



## DIPLOMARBEIT

### **A BALKAN KID WITH A VIEW ON THE WEST**

Reserach on Post-War buildings in the Western  
Balkans with a focus on the city of Struga, North  
Macedonia

ausgeführt zum Zwecke der Erlangung des  
akademischen Grades eines Diplom-Ingenieurin  
unter der Leitung

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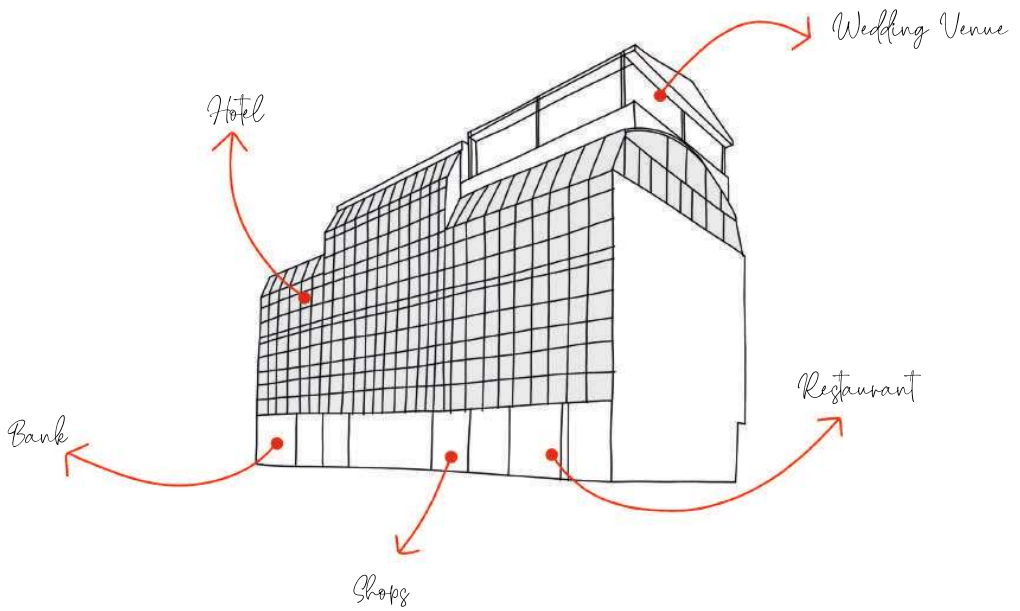
## 1.1 Abstract - Balkan kid with a view on the west

Situated in a great geographical position, the Balkan countries have been mostly known throughout history for a heavily politicized presence in Europe. The overturn of mighty empires during the 20th century, including the division of Yugoslavia, has visibly had its impact on the way these countries consume and translate architecture.

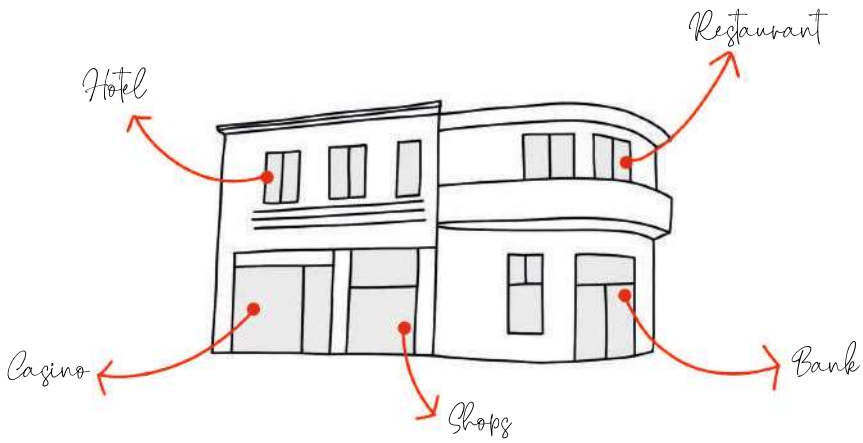
Turbulences taking place in society have made for a wide variety of illegal new constructions, as well as the destruction of older structures in need of renovation. Newer, fancier, and flashier materials, imported heavily from western countries, have created a trend, typical for nearly all the Balkan countries, mainly focusing on the south-western ones, where such resources have been independently (mostly by everyday people) implemented in somewhat grotesque structures, typical of these places. All in all, the mixture of European resources mixed with local and traditional building methods has created a juxtaposition of no other kind. This type of culture is called 'Turbo-Folk' or, in the case of such architecture, coined by Srdjan Jovanović Weiss as 'Turbo-Architecture'. Even though this kind of architecture has its nuances and each country in the Balkans has had its own translation into architecture, the research focuses mainly on North Macedonia and its neighboring countries, which have had a similar evolution of this type of architecture. Brutalist apartment complexes, built during Yugoslavian times, buildings in dire need of renovation,

where living conditions are non-existent, and newer construction trademarked as post-Yugoslavian, where no norms and conditions on building methods were followed, are some of the examples of the type of architecture found in these countries.

My goal is to research the societal, political, and architectural influences leading to the status quo, all the while categorizing the found information, focusing not only on the above-mentioned 'turbo' aspect of these structures but also on the interesting mixed functional properties that make up a typical post-Yugoslavia Balkan structure that don't seem to fit anywhere else except on the land of honey and blood. Translating these findings and the typical building strategies of Western architecture into a complex fitting a typical city in the Balkans is the main intention of this thesis, while also designing in accordance with the socio-political aspect.



**Fig. 1** Typical multi-functional building in the Balkans



**Fig. 2** Typical multi-functional building in the Balkans

## 1.1 Kurzfassung – Balkankind mit Blick nach Westen

Im Laufe der Geschichte waren dank ihrer hervorragenden geografischen Lage die Balkanländer im Laufe der Geschichte, vor allem, für ihre stark politisierte Präsenz in Europa bekannt. Der Sturz mächtiger Reiche im 20. Jahrhundert, einschließlich der Teilung Jugoslawiens, hatte sichtbare Auswirkungen auf die Art und Weise, wie diese Länder Architektur konsumieren und übersetzen.

Gesellschaftliche Turbulenzen haben zu einer Vielzahl illegaler Neubauten geführt, wie auch zur Zerstörung älterer, sanierungsbedürftiger Bauten. Neuere, interessantere und auffälligere Materialien, die in großem Umfang aus westlichen Ländern importiert werden, haben einen Trend geschaffen, der für fast alle Balkanländer typisch ist und sich hauptsächlich auf die südwestlichen Länder konzentriert, wo solche Ressourcen unabhängig voneinander (hauptsächlich von einfachen Einwohner) in gewisser Weise in groteske Strukturen, typisch für diese Orte umgesetzt wurden.

Alles in allem hat die Mischung aus europäischen Ressourcen, gepaart mit lokalen und traditionellen Bauweisen, ein Nebeneinander geschaffen, das seinesgleichen sucht. Diese Art von Kultur wird „Turbo-Folk“ genannt oder, im Fall einer solchen Architektur, von Srdjan Jovanović Weiss als „Turbo-Architektur“ geprägt.

Obwohl diese Art von Architektur ihre Nuancen aufweist und jedes Land auf dem Balkan seine eigene Übersetzung in die Architektur hat, konzentriert sich die

Forschung hauptsächlich auf Nordmazedonien und seine Nachbarländer, in denen sich diese Art von Architektur ähnlich entwickelt hat. Brutalistische Apartmentkomplexe, die während der jugoslawischen Zeit gebaut wurden, Gebäude, die dringend einer Renovierung bedurften und in denen es keine Lebensbedingungen gab, sowie neuere Bauten, die als Post-Jugoslawien gelten und in denen keine Normen und Bedingungen für Bauwege eingehalten wurden, sind einige Beispiele für die Art der Architektur, die man in diesen Ländern findet.

Mein Ziel ist es, die gesellschaftlichen, politischen und architektonischen Einflüsse zu erforschen, die zum Status quo geführt haben, und gleichzeitig die gefundenen Informationen zu kategorisieren, wobei ich mich nicht nur auf den oben erwähnten „Turbo“-Aspekt dieser Strukturen, sondern auch auf die interessanten gemischten funktionalen Eigenschaften konzentriere, die eine typische Post-Jugoslawien-Balkanstruktur bilden und nirgendwo anders zu passen scheinen, außer im Land des Honigs und Blutes.

Diese Erkenntnisse und die typischen Baustrategien der westlichen Architektur in ein Gebäude zu übersetzen, der zu einer typischen Stadt auf dem Balkan passt, ist das Hauptanliegen dieser Arbeit, wobei die Gestaltung auch im Einklang mit dem gesellschaftspolitischen Aspekt stehen soll.

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# 1. THE AB T LINE

# ARGUMENTEN

## **1.1 Introduction**

A Balkan Kid with a view on the west

## **1.1 Interview**

A Balkan Dad with a view on his home

## 1.2 Interview - A Balkan Dad with a view on his home

My father was born in North Macedonia in the late 1960's, part of a family that migrated heavily to the German-speaking countries during different times of the last century, mainly as "Gastarbeiter"—not looking for a long-term migration, thus leaving their families behind. He has lived almost all of his life in the village he was born and grew up in, with the exception of moving for a short time to study in Kosovo and Albania. Four of his six siblings have all migrated to either Austria or Switzerland, while he has stayed loyal to his hometown and his home. All of the siblings have invested in building multiple houses in North Macedonia, and during all this, he has been their connecting point with the construction teams, architects, the purchases of materials, and their implementation.

An interview was conducted with him in person in order to better understand how he perceives his hometown and everything surrounding it. Migration, investments, and the emotional connection to one's home are some of the themes seen throughout. The interview, while being to a degree informal, strives to show the Balkan mentality on a more personal note, since not many know it from the viewpoint of somebody who has a view of his home and not of the western countries, somebody who is put in his way of staying in the same home he helped build.



**Fig. 3** Original family photo, early sixties, showing my grandfather arriving home with his car from Germany, where he used to work as a 'Gastarbeiter' and being greeted by three of his seven children.

**V:** How has immigration, while living in this part of the Balkans, influenced you? In what state is the town you live in nowadays, and is immigration still a main topic as it has been during the last decades after the conflicts in the region?

**I:** I was born and raised here, with most of my family already working abroad to help us get back home. In my small village, which has a total population of about 7.000 people, only 4.000 people live here during the whole year, while the rest visit during a short period of each summer or the last two weeks of the year. Now you can only imagine what kind of importance the diaspora has here—an influx from every possible branch is always to be seen during the times I mentioned. The whole town comes alive, and you partly forget how empty places can be when everybody leaves and continues their lives elsewhere.

The problem is that people keep on leaving; there is no stopping the younger generation. They are in many ways looking for better life opportunities because there are clearly some crucial things missing for them here. While it is really sad to see fewer and fewer younger people in the city, the main investments we get here are from the diaspora, which we never take for granted, so this has become a type of vicious cycle. They leave for a better life and still come back for every holiday, in empty houses they built, to have somewhat of a connection to their so-called “home”.

**V:** All the siblings that have left town have built multiple houses here. How did the process work out with them not being there to overlook any of the work?

**I:** This is a pretty typical practice here. For the short time these people spend here, they build a house, sometimes even two or more,

mostly for their children, who weren't even born here. While the chances of these immigrants returning home nowadays are close to none, the connection to their hometowns is still believed to be held by these buildings.

My family, like many others, has also built multiple homes here, and it has primarily been the same process every time. They typically get a plan from an architect, mainly for some piece of land they inherited from the family.

There is also always somebody from the family with some technical background who oversees the project and its many obstacles. Most of our immigrants work in the construction branch, and the typical Balkan way of building differs, in some part, pretty widely from that of the western countries where these people have learned their expertise. It is indeed quite interesting watching these two types of building schools collide, while here, in the Balkans, we have a more relaxed take on general regulations and we try to do with what we have. The immigrants, on the other hand, bring a more refined type of work and materials, conforming to western regulations. What it entails, in my opinion, is an interesting ensemble that could maybe only be found in the Balkans.

**V:** You mentioned the different materials being brought into the Balkan way of working. Could you explain exactly what that means for the buildings in your town?

**I:** Many building elements, be they types of windows, doors, facades, or something as simple as bricks or steel, were not as widely known, used, or produced in the surrounding Balkan towns. The diaspora, working in the construction branches and always looking forward to investing home, has brought all of its knowledge back so

that the people here can also learn it. All of these materials and elements have been used in different ways on different types of structures and have become a standard in nearly every building here. Better materials immediately mean better living standards here; the problem might be that the building methods have stayed the same, thus creating some type of building dysmorphia. Why does a one-family house need a fancy glass facade that can be found on a skyscraper somewhere? The prestige people want to show makes for interesting examples here.

**V:** Why are there so many copies of the same buildings and houses around here, and how did they, in your opinion, come to be?

**I:** Families here have usually always been bigger in comparison to the typical western families. In order to avoid any inferiority or rivalry between the siblings living here and those in the diaspora, the parents decide to build all houses in the same way. thus creating clusters of identical houses or buildings with the same floor plans, functions, and materials. As the years go by, though, each family begins changing things in their own houses to accommodate their needs, thus creating houses that, at first glance, seem similar but, at a closer look, have different additions.

In my family, we also went through the same process: We had the land to build four houses, so four of us pitched in, with help from siblings in the western countries, and began working on building our houses. There were no construction companies, no contracted help from outside; everything was done by ourselves, with the materials and the building knowledge, as I explained before. The neighbors helped us too, which used to be standard then: I help you out, and in turn, you help me out too.

This process happened more than twenty-five years ago, and most of these houses are still in decent shape, with minor renovations needed to their structures now and then.

What I myself find fascinating is the process that has begun in the last three to four years: the diaspora is not pleased with the not-so-modern homes and buildings that were built before them. Being influenced by the new trends seen in western countries, there seems to be a need to destroy these nearly never-used houses in order to build new, more trendy buildings that match the ones in many western countries. Thus, the copy-cat house pattern is destroyed, while the very crucial method that was being used to build these houses gets destroyed during the process.

THERE IS POTENTIAL  
HERE THAT SEEMS  
TO BE EASILY LOST,  
ESPECIALLY WITH  
THE YOUTH



# 2. THE SO TICAL ST

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# OCIO-POLI UDY

- 2.1 Brief digression of the past**
  - 2.1.1 a (very) short historical timeline
- 2.2 Migration**  
An exodus summarized
- 2.3 Migration**  
Mindmap
- 2.3 Turbo**  
An explanation and its consequences



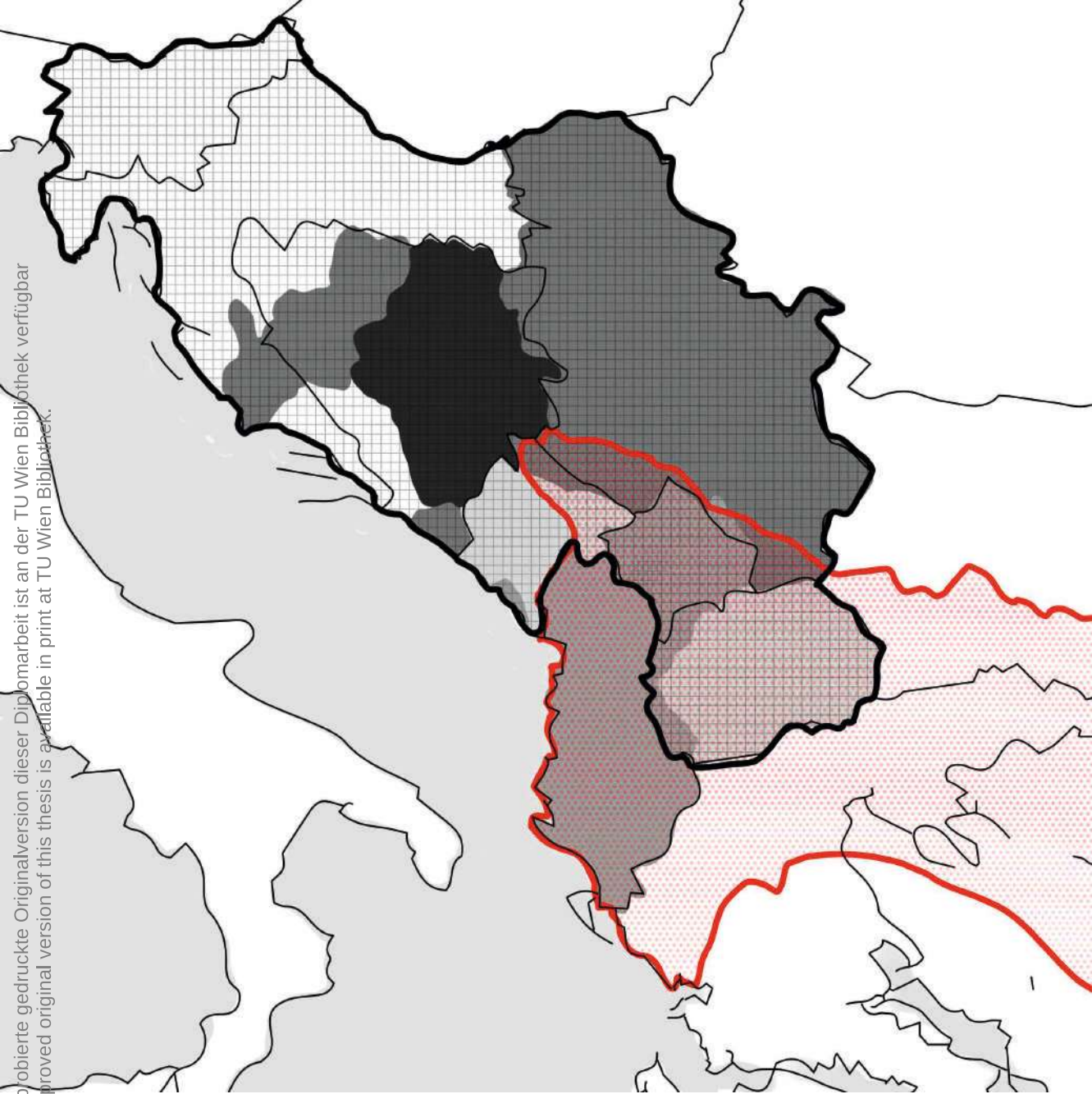





Fig. 4 Variations of the region of the Balkans throughout different eras

-  Boundary of the Ottoman Empire in 1912, before the Balkan Wars
-  Former Yugoslavian Borders
-  Ethnic distributions in the Balkans in the 19th century

## 2.1 Brief digression of the past

The Balkan states all share a turbulent, war-ridden past that to this day influences their state-making policies. While the region and people of the Balkan Peninsula have a history dating back to the Neolithic Period, it was nearly in the 19th century that some of the nations that now reside there began forming, or, for lack of a better word, enforcing, their national identities. National heroes of the past, from each pertaining folk, came to be idolized, thus emphasizing the importance and power of each state. Nationalism is still a part of many state-building policies, reviving older problems.

Nowadays, there are still non-resolved conflicts, dating back more than decades, reappearing from each neighboring country that do not seem to have any end or resolution in sight, in spite of the influence and the help given by western countries. While the above-mentioned conflicts seem never-ending, a huge number of the population is already leaving, searching for a better standard of living in mainly German-speaking countries or Scandinavian ones. The remaining people have yet to find a way to leave, or are those of an older age, not wanting to leave their homes. Immigration seems to be the biggest problem, even though it is not perceived as one by the ruling forces of those still in transition states. The aftermath of this major exodus is yet to be fully felt.

The following illustration aims to give a brief overview of turbulent history, beginning with the Neolithic Period, continuing with the Ottoman Empire, Communism, the creation and fall of Yugoslavia, and continuing to the present with the highest migration rates to this date.

# B

## 1400's

The Ottoman Empire conquers the Balkans. The long conquest `brought complete social and political revolution`, be that in culture and religion, but also really clearly in architecture.

## 1900's

After the fall of the Ottoman Empire, the Balkan nations were created with newly defined state boundaries. These brought many restrictions; many parts of the Balkans were deprived of their own incomes.

## BC

Archaeological evidence indicates that the Balkans were populated well before the Neolithic Period.

# A L

## 2020's

Immigration surges in all Balkan countries. Little, to no youth left.

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Fig. 5 Typical architecture of the 2000, <https://www.flickr.com/photos/danielzolli/1061374074>

# A (very) short history of the Balkans focused on the heritage and politics, two features that define the peninsula.

## 2008

20

The end of an era. Kosovo declares its independence as the last country still part of Serbia. Slovenia, Macedonia, Serbia, Kosovo, Croatia, Montenegro, and Bosnia and Herzegovina are on the left of Yugoslavia.

## 2010's

Balkan has a huge wave of immigration. Corruption is mostly on the rise, and politics is the main focus of everyday people. Investments are mainly made by foreign entities.

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Fig. 6 Typical architecture before the 2000's, Saints Cyril and Methodius University, <https://worldcapital-confidential.com/socialist-brutalist-architecture-in-skopje/>

## 1950's

Communism in the Balkans. In Albania, a strong dictatorship, led by Enver Hoxha, was to be seen, while in Yugoslavia, a mix of multiple cultures created conflicts that were mostly hidden from the public eye.

## 1918-1945

Kingdom of Yugoslavia

## 1945-1992

Communist Yugoslavia

## 1992-2008

Republic of Yugoslavia

# N

# K A

...

## 2.2 Migration - an exodus summarized

Even though there is little to no reliability in the statistics found on migration in the Balkan countries, there is still a complex demographic problem that is clearly to be found, specifically in the Western Balkan countries. In all these places, emigration has mainly begun to rise during the conflicts of the 1990's. The other reasons why there is a continuation and rise of this trend are that living standards are not getting better, thus people leave looking for something better, and the other reason is the politicization of every aspect of life (this is connected to the high corruption cases in every aspect of state building policies).

Each of these countries has seen a surge in migration that seems to have only been on the rise in the last decade. The migration at the end of the last century created two groups of people that also had a direct influence on the architecture we see nowadays. A part of the group that moved during the conflicts stayed in western countries and invested back in their hometown, bringing money and materials to build houses. Some of them destroyed the houses that they had owned and maximized the space that they owned. The other part returned to their homes and had help from the first group to rebuild their homes or like-

wise create new structures that were thought to be better investments. Nowadays, this last group is again trying to migrate to the western countries that they left, looking for better living standards.

The influence and investments from migration to western European countries are of immense importance, being the main source of income for most of these places.

The statistical data shown in the next graph, even though it lacks data from the last decade (information is nearly impossible to obtain or is not backed up with credible sources), aims to show the high number of migrations in Western Balkan countries in correlation with the conflicts of the 1990s.

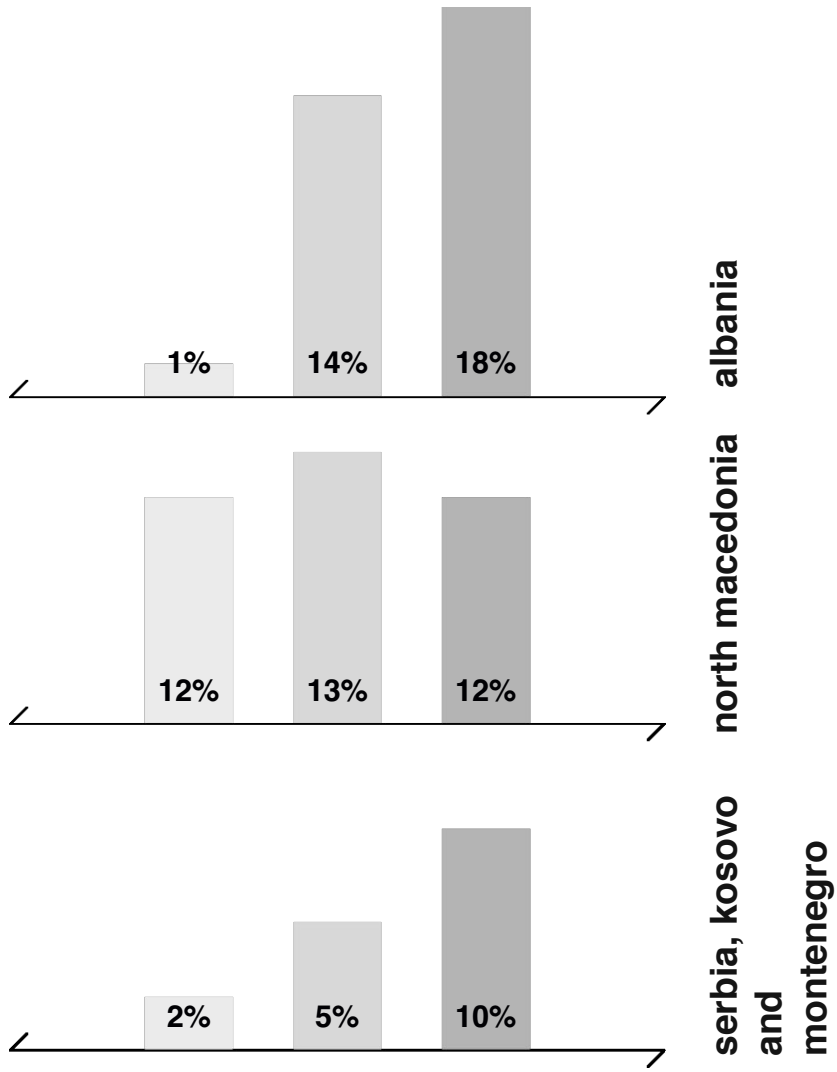
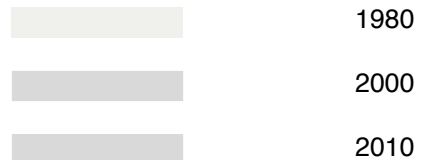
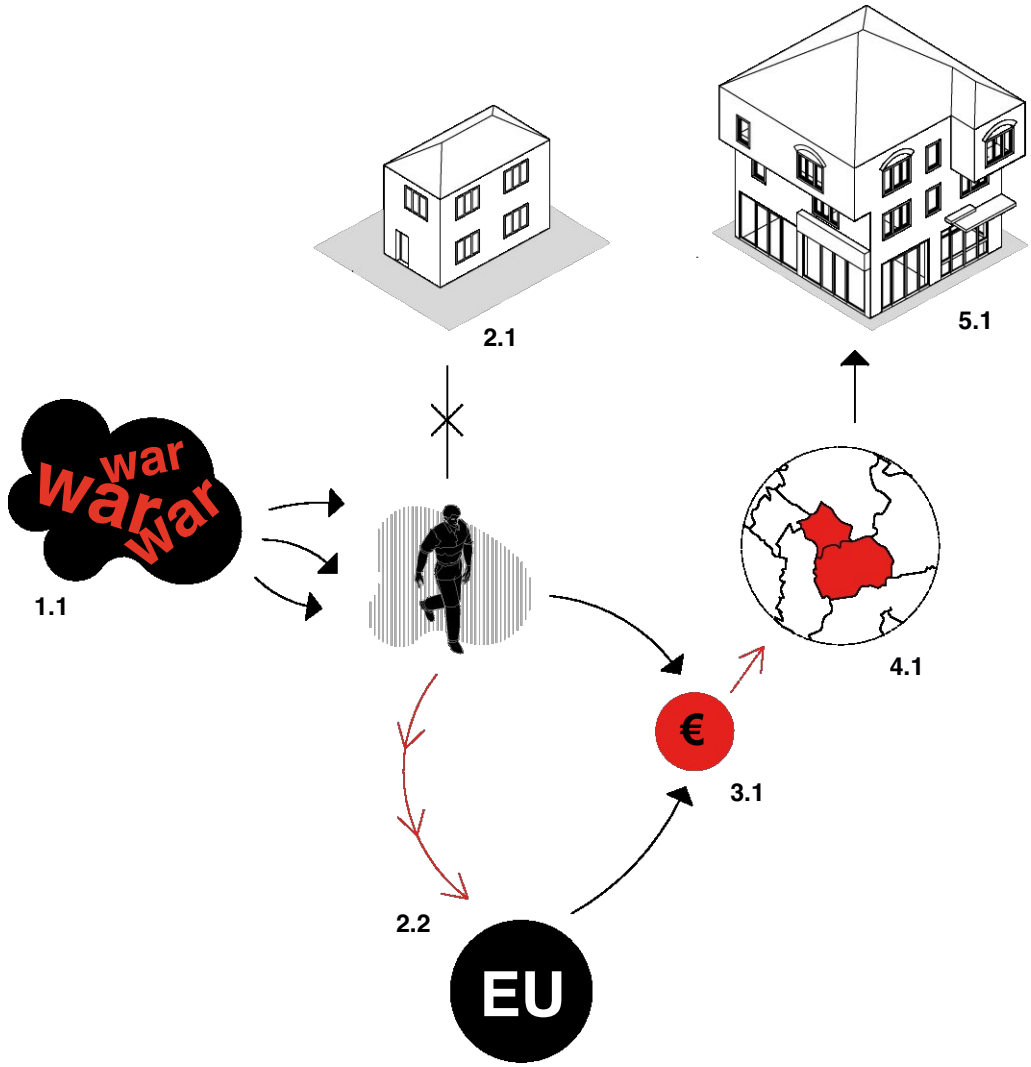


Fig. 7 Emigration Rates in the Western Balkans,  
Source: IAB Brain Drain Database





**Fig. 8** Case Study 1: Balkan Immigrant, now living in the EU

- 1.1 War breaks out in the Balkans, end of the 20th century
- 2.1 Thousands of people are displaced and
- 2.2 migrate to the EU.
- 3.1 working and earning money.
- 4.1 Their profits are sent to their relatives in the Balkans.
- 5.1 Houses copying western standards are built with this money.

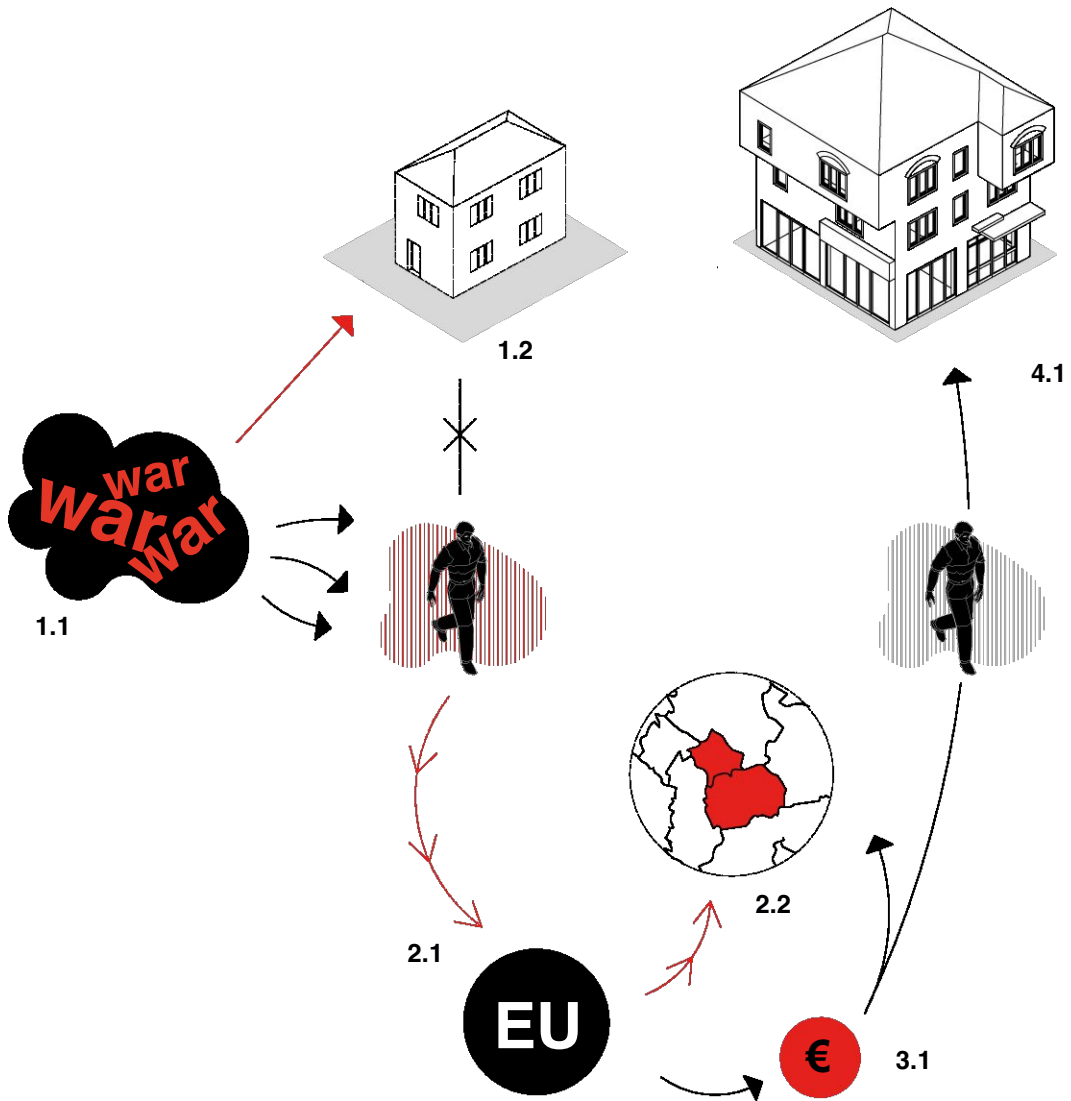


Fig. 9 Case Study 2: Balkan refugee, now living in the Balkans

- 1.1 War breaks out in the Balkans, end of the 20th century
- 1.2 Thousands of people are displaced; their homes vandalized or destroyed.
- 2.1 EU takes thousands of refugees and asylum seekers.
- 2.2 After the war, their status is revoked.
- 3.1 Relatives in the EU send money to rebuild
- 4.1 their destroyed houses.



## 2.3 Mindmap - flow of investments



The main influence that migration has had in these Balkan countries has been the investments made in the last two decades. With approximately 631 million euros of imported and exported construction materials between the West Balkan countries and the main EU countries, this branch is clearly one of the main living sources for the people still living in these countries. The flow of the investments can be divided into two categories: direct and indirect investments. The direct way is the money spent during the holidays by the immigrants

spending their holidays at home. The indirect way is the import and export of materials and goods, which are mostly used for construction. These goods are mostly materials that are divided into local and imported ones. The local ones can either be easily found or be produced locally. The imported ones can, for one reason or another, not be produced locally and thus are sent from mainly western countries. They are then implemented by different actors.





