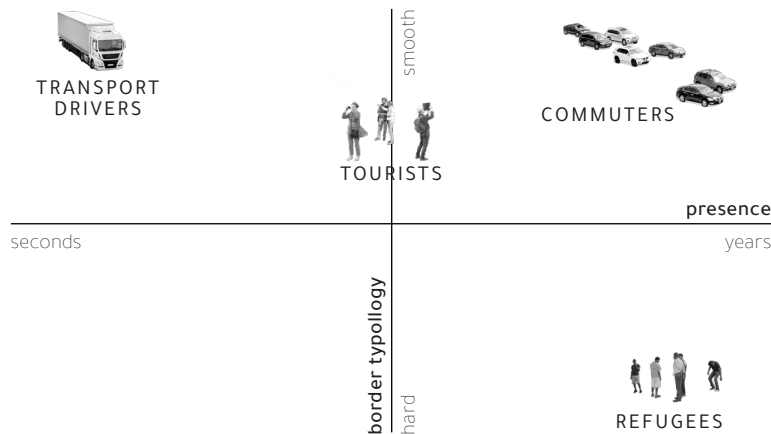
4.7 | Diverse relations to border space

In the chart above, the four groups as described on the neighbouring page are plotted to give an idea of the different relations of each group to border space. On the horizontal axis, time is plotted from seconds to years, to describe the amount of time spent in border space. The vertical axis defines the smoothness of border-crossing.

Transport drivers spend the least time in border space. Their crossing-time is smoothened as much as possible. This puts them in the upper-left corner of the chart. For commuters, likewise, crossing-time is smoothened. For them, however, presence in border space could be much longer, as many of them benefit from living close to the border, in border space. Tourists end up more in the middle of the chart, as they spend more than seconds, but surely not years along the border of Como-Chiasso. Tourists linger more along the border than transport drivers and commuters, which is why they are positioned lower on the vertical axis. They do not drop below the horizontal bar, though, as their border-crossing is very much stimulated by the national governments, in order to strengthen their economies. The final group plotted in the chart is the group of refugees. Refugees are positioned in the down-right corner of the chart. For them, the border is extremely hard, as crossing is forbidden. This results in a presence in border space that can take years.

4.8 | Diverse networks in border space

On the next page, the spaces typically used by the defined groups are mapped to give an idea of the diverse networks that overlap in border space. The way in which these networks could be brought into relation with each other will be studied further on in this work.

31 Based on minimum floor space per person in cities of developed countries: United Nations, 'Charting the Progress of Populations: Floor area per person' <https://www.un.org/en/development/desa/population/publications/trends/progress-of-populations.asp> [accessed 31 May 2020].

32 Estimated size of small hotel room based on searches on Booking.com.

33 Based on avarage size of dwellings in cities and suburbs in Italy: EuroStat, 'Average size of dwellings, by degree of urbanisation, 2012' <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=People_in_the_EU_-_statistics_on_housing_conditions> [accessed 31 May 2020].

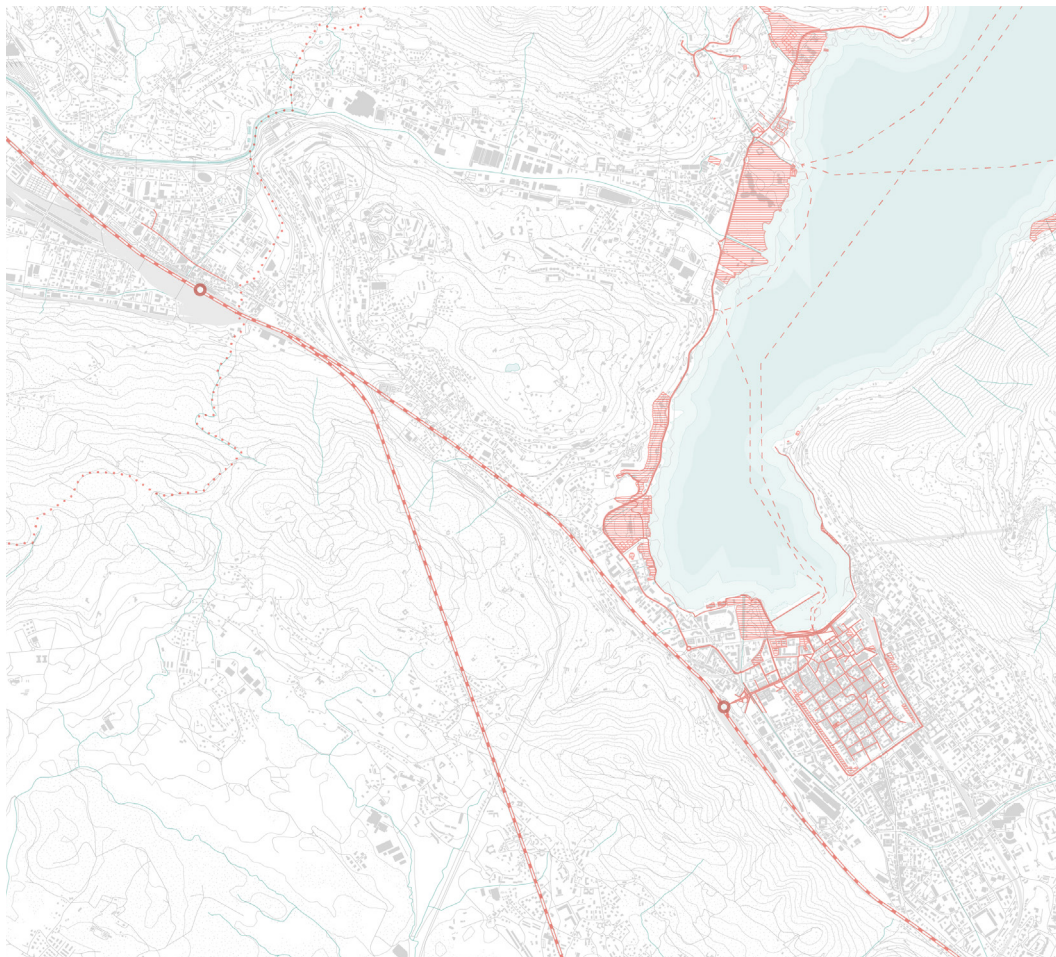34 Based on size of current lorry parking spot in Chiasso.

44
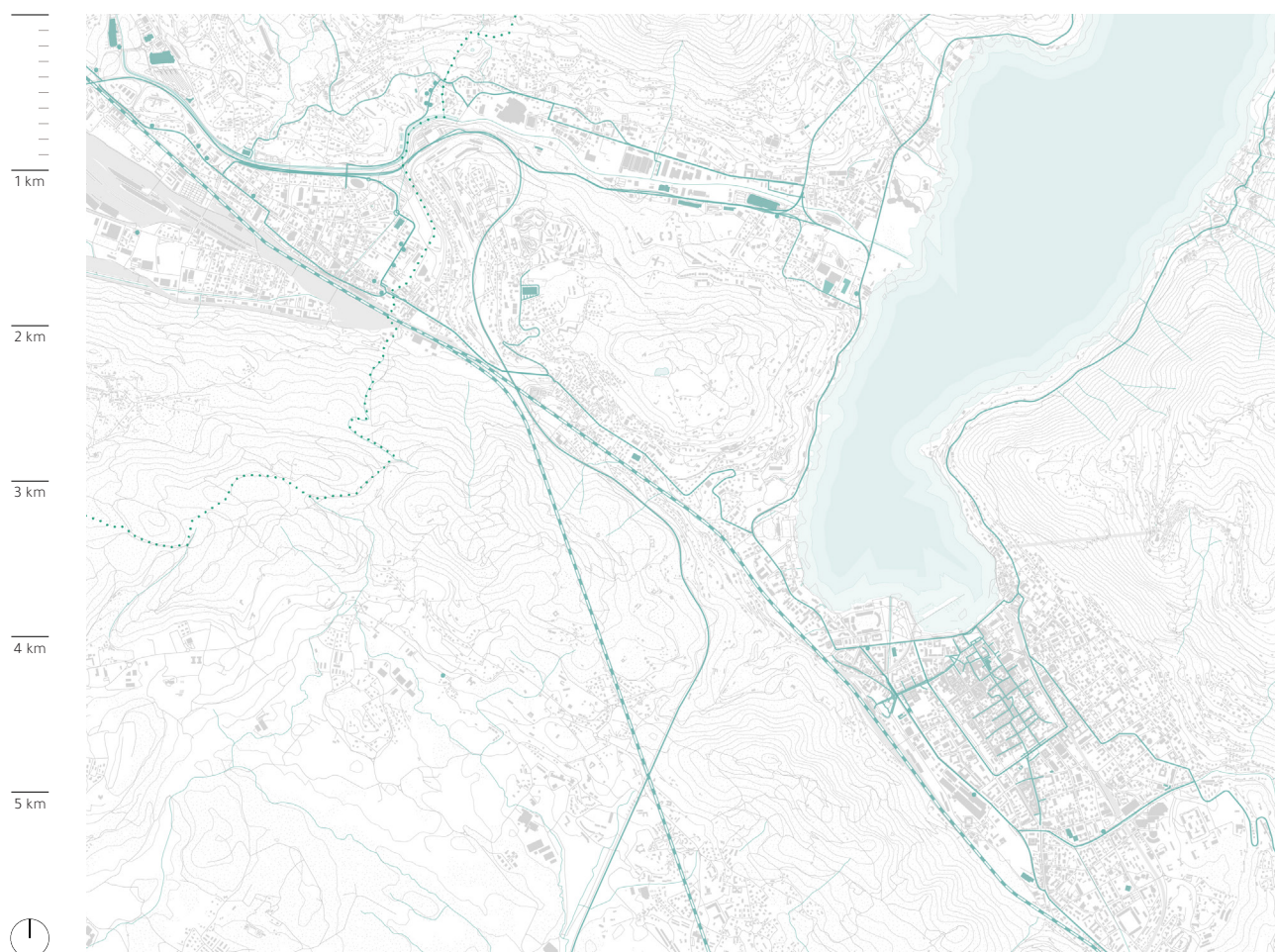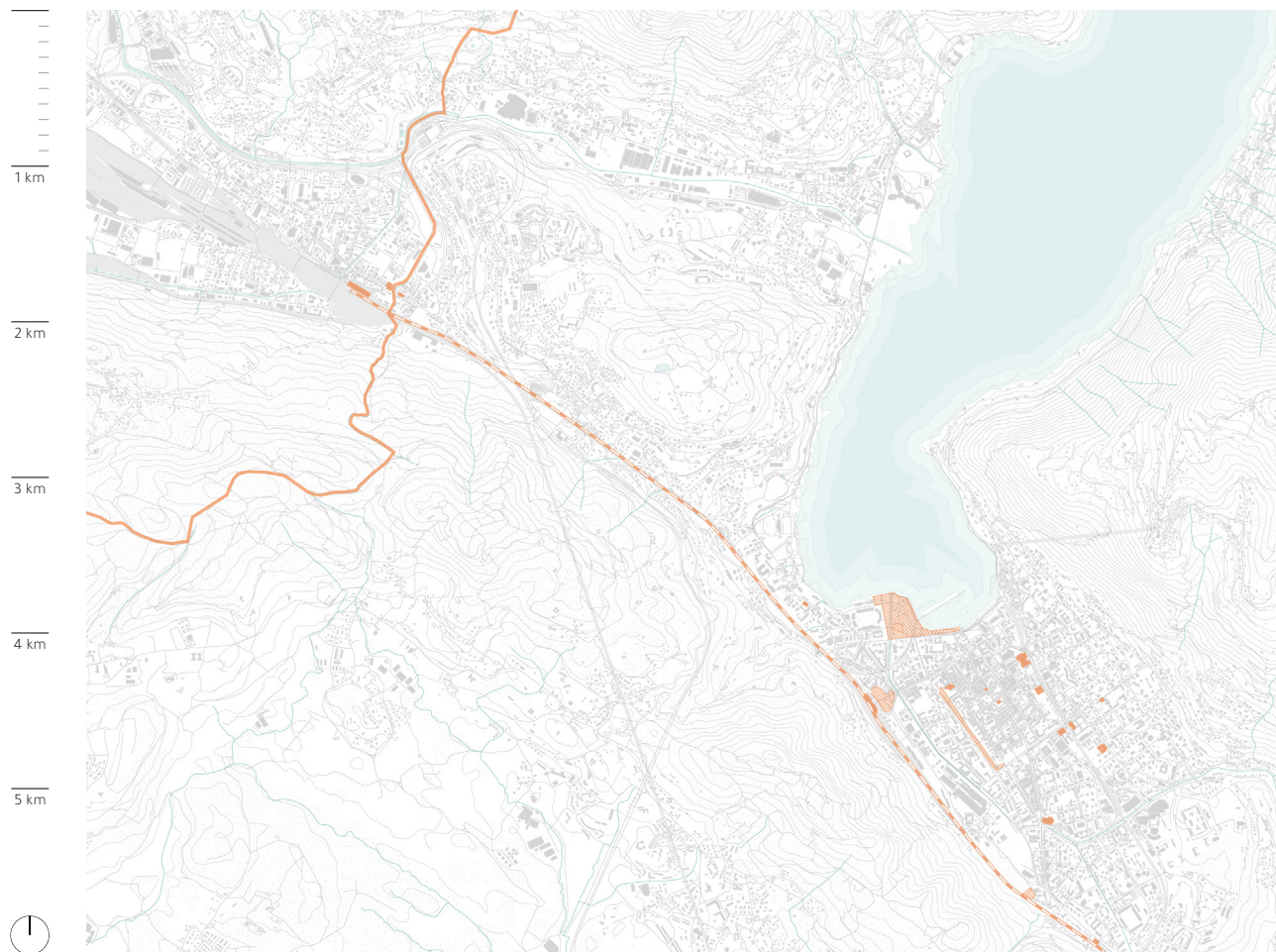
Figure 26   Above Left
— Current refugee network. Map by author. Based on information obtained through interviews with volunteers and refugees from the area; newspaper articles.
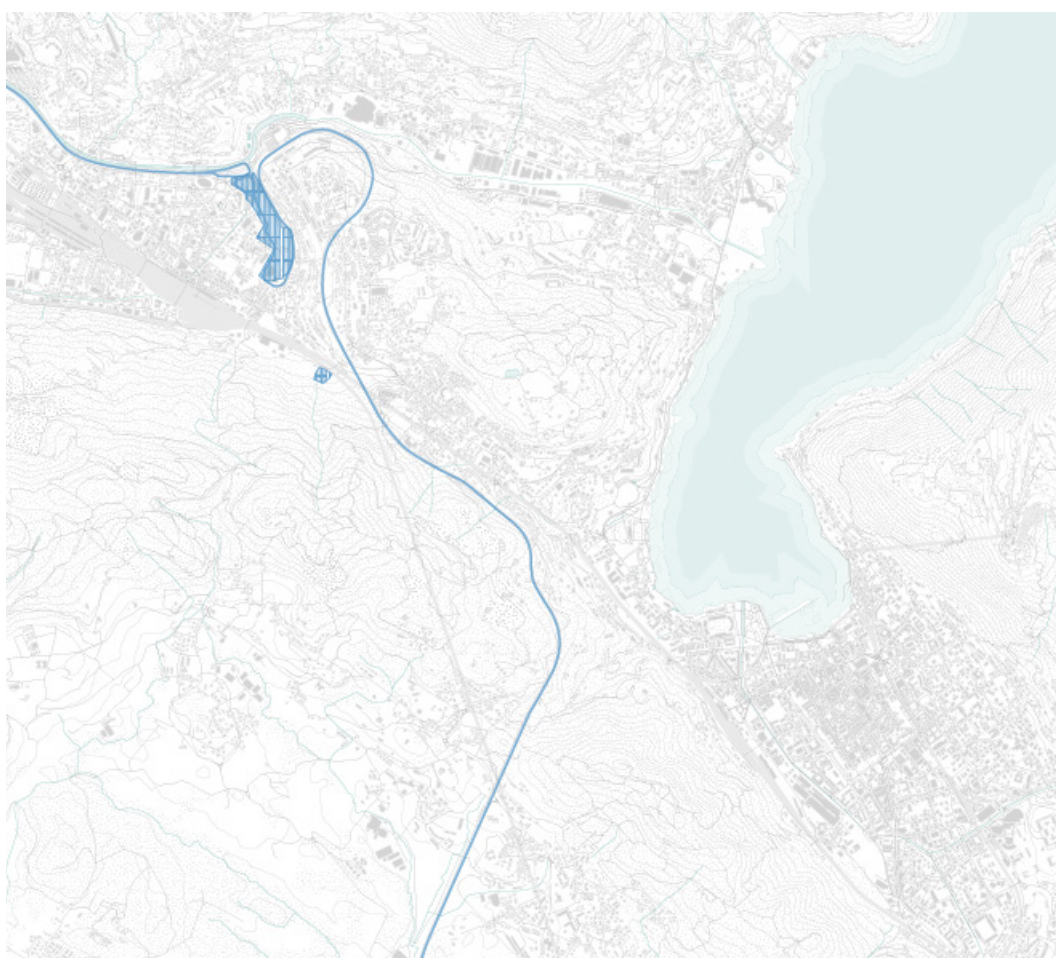
Figure 27   Below Left
— Current commuter network. Map by author. Based on information obtained through interviews with local population; Google Maps Traffic.

Figure 28   Above Right
— Current tourist network. Map by author. Based on personal experience as a tourist in Como; news paper articles; information on tourism websites.

Figure 29   Below Right
— Current transport network. Map by author. Based on information obtained from Google Maps.

46
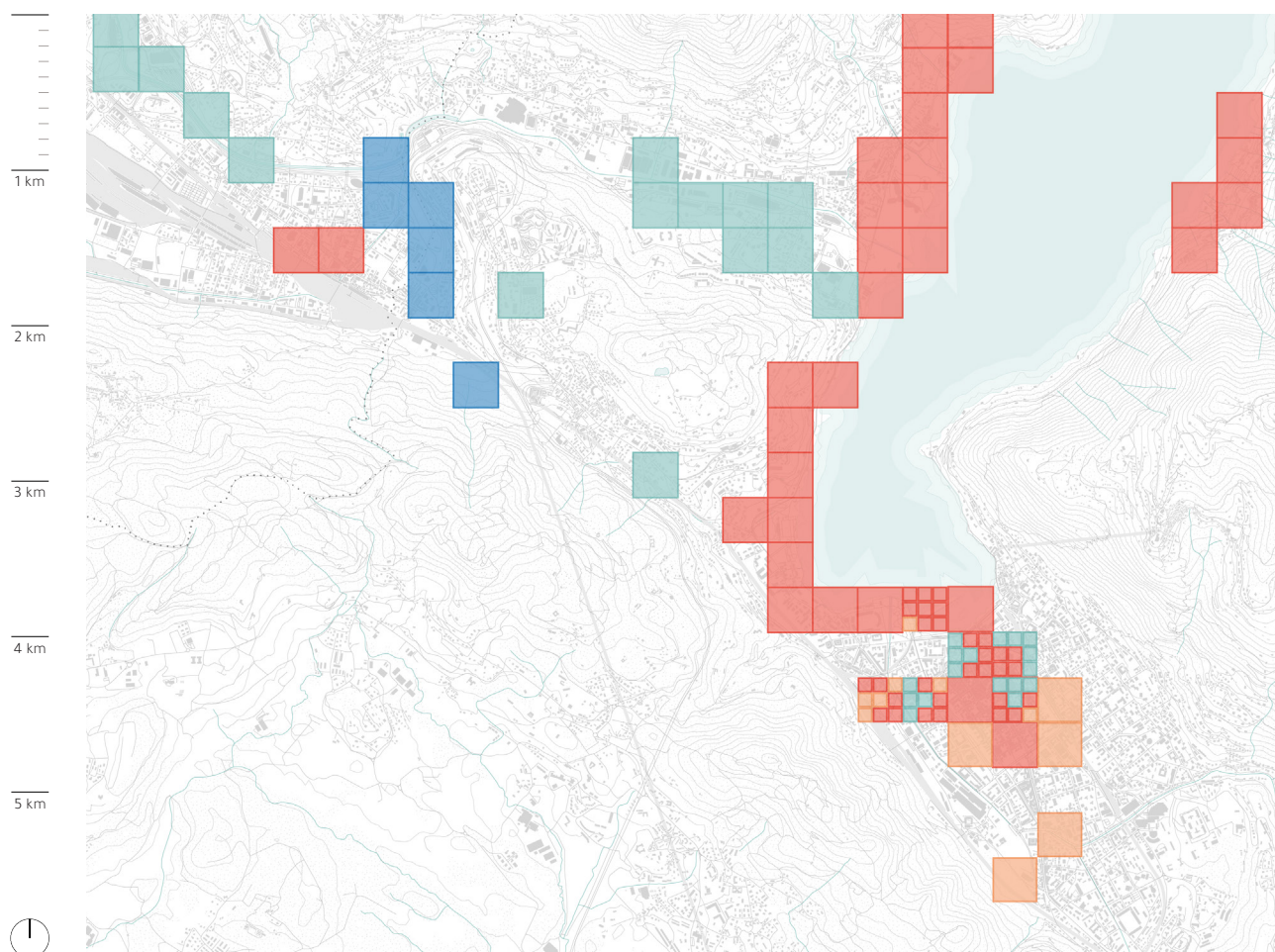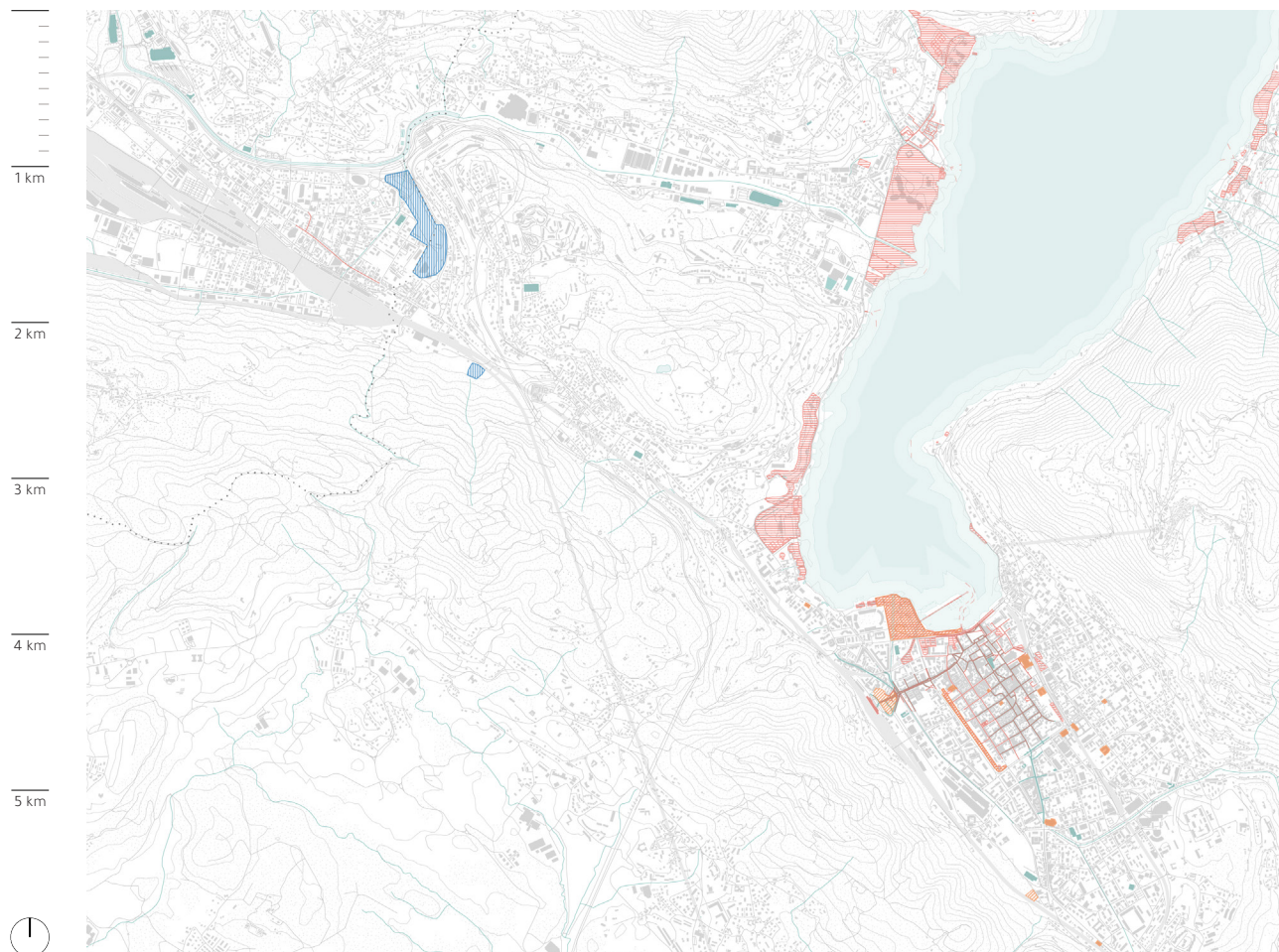
4.9 | Why overlapping networks is not enough

The map on the left above shows the overlapping places to stay of the four defined groups in the Como-Chiasso border area. One starts to see the devision of the various defined groups in border space. This devision is abstracted in the map on the left below. Although the historic city centre of Como shows to be a place where the networks of places to stay of local commuters and tourists overlap, for other parts of the mapped area, the different colours are mainly clustered together. Tourists stick to the lake. Transport drivers spend time at the border. Commuters spend time in the large shopping malls and in the more industrial areas.

For refugees, a particular observation can be made. Looking at the map below, one can see that refugees' places to stay are almost all clustered along the edge of the city centre, along the infrastructure networks. These are the places that people speed by, with no apparent reason to slow down. It confirms the hypothesis of this thesis, that refugees are stuck along high speed infrastructures, without the possibility to make use of the means to move. **What would happen if refugees' places to stay would be positioned in the cores of places; in central locations where exchange with others is unavoidable?** Could refugees benefit from the potential interaction, from the opportunities to trade, exchange words, and share experiences with different groups in border space?
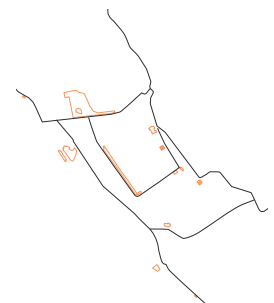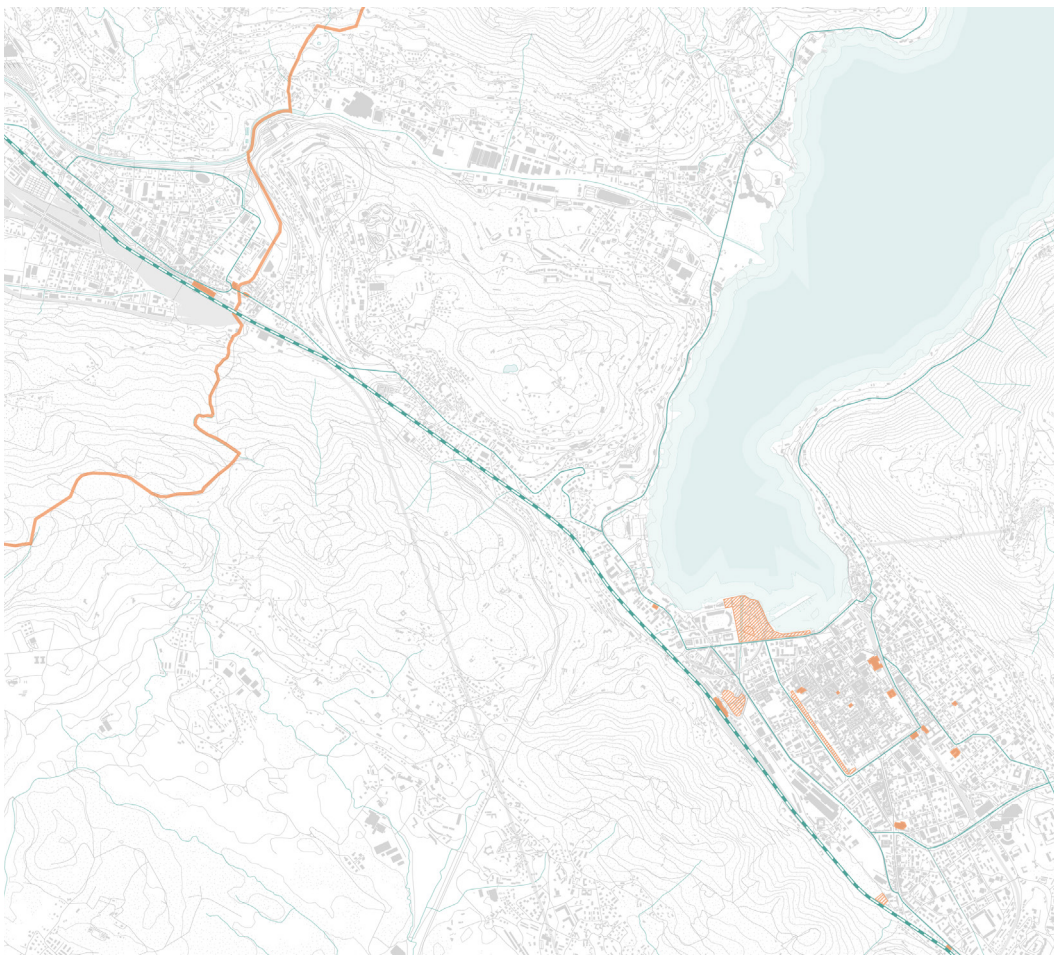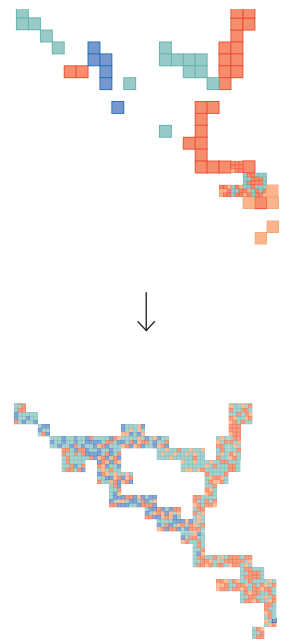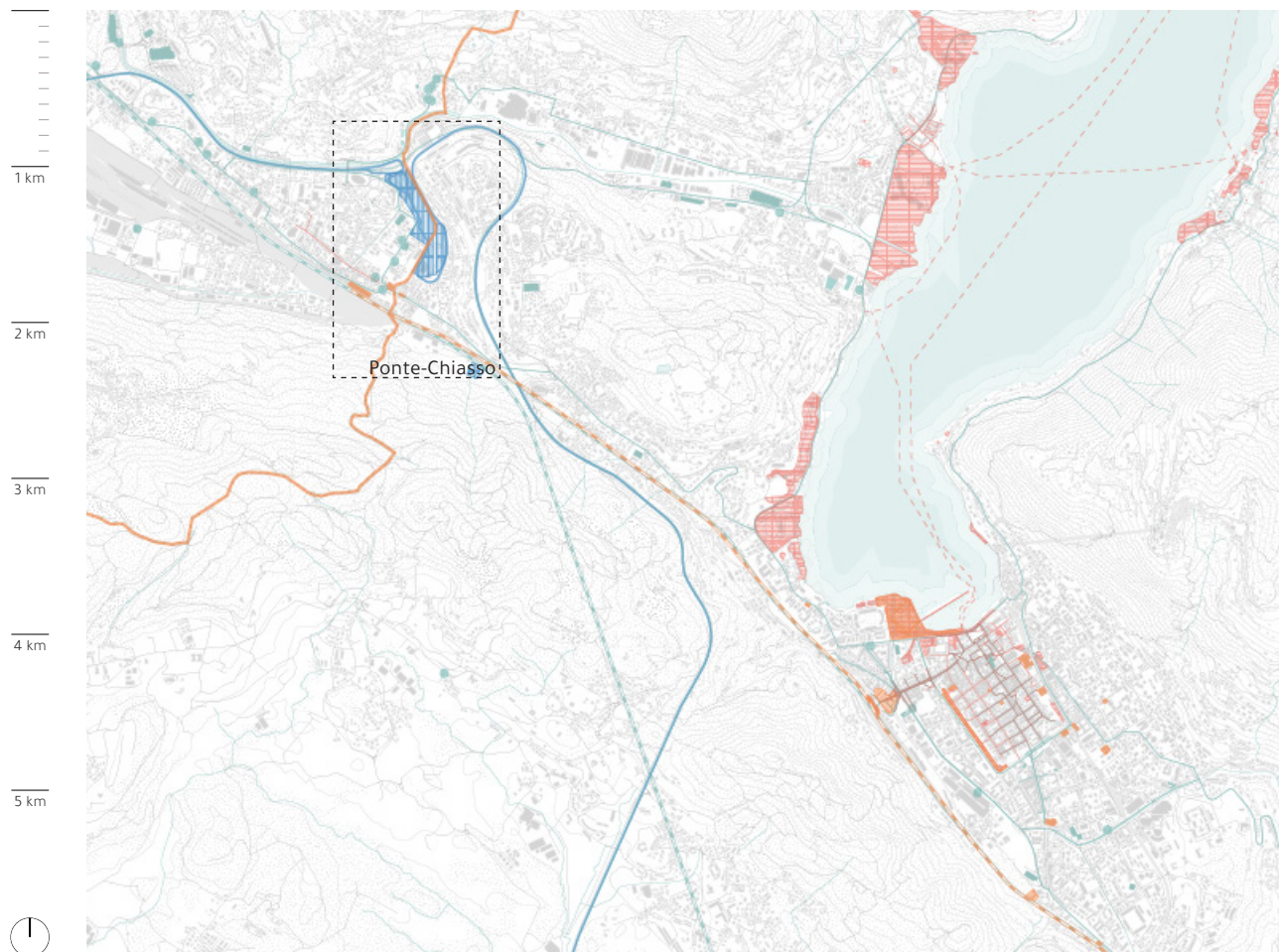

Figure 30   Above Left
— Refugee network
— Commuter network.
— Tourist network
— Transport network.
     Map by author.