Examples of the types of architecture found in the western Balkan - photos from Kosovo and North Macedonia

**Fig. 10** <https://www.blocal-travel.com/balkans/macedonia-fyrom/skopje/brutalist-architecture-skopje/>  
**Fig. 11** own photo, 2021

**Fig. 12** <https://www.adventurous-travels.com/posts/pristina-kosovo-ugly-city-with-a-great-vibe>

## 2.4 Turbo - A short explanation

Named after the music style popularized in the 90's of mixing global and local styles—turbo folk music—the type of architecture that developed around the same time, sharing the same characteristics, was coined by the architect Srdjan Jovanovic Weiss as Turbo-architecture.

Kai Vöckler in “Pristhina is Everywhere” calls some of the examples of this architectural style a combination of “Victorian-neoclassical-oriental-American free-style architecture”. While there are still remnants of local, traditional architecture in many Balkan countries, the ones where turbo architecture is most apparent are Kosovo, North Macedonia, and partly Serbia. The research in the next chapter focuses on typical buildings found in these countries.

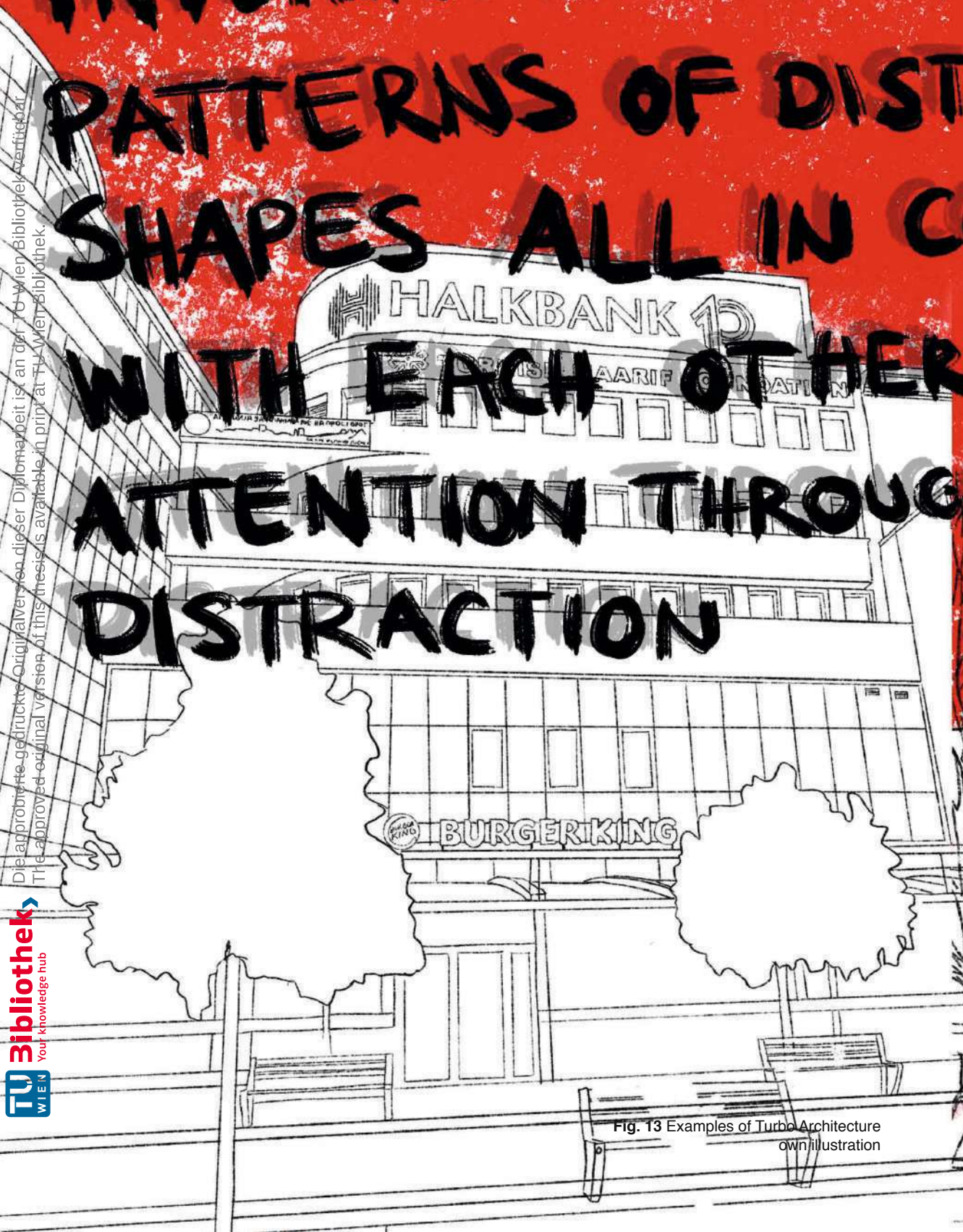
“Same as Turbo music, the architecture symbolically expresses a longing to be part of Europe”

“ Turbo architecture arose from dirt, or more precisely, the desire to be accepted in grand style.

Turbo architecture is global because it rejects modernism by reasserting both the forms and shapes that preceded it and the ones that follow it. Turbo architecture consciously or unconsciously leans toward Oriental sources, presenting them as authentically local. It cares little about the historical riddle that, prior to modernism, Oriental influence had been affecting traditions for generations. Turbo architecture is against orthogonal form but is based on technology that supports this form. Thus, it tries to bend it, twist it, decorate it, cover it, disarm its interiors with a secondary layer of materials; it unites the expressive formal possibilities of modernist technology and traditional form until its primary sources are indistinguishable.”

Srdjan Jovanovic Weiss

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Fig. 13 Examples of Turbo Architecture  
own illustration

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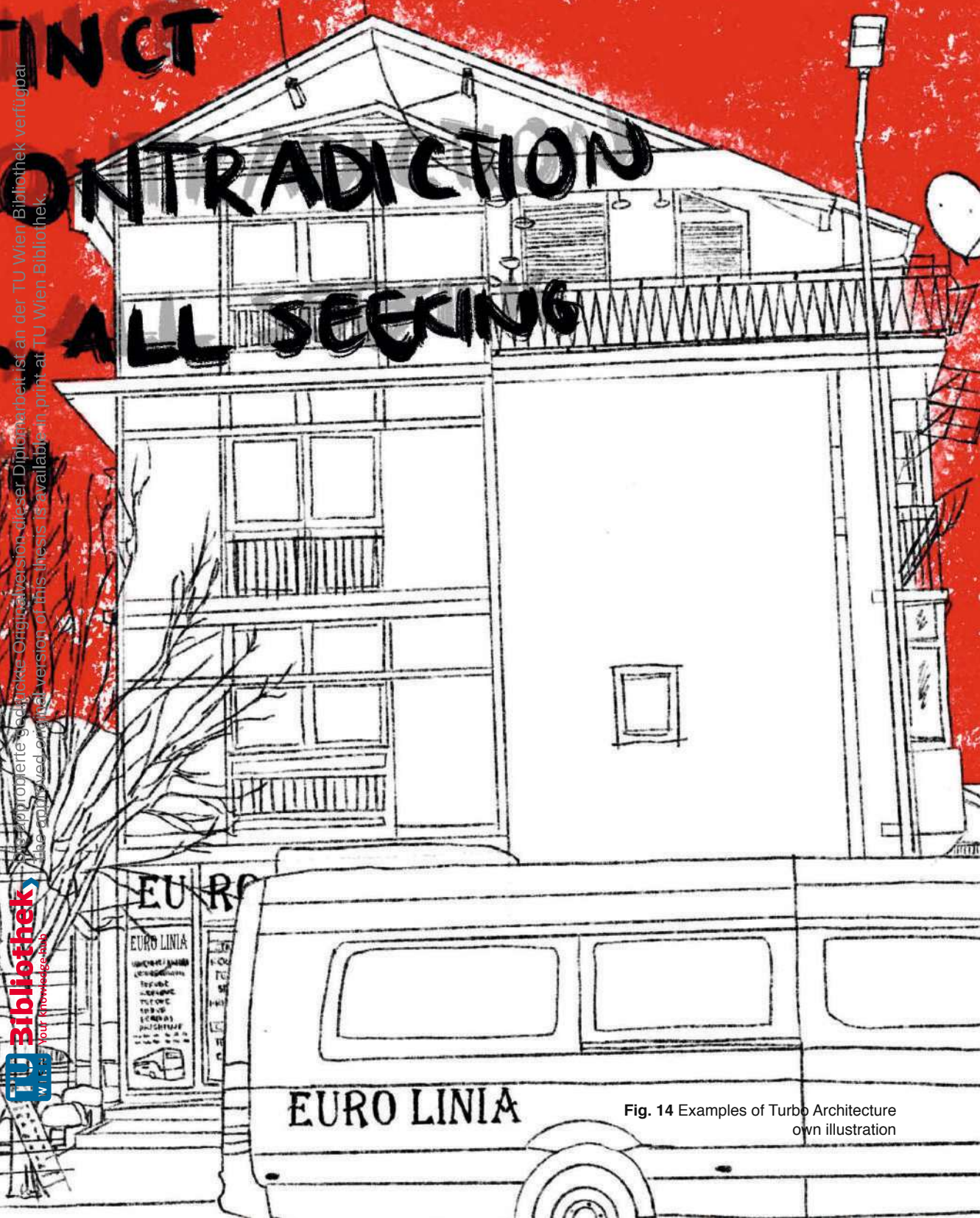


Fig. 14 Examples of Turbo Architecture  
own illustration

# 3. THE RE

# SEARCH

## **3.1 Categories**

3.1.1 Morphological Typology

3.1.2 Functional Typology

## **3.2 Timeline**

The influence of diaspora

## **3.3 Transition to North Macedonia**

**3.4 ‘An architect in a place where architects are not needed’ - Interview**

## **3.5 North Macedonia in statistics**

3.5.1 Population

3.5.2 Density

3.5.3 Ethnicity

3.5.4 Age and Literacy

3.5.5 Employment

3.5.6 Migration



### 3.1.1 Categories - morphological typology

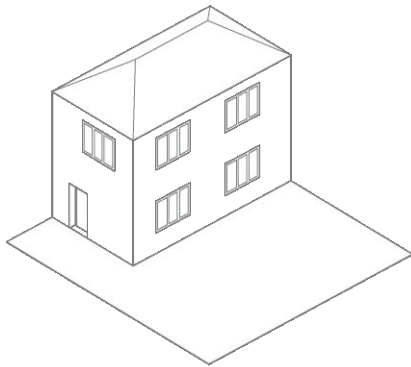
While researching the types of buildings found in these countries, even through the many rapid changes of recent years, there seems to be a pattern in the architecture that is portrayed. Even though generalization is nearly impossible in the concept of Turbo Architecture, the three main categories shown in the next illustration aim to portray the basic principles found behind the architecture that bloomed after the conflicts in the 2000's.

**Type A** makes up the lowest percentage of the buildings found in the region. These are private homes that have mostly been destroyed or renovated.

**Type B** is the most typical example of Turbo Architecture. These houses are heavily renovated with “international materials” and rarely conform to building laws.

**Type C** categorizes ex-Yugoslavian buildings that, similar to Type B buildings, have been renovated, adding whole illegal add-ins not conforming to any law. These, including Type B buildings, also have a greater mixture of functions than Type A.

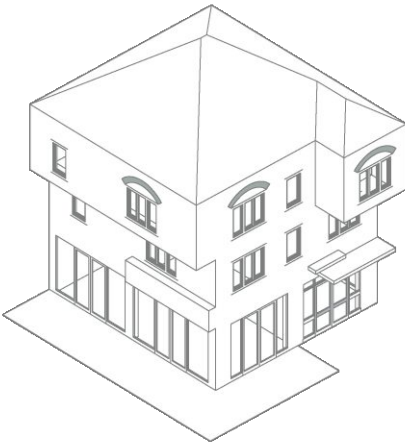
Similar themes are found in all categories throughout. One of the main ones is the maximization of the built m<sup>2</sup> per open space. This, in comparison to building regulations beforehand, is a major difference. While urban laws have not changed significantly, corruption and politics have allowed for little to no rational ratio between open and fully built spaces. Another similar theme seems to be the constant change to these structures, mainly without permit, done by the owners themselves. Imported materials from families that have migrated play a role in these changes, creating structures authentic to these regions.



### Type A

Typical 1-2-story private homes have spacious garden spaces.

Nearly non-existent after the 20th century. Mostly destroyed for the maximization of the land.



### Type B

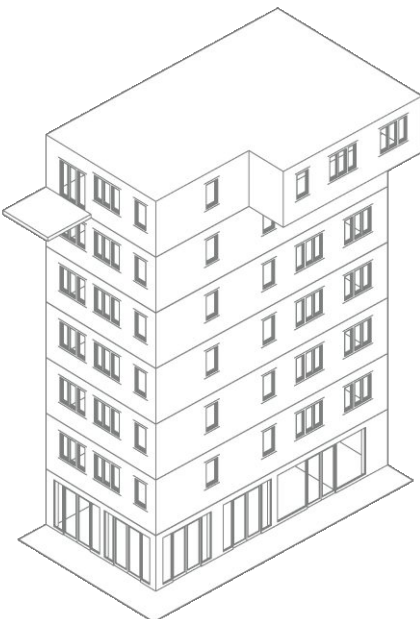
New structures from the 2000s

Mostly illegally built

Not conforming to building laws

Up to 3 floors

International Materials, built in 'balkan construction style'.



### Type C

Ex-Yugoslavian buildings, with approximately 4-6 floors.

Sturdy materials and a great position, with good connections to the city center. Renovations and add-ons in the last two decades have been mainly illegal, with the addition of two floors on the roof.

**Fig. 10** Morphological categorization of typical buildings found in the West Balkans

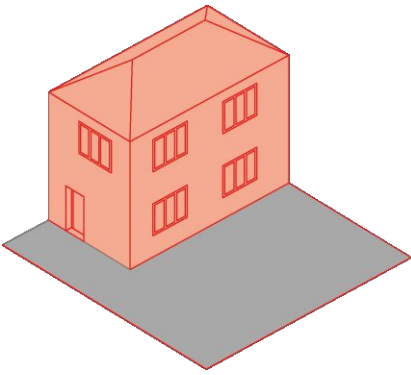
### 3.1.2 Functions - functional typology

The three categories not only portray different styles of architecture but also house a mix of different functions. Through changes made in the structures, many functions were added, differentiating from the primary functions that typical buildings had. The spaces in turn have either been kept the same, even through many functional changes, or have been wildly changed to accommodate those functions.

**Type A** houses are strictly used as family houses with a lot of garden space. These are clearly private spaces that, as mentioned, are nowadays rarely found in urban spaces.

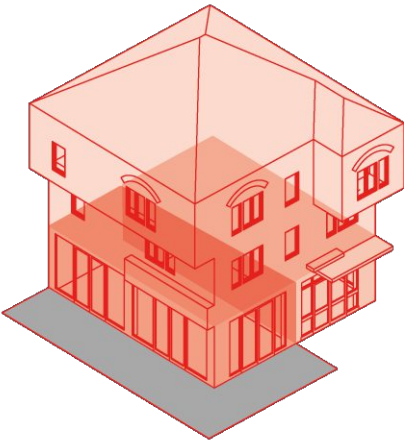
**Type B** buildings have on the ground floor, sometimes including the first one to two floors, shops, cafes, and mainly spaces for leisure. Additions to these spaces are made to expand the profit space, all the while reducing public or open spaces. Private spaces are situated upwards of the first floor, with either one family house or multiple apartments. This is one of the main changes to the buildings built in the last two decades. Constant additions have also changed the functions found in these buildings.

**Type C** buildings have had a change in their functions through the additions to their structures, thus mixing many different functions that were not meant to be housed inside. The initial functions are sometimes ignored, and newer functions to increase profit replace them.



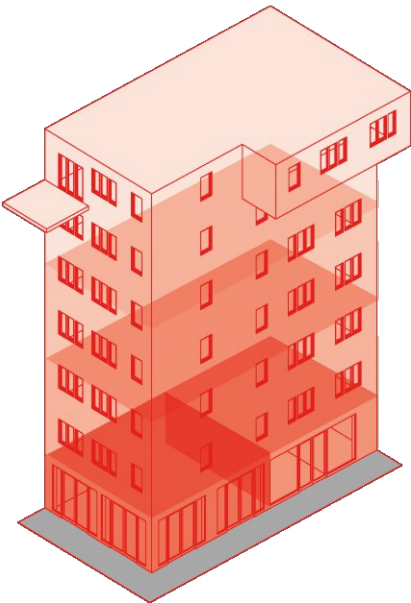
**Type A**

- General garden space
- Private living spaces



**Type B**

- General garden/open space
- Small-scale shops
- Bars/Restaurants
- Private apartments



**Type C**

- General garden/open space
- Small-scale shops
- Bars/Restaurants
- Private apartments

**Fig. 11** Functional categorization of typical buildings found in the West Balkans

**STEP 1**

Migrants of the first or second generation in the EU countries

**STEP 2**

The families living in the Balkans are receiving help from migrants

**STEP 3**

Someone from the family with technical knowledge who helps out

**STEP 4**

Mu  
co  
fir

**STEP 1**



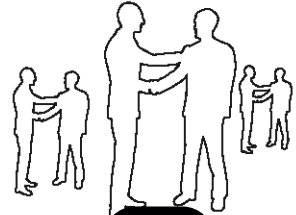
**STEP 3**



**STEP 2**



**STEP 4**

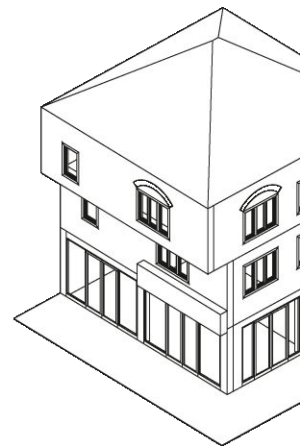
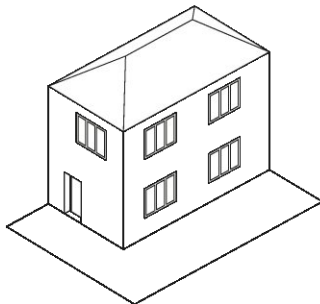


1990

2000

The culmination of political conflicts makes for a big surge in migration to western countries. Typical structures that are made of one-family houses or Yugoslavian complexes.

Migration continues, and living standards keep lowering. The initial migrants started importing building materials back home to rebuild houses. The architecture begins to drastically change, with many structures being destroyed.



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Multiple small construction firms

**STEP 5**

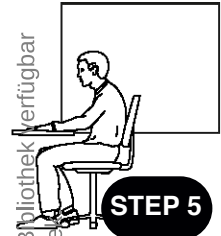
Architects that are rarely brought into the projects

**STEP 6**

Materials imported from the EU countries

**STEP 7**

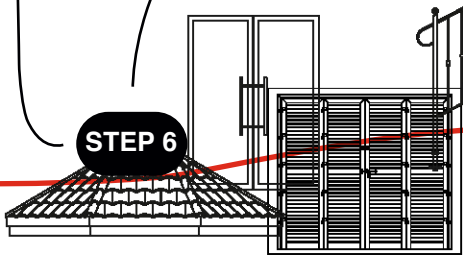
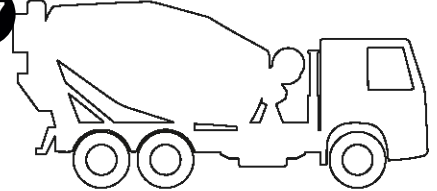
Machinery mostly brought from the EU



**STEP 5**



**STEP 7**



**STEP 6**

2010

2020

The effects of the 2000's continue well into the next decade, with drastic changes to the local architecture.

Migration is on the incline and reaching an all-time high. The architecture built seems to stagger a bit, but there are still materials and houses being built. This trend seems to continue well into the next decade.

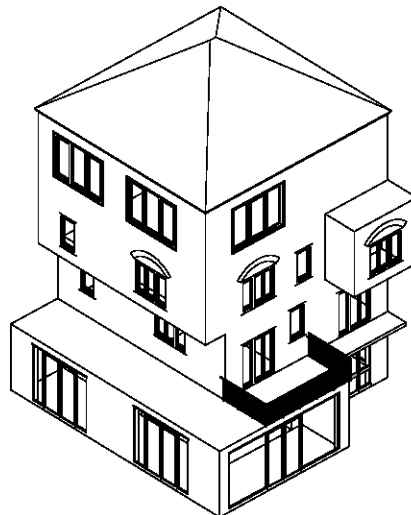


Fig. 12 Illustration of the process of how a typical building gets built, portraying the steps mentioned on the research

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### 3.3 What's next? Transition to North Macedonia

These findings can be found in many Balkan countries, such as Montenegro, Kosovo, and Serbia (Albania, not being part of Yugoslavia, has had a different exposure to this and cannot be grouped in the same category). The country that seems to translate all of the research best is North Macedonia, which is thus the main research point of this work. Macedonia, like many other Balkan countries, houses a plethora of different nationalities, each cohabiting with each other, which in turn has created an interesting architectural ensemble. In the next chapter, the goal is to give an introduction to the country, its statistics pertaining to the research, and the state that it has been in between the last decades of the 20th century and now. Due to inner conflicts dating back decades, there is not a lot of credible information or data on the state of Macedonia during the 2000's until now. The information collected here is partly from older documents, rough estimates of the last two decades, and some individual knowledge from living in the country. With an interesting geographical situation, it has a history dating back more than thousands of years. Macedonia, a multi-ethnic country facing a huge decrease in its population due to heavy migration to European countries, can be taken as an interesting case study to research how architecture has changed due to heavy migration. The goal is to create an overview of the state and understand its composition. This in turn helps us understand the socio-demographic influence that it has had on its architecture.

A change in the state name happened during the last decade due to a dispute with Greece. In this research, both versions (Macedonia and North Macedonia) are used interchangeably to avoid misunderstandings.

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Examples of the types of architecture found in North Macedonia  
**Fig. 13** Skopje, North Macedonia, own photo, 2022



**Fig. 14** Struga, North Macedonia, own photo, 2022



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**“AN ARCHITECT IN  
A PLACE WHERE  
ARCHITECTS ARE  
NOT NEEDED”**

**An interview was con-  
ducted with one of the ac-  
tive architects in the city  
of Struga, Macedonia, in  
order to obtain a different  
viewpoint on the building  
culture of the city.**

**V:** In what sense has the style and way of building changed in North Macedonia, and especially in your city, in the eyes of an architect, during the last decade or so? Does the traditional style of building influence the one we see nowadays, and how do these extremes cooperate with each other?

**L:** First and foremost, let me explain that, taking into consideration that my city, Struga, in North Macedonia, is a fairly small city, and even though we find ourselves as a society in the finalizing steps of the transition, all societal phenomena here, even those in architecture, urbanism, and construction, are influenced by contemporary changes and evolutions. The building style in this dynamic time, in general, encapsulates newer styles, new building techniques, and new technologies, which in many cases clash directly with the traditional style of construction and have no connections whatsoever.

Taking this information into consideration, we find that, in fact, the traditional building style is in a dire state and has been left behind. The values it possesses for an authentic society are ignored in contemporary building styles that can be found here, especially when you take into account the new influences and the thirst for personal and material gain in this branch, fulfilling this with the non-working supportive administrative mechanisms.

**V:** How does the basic process of building a house for an immigrant in our city work, and what kind of problems or misunderstandings may arise, keeping in mind the core ideal and building ways differences?

**L:** The simple process of building, from taking the step of beginning a concept to planning and building said project in our city, is a pretty complicated and long process, even without

the other aspect of the person not living there.

This is for many different reasons, all of which are connected. First, the definition of the property of the land is pretty complicated, mainly because of the mentality and the problems that have arisen in this branch. There seems to always be a need for some personal gain, be it from the administration or other people. Secondly, the destruction of economic construction in terms of the failure of a good systematization of family needs, energy efficiency, and building security and protection. In this context, we have just started to implement and analyze these elements.

Many of the elements used in the new buildings are imports or imitations from the West. In what aspect do you see their implementation in our new facilities? Do you think there are, or if you know any examples, factories or places where these types of elements can be obtained from our surroundings locally?

As it has been present in the historical past, the import, imitation, and use of western elements in new buildings is inevitable, especially when commercialization and momentary profit are insisted through construction, with all its positive and negative properties.

In my opinion, in the near future, it will be a challenge for architects to preserve the authenticity of the space environment. In our surroundings, even though factories and departments have been built, they are still in the initial phase of their work. These, in my opinion, are a better solution, first of all for energy efficiency, protection, and isolation of elements.

**V:** How ready would you be, as one of the main architects of the city, to implement local products in new buildings?

For the sake of economizing construction, speeding up the construction process, and developing the local economy, I think that the implementation of local products in new buildings is most necessary and can be seen as the main step forward.

**V:** What main difference have you noticed as an architect in the Balkans since the conflicts of the last twenty years? What effects did the change from a totalitarian system have, and how was this, in your opinion, translated into architecture?

**L:** The change from a totalitarian system in this final stage of transition has been developed and translated into architecture and urban planning in the weakest and worst possible way. In a word, I can say that the principle has worked where the individual has been enriched and has deteriorated, whereas the general needs of society, the state of the environment, the living environment, and the infrastructure have been overlooked.

In addition to the many efforts and insistences of international organizations for the regulation of nomenclature and legal acts for the prevention, regulation, and control of this problem, unfortunately, I have to state that we are still far from the implementation of the legal acts of the Law on Spatial Planning, the Law on Construction, Regulations

and Standards for Design, and the UNESCO Recommendations for the Region.

Based on this, in some cases, the totalitarian system is considered the most caring and fairest in terms of control and preservation of the common good. Based on this, we can conclude that the post-conflict phase and the transition from a totalitarian system to the final phase of the transition to a democratic society have had a negative impact on urbanism and architecture, pointing out some recent positive examples. Personal gain, indifference to building laws, and maximization of built space are, in my opinion, the effects that can be felt after the conflicts in the branch of architecture.

AS IT HAS BEEN PRESENT IN THE HISTORICAL PAST, THE IMPORT, IMITATION, AND THE USE OF WESTERN ELEMENTS IN NEW BUILDINGS IS INEVITABLE, ESPECIALLY WHEN COMMERCIALIZATION AND MONETARY PROFIT ARE INSISTED THROUGH CONSTRUCTION WITH ALL ITS POSITIVE AND NEGATIVE PROPERTIES

In the Balkans, there are high numbers of young people leaving, and the city lacks infrastructure to encourage their emancipation. How do you see the future of this generation from your point of view? Do you think that architecture can have a direct effect on a change in society in this current state?

If we start from the fact that the problem of youth flight and population migration is very dimensional, it is normal that urban planning and architecture can have a positive and indirect

impact on changing the situation we are in now.

This gains importance and meaning at the moment when we will manage to create organic connections with the environment—the living environment, natural resources,

and favorable climatic conditions—with the aim of urbanism and architecture.

The youth of today have a high degree of emancipation, fast, dynamic IT, and technological communication. Including the arrival of information in a quick and easy way, the above-mentioned issues can be prevented in a way through architecture and urbanism and thus create a strong positive impact on the youth.

This issue is also somewhat easily solvable, at the very moment when legal institutions develop their activity according to the law, use their personnel and intellectual capacities, in the movement the principle of meritocracy, the level of corruption is reduced, the natural and infrastructural resources are exploited (Lake Ohrid, the flow of the Black Drini River, the interstate connection at the border Qafe Thane, the 8th Corridor, through the Road and Railway infrastructure, Summer Tourism), the current financial opportunities created by the diaspora are used, and the traditional style of construction in Architecture and Urban Regulation of historical spaces is used as a place of reference.

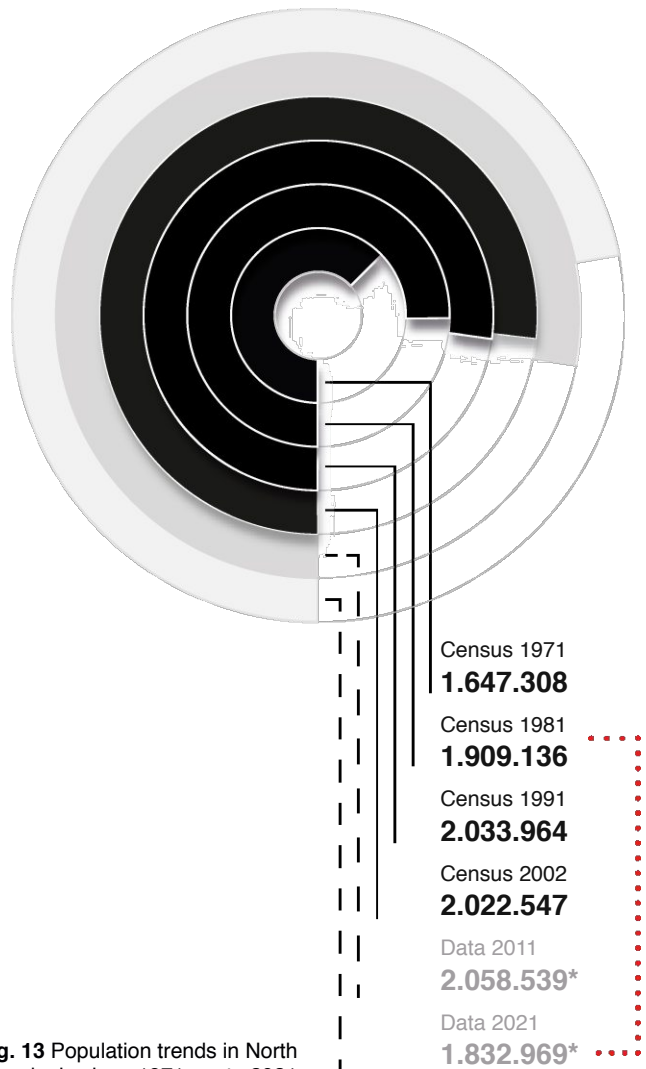
All these, in the function of raising the level of human civilization, will, in my opinion, decrease the level of migration and can create conditions for hiring or engaging the labor force from abroad. All this is done in order to dynamize the lives and economic well-being of the citizens.

### 3.5.1 North Macedonia in statistics - Population

During the census held in 1971, 1981, and 1991, North Macedonia was part of Yugoslavia. The only state-led census while the state was independent was the one from 2002. Since then, there have been many attempts to lead a new census, and while there is data collected, they have mostly failed.

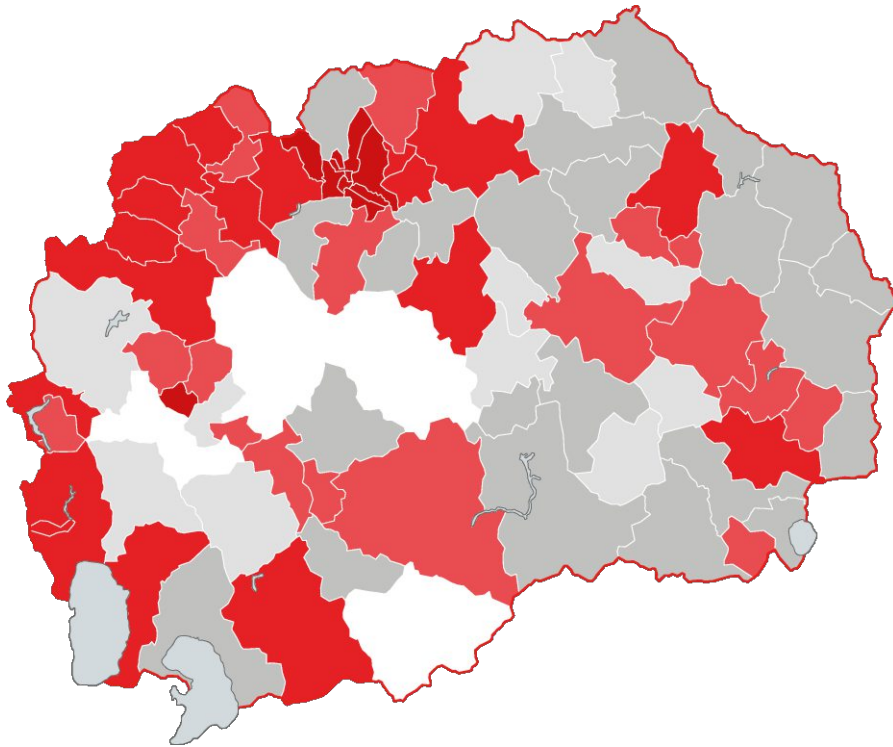
The data for 2011 and 2021 are estimates and may not be fully reliable. Even so, the numbers show a major decrease in the population. There are many different reasons for this drastic change, but migration seems to be the main cause.

According to the most recent data, the population is shrinking to a rapid degree. The numbers collected now are even lower than those from the 1980s.



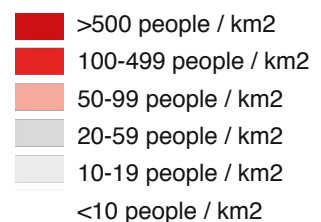
**Fig. 13** Population trends in North Macedonia since 1971, up to 2021

### 3.5.2 North Macedonia in statistics - Density



**Fig. 14** Density of the population in North Macedonia

This illustration shows the division of the population from this decade (2021) through the country. The most populated cities are those near the capital, while the least populated ones are divided mostly between the center and the east of the country. The difference between the average highest and lowest density of the country is 500 people per km<sup>2</sup> and less than 10 people per km<sup>2</sup>. The average total population density is 78.7 people per km<sup>2</sup>.