Figure 31   Below Left
■ Refugees zone
■ Commuter zone
■ Tourist zone
■ Transport zone
     Map by author.

Figure 32   Below Right
— Refugees network
— Main commuter
   infrastructure
   Map by author.

1 km

2 km

Ponte-Chiasso

3 km

4 km

5 km

500 m

1 km
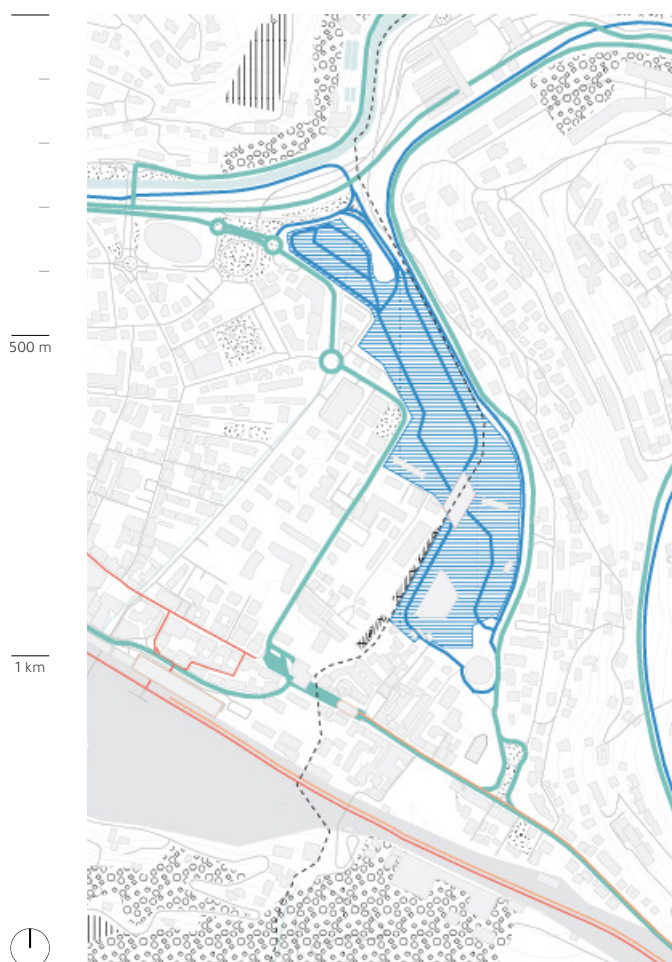
## 4.10 | Slow traffic infrastructure as integrative edge

Zooming in to Ponte-Chiasso, the map on the bottom left reveals how the border area is currently occupied by transport and commuter traffic. **The commuter traffic and lorry transport divide Chiasso (CH) and Ponte-Chiasso.** The infrastructures are perceived as barriers.

This thesis questions the need for transport to take up such a large amount of space along the border. Lorry transport is assumed to be temporary and unsustainable. I am convinced that, because of the amount of CO_2 emmited and the amount of space occupied (and wasted), lorry traffic as we know it today will not continue to exist in the near future. Instead, I imagine transport of goods will be organized much more efficiently and sustainably, using train rails, for instance. Additionally, because of technological advancements, lorries that do stay in use might be equipped with certain tools that make it possible to perform customs checks from a distance, without the lorry having to stop at national borders. Following this logic, **a lot of space in Ponte-Chiasso is freed up to improve the inhabitability and ecological value of the area.**

The map on the bottom right communicates a vision in which Ponte-Chiasso is connected rather than devided by its networks. While the **commuter and transport networks are seen as deviders** and are thus reorganised to occupy less space, the tourist and refugee networks represent the **slow traffic networks** that **have the potential to connect people** from different backgrounds (more on this from page 109) . This notion is illustrated in the diagrams below.
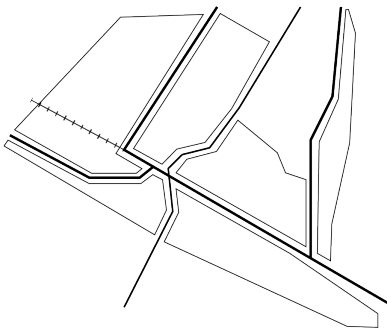
Current traffic situation:
Commuter traffic cuts up urban fabric into separate fragments.
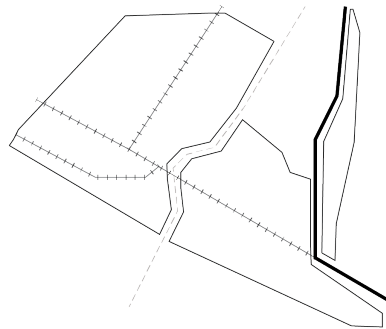
Proposed traffic situation:
Commuter traffic is redirected and streets are transformed into slow-traffic inclusive streets that accommodate places to pause and meet.

Figure 33   Left page, Above
— Refugee network
— Commuter network.
— Tourist network
— Transport network.
▪ Refugees zone
▪ Commuter zone
▪ Tourist zone
▪ Transport zone
     Map by author.

Figure 34   Left page, Below
     Left: Current people
     networks
— Refugee network
— Commuter network.
— Tourist network
— Transport network.
     Map by author.

Figure 35   Left page, Below
     Right: Proposed people
     networks
— Refugee network
— Commuter network.
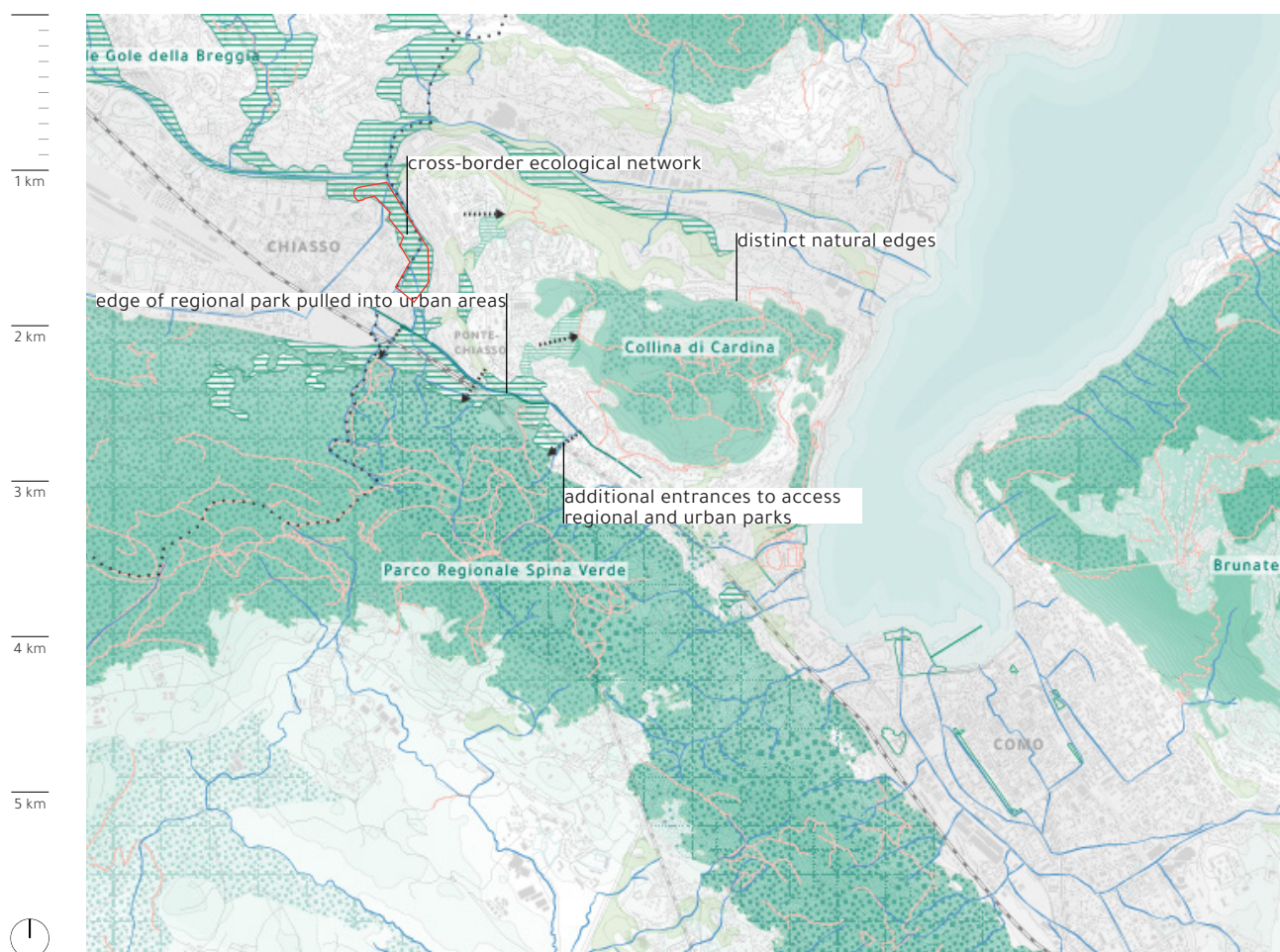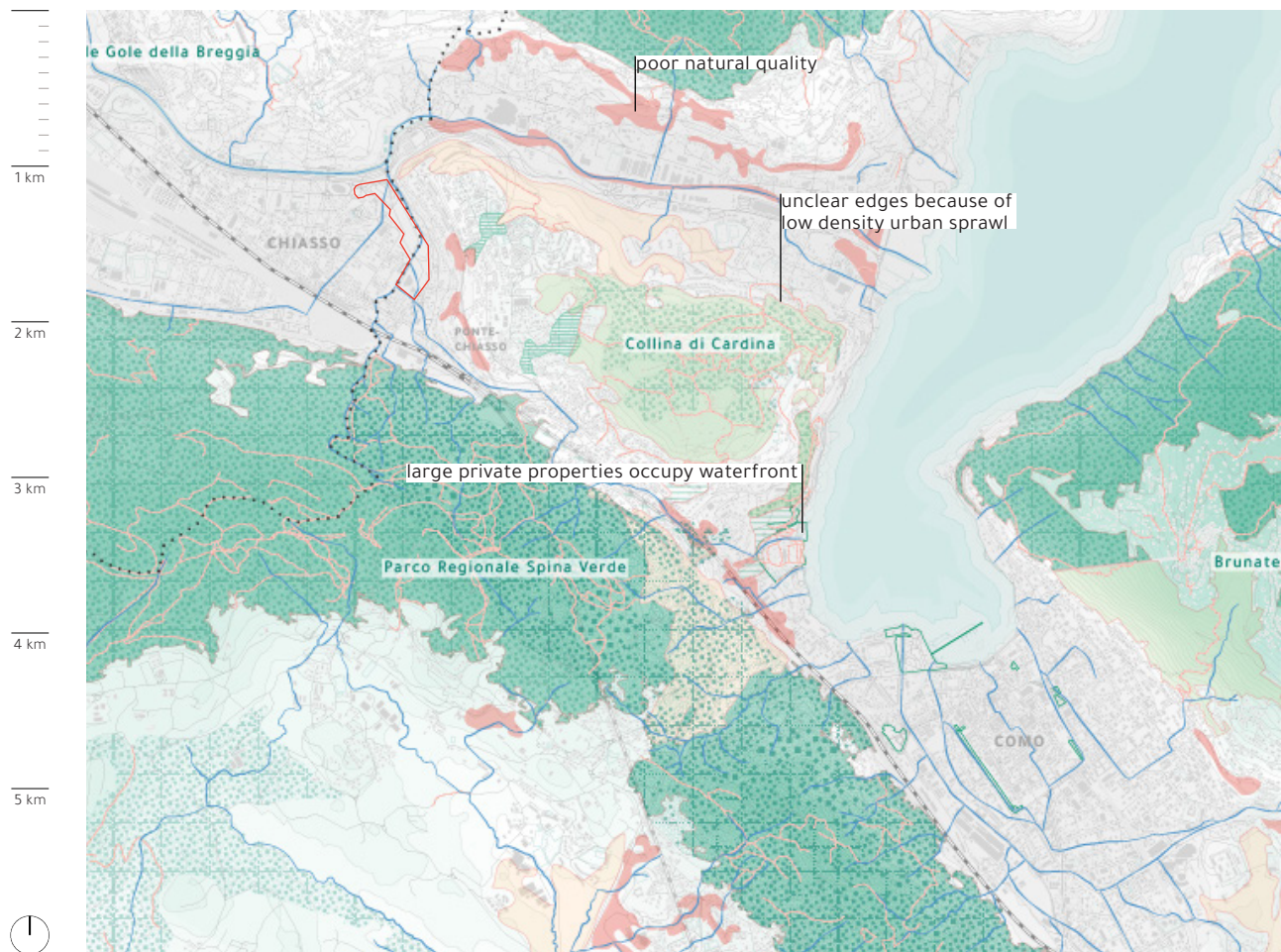— Tourist network
— Transport network.
     Map by author.

Figure 36   Right page, Left
Customs area, looking to Italy
from Switzerland. Photograph
by author.

Figure 37   Right page, Right
Customs area, looking to
Switzerland from Italy.
Photograph by author.

le Gole della Breggia

poor natural quality

unclear edges because of
low density urban sprawl

CHIASSO

PONTE-
CHIASSO

Collina di Cardina

large private properties occupy waterfront

Parco Regionale Spina Verde

Brunate

COMO

1 km
2 km
3 km
4 km
5 km

le Gole della Breggia

cross-border ecological network

distinct natural edges

CHIASSO

edge of regional park pulled into urban areas

PONTE-
CHIASSO

Collina di Cardina

additional entrances to access
regional and urban parks

Parco Regionale Spina Verde

Brunate

COMO

1 km
2 km
3 km
4 km
5 km

4.11 | The ecological network

To work towards an inclusive border design, an understanding of the various cross-border networks is required (as explained on page 41). Other than mapping the various defined user groups in border space, other networks that cross borders can be visualized. On the left page, an analysis of the current landscape (above) and proposed ecological network (below) are visualized.

The new cross-border ecological network proposal takes into account the reduction of space use of lorries in Ponte-Chiasso. **The former customs area is envisioned to fill in the missing link between two ecological zones of the region: the *Parco delle Gole della Breggia* and the *Parco Regionale Spina Verde*.**

The different networks, overlapping and intertwining in reality, are taken apart in an axonometry on the next page. Together these layers form the borderscape that is worked with in this thesis.

The customspark as a link between the *Parco Regionale Spina Verde* in the South and the *Parco delle Gole della Breggia* in the North. The theme of repurposed industrial monuments unites the three parks.
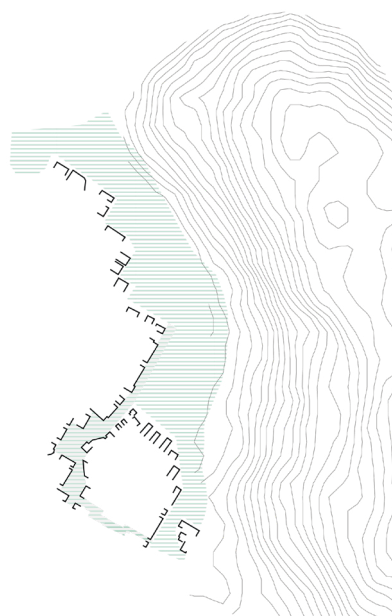
The customs park is shaped by a natural edge in the East and an urban edge in the West, forming a distinct natural - urban edge.

Figure 38   Left page, Above
   Current value landscape
■ High
■ Middle
■ Low
— Waterways
Map by author
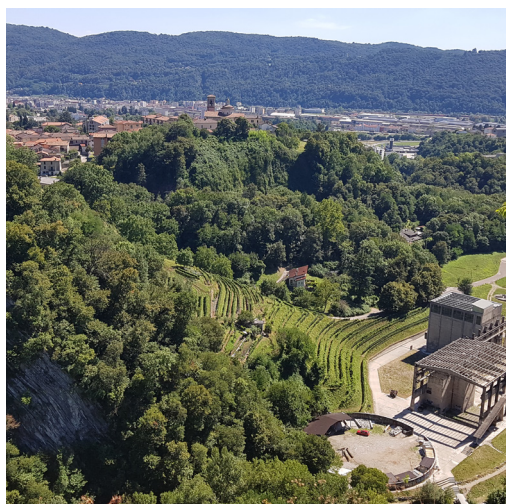
Figure 39   Left page, Below
             Vision landscape
■ Park with regional value
■ Park of local value
···▶ Additional entrances
▤ Proposed ecological connection
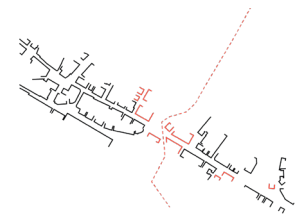— Waterways
Map by authora

Figure 40   Right page, Left
Parco delle Gole della Breggia.
Photograph by author.

Figure 41   Right page, Right
Parco Regionale Spina Verde.
Photograph by author.

500 m

1 km
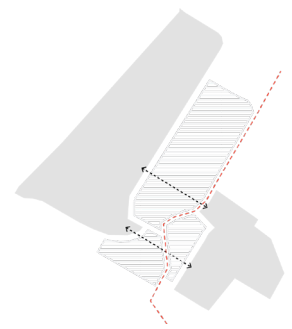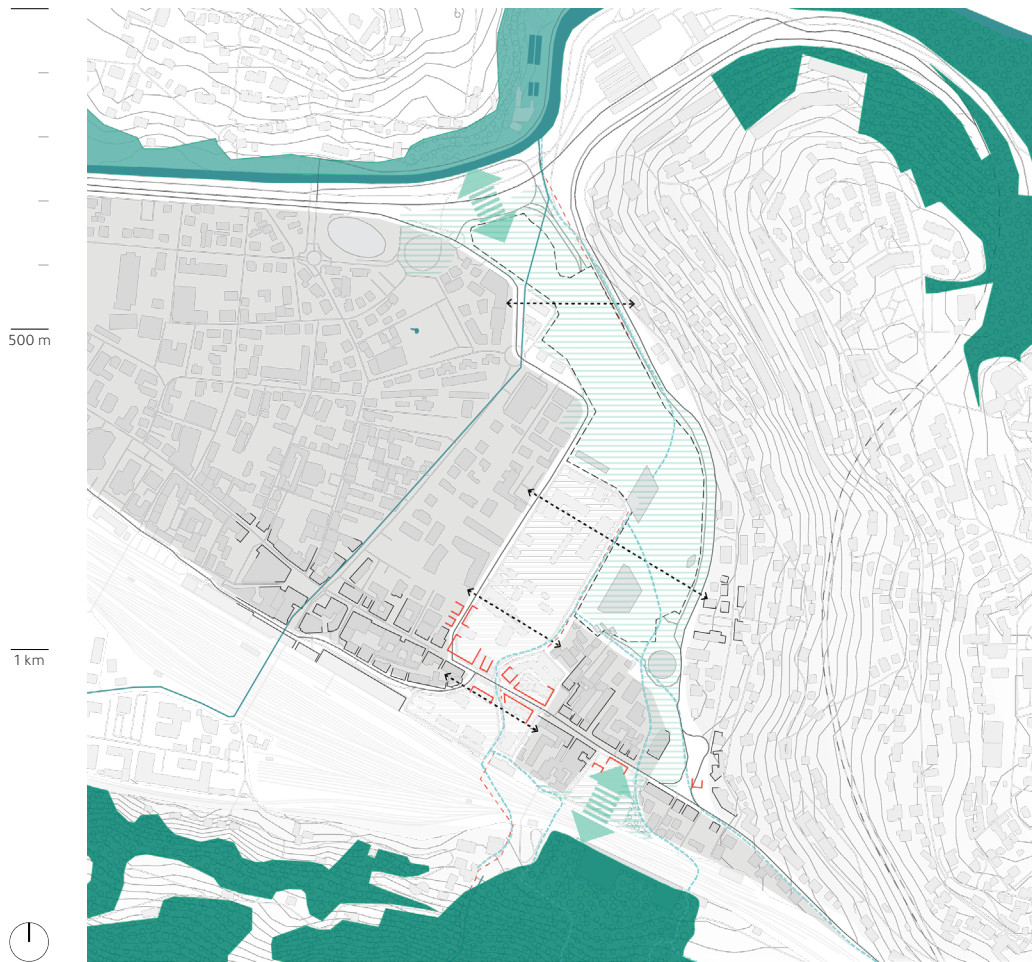
Urban connection accross
former customs area

Filling the gaps in urban main
street accross national border

500 m

1 km

Customs park as sound buffer
against noise from traffic artery

Customs park branches off into
Border park with more urban
character that functions as
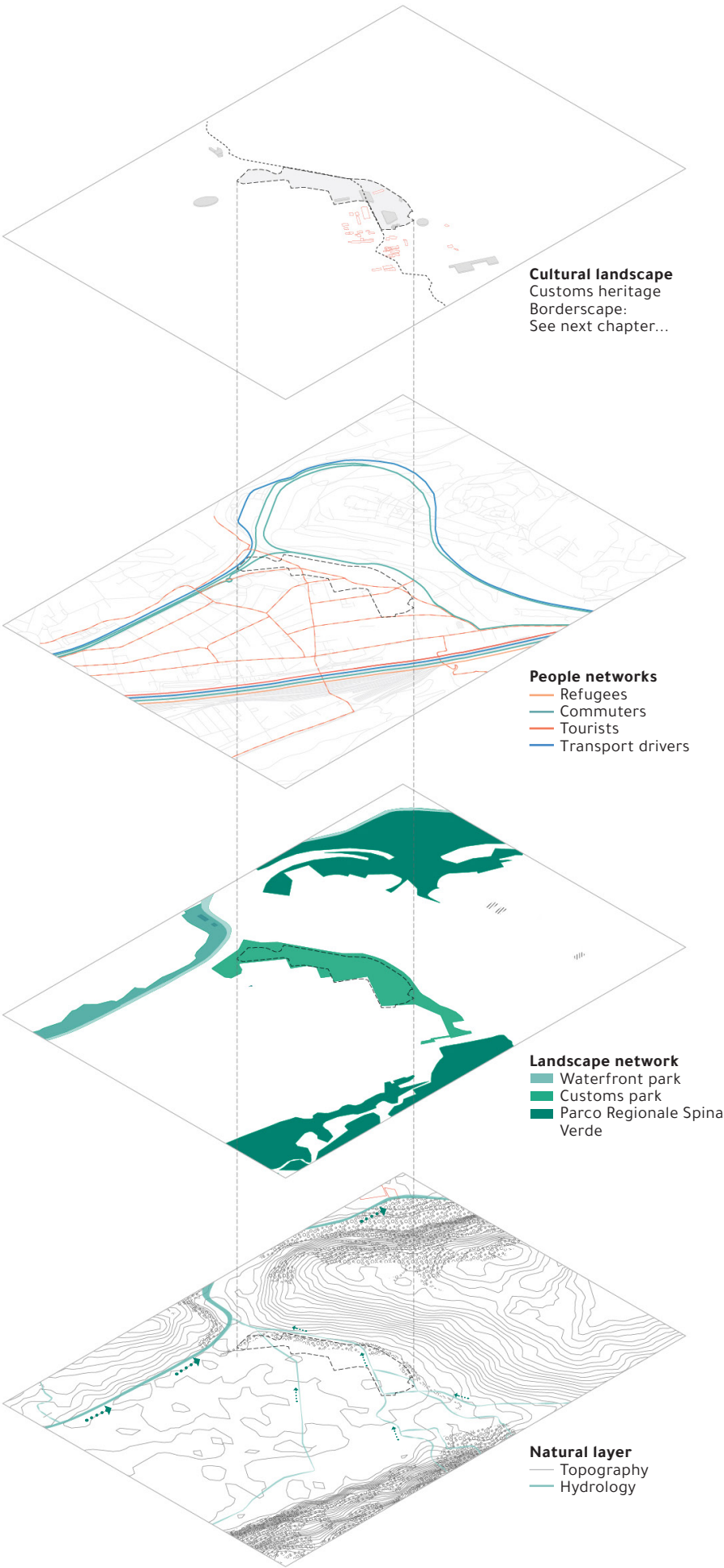integrative edge.

52

4.12 | Structure map

Cultural landscape
Customs heritage
Borderscape:
See next chapter...

People networks
— Refugees
— Commuters
— Tourists
— Transport drivers

Landscape network
Waterfront park
Customs park
Parco Regionale Spina
Verde

Natural layer
— Topography
— Hydrology

Figure 42   Above
    Structure analysis
Urban area
Waterfront park
Regional park
Urban central street
Gap urban central street
Missing urban link
Missing ecological link
Existing waterway
Historical waterway
Customs area
National border
Map by author.

Figure 43   Below
    Structure proposal
Urban area
Waterfront park
Regional park
Customs park
Border park
Urban central street
Regional cycling path
Car traffic artery
Customs monument
Existing waterway
New waterway
Map by author.

3

Borders mark changing conditions that have a spatial output.

The third observation introduces the concept of three-dimensional 'border space'.

Rather than accepting a border as a flat line that devides two delimited territories, I argue that a border should be seen as a three-dimensional space with specific spatial conditions that are caused because of the presence of the nation-state border. Understanding the three dimensional effects of a nation-state border is needed in order to imagine the border's spatial future.

Studying the spaces the border has produced will help to explore the possibilities of changing space along the border to increase the quality of life in border space.

5.1 | The production of border space: the case of Como-Chiasso

National borders originally functioned as checkpoints to control who and what went into the national territory. This made national borders home to congestion. Along with the interruption of journeys of people and products crossing the national border, structures that enabled the control of the territory started to cluster along the initial border *line* and started to shape a *three-dimensional* border space[35].

Up until this day, the conditions on both sides of a national border trigger developments. One can think of developments such as the construction of housing for people who profit from living close to the border, or large shopping malls where border crossers profit from lower product prices. This also happens in the area along the Como-Chiasso border. More than just a line on the map, the border of Como-Chiasso is a marker of changing conditions. Different taxation systems, laws and opportunities cause people to cross borders.

On the Italian side of the border, you can find large shopping malls where the Swiss go to buy cheap meat, alcohol and tobacco. On the Swiss side of the border, you can find casinos and brothels - both illegal on Italian terrain - as well as an absurd amount of petrol stations that used to cater to the many Italians coming in to profit from the CHF - EUR exchange rate - since 2015 less attractive because of the abortion of the EUR @ 1.2 regime by the Swiss bank. **This shows that spatial consequences of a border can also become outdated as conditions change.**

35 Vassilis Tsianos & Serhat Karakayali, 'Transnational Migration and the Emergence of the European Border Regime: An Ethnographic Analysis'. European Journal of Social Theory. 13(3). (2010) 373 - 387.

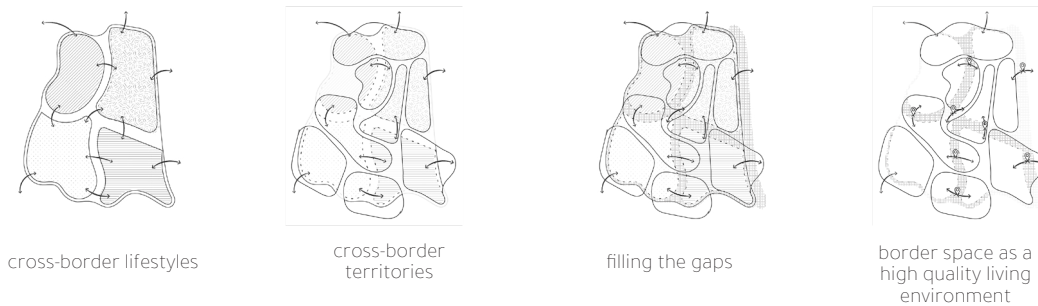Figure 44   Above
'Border as a Line': the border between Ronago (Italy) and Novazzano (Switzerland). By Mattia Vaca. Retrieved from:
< http://reportage.corriere.it/cronache/2016/italia-svizzera-con-i-migranti-lungo-i-sentieri-dei-contrabbandieri/ >

Planners and designers in the Como-Chiasso border area do not seem to have recognized that **the unmanaged development of border by-products has now turned the area into an uncomplimentary accumulation of functions and dwellings**. The border space along the Como - Chiasso border is unattractive and functions as a gateway for people to cross. The developments that occured as a consequence of the national border are worn down, there is a lack of facilities and an absence of places to stay.

cross-border lifestyles

cross-border territories

filling the gaps

border space as a high quality living environment

The Como - Chiasso border area is subject to national-oriented planning, in which the border is seen as an edge rather than a central spatial condition with opportunities. The area would benefit from a spatial planning and design approach that treats the border as a border space, rather than a two-dimensional vaccuum between two countries' urban areas. Rather than a collection of by-products of the border, in this thesis, **border space will be taken as the three-dimensional focus point of attention.**

SMOOTH BORDER
networks run parallel and efficient
crossing time is minimized
opportunities accessible by crossing
territories are smoothened out
places to stay are non-existent
people move past each other
+ by-product of infrastructures

BORDER SPACE
networks cross and overlap
crossing time is interrupted
opportunities are fairly distributed
territories overlap
places to stay are complex; diverse
people meet and exchange
+ 3D living environment

HARD BORDER
networks end at the border
crossing is impossible
there are no opportunities
territories end at the border
places to stay are homogeneous
people are unmoved and unmixed
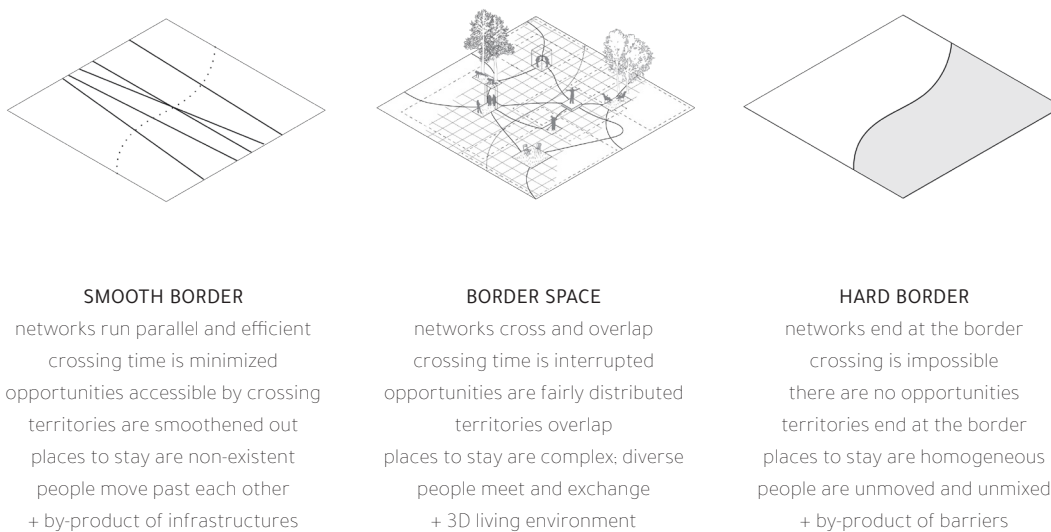+ by-product of barriers

Figure 45   Above
Multiple petrol stations stand along main entry road into Chiasso (CH). Some of them have lost their function. Petrol station on the left has changed from petrol station to clothing store to car dealer. Photograph by author.

Figure 46   Below
Toilet and shower building for truckers stands along main entry road into Ponte-Chiasso (IT). Photograph by author.

			QUALITIES	CRITIQUES
URBAN STREET			• beautiful 20th century architecture alternated with denser apartment blocks • buildings directly face street • many front doors and public functions directly linked to main street	• large amount of commuter traffic breaks public space in two • no space reserved for staying • small footpaths
INTIMATE STREET			• low rise, long-stretched customs architecture gives intimate, human-scale atmosphere • building entrances are directly linked to street • balconies face the street	• many buildings are vacant and neglected • cars dominate the already narrow streets, leaving no space for other types of movement
MIXED AREA			• large contrast between architectural styles • high density	• car-dominated, paved public space • buildings are neglected • building plinths are often 'blind' • buildings are oriented at random, creating confusing, undefined public spaces
TRAFFIC ARTERY			• arteries have large capacities to transport many people and goods	• arteries are enclosed by walls • buildings along arteries turn their back to the busy roads • spaces are completely anonymous and form a barrier, breaking up the urban fabric
CUSTOMS			• covered structures on pillars amidst vast open (concrete) fields are unique for border areas	• customs areas are inaccessible to the public; they make a large space claim and contribute little to the environment
HILLSIDE ROAD			• hedges along streets create a green oasis • views are spectacular • dwellings are oriented towards valley	• streets are narrow and blind (with no facades connected to them), making the streets feel unsafe at night • the narrow profile leaves little room for walking or cycling
LANDSCAPE PARK			• abandoned former customs structures in the landscape give a unique quality to the mountainous landscape	• landscape is difficult to access • landscape is invisible in the urbanised part of Ponte-Chiasso

5.2 | A reading of border space: defined and undefined public spaces

Studying Ponte-Chiasso's border space as a central, three-dimensional space requires a spatial reading of the area. In the map below, an inventory has been made of the different types of (public) spaces that constitute the Ponte-Chiasso border area.

The border space typologies are a consequence of a.o. building orientation, building density, building access, openness of a building towards the street and the use of space. The diagrams on the left page explain how these factors determine the particular border space typologies. For each typology, qualities are distinguished that will be worked with in the design to preserve the spirit of the border region. Criticism to each typology will also be taken into account in the new border space design. In the 'Towards a Border Space Design' section of this thesis, these open space typologies will be developed into desired spatial typologies (see page 75).
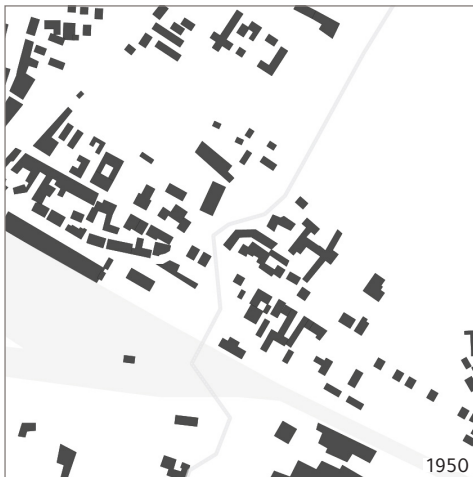
BUILT ENVIRONMENT

BUILDINGS THAT STAYED / DISAPPEARED

1920

1920

1950

1950

1980

1980

2010

2010

60

5.3 | Dynamic functions, static constructions...

The Como-Chiasso border space, as any urban environment, has been subject to developments that change the spatial needs of that area. Developments that influence the spatial needs along borders include developments that all urban areas deal with, such as technological innovations. But border areas are also subject to other influences that general urban areas do not have to deal with. Border areas such as Ponte-Chiasso are largely shaped by national decisions. When taxations, legalizations or other national decisions make one territory more attractive for a certain purpose than the other, this creates movements and developments. To name an example, the construction of five petrol stations on the Swiss side of the border can be a fruitful development at one moment, while changes in the EUR - CHF exchange rate might make these developments useless twenty years later - which is what happened in 2015, as the value of the Euro dropped considerably because of the abortion of the Euro @ 1.2 CHF regime by the Swiss central bank. This results in vacant buildings on either or both sides of the border; buildings that no longer have their purpose because their function is no longer more attractive on their side of the border, than on the other.

In the maps in the left column, the footprints of the buildings in Chiasso and Ponte-Chiasso in 1920, 1950, 1980 and 2010 are visualised. In the column on the right, the same footprints are drawn. This time, however, the footprints of the buildings that disappeared over time are drawn in light grey. This gives an impression of the dynamic nature of border space.

The diagram below gives a hint of what the appearing and disappearing buildings and their functions might have been. The diagram shows a timeline of the past fifty years, in which the line in bold marks the period in time in which the specified function developed significantly more on one side than on the other. Various historical, political changes influenced the appearance an disappearance of these functions.
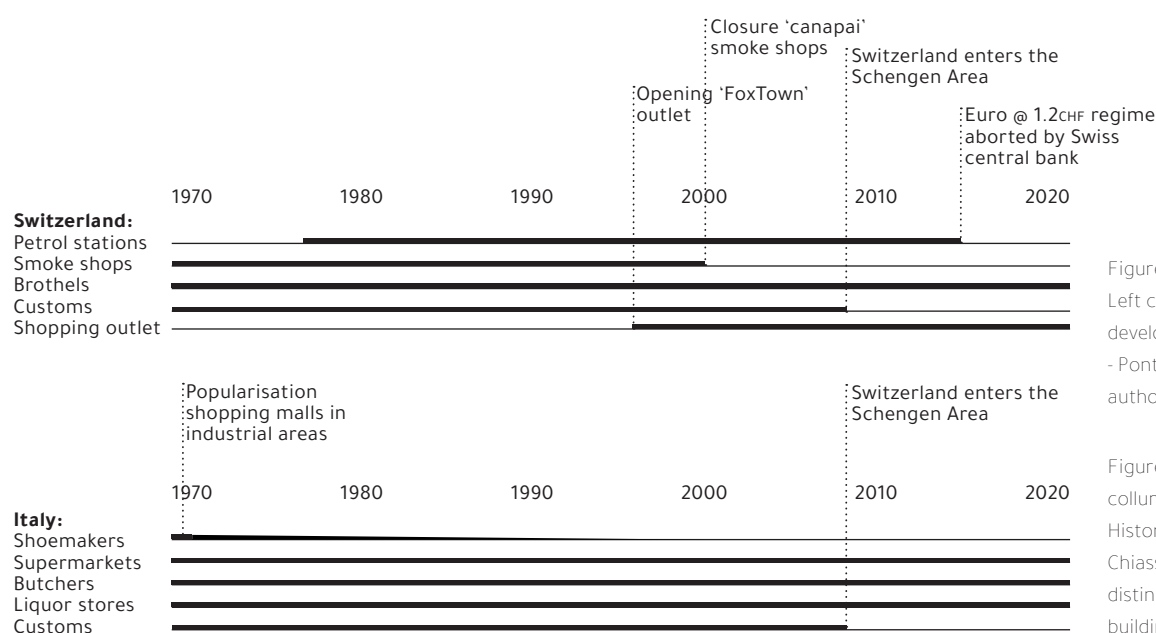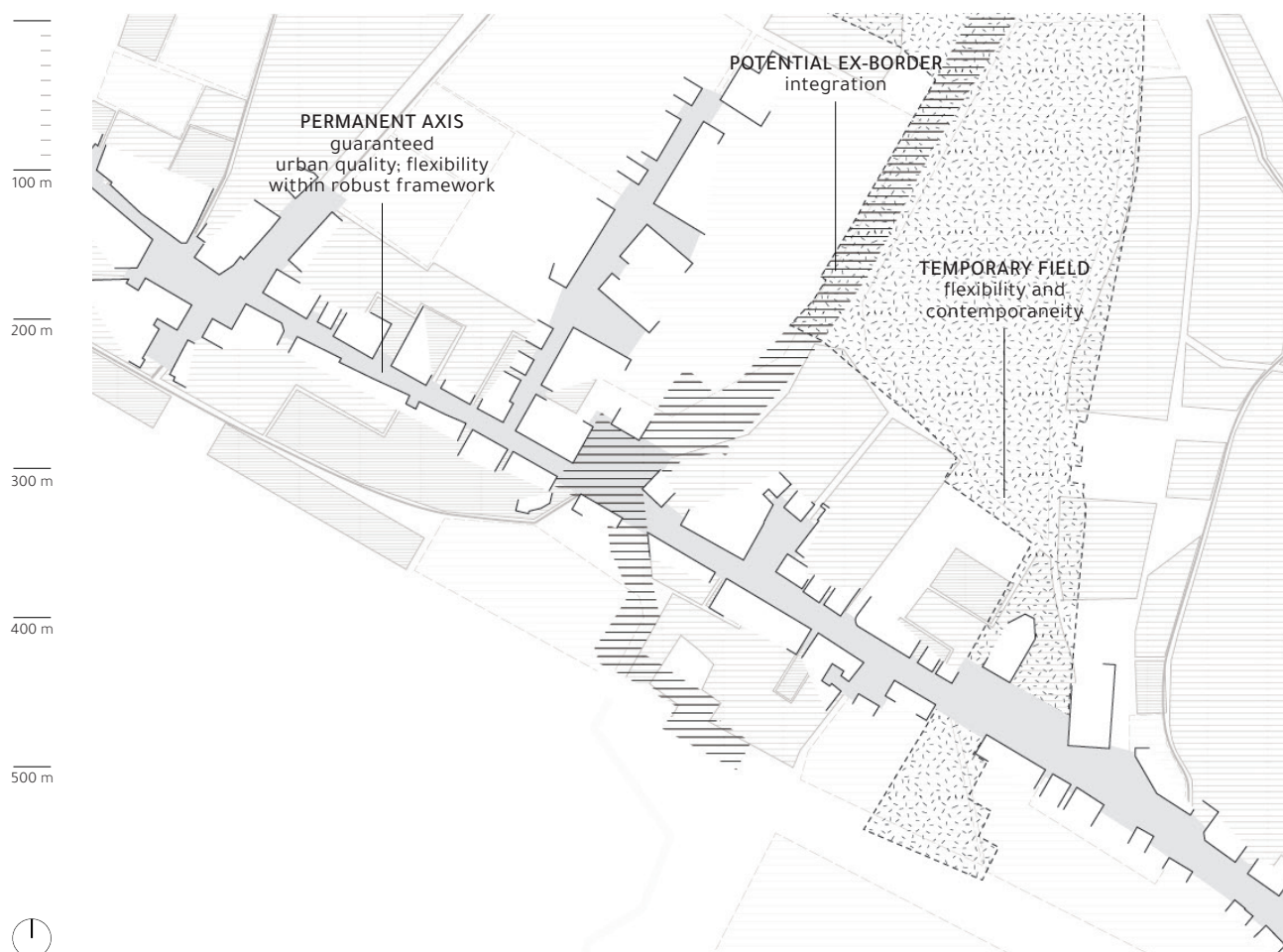

Figure 48   Left page. Left collumn Historical development of Chiasso - Ponte-Chiasso. Maps by author.

Figure 49   Left page. Right collumn Historical development of Chiasso - Ponte-Chiasso distinguishing between buildings that remained (black) and buildings that disappeared (light grey). Maps by author.

Figure 50   Right page Timeline of border crossing-inducing functions

An area that is subject to changes to such an extent should be organised in a flexible way in order to be sustainable. This means buildings should be flexible in use; their function easily changeable.

100 m
200 m
300 m
400 m
500 m

100 m
200 m
300 m
400 m
500 m

PERMANENT AXIS
guaranteed
urban quality; flexibility
within robust framework

POTENTIAL EX-BORDER
integration

TEMPORARY FIELD
flexibility and
contemporaneity

5.4 | Permanent axes and temporary fields

Based on the historical development maps on the previous page, a new reduction map can be drawn. The map on the top left shows the variation between permanent spaces: spaces that have hardly changed over time, and temporary spaces: spaces that have changed enormously. Looking through one's eyelashes, another reductive drawing can be made of this image: we can identify permanent axes along which buildings have hardly changed, and temporary fields in which buildings have been placed and replaced frequently.

When imagining future scenarios, this notion of permanence and temporality can be used as a tool to secure qualities that improve the liveability of the area for the long term.

To be sure that design interventions keep their impact, the permanent axes will be used as a backbone of Chiasso - Ponte-Chiasso, into which all design ambitions are integrated. The design ambitions, presented further on in this document, aim to turn border space into an inclusive and inhabitable space. Integrating the ambitions *at least* into the permanent axes means the added qualities are less likely to be replaced here and will continue to make Ponte-Chiasso's border space inhabitable.
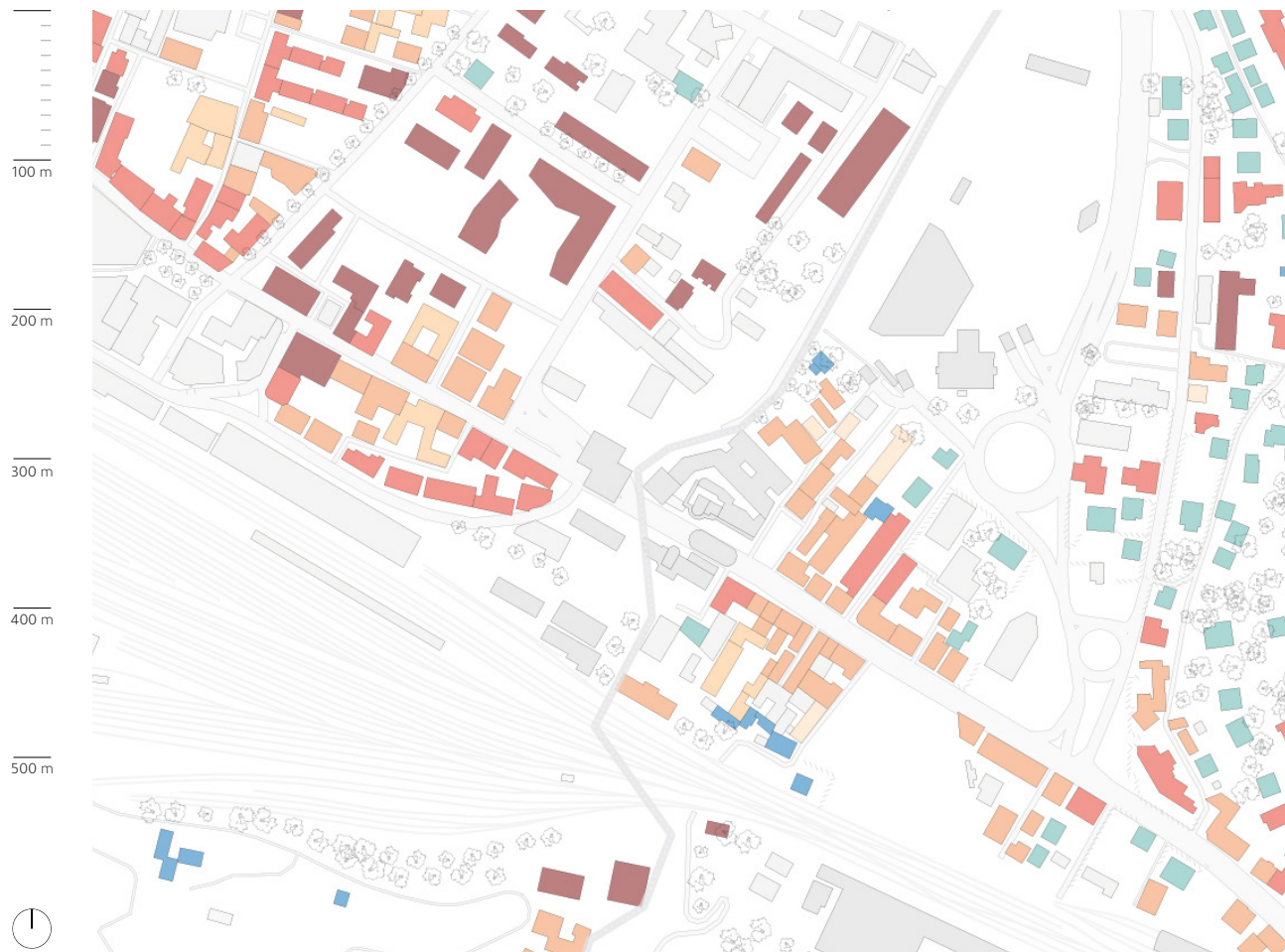
TEMPORARY FIELD
flexibility and
contemporaneity

PERMANENT AXIS
guaranteed
urban quality; flexibility
within robust framework

Figure 51   Above
Urban Change
Buildings and urban
structure remained.
Urban structure
remained, buildings
changed.
Buildings and structure
changed.
Map by author
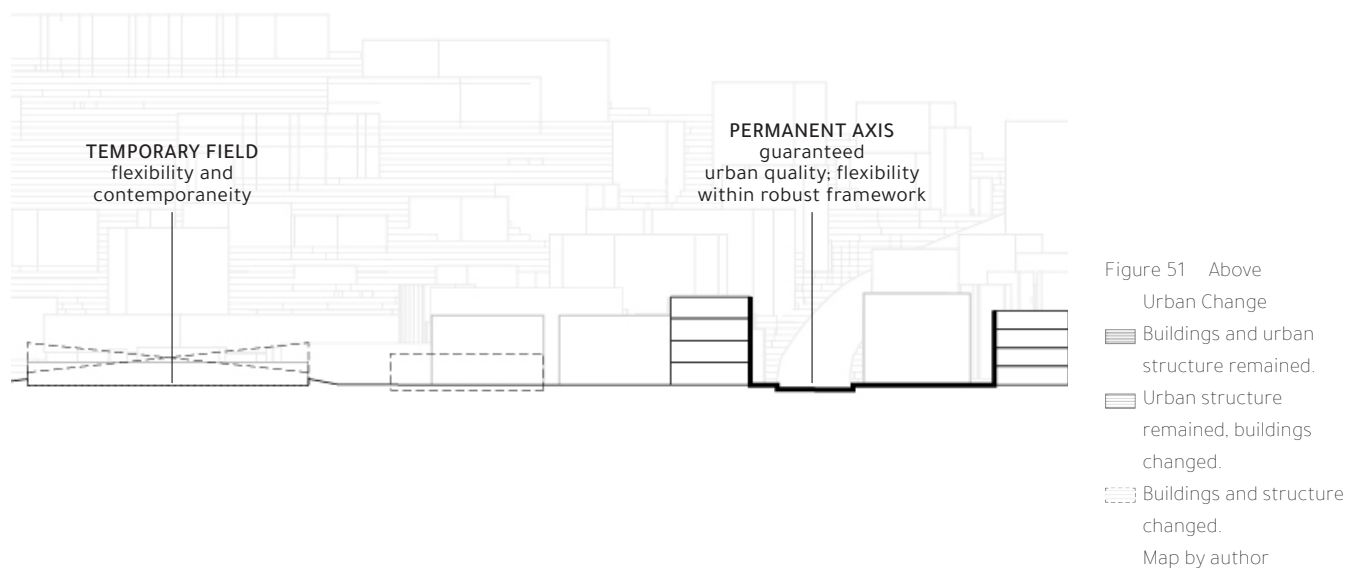
Figure 52   Below
Permanent axes and
temporary fields. Legend
written inside map. Map by
author.

100 m

200 m

300 m

400 m

500 m

LOW-RISE APARTMENTS

MID-RISE APARTMENTS

HIGH-RISE APARTMENTS

SINGLE FAMILY HOME

COURTYARD

PALAZZINA

5.5 | Permanent typologies

Upon examining the building typologies, one observation stands out: along the permanent axes, specific typologies can be recognized: typologies of which the facade directly faces the street. Facades directly facing the street are thus characteristic for the permanent axes. Between the two facades facing each other along these streets, qualities in public space can be defined and preserved. The temporary fields, instead, have generally accommodated buildings that were placed more centrally in the lot, leaving the space around it undefined. These areas have changed a lot over time. **To achieve robust public spaces that will maintain their quality over time, permanent building typologies that directly define the relationship between street and facade are thus prefered.** This knowledge will be used further onwards in the design.

Plinth - street relationship

permanent typologies

temporary typologies
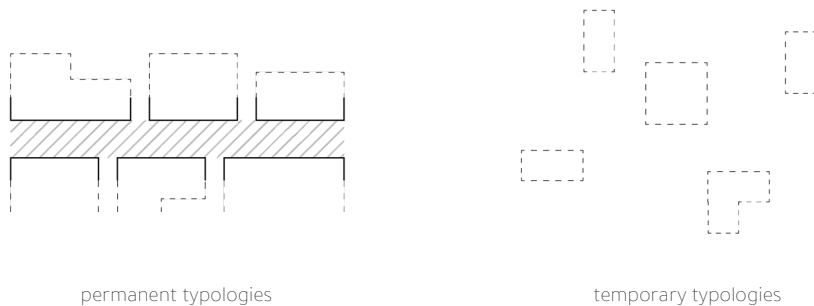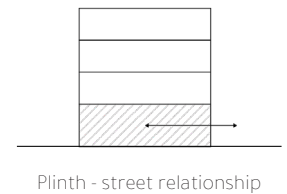
Figure 53   Above
        Building typologies
■ Low-rise apartments
■ Mid-rise apartments
■ High-rise apartments
■ Single-family home
■ Courtyard
■ Palazzina
▨ Customs
        Map by author

Figure 54   Below
Overview various building typologies. Photographs by author / Google Streetview.

100 m

200 m

300 m

400 m

500 m

1

2

3

4

5

6
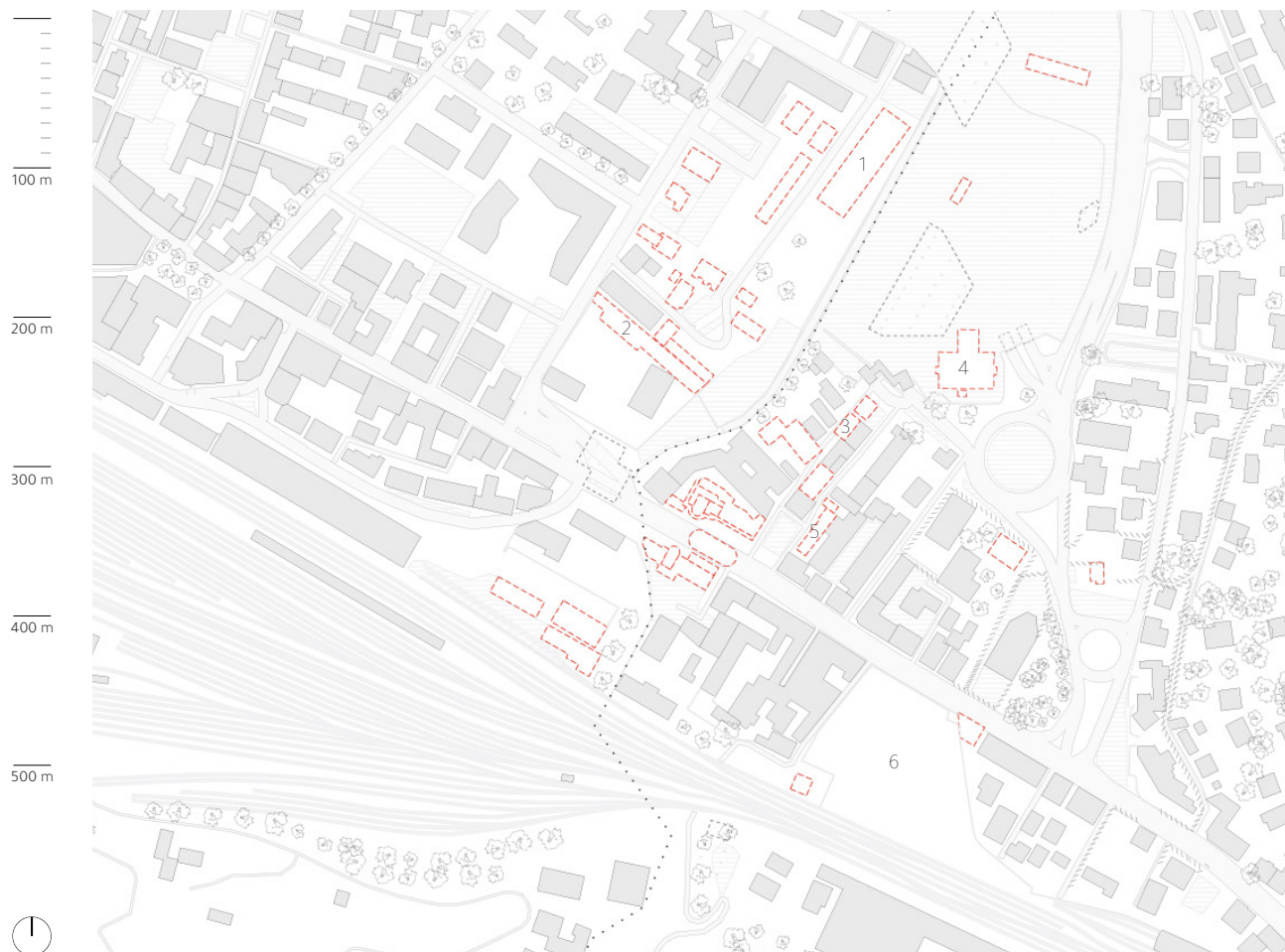
[1]

[2]

[3]

[4]

[5]

[6]

5.6 | Working with the residue of Chiasso - Ponte-Chiasso's border space

Field work on site has resulted in an inventory of which buildings should and should not be preserved. The buildings outlined in red in the map on the top left are buildings that are either so worn down that there is no point in saving them, or so awfully intrusive that they do not deserve to be preserved.

The analyses of Chiasso - Como's infrastructures and networks, the different public space typologies, the historical development and the different building typologies   has helped to reach a starting point from which to develop a border space design for Ponte-Chiasso. This starting point or base layer can be described as a layered understanding of the border spaces of Chiasso - Ponte-Chiasso; one that acknowledges the richness and variety of the area and that seeks to address points of weaknesses and strengths that can be used in order to lay the foundations for an inclusively inhabitable, lively, ecological and urban Ponte-Chiasso.

A summary of these analyses is visualised in the axonometric drawings on the next page.
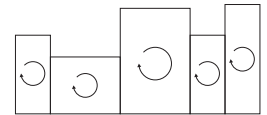
Buildings are renovated, enriched and replaced over time.

Figure 55   Above
      Building value
▨ Buildings to keep
⬚ Buildings to remove
⬚ Open customs structures
      Map by author

Figure 56   Below
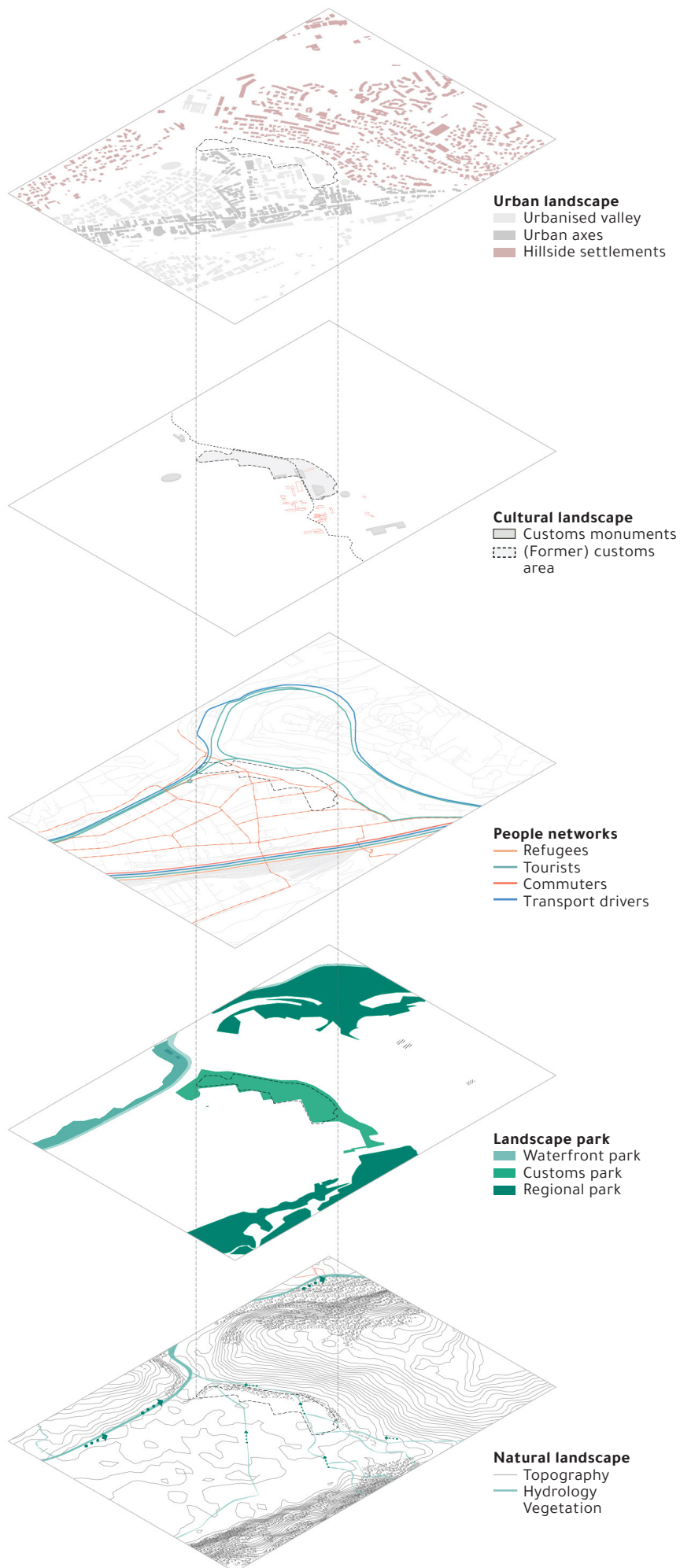Overview neglected buildings..
Photographs by author /
Google Streetview.

67

Urban landscape
- ⬜ Urbanised valley
- ⬛ Urban axes
- ⬛ Hillside settlements

Cultural landscape
- ⬜ Customs monuments
- ⬜ (Former) customs area

People networks
- — Refugees
- — Tourists
- — Commuters
- — Transport drivers

Landscape park
- ⬛ Waterfront park
- ⬛ Customs park
- ⬛ Regional park

Natural landscape
- — Topography
- — Hydrology
-   Vegetation

Figure 57   Top image
Via Bellinzona; urban main street. Photograph by author.

Figure 58   Second image
Customs area along train rails. Photograph by author.

Figure 59   Third image
Railways of Chiasso. Photograph by author.

Figure 60   Fourth image
Parco Regionale Spina Verde .Photograph by author.

Figure 61   Bottom image
View after hike to the top of Monte Bisbino, overlooking Como in the distance. Photograph by author.

Figure 62   Right page
Illustration by author.

Asylum seekers from Gambia (L-R) Abba Dampha, 23, and Jacob Camara, 25, sit on the guardrail as sheeps pass by on the road towards the CARA (Accommodation Centre for Asylum Seekers) in Mineo, Sicily (2017). By Gianni Cipriano. Retrieved from: <https://www.giannicipriano.com/portfolio/les-debarques/>

TOWARDS A BORDER SPACE DESIGN

The observations addressed in the previous chapter can be translated into spatial requirements for the Como-Chiasso border area that support the development of an inclusive border space in which networks cross, diverse people are accommodated and encounters are stimulated.

TOWARDS A BORDER SPACE DESIGN

ESTABLISHING THE BASE LAYER

Before the design ambitions of this thesis are elaborated on, this chapter presents how the analyses have informed a so-called 'urban basis' within which to develop the urban plan.

The urban basis preserves Chiasso - Ponte-Chiasso's existing qualities and forms the foundations for the development of additional qualities in the border area.

6.1 | A note on genii loci

The term 'genius loci' - Latin for 'the spirit of the place' - is (too) often used in contemporary urban planning and design to refer to a location's distinctive atmosphere. In its contemporary use, the pursuit of (bringing back) the genius loci seems to me to often deny the idea that the atmosphere of a place is bound to change over time. Furthermore, it often presupposes that a place has one single identity that is (to be) perceived similarly by everyone.

The main ambition of this thesis is to bring out various potential qualities in an otherwise neglected urban area along the Swiss-Italian border. The thesis does not aspire to shape the area into one consequent, smoothed out urban area with one 'genius loci'. It does, however, preserve existing qualities that are characteristic for the area - qualities that might correspond to various genii loci. In essence, the project aspires to **provide basic spaces from which new qualities can grow, within a framework of existing, characterful spaces.**

The extensive analysis of Chiasso - Ponte-Chiasso has lead to a spatial understanding of the urban area that is functional, social, ecological, and historical. The analyses have laid the foundations for the development of an urban design for the area. They have led to an understanding of exisiting qualities and potentials, as well as brought to light the interventions that are necessary to turn Chiasso - Ponte-Chiasso into a lively, inhabitable urban area. Before going into these interventions, this chapter reveals the existing framework of spaces, and how these spaces might be adapted.