### 3.5.3 North Macedonia in statistics - Ethnicity

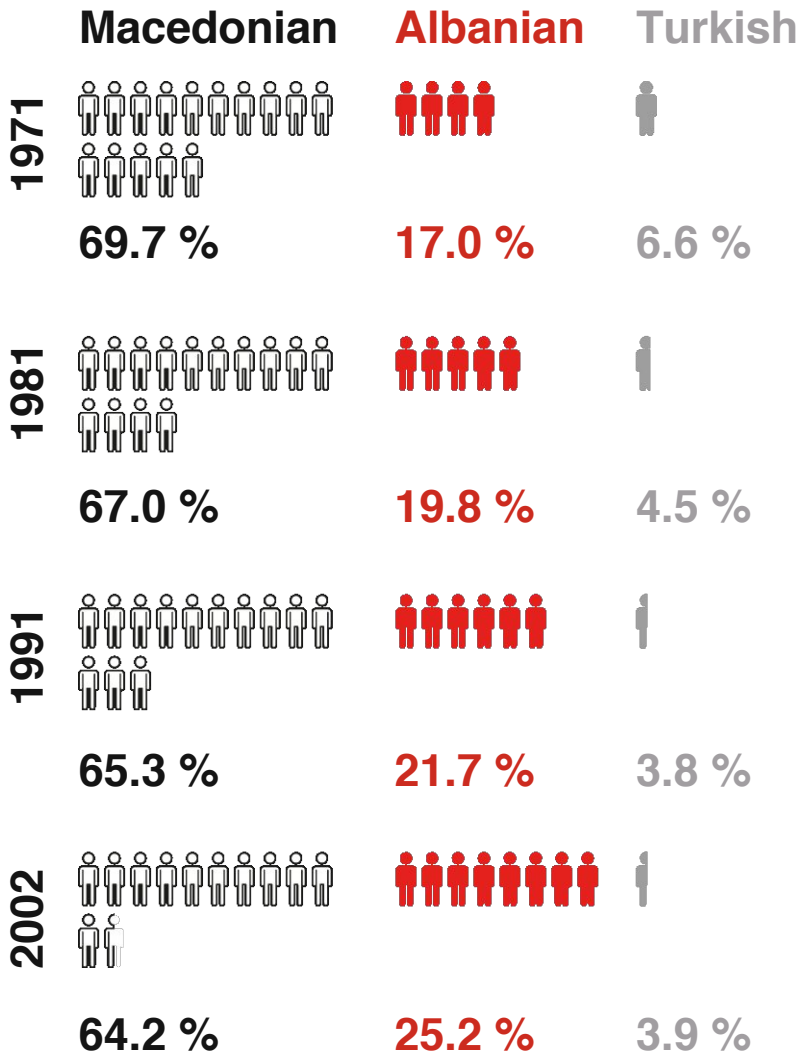
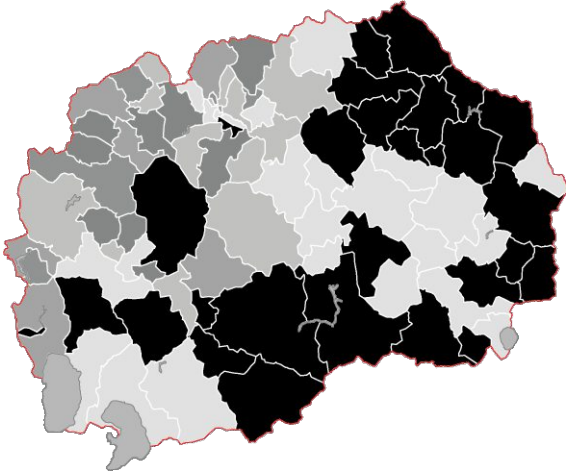


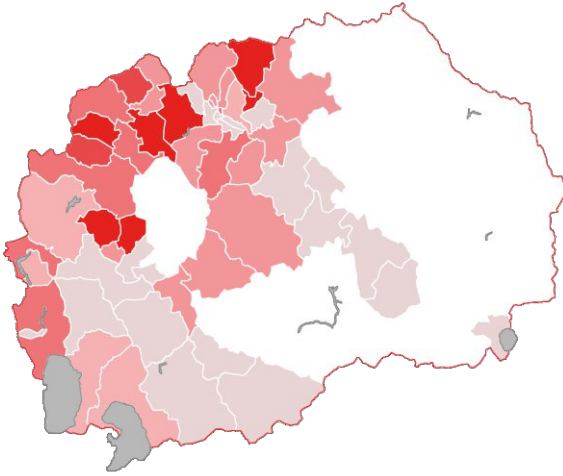
Fig. 15 Ethnicity trends in North Macedonia 1971-2002

Likewise to all Balkan countries, North Macedonia houses many different ethnic groups. The three biggest ones are shown in this graph: Macedonian, Albanian, and Turkish, since they make up the majority. Macedonians make up 64% of the population, Albanians 25%, and Turks about 4%. Other groups contain Roma, Vlachs, and a small part of Serbs and Bosniaks. While there are no cities that are not multi-ethnic, there are still very varying compositions of the cities in North Macedonia.

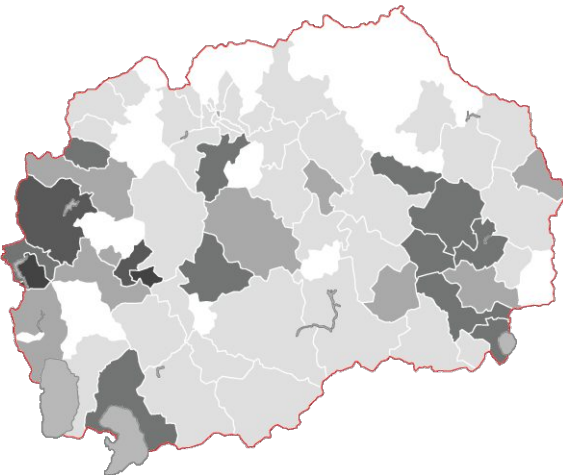
# Macedonian



# Albanian



# Turkish



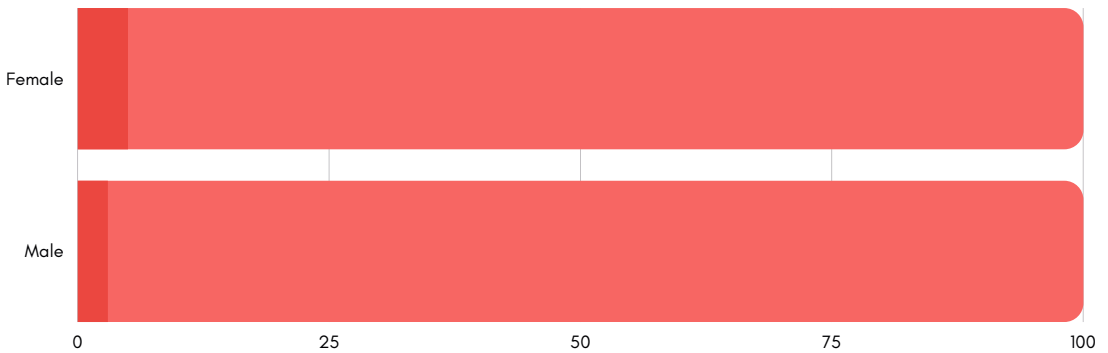
**Fig. 16** Ethnicity trends divided citywise in North Macedonia

This illustration shows which ethnic groups make up the majority in each city of the country, according to the last data from this decade (2021). While most cities are mainly Macedonian, there are still cities that have minority groups making up the majority of the population, such as a part of the south-east of the country, where Albanians in some cities make up the majority.

Villages have a different structure, where they are almost always populated by one ethnicity; cities, on the other hand, present a more mixed habitat.

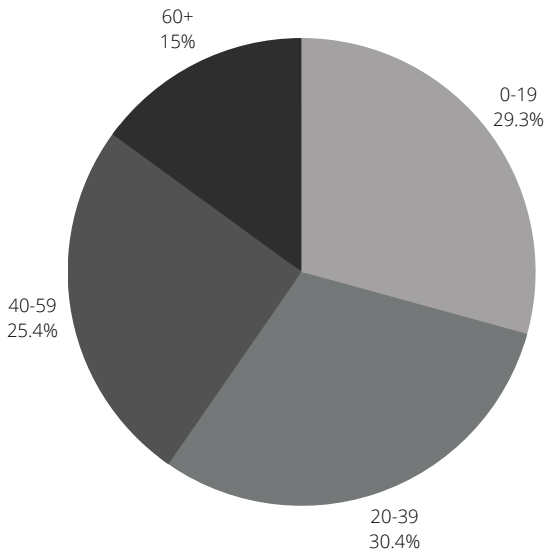


### 3.5.4 North Macedonia in statistics - Age and Literacy



**Fig. 17** Statistics of literacy divided by gender in North Macedonia, according to the last census

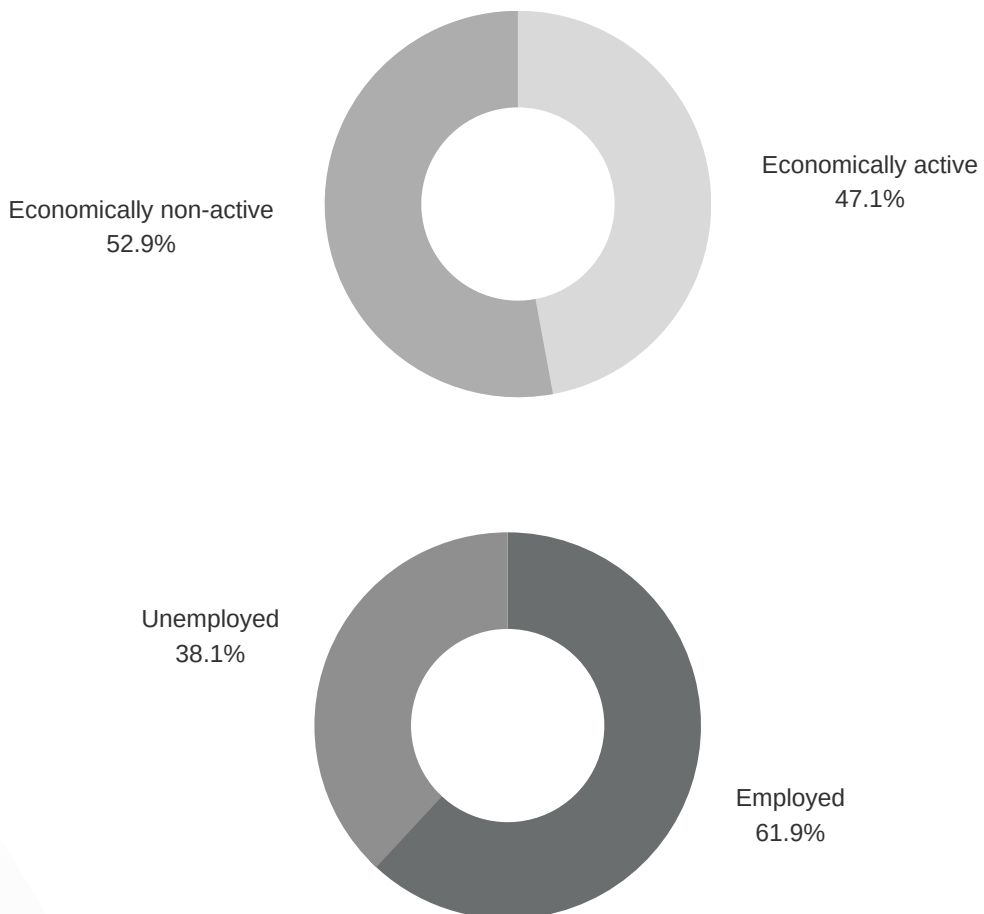
While both males and females have a higher percentage of literacy, there seems to be a slight difference in favor of the male gender, which is in accordance with the lack of emancipation. A very small percentage of the population has finished higher education, while the majority has only finished primary or secondary school. The estimates for 2020 show growth at an average annual rate of 1.51%.



This graph is based on the Census of 2002. The structure is approximately the same between males and females. With a higher percentage of people up to 40 years old, the country shows that the younger people should be one of the main actors.

**Fig. 18** Age composition of the country

### 3.5.5 North Macedonia in statistics - Employment



**Fig. 19** Employment rates of North Macedonia

While according to new estimates, the unemployment rate seems to be decreasing (estimate 2019: 17.26%), this seems to be in direct correlation to high migration numbers (seeking employment outside of the country is one of the main reasons for immigration). A very high percentage of the population is economically non-active.

### 3.5.6 North Macedonia in statistics - Migration

There are five categories as to why citizens of North Macedonia have migrated outside the country. Different cities have different migration rates, with the capital being the only one with a higher rate of immigrants.

The four categories are: employment, marriage, family, education, and other smaller ones. Education has the lowest rate and marriage has the highest one, while employment and family make the middle categories. Even though education seems to be a lower category, according to new data, between 2013 and 2015, there was a 130% increase in student mobility, with Austria being one of the main destinations.

While each category has a different background and reasoning, they all come down to people looking for a better living standard in western countries. According to OECD 2022, more than one in five people born in the Western Balkans live abroad.

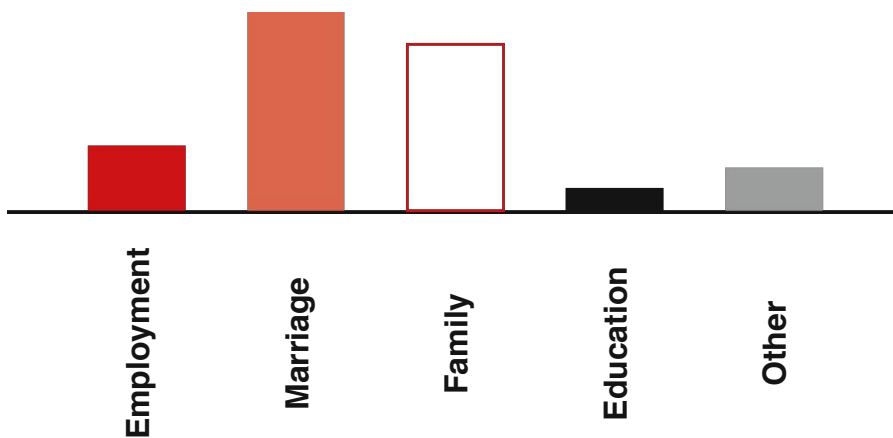


Fig. 20 Reasons for migration in North Macedonia

## TIME FOR POLICY CHANGE ON WESTERN BALKANS EMIGRATION

Alida Vracic

Sarajevo

BIRN

January 13, 2020 12:01

NEWS

# Nearly Half of Bosnia's Youngsters Pondering Emigration

Milica Stojanovic | Belgrade | BIRN | November 17, 2021 | 11:58

*New UN survey says some 47 per cent of Bosnians aged 18 to 29 are contemplating emigration, either temporarily or permanently, disillusioned by the lack of prospects at home.*

## Depopulation Disaster: The Balkans And Its Creeping Demographic Crisis

By Andy Hill  
March 9, 2020

## Balkan brain drain could be costing the region its future

By Alice Taylor | EURACTIV.com and EURACTIV.com with exit.al

13. Dez. 2021

ALL ARTICLES, COVID-19, EASTERN EUROPEAN POLITICS, EUROPEAN INTEGRATION, FEATURED, MIGRATION

## Youth unemployment in the Western Balkans is fuelling Europe's highest emigration rate

## The long decline: mass migration batters Balkans

### The Way Back: Brain Drain and Prosperity in the Western Balkans

Alida Vracic

Policy Brief - 9 May 2018

THE RESEARCH

Fig. 21 Collage

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# 4. THE HO OGRAPI

# HOUSE BI LIY

**4.1 Apartment Complex**

**4.2 Mixed-use building**

**4.3 Hotel**

**4.4 Conclusion - Guidelines**

**4.5 Element Catalog**

4.5.1 Connecting

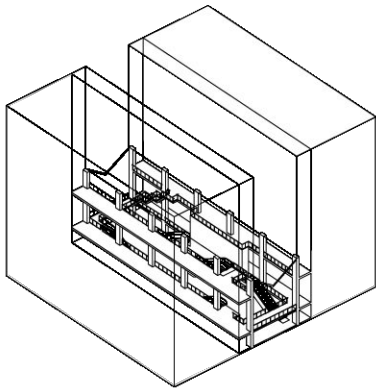
4.5.2 Moving

4.5.3 Opening

4.5.4 Enclosing

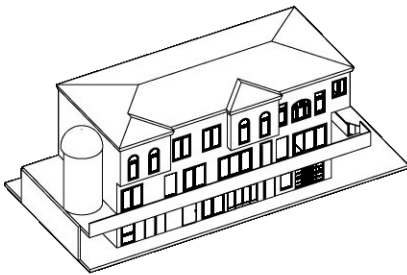
4.5.5 Differentiating

THE NEXT STEP IS THE RESEARCH OF THREE EXAMPLES OF THE ARCHITECTURE FOUND IN THE REGION, TO BETTER UNDERSTAND HOW THESE STRUCTURES WORK. THE HOUSE BIOGRAPHIES HELP TO CATEGORISE WHAT IS IMPORTANT AND HOW THIS ARCHITECTURE WORKS IN ITS ENTIRETY.



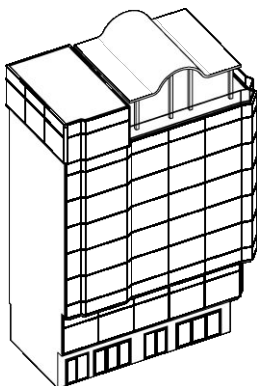
### HOUSE BIOGRAPHY 1

A newly built apartment complex in the Balkans with a passage that connects two heavily used streets near the center of the city, mixing different spaces and creating a community hub.



### HOUSE BIOGRAPHY 2

A typical existing building from the last century in the Western Balkans that has undergone changes and now houses a mixture of shops and office spaces, with changes on the inside and outside.



### HOUSE BIOGRAPHY 3

A newer structure that has implemented a lot of imported materials with a glass facade, an open rooftop, and many different functions that often clash with each other.



## 4.1 HB 1 - Apartment complex

Situated only 5 minutes away from the hubbub of the capital city, this apartment complex was built in the last decade, approximately 10 years ago. Two blocks of 10-story private apartments and two heavily used streets are connected through a passage that contains a multitude of functions. While the apartment complex is built on a

standard type of architecture, the passage is made of different materials, rooms, and functions, which seem to clash with each other. The passage in itself, with many changes since it was built, gives a more authentic local vibe of architecture than the accompanying apartment complexes.

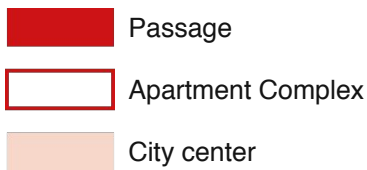
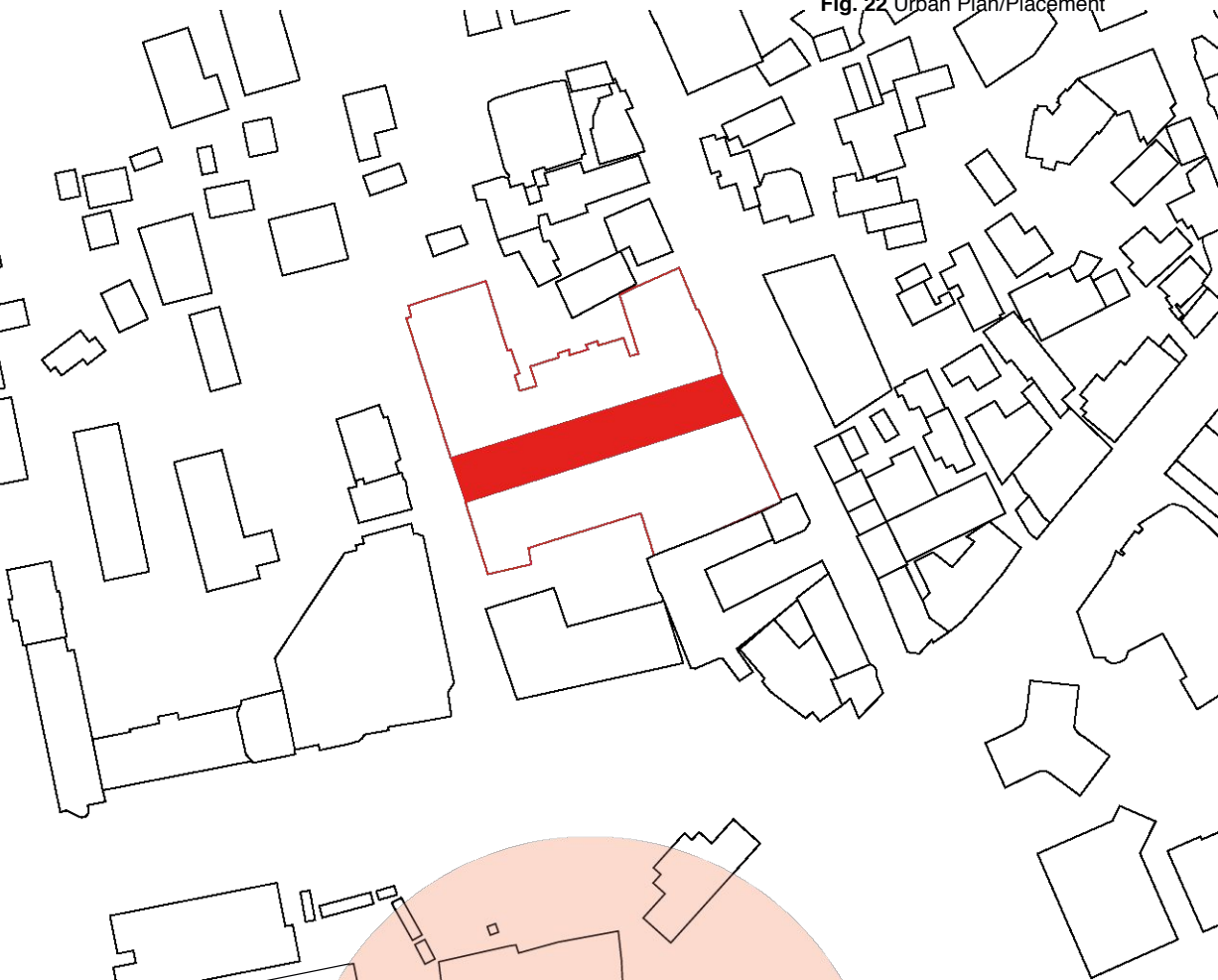
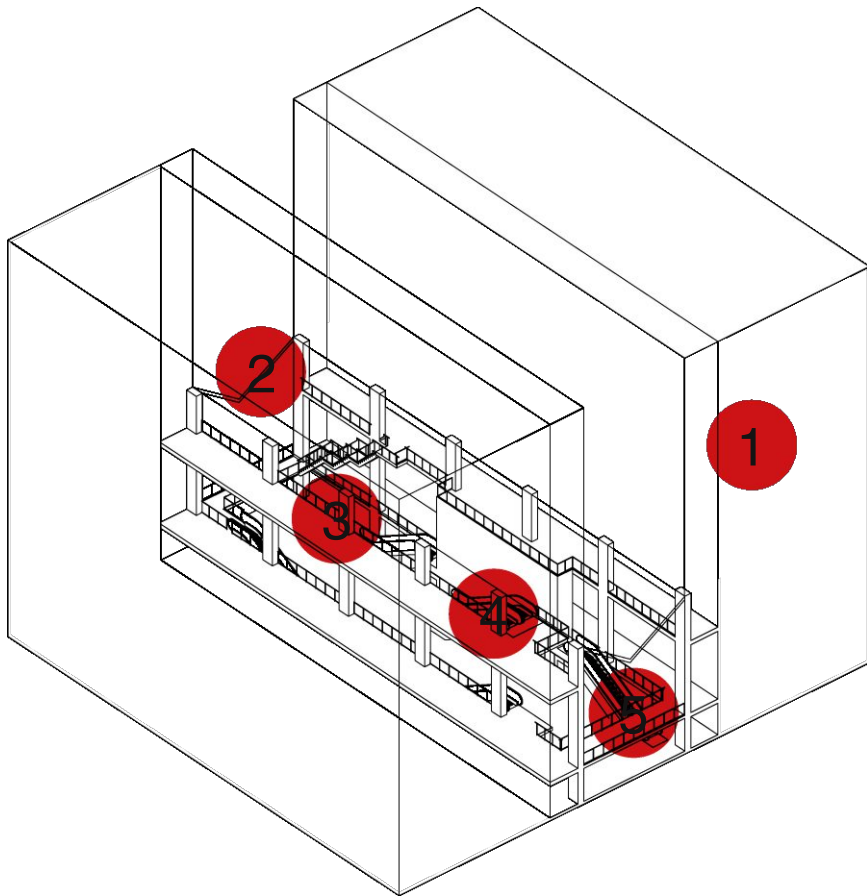


Fig. 22 Urban Plan/Placement





**Fig. 23** Axonometry Apartment Complex

- 1** private apartments
- 2** enclosure of the space
- 3** hallways with half-private functions
- 4** multiple ways of moving
- 5** bridges connecting the buildings

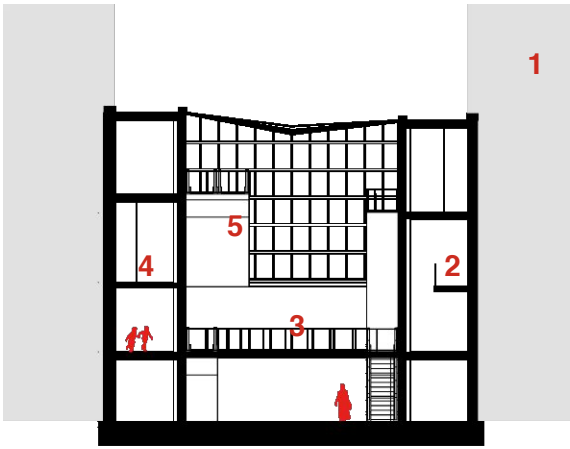
The private apartments (1) are accessed through different entrances; the main ones are situated through the passage, where the residents have to go through the many spaces that house different functions.

A glass roof (2) encloses the building and makes for a more private space that can thus be used year-round. With this, the apartments do not have a direct view of the passages, thus giving them their own privacy too. Multiple escalators and stairways (4) in a tight space take people to the different levels of the passage, where shops, open spaces, and office spaces (3) are used by many different businesses.

Located on the ground and upper levels are different cafés that are connected through bridges (5). These serve as connectors between the two buildings on the upper floors and give different views of the passage and main streets on both sides.

Through its multiple functions, levels, and materials, the passage becomes an interesting part of the city.

The passage has undergone major changes to its interior to accommodate different functions throughout the years, which is a typical procedure in this region.



- 1 Apartment complex
- 2 Split level floor
- 3 Connecting bridges
- 4 Private spaces
- 5 Different ways of moving

Fig. 24 Section of the Passage

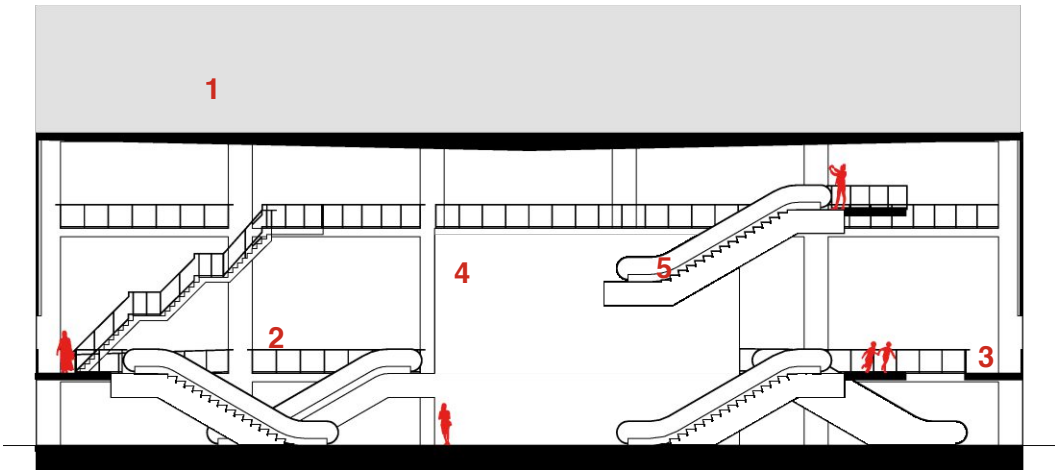


Fig. 25 Section of the Passage



**Fig. 25** Passage seen through the main street, own photo, March 2022



**Fig. 26** Example of the usage of the space inside the passage, own photo, March 2022



**Fig. 27** The initial opening of the passage, where the functions are not fully developed, unknown author

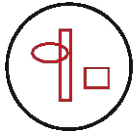
I find myself going through this way multiple times a day. The market has fresh produce, and there are always shops that stay open later on. I get a great feeling of community; even though it was built just years ago, there seems to be some great foot traffic and some interesting places,

Living in one of the apartments above here, I have to use the passage multiple times a day, and I partially agree with what you are saying. It is interesting to see different people, and the shops and cafes are so close that it is such a convenience. On the other hand, all the people on all of the different floors can sometimes make a lot of noise, especially if the office spaces on the upper levels are rented out.

All the stairs make you kind of dizzy, though. I see a lot of kids just running around all the escalators. The bridges make for great coffee spots, though, and the views directly into the street make for a great spot. I love how connected the community feels here.



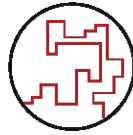
## HB 1 - Conclusion



multi  
functional



community  
feel



multi  
level

A space that connects the three above-mentioned categories: 1. Organically created multifunctional spaces that came to be not only because of the accidental spaces that were created through architecture. 2. The community makes space for multiple rooms and functions that need such spaces to accommodate their production (see

organic market, putting produce all across the passage). 3. The multi-level type creates a kind of border between the private and public spaces, while the many ways of movement—stairs, escalators—make for a connection between the otherwise divided spaces, not only inside the building but also in other parts of the city.



Fig. 28 The passage nowadays, <https://de.foursquare.com/v/galeria/4fc8e95ee4b06803696e1ea6>

## 4.2 HB 2 - Shopping center

An existing building, built around the 50's in a typical Yugoslavian architectural style and part of a bigger complex made out of similar-looking parts of a building, is situated between the main corso—the central and old promenade—and the main street that connects the outer part of the city with the lakeshore. Built during the later part of the

last century, it represents a specific type of architecture found in many cities in the Balkans, where an abundance of changes were made to the exterior and interior of the space that have had an effect on the functionality of the space. The building creates, without trying, an accidental passage through many parts of the city.

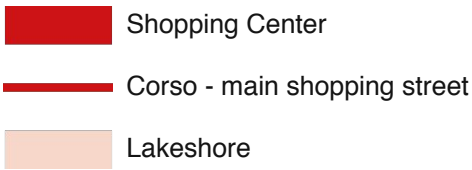
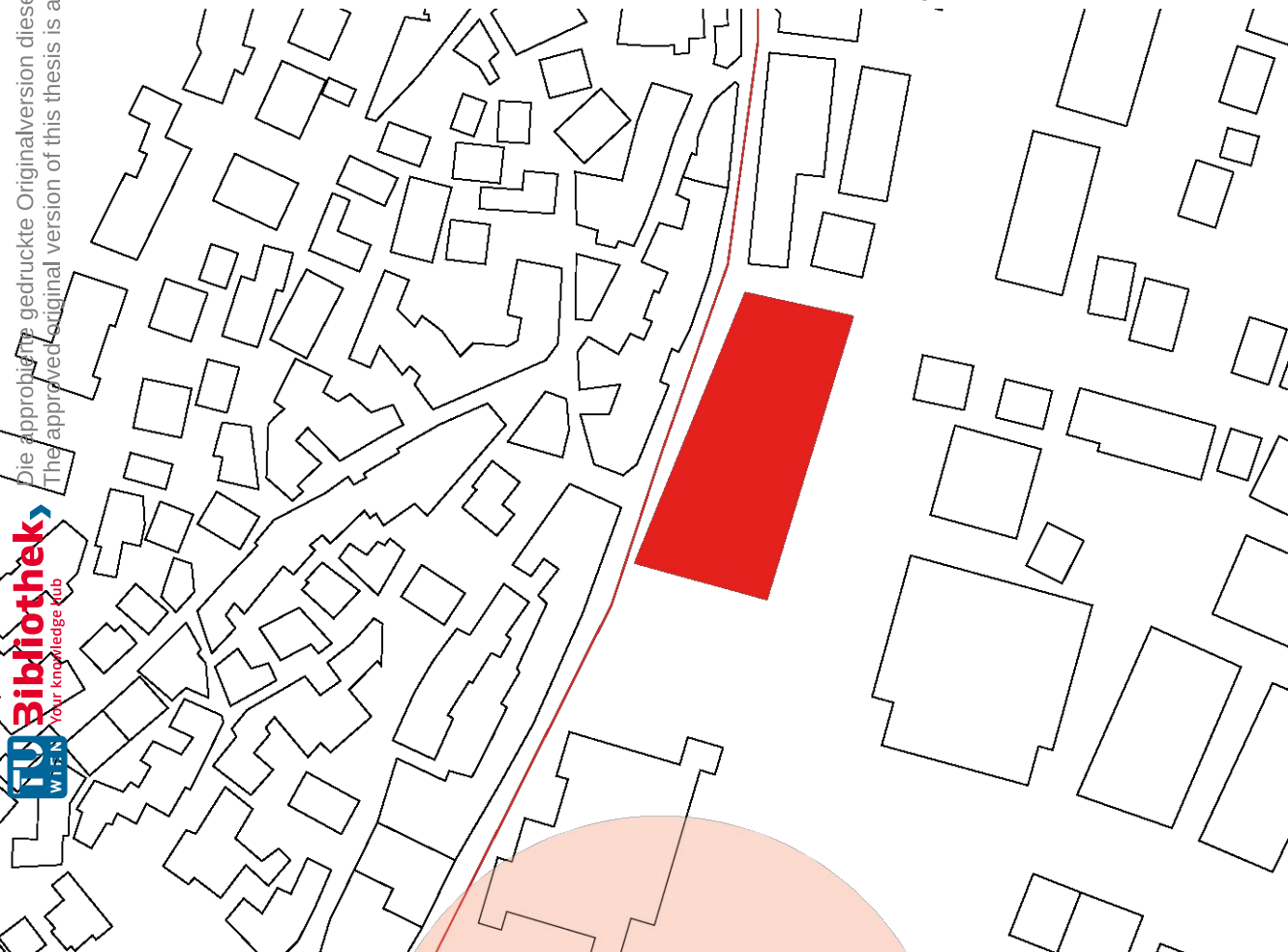


Fig. 29 Urban Plan/Placement





**Fig. 30** Axonometry Shopping center

- 1** existing building ex yu
- 2** semi private office spaces
- 3** public hallways
- 4** small-scale shops
- 5** public space

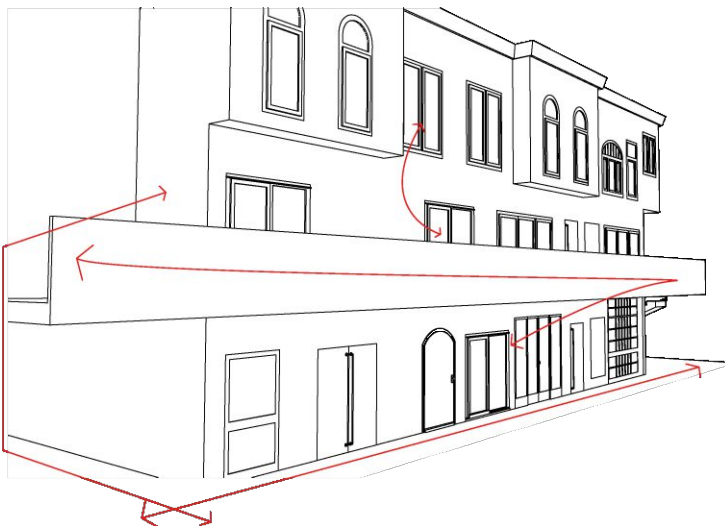
The existing building (1) has many parts, like the roof, balconies, and other elements, that have withstood time and have not undergone a lot of changes through the years. The spaces are divided mainly into semi-private offices or shops on the upper level (2) and small-scale, astisanal, or just family-owned shops on the ground floor (4). While all these functions are either facing the main street or the promenade, there are, on one hand, hallways and stairways that connect the spaces situated on the inside, and on the other hand, there are balconies on the upper level (3) that are either reached through the private hallways

or directly through stairways from the ground floor. This way, people can reach different parts of the building in many ways. This also allows for a much freer public walkaway (5) on the ground floor, which, in such a condensed space with shops and offices, frees the pathway for a space with a lot of foot traffic.