Figure 63   Above
Writings on wall in Milan (IT). Retrieved from: <https://medium.com/italia/all-inizio-i-trafficanti-erano-pi%C3%B9-umani-poi-hanno-iniziato-con-le-torture-f3dd2a7d6c85>
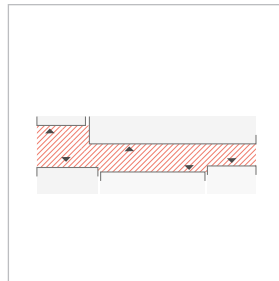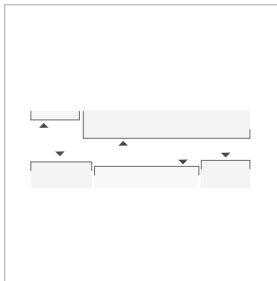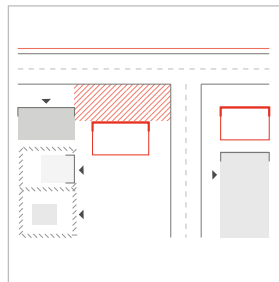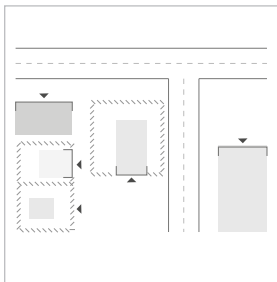
73

URBAN STREET
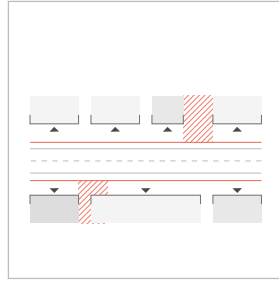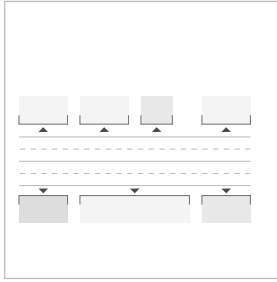
- integrated cycling network

- more space for slow traffic, less space for cars

- integrated places to stay

INTIMATE STREET

- streets are repaved to become attractive place to stay

- neglected buildings are renovated or replaced by buildings in a similar intimate scale
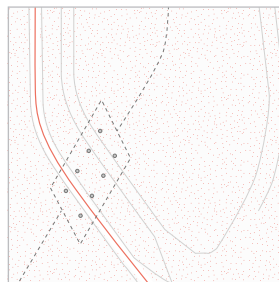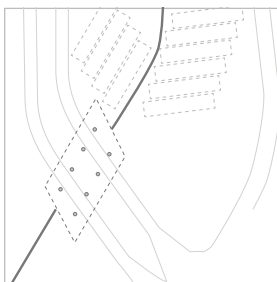
MIXED AREA

- buildings of low quality are replaced

- building orientation of new buildings adds hierarchy to the area, introducing main roads with active plinths
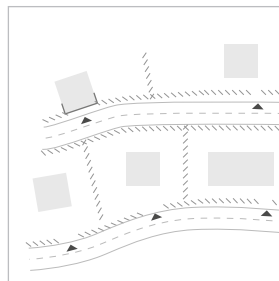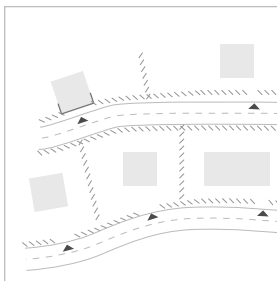
TRAFFIC ARTERY
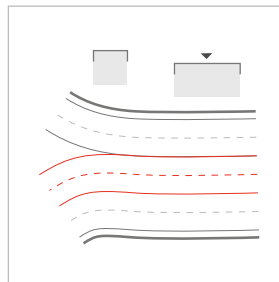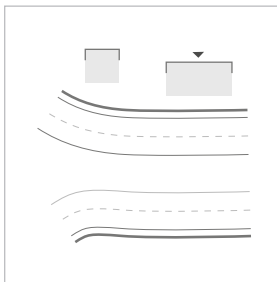
- capacity of arteries is enlarged to relieve traffic pressure on urban area

- arteries are organised more compactly
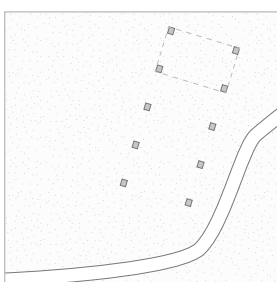
CUSTOMS

- lorry customs area is replaced by large landscape park (see page 49)

- integrated regional cycling network

HILLSIDE ROAD

- area is not addressed in this thesis as it is too far away from central urban area

LANDSCAPE PARK

- access into landscape is improved

- monumental structures are repurposed

6.2 | From spatial reading to design

The open space typologies that have been developed in chapter 5.2 (page 59) form the basis for the development of new, desired spatial typologies that might define Chiasso - Ponte-Chiasso in the future. The definition of qualities and critiques on the spatial typologies in chapter 5.2 has lead to a list of necesarry adaptations to improve the spatial quality of Chiasso - Ponte-Chiasso, within a framework of existing spaces.

This list of necessary adaptations will be taken into account on the next pages, where the design for Chiasso - Ponte-Chiasso is further developed. The map below shows the base layer within which new interventions will be organised.
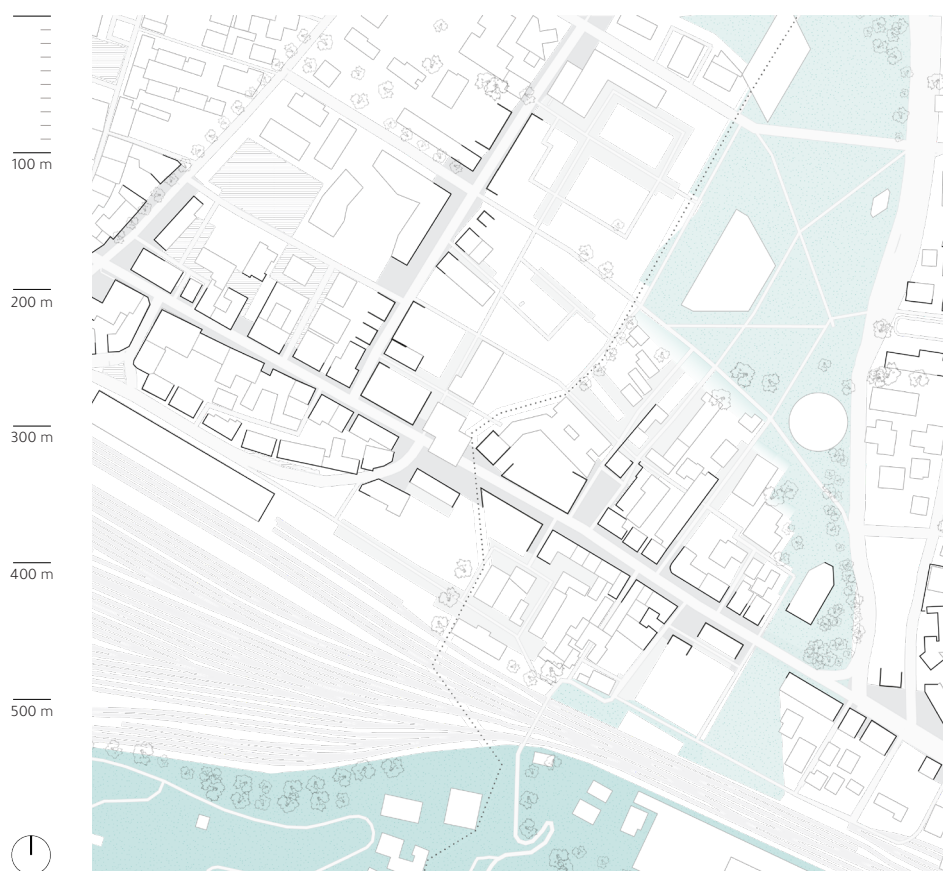
**TOWARDS A BORDER SPACE DESIGN**

DEVELOPING THE DESIGN AMBITIONS

7.1 | Affordable, incremental housing

7.2 | Complex public spaces

7.3 | Slow traffic networks

Based on the three observations explained in the previous chapters, a desired border typology has been established: a slow, complex border space (see page 57) .

The next step is to understand what the design requirements for border space are. For this purpose, three design ambitions have been established that aim to contibrute to the development of inclusive border space. These three ambitionas are: developing affordable, incremental housing, developing robust, lively public spaces, and building slow traffic networks that are inclusively accessible and ensure the equitable access to opportunities in border space.
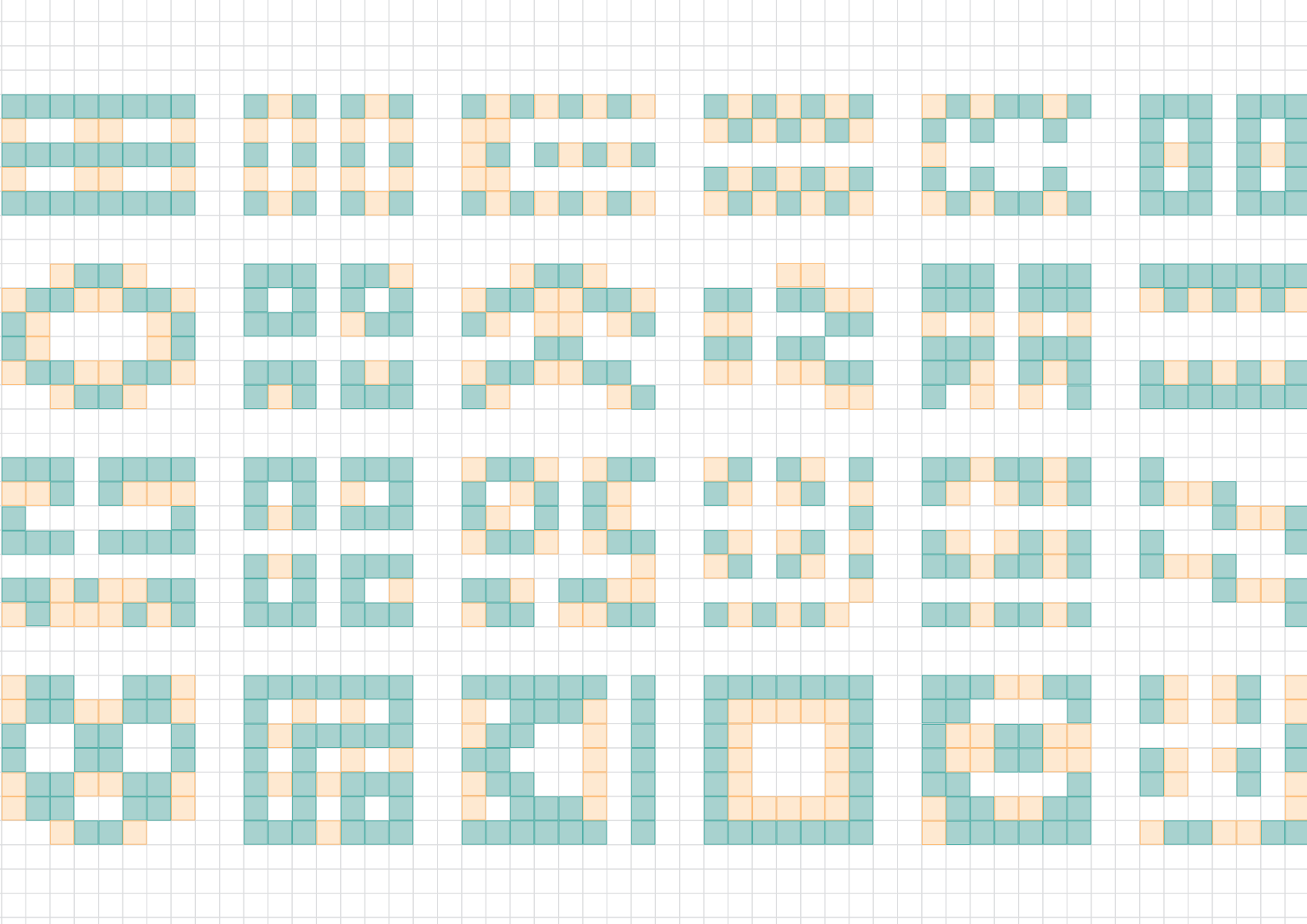
7.1 | Affordable, incremental housing

The first design ambition for the Como-Chiasso border area stems from the observation that the border has spatial, three-dimensional effects on border space. One of these effects is the cluttering of housing along the border, to accommodate people who want to profit from the benefits of border crossing.

The current housing solutions present along the Como-Chiasso border are worn down. Old villas and shabby apartment blocks make up the offer along the Como-Chiasso border. If the aim is to accommodate people from diverse backgrounds in border space, the first spatial requirement in border space is affordable housing. Considering the changing conditions inherent to border space, it is also important that structures in border space are flexible to adapt to changing needs.

The design question thus becomes: how to design affordable housing that is sustainable and suitable for diverse inhabitants with differing spatial needs?

Figure 65   Above
Configuration study of the minimum 4 x 4 unit (see page 85). Image by author.

77

In search for an answer to this question, inspiration is taken from a housing concept developed by the architecture studio Elemental: incremental housing. The main idea with incremental housing is that a house can grow in quality over time.
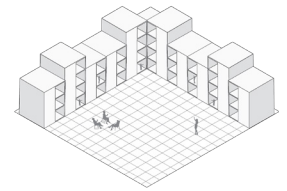
Building robust frames that can be filled in by the inhabitants of border space in Como can create a creative, diverse but robust housing stock that is suitable to various groups in border space. How these flexible blocks should be designed is explored in the following pages.

7.2 | Complex public spaces

The second spatial design ambition is derived from the observation that border space has overlapping networks and belongs to multiple territories. The diverse users of border space do not have the opportunity to meet, however. This leads to the understanding that border space needs diverse, public spaces in which different users can come together to meet and exchange.
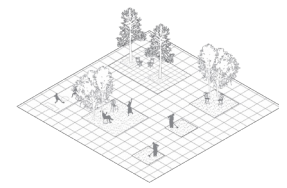
Designing for a dynamic condition means public spaces should be adaptive, but also robust - to ensure that their quality remains over time. The dynamics between incremental housing and public space are further tested in the coming pages of this thesis. What happens if the density inside a dwelling grows or shrinks? How can public space be organised to accommodate these changes?

7.3 | Slow traffic networks

The third spatial design ambition is inspired by the observation that border space is shaped by movements of people, products and information. Currently, the infrastructures that allow these movements to take place are organized as such, that opportunities to pause are scarce. Moving people through border space with such a speed leads to a decline in possibilities for different people in border space to see each other, let alone interact. The development of a slow traffic network could enhance the chances of running into one another in border space. Also, slow transport is much more accessible for people with a low income. Locations along the network are a suitable location for the development of spaces that could bring into contact diverse people in border space.
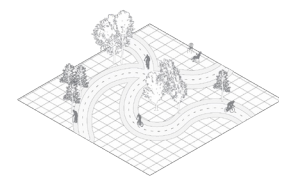
Figure 66   Upper left
Quinta Monroy Housing
project by Alejandro Aravena.

Figure 67   Lower left
Apartment building in Ponte-
Chiasso, a few minutes from
the border crosspoint. Image
from Google Streetview.

TOWARDS A BORDER SPACE DESIGN

AFFORDABLE, INCREMENTAL HOUSING

Based on the three observations explained in the previous chapters, a desired border typology has been established: a slow, complex border space.

The next step is to understand what the design requirements for border space are. For this purpose, three design ambitions have been established that aim to contibrute to the development of inclusive border space. These three ambitionas are: developing affordable, incremental housing, developing sustainable, decremental public space, and building slow traffic networks that are inclusively accessible and ensure the equitable access to opportunities in border space.

8.1 | Incremental housing

The intergovernmental Organisation for Economic Co-operation and Development (OECD) write in their publication *Working Together for Local Integration of Migrants and Refugees* that 'in many cities where migrants experience segregation in poorer neighbourhoods, creating spaces and housing solutions that are affordable and attractive for all groups is understood as one of the factors that contribute to desegregation'[36].

Affordable housing solutions come in different forms. **The 'incremental housing' scheme taken as a concept for this project assumes that it is important for buildings to be able to grow in quality over time.** The scheme allows inhabitants to invest in their dwellings to increase their value. The concept also underwrites the conviction that space is never finished - and that spatial designs should never be presented as such[37]. In this thesis, I distinguish between two types of incremental housing: incremental housing units that grow within a fixed building structure, and incremental housing of which the structure expands, either outside its own footprint or by constructing layers on top of the dwelling.

36 OECD, Working Together for Local Integration of Migrants and Refugees, (OECD Publishing, 2018), p. 117.

37 Edward Soja, Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places (Wiley-Blackwell, 1996).

PRE-EXPANSION	POST-EXPANSION	EXPANSION

TERRACED HOUSE

· expands on top
· expands in front
· expands at the back

SECTION

PLAN

BACK TO BACK TERRACED HOUSE

· expands in front

SECTION

PLAN

BACK TO BACK TERRACED HOUSE

· expands on top

SECTION

PLAN

BACK TO BACK TERRACED HOUSE: REVISED

· expands on top
· expands left/right

SECTION

PLAN

APARTMENT BLOCK

· unable to expand outside the building's skin; see next page.

SECTION

PLAN

—— original
—— expansion

82

8.2 | Externally incremental housing

In search for housing typologies that can expand outside the buildings' skin, detached houses have the largest potential. Looking back at the building typologies mapped on page 65, we realize, however, that detached single-family homes hardly exist in the Chiasso - Ponte-Chiasso area. In making a context adaptive plan, it would thus make sense to consider the implementation of other typologies in the urban plan. The low density of a detached home is another reason to consider different typologies.

Organizing single family homes in a more compact way - into closed buildings blocks - could be a way to integrate single family homes in the area to ensure a diversity in housing opportunities, without losing the opportunity to densify. The typology would be more adaptive to the context as well, as closed building blocks are common along the central streets of the area. Closed building blocks or terraced houses lose the possibility to expand in five directions (left, right, front, back, on top), but can still expand in three directions (front, back and on top).

Remembering the observation, again from page 65, that guaranteeing permanent quality in public space can be done by pre-defining the facade - public space relationship, terraced housing typologies that expand in the front of the house are not as suitable - because the facade - public space relationship cannot be fixed up front. Keeping in mind this notion, a revised version of the terraced house is developed: a typology in which the building line of the houses - the edge between private and public - is already defined, and in which housing expands sideways. The expansion sideways instead of to the back of the block allows two dwellings to attach their backs to each other, hereby increasing the density considerably.

The revised terraced house typology can start as a configuration of blocks in a linear composition. The permanent public space, towards which the main entrances are oriented, is well-defined and incorporates necessary basic qualities such as attractive places to stay and slow traffic networks. In between the blocks, the dwellings can expand. Until the dwellings have expanded, the residents enjoy a temporary, semi-public space in between the blocks that can be organized more informally. This dwelling typology is further elaborated on in the chapter "*Zoom In: The Refugee Community*" on page 114.
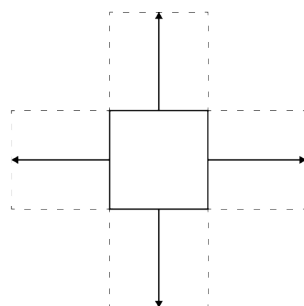
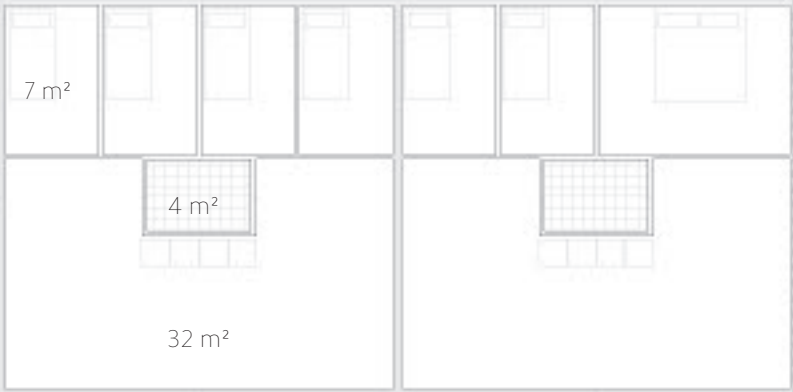Externally incremental housing can expand outside the building's skin

refugee
16 m²

tourist
16 m²

commuter
32 m²

7 m²

4 m²

32 m²

64 m² for 4 refugees

14 m²

4
m²

14 m²

32 m²

for 1 - 2 persons

14 m²

4 m²

32 m²
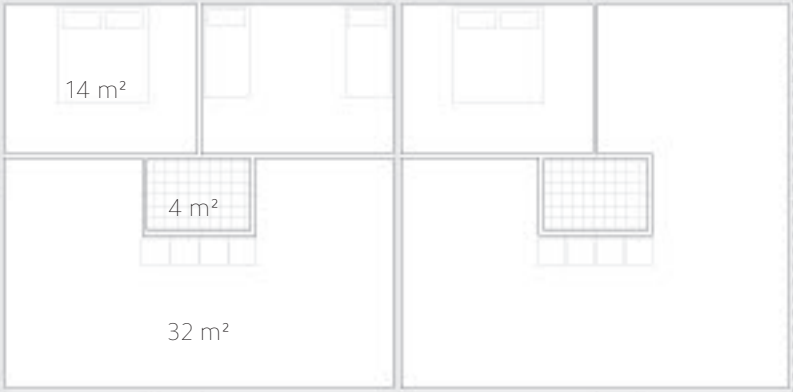
64 m²

for 2 - 4 persons

8.3 | Internally incremental housing

More often, affordable (social) housing is organized in (high-rise) apartment blocks. This typology is difficult to expand externally: the exterior structure of the buildings is fixed. It is up to the internal organization of these typologies to ensure that within a fixed structure, dwelling units can shrink and expand depending on the needs of the context.

On the left page, a variation of the many possible ways to organize internally incremental housing is presented. The sizes of the units are based on the standard needs of the different user groups as introduced on page 42.
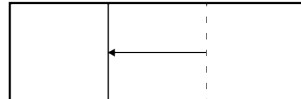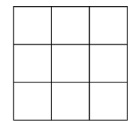
Internally incremental housing: many small units can be converted into fewer, but bigger units

8.4 | The 4x4 m unit

The units designed for the various user groups in this thesis are repetitive units. The repetition of standardised units has several advantages. First, the production of construction material is cheaper when building components are standardised and manufacturable in bulk. Second, the units are more easily combinable, creating larger or smaller apartments without having to alter the construction of the building is thus easier.

repetitive units

The 4x4 m unit is used both in the development of (externally incremental) terraced houses and (internally incremental) apartment blocks. Reducing 'a refugee' to a 4 x 4 meters square surface (s)he needs as a minimum space to live comfortably has helped enormously to get rid of distractions. Abstracting complex personas and spaces into cubes has helped to think more freely about potential ways of organizing co-habitation in border space. Becoming precise is a necessary next step. This will follow in the chapter "Zoom In: The Refugee Community" on page 114.

On the left page three user groups out of four are presented: the refugee, the tourist and the commuter. Where has the transport driver gone, you ask? Taking out the customs area in Chiasso - Ponte-Chiasso means lorry drivers can park anywhere to rest. They no longer occupy the large amount of space they used to occupy before. For their housing needs, they do now not differ from regular tourists - the only difference being their need for a large parking spot. Mixed-use trucker hotels could be developed at strategic positions at the intersections of the public space network and highways to integrate various usergroups. In the following sections, the transport driver will no longer be considered as a typical user of the future border space of Chiasso - Ponte-Chiasso.

Figure 69   Left page Functionality study 4x4 unit: internally incremental housing
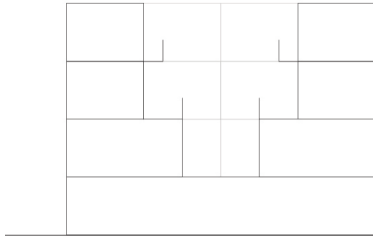
SMALL HOUSING UNITS

second floor

MIXED HOUSING UNITS

second floor

8.5 | Affordability tools

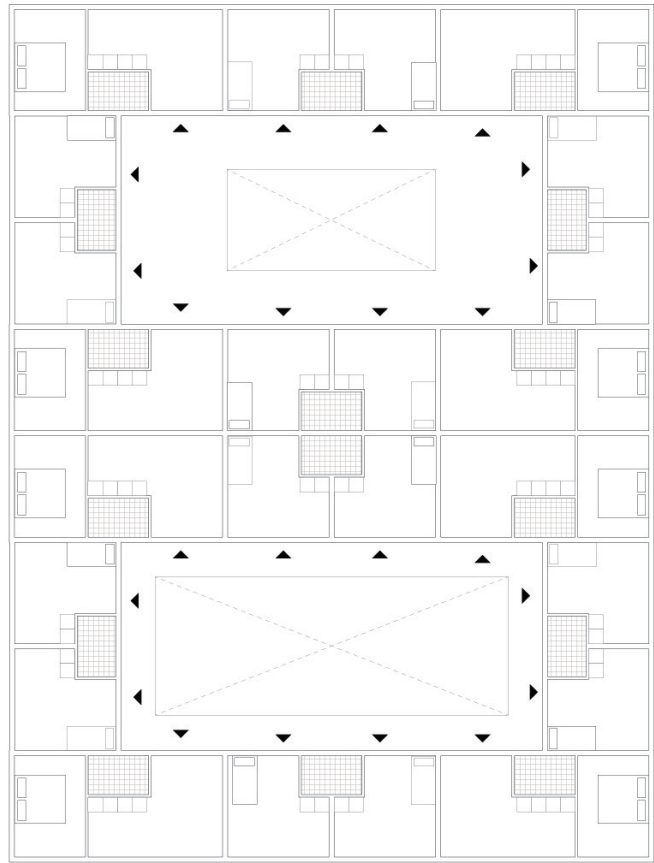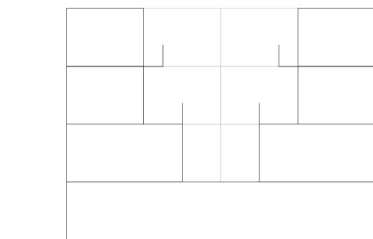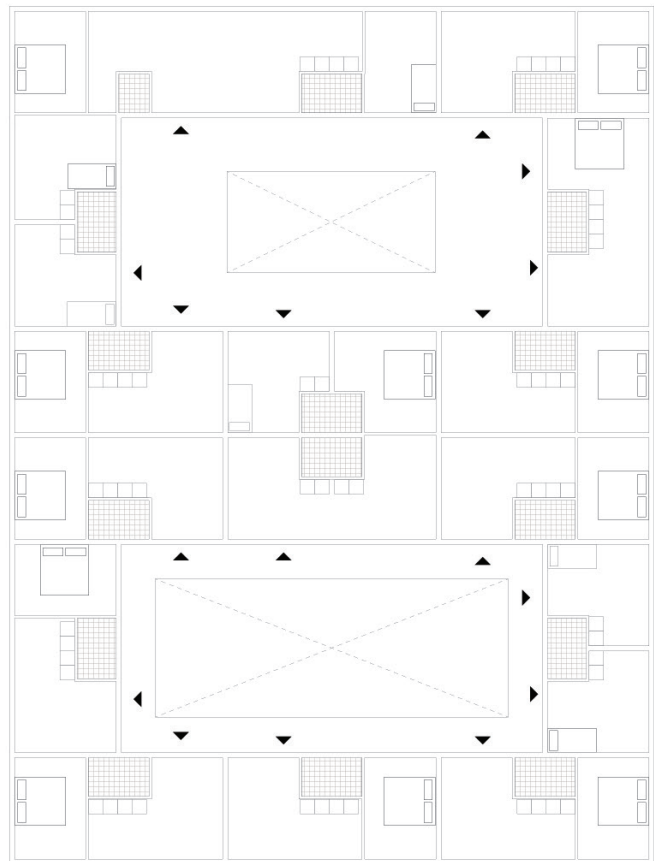It is not just architects that have influence over the affordability of housing. Securing affordability starts from the urban plan that dictates building lines, functions and densities. Other than the use of repetitive units, this thesis makes use of several design principles to achieve the development of affordable housing.

One obvious way to achieve more affordable housing is building in higher densities. As the land value partially (sometimes largely) determines the value of a dwelling, fitting more dwellings on top of one piece of land diminshes this cost. In which densities needs to be build in order to reach a desired liveliness is calculated on page 91.

A second urban designer tool to succeed in developing affordable housing is avoiding the creation of strange corners that will be difficult to put to use efficiently. Instead, this thesis experiments with using solely 90° angles.

Finally, the ground floors of the added apartment blocks are often reserved for commercial functions. Inviting commercial parties to pay for a part of the rents helps to reduce the housing price for inhabitants on the floors above. Additionally, the commercial ground floors activate the street, creating a lively plinth.
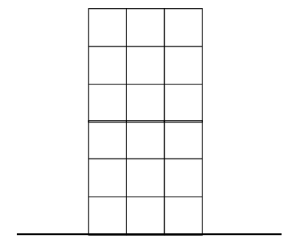
higher densities
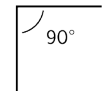
90 degree angles
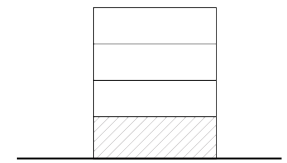
commercial ground floor

8.6 | Example block

The sections and plans on the left page show one of the typologies of the many variations that can be made with the 4x4 meter unit, following the affordable housing principles as described above. **The variations have helped to understand which configurations could work architecturally, and which forms would be less efficient, informing how the 4x4 meter unit can be organized in the urban plan.**

The aim is to organize urban form as such that dwelling floor plans can easily be combined, so that dwellings can grow and shrink within the building's skin. In the example on the left page, the floor plans show how the small dwelling units can be easily merged because of the organisation of the floor plans.

Various typologies can be constructed applying the principles described above. **The next step is to see how these typologies could fit into the urban context.** Before fitting the architectural forms into the urban context, it is necessary to determine the required density for Chiasso - Ponte-Chiasso to become a lively urban core. A study on the following pages will give more insight into the needed density. The integration of the 4 x 4 unit will follow accordingly.
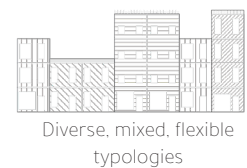
Diverse, mixed, flexible typologies

Figure 70   Left page
Example of internal expansion of living units. Above: small units. Below: same building in which some units have merged into larger dwellings.

TOWARDS A BORDER SPACE DESIGN

DIVERSE PUBLIC SPACES

Based on the three observations explained in the previous chapters, a desired border typology has been established: a slow, complex border space.

The next step is to understand what the design requirements for border space are. For this purpose, three design ambitions have been established that aim to contibrute to the development of inclusive border space. These three ambitionas are: developing affordable, incremental housing, developing sustainable, decremental public space, and building slow traffic networks that are inclusively accessible and ensure the equitable access to opportunities in border space.

9.1 | Diverse, dense spaces

Living with diversity is unavoidable. Rather than discussing *if* we should consider diversity in our urban design, it is important to think of *how* we can acccommodate diversity in the urban fabric. This chapter focuses on how to develop a large variation of public spaces, into which are embedded diverse types of housing, for diverse types of people.

> "The combination of density and diversity of building types and uses, with a compact footprint and on a human scale, makes for an environment that is both efficient and attractive."
>
> - David Sim (2019)[38]

There are many arguments for increasing density. Constructing affordable housing is one of them, but also the fact that we need to make better use of the resources and space we have in the context of rapid urbanisation counts as a reason to increase the density in our existing urban areas, as well as the need to reduce the energy consumption of our built environment by building more compactly, thus saving transport energy costs, etc.

38 David Sim, Soft City: Building Density for Everyday Life (Island Press, 2019).

VIA MILANO, COMO, LOMBARDY, IT

5 minutes
walking

Building Density
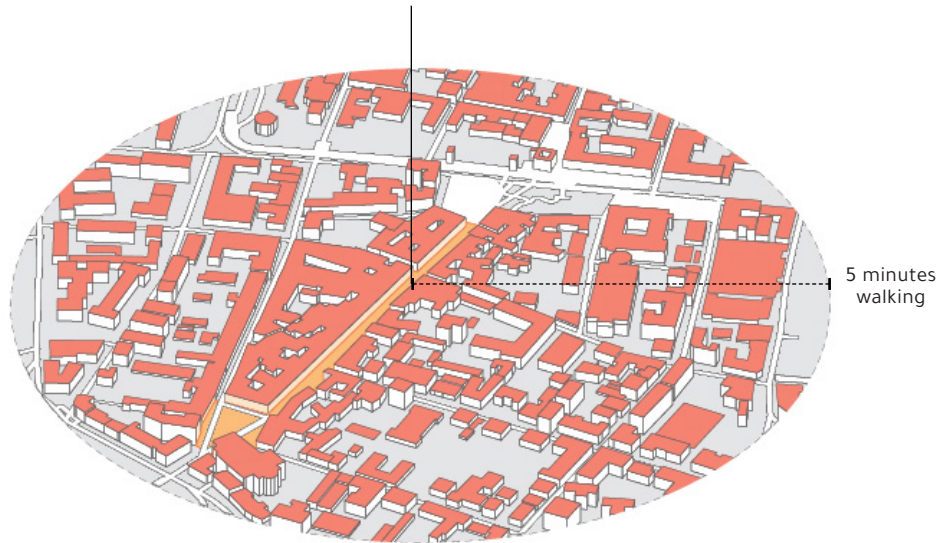
		People Density		**Mix of Functions**	
Total area:	32 ha	# of residents:	9.806	Community facilities	
Total floor area:	477.142 m²	# of units:	3.801	Supermarket	
Housing floor area:	357.856 m²	# of resents per unit:	2,6	Offices and institutions	
Gross floor area ratio (FSI):	1,5	Dwellings / ha	118	# of shops:	103
Site coverage ratio (GSI):	0,4	People / ha	303	# of Bars:	24
Open space ratio (OSR):	0,4			# of Restaurants:	31

VIA ROMA, SARNICO, LOMBARDY, IT

5 minutes
walking

Building Density
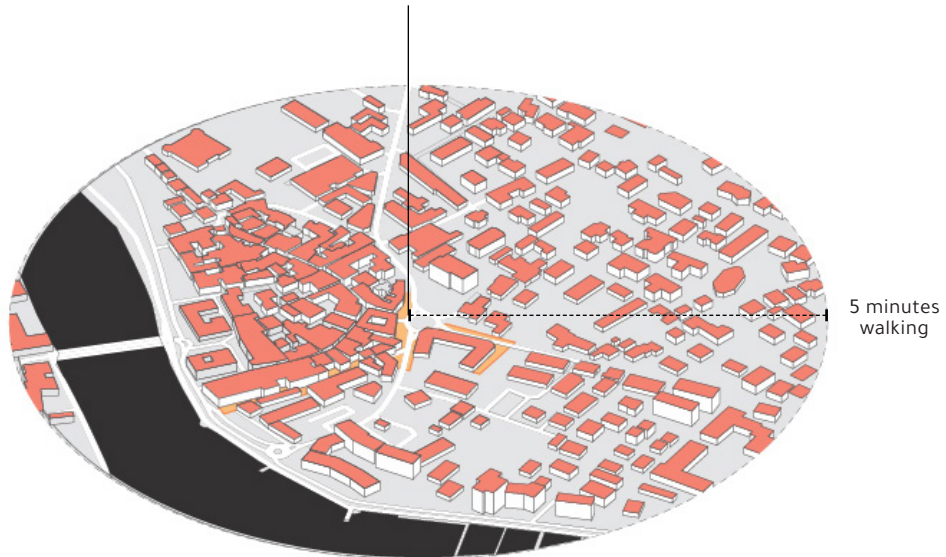
		People Density		**Mix of Functions**	
Total area:	32 ha	# of residents:	5.487	Community facilities	
Total floor area:	229.694 m²	# of units:	2.127	Supermarket	
Housing floor area:	172.271 m²	# of resents per unit:	2,6	Offices and institutions	
Gross floor area ratio (FSI):	0,7	Dwellings / ha	66	# of shops:	78
Site coverage ratio (GSI):	0,3	People / ha	170	# of Bars:	23
Open space ratio (OSR):	1,1			# of Restaurants:	24

9.2 | Building Density, People Density and Mixed Functions

In order to create lively, diverse public spaces, many people need to pass by at various moments. To grasp why Ponte-Chiasso is not as lively as some other reference locations, a comparative study has been made that estimates the densities of two locations in the same Italian province that *do* have a lively central street.

The names of the reference streets, 'Via Milano' and 'Via Roma', already give away that they have something in common with Via Bellinzona in Ponte-Chiasso: each of them is a transit route that used to connect the urban areas to a larger city. The streets thus share an important trait: they are connectors and their liveliness depends not only on activity, but also on through-movements. Pictures of these streets are shown on the next page.

Based on personal judgements of feasibility, the target density decided on is a density somewhere between the reference locations Como and Sarnico. This mean **adding over 2.000 inhabitants** to Chiasso - Ponte-Chiasso. Calculation:

Increasing density at crossings with main road improves opportunities of diverse people to meet and exchange.

Added residents:
Within 5 min. walking from centre live:
Como: 7.355 people
Sarnico: 5.487 people
Ponte-Chiasso: 4.143 people
Target: (7.355 + 5.487) / 2 = 6.421

This means I aim to add:
Target - current # inhabitants =
6.421 - 4.143 = 2.278 people

Added functions
Shops: (103 + 78) / 2 - 33 = 58
Bars: (24 + 23) / 2 - 10 = 14
Restaurants: (31 + 24) / 2 - 10 = 18

Calculated in the same manner as # residents.

VIA BELLINZONA, PONTE-CHIASSO, LOMBARDY, IT

5 minutes walking
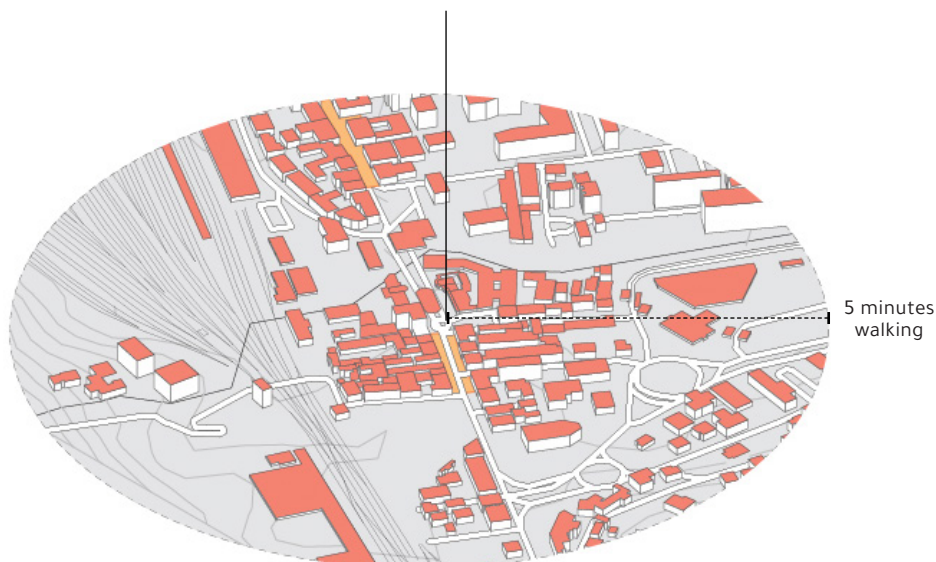
Building Density		People Density		Mix of Functions	
Total area:	32 ha	# of residents:	4.143	Supermarket	
Total floor area:	171.255 m²	# of units:	1.606	Offices and institutions	
Housing floor area:	128.441 m²	# of resents per unit:	2,6	# of shops:	33
Gross floor area ratio (FSI):	0,5	Dwellings / ha:	50	# of Bars:	10
Site coverage ratio (GSI):	0,1	People / ha:	128	# of Restaurants:	10
Open space ratio (OSR):	1,7				

City	Inhabitants	Received refugees	Percentage added
Darmstadt (DE)	10.0000	2.000	2%
Berlin (DE)	3.769.000	51.800	1%
Erlangen (DE)	100.000	2.000	2%
Karlruhe (DE)	313.092	7.536	2%
Barcelona (ES)	5.575.000	2.054	0%
Bologna (IT)	388.367	1.980	1%
Lisbon (PT)	504.718	872	0%
Athens (GR)	664.046	3.000	0%
Stockholm (SE)	975.904	4.000	0%
Malmo (SE)	344.166	6.939	2%
Uppsala (SE)	172.402	3.950	2%
Helsingborg (SE)	112.496	1.500	1%
Geneva (CH)	499.480	7.500	2%
Rotterdam (NL)	623.652	2.650	0%
Vienna (AT)	1.897.000	20.600	1%
Graz (AT)	443.066	3.200	1%
Ghent (BE)	248.358	1.500	1%
Metz (FR)	117.492	900	1%
		Average:	**1%**
Gaziantep (TR)	2.069.264	500.000	24%

The Guardian

How a small Turkish city successfully absorbed half a million migrants

Gaziantep has grown by 30% due to newcomers fleeing the crisis across the border in Syria, but remains a model of tolerance and pragmatism

Via Milano, Como

Via V. Veneto / Via Roma, Sarnico

Via Belinzona, Ponte-Chiasso

39 United Nations Educational, Scientific and Cultural Organization, Cities Welcoming Refugees and Migrants: Enhancing effective urban governance in the age of migration (UNESCO, 2016).

40 Stephen Burgen, 'How a small Turkish city successfully absorbed half a million migrants ' (The Guardian, June 19 2019). <https://www.theguardian.com/cities/2019/jun/19/gaziantep-turkish-city-successfully-absorbed-half-a-million-migrants-from-syria>

9.3 | Refugee density

Accommodating refugees in the urban area of Ponte-Chiasso could solve, apart from humanitarian issues, problems of vacancy and inactivity of the city. On the previous pages, a calculation was made of the amount of inhabitants that need to be added in order to create a lively urban centre. **How many of these new inhabitants could be refugees?** Can we speak of a 'right balance' of refugees and other inhabitants inhabiting an urban area?

To find an answer to these questions, insights are taken from existing cases. Looking at the accommodation of refugees in cities accross Europe, we can see that on average only an amount equivalent to 1% of the existing population of the city is accommodated. An overview of such numbers is given in the table on the left page[39]. In the case of Chiasso - Ponte-Chiasso, this would mean that, if we indeed add the amount of 1% of the total of 10.000 inhabitants, only 100 refugees would be accommodated.

This thesis, however, inspires to be a little more progressive. Therefore, example is taken from the Turkish city of Gaziantep. When researching the integration of refugees in urban areas, the city of Gaziantep is come across often as an example of a city that has reacted proactively to achieve the integration of refugees in its city. The Turkish city on the border with Syria, with little over 2.000.000 inhabitants, has accommodated 500.000 refugees - almost a quarter of the initial population[40]. Because of its focus on the development of proper migrant integration policies by providing, for example, education, housing and health, the city is seen as a progressive, succesful example of refugee integration in urban areas.

Adopting this number in Chiasso - Ponte-Chiasso would mean adding 2.400 refugees to the city. This would also mean, however, that the areas to be developed would be inhabited 100% by refugees. This could lead to (socio-spatial) segregation. Instead, this project chooses to treat the added units for + 2.000 inhabitants as a new, mixed community, of which 24% is refugee.
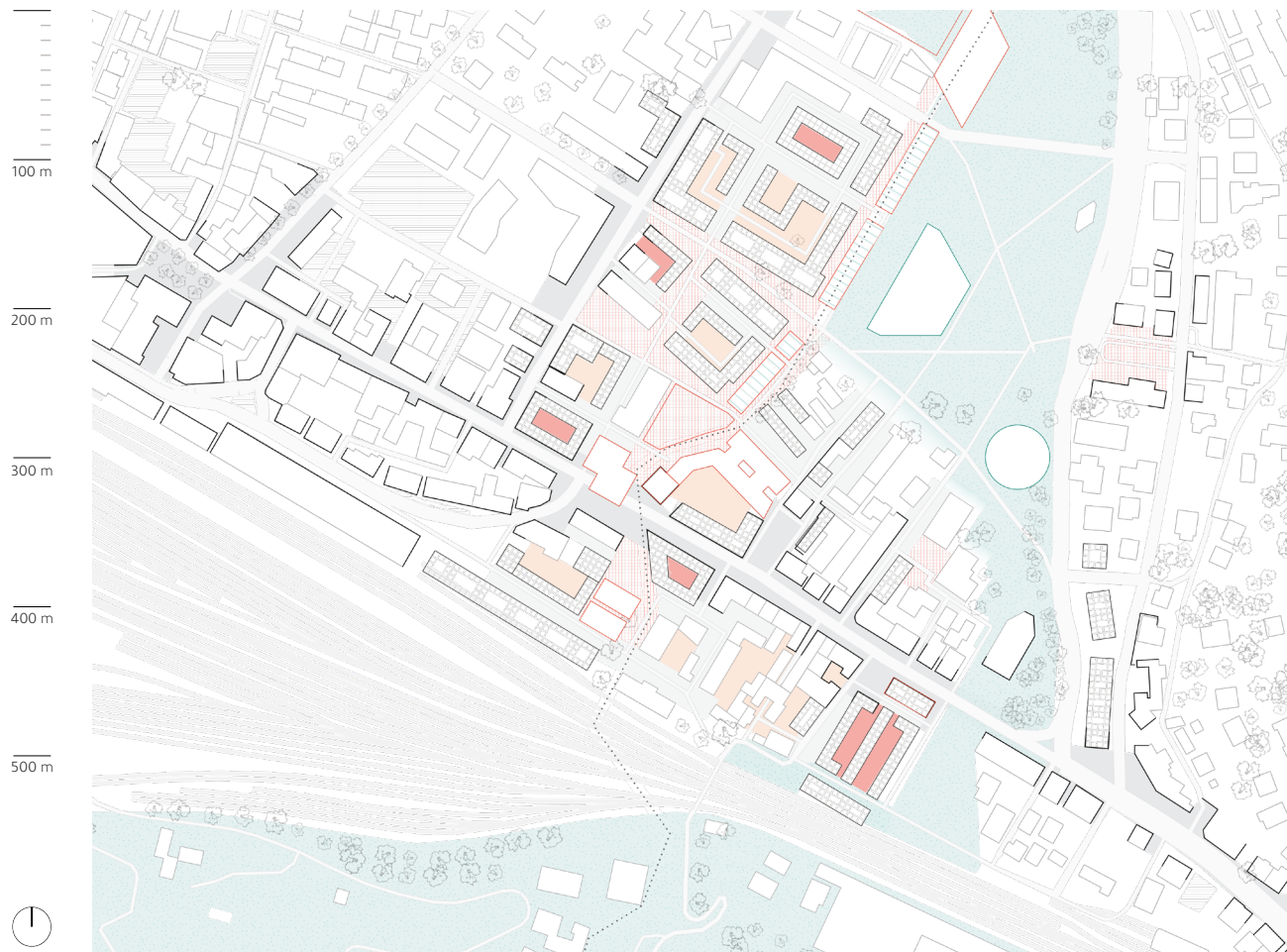
City	Inhabitants	Added pop.	Percentage added	Received refugees
Chiasso - Ponte-Chiasso	10.261	2.278 (see page 91)	24% of added pop.	547

93

94

9.4 | A great variety of public spaces

The plan on top of the left page is the prefered plan of many try-outs that fit the **desired + 2.000** dwellings into Chiasso - Ponte-Chiasso. The option shows a variety of public spaces: urban streets, intimate streets, squares, public and private courtyards and a large public park, to cater to the needs of various users.

The creation of a large variety of public spaces has been a guiding theme in the design approach. The diagrams in the right edge of this page show ingredients that were included to achieve a diverse living environment. The diagram below shows how different building typologies are accessed through different sequences of public space.
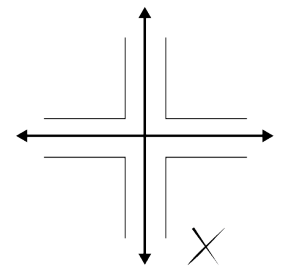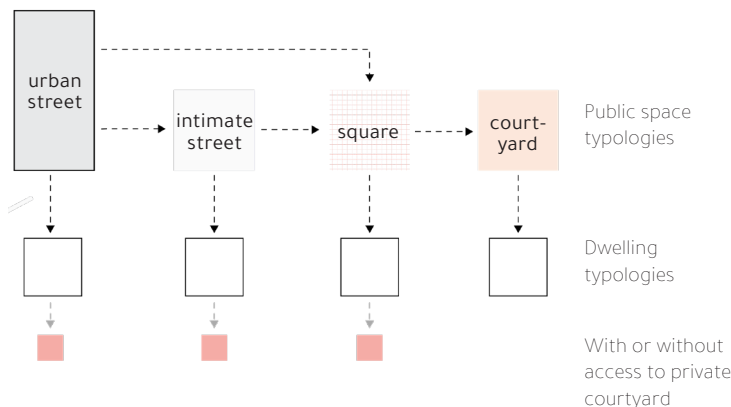
Current streets are designed for moving through
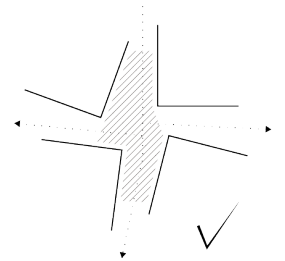
In proposed streets, blocks are playfully rotated to create spaces to stay and meet
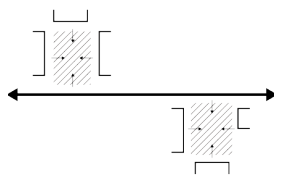
Intimate public spaces are connected to and visible from main road.

9.5 | Public to private gradients

The variety of public spaces can be classified by type, but also by their level of publicness / privateness. The diagram below shows how dwellings are either accessible from public, semi-public or semi-private spaces, **hereby generating a variety of options for inhabitants with different needs.** The semi-private spaces are usually only accessible coming through a semi-public space first. This gradient is important to secure the intimacy of the semi-private spaces.

9.6 | Four open space typologies

On the next pages, the four main open space typologies that will be developed are elaborated on. Their characteristics are revealed and an impression is given of what these spaces might look like.
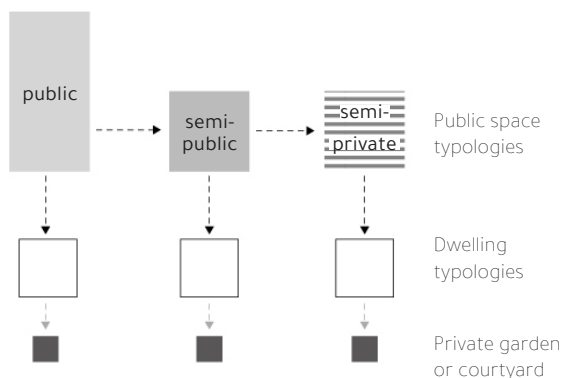
Figure 73   Above
Public space typologies
▭ Urban street
▤ Square
▭ Public courtyard
▭ Intimate street
▭ Private courtyard
▢ Affordable housing unit
Map by author

Figure 74   Below
Public to private gradients
▭ Public
▭ Semi-public
≡ Semi-private
▪ Private
Map by author

95

URBAN STREET

mix of old
and new

facades
aligned

building height
adapted to avarage
building height
(4-6 floors)

high, open plinth with
public functions

green pockets with
street furniture
alternate with
parking spaces

places for staying
at intersections

SQUARE

setback from plinth
provides intimate scale
in front of buildings

squares are located
intelligently nearby public
functions that can make
use of the open spaces to
activate them

green buffer zone between
building and open square
to ensure privacy and
water infiltration

trees aligned to
demarcate edges square

public space
designed to cater
to mixed public
functions

building height
adapted to avarage
building height
(4-6 floors)

new buildings
align with existing
buildings to create
enclosed spaces

Figure 75   Left page, Above
Impression urban street.
Illustration by author.

Figure 76   Left page, Below
Impression square. Illustration
by author.

Figure 77   Right page, Above
Typological axo urban street.
Illustration by author.

Figure 78   Right page, belo
Typological axo square.
Illustration by author.

INTIMATE STREET

staggered building line creates attractive places to stay in an intimate setting

trees are organised in clusters, to emphasize informal character

gradual public to private transitions with height differences or garden buffers

building height adapted to avarage building height (2-4 floors)

narrow street width (8 - 12 m)

mix of old and new

new street pattern embeds existing buildings

single family homes with diverse characters

COURTYARD

connected to continuous streets where people pass through to secure access, safety and liveleliness

gradual public to private transitions with height differences or garden buffers

green courtyard with informally organised trees to emphasise natural character

mix of diverse buildings encloses intimate courtyard

courtyards are part of the public realm; no fences!

Figure 79   Left page, Above Impression intimate street. Illustration by author.

Figure 80   Left page, Below Impression courtyard. Illustration by author.

Figure 81   Right page, Above Typological axo intimate street. Illustration by author.

Figure 82   Right page, belo Typological axo courtyard. Illustration by author.

refugee
16 m²

tourist
16 m²

commuter
32 m²

lorry driver
80 m²

health centre
1024 m²

sports
288 m²

tourist
info
32 m²

bar / café
128 m²

kinder garten
1024 m²

work
space
32 m²

small library
128 m²

small theatre
128 m²

mensa
128 m²

primary school
1280 m²

language school
128 m²

migration centre
128 m²

4 m

9.7 | Functions towards integration

Now that we have established what kind of public spaces to develop, the question becomes **how to activate these spaces with different public functions**. A search for which functions to add starts from the analysis of the potential integration of refugees.

The integration of refugees into the local population is not easy. From interviews with different young refugees, residing either in Como or in Delft, I understood that the easiest way to get in touch with the local population for them had been involvements with local volunteers: places such as language schools, refugee camps or mensas where a relatively large amount of time is spent together. Occasions where spontaneous contact between refugees and other inhabitants occurs are rare.

Looking into additional studies about the local integration of refugees[41], other facilities such as schools, migration centres, libraries, theatres or event locations are suggested to support the integration of refugees. To this list I have added other, general functions in which interaction might occur, such as workshop spaces, bars and cafés, to come to a list of facilities that could stimulate the integration of refugees into the local population, or an awareness of their presence, as well as activate the public spaces.

In order to understand how these places of integration might take shape, the page on the left reveals the estimated amount of space each of these facilties would take up. These sizes can be used to project the integrative facilities onto the selected design location.

The table below reveals which public space networks could overlap in the different facilities. This does not mean that functions that are dedicated to one particular group cannot help for the integration of refugees. Locating facilities directed at one group in places where functions directed at other groups in border space are located could likewise support the integration of different networks. The clever organisation of functions is deemed an important tool to foster interaction and recognition between different people in border space.

	Health centre	Market place	Sports facilities	Bar / café	(Small) library	(Small) theatre	Mesnsa	Language school	Primary school	Kindergarten	Office / work space	Migraiton centre	Tourist information
refugees	•	•	•	•	•	•	•	•	•	•	•	•	
commuters	•	•	•	•			•		•		•		
tourists	•	•		•		•		•					•
transport drivers	•			•			•				•		

bars
restaurants
shops
urban axis
kindergarten
schoolyard
primary school
library
border park
basketball fields
language school
language school
allotmentgardens
fitness
work spaces
entrance gate
customs park
market
museum
amphitheatre
health care
public park
public garden

9.8 | First, Second and Third place theory

Public spaces can be classified in different ways. One way to classify public space is by distinguishing First, Second and Third place.[42]

First place can be described as anonymous space: it is the most public of spaces. Second place is also refered to as parochial space: it is intended for specific groups of users that share a common interest. Third place occurs in informal settings. It is the place where informal encounters take place. Examples are cafés and shops.

Especially Second place is interesting for this thesis. While in First place, encounters are scarce and people tend to stay to themselves, **in Second place, people share a common interest.** Think of sports clubs, allotment gardens, schools, libraries, etc. These places are relatively large public functions to which a large variety of people from different backgrounds, but with a shared interest have access. Unlike Third place locations, in which people tend to search for like-minded people (for example: you go to a bar where you like the guests), Second place is intimate enough to meet new people, but open enough to invite people from diverse backgrounds.

What the OECD writes about refugee integration similarly reminds of second place functions:

> "Active participation of migrants is sought not only through labour inclusion but also by expanding the spaces for their contribution to local public life. (…) spaces (**public librar- ies, schools and pre-schools, theatres, squares, recreational centres etc.**) and activities (festival, cultural events, awards, etc.) for developing **common interests**, engaging in local causes, exchanging skills, and building social networks. Fostering collective experi- ences and social mixing, combined with local leaders' communication around integration, influence the perception of host and migrant communities and helps knock down trust barriers."
>
> - OECD (2018), p. 115.

Usually, Second place functions are located in the outskirts of urban areas. Sport fields, for instance, are generally located in remote locations. This thesis proposes to treat Second place differently. Instead of locating Second place functions in locations that are difficult to access, **Second place functions will be located in the seams that can bring segregated urban areas together.** Sennett writes in his work *Building and Dwelling* that barriers that run through urban fabrics might be broken down by activating them with shared public functions. Activating these barriers is, I argue, done best by adding Second places. In Chiasso - Ponte-Chiasso, this seam-to-be is of course the national border.
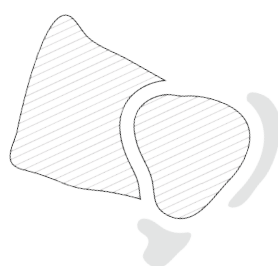
Current organisation of
Second place
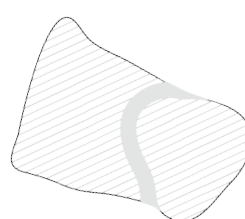
Proposed organisation of
Second place

Figure 83   Above
≡ First place
≡ Second place
≡ Third place
    Map by author

Figure 84   Below
    Different networks cross
    in Second place
— Refugee network
— Commuter network
— Tourist network
— Transport network
⠿ Meeting point
    Map by author

FIRST PLACE

SECOND PLACE

THIRD PLACE

FIRST PLACE

◻ market place / event location

◻ health care centre

▪ pavillion
▪ look-out

◻ (botanical) garden

◻ public garden

◻ supermarket

SECOND PLACE

◻ basketball field

◻ dance and music centre

◻ allotment gardens for 16 families
◻ children's farm

◻ language school

library

◻ kindergarten

◻ primary school

◻ small exhibition space

◻ school

▪ tourist information
◻ office / work space

THIRD PLACE

◻ bar / café
◻ restaurant

◻ small shop
◻ playground

100 m

9.9 | The camp as a tool for revitalisation

This thesis brings together the need to revitalise the border area of Chiasso - Ponte-Chiasso with the accommodation of refugees. Ponte-Chiasso is an urban area that has to deal with aging of its inhabitants and the vacancy of commercial functions. The shops in the area cannot compete with the shopping malls nearby, nor can they be sustained by visits from the small local population.

This thesis argues that increasing the density of the area by 'giving space' for refugees to inhabit can be beneficial for the liveliness of the area and the sustenance of local commercial activities. The OECD confirms this hypothesis:

> "Initial qualitative evidence shows that the presence of migrant communities could have a positive impact, even in disadvantaged neighbourhoods, by revitalising demand for local business, bringing local and migrant families together around public schools and health centres and diversifying the cultural activities for all residents."
> - OECD (2018) p. 18

Figure 88   Above
Impression of refugee camp.
Illustration by author.

TOWARDS A BORDER SPACE DESIGN

SLOW TRAFFIC NETWORKS

Based on the three observations explained in the previous chapters, a desired border typology has been established: a slow, complex border space.

The next step is to understand what the design requirements for border space are. For this purpose, three design ambitions have been established that aim to contibrute to the development of inclusive border space. These three ambitionas are: developing affordable, incremental housing, developing sustainable, decremental public space, and building slow traffic networks that are inclusively accessible and ensure the equitable access to opportunities in border space.

10.1 | A layering of different scale slow networks

This thesis presents **slow traffic networks as potential integrative edges.** Where commuter networks devide the urban fabric into segregated patches, slow traffic networks have the potential to seam two areas together.

The 'slow traffic network' does not only include the regional slow traffic connections as seen on page 34, but is rather a layering of different networks: a regional cycling network (primary slow traffic network), a local cycling network (secondary slow traffic network) and a fine-grained pedestrian network (tertiary slow traffic network). The traffic concept diagram can thus be developed to the following:
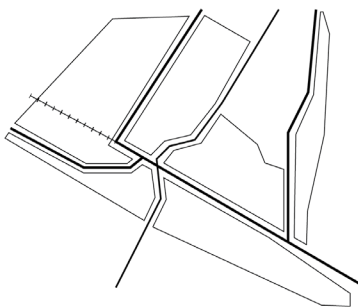
Current traffic situation:
Commuter traffic cuts up urban fabric into separate fragments.

Proposed traffic situation:
Commuter traffic is redirected and streets are transformed into slow-traffic inclusive streets that accommodate places to pause and meet.

100 m	
200 m	
300 m	
400 m	
500 m	

10 m
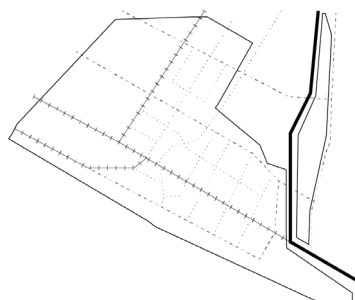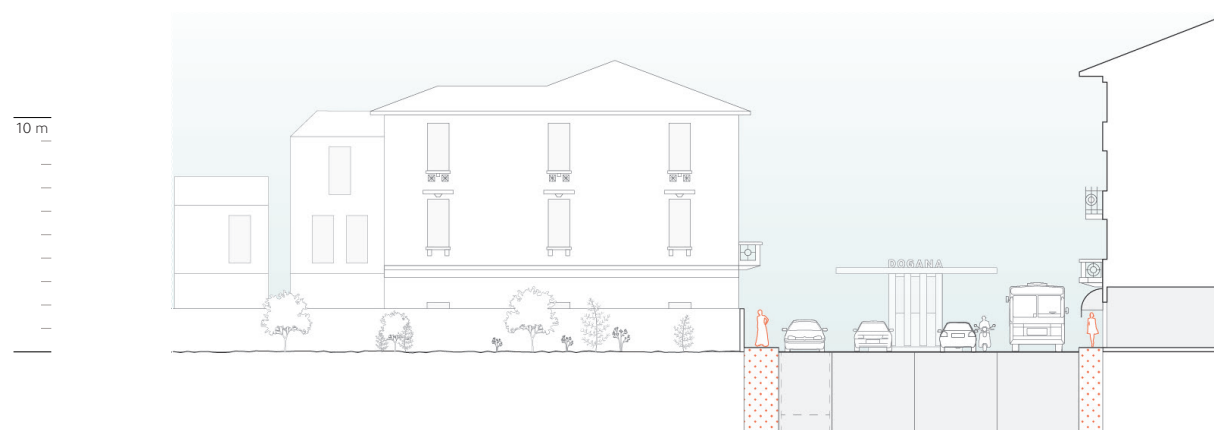
AFFORDABLE HOUSING
4x4m adaptive units

DIVERSE PUBLIC SPACES
to meet, see and be seen

SLOW TRAFFIC NETWORKS
inclusive access to opportunities

10 m

110

10.2 | From racing through to staying in border space

The map on the left page shows the proposed slow traffic network and the hierarchy of primary, secondary and tertiary slow traffic networks. The blocks in the area are broken op and made small on purpose, to stimulate walking in the area.[43]

The slow traffic movements are embedded in the envisioned urban street. This becomes visible in the sections on the left page. The section above shows the current situation; the section below the proposed situation.
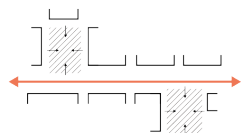
Once again, the concept to integrate all design ambitions in the permanent axis is carried through. The local cycling network and spatious pedestrian areas offer places to stay and allow crossing time to be interrupted. They also contribute to making opportunities equally accessible. The diverse public spaces added offer a wide range of places to stay, in which people from different backgrounds meet and exchange. The affordable housing solutions make border space inclusive.

Together, the three design ambitions as presented in this chapter constitute inclusive border space. How this takes shape exactly, on a local scale, will be focused on in the next chapter: *Zooming In.*

43 Jane Jacobs, The Death and Life of Great American Cities (Random House, 1961)

Large building blocks enforce homogeneity

max 100 m

Small building blocks encourage walking

SMOOTH BORDER	BORDER SPACE	HARD BORDER
networks run parallel and efficient	networks cross and overlap	networks end at the border
crossing time is minimized	crossing time is interrupted	crossing is impossible
opportunities accessible by crossing	opportunities are fairly distributed	there are no opportunities
territories are smoothened out	territories overlap	territories end at the border
places to stay are non-existent	places to stay are complex; diverse	places to stay are homogeneous
people move past each other	people meet and exchange	people are unmoved and unmixed
by-product of infrastructures	3D living environment	by-product of barriers

Figure 89   Above
      Slow traffic networks
━ Primary
─ Secondary
─ Tertiary
      Map by author

Figure 90   Below
      Section Via Bellinzona
∴ Pedestrian space
/// Bicycle space

'La Saceba', the old concrete factory in Morbio Inferiore that [...] the Parco delle Gole della Breggia. Photograph by author.