**Fig. 31** Fassade composition with its many changes



- Easily accessible balcony that reaches the functions from the outside
- Open walkways from the ground floor
- Different ways of moving inside the building

**Fig. 32** Perspective of the open walkways of the building



Fig. 33 The building seen from the main old corso, <https://pressingtv.mk/magazin>



Fig. 34 The building seen from the main street, with the many changes to its structure, <https://pressingtv.mk/magazin>

I remember when this building was under construction. It was probably the first shopping center in the city, with many small shops, bakeries, markets, and other things. It could always be used as a passage too; you can walk from the streetside to the main shopping street on the other side. Through the years, there have been so many changes on the outside from the people owning the shops—bigger windows, doors, and glass facades have been built into the existing parts to accommodate newer functions.

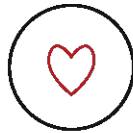
Nowadays, you can only find smaller, privately owned shops on the ground floor. Newer, bigger, and more commercial spaces have taken the place of this building. But the office spaces on the upper floors are newly occupied and seem to have a revival here.



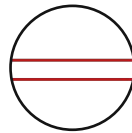
## HB 2 - Conclusion



adaptable



community  
feel



in-between

A typical building of its time that has seen many changes but still can house an abundance of different functions gives the community a space to use throughout the whole year. While the core of the building has stayed the same, many changes have been made, legally and illegally, to the inner spaces, the facade, and the outside throughout the years, which shows how adaptable this

building is. The other characteristic of this building are the different levels, connecting different streets, stairs, balconies, and passages, which in turn break down the barriers between the outside and inside and create an in-between, multifunctional space for every demographic.



Fig. 35 The overview of the building, 2023 Google

### 4.3 HB 3 - Hotel

The third case study is located in a rather tightly packed part of the city. With seven floors above ground, it seems somewhat missfitting in a typical city in this region, where the average would be three to four floors. The other differentiating factor is the foreign materials that clash so strongly with their surroundings, creating an interesting

pattern. Likewise, in many buildings, a rooftop was added, in stark contrast with the other part of the hotel, using different materials. Rather small paveways and no short-term parking at the front of the building give the impression that the plot was not planned to have such a big structure in it.

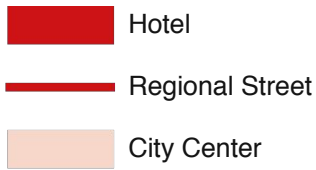
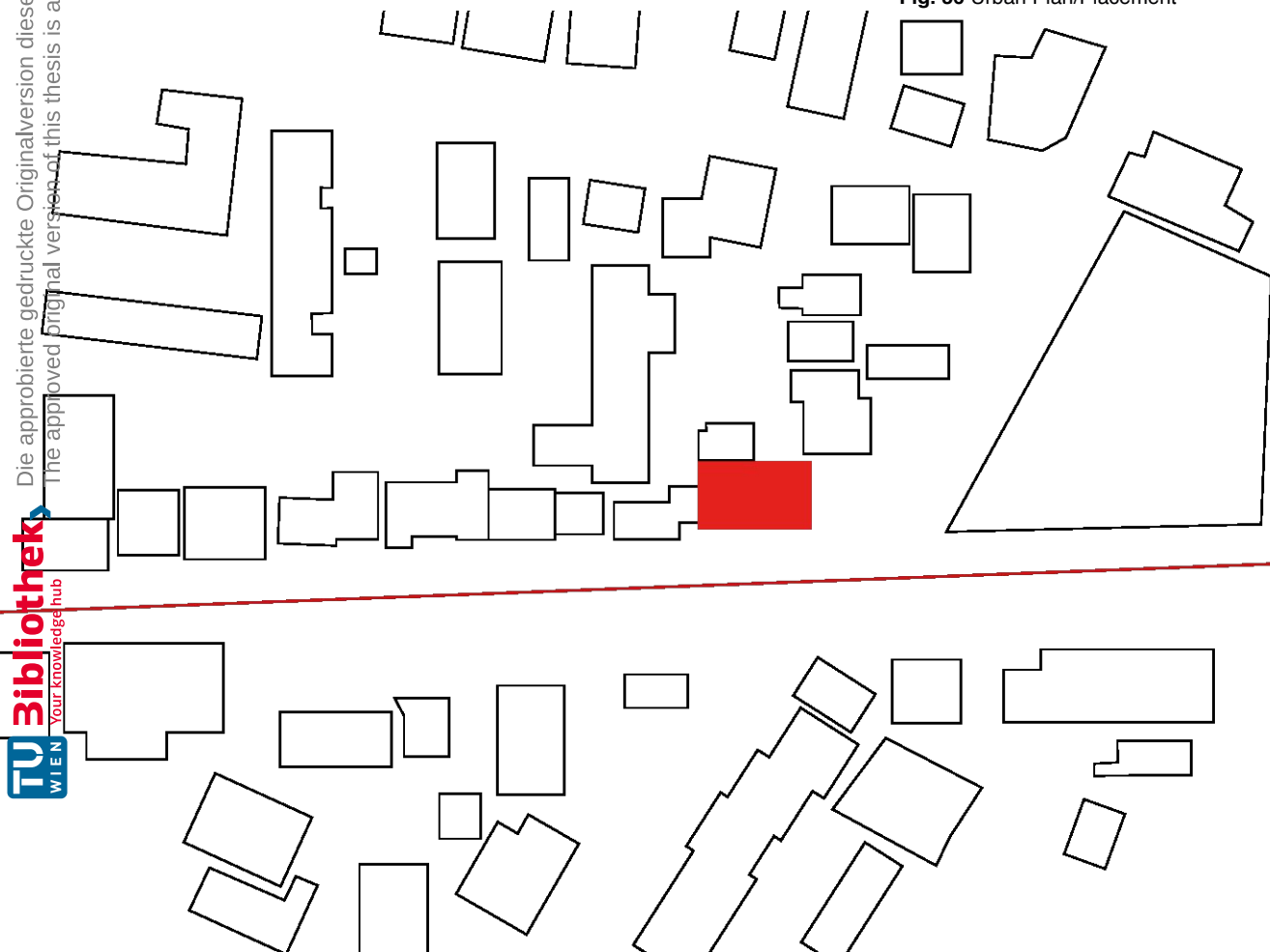


Fig. 36 Urban Plan/Placement



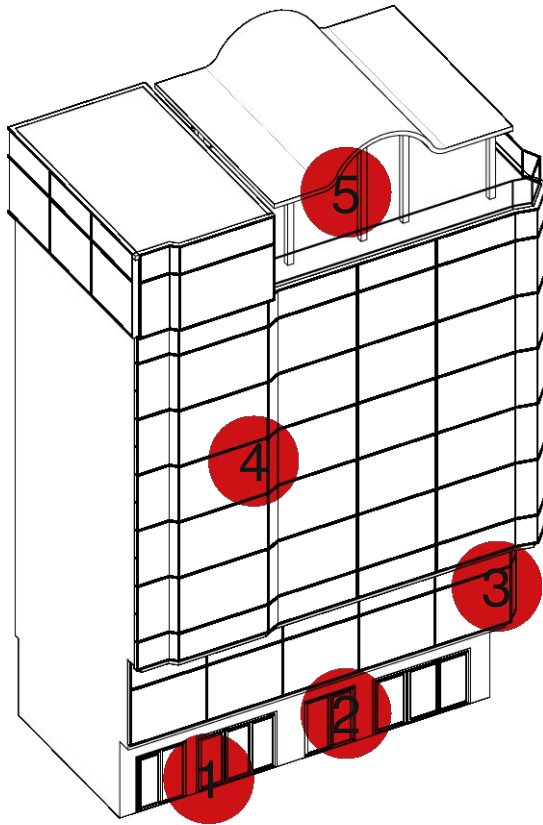


Fig. 37 Axonometry Hotel

- 1 different shops on the ground floor
- 2 main entrance to the hotel
- 3 semi-private conference spaces
- 4 clashing glass facade
- 5 half-public rooftop bar

The building houses many different functions: on the ground floor, many small shops are put in a very tight space (1); on the second floor, the space is divided by the conference and meeting spaces (3); and the hotel; the rest of the floors are taken by the hotel; while on the rooftop, a bar that sometimes, if used for events (5), takes up most of the space. The shops have all adjusted their entrances to fit their functions, thus creating a much different ground floor than the glass facade. This is quite a foreign material that clashes with the typical building style in the city (4). Through the above-mentioned changes on the ground

floor, the main entrance to the hotel is easily lost (2) and would not be clear if it weren't for the sign announcing it. The bar on top of the building clashes with the building itself and also with its surroundings, not only because of its materials but also because of the different style it has from the typical glass facade of the building.



**Fig. 38** Front view of the hotel, <https://www.trip.com/hotels/gostivar-hotel-detail-23647225/barok/>



**Fig. 39** Overview of the facade, <https://barok-hotel.business.site/>

### HB 3 - Conclusion



mix of  
materials



placement



feature of the  
city

While at first glance, the building seems mismatched to its surroundings and neighborhood, there are characteristics that give it its typical turbo-architecture features. The initial placement of such a big structure in a rather small city makes it unintentionally a feature of the city—a place of orientation for people to use as a meet-up. Another feature is the mix of materials that is

clearly visible, which in turn has changed the outer layer of its surrounding buildings too. The neighboring buildings have also been renovated and, as such, match up with the glass facade of the hotel. The mix of materials, functions, and placements gives it an accidental, authentic character.



Fig. 40 The neighborhood where the hotel is located, <https://mapio.net/pic/p-47917805/>



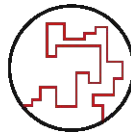
#### 4.4. Conclusion - Guidelines



multi  
functional



community  
feel



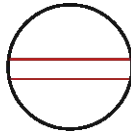
multi  
level



adaptable



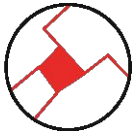
community  
feel



in-between



mix of  
materials



placement

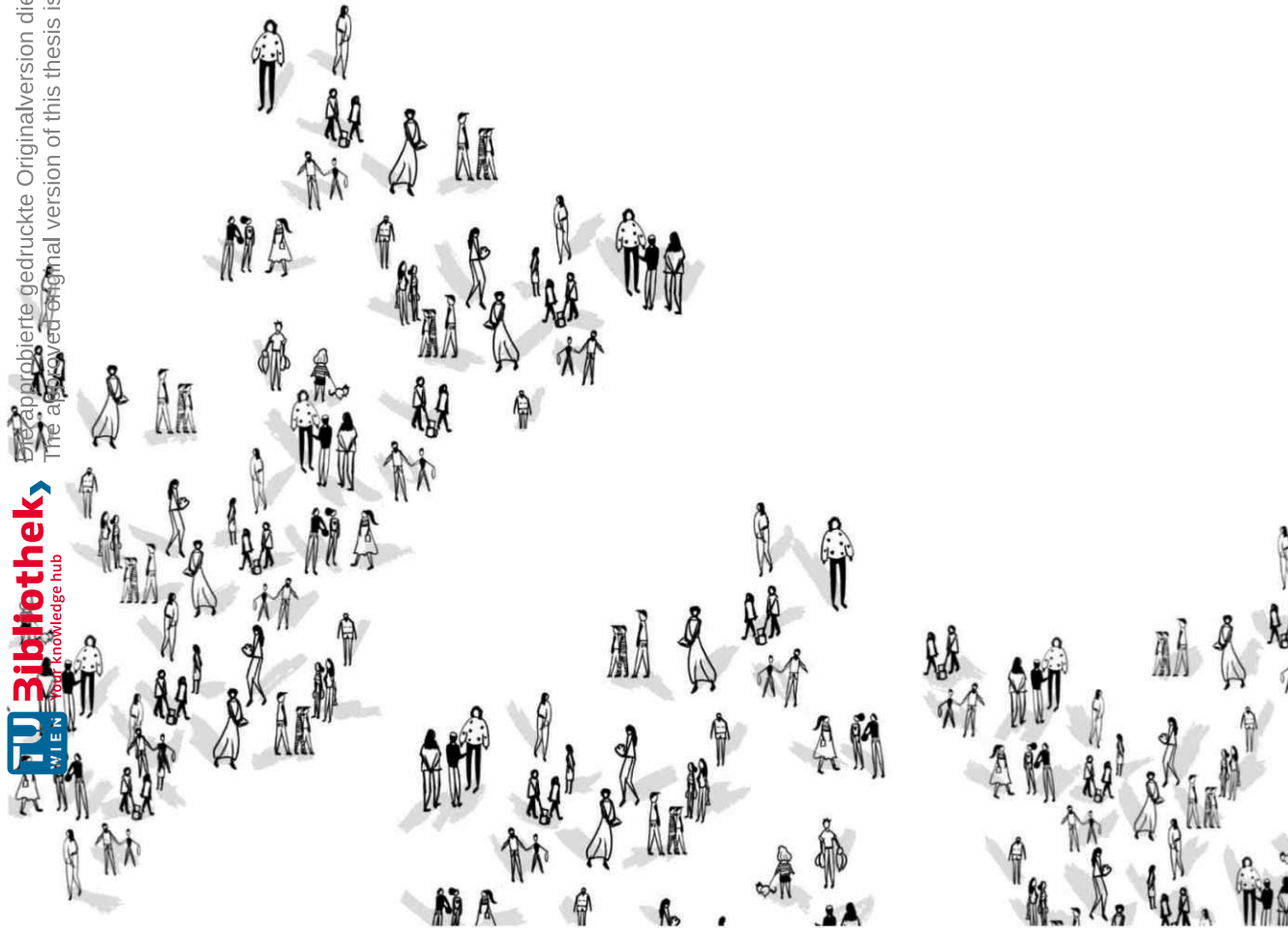


feature of the  
city

The goal of this chapter was to pinpoint the characteristics of each house biography and, by doing so, create a paragraph for the basis of an element catalog. As it is clear, some examples share a lot of features that are characteristics of turbo-architecture. These parameters and the elements created help translate the research into a concept.

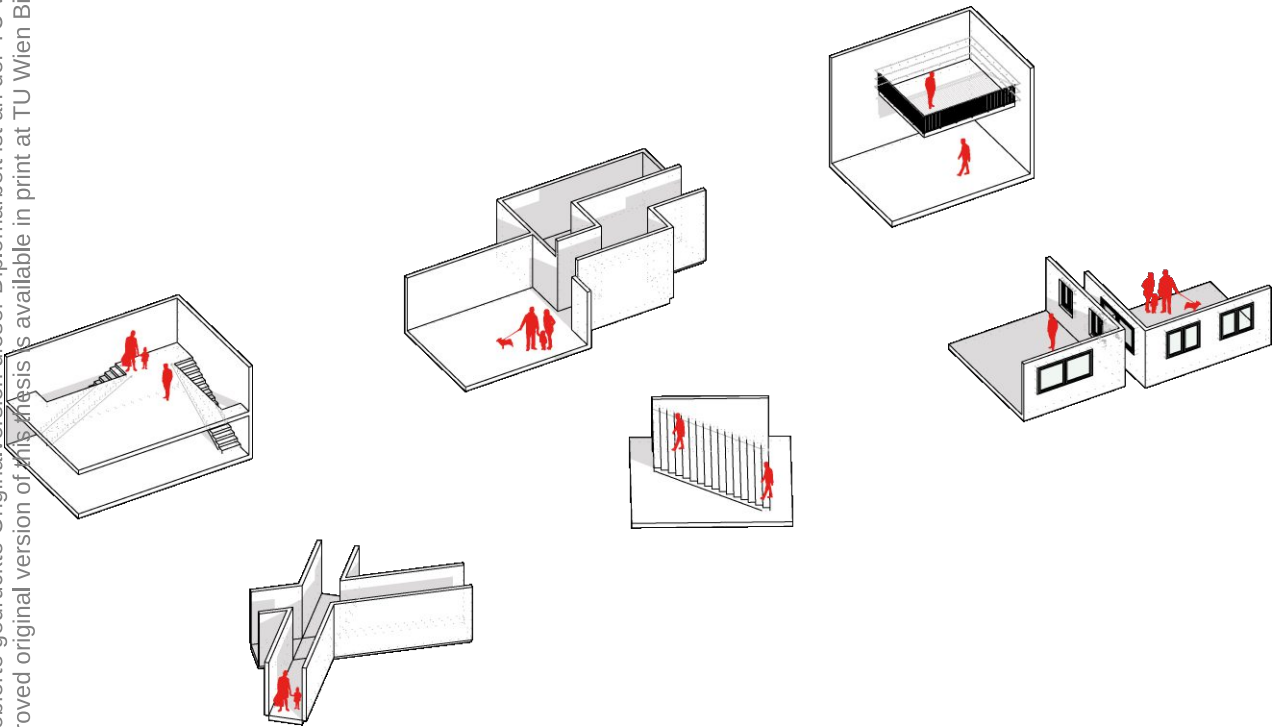
## CREATING A A CATALOG OF ELE- MENTS BASED ON THE CASE STUDIES

The case studies bring forth elements used multiple times that have been put into categories to showcase different properties shared by buildings in the region. Elements used to connect, move, enclose, open, and differentiate are used as a basis to help in the next step of the concept. These are not perceived as building elements but more as moments of action that can help create a more dimensional space.



### 4.5.1 Connecting

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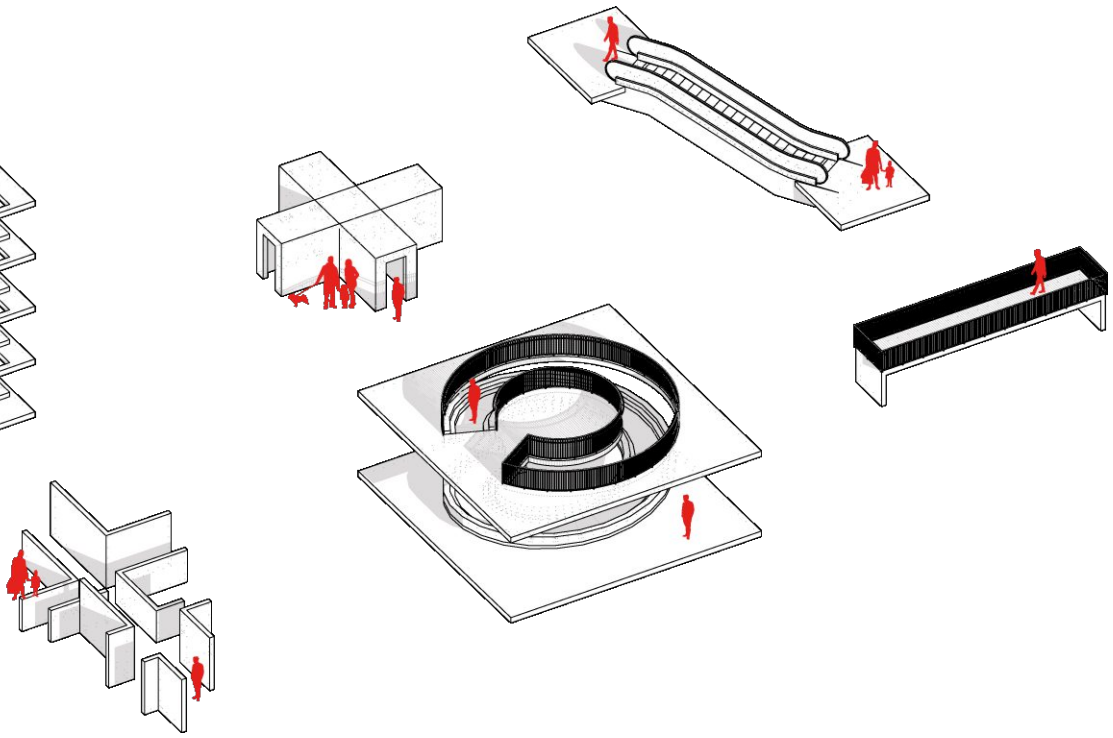


connecting through levels  
 connecting through hallways  
 connecting through viewpoints  
 connecting through elements

Fig. 41 Element Catalog - connecting

### 4.5.2 Moving

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moving through orthodox ways  
 moving through unorthodox ways

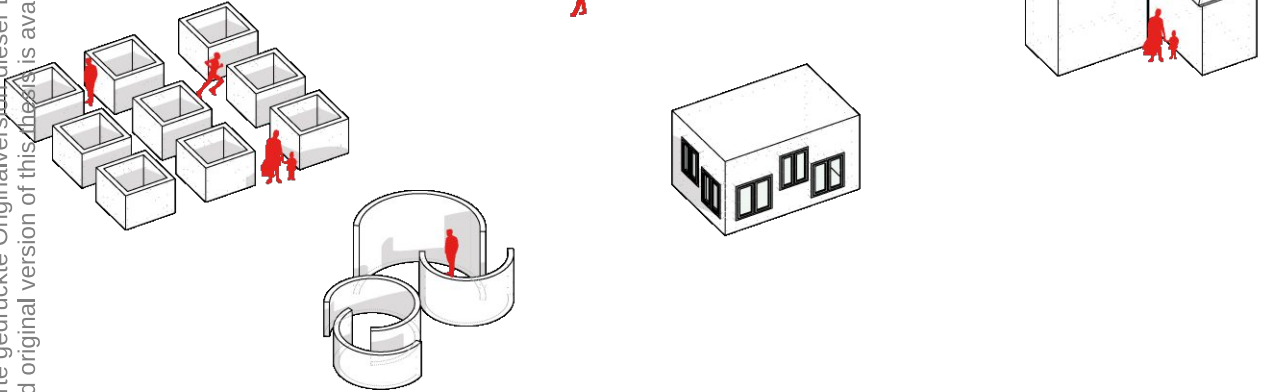
Fig. 42 Element Catalog - moving

### 4.5.3 Enclosing

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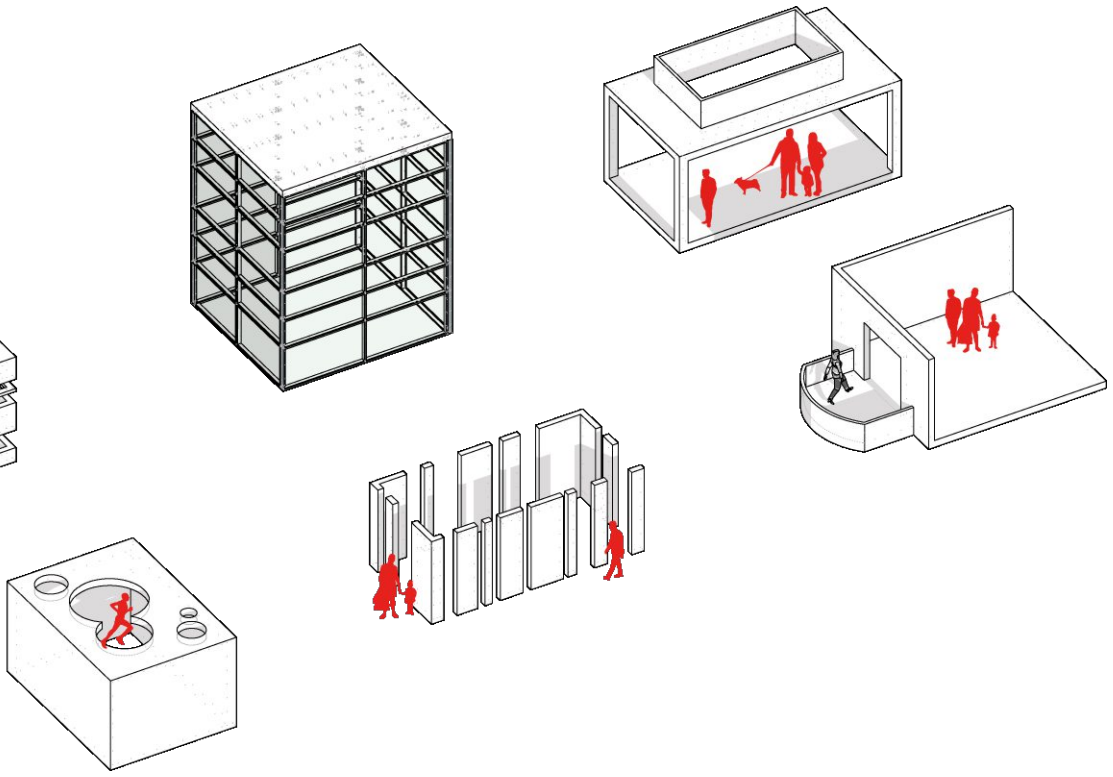


enclosing through opening  
enclosing through protecting  
enclosing through space

Fig. 43 Element Catalog - enclosing

### 4.5.4 Opening

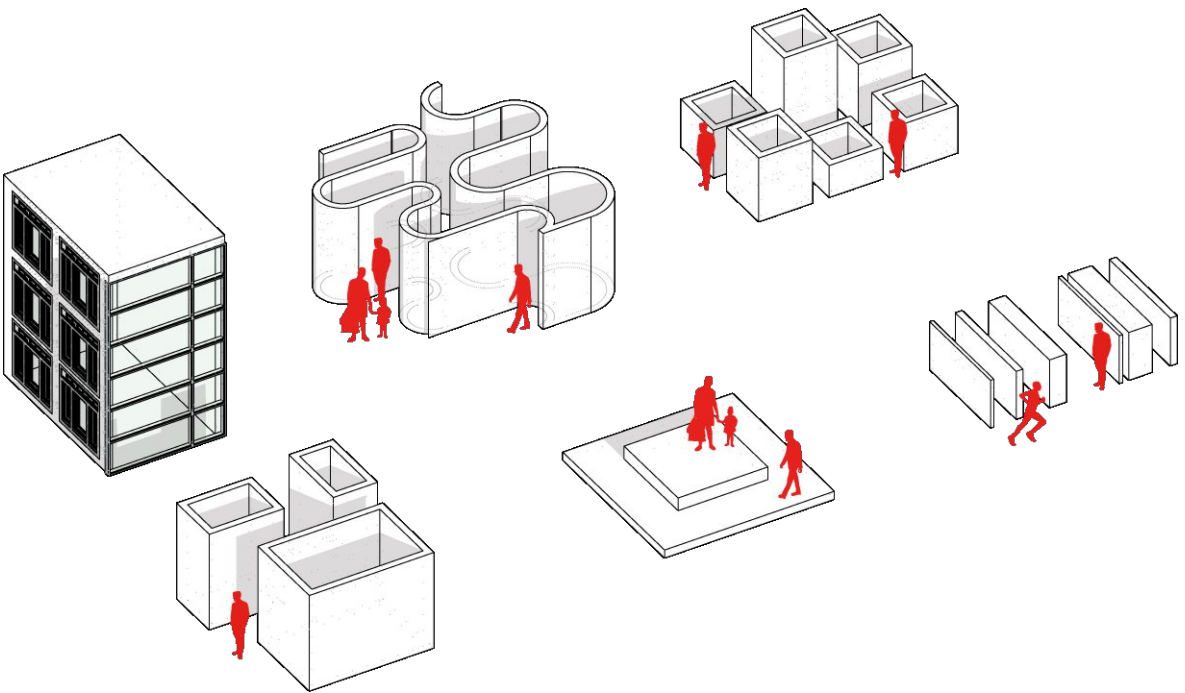
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opening through facade  
 opening through light  
 opening through movement  
 opening through shadow

Fig. 44 Element Catalog - opening

## 4.5.5 Differentiating



differentiating through height  
 differentiating through space  
 differentiating through openings  
 differentiating through movement

Fig. 45 Element Catalog - differentiating





# 5. THE DI

# DETAIL

## **5.1 Struga - Introduction to the city by the lake (and the river)**

### **5.2 Struga in statistics**

- 5.2.1 Population
- 5.2.2 Ethnicity
- 5.2.3 Age
- 5.2.4 Unemployment

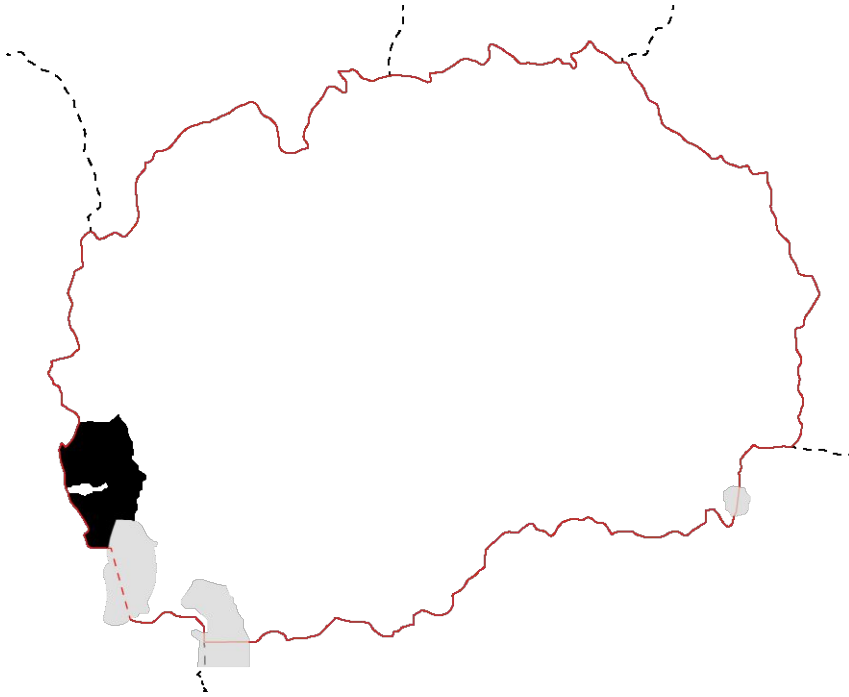
### **5.3 Struga in urban planning**

- 5.3.1 Functions and Attractions
- 5.3.2 Connections
- 5.3.3 Plot Placement

### **5.4 The Plot**

- 5.4.1 Functions and Attractions
- 5.4.2 Connections
- 5.4.3 Height and Topography
- 5.4.4 Grid System

### **5.5 City Guidelines**



**Fig. 46** Map of Macedonia, highlighting the city of Struga

## 5.1 Struga - introduction to the city by the lake (and the river)

The municipality of Struga is made up of the city of Struga and fifty neighboring villages. Struga borders the country of Albania and Vevcani Municipality (North Macedonia) to the west, Debarca and Centar Zupa Municipality to the east and north, and Lake Ohrid to the south. Lake Ohrid is one of the oldest and deepest lakes in Europe, which has made the city especially attractive to tourism throughout the years. One of the most impressive geographical properties is the Blak Drin River, which runs through the lake and divides the city into two parts. With a rich history dating back to ancient times, this region has always had turbulent times and societal changes. The name Struga is believed to stem from an Albanian and Romanian word, while the name Enchalon was the name of the ancient city, most probably coming from the ancient Greek word for eel (during the summer, there can still be found eels in the city, but in a lower quantity). While the city cannot be thoroughly researched without keeping in mind the villages that make up more than 70% of the population of the municipality, this research will focus mainly on the city of Struga while also incorporating the villages with their characteristics and needs. With many important facts that will be discussed in the following chapter, one of its main characteristics is its culture.

The main cultural event are the Struga Poetry Evenings, which are held every summer and award the main poets and authors from all around the world while also giving a boom to the social life that is mostly empty throughout the year.

## 5.2.1 Municipality of Struga - Composition

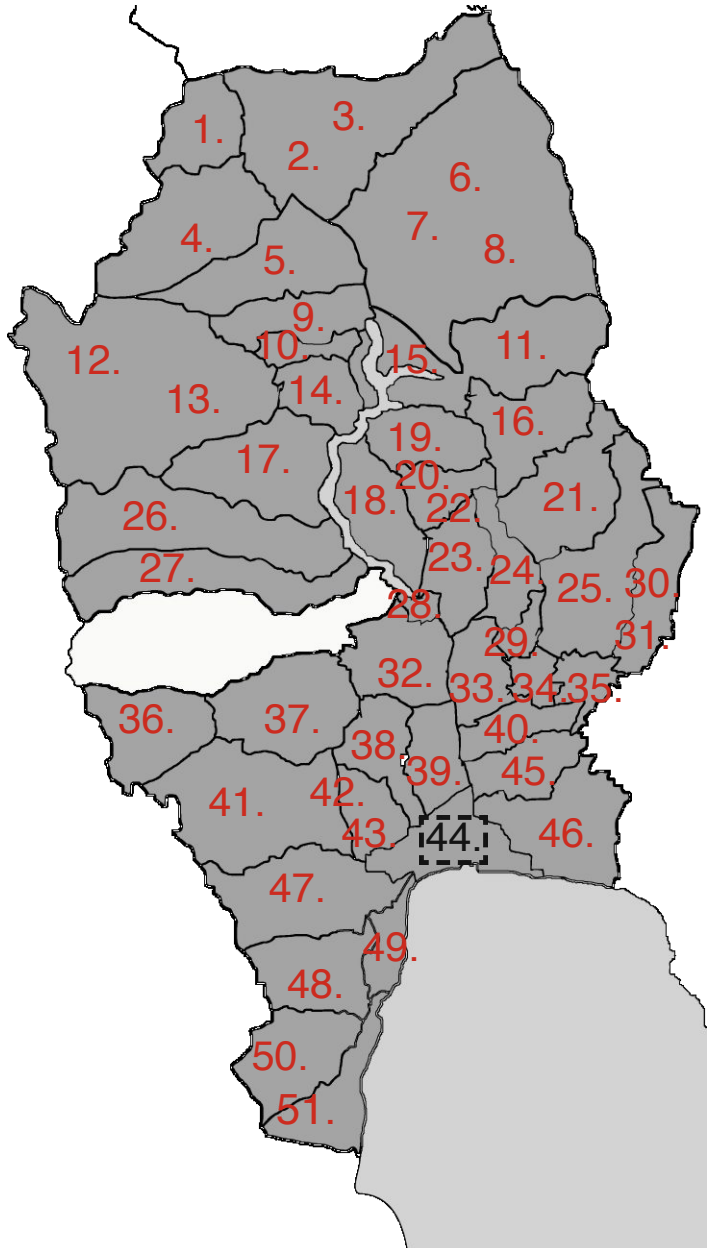


Fig. 47 Map of Municipality of Struga

- |                  |               |
|------------------|---------------|
| 1. Drenok        | 27. Podgorci  |
| 2. Burinec       | 28. Dobovjani |
| 3. Selci         | 29. Novo Selo |
| 4. Modric        | 30. Korosista |
| 5. Lukovo        | 31. Zepin     |
| 6. Rzanovo       | 32. Velesta   |
| 7. Lokov         | 33. Lozani    |
| 8. Zbazdi        | 34. Bidzevo   |
| 9. Nerezi        | 35. Livada    |
| 10. Bezovo       | 36. G. Belica |
| 11. Prisovjani   | 37. Oktisi    |
| 12. Lakaica      | 38. D. Belica |
| 13. Jablanica    | 39. Vranista  |
| 14. Piskupstina  | 40. Draslajca |
| 15. Globocica    | 41. Visni     |
| 16. Mislodezda   | 42. Zagracani |
| 17. Borovec      | 43. Sum       |
| 18. Tasmarunista | 44. Struga    |
| 19. Brcevo       | 45. Moroista  |
| 20. Bogojci      | 46. Misesovo  |
| 21. Poum         | 47. Radolista |
| 22. Toska        | 48. Frangovo  |
| 23. G. Tatesi    | 49. Kalista   |
| 24. D. Tatesi    | 50. Mali Vlaj |
| 25. Delogozdi    | 51. Radozda   |
| 26. Labunista    |               |

**63.376**  
inhabitants

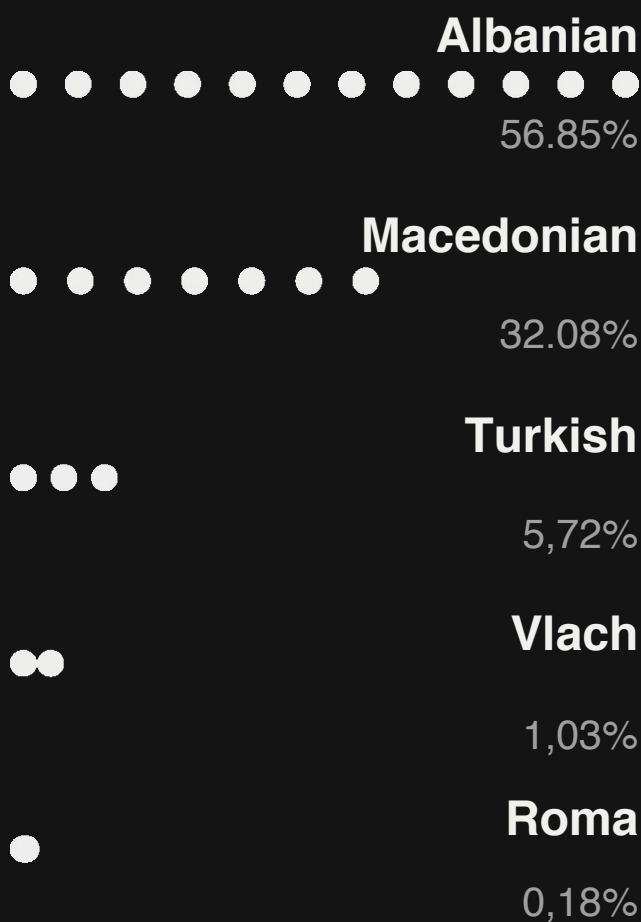
**16.559**  
city

**46.817**  
villages

The villages of Struga make up more than 70% of the population of the municipality. While they are not fully populated during the whole year, the major influx into the city comes from the working force out of the villages. The last census showed a slow increase, while the estimates of the last year show, similar to the whole country, that a decrease is on its way, with a major wave of immigration. The villages situated on the mountains are slowly becoming inexistent, while the ones near the city of Struga still have decent populations. Even though there are 50 villages, none are further away from the city of Struga than 30 minutes, and that is why almost everybody who is economically active works in the city.

## 5.2.2 Struga in statistics - Ethnicity

The municipality and the city of Struga have both a very similar composition of different ethnicities, with Albanians making up the majority. The villages, unlike the city, are either predominantly Albanian or Macedonian; only a small part of them have mixed ethnicities living in them. Ignoring specific cases, multiethnic tolerance is clear in the municipality.



### 5.2.3 Struga in statistics - Age

The majority of the municipality is made up of younger people, mostly between the ages of 14 and 24. Though the estimates for 2021 show a decline in this statistic, a great majority of younger people are immigrating to German-speaking countries. In comparison to the country's average, there are more youth in the city.

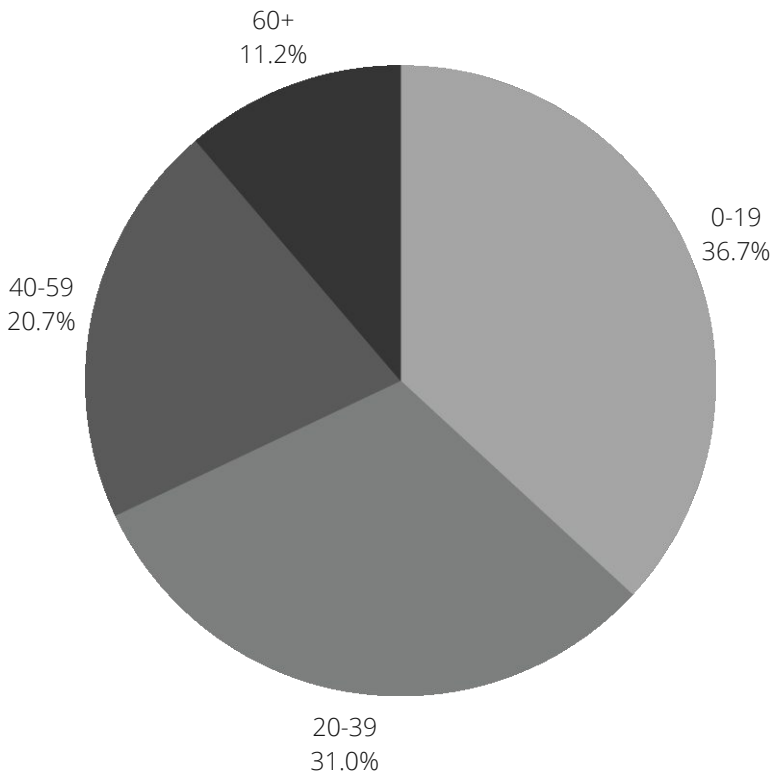


Fig. 48 Statistics of Struga, Age



## 5.2.4 Struga in statistics - Age

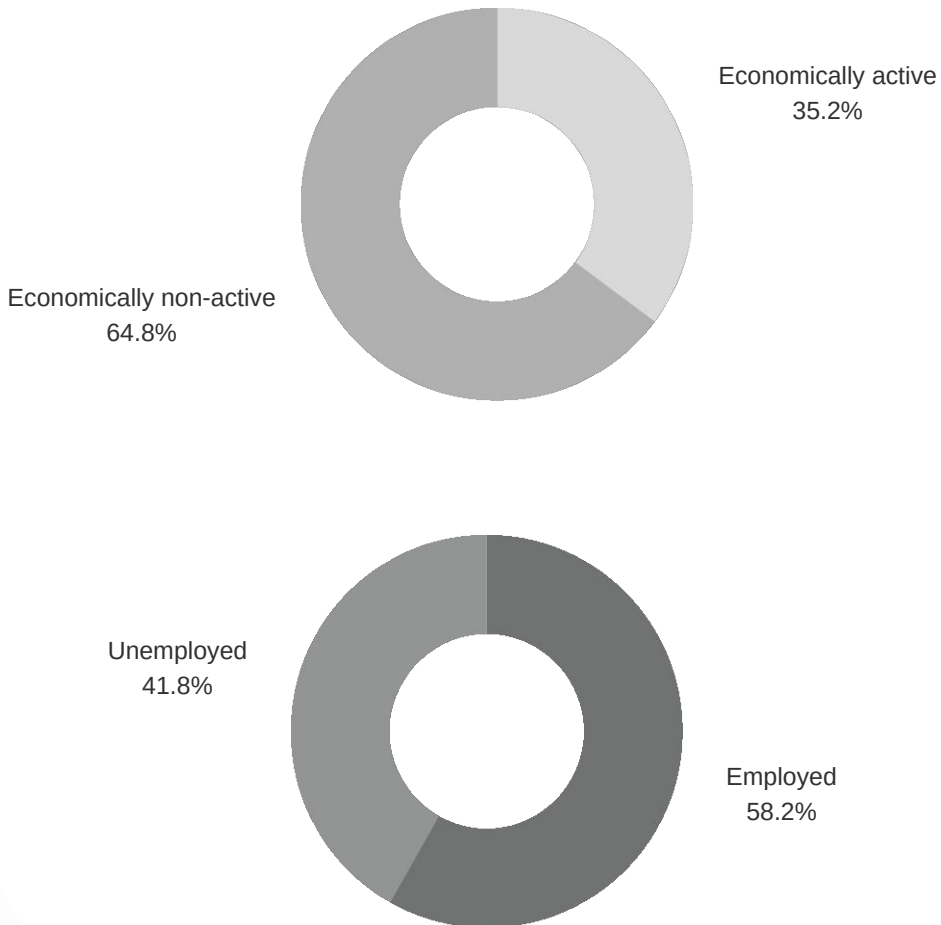


Fig. 49 Statistics of Struga, Employment Rate

In comparison to the average of the country, the Municipality of Struga has a much higher percentage of economically non-active and unemployed people, which in turn corresponds to a higher migration rate due to people seeking employment outside the country.



**Fig. 50** Photos from the current state of the city of Struga show the Drim Lake, dividing the city into two parts with the newer buildings, filling out most of the skyline of the city, own photo, June 2022



**Fig. 51** Photo showing the older buildings that were renovated after the 2000's, June 2022

THE DETAIL



Fig. 52, 53 Older pictures of Struga, showing the architecture, traditional to the area, [www.struga.org](http://www.struga.org)



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Fig. 54, 55 The actual state of architecture found in Struga nowadays, own photo app. End of 2022



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### 5.3.1 Urban Planning - Functions

- 1 Bus Station    5 Shopping Center    9 Municipality Building    13 Football Stadium    17 Sports Complex
- 2 High School    6 Park Mother Teresa    10 Youth Centrum    14 Central Park    18 Kayak Club
- 3 Hospital    7 Market Place    11 Secondary School    15 Swimming School    19 Poetry Bridge
- 4 Lake Black Drim    8 Cultural Center    12 Hotel    16 Lake Ohrid    20 Poetry Park

Fig. 57 Urban Plan showing the most important functions of the city of Struga

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### 5.3.2 Urban Planning - Connections

- - - National Road
- - - Regional Road
- Main City Street
- Corso - walking promenade
- - - Connecting Bridges
- - - Walkways

Fig. 56 Urban Plan of Connections in the City of Struga



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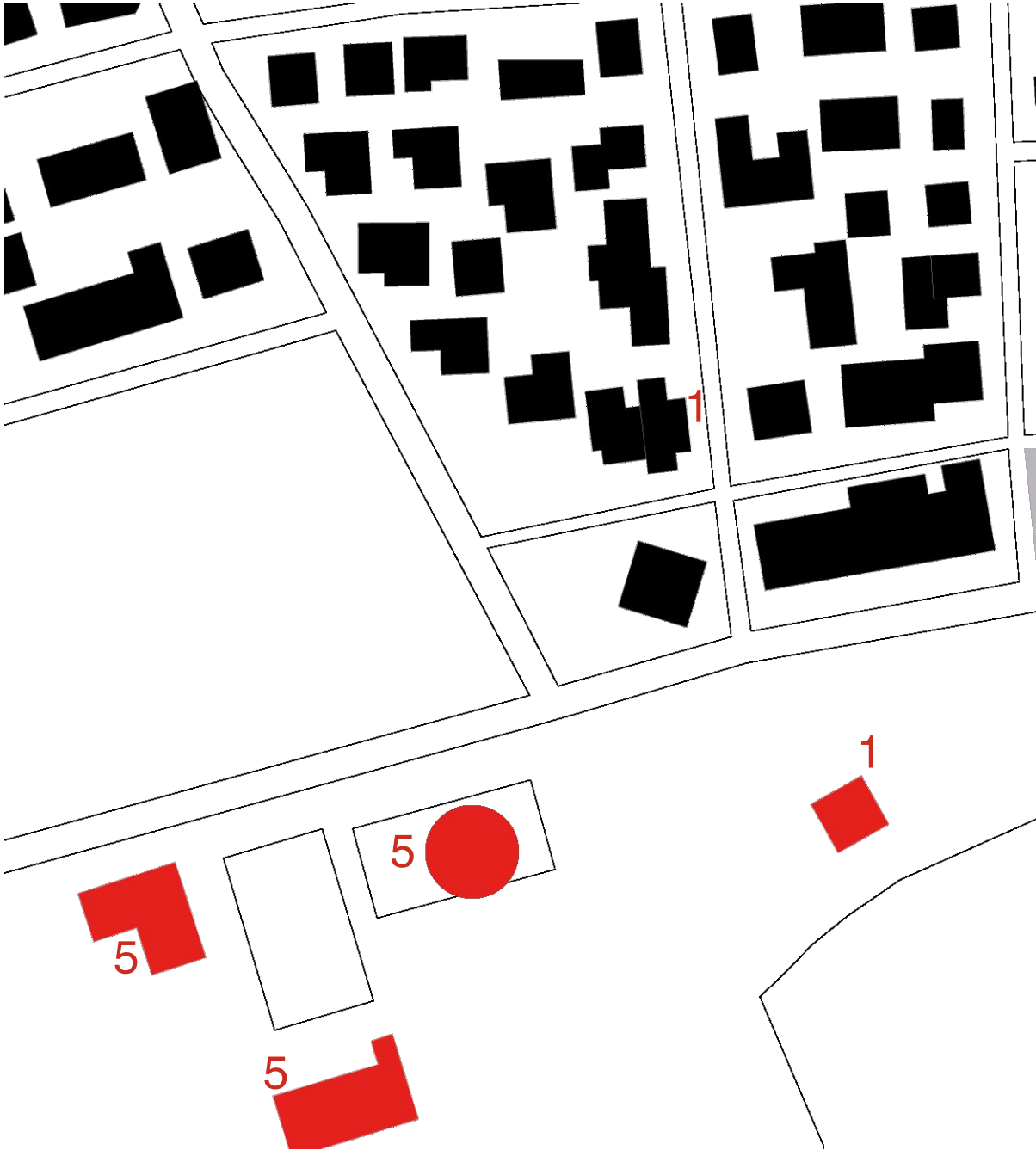
Fig. 58 Definition of the plot

### 5.3.3 Plot definition

After the research of the city, its connections and functions scattered seemingly haphazardly, a plot was chosen as a place that connects many of the until now mentioned characteristics. The plot has been left open and unused for the last decade, without any function, by the municipality. As with many places around the city, there are problems with the ownership of the plot. In the next part, the surroundings of the plot will be researched to better support the design process. One of the main objectives is to work with neighboring functions and not clash with the structure of the city.

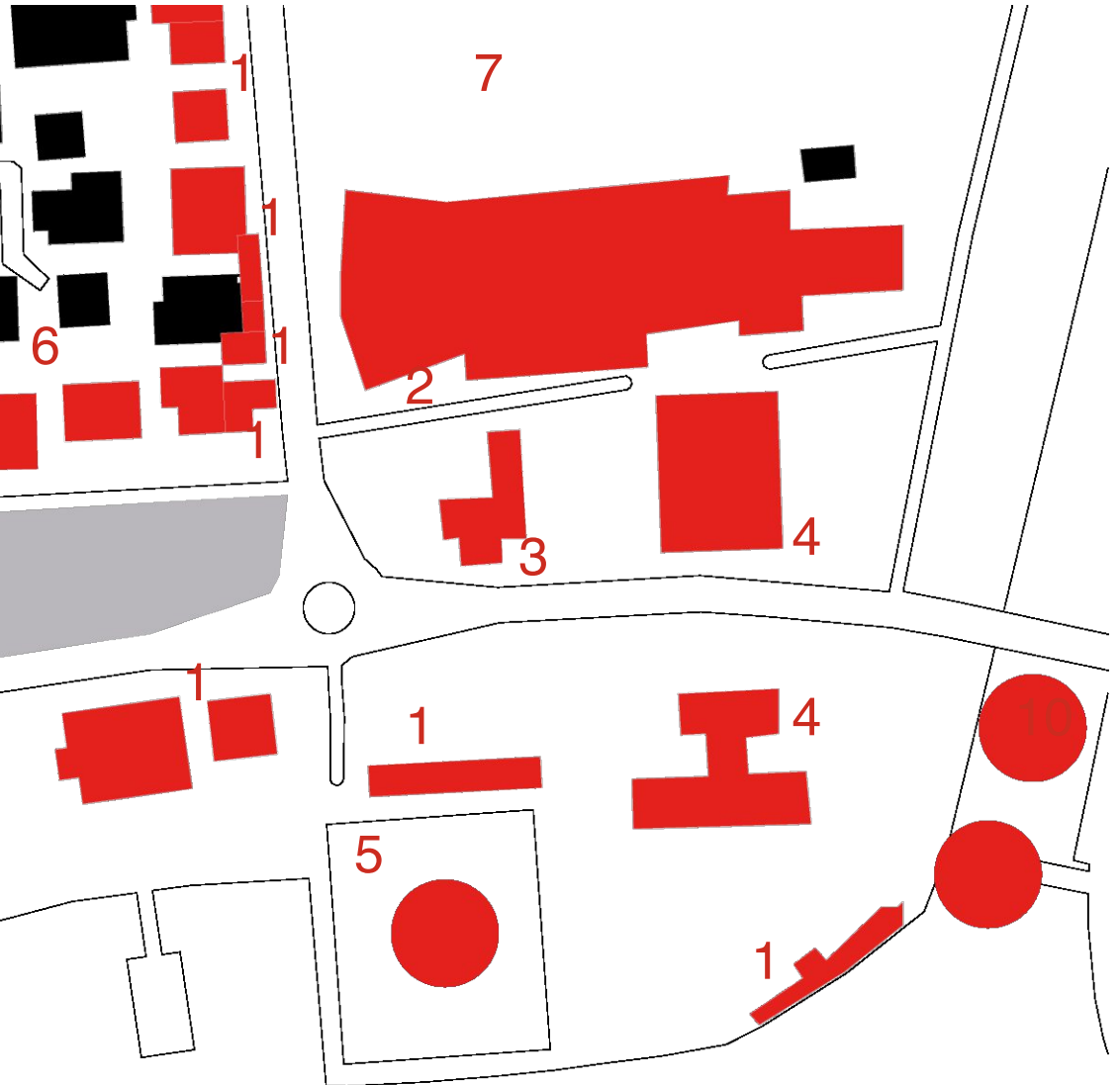


### 5.4.1 Plot Analysis: Functions



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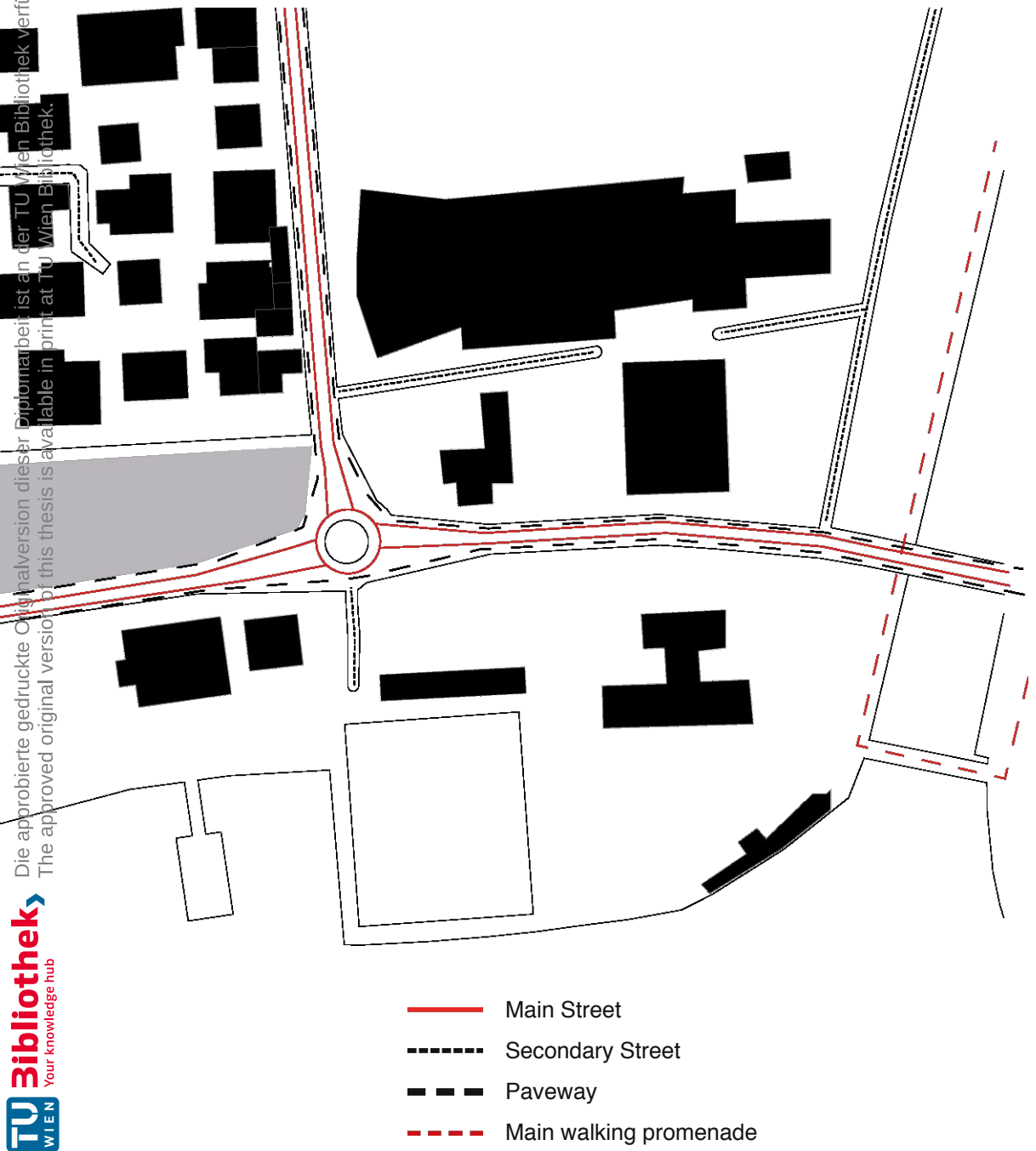
- |   |                       |    |        |
|---|-----------------------|----|--------|
| 1 | Cafe, Restaurant      | 6  | Houses |
| 2 | Cultural Center       | 7  | Park   |
| 3 | School                | 8  | Beach  |
| 4 | Municipality Building | 9  | Lake   |
| 5 | Sport Venue           | 10 | River  |

**Fig. 59** Functions near the plot

### 5.4.2 Plot Analysis: Connections



THE DETAIL



**Fig. 60** Connection research of the plot

### 5.4.3 Plot Analysis: Topography

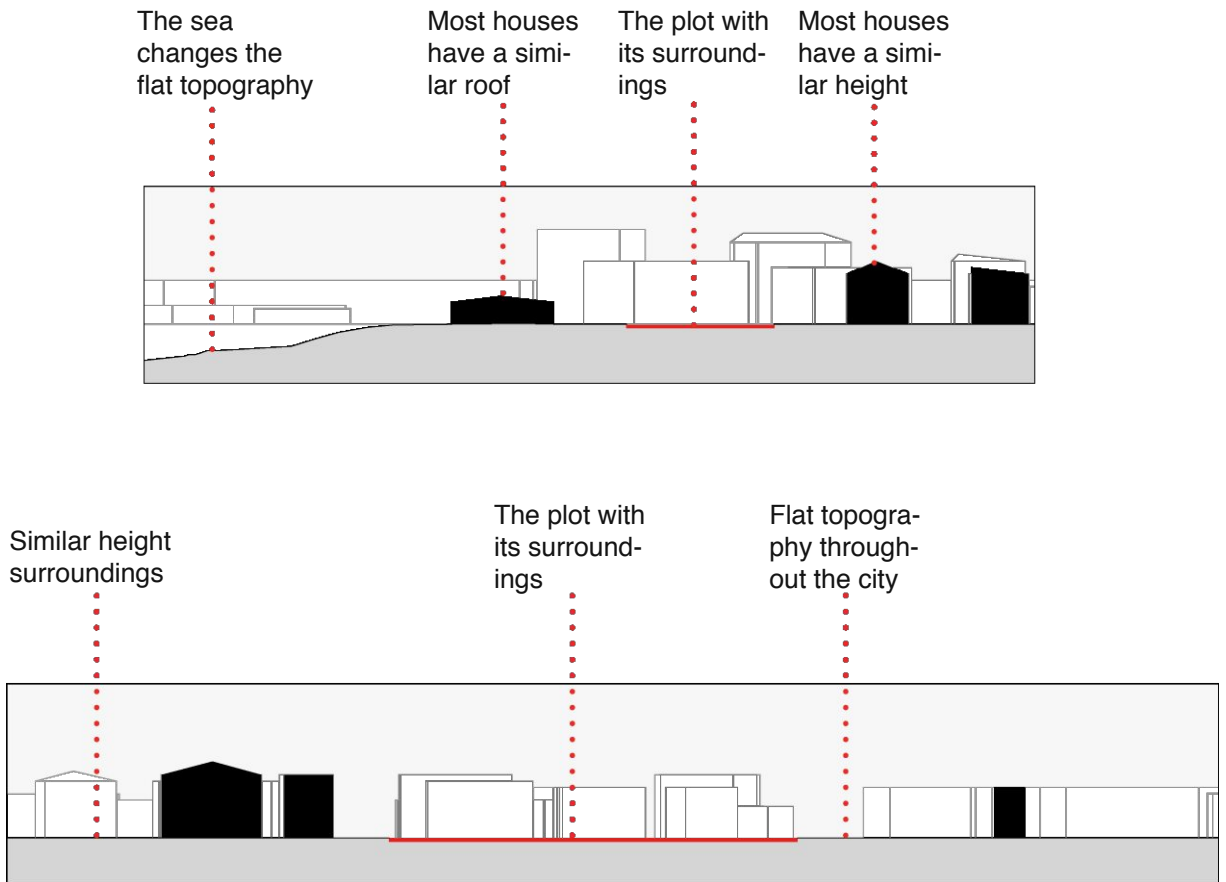


Fig. 61 Section explaining the topography

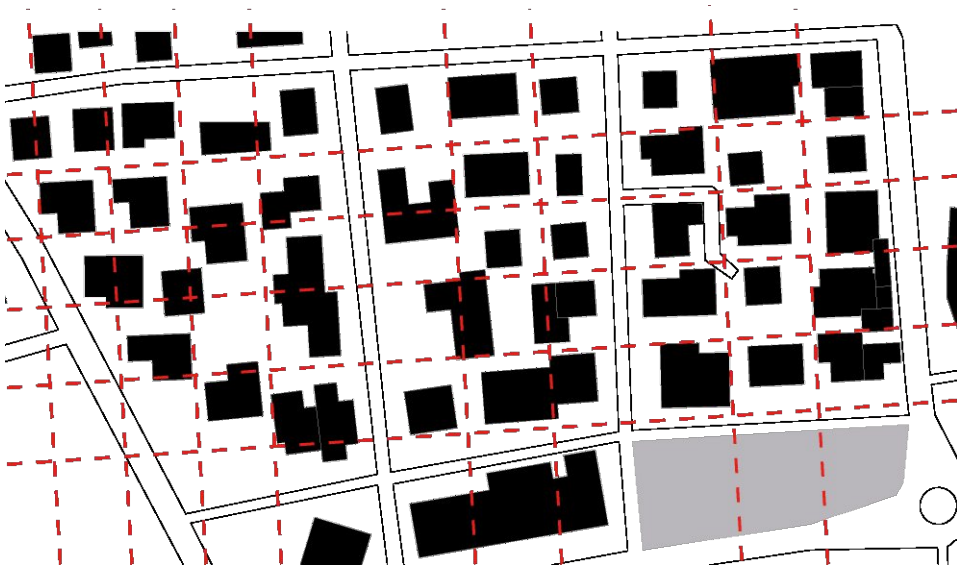
The general surrounding houses are all of similar height, with approximately three stories and slated rooftops with traditional tiles. The only exceptions are the buildings housing different functions: the brutalist cultural center, the traditional architectonic hotel, or

the old secondary school building. These still have similar materials and heights but are different in their size and placement. The sea and the lake nearby change the seemingly flat topography of the city.

### 5.4.4 Plot analysis - Grid System



**Fig. 62** Old urban plan of Struga (app. 1913), Mulickovski P., 2002



The city of Struga has had a complex, but rather typical of ex-Yugoslavian cities, development of its urban planning from the last century until today. The authentic, still not destroyed, part of the center shows a density and unrational planing only found in specific

older parts of the city, while the other part, despite major changes in the last two decades, shows typical Yugoslavian spatial planing with a grid structure that is still visible near the plot.



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Fig. 63, 64, 65, 66 Examples of the plot and its surrounding space, own photos



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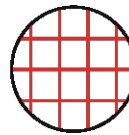
## 5.5 City Guidelines

The research of the city, its surroundings, statistics, spatial planning, and the plots in the neighborhood have been put into categories as a guideline for parameters. These are each backed up by examples and research, especially the plot, and aim to help

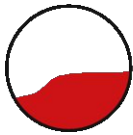
the concept-building stage of the next chapter. These, in connection with the parameters summarized by the house biographies and the elements catalog, are the basis of the next chapter.



HEIGHT



GRID  
SYSTEM



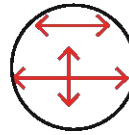
TOPOGRA-  
PHY



VIEW TO  
THE LAKE



FUNCTIONS



CONNEC-  
TION



MULTI  
CULTURAL



EMPLOY-  
MENT



# 6. THE DI

# DESIGN

**6.1 House Biography - possible outcomes**

**6.2 House Biography - the process**

**6.3 Concept documentation**

6.3.1 Overview

6.3.2 Axonometries and Plan

**6.4 Concept explanation**

6.4.1 Connection

6.4.2 Function

6.4.3 Participation

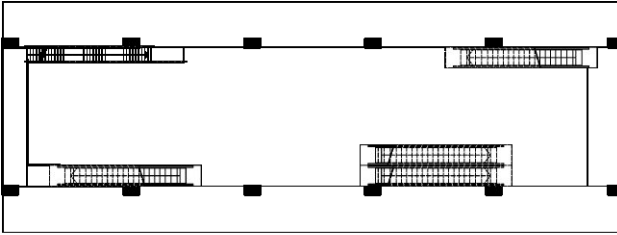
6.4.4 Distinction

**6.5 Elevations, Sections and Perspectives**

**6.6 Conclusion**

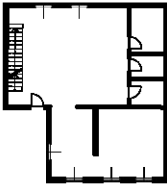
## 6.1 House Biographies - Outcomes

1



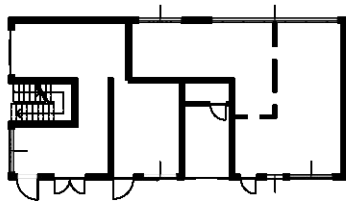
A mixed-use building with a passage and bridges that connect different functions. There are multiple ways of moving through the building.

2



A house shared with a traditionally larger family, with three floors and many balconies and bay windows.

3



A building with shared spaces for shops, cafes, and offices, with constant changes to its structures throughout the years.

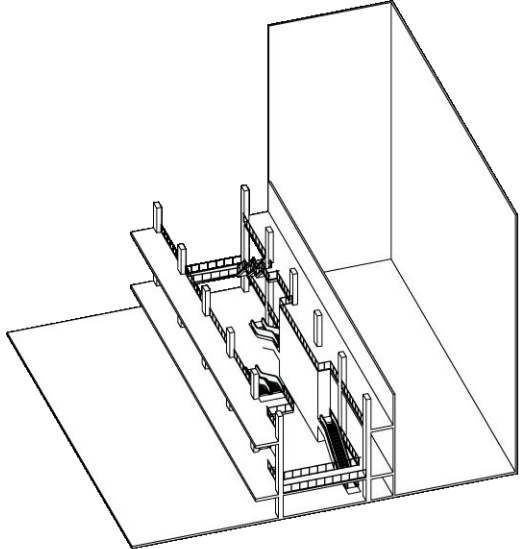
**Fig. 67** House Biography Examples

Through the research, six types of buildings with different characteristics were picked, which helped with the concept building. Each of these buildings had different materials used, housed different functions, and had a different history from different eras.

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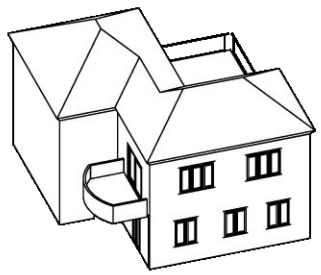


1



PASSAGE  
MARKET  
CAFE  
OFFICES

2



PRIVATE  
HOUSING

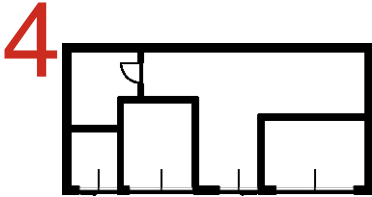
3



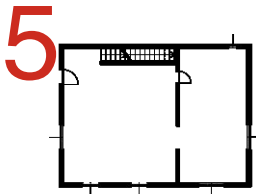
OFFICES  
SHOPPING  
PUBLIC  
PASSAGE



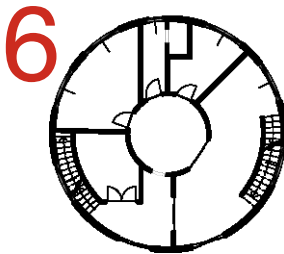
## 6.1 House Biographies - Outcomes



A hotel with a fully glassed facade and mainly imported materials, housing different functions.