ZOOMING IN

The design strategies and principles developed in the previous chapter are given a place in this chapter. Two zoom-in projects are used to go deeper into the topics 'refugee integration': the Refugee Community, and 'dealing with permanence and temporality': the Customs Park.

DEALING WITH PERMANENCE AND TEMPORALITY

ZOOM IN: THE REFUGEE COMMUNITY

The three design ambitions elaborated on in the previous chapter have lead to city-scale strategies on the various subjects.

What is missing, still, is an idea of how these concepts and strategies might crystalise into space. To spatialize the three ambitions, two zoom-in projects are developed. Into each zoom-in project, the three design ambitions are integrated.

Additionally, each zoom-in project treats a topic that has been guiding in the design of this thesis, but that thus far has not been properly addressed. In the case of the Refugee Camp, this topic is 'refugee integration'.

proposed refugee "camp"

former refugee camp
2016 - 2018
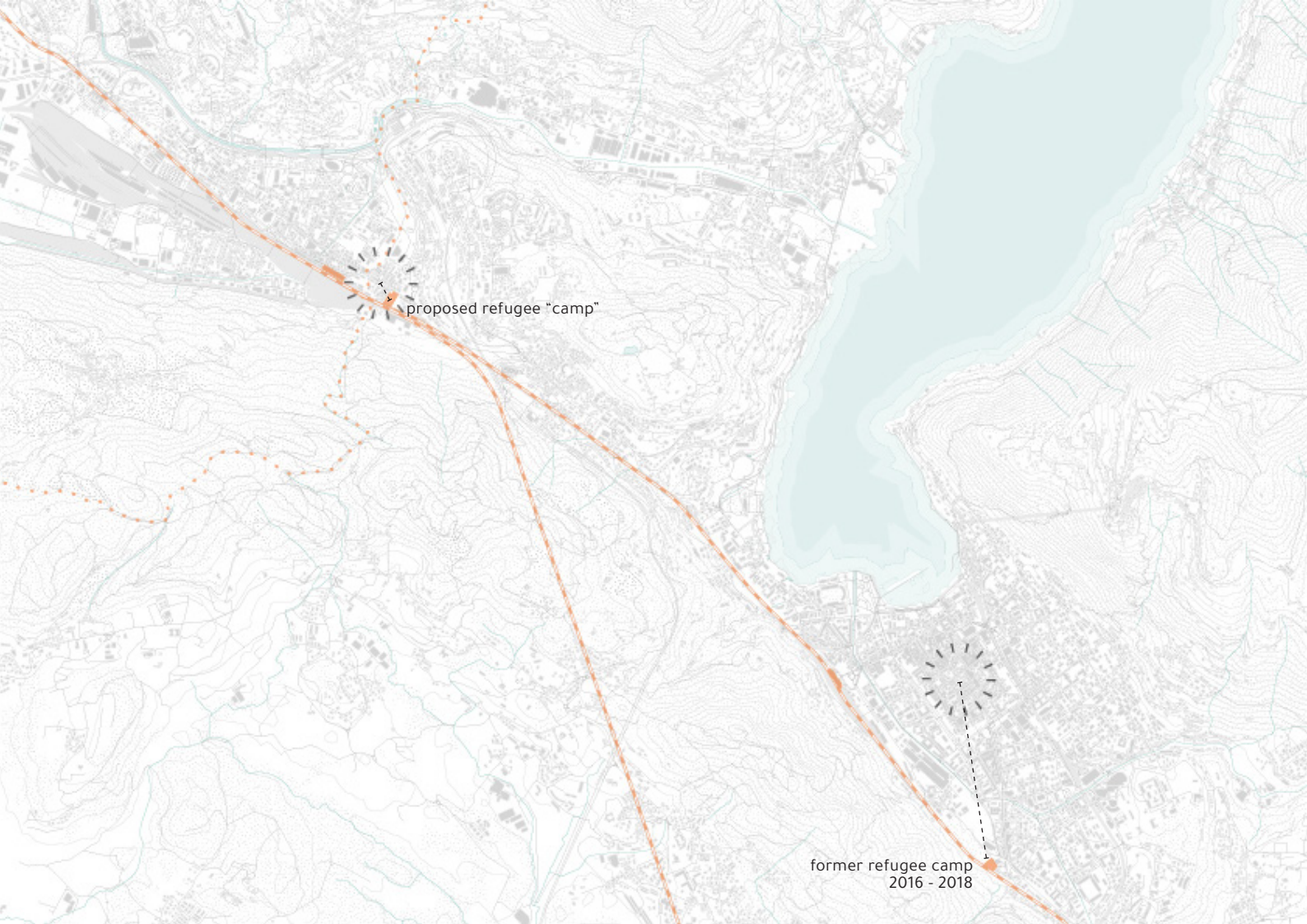
11.1 | The camp relocated to a central position

> "Integration needs to happen where people are, in their workplaces, in their neighbour-
> hoods and the schools to which they send their children, in the local supermarkets where
> they shop, and in the public spaces where they will spend their free time."
> - OECD (2018) p. 24

The former refugee camp that was located in the municipality of Como between 2016
and 2018, sandwiched between a cemetery and a railway, was isolated from urban
activity. This contributed to the segregation of refugees from social and economic
activity.

This chapter studies how a refugee community can be integrated into an urban core
- in particular: the newly developed urban centre of Ponte-Chiasso. As the current
centre of Ponte-Chiasso is run-down, there is plenty of space to redevelop vacant
lots into (mixed) refugee accommodation. The central position of Ponte-Chiasso in
combination with the amount of left-over space available for new developments make
the location ideal for imagining the potential benefits and pitfalls of the development
of refugee accommodation in central urban areas.

Figure 91   Above
Centrality refugee
community
— Refugee network
■ Camp
Urban centre
Map by author

Top plan labels:

language school
church
security
job orientation / diploma
validation / legal assistance
rubbish containers
immigration office
water tap stand
food supply
community kitchen
health centre
sports
communal square
water tap stand

Bottom plan labels:

public square
church
library
language school
security
job orientation / diploma
validation / legal assistance
immigration office
communal garden
communal square
food supply
fitness
health centre
sports

100 m

11.2 | The incremental camp

The refugee camp that was set up in the municipality of Como between 2016 and 2018 was a typical example of what Irit Katz defines as the 'biometrically controlled container camp'[44].

> "These [biometrically controlled container] camps are surrounded by barbed wire and provide nothing more than the residents' basic biological needs (basic food and shelter), creating spaces that are built for everyone yet for no one" - Katz (2017) p. 5.

The approach to migration in these camps is problematic, as the dehumanisation of the spaces make inhabitation impossible[45]. Moreover, the camps clearly distinguish a group of 'controllers' and a group of the 'controlled'. To surpass this binary approach to migration, Camillo Boano and Giovanna Astolfo refer to the suggestion of 'giving place' to the guest.

To bo able to 'give place' to refugees, spatial opportunities for interaction and personal development need to be constructed in an open-ended way. **Rather than defining spaces precisely, the design in this thesis creates multi-purpose spaces that can be adapted to the needs of the inhabitants.** To sustain the qualities created in the camp for the future, the camp is built following the concept of incremental housing.

To illustrate how this camp is 'incremental', the development of the camp through time is visualised in the maps on the left pages. The site into which the camp will be integrated is an abandoned lot that is partially paved and partially overgrown with weeds and shrubs. In the first stage of the refugee camp, on the paved area, an emergency camp is built up. At the same time, the construction of the 'permanent' refugee community commences. In the map on the left page below, the 'permanent' community is visualised. Important features of the permanent refugee community are the facilities located along the urban axis adjacent to the community. The language school where refugees can start to learn italian, a small public library and the job orientation centre are all located along this axis. These shared public spaces increase awareness between refugees and other inhabitants of border space[46].

In a next stage, as some refugees move out as they move on to other places, or search for larger accommodations in the same area, parts of the refugee community become vacant. Instead of breaking down the construction, however, the incremental camp of this project stays.

Because of the flexible lay-out of the camp, refugees that remain have the opportunity to grow within their housing block: buildings can grow and expand within the building's skin. The dwellings now also become available to other inhabitants in border space: the flexible, affordable housing units on a central location of the now lively urban centre of Ponte-Chiasso are attractive to a large variety of inhabitants.

In the floor plans on the next page, an example is given of how the dwelling units can change within the building's skin.

44 Irit Katz, 'Between Bare Life and Everyday Life: Spatializing Europe's Migrant Camps', in Architecture_MPS, 12(1): 2. (2017)

45 Camillo Boano & Giovanna Astolfo, 'Notes Around Hospitality as Inhabitation: Engaging with the Politics of Care and Refugees' Dwelling Practices in the Italian Urban Context', in Migration and Society: Advances in Research 3. (2020) 222 - 232.

46 OECD

section
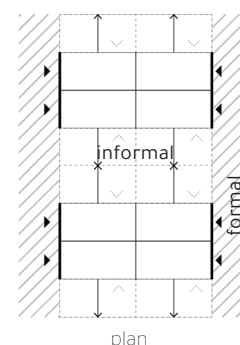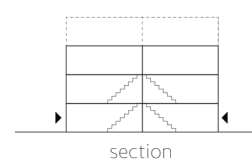
plan

the refugee accommodations can expand in (1) left / right and (2) on top.
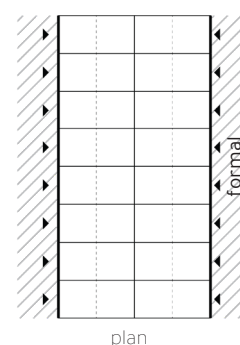
plan

the refugee community expanded

Figure 92   Above Emergency camp. Map by author.

Figure 93   Below Refugee communitu. Map by author.

shared public square

intimate outdoor space

green open space

security wall
(if necessary)

public plinth

small front garden

paved open space

 # (4x4) units: 342
estimated # refugees: 342
* For calculations see 'A.04 | Calculations
density refugee community' on page 162.

REFUGEE HOUSING

common ground floor 32 m²	common ground floor 32 m²
ground floor

1 refugee 16 m²	1 refugee 16 m²
1 refugee 16 m²	1 refugee 16 m²
first floor

1 refugee 16 m²	1 refugee 16 m²
1 refugee 16 m²	1 refugee 16 m²
second floor

1 refugee 16 m²	1 refugee 16 m²
1 refugee 16 m²	1 refugee 16 m²
third floor

12 inhabitants 100 %

MIXED HOUSING

1 refugee 32 m²	1 commu-ter 32 m²
ground floor

| 1 refugee 32 m² | 1 tourist 16 m² |
| | 1 tourist 16 m² |
first floor

1 refugee 32 m²	1 commu-ter 32 m²
second floor

1 refugee 32 m²	1 refugee 32 m²
third floor

9 inhabitants 75%

diagramatic section

In the floor plans above, an example is given of how the refugee accommodation could develop into mixed housing units. The row of floor plans above represents the refugee housing, in this case made up out of four layers. The entire block of four floors accommodates 12 refugees that either share a bedroom or have a small private bedroom. The ground floor is reserved for shared cooking and a living room, but groups of two refugees also have a small kitchen on their own floor for individual use.

In the floor plans of the 'mixed housing', some of the internal walls have been taken out to turn the refugee dwellings into studios of 32 m². This has happened to the units on the right side of the block shown above. On the left side, the entire stacking of floors has been turned into a single family home of 128 m² for a refugee family that is (now) able to afford a larger home.

6573 m² total size lot

3949 m² open space 100%

3373 m² open space 85%
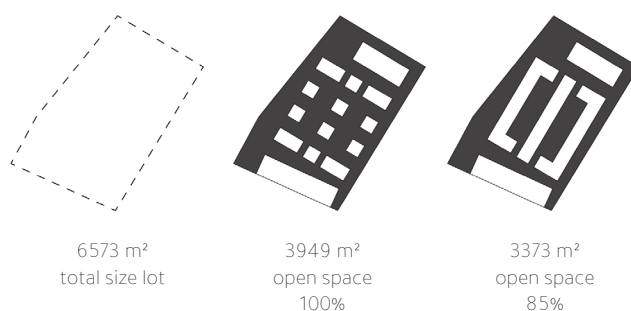
Figure 94   Above Axonometric refugee community. Illustration by author.

Figure 95   Below Impression refugee community. Illustration by author.

119

shared public square

green open space

public plinth

public garden

small front garden

paved open space

4x4 units: 564*
estimated # inhabitants: 282*
estimated # refugees: 141*
* For calculations see 'A.04 | Calculations
density refugee community' on page 162.

In the last stage of the development of the incremental camp. The gaps between the separate blocks are filled to increase the density of the plot. Where before, 12 refugees were living in one block, the density of the blocks reduces once the dwellings inside the former refugee community start to grow internally. Less inhabitants means less need for open space.

By filling the gaps between the separate blocks, a new typology is developed: the courtyard typology. **The courtyards between the blocks offer a semi-public sphere in which communities can interact.** The now mixed inhabitants on the lot have a common ground and can enjoy the facilities of the urban centre nearby.
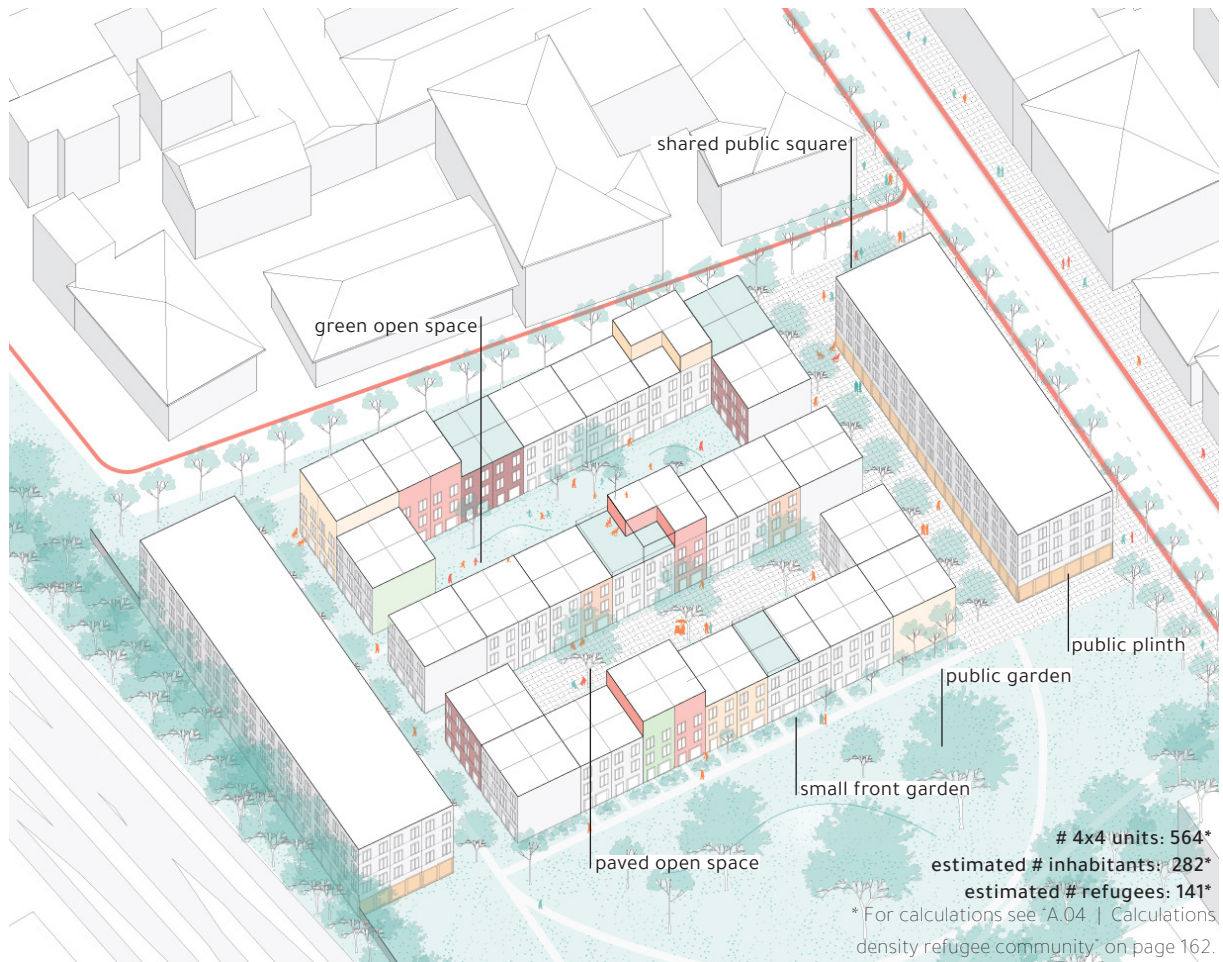
47 Boano & Astolfo

11.3 | Community creation rather than urban dispersal

Ideas on the most suitable way to integrate refugees into 'normal city life' are mixed. As social connections are said to be more easily built between locals and refugees when they live together in small, mixed groups, the dispersal of refugees in cities is sometimes advocated. But, the urban dispersal of migrants also receives a great deal of criticism. Spreading migrants across an area might bring them closer to other inhabitants of border space - it also makes the distance between migrants in similar situations larger.

Urban dispersal policies can be seen as a form of control[47]. By dispersing refugees, a collective way of life between fellow refugees is lost. Their oppurtunities to form a community and have a political voice are taken away and their dependency on one another is replaced by aid dependency.

This is why in this thesis, the creation of a refugee community upon arrival is seen as an important first step in the process of refugee integration. The refugee community in this chapter does precisely this: from the beginning, the community hosts solely refugees and offers open, communal public and semi-public spaces in which social connections can be developed. To not create an isolated enclave, the building that forms the edge of the refugee community is set up as a meeting point between the refugees and other inhabitants of border space.

In the long term, as some refugees move out in search of larger accommodations or on their way to different places, new inhabitants will come in and slowly the refugee community will become an integral part of Ponte-Chiasso's urban fabric. This scheme gives the migrant a more powerful position in the integration process, by not being a minority within their small community, instead of starting the process at a disadvantage. There is thus a more equal starting point to work towards mutual adaptation.

Building on edge of refugee community is point of interaction between different groups in border space

11.4 | Refugee community development and management

The refugee community is envisioned as a 'top-down' collaborative, incremental housing project. The top-down initiated collaborative housing project involves a professional non-profit organisation building on the plot of land selected, for the development of the plot into a collectively self-managed housing project. Although the project is financed by the providers, an important aspect is the co-design of its

Figure 96   Above Axonometric of refugee community after site has developed and other inhabitants have been admitted into the dwellings. Illustration by author.

Figure 97   Below Axonometric after site has developed and other inhabitants have been admitted into the dwellings. Illustration by author.

11.5 | Stakeholders

indirect stakeholders

direct stakeholders

Public /
non-profit

Private

users

refugee
community
development

Community

refugees

commuters

(other) inhabitants of
the neighbourhood

municipality

non-profit developer

social organisations

small business owners

real estate market

—————— strong relation

researchers

- - - - - relation

European Union
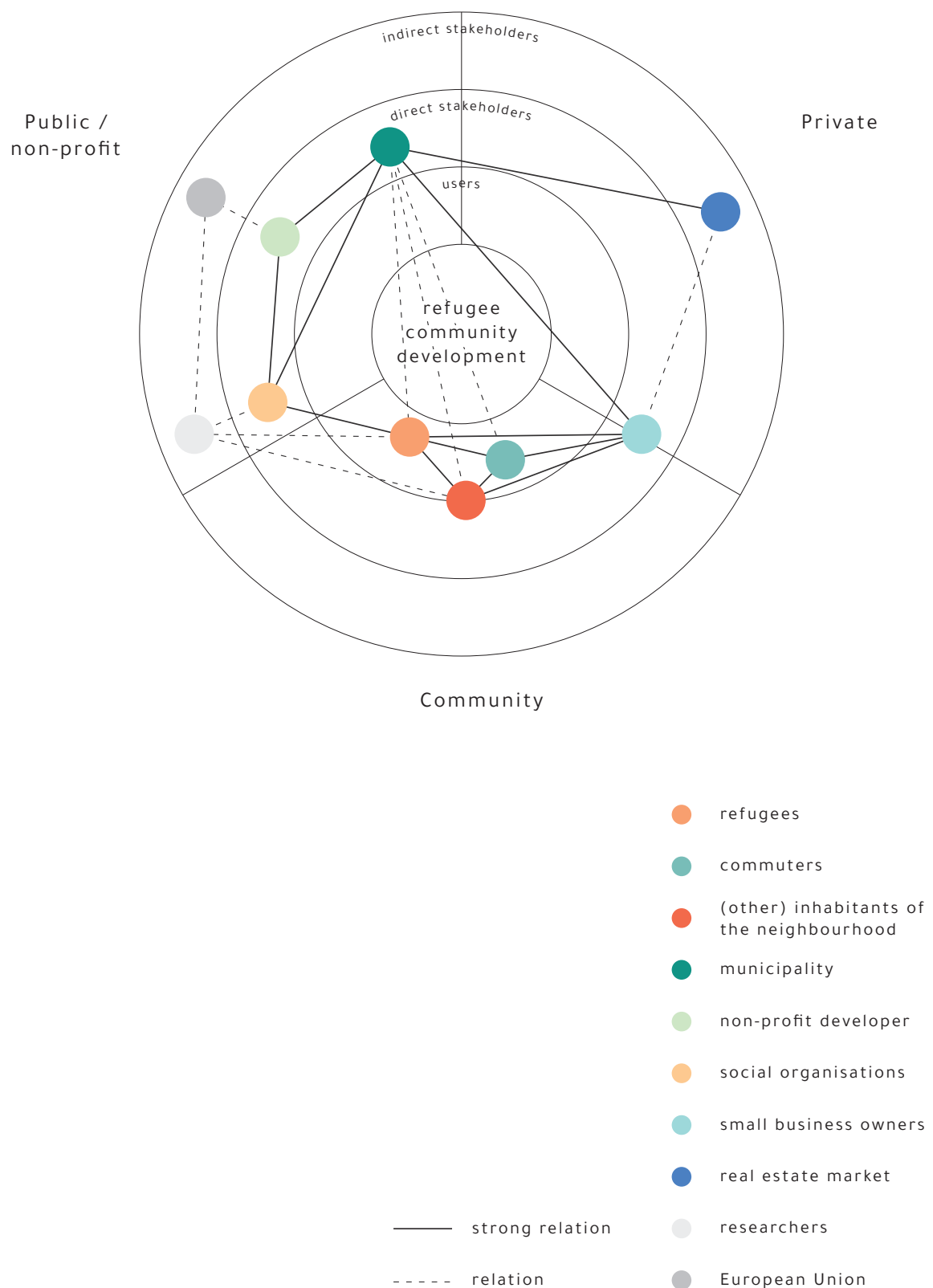
spaces by future residents of the community as well as by neighbours who already inhabit the surrounding area.

In the first phase of the refugee community, the emergency camp that is visualised in Figure 92 on page 117 is set up to quickly accommodate a large group of refugees. Meanwhile, the construction of the 'permanent' refugee community starts. Refugees can openly apply for accommodation in the new refugee community. A professional coaching organisation is responsible for selecting the residents. In the selection of residents, it is important to keep in mind that common interests between inhabitants can promote bonding, especially when vulnerable groups are later mixed with local inhabitants.[48] This could mean that the coaching organisation selects residents belonging to the same household type, or to a few specific, complementary age groups. Which (social) groups those could be is left for further research to uncover.

While the basic structure of the refugee community is being constructed, a social development process starts in which the selected refugees are involved in, for example, the design of the common spaces, the distribution of dwellings, and so on. Involving the residents in the development process can result in more active use of the spaces provided.[49] Involving both residents and neighbours from an early moment on also ensures that the forming of alliances among future residents, and between residents, the municipality and local organisations can start already before the moment of inhabitation.

The refugee community as visualised in Figure 94 on page 119 is not the final stage of the development. As access to education, employment and healthcare give the refugee inhabitants a stronger position in the city, gradually, families and individuals might start moving out to other, larger places. The spaces that become available allow dwellings within the community to grow within the buildings' skin, as is explained on page 119.

At this point, as the density in the plot shrinks, the open spaces between the seperate blocks can be developed by the non-profiit developer, in cooperation with the early and new inhabitants. The same coaching organisation that was responsible for the selection of refugee inhabitants selects the new residents that are to enter the housing block. The organisation strives to reach a balance of more or less 50/50 refugees and other inhabitants, as this promotes the opportunity to meet and interact on a regular basis and on an even footing.[48] Again, the inhabitants, this time both (former) refugees and others, are involved in the (social) development process of the new lots and in changing the public spaces. The underlying assumption is that the social development process of the housing block will lead to regular social interactions between Italian and refugee tenants.

Social mobility for refugees cannot be expected through collaborative incremental housing alone.[49] During the entire process, ongoing refugee support is required.The support could be organised in turn to involve the larger neighbourhood. v

48 Darinka Czischke Ljubetic & Carla Huisman, 'Integration through Collaborative Housing? Dutch Starters and Refugees Forming Self-Managing Communities in Amsterdam', in Urban Planning, 3(4), (2018) 156-165.

49 Dorit Fromm, 'Seeding Community: Collaborative Housing as a Strategy for Social and Neighbourhood Repair', in Built Environment (1978-), 38 (3), (2012) 364-394.

Figure 98   Left
Stakeholder diagram refugee community development

language
school

1
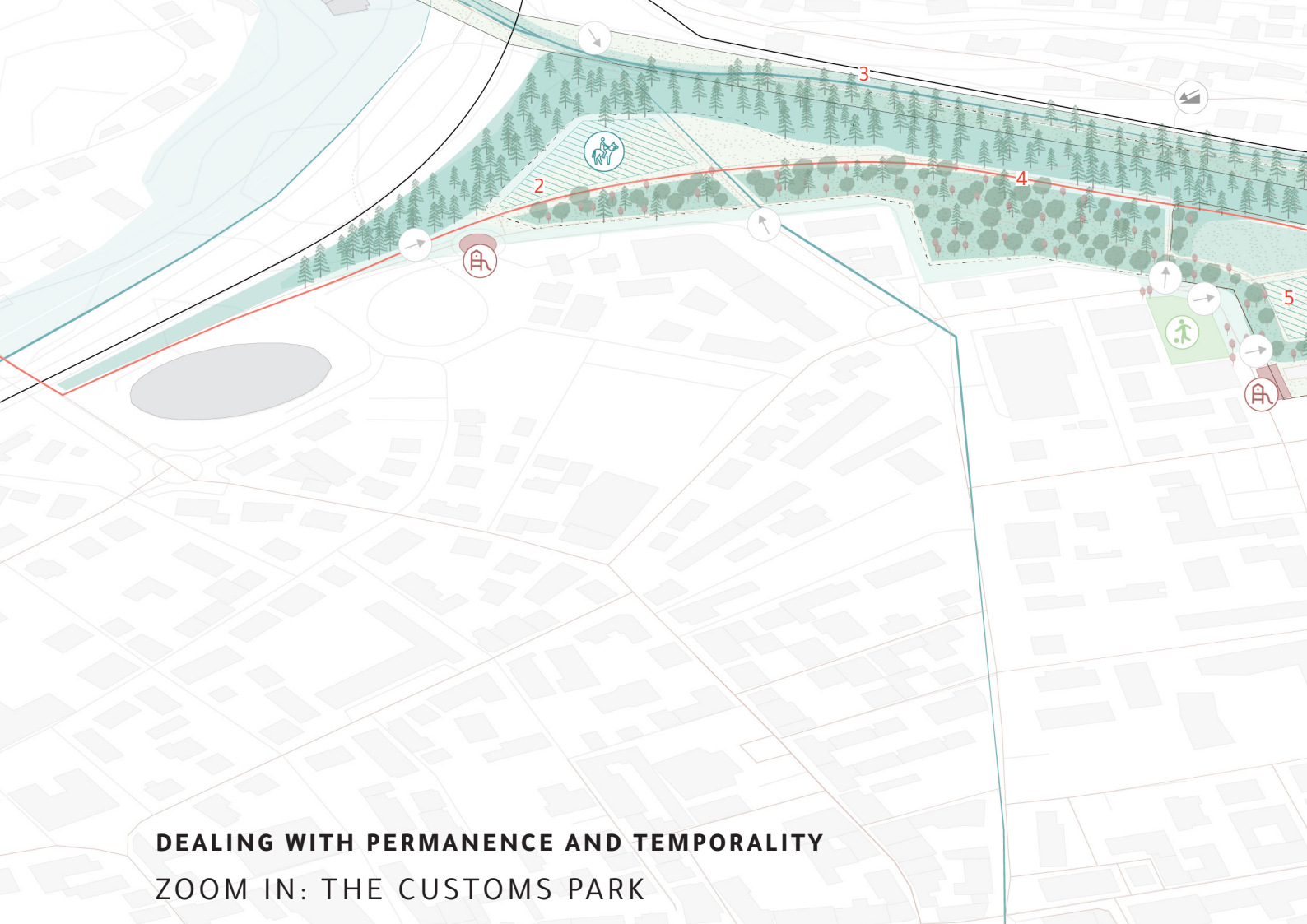
DEALING WITH PERMANENCE AND TEMPORALITY

ZOOM IN: THE CUSTOMS PARK

12.1 | A tour through the customs park

12.2 | Anticipating different scenarios

12.3 | Stakeholders

The regional valley park is a collection of different patches of park, agriculture, ecology and public functions. The park reaches from the Parco delle Gole della Breggia and runs along the Breggia river as a waterfront park with scattered large public functions, such as a swimming pool.

Part of an important theme in the regional valley park are the industrial monuments that emerge from the valley landscape. The desolate customs structures are requalified or given a new purpose - such as has already happened to the old concrete factory in the Parco delle Gole della Breggia that has now become an event space.

12.1 | A tour through the customs park

Let us take a stroll through the park to become acquainted with it. Crossing the Breggia river and the international highway that connects Switzerland and Northern Europe to Italy (1) , we enter the **customs park** (2). The customs park, located - unmistakably - where the former lorry customs resided, is enclosed by a forest that marks the boundaries of the former customs area. The forest is made up out of local tree species that are characteristic for the plains of the pre-alpine area, such as hornbeams, oaks, chestnuts, scots pines and robinias[50]. In the open areas surrounded by these forests, the natural landscape of the brook valley that connects the Parco Regionale Spina Verde to the Breggia river is restored. Functions that require large open spaces, such as a horse riding school, fit well within these open spaces. Along the East side of the park, the diverted traffic artery runs (3). The forests protect the park from noise polution. Moving ahead along the regional cycling path, the open spaces are alternated by enclosed paths that run through denser forests (4). Not much further on, the park opens again into an open field that can be used for large pop-up events, such as festivals (5). Continuing our way, we pass the former Swiss lorry control point (6), that is now overgrown with different plant species. Some added openings in the roof allow light to filter through the plants.

50 ERSAF Lombardia, 'Catalogo Piante', 2013.

Figure 99   Above
Low meadows
High meadows
Forest
Waterway
Car traffic artery
Regional cycling path
Slow traffic path
Customs area outline
Square
Playground
Sports
Sloping park entrance
Stairs park entrance
Flat park entrance
Vegetable gardens
Event location
Horse riding
Theatre
Market
Map by author
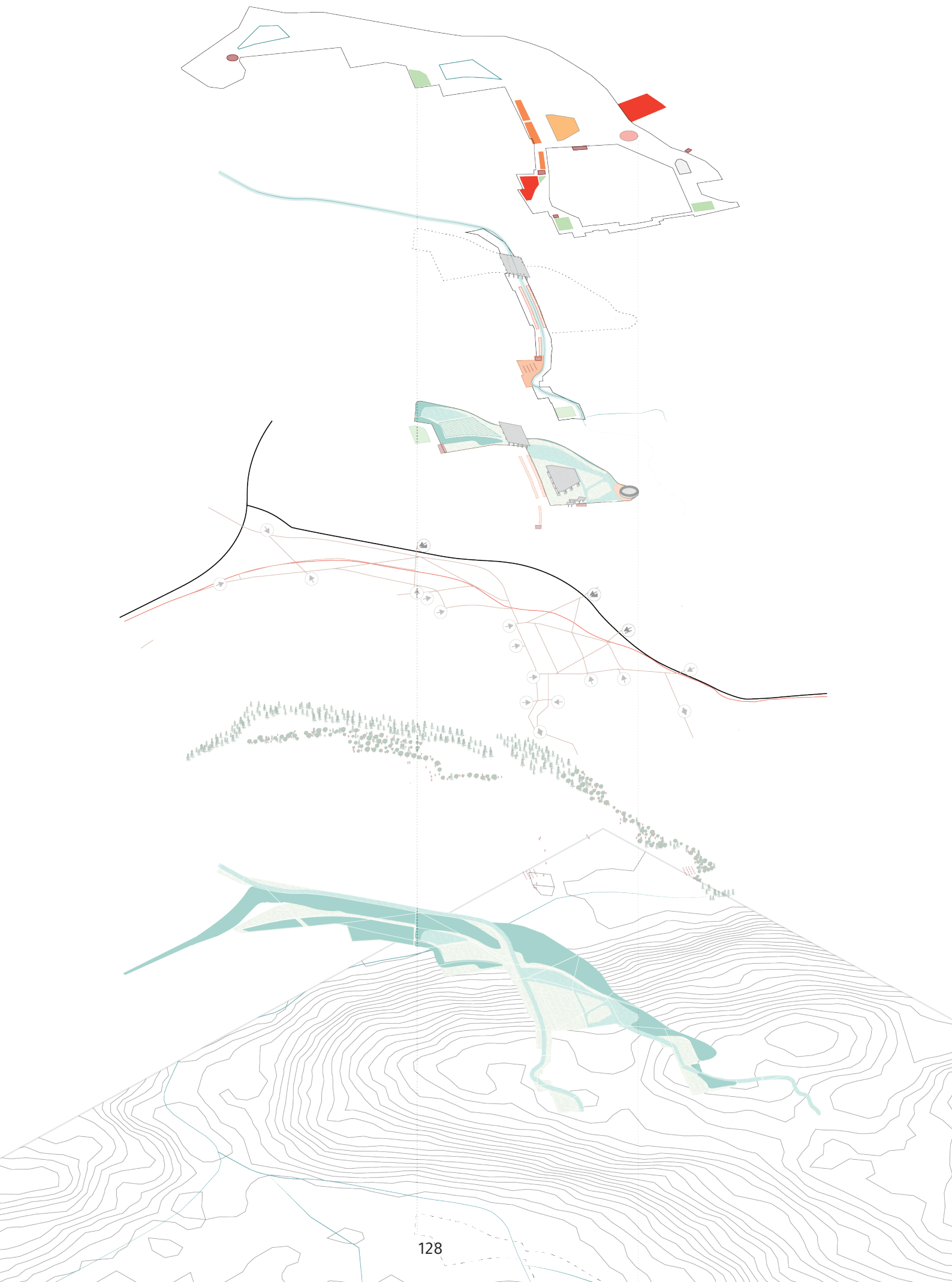
The atmosphere of the park now changes. From a solitary, ecological forest, we move into a more vibrant open park. We pass a former control point (7) - an open structure, covered by a thin roof - that has been transformed into a vibrant market place that opens every Saturday. Footpaths and cycling paths here connect the previously separated nations. Looking to our left, we see a small amphitheatre (8) - a former multi-level parking roundabout where open air events can be organised in summer. Moving along the edge of the park towards the **border park**, we arrive in a more enclosed, urban space (9). The anonymous space of before now becomes much more animated. A kindergarten, a school, a museum, workspaces and a library bring together like-minded people from different backgrounds.

Ducking underneath the library that stands along the busy Via Bellinzona (10), we cross the main road and continue along the former border, passing sports fields where children from different backgrounds play together. Then, the border is crossed once more (11). We head further into Italy and can take a decision: we either take the tunnel (12) - the view on the other side of which promises a green oasis, or we continue straight to arrive at the former refugee accommodation, that is now a strong, mixed community (13). Inside the former refugee community, we pass a local food store and a gym, to arrive in a public garden (14) where people working in the area enjoy their break. Small playground facilities allow children and parents to meet here. Finally, once again crossing Via Bellinzona at the church (15) we arrive back into the edge of the customs park - able to continue our circle.

Tree species adapt to edge they are most closely related to: deciduous trees adorn urban edges; pine trees stand along hillside.

Buildings along Border park form urban front. Building along Customs park edges open up to the park.

Figure 100   Exploded axonometric explaining structural layers. Legend: see above.

petrol station

petrol station

vacant headquarters

car access for Swiss customs employees

Italian lorry customs

former customs

office building

lorry entrance

vacant headquarters

Swiss customs

office building

former customs

work shops

100 m

100 m
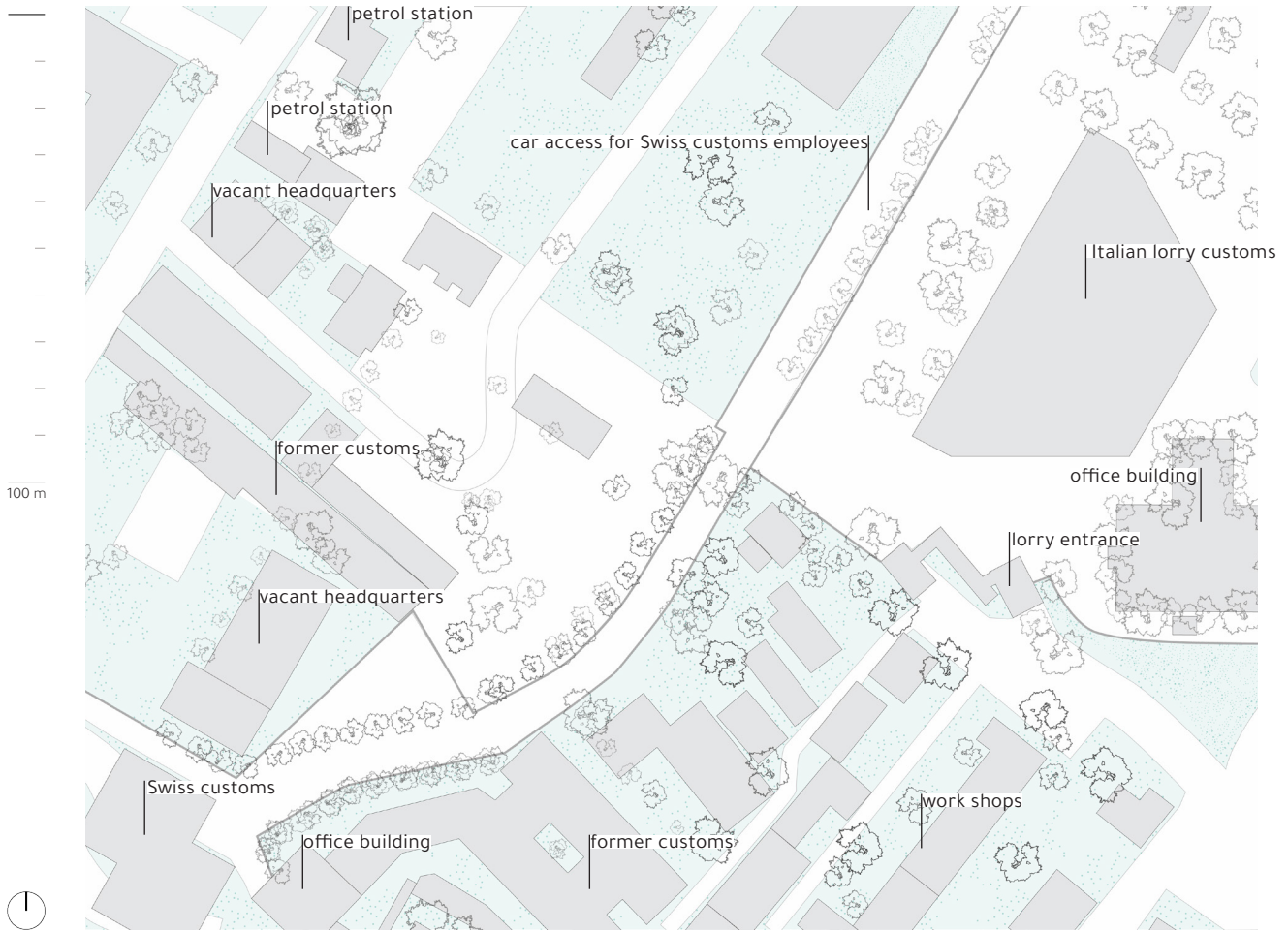
12.2 | Anticipating different scenarios

Anticipating that the barrier that marks the national border will completely dissapear is of course quite utopian - and might not happen in a near future. This is why the urban plan for Chiasso - Ponte-Chiasso is designed as such, that it can also function if the barrier of the national border does not dissapear. This is demonstrated in the zoomed-in plans on the left page.

In the map on top, the current situation is shown. The map below it shows the plan for the area if the physical border is not removed. The (public) gardens facing the border's wall function as a green buffer between te border and the added housing blocks. Building blocks are accessible from both sides so that access can be granted from the side not facing the border if the physical barrier stays in place.

The new housing blocks follow the same incremental housing principles as presented earlier in this work (see page 87). The housing units are flexible in use and can accommodate diverse inhabitants. The typologies offer gradients of different types of public spaces - some more enclosed; others more open and public.

In the map on the next pages, the prefered scenario where the physical border is taken away is presented. We see how the former border area becomes a place for interaction: a meeting point where people from different backgrounds meet and exchange.

12.3 | Stakeholders

strong relation

--- relation

Community

- refugees
- commuters (and other inhabitants)
- tourists
- municipality
- regional government
- environmental organisations

- educational institutions
- small business owners
- real estate market
- event planners, artists, entrepreneurs
- national government
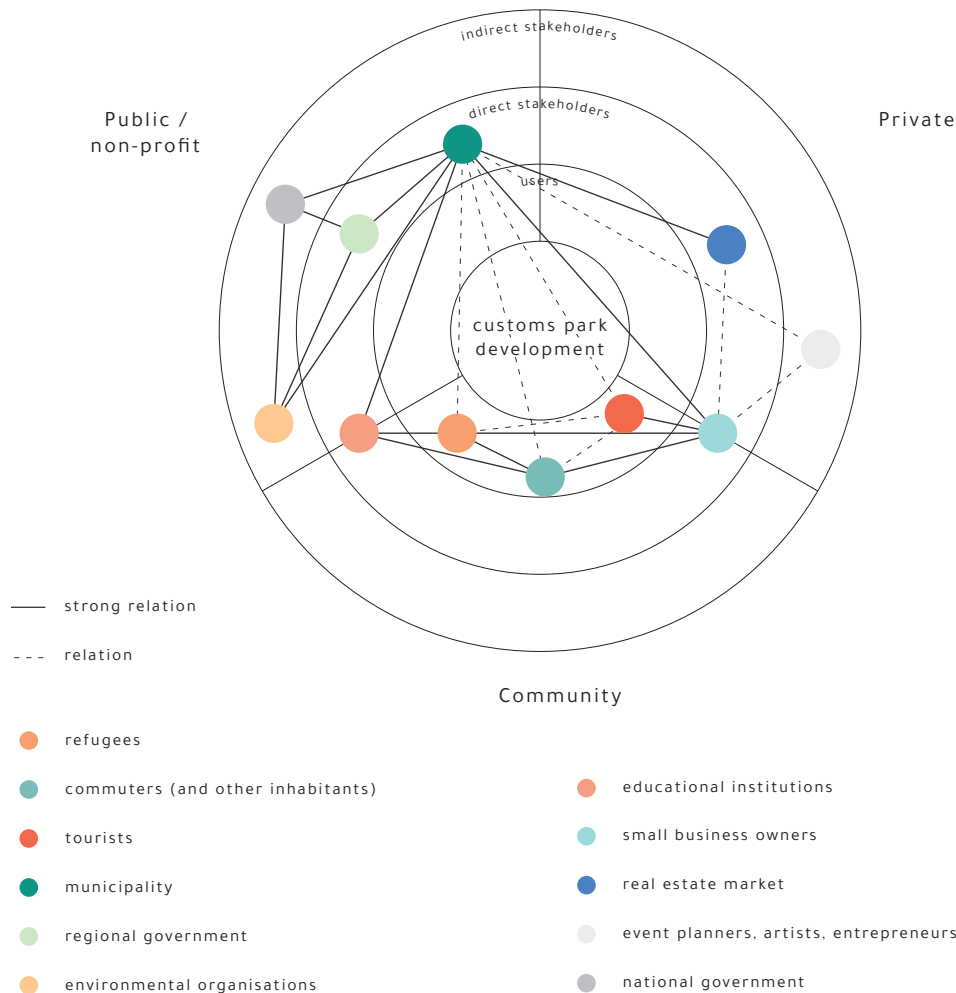
Figure 101   Above Current situation. Legend inside map. Map by author.

Figure 102   Below Border space design with current border barrier and customs sitll in place.
Preserved building
New building block
Stairwell
Private entrance
Mainly vegetation
Mainly paved
Map by author.

Figure 103   Left Stakeholder diagram customs park development

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cafe

kindergarten

primary school

library

museum

workspaces

allotment gardens

market

playground

work
shops
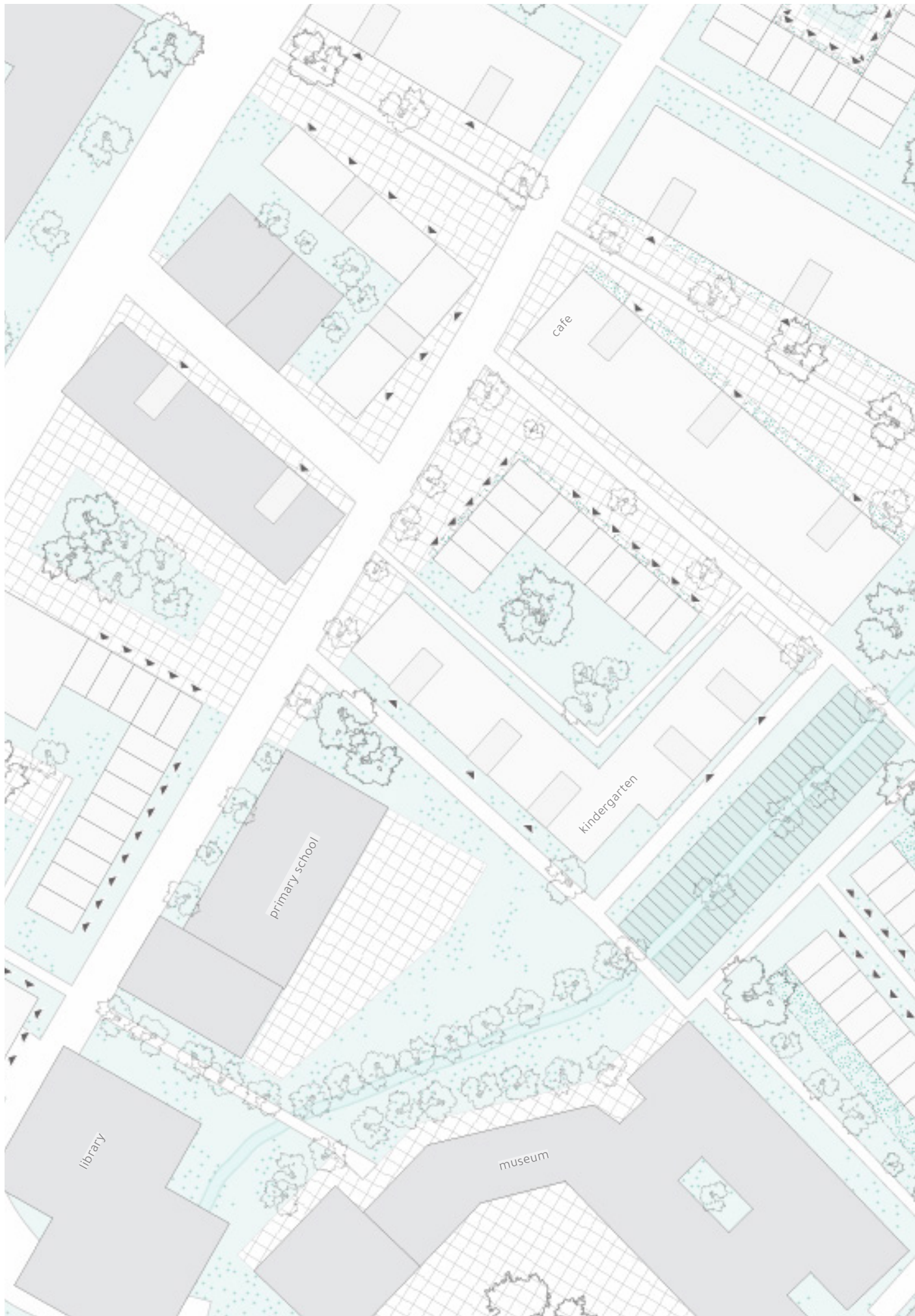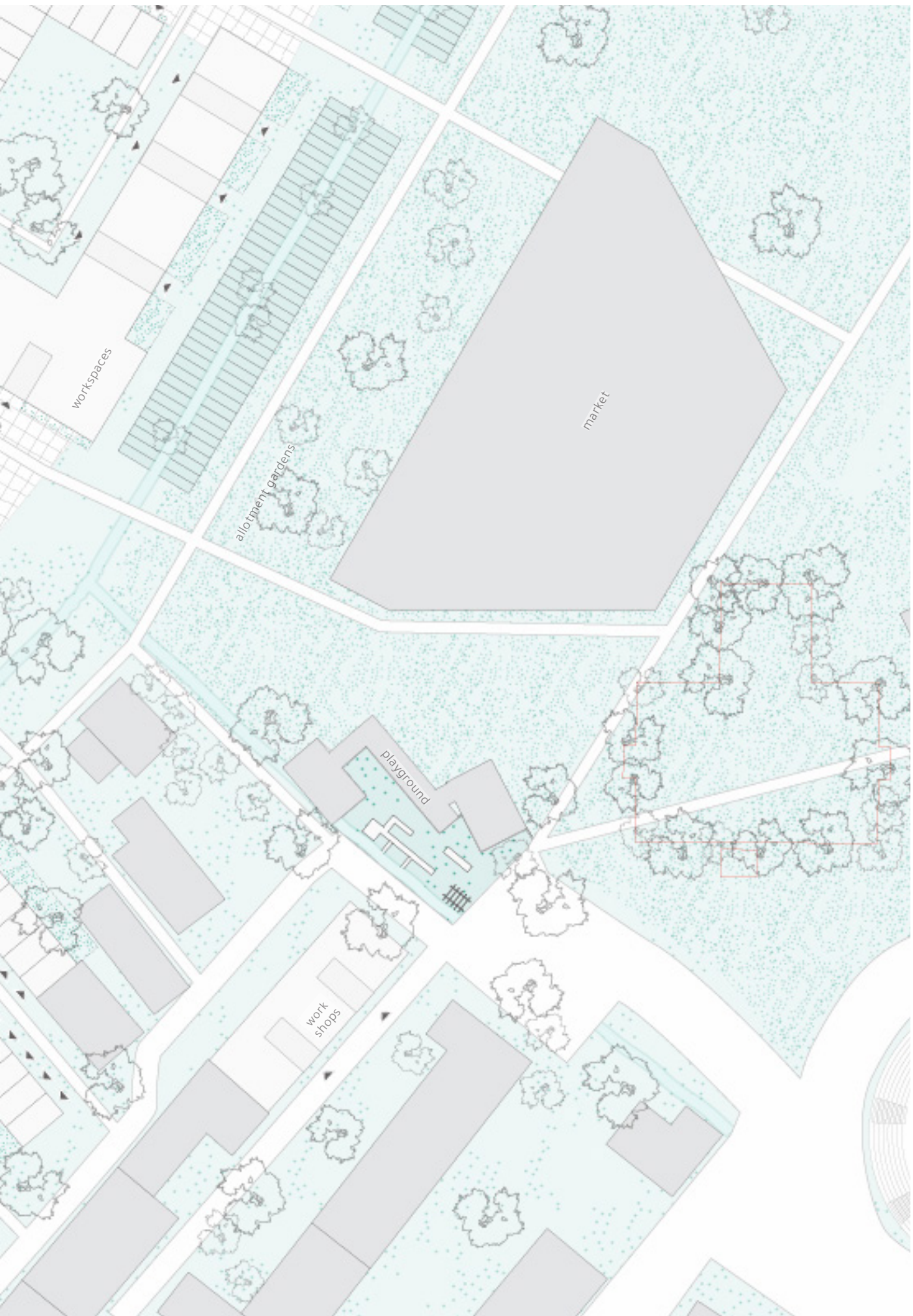
Border park: kindergarten and schoolyard activate urban park edge

Border park: vegetable gardens shape gradual, social edge between park and urban area

Urban main street: green public space pockets

Customs park: slow traffic connections crosses green Agora

Former refugee camp turned into mixed courtyard

Intimate street with buildings from different eras in informal setting

CONCLUSIONS

Finally, the research questions posed in the Methodology chapter will be answered in a comprehensive text that summarizes the research results. The conclusion is followed by a critical reflection on the research and design process, the choices made and the lessons learned.

CONCLUSIONS

CONCLUSION

12.1 | Answering the research question:
How to design border space
that allows the spatial and social
mobility of all actors, and that
functions as an integrative edge for
people from different backgrounds?

12.2 | Transferability of the research

12.3 | Research recommendations

The final chapter gives answers to the main and subquestions posed in the methodology chapter.

In the conclusion, I try to take an extra step, quickly elaborating on why certain decisions have been made.

In the discussion, I try to take a step back: what have I done and why? What went well? What could have gone better? What have I learned in the process?

12.1 | Answering the research question(s):
How to design border space that allows the spatial and social mobility of all actors, and that functions as an integrative edge for people from different backgrounds?

This thesis presents the results of experimentation with different spatial compositions to accommodate liveliness and diversity in the border space of Chiasso - Ponte-Chiasso - always moving between theory research, knowledge from practice and design experimentation. Along the lines of three observations on border space, the thesis has gradually been developed.

SQ1. What are the impacts of the various forms of spatial mobility on border space?

The first observation is that borders are defined by movements of people, products and information. At present, the movements that define border areas are organised to make border-crossing as efficient as possible. Adding inclusive places to stay and inhabit to the border area is necessary to interrupt the smoothness of border-crossing, to allow people to pause and meet. A second conclusion following from the first observation is that the border area currently lacks inclusive mobility networks. Inclusive mobility is defined as a form of movement that is accessible (economically and physically) to all inhabitants of border space. Slow traffic networks

Figure 104   Above
The author **:)**, hiking Monte Tamaro, Switzerland.

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are considered the appropriate networks to increase the inclusive spatial and social mobility of people in border space.

SQ2. How can planning and design in border space be adapted to do justice to cross-border lifestyles? What cross-border networks are at stake?

The second observation claims that border areas consist of overlapping networks and belong to multiple territories. The general idea about border areas is that they are and should be (spatially) defined by the national territories they are part of. This thesis argues that in reality, there are many additional cross-border territories and networks that shape the border area. It is the responsibility of planners and designers to respond to this complexity. To do this, this thesis distinguishes four target groups that are typical for the Como - Chiasso border area, along with the networks they typically use. These four groups are: refugees, tourists, commuters and transport drivers. While refugees currently reside solely in isolated areas, the ambition of this thesis is to introduce central, diverse public spaces and affordable housing options that can be used by the various groups, including refugees. The study concludes that second place functions - public functions that serve people with a common interest - are most suitable to bring together people from different backgrounds. These functions are organised along the freed up spaces directly related to the Chiasso - Ponte-Chiasso border, to symbolically stitch together two previously divided urban fabrics.

SQ3. What are the spatial consequences of the presence of a nation-state border?

The third observation is that borders mark changing conditions that have a spatial output. The (legal, economical, governmental, ...) differences that are defined by a nation-state border have resulted in a dynamic, but also random, uncomplimentary spatial composition of the border's by-products in the area of Chiasso - Ponte-Chiasso. The aim of this thesis has been to work with the residue of these dynamics, to understand what the spatial consequences of a nation-state border are and to find a way to work with them and to activate their potential value. The chapter visualises a spatial reading of the area and defines permanent and temporary qualities. Additionally, morphological analysis shows that certain spatial choices, such as fixing the relation between the facade of a building and the public space, might ensure that added spatial qualities will persist on the long term.

SQ4. What kind of urban design interventions could contribute to making border space an inclusive, integrative and inhabitable space?

The result - after elaborating on three observations - is an analytical, in-depth reading of the Chiasso - Ponte-Chiasso border area that produces ingredients for a spatial design. Three main design challenges for the Chiasso - Ponte-Chiasso border area come forward: the need for affordable housing, for diverse public spaces and for slow traffic networks.

Firstly, different affordable housing concepts have been developed and experimented with: introducing higher densities, using 90-degree angles, inserting repetitive units and giving building blocks a commercial ground floor are examples of how to achieve

affordable housing. While giving buildings a commercial ground floor turned out to not always be suitable and depended on the location of a block (a more centrally located building is more suitable to have a commercial ground floor), the use of repetitive units with a 90-degree angle could be consequently implemented. Moving back and forth between the design of the interior and the design of the urban form has helped to establish a workable size for a flexible housing unit that can grow or shrink depending on the needs of the inhabitants: the 4 x 4 meter unit. This 4 x 4 meter unit, stripped of its complexities, has been a helpful guide to develop different affordable housing schemes.

Secondly, achieving a diversity of public spaces has been guiding in the development of an urban plan for the Chiasso - Ponte-Chiasso border area. These spaces are in the first place intended for staying in, rather than passing through, and their shape has been determined based on this notion. Rotating blocks slightly to create corners, carving out squares along the main traffic arteries, increasing the density of people and functions at important junctions and ensuring the inclusion of a variety of public space typologies (urban axes, courtyards, intimate streets, squares, ...) have been criteria to achieve diverse public spaces. Rather than allowing building form to dictate the shape of public spaces, the desired variety in types of public spaces has been guiding the urban form throughout.

Thirdly, the integration of slow traffic networks has shaped the urban design proposal. While car traffic arteries are perceived as barriers, slow traffic-oriented street profiles have the potential to stitch together two sides of a street. Small building blocks are integrated into the plan to encourage walking. The new plan reserves much more space for walking and cycling, allowing border-crossers to slow down and perceive the diversity of people in border space.

Although this thesis highlights a focus on three main design ambitions, throughout the course of this thesis, multiple design criteria have been developed that individually and combinedly shape the urban plan. Important assessment criteria to judge the variations of urban designs were: How diverse are the public spaces I provide for? Can a high quality slow traffic network be easily integrated into the plan? How are the public to private gradients? How many dwelling units can I add? How many of the existing (architectural/landscape) qualities are preserved? Can the regional ecological network still be continued along the border? How flexible is the plan in a dynamic context? The continuous assessment of these and other criteria has led to the preferred design solution as presented in this thesis.

Finally, some themes that were important throughout the project are highlighted in two zoom-in areas: the Refugee Community and the Customs Park. Both of the zoom-in designs include the three design ambitions elaborated on before.

SQ5. How can refugee integration be stimulated through interventions in urban form?

The Refugee Community zoom-in addresses the integration of refugees into an urban area. The method deemed most suitable for the mixing of refugees with other inhabitants in border space has been that of smartly organising functions and dwellings. While people cannot be forced to interact, people can be stimulated to cross paths, by locating functions and dwellings that serve different people compactly and offering space to reside in together. Thus, in the introduction of a higher density

and more functions, two challenges have been brought together: the integration of hundreds of refugees into the border area brings activity to the area, allowing local functions and urban liveliness to be sustained, while at the same time bringing refugees closer to social and economic opportunities. Another objective that was found to be important for the accommodation's design was the creation of a refugee community. While spreading refugees over an urban area can seem desirable because of the potential accelerated integration of refugees in 'normal city life', it has been found that the creation of a community upon arrival is important for refugees to establish a network and develop a political voice. First, the accommodation takes the shape of a refugee community. Over time, the incremental structure - another theme highlighted in this zoom-in - allows the growth of dwelling units and admits other type of inhabitants, for the area to become fully integrated with the surrounding urban fabric.

> ### SQ6. How can the dynamics of permanence and temporality inherent to border space be addressed by design?

The Customs Park zoom-in addresses the plan's adaptation to qualities of the existing, and the topic of dealing with permanence and temporality. Dividing the design into three different phases: the current situation, the situation if the border remains (conservative) and the situation of the border disappears (progressive), helps to understand the adaptiveness of the plan. It reveals how urban form has been established taking into account the possibility of different futures. The urban form is adaptive to both the conservative and the progressive scenario, which means that the implementation does not have to wait for some utopian government. In both scenarios, potential spatial qualities that already exist are highlighted and put in a better light. Concretely, this means leaving spaces as they are, sometimes taking away polluting elements to bring out disregarded qualities.

12.2 | Transferability of the research

All in all, this thesis experiments with themes that come together along the border of Chiasso - Ponte-Chiasso, but that confront us worldwide; themes as migration, mobility, exclusion v.s. inclusivity, the capacity of the built environment to absorb change and the revaluation of our relation to a place (after years of becoming more distant from our surroundings). I am playing with the idea of framing this thesis as a hyperbole - although I am not sure it is the right term. A hyperbole is defined as the use of exaggeration as a rhetorical device. Although the issues addressed in this thesis are real, the design location has been deliberately chosen because aforementioned issues are prominent here. The thesis thus deliberately focuses on a location where contemporary issues are amplified or 'exaggerated', using exaggeration as a rhetorical device to convince you, reader, of the urgency of addressing these issues - also in places where they lie deeper below the surface.

12.3 | Research recommendations

While, throughout this thesis, I claim that design knowledge is best obtained from a thorough analysis of what works and what does not work in practice, for some of the topics, input from practice is under-represented in this thesis. Take the integration of refugees in an urban area: research into existing cases in which refugees have been

given a place inside the city centre could be a valuable contribution to this research. The effects the presence of refugees has on the local economy and liveliness of a place could be studied through this comparative method.

Furthermore, comparative research between different urban areas along borders and the integration of migrants in these areas would be a valuable contribution to research. The area of Chiasso - Ponte Chiasso could for example be thoroughly compared with Gaziantep, the Turkish city that progressively accommodated 500.000 refugees.

Another recommendation for future research is to study the types of governance that could support a development such as the one I present in this thesis. Who are the stakeholders involved with the implementation of such a plan? Who could be of help? Who might be against it?

Other potential research questions that have arisen from this research are: what constitutes European border spaces? Where exactly are European borders located? As most people notice the effect of a border much deeper inside a country, rather than at the nation-state border, the question becomes: where exactly are European borders experienced? What kind of spaces are they?

CONCLUSIONS

DISCUSSION

The department of Urbanism cites Jennifer Moon [51] to explain the definition of a 'critical reflection':

> Critical reflection: the work consistently demonstrates an awareness that actions and events are not only located within and explicable by multiple perspectives, but are located in and influenced by multiple historical and socio-political contexts.

The critical reflection is supposed to be a chapter that comes at the end of the thesis report. Does this imply a critical reflection is only at place in the end? I would like to point out that critical reflections as defined above have been a constant part of my research. Writing a small chapter on it in the end without acknowledging this seems to undermine the effort.

13.1 | Positioning myself in a new context

Before the start of my graduation thesis, I had already decided: I will not work on a project in The Netherlands *again*. I was tired of the polder landscapes, the polder models, the seemingly progressive policies towards 'circularity' and 'multi-modal transport hubs' - I could go on for a while. At the same time, a self-consciousness that as a Western student I cannot just go around telling the world how it should spin kept me from picking any place at random. The selection for a context to design for was thus limited to places without multi-modal transport hubs that I had lived in. This reduced the options considerably.

This project is an exploration of the context of Chiasso - Ponte-Chiasso: an area I inhabited between September 2019 and February 2020. It is a context I got to know well enough to understand that I know very little about it. This didn't keep me from writing hundreds of pages on how to deal with it though - so far my consciousness. More than a study of the physical and political context of Southern Switzerland and Northern Italy, however, my thesis is a reflection on a specific situation that occurred in Chiasso - Ponte-Chiasso at that time, but that occurs throughout Europe more than once: the paradox of desired an undesired mobility across borders - and how we deal with this spatially. Within my exploration, some might say I have wrongfully (even naively?) neglected the political context specific to my research site - but reacting to current politics was not the exercise I wanted to perform.

51 Jennifer Moon, 'A Handbook for Reflective and Experiential Learning: Theory and Practice (Psychology Press, 2004)

Figure 105   Above
View from Monte Tamaro.
Photograph by author.