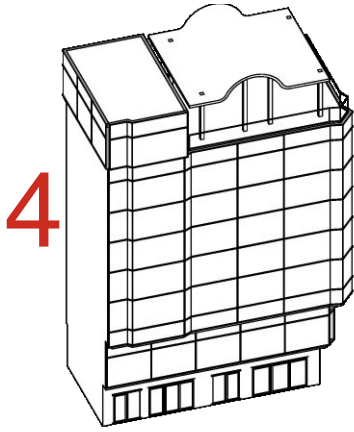


A house used by only one family with only two floors and many balconies and changes through the years. Typically traditional architectural style.

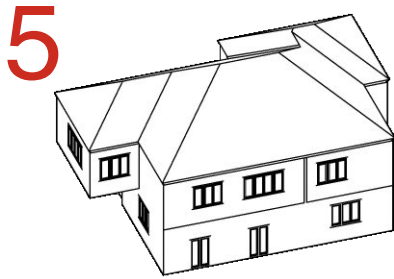


A shopping center with many mixed-use spaces and an eccentric group of elements—shapes, windows, doors, and stairs.

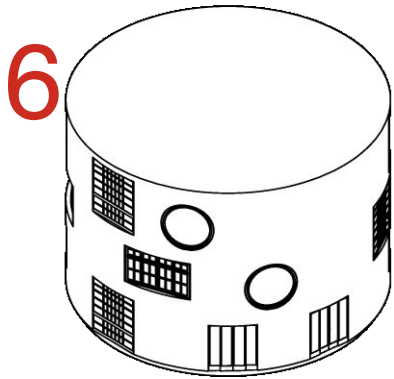
**Fig. 67** House Biography Examples



HOTEL  
SHOPPING  
OFFICES



PRIVATE  
HOUSING



SHOPPING  
OFFICES  
PUBLIC

Fig. 67 House Biography Examples

## 6.1 House Biographies - Outcomes

The six buildings are put in different possible scenarios to create spaces that house different functions, keeping in mind the city structure and its social characters. The multiple outcomes are incorporated with the element catalog developed during the research to create a building fit for the specific spatial plan of the city of Struga. The western knowledge, connected with the authentic elements from this area and the usage of local materials, creates one of many outcomes of this concept. The neighboring urban grid system has been continued onto the plot, helping with the different outcomes of the construction of the project, including the other parameters from the city's research.

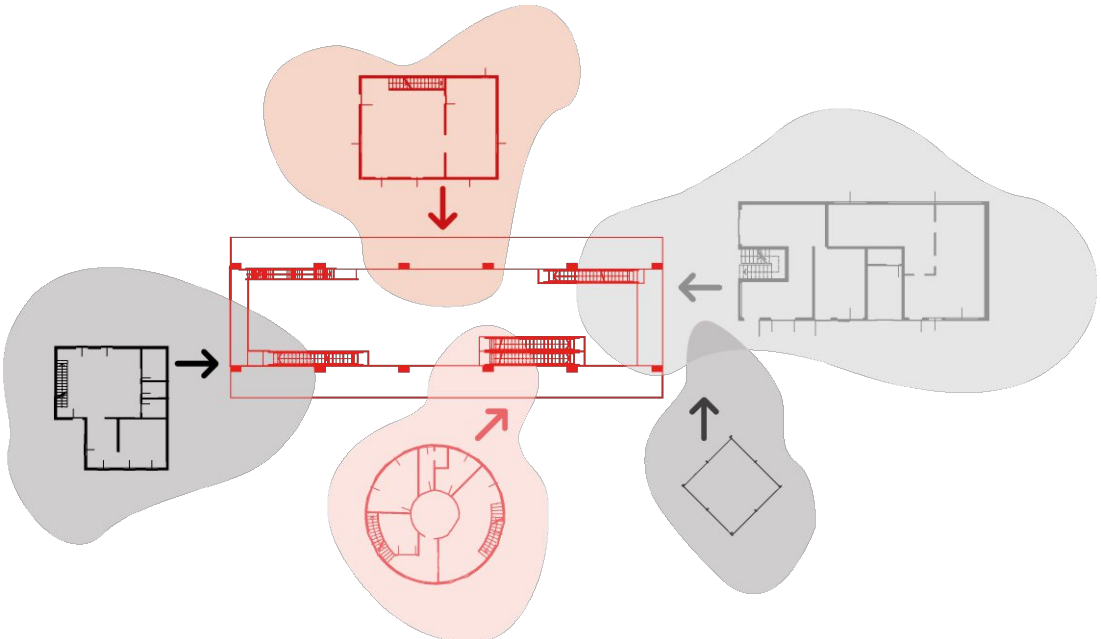
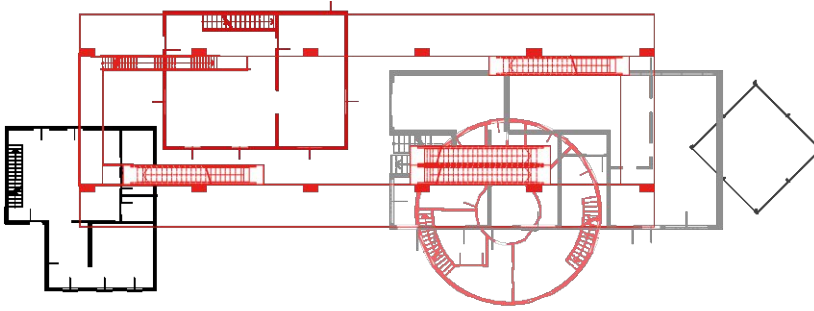


Fig. 68 House Biography Examples, different outcomes

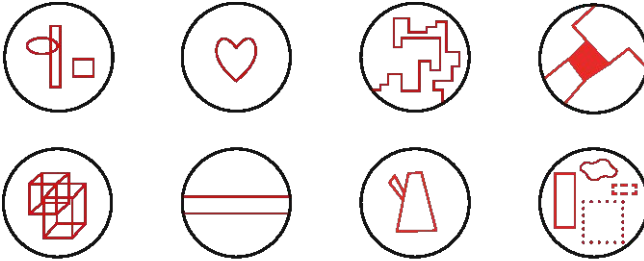
**different outcomes**

**STEP 1**



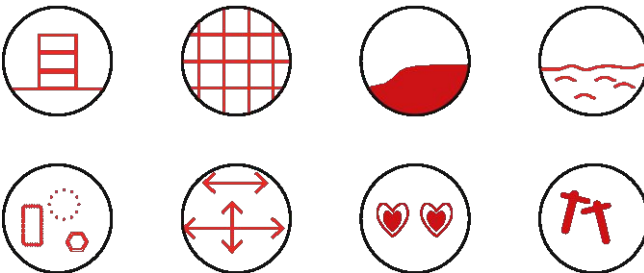
**house biographies**

**STEP 2**

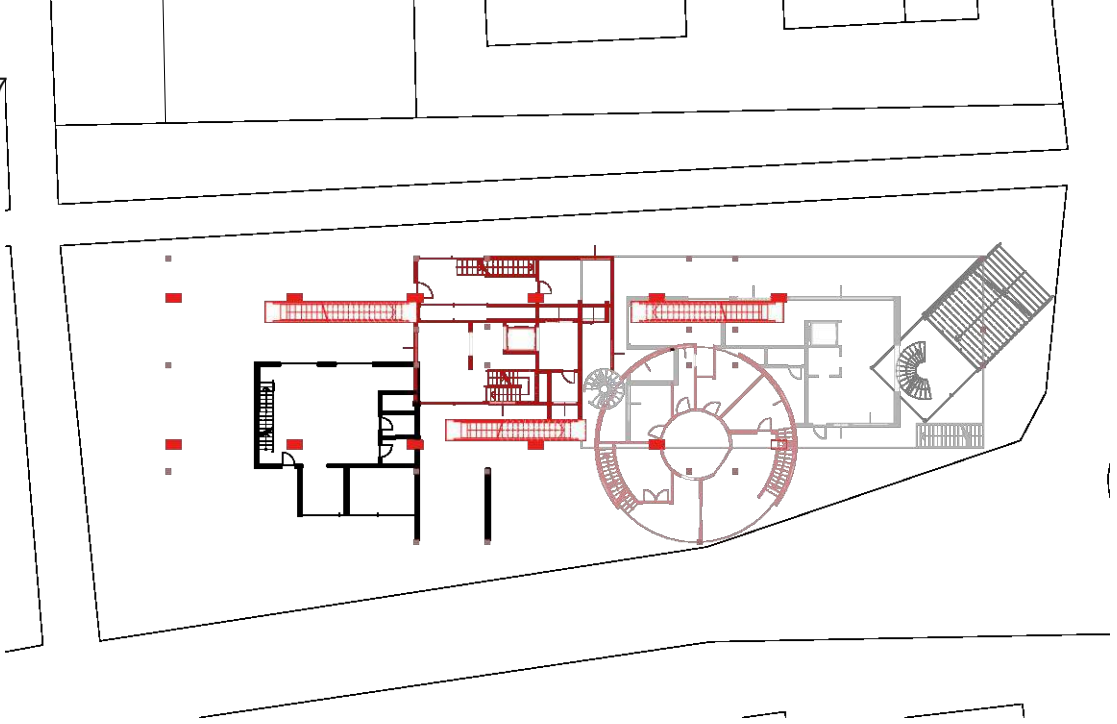


**city guidelines**

**STEP 3**



The six examples are woven into each other to create new spaces. The initial placement is very one-dimensional and does not account for the whole assembly. (Step 1) The next step takes into account the spaces created without their placement in the plot. (Step 2) The last step takes into consideration the parameters of the city and the neighborhood, with the goal of creating a fitting building in the city.



The next step is the initial placement of the composition of the house biographies in the plot, without taking into consideration the parameters of Steps 2 and 3.

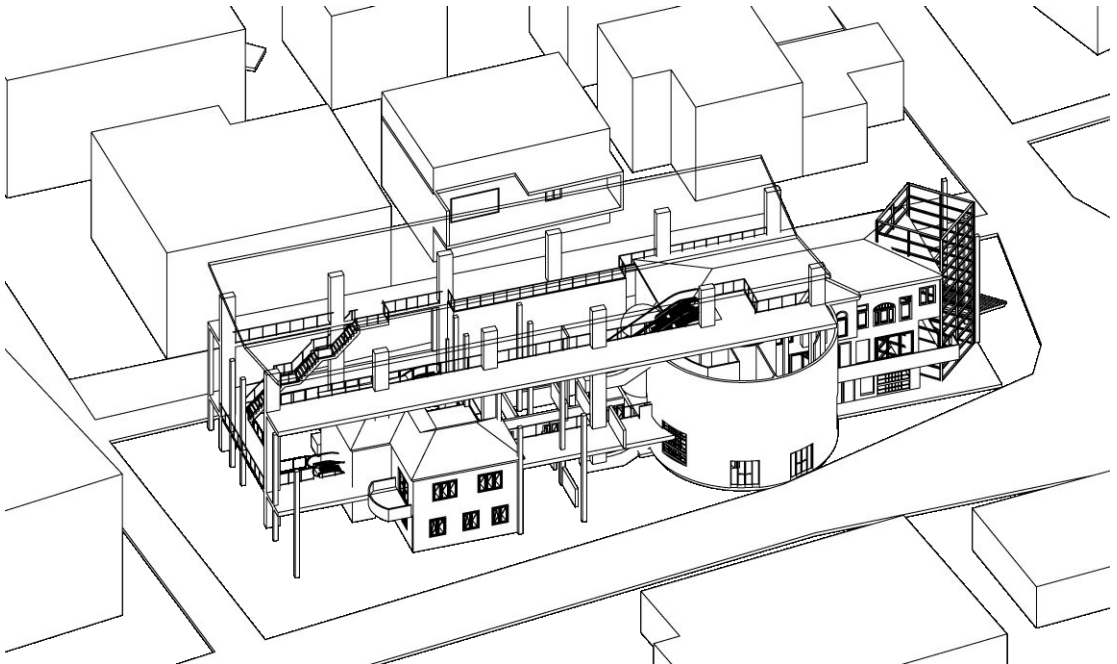
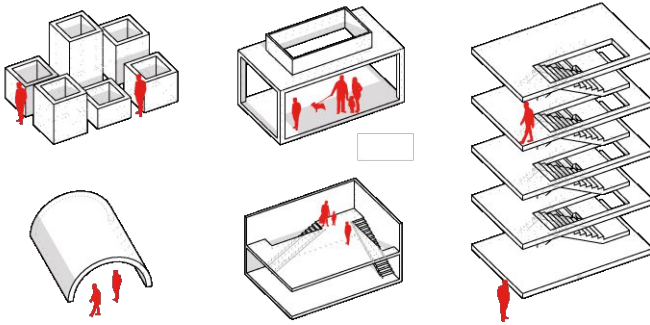
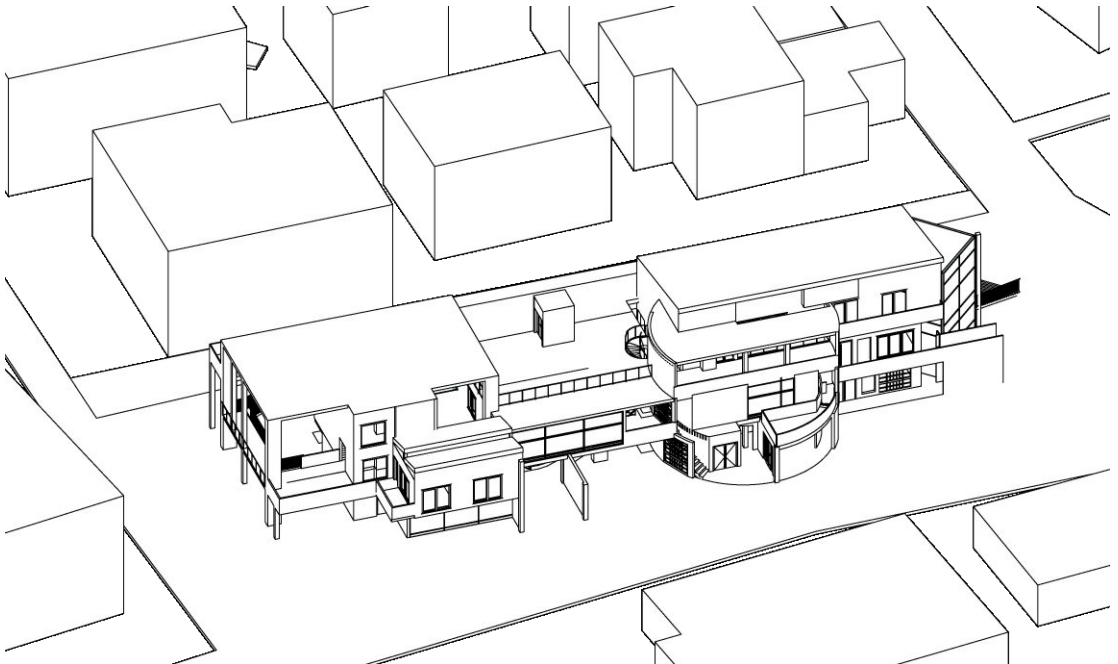


Fig. 69 Axonometries of the possible outcomes of the house biographies

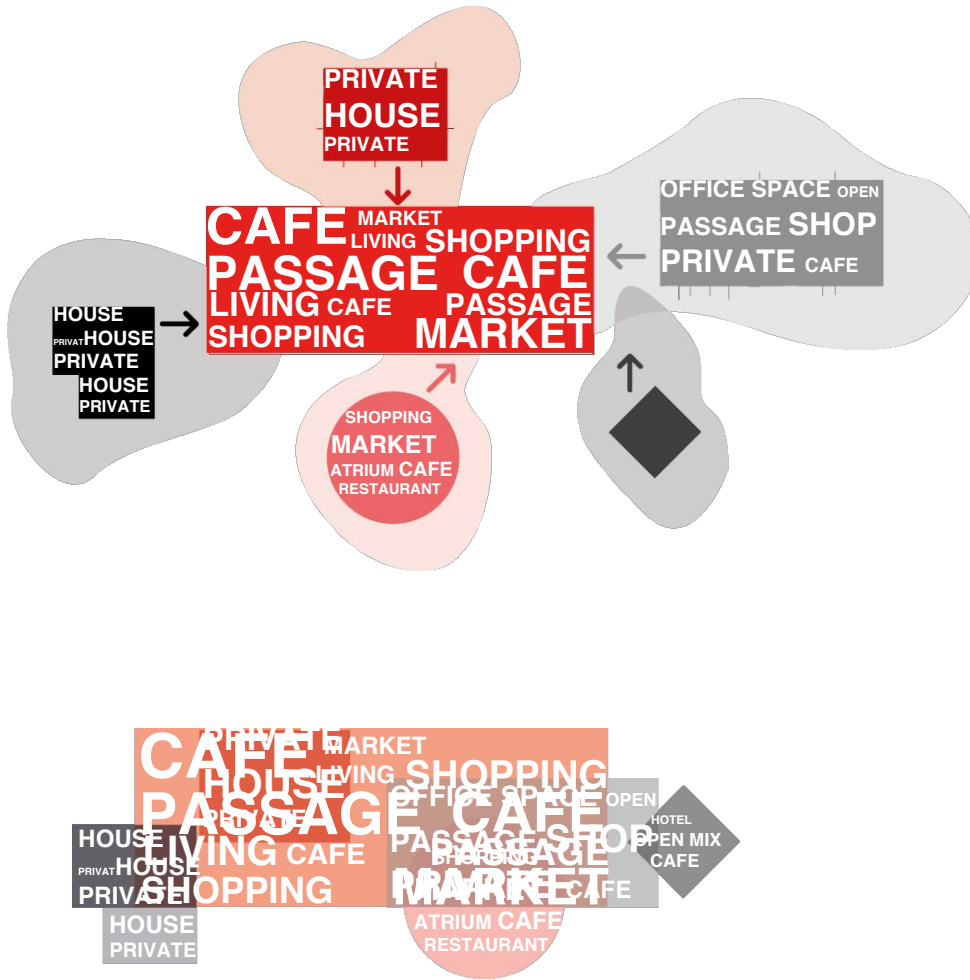
# STEP 4



The addition of the elements catalog helps to further explore the possibilities, the spaces that can be created, and the functions that they can house.



**STEP 5**

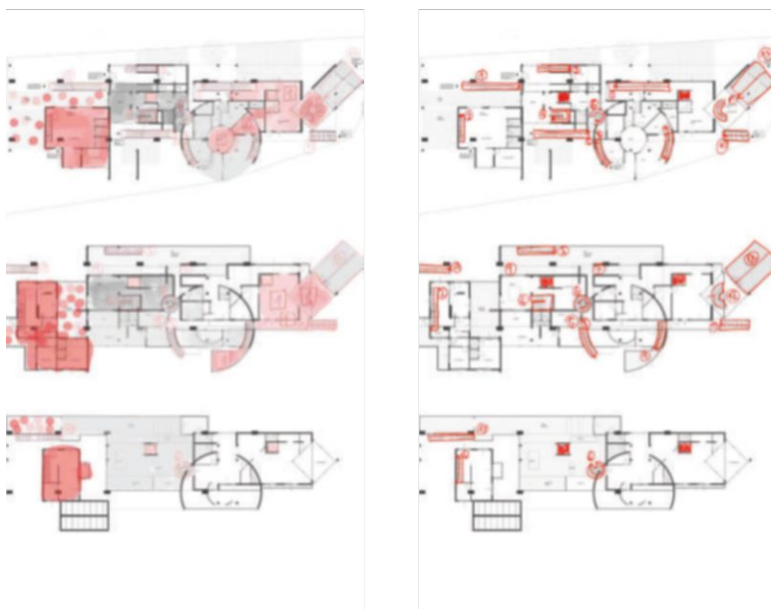
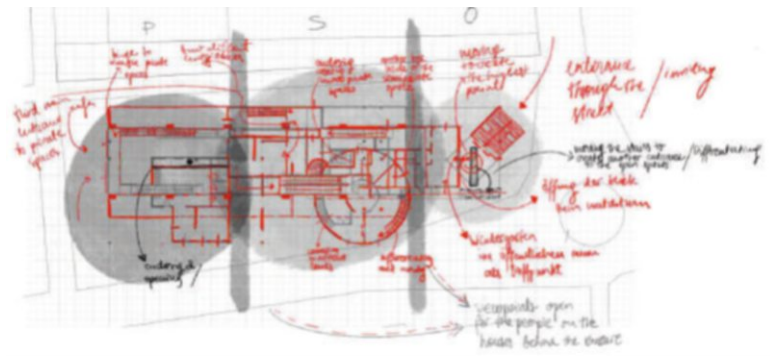


**Fig. 70** Functional illustration of the different outcomes of the house biographies

The last step is the one where the functions of the case studies are put identical to Step 1, to see how not only these structures work with each other but also how their functions can interact with each other.

## 6.2 House Biographies - The process

The concept was created following the steps mentioned, with the city and all the parameters in mind. The following illustrations aim to show the complex and rather chaotic process of creating an appropriate building that fits into the city structure. A complex space that is also adaptable, if in the future changes are done to it, is typical of the surrounding existing buildings.



THE DESIGN



### 6.3.1 Overview

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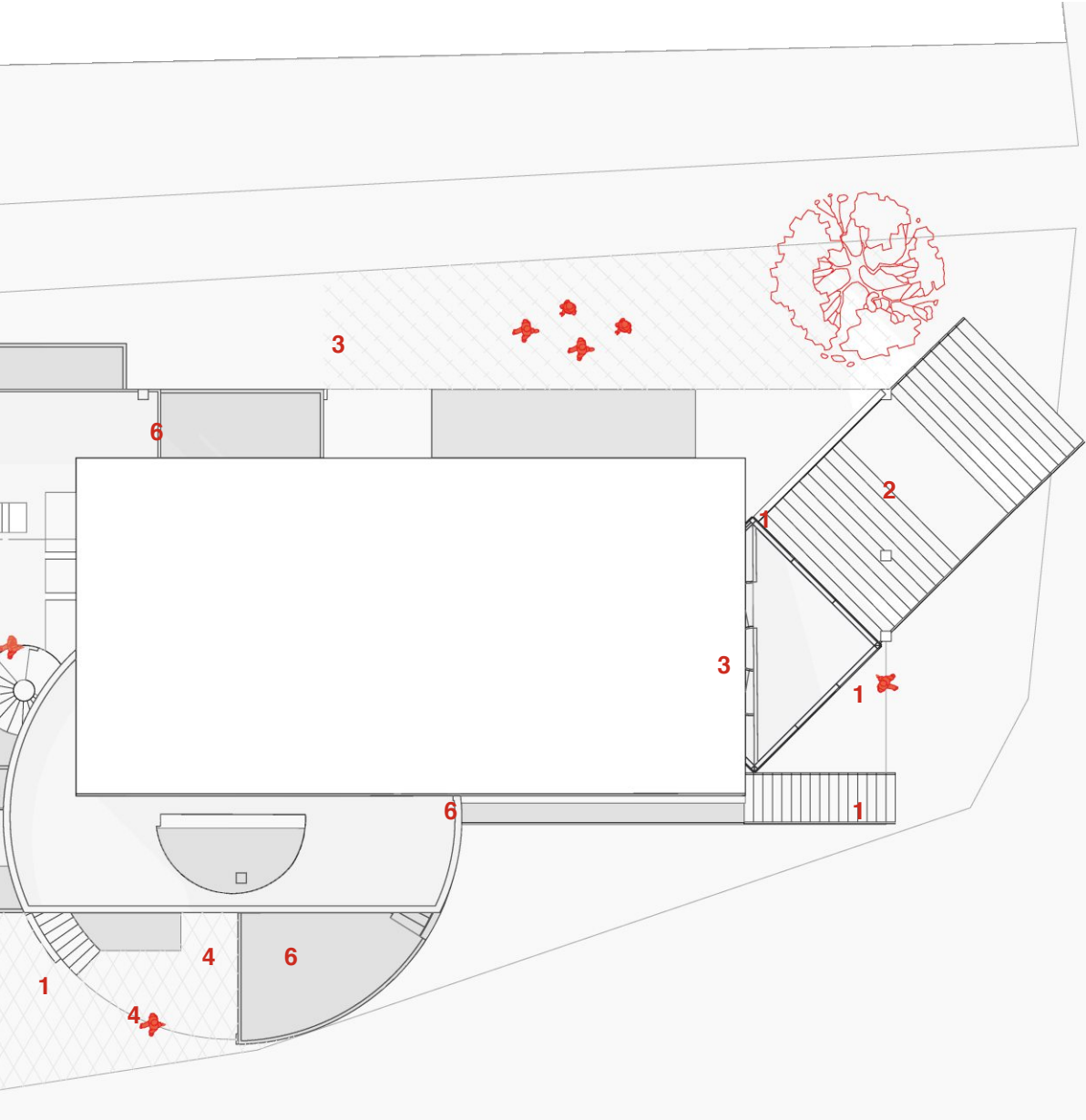


Fig. 71 Overview of the building

- |   |                    |
|---|--------------------|
| 1 | Possible entrances |
| 2 | Public space       |
| 3 | Semi-public space  |
| 4 | Cafe/Restaurant    |
| 5 | Drop-off zone      |
| 6 | Terraces           |

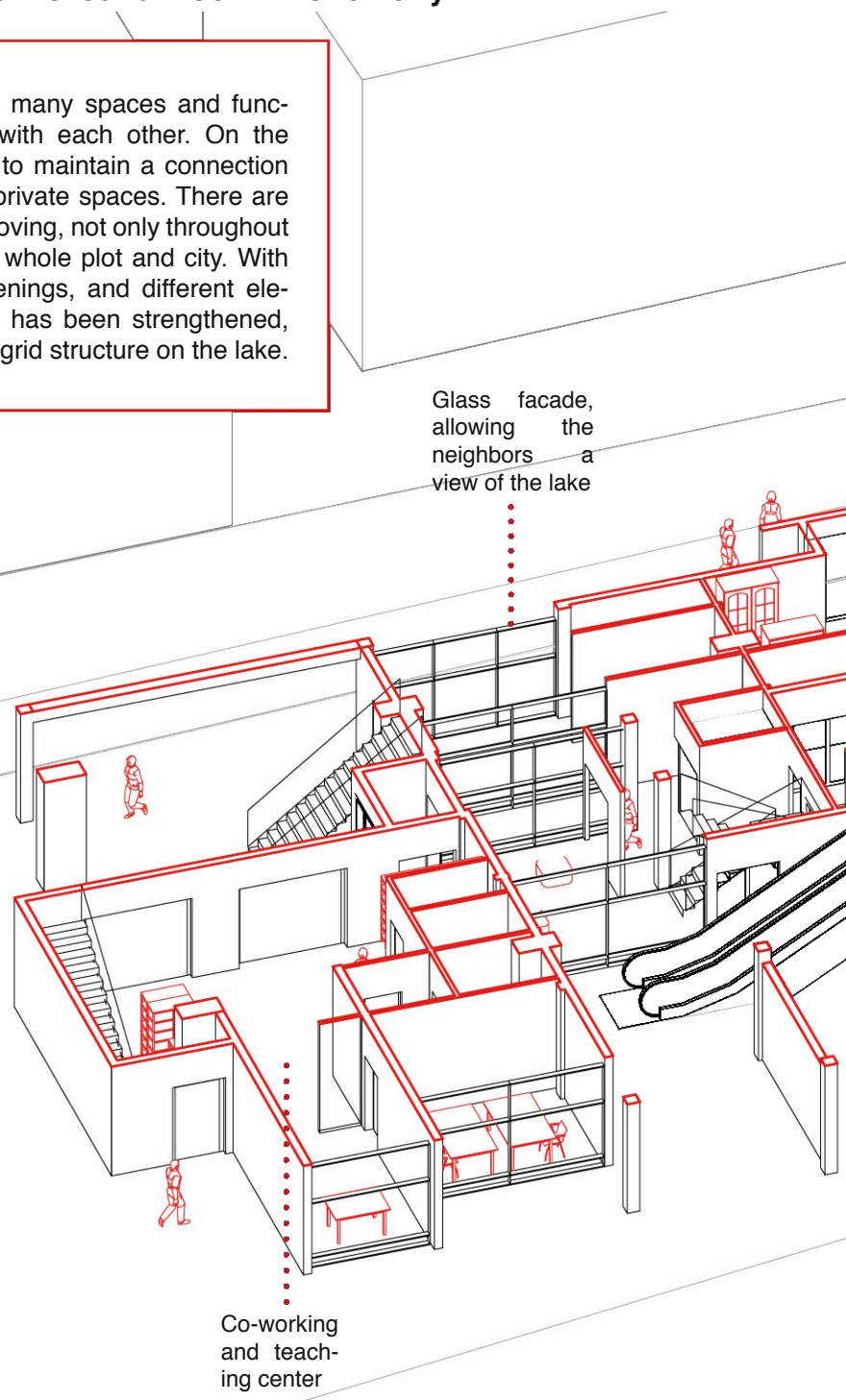
### 6.3.2 Ground Floor - Axonometry

The concept allowed for many spaces and functions to be intertwined with each other. On the ground floor, the goal is to maintain a connection between the public and private spaces. There are many different ways of moving, not only throughout the building but also the whole plot and city. With the aid of materials, openings, and different elements, the city structure has been strengthened, thus allowing for a visual grid structure on the lake.

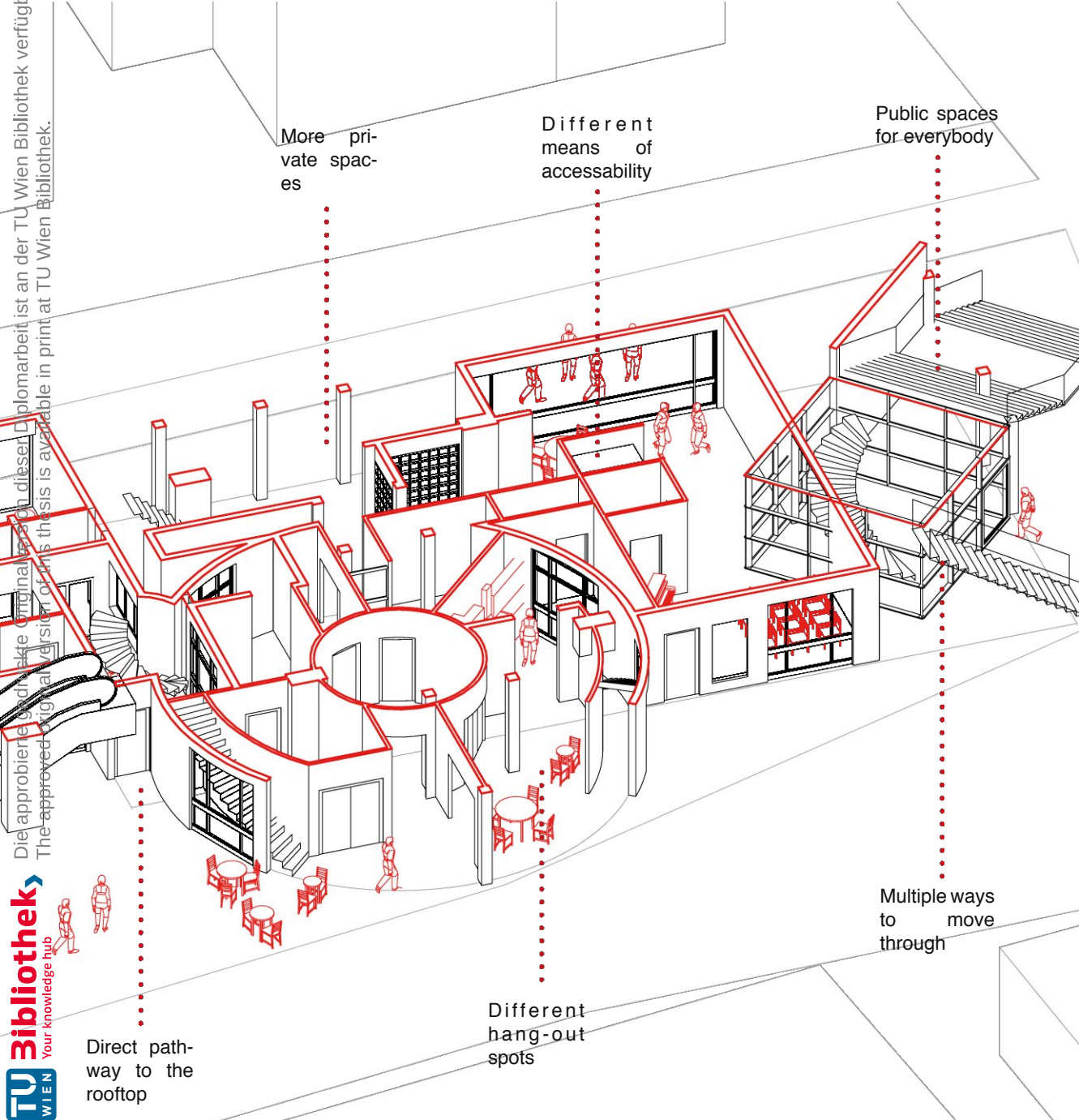
Glass facade, allowing the neighbors a view of the lake