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Rather than spatially fitting refugees into currently established frameworks, my thesis sought to experiment on European territory. The thesis should be seen as a proposal for a 'European experiment' that explores potential ways to integrate migrating flows of people. My limited knowledge of the political context of Switzerland and Italy - based on talks with friends, Google searches and a few interviews with volunteers - has been enough to inform a plan that is precise yet very unprecise depending on who you ask. I realize I have mainly been in touch with people that would be in favour of my plans - and this could be seen as a weakness in my work.

The aim of this thesis is to provoke a new understanding of refugee-space; to explore what could be and ask critically: why are we dealing with things the way we are now? The project reveals the potential qualities of a spatial experiment that should be developed locally, from which the results, its effect on the liveability of a place and the creation of opportunities can be studied only after implementation. If the ambitions - as proposed in this thesis - can indeed be achieved in the experiment, the project could be replicated to other border spaces (along national borders, but perhaps also along physical borders, geographical borders, and so on). Its effects could again be studied and we could learn how segregating European border spaces could eventually become spaces of integration.

I don't mind the label 'naïve', if naïve means openly admitting you have no idea if what you propose will work. What is much worse, in my opinion, is not exploring unknown potentials, just by fear of being called naïve. The only way we will know, is by putting these seemingly unrealistic thought-experiments into practice.

13.2 | Reflections on research methodology

Reflecting on the past months, the methodology used for this thesis feels like that of a bulldozer that slowly but steadily worked its way through all the material. There have been no major turning points or break-downs: the project developed steadily throughout the months. Zooming into the different phases, however, I realize I have been jumping between different methods of research all along. Rather than the bulldozer itself, maybe I was the confused driver of the bulldozer, that throughout the way consulted all sorts of techniques (reading literature, designing, interviewing, reading again, designing again, watching a movie, going for a walk, designing again, etc.) to understand how to drive the massive machine.

Switching between the different design methods has helped to stay active and to not get lost too much in one particular topic. I am convinced that the research has become a robust, consistent and precise work by focusing on different topics on a daily basis, rather than every hour. I enjoyed having so much time to spend on this thesis, because it finally allowed me to dive for a longer time into several topics. Forcing myself to do something different the next day, however, helped to refresh the mind and bring new insights.

One design technique that was new to me, and that has helped me a lot to steer the project, was that of over-abstraction. As I like to have control over a situation, tackling complex problems can be overwhelming. Reducing 'a refugee' to a 4 x 4 meters square surface (s)he needs as a minimum space to live comfortably has helped enormously to get rid of distractions. Abstracting complex personas and spaces into cubes has helped to think more freely about potential ways of organizing

co-habitation in border space. Becoming precise is a necessary next step, but I have learned that becoming precise too soon can block ideas.

Something that also becomes clear to me, looking back at my design methods, is that my way of designing is first analytical, then intuitive, then analytical again. By informing myself with thorough reading and other impressions, I create an analytical base of knowledge from which to start sketching. I sketch without really pointing out what I am doing, taking different decisions based on the previous impressions. I then look back at what I sketched and try to understand: what am I drawing? What is important and why do I think this is important? I then establish the main design focus and develop the design ambitions precisely. After the design ambitions have been developed, I look back at the sketches: how consequent am I in pursueing these ambitions? Where can the design be adapted to correspond better to the defined ambitions?

For the future, I have learned that I could help myself by starting to point out earlier why I am drawing what I am drawing. Instead of looking back at a drawing later, I think immidiately determining why I take certain design decisions can help to make the process of drawing, (re)defining, drawing, (re)defining more automatic.

13.3 | Dealing with Pandemics

What I have missed a lot, bulldozering this project, were in-between discussions with and distractions from fellow colleagues. I see having had few discussions about the project as a big limitation of my work. I have realized the importance of allowing your work to be shaped by opinions from others, as they shape the project into something you feel more comfortable about sharing in a later stage.

Only a few weeks into graduation, the national lockdown also made collecting data on site impossible. I was lucky to already be familiar with my research site. Other than that, Google Streetview has been of great help. It was a big advantage to know the place and people who know the place even better beforehand. Because of this, I still had constant access to contacts with people and organizations, to materials and local experiences.

13.4 | Ignoring Pandemics

National borders that close while writing a thesis on national borders can of course be very exciting. Nevertheless, I have deliberately chosen to not include the closed Corona-borders into my thesis, because it was simply too early to be able to say anything meaningful. The lack of access to data and to the site made me decide it will be up to someone else to study the effect of closing Corona-borders on border spaces. The consequences of COVID-19 oppose rather than compliment the idea that the world is becoming increasingly mobile. If pandemics will indeed become more common in the future, it could be interesting to study the dynamics between completely mobile and completely immobile situations, and what the effects of these dynamics are on border space.

13.5 | Societal relevance

Now that nationalism is growing in popularity and the survival of the European Union is increasingly questioned, foreseeing the spatial consequences of the potential smoothening or hardening of national borders is necessary to anticipate and discuss its effects.

The growing popularity of nationalism runs parallel with increased global movements of people, products and information. Increasing migration and increasing border control are paradoxical and can lead to an exclusionary form of migration, in which only the lucky few are able to enjoy the benefits of border-crossing. Others will stay stuck in the 'in between'. My contribution to understanding and re-designing the 'in between' of today should help to avoid developing an even more segregated 'in between' tomorrow, by exploring new forms and values of border-crossing.

Rather than a vacuum between a here and there, in this thesis, border space is the focus point of attention, as an imaginable, experimental space. I use border space as the lens through which to explore large phenomena currently confronting us, such as migration, exclusion and privilege, increasing inequality and the ability of cities and communities to accommodate fluctuating flows of people. Border space, reasoning this way, also becomes of high interest for the European Union, as it might become the space where people do not feel more part of their country than of Europe.

13.6 | Scientific relevance

Topics such as migration and border-crossing are clearly not new to scientific research. Endless reports have been written to grasp people flows and to write guidelines on how to treat these flows and border-crossings. What is lacking, however, is a spatial approach to migration. Contemporary ideas on how to integrate migration in space are limited. By studying the dynamics between migration, border-crossing and space, knowledge on the form and functionality of borders and migration can be advanced.

13.7 | Professional relevance

In planning and design, borders are often treated as outlines. The representations of designs reveal precisely this territorialism: the plan ends where the territory ends. But, nation-state planning does not correspond with the reality of cross-border lifestyles. And designing for nation-state territoriality has resulted in borders becoming an uninhabitable vacuum. This thesis underlines the responsibility of planners and designers to plan for border spaces as integrative, inhabitable edges instead.

This thesis is relevant to spatial practitioners in its novel way of treating borders and designing for migrant integration. As one of the main problems with border spaces is their fixedness in a world that is increasingly fluid, the thesis experiments with the question for planners and designers: how to plan and design without the ulterior goal of control and definition. Undefined planning and design is a trend that is not new and that in current design practices is progressively experimented with. Against the old habits of modernist planners who drew blue prints for an imagined utopia is the current design paradigm of planning for spontaneity and flexibility, for diversity and

bottom-up, incremental initiatives. This thesis is a contribution to experimentations in this field.

The thesis is a call for spatial practitioners to realize that Europe's ultimate purpose is not to exclude others, but rather to make borders soft. Planners and designers have a responsibility to challenge nation states' border spaces, drawing maps in which political entities become equally important as the spaces occupied by border-crossers.

13.8 | Ethical considerations

Essentially, I believe urban designers should be designing and planning for an open society. An open society is a society in which people of different backgrounds freely exchange goods and information. The construction of walls and fortification of borders makes me worry that we might be headed in the wrong direction. My thesis should promote a type of spatial planning and design that is inclusive and that considers migration as a phenomenon that will not be stopped by increasing border control, but that is permanent and should therefore be accommodated spatially.

ACKNOWLEDGEMENTS

REFERENCES

Bibliography

Agier, M. (2016). Borderlands: Towards an Anthropology of the Cosmopolitan Condition. Polity Press.

Balibar, E. (2003). We, the People of Europe? Reflections on Transnational Citizenship. Princeton University Press.

Bauman, Z. (2011). Migration and identities in the globalized world. Philosophy and Social Criticism, 37(4), 425-435. DOI: https://doi.org/10.1177/0191453710396809

Bauman, Z. (2016). Strangers at Our Door. Polity Press.

Bauman, Z. (2018). Between separation and integration: Strategies of cohabitation in the era of diasporization and Internet. Popular Communication: The International Journal of Media and Culture, 16(1), 1-3. https://doi.org/10.1080/15405702.2017.1406094

Beck, U. (2004). Mobility and the Cosmopolitan Society. In Mobility and the Cosmopolitan Perspective.

Bergmann, S., Hoff, T. A., & Sager, T. (2014). Spaces of Mobility: Essays on the Planning, Ethics, Engineering and Religion of Human Motion. Equinox.

Boano, C. & Astolfo, G., (2020) Notes around Hospitality as Inhabitation Engaging with the Politics of Care and Refugees' Dwelling Practices in the Italian Urban Context. Migration and Society: Advances in Research 3, 222 - 232. DOI: 10.3167/arms.2020.030118.

Cervero, R. (2001). Integration of urban transport and urban planning. The Challenge of Urban Government: Policies and Practices, 407-427.

Crimson Historians and Urbanists (2019). City of Comings and Goings. nai010.

Czischke Ljubetic, D., & Huisman, C. (2018). Integration through Collaborative Housing? Dutch Starters and Refugees Forming Self-Managing Communities in Amsterdam. Urban Planning, 3(4), 156-165. https://doi.org/10.17645/up.v3i4.1727

Faludi, A. (2018). The Poverty of Territorialism: A Neo-Medieval View of Europe and European Planning. Edward Elgar Publishing Lt.

Fromm, D. (2012). Seeding Community: Collaborative Housing as a Strategy for Social and Neighbourhood Repair. Built Environment (1978-), 38 (3), 364-394.

Halsema, F. (2017). Nergensland: Nieuw Licht op Migratie. Ambo | Anthos Uitgevers.

Jacobs, J. (1961). The Death and Life of Great American Cities. Random House, New York City.

Katz, I. (2017). Between Bare Life and Everyday Life: Spatializing Europe's Migrant Camps. Architecture_MPS, 2017, 12(1): 2. DOI: https://doi.org/10.14324/111.444.amps.2017v12i2.001

Kaufmann, V., Bergman, M. M., & Joye, D. (2004). Motility: Mobility as Capital. International Journal of Urban and Regional Research, 28.4, 745-756. https://doi.org/10.1111/j.0309-1317.2004.00549.x

Latour, B. (2017). Europe as refuge. In H. Geiselberger (Ed.), The Great Regression (pp. 78 - 87). Polity Press.

Sennett, R. (2019). Building and Dwelling: Ethics for the City. Farrar, Straus and Giroux.

Sim, D. (2019). Soft City: Building Density for Everyday Life. Island Press.

Soja, E. W. (1996) Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places. Wiley-Blackwell.

Tsianos, V., & Karakayali, S. (2010). Transnational Migration and the Emergence of the European Border Regime: An Ethnographic Analysis. European Journal of Social Theory, 13(3), 373-387. DOI: https://doi.org/10.1177/1368431010371761

Urry, J. (2004). The New Mobilities Paradigm. Mobility and the Cosmopolitan Perspective.

Van der Velde, R. (2018). Transformation in Composition: Ecdysis Of Landscape Architecture Through The Brownfield Park Project 1975-2015. A+BE Architecture and the Built Enviornment.

Walsh, C. (2019) Brexit Geographies: Spatial Imaginaries and Relational Territorialities on the Island of Ireland. Irish Geography, 52(2), 137-152. DOI: 10.2014/igj.v52i2.1398

Other references

Burgen, S. (2019, June 19). How a small Turkish city successfully absorbed half a million migrants. The Guardian. Retrieved November 18, 2020, from: https://www.theguardian.com/cities/2019/jun/19/gaziantep-turkish-city-successfully-absorbed-half-a-million-migrants-from-syria

Comune di Como (n.d.) Piano delle Regole di Como. In Piano del Governo del Territorio (PGT).

ERSAF Lombardia (2013) Catalogo Piante del Vivaio Forestale Regionale ERSAF - Curno (BG). https://www.ersaf.lombardia.it/it/b/2248/catalogopiante

European Commission. (n.d.). Temporary Reintroduction of Border Control. Retrieved April 9, 2020, from https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen/reintroduction-border-control_en

Eurostat. (2017). People in the EU - statistics on housing conditions. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=People_in_the_EU_-_statistics_on_housing_conditions

OECD. (2018). Working Together for Local Integration of Migrants and Refugees. OECD Publishing.

OpenMigration. (2017). Como, an endless Game of the Goose at the expense of migrants. https://openmigration.org/en/analyses/como-an-endless-game-of-the-goose-at-the-expense-of-migrants/

QuiComo. (2018). Chiusura del campo profughi di Como, migranti trasferiti: centro sgomberato. http://www.quicomo.it/politica/chiusura-campo-profughi-como-sgomberato.html

Torricelli, G. P., & Garlandini, S. (2017). La frontiera e le mappe: Evidenze demografiche e socioeconomiche tra Svizzera e Italia, 2010-14. Quaderno I. Dipartimento del territorio, Bellinzona.

UNHCR. (n.d.). The Mediterranean Situation. Retrieved April 9, 2020, from https://data2.unhcr.org/en/situations/mediterranean

UNHCR. (2016). Sea Arrivals to Italy. https://data2.unhcr.org/

United Nations Department of Economic and Social Affairs. (n.d.). Charting the Progress of Populations: XII. Floor Area per Person. https://www.un.org/en/development/desa/population/publications/trends/progress-of-populations.asp

United Nations Educational, Scientific and Cultural Organization (2016). Cities Welcoming Refugees and Migrants: Enhancing effective urban governance in the age of migration. UNESCO.

USA Today. (2016). Switzerland blocks migrants wanting to pass-through from Italian border. https://eu.usatoday.com/story/news/world/2016/09/16/switzerland-blocks-migrants-italian-border/89955758/

ENCORE

APPENDIX

A.01 | Transcript telephone interview with refugee in Como

The interview that is transcribed below was held on 22.05.2020 with 'P', a young man from Benin City, Nigeria, living and working in Como.

L: I am curious about your experience of arriving to Como. Could you tell me something about that?

P: Yes. Well arriving in Como wasn't easy honestly. Because when I came, there was not a place for me where I could sleep, a place where I could eat, a place where I could have my place. So it wasn't really easy. I think when I came to Como, I stayed a whole two weeks outside on the streets, without a place to stay. Everything was congested. It wasn't easy. During the cold, they opened a place in Como with tents for people without a home. I was fortunate to be among the people they offered the place to stay for a period of time.

L: When was this?

P: It was December 2018.

L: Can you tell me about the situation in the camp? How was it there?

P: It was a good situation, but it was congested with a lot of people. There I had a sickness for three days, so I couldn't walk, I couldn't do anything because I was so ill. Due to I have never been to a place like that. 'Volunteer I' was among the people that worked as a volunteer at that place. Every Tuesday, she came there to help the people. Wash some places, bring food or bread for the people. So there we met. So after - I think the place lasted for three months - so when they closed the place I didn't have a place to go. So I was on the streets again. And 'volunteer I' called me and offered me and my friend a place in their house, where we could stay. So since then I have been with them in their house, so from there I came in contact with her family, her children, her husband.. everybody in the family. I can say it is a big opportunity.

L: Were you planning to go to Como initially?

P: Como was not my destination. I was trying - I have a friend who lives in Switzerland - so he invited me to come. So on my way to there, they couldn't allow me to cross the border. So I was stopped in Como, without a home.

L: Are you still trying to go to Switzerland?

P: No. I am not trying anymore to go to other places. Because I have done a lot of things in Italy. I have my median school certificate. I can say I speak the language a little bit. I learned the little things about the culture of the people. So because of that I don't think I have interest of going to Switzerland again. Because going to Switzerland is starting allover again. So for now I am in Italy.

L: Do you think it's important to get to know the other people's cultures?

P: For me it's very important. Without knowing someone's culture, I dont think you can live with the people. With culture you can interact with people. You know the way they live, the way they behave. So it's very imporant.

L: How was your experience with interaction with local people?

P: [Laughs]
It wasn't easy. In fact it was very difficult for me to interact with them. Because, for me I think it was a language barrier. That was the number one thing. Second thing, Italian people are very difficult people. Italians are people who are proud. So people who don't want to associate with other people. They always raise their shoulders. They think they rule the world. There are some italians who are very good, who are nice people, like 'volunteer I' and her family. So I can't generalize everybody to be difficult. There are certain people who are good.

L: And the good people you met in Como, can you tell me about certain places where you got in touch with them?

P: When I was doing my Italian study… There I got in touch with a lot of people from different countries, like people that came from Egypt, China, Russia… It was all fun during that period. We stuck together. We shared little things in common. The class lasted for one year. So we have really a Whatsapp group chat. So it was nice honestly.

L: Would you say you became close friends?

P: No. One year is too little for me to become close friends. It is difficult. One year… So everyone is from different places, different homes, different countries, so one year is not enough to make my best friends. So actually I had my best friends not in the class honestly. The refugee centre is a place where I met a lot of people. Italian people, African people.. There I got a lot of friends. We talked together. That's the place where I met them.

L: I am curious to know specific locations where you spend a lot of time. Could you tell me about some of them?

P: Okay. The location I spend most of my time is a private place. I used to go to the mountain. A place where there is nobody, very quiet… Feeling nature. I go to the city, but in the city I don't have this comfortable mind. Sometimes when I'm free, I go to this place where I feel the nature, where I can see the lake, the green.

L: Are you from a city or from a village?

P: I am from a big city: Benin city, in Nigeria.

L: Did you always prefer city over nature, in Nigeria as well?

P: In the city - every city - you must find a place that contains nature. If a city is not big, you can find a place filled with nature. That's how they build a city.

L: Do you spend time in Como's parks?

P: In Como there is a little park.. Let me see, I have the street: Via Independenza. There is a little park there. There, when I first came to Como, I'd usually go to that place to sit down with friends. Later, the police would come. When they come, they disturb people.. The immigrant people. They drive us out. It's not nice. They drive us out for the white people to stay there. So now I hate this park. Since when the police people started disturbing black people there. I don't like the place again. It's something that distracts my spirit, so I don't wanna go to that place again. So now I go to the big park that's close to the lake. There it's better. Although the police also come, but if you stay quiet, you don't disturb. You don't associate with those things as people that deal with drugs, so they don't disturb you. When they come to you sometimes, they ask you: do you have a document? What are you doing here? You show them that you have a document, nothing bad is going on. So they go away.

L: Do they still check you now, or has it changed since there are less people sleeping on the streets?

P: Last year someone checked me. It's their job I think. I am not a bad boy. I don't do things that are bad. If I don't go to school, I come back to my house. I relax sometimes. If I want to feel the nature I go outside.

L: Do you have a job?

P: I work in the restaurant as an assistant cook. In 2015 I was working in teatro sociale. I was working there as a doorman. I got another work in the restaurant. It's a Sicilian restaurant.

L: Other than the places you've mentioned, are there public places that you go to?

P: I go to the market sometimes if I wanna buy something. I go to church. Sometimes I go to my friend who lives in Camerlata. In the church I am the only friend that goes. All of my friends go to the African church. I go to the catholic church.

L: Are there facilities or things that you miss or missed when you arrived to Como?

P: When I first came my initial plan was to go to Switzerland. So when I stopped on the road, it was complicated. I didn't know what to do again. So everything was complicated. I was thinking if I go to start school, or to try the road again and go back again. There is a place, near my friend, where I went to sleep. The place was such a disaster… So from there, I was so confused. I was missing a lot of things that I used to have.. Good friends. Those days were very hard. It's something I've never experienced. It was very horrible. All I was missing was my good days. Those days I had before, with friends. The freedom I had before. The childhood I had with friends before. Those were the things I was missing.

L: Did you regret coming to Como?

P: There were some stages where I regretted it, but I saw stages where I come in conclusion that in life there is always change. There is always movement. It's a process. There are processes in life.

L: Do you feel you are accustomed now to your current stage?

P: I can't say it's everything I planned when I was little. You know, when you are little, that you have this big heart. Your head is full with the future. You want to have the best future, live the best life. You know this, right? Sometimes I sit down and I say 'Wow, this is not the way I planned my life'. It's not easy. Life is very difficult. Life is the most difficult case in the whole world wide. Sometimes it's not what you planned that is good. Sometimes it is not what you want that is good. It's very very difficult, life.

A.02 | Transcript zoom interview with refugee in Delft

The interview that is transcribed below was held on 24.05.2020 with 'M', a young man from Damascus, Syria, living in Delft and preparing for a study at TU Delft.

L: What were the facilities you enjoyed most during your time in the AZC?

M: I speak about me, because other people have different situations. For me it was definitely the language. We had some lessons and because I was speaking reasonable English back then it was really nice to just start some things there... so I also started to volunteer. But I really really liked the Dutch courses. It was really nice just to break the fear of the language first. I was first in the North, in Ter Apel, next to Groningen. When I moved to Utrecht I missed that. In Utrecht it was a permanent camp. You go there because you have your residence permit and you are waiting for a house. The shortage there was something to do. Because they didn't have any sports centre, in comparison with the facilities in Ter Apel. In Ter Apel there were big spaces, football fields, a gym, a computer hall. I used to spend the whole day at those facilities. It was really good.

The first couple of months are really hard because you don't have anything to do and you can't start with the language yet. You need to wait for your turn. So the most important thing in the North were the sports facilities and the language. I would have preferred to do more: more real courses. The lessons were good, but it's like an introduction. Also when I went to the permanent camp in Utrecht, we did a course, but not much. I took seven to eight lessons. They were also camp courses. I think it would be better if they would do real courses. Also since I already had the residence permit, so just send us to the real school.. Because courses in the camp are not really a hundred percent efficient. It's less good than the other schools. The schools take care of the quality, they check the lessons, they ask students for references or opinions. In the camps they don't do that that much. It would be better if the camp would have a contract with the schools and give the people real lessons, to give them a chance to not waste their time.

L: So you said sports and language classes were things you missed in Utrecht. Were there other facilities that you missed?

M: I don't know. I was keeping myself really busy. I was volunteering at the gym in Ter Apel, doing sports: volleyball, sometimes at the gym. Studying four or three hours a week. I was really busy, even in Utrecht, when I got transferred, I kept myself busy. They had many activities with taalcafés there. It was a little bit... yeah well they were all volunteers, but it was really good. Something I did miss was money. You get little money, but I'm not going to complain about that.

L: What are places where you met Dutch people?

M: Everywhere [laughs]
Taalcafés, volunteering, parties or concerts or something... When you are

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older than forty probably it's harder to meet people. Dutch people that are older probably have less time.

L: Do you know people who have passed through Italy on their way to The Netherlands?

M: I have some relatives who came through Libya and Italy. When I heard from them, I said I will never do that. You stay at sea for so long, and sometimes you have a storm. They said: 'We never knew it would be like that. If we would have known, we would have never done it'. But you don't know. People might say it's hard, but then you think 'maybe they are exaggerating'.

A.03 | Received information from 'volunteer I'

'Volunteer I' is a Dutch volunteer who has lived and worked in Como for more than twenty years. The text below is a summary of a conversation we have had on the phone. The text is written by 'volunteer I' herself. The text is slightly adapted to filter out names and phone numbers of people that were shared in confidence.

Vluchtelingen in Como

GEIMPROVISEERDE EN GEORGANISEERDE VERBLIJFPLAATSEN VOOR DE NACHT:
-park voor station Como San Giovanni (zomer 2016 tot september 2016)met hulp van bewoners en vrijwilligersorganisaties wordt dit een geimproviseerd tentenkamp waaromheen allerlei hulpdiensten worden georganiseerd. Onder andere komt er een avond 'mensa'in de kerk van sant Eusebio in via Volta. Uiteindelijk mondt dit uit in organisatie kamp rode Kruis in via Regina (19 september 2016 - 31 oktober 2018)

-parkeerplaats "Autosilo Val Mulino" toenemende spontane hulp door bewoners leidt tot de organisatie van een zeer rudimentaire slaapoplossing in de binnenplaats van Centro pastorale Cardinal Ferrari. Georganiseerd door Caritas Como met hulp van Como Accoglie die ook officieel een 'associazione' wordt. Deze tenten geven slaapplaats vanaf december tot eind maart later verlengd tot eind april,en nu met coronavirus tot eind mei.De meerdere tenten zijn in het tweede jaar één grote tent geworden met stapelbedden gevuld.Nu in het derde jaar heeft de coronacrisis gezorgd voor het creeren van meer ruimte per persoon,de mogelijkheid om de hele dag binnen te blijven en het'afsplitsen' van 20 man naar een nabijgelegen gymzaal van de school in via Perti. Dit project is georganiseerd door Padri Somaschi. Dit is ook een verblijfplaats voor de hele dag en er worden aktiviteiten georganiseerd(taalles en andere aktiviteiten di nuttig kunnen zijn)

- Emergenza Freddo is al van ver voor 2016 een opvang voor Italiaanse en buitenlandse daklozen.en is een opvang voor de nacht voor zowel vrouwen als mannen,gelegen in het gebouw (niet de binnenplaats) van Centro Pastorale Cardinal Ferrari.

-Na het eerste jaar 'opvang in de tenten binnenplaats Cardinal Ferrari, wanneer een grote groep vluchtelingen en andere daklozen weer op straat kwamen te staan, heeft Como Accoglie besloten om vluchtelingen die in het portiek van de ex Chiesa di San Francesco(bij overdekte markt in via mentana1) overnachtten een zak met matrasje slaapzak en deken te geven en die zak 's ochtends weer op te halen, op te slaan en 's avonds weer uit te delen. (het materiaal gekregen door medici senza frontiere-dekens uit opslag don Giusto,wordt af en toe gewassen, en de tas vervangen)De nieuwaankomende vluchtelingen worden verwezen naar de verschillende instanties die hulp kunnen bieden, en Como accoglie begeleid eventueel ook mensen naar arts, kantoor of rechtshulp naargelang nodig.Ondertussen probeert men burgers gevoelig te maken voor de problematiek,en vooral ook bij het gemeentebestuur aan te dringen op een aktievere houding bij het oplossen van de problemen.(dit o.a door deelname aan een overleg 'tavola della grave marginalità' genaamd waar allerlei organisaties aan deelnemen die met daklozen en andere problematische situaties in de stad Como te maken hebben).

- Dormitorio OZANAM Via Napoleone 34, overnachtingsmogelijkheid die al sinds jaren bestaat gerund door Caritas Como. accoglienza@caritascomo.

-Dormitorio bij de padri Combognani ,Via Salvadonica 3,Rebbio. Slaapgelegenheid sinds 2017, met daaraanvast een bepaald project om mensen verderop te helpen met werk en integratie. Gerund door Caritascomo in samenwerking met de parocchie van Rebbio.

Hiernaast is ook een vast groepje vluchtelingen gehuisvest bij de Padri Combognani in een projekt van de organisatie Symploké (?). Ook voortgekomen uit CaritasComo.

- De Parochie van Rebbio chiesa prepositurale di San Martino, via Alfonso Lissi,11

De priester daar Don Giusto della Valle heeft opvang voor vluchtelingen.Hij is in Como een heel centrale figuur in de vluchtelingenopvang. Veel van de vrouwelijke vluchtelingen zijn hier opgevangen, Er zijn ook mannen. Soms gaat het om een bed voor de nacht maar er zijn ook een aantal appartementen of kamers bewoond.

-Simploké (Società Cooperativa Sociale Onlus-info@symplokecoop.it)begeleid ook een aantal vluchtelingen die verspreid wonen in:

istituto sacra Famiglia -vrouwen

parocchia san Bartolomeo

parocchio di san Rocco,Via Regina 50.Priester don Roberto verzorgde tot voor coronavirus elke dagontbijt voor daklozen bij zijn kerk en voorheen ook op verschillende plaatsen in de stad o.a. bij ex chiesa san Francesco (tafeltje dekje systeem). Hij is een fantastische man met een groot talent om met de meest verscheidene mensen een relatie op te bouwen.

-De organisatie Refugees Welcome Como probeert voor vluchtelingen die in orde zijn met hun documenten en hulp nodig hebben met de integratie opvanggezinnen te vinden waar ze een bepaalde tijd kunnen verblijven tot ze zelfstandig zijn.

- . Hier wonen minderjarigen in een CAS(centro accoglienza straordinario). En er zijn(of waren) ook een aantal 19 plekken voor SPRAR Dat is een opvang door de staat gesubsidieerd voor vluchtelingen die hun vluchtelingenstatus hebben,om hen te helpen met hun integratie in de maatscappij.

Verder zijn er natuurlijk de wanhoops oplossingen zoals slapen in een oud doanegebouw bij station sanGiovanni, slapen in een verlaten afdeling van ex ziekenhuis sant Anna bij Camerlata, een verlaten fabriek, een oude locomotief in het stadspark bij het meer etc.

WAT DOEN DE VLUCHTELINGEN OVERDAG
Er wordt door een aantal vluchtelingen gewerkt, stage of scholing gevolgd.

Dit voornamelijk door wie op een of andere manier onderdakheeft gevonden al is het maar in een slaapzaal,ook al waren er mensen die in het portiek bij san Francesco sliepen, maar s'ochtends naar hun werk gingen, de trein moesten halen enz.

Er zijn opvangcentra voor overdag 'centro diurno' waar daklosen en dus ook vluchtelingen terecht kunnen voor een kop koffie een droge plek een gesprek en soms worden er ook aktiviteiten georganiseerd. Eèn 'centro diurno zit in de

omgeving van PORTA APERTA via primo Tatti,18 (porta.aperta@caritascomo.it)dit
is een zeer belangrijk kantoor open op maandag woensdag en vrijdag morgen.Hier
kunnen de vluchtelingen om medische hulp terecht . Er is een sociaal werkster je kan
bonnen ophalen voor de douche en voor het eten s'middags daar om de hoek (via
lambertenghi)

 s'avonds is er te eten in de 'Mensa dei poveri' in het gebouw van Opera Don Guanella,
via Tommaso Grosso 18. elke middag van de week is er op het terrein van Don Guanella
ook het centro diurno 'Il Rifuggio' open van 16 tot 19. Je kan er terecht voor gezelschap
een vieruurtje een droge plek om te blijven en er worden taallessen gegeven.Ook kan
je er terecht voor een douche of voor kleren.

Om 19.00 gaat de avondmensa open aan de andere kant van het gebouw.

Taallessen zijn er op verschillende plaatsen in de stad.

-Don Guanella Angolo dell' Italiano.

-Rebbio cursussen voor vrouwelijke buitenlanders met eventuele babyopvang

 ook kursussen voor mannelijke cursisten s'middags en s'avonds. In Rebbio zijn er ook
cursussen informatica.

Cursus Italiaans georganiseerd door Caritas,scuola di san Vitale, in de parochie van
st.Orsola ,viale Lecco 125. hier naast Italiaanse les ook conversatie om elkaar beter
te leren kennen, en er is door een van de leerkrachten op eigen initiatief ook een
tekenkursus georganiseerd. Voor verdere info zie: rete delle scuole di Italiano per
Stranieri.

Er zijn een aantal noemenswaardige initiatieven georganiseerd door culturele
organisatie Artificio in het chiostrino di sant'Eufemia, piazza Terragni 4, ook genoemd
chiostrino Artificio. Er is een teatercursus Arte Migrante die al verschillende
voorstellingen heeft gegeven.

Ook is er een naaiatelier met serieuse naaicursus en produktie van kleding en
tassen en andere assesoires waar migranten aan het werk zijn (cou(L)ture Migrante
imprenditoria sociale. Verder zijn er regelmatige gratis cursussen georganiseerd door
'Svillupamente' korte cursussen bijv, italiaans voor het rijbewijs,

RECHTSHULP
Vanaf de enorme toestroom van vluchtelingen in 2016 is er een rechtshulporganisatie
ontstaan 14 oktober 2016, het OSSERVATORIO GIURIDICO, vaak osservatorio legale ze
ontvangen vluchtelingen elke dinsdag en vrijdagmiddag(tijdelijk onderbroken door
coronavirus) in het gebouw van de circoscrizione 6 in via Grandi 21.

A.04 | Calculations density refugee community

Refugee community first phase:

450 4x4 units
1 4x4 unit per refugee
450 / 1 = 450 refugees.

Refugee community second phase (after expansion):

450 4x4 units + 64 units (as ground floors in freestanding blocks change from communal to private) = 514 4x4 units
Say half of the inhabitants build an extra layer on top: add 50 4x4 units.
514 + 50 = 564
2 4x4 units per person (taking 32 m² as the avarage floor surface per person)
564 / 2 = 282
50 % is refugee, 50% is other inhabitant
282 * 0,5 = 141 refugees