Half-open drop-off and work zone

Co-working and teaching center



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More private spaces

Different means of accessibility

Public spaces for everybody

Multiple ways to move through

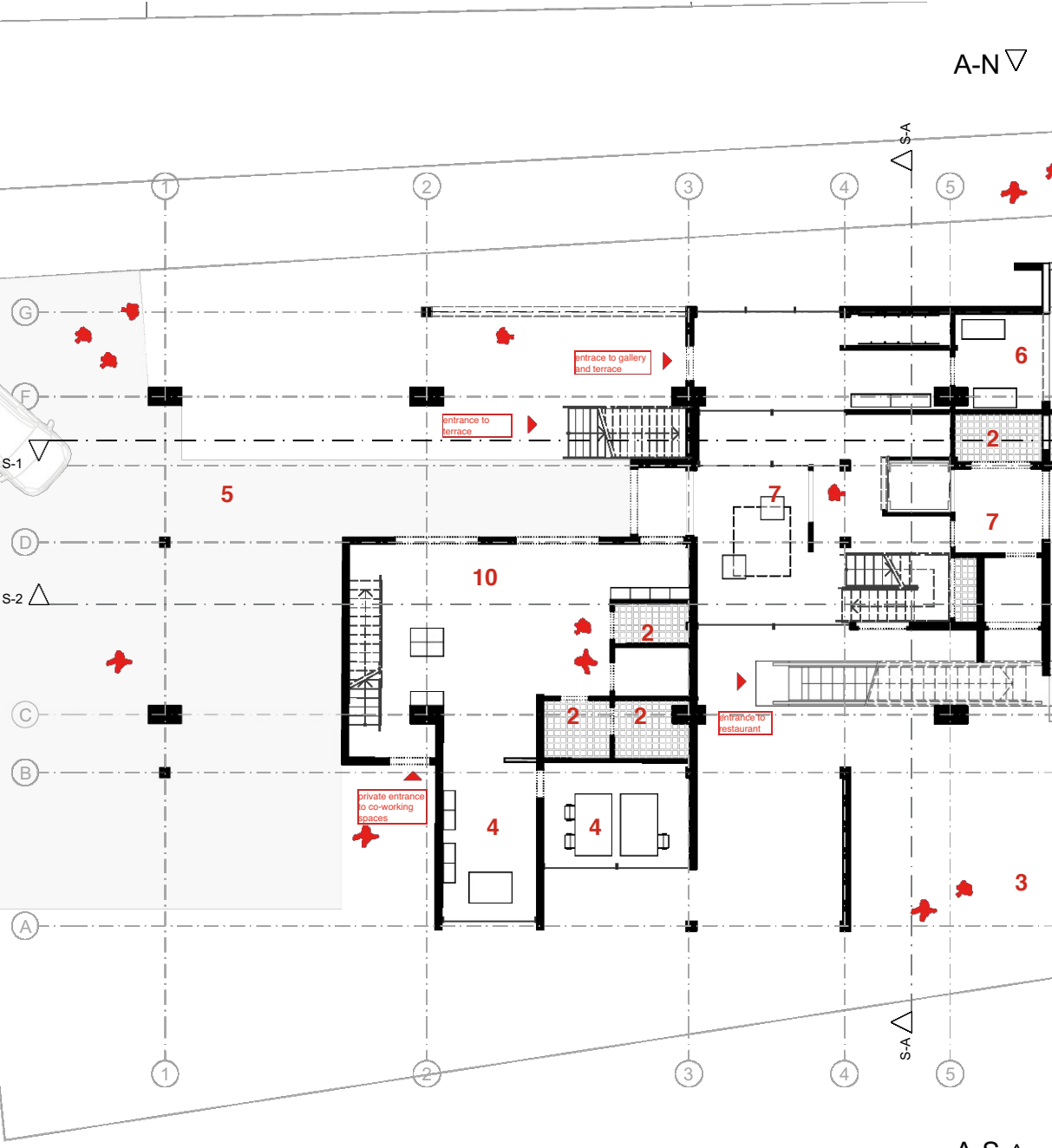
Different hang-out spots

Direct pathway to the rooftop

Fig. 72 Section Axonometry of the ground floor

### 6.3.2 Ground Floor - Plan

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 Direct way to Upper Terrace  
 Direct way to Lower Terrace

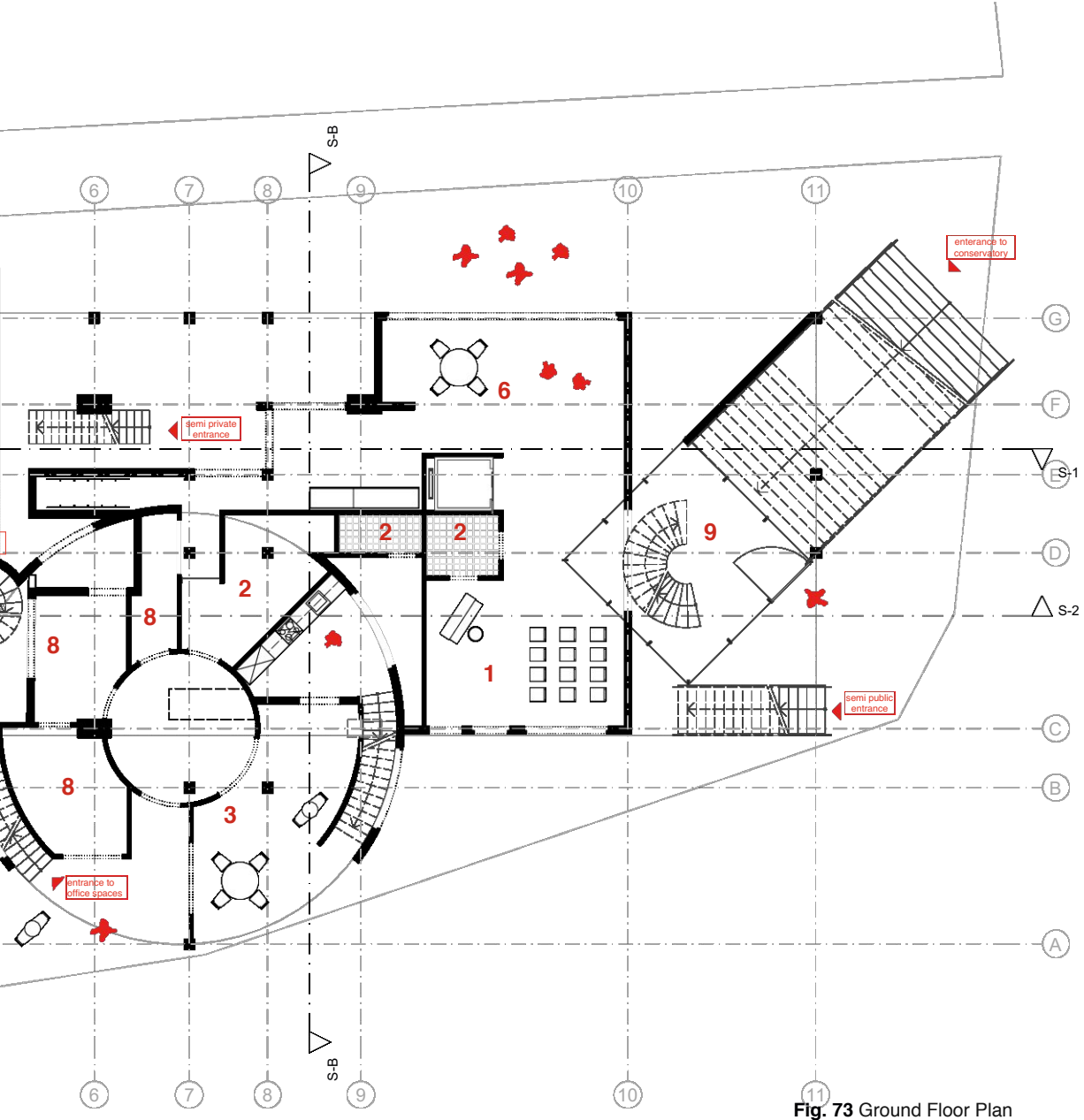
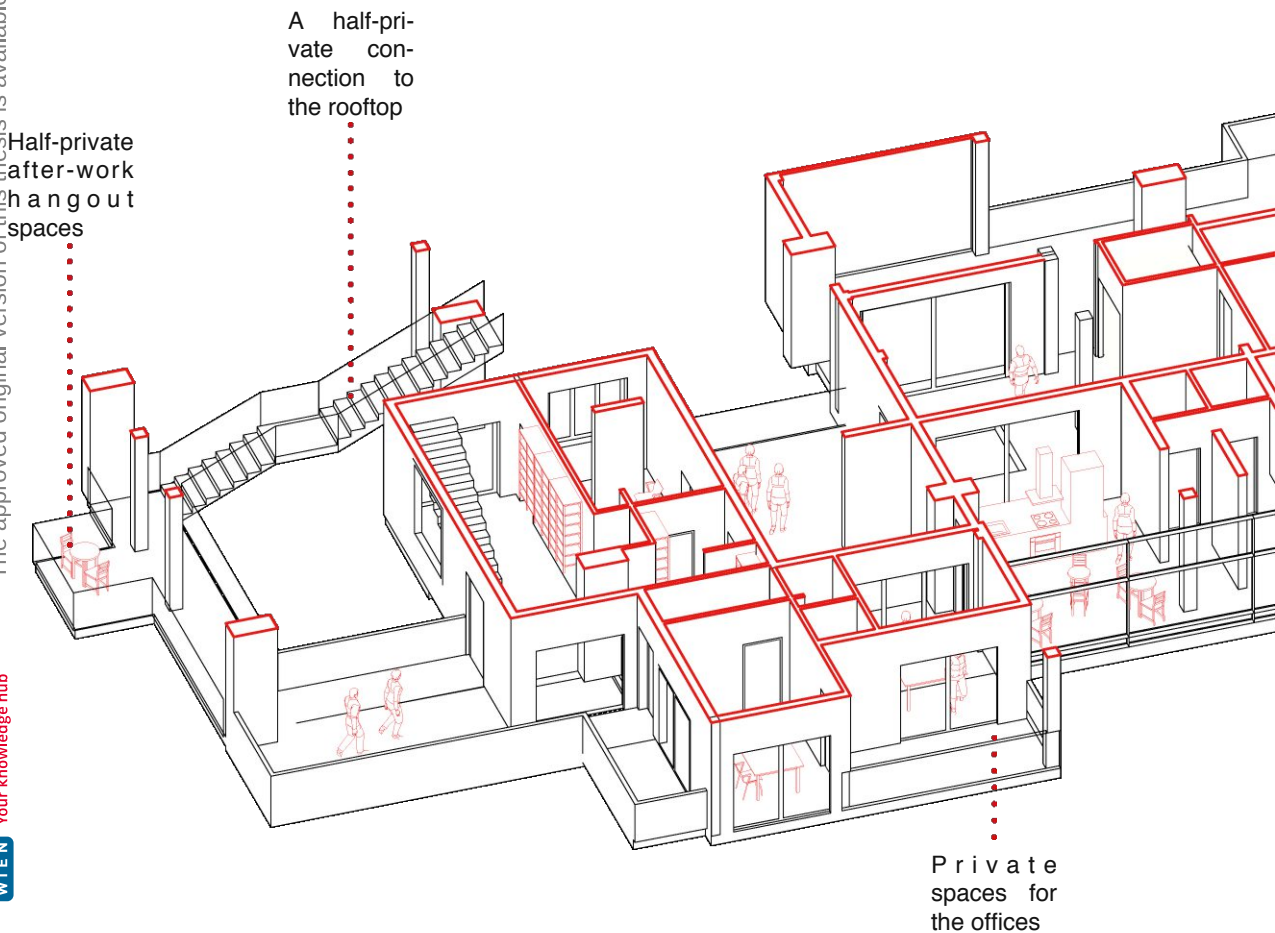


Fig. 73 Ground Floor Plan

|                 |   |                      |    |              |
|-----------------|---|----------------------|----|--------------|
| Community space | 5 | Drop-off / Storage   | 9  | Conservatory |
| Secondary space | 6 | Offices              | 10 | Production   |
| Cafe/Mensa      | 7 | Gallery / Exhibition |    |              |
| Co-working      | 8 | Shop                 |    |              |

## 6.3.2 First Floor - Axonometry

The first floor is reached in many ways, partly from inside the building and partly directly from outside the structure. There are many spaces that seem to be divided into bigger areas that allow for different functions to be furnished and housed inside the building. Many terraces create open spaces that vary from fully private to fully open and can be reached without entering the building. The initial case studies melt into the whole structure, creating interesting spaces.



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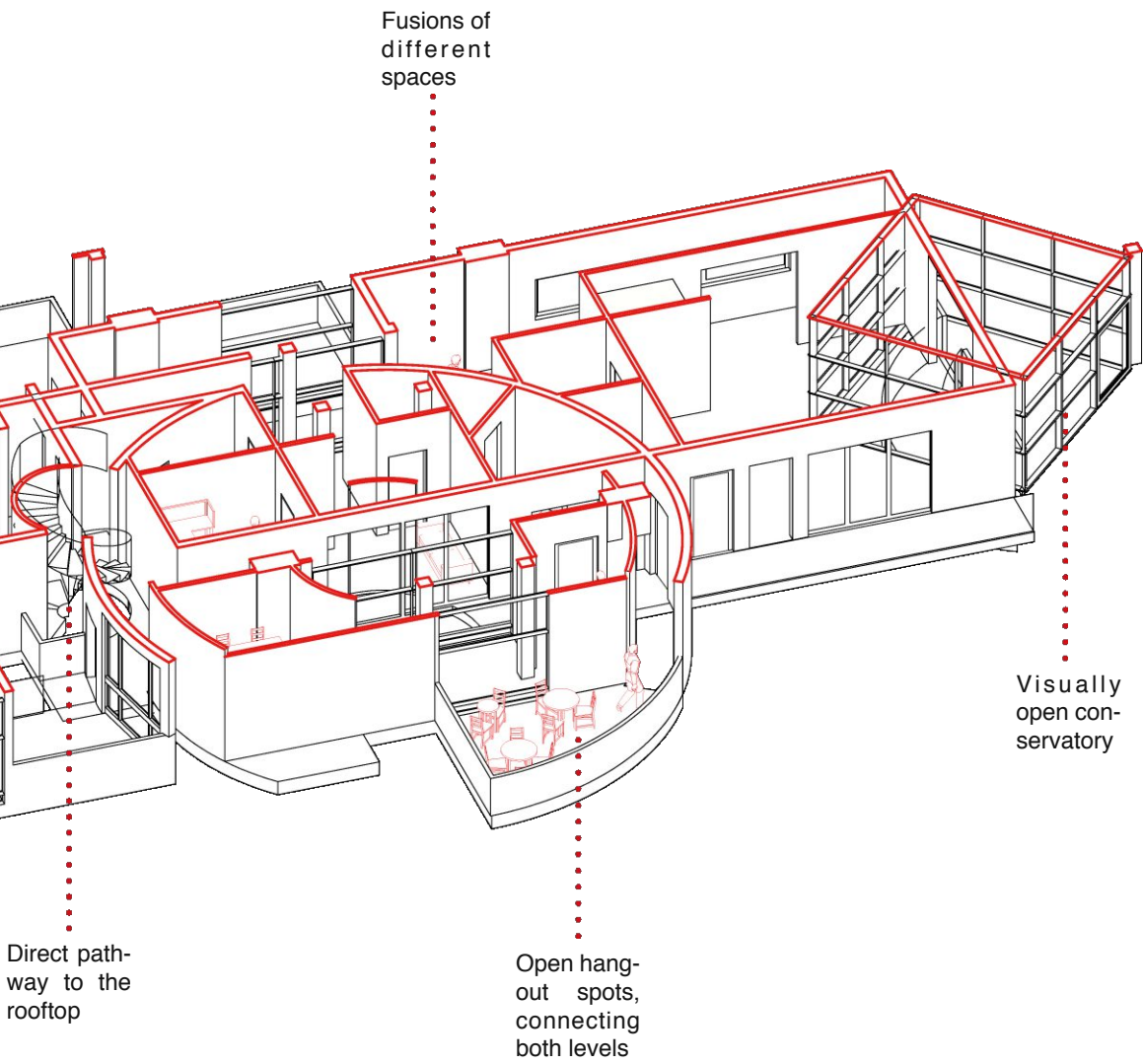
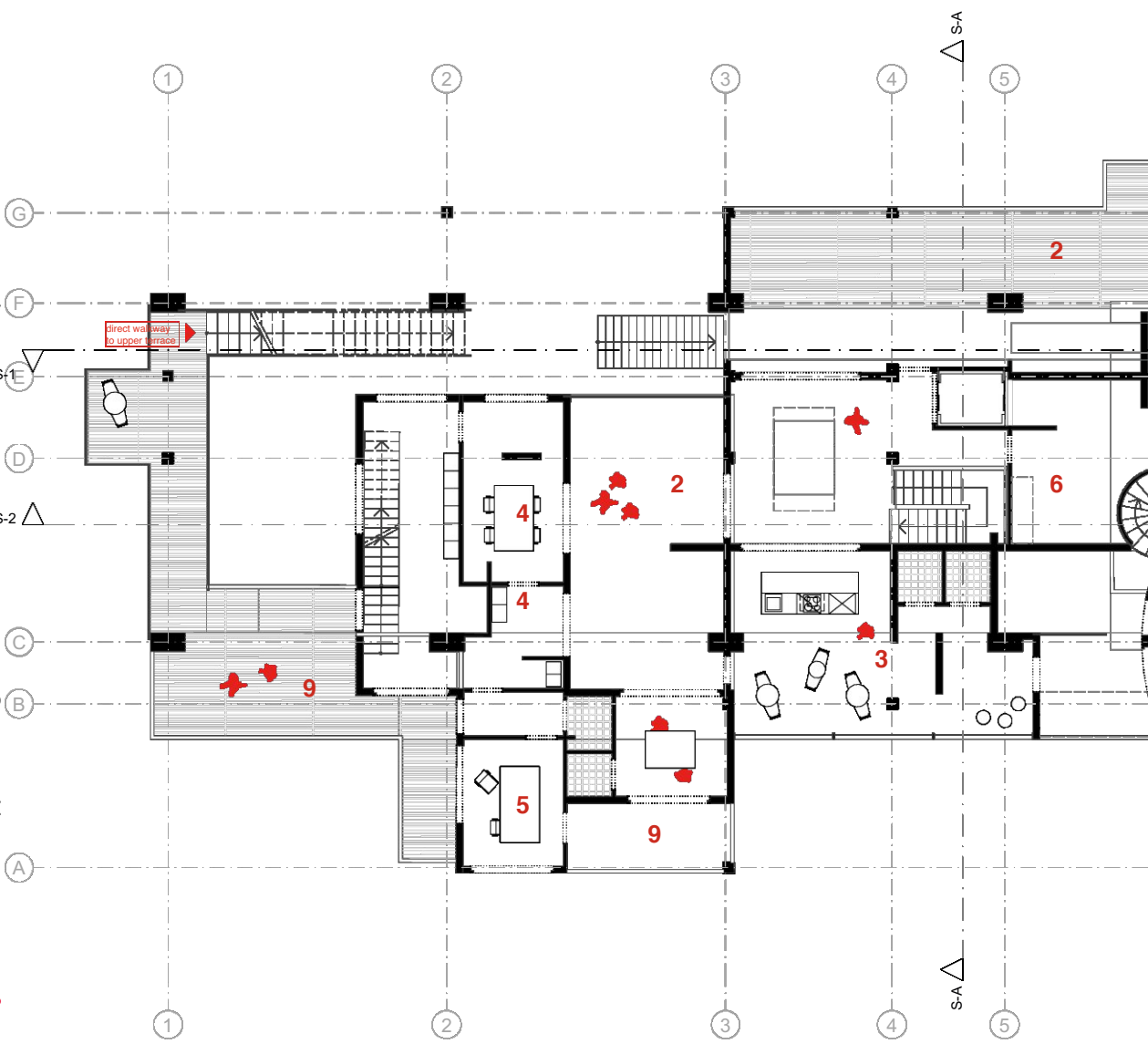


Fig. 74 Section Axonometry first floor



### 6.3.2 First Floor - Plan

A-N ▽



A-S ▽

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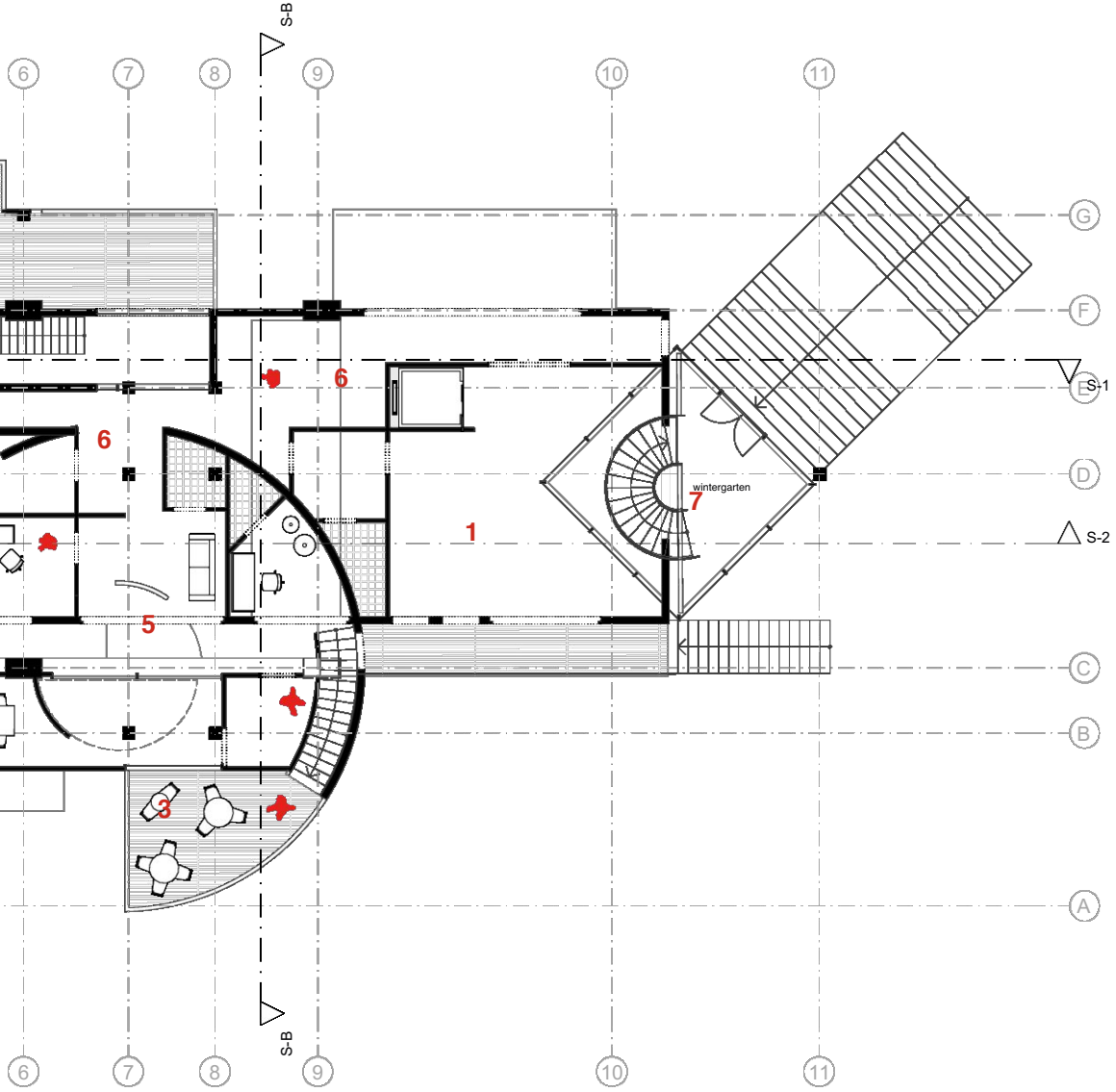
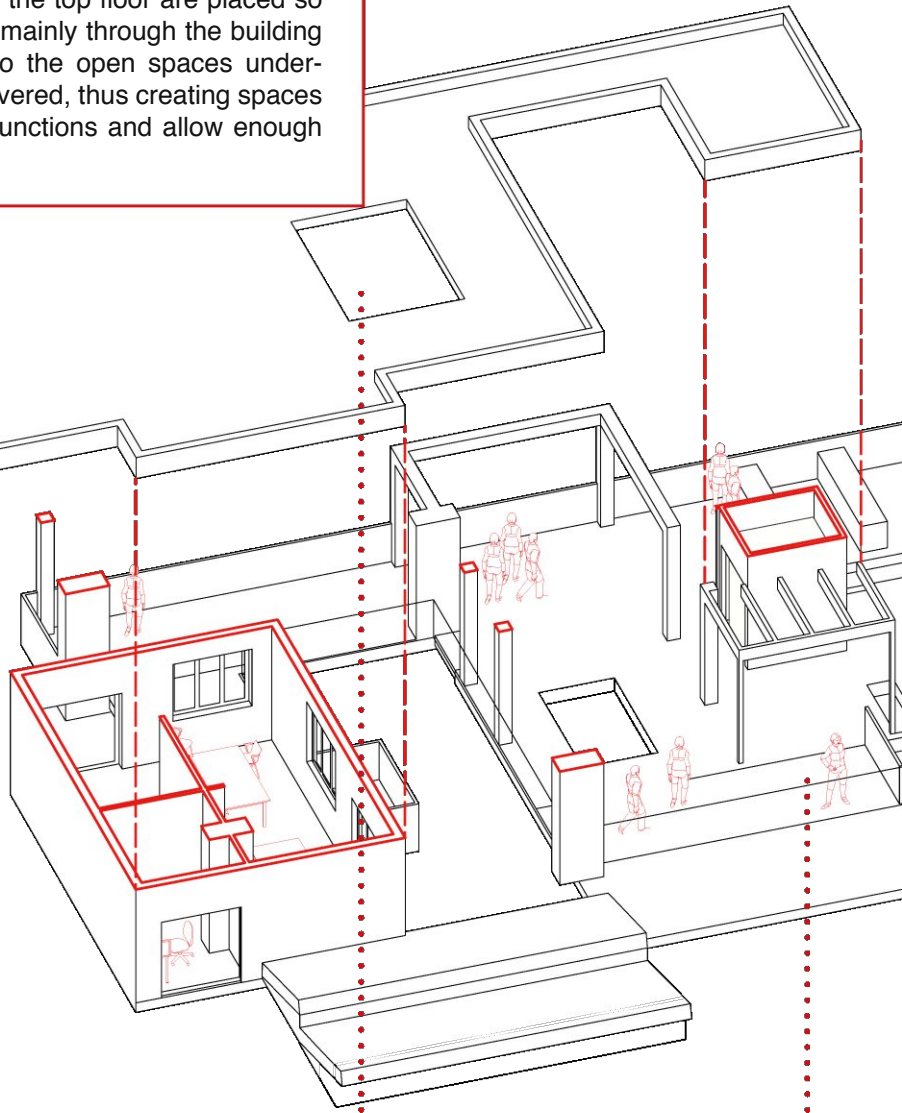


Fig. 75 First Floor Plan

|   |                 |   |                      |   |                 |
|---|-----------------|---|----------------------|---|-----------------|
| 1 | Community space | 4 | Co-working           | 7 | Conservatory    |
| 2 | Public Terrace  | 5 | Offices              | 8 | Production      |
| 3 | Cafe/Mensa      | 6 | Gallery / Exhibition | 9 | Private balcony |

### 6.3.2 Top Floor - Axonometry

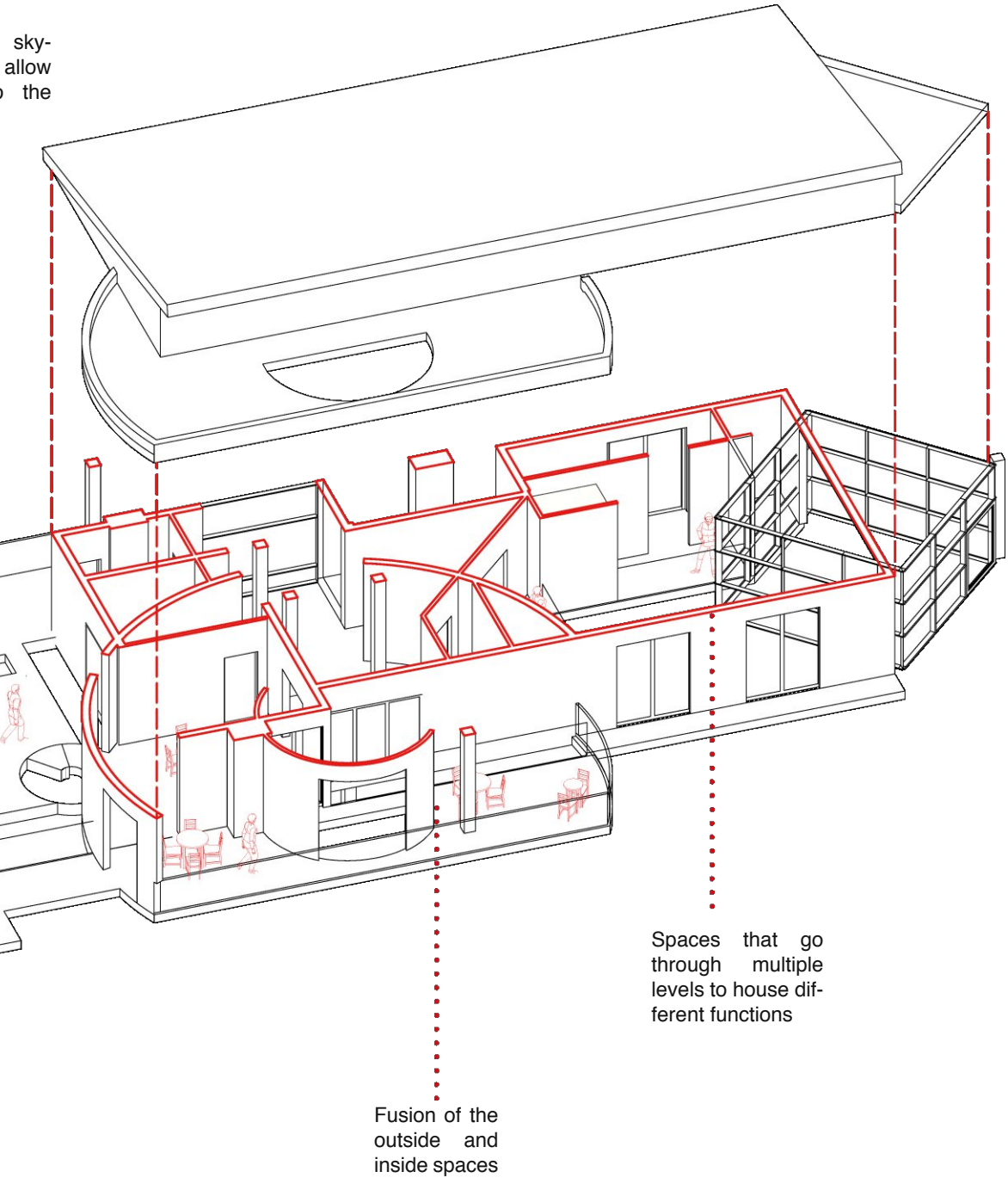
The top floor is the main viewpoint for the attractions surrounding the plot. The building is not higher than the neighbors, allowing an undestructed view to everybody, but also a great view of the building. Many skylights through the top floor are placed so that light goes through mainly through the building and its rooms, but also the open spaces underneath that are partly covered, thus creating spaces that can house many functions and allow enough light.



Skylights allow more light to reach the other levels

Main look-out point to the lake

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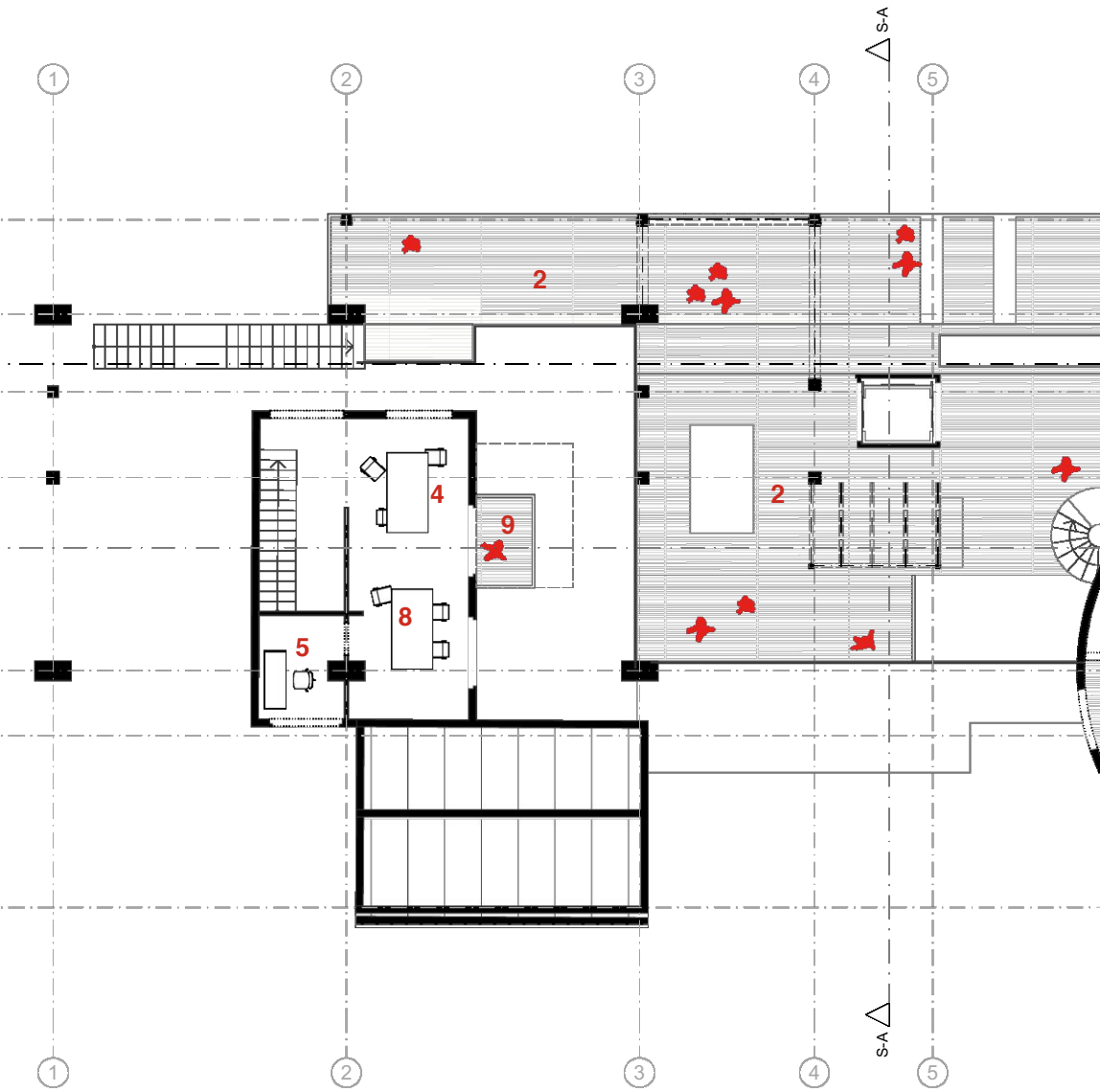
Spaces that go through multiple levels to house different functions

Fusion of the outside and inside spaces

Fig. 76 Section Axonometry top floor

### 6.3.2 Top Floor - Plan

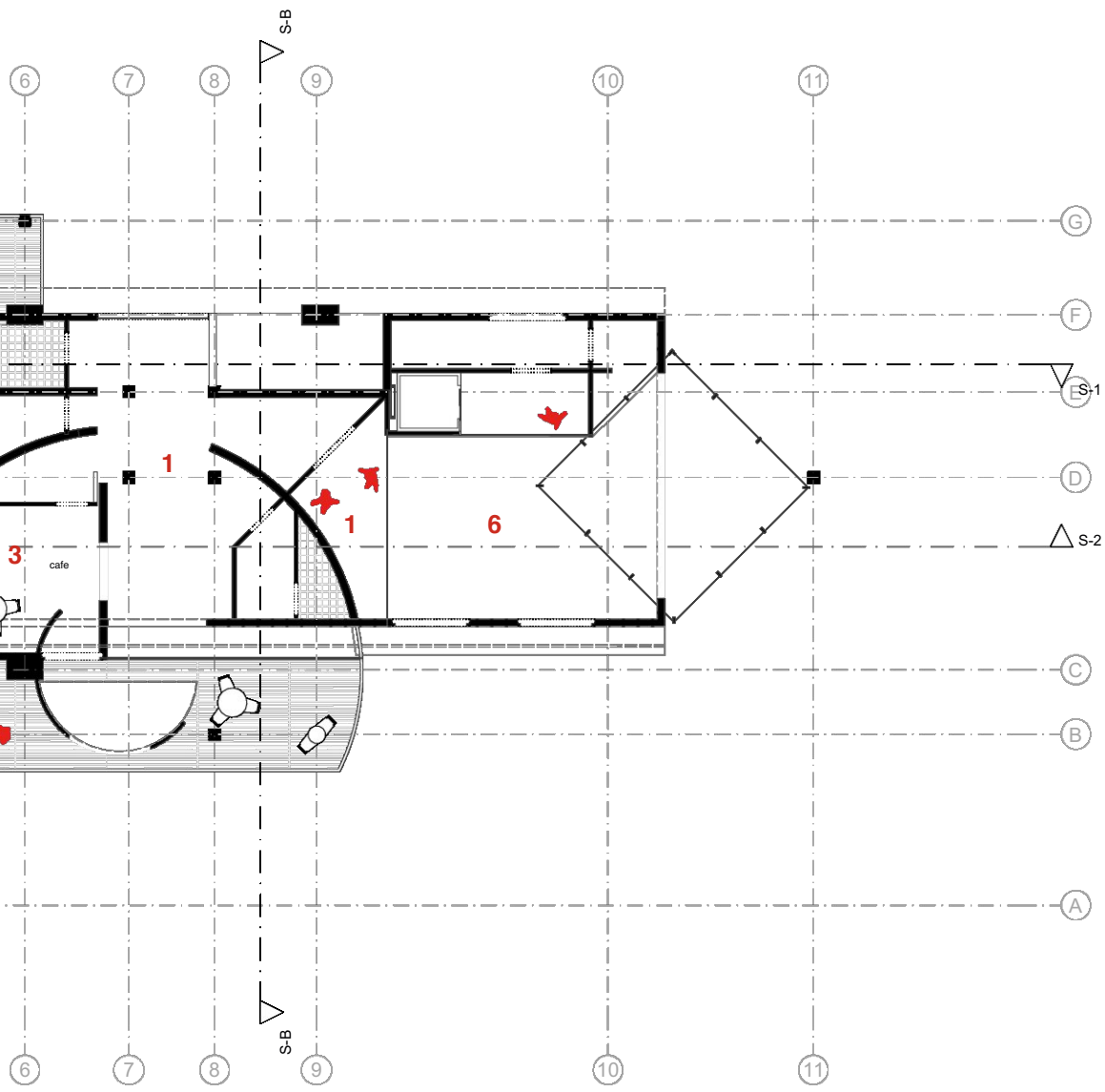
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**Fig. 77** Top Floor Plan

|   |                 |   |                      |   |                 |
|---|-----------------|---|----------------------|---|-----------------|
| 1 | Community space | 4 | Co-working           | 7 | Conservatory    |
| 2 | Public Terrace  | 5 | Offices              | 8 | Production      |
| 3 | Cafe/Mensa      | 6 | Gallery / Exhibition | 9 | Private balcony |

## 6.4.1 Connection

There are multiple ways of movement and connection in the building. Some of the ways of movement are: public stairways connecting public spaces; half-private stairways for the people working in the building; escalators and elevators allow different types of movement; and stairways purely as a place to meet up people. Another means of connection is the grid system of the neighboring houses, which is translated onto the structure. The city is invited onto the building, and the borders of the plot aim to not be perceived.

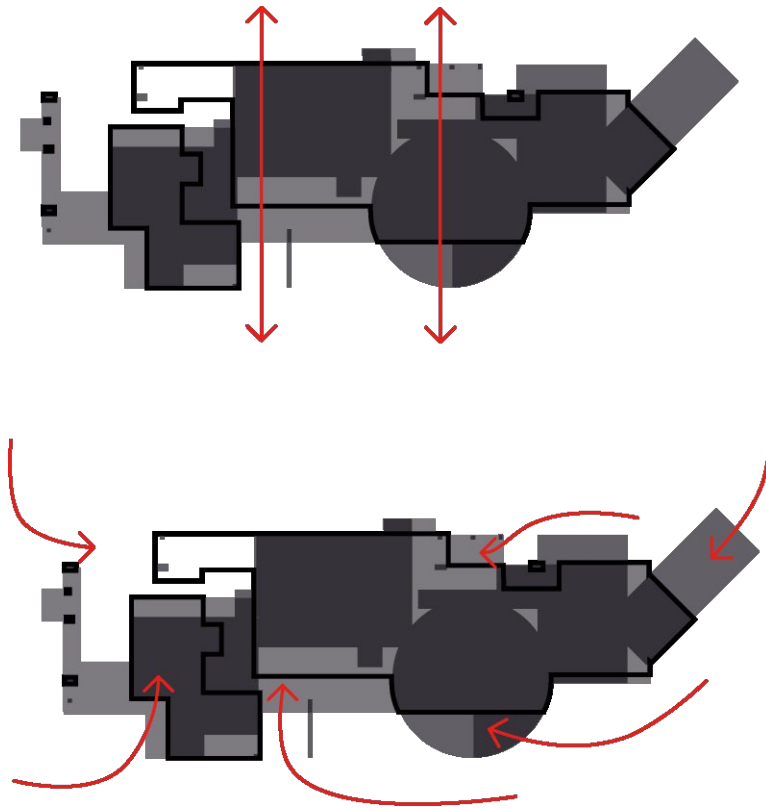


Fig. 78 Concept Connection

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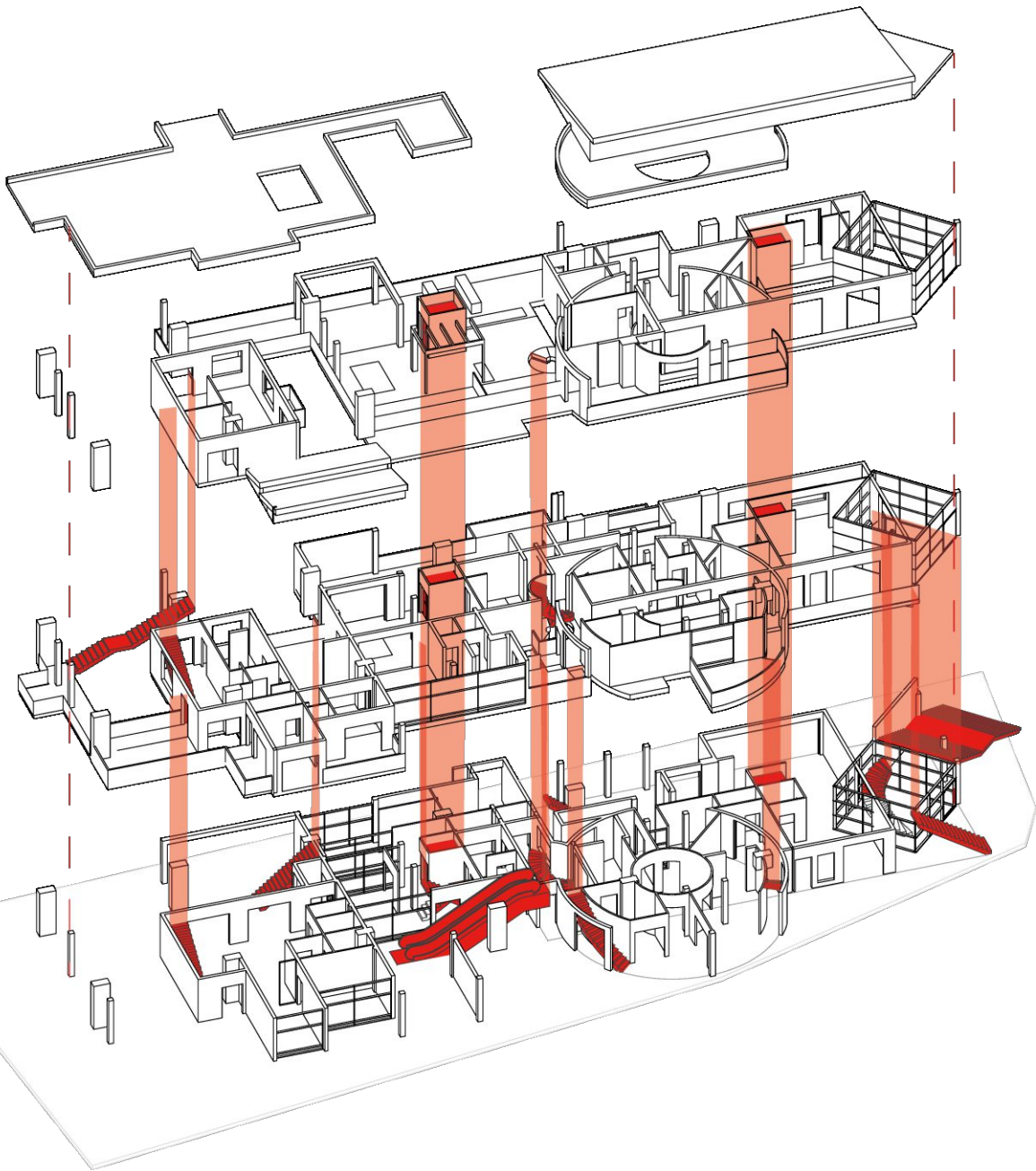
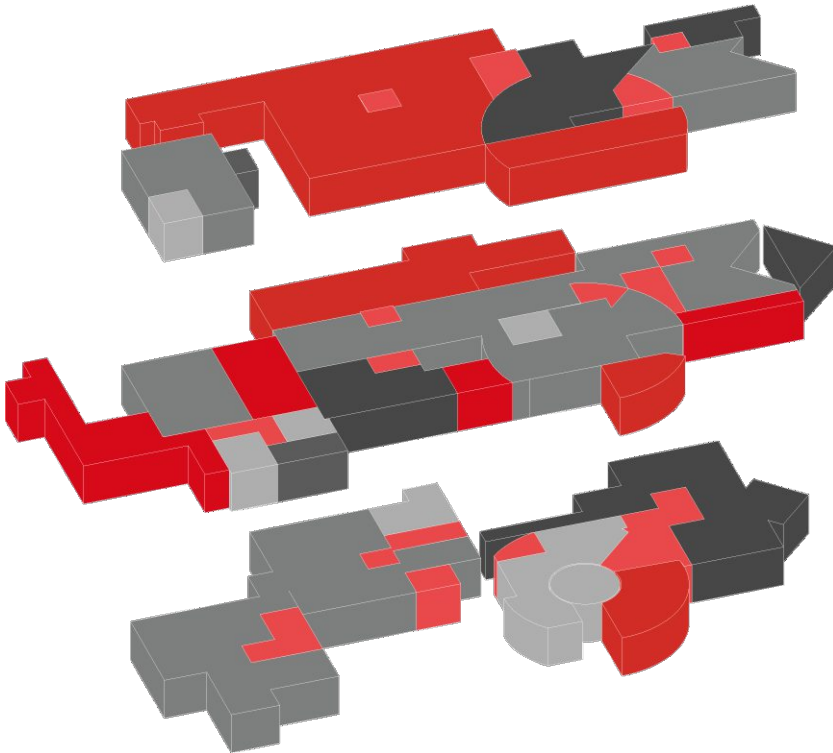


Fig. 79 Concept Connection Explor - Axonometry



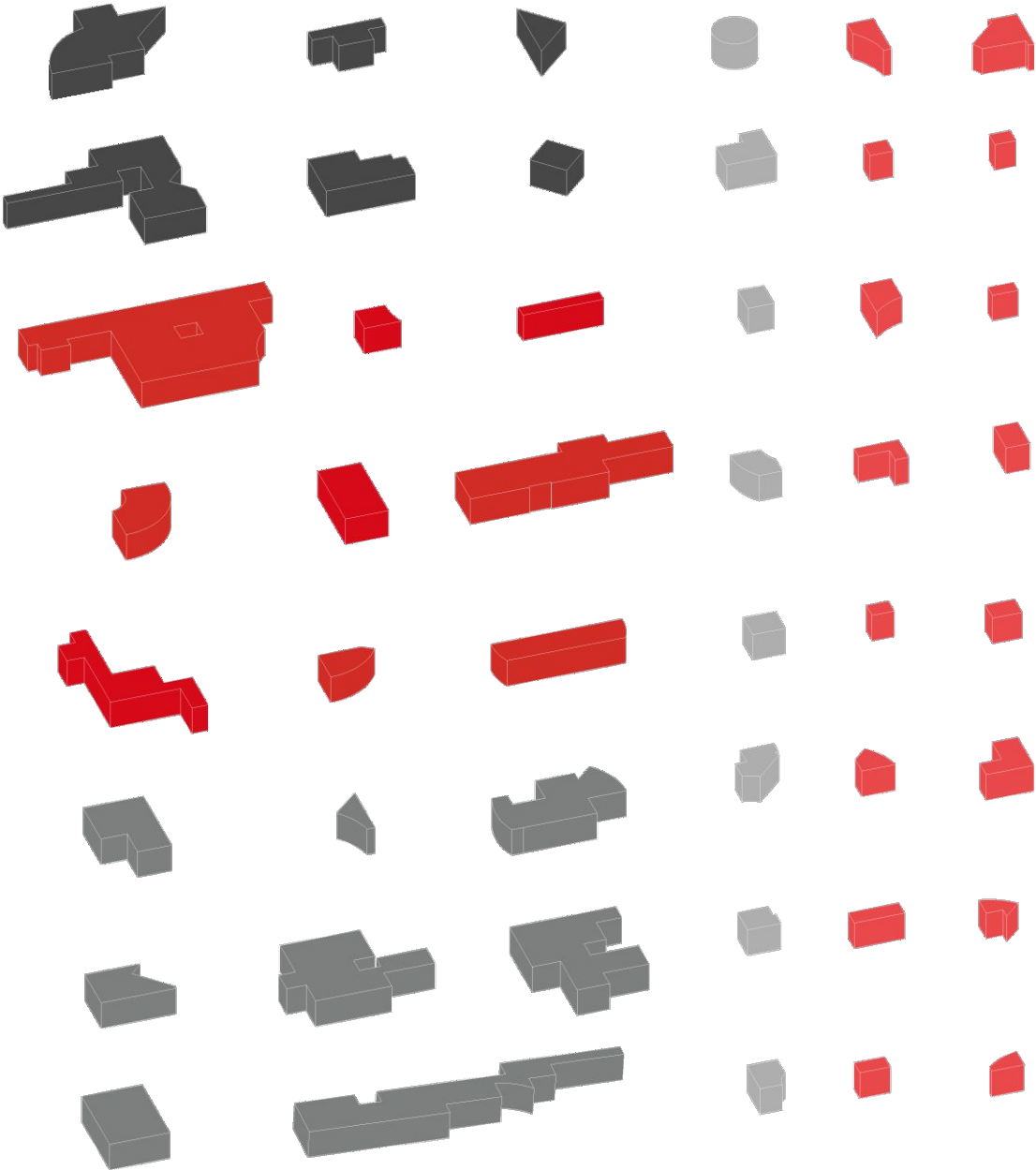
## 6.4.2 Function

The volume and shape of the spaces inside and outside the building are designed so that they can house many different functions. Through the building's unorthodox structure, public and private spaces are not traditionally divided in a vertical way but more as spaces that intertwine with each other in a two-dimensional way. A basic flow of functions is created, and other types—semi-private, semi-public, open, and closed spaces—are added to create a connection with each function.



**Fig. 80** Composition of different functions

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The illustration shows the different functions and how they fit in many different volumes, thus allowing a mix of different sub-functions.

**Fig. 81** Different functions and their different sizes

### 6.4.3 Participation

The main actors using the building are the residents of the city and the villages of the municipality. Spaces are designed so that many different groups can interact with each other, even though there are still spaces that are semi- or fully private. Workshop rooms, typical shops, galleries, community mixed-use spaces, and open balconies allow for multiple participants to interact and find a place in this building during different times of the year. During the research, the following participants came to be of importance, and as such, they shared the many different spaces mentioned above:

1. **The students** play an important part in helping keep the youth in the city.
2. **The elders** are part of the majority that gets left behind after immigration and, as such, have little to no place in the city.
3. **Employees**, in their own category, create more private spaces to create more work opportunities.
4. **Artists** play an important role in the cultivation of art in the city, with Struga being a city of culture and poetry.
5. **Contractors**, being part of the most important industry in the city, are put here as participants, helping the future of the space.
6. **Community** takes the most important role in the space since it is the most important characteristic of the city and encompasses generally every other category.
7. **Vendors** are able to sell their products that can also be produced in the building.

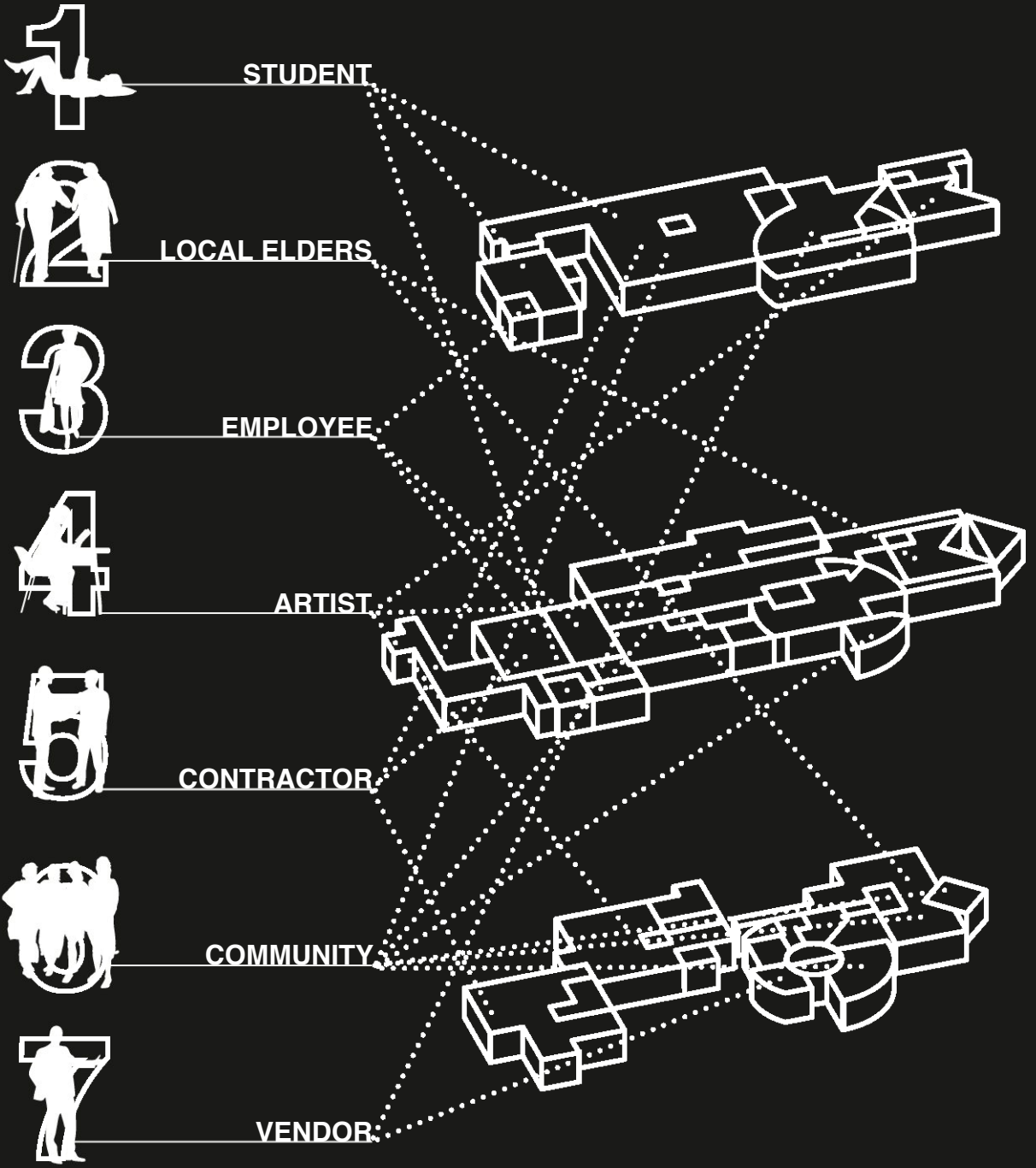
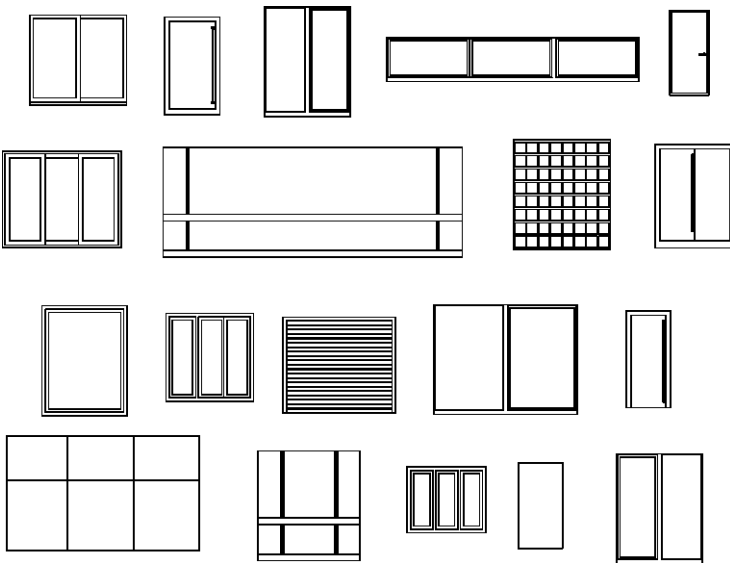


Fig. 82 Participants of the building

### 6.4.4 Distinction

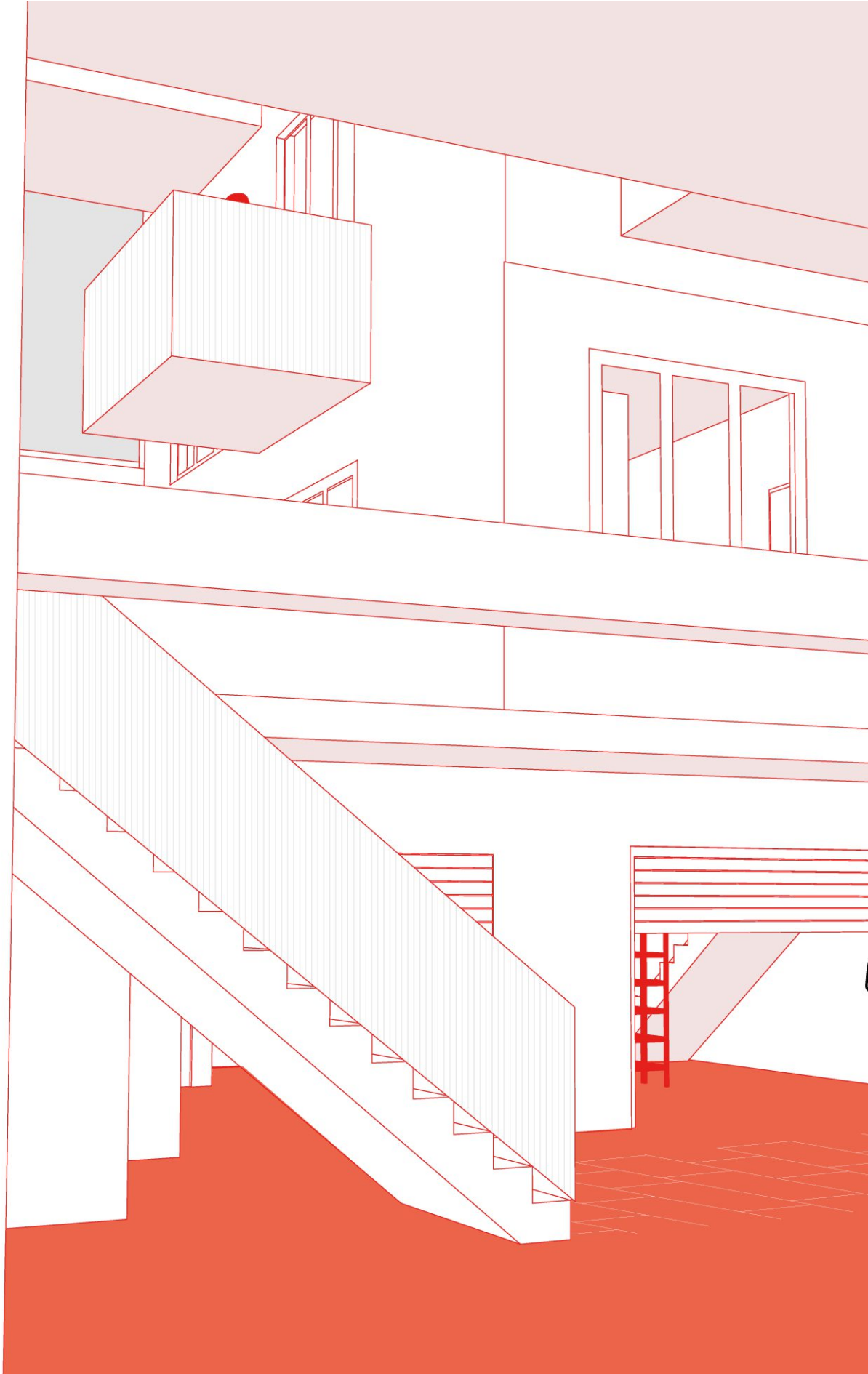
The composition of the case studies and the element categories create an interesting image of the outside of the building. The first category is the one of distinguishing between openings in the facade to the inside and the perforation of the construction. The second category is the one distinguishing between the openings (windows, doors, glass facades), their placement, and their dimensions. The first one is in direct correlation to the connection category and how the city and its participants are an important part of the design process.



**Fig. 83** Examples of the elements used in the building



**Fig. 84** The openings of the building, in comparison to each other



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Fig. 85 Perspective of the open, working area



## 6.5 Elevation



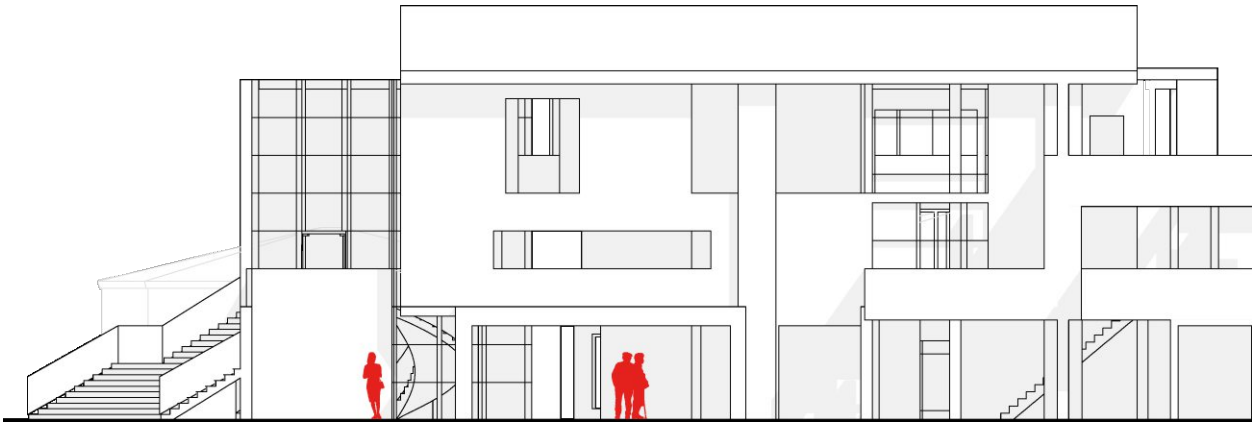
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The elevation facing the lake is more vivid, allowing for different-sized openings and a somewhat playful take on the more public side of the building. Many balconies, terraces, and skylights enhance the movement of the facade.

**Fig. 86** Elevation - South 1:500

## 6.5 Elevation





The elevation facing the surrounding neighborhood houses aims to be more subtle, with fewer openings and direct connections to the private houses. The grid system helps create viewpoints, connecting the houses with the lakeshore.

**Fig. 87** Elevation - North 1:500

## 6.5 Elevation



The elevation leading from the main street has a more open facade with different stairways, including a bigger staircase, that invites the actors and can create a hangout space for the city.

**Fig. 88** Elevation - West 1:500



The elevation on the more private part, similar to the north elevation, is more subtle and shows smaller, more private spaces that do not want to disturb their neighborhood.

**Fig. 89** Elevation - East 1:500

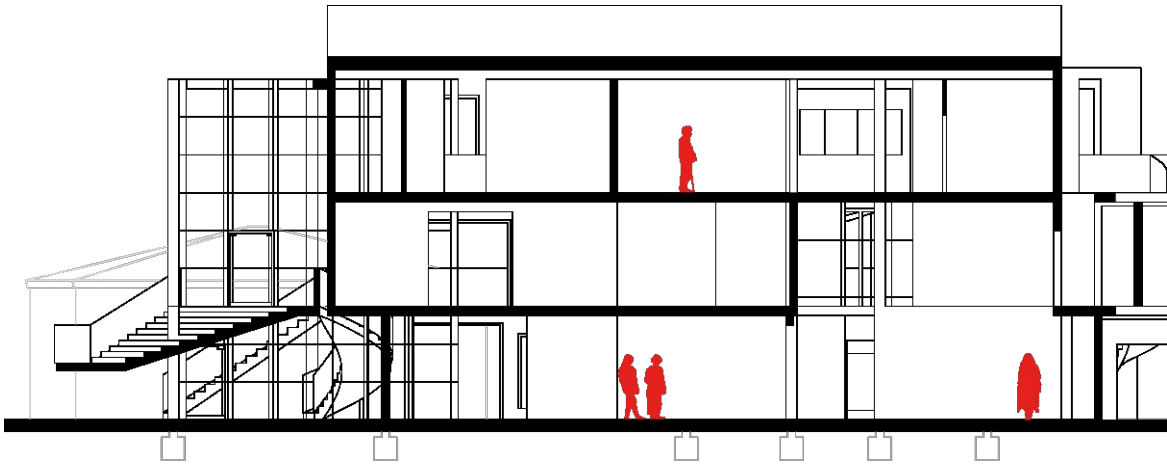




Fig. 90 Perspective of the community/gallery space



## 6.5 Section



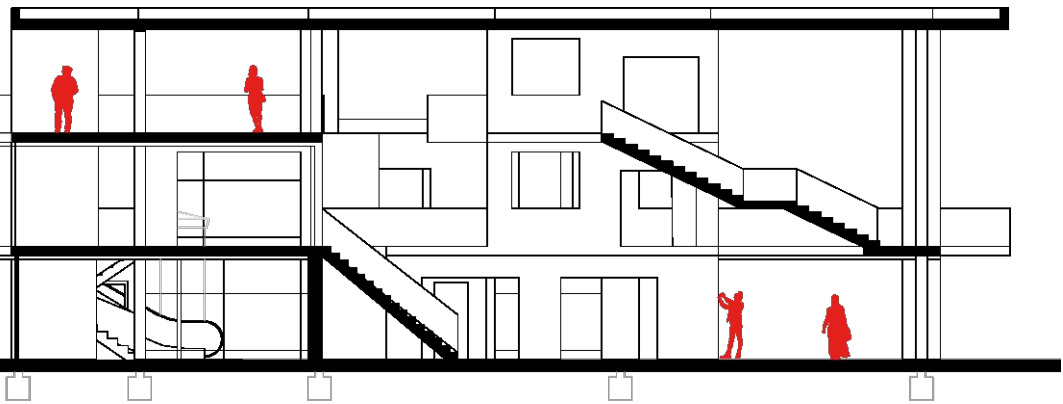
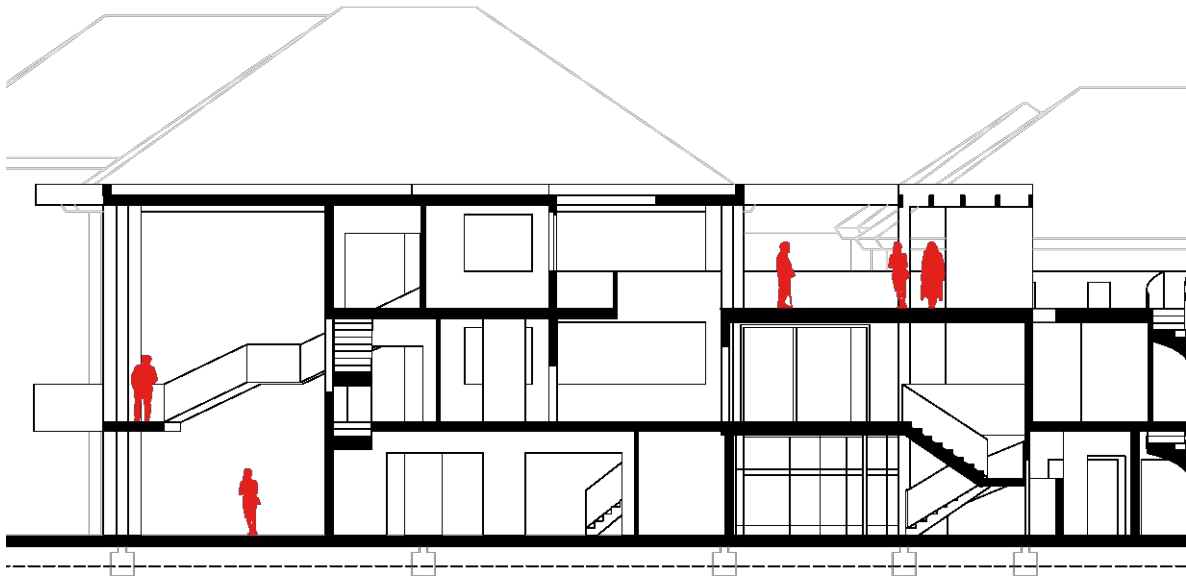


Fig. 91 Section 1 1:500

## 6.5 Section



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Fig. 92 Section 2 1:500

## 6.5 Section



Fig. 93 Section A 1:500



Fig. 94 Section B 1:500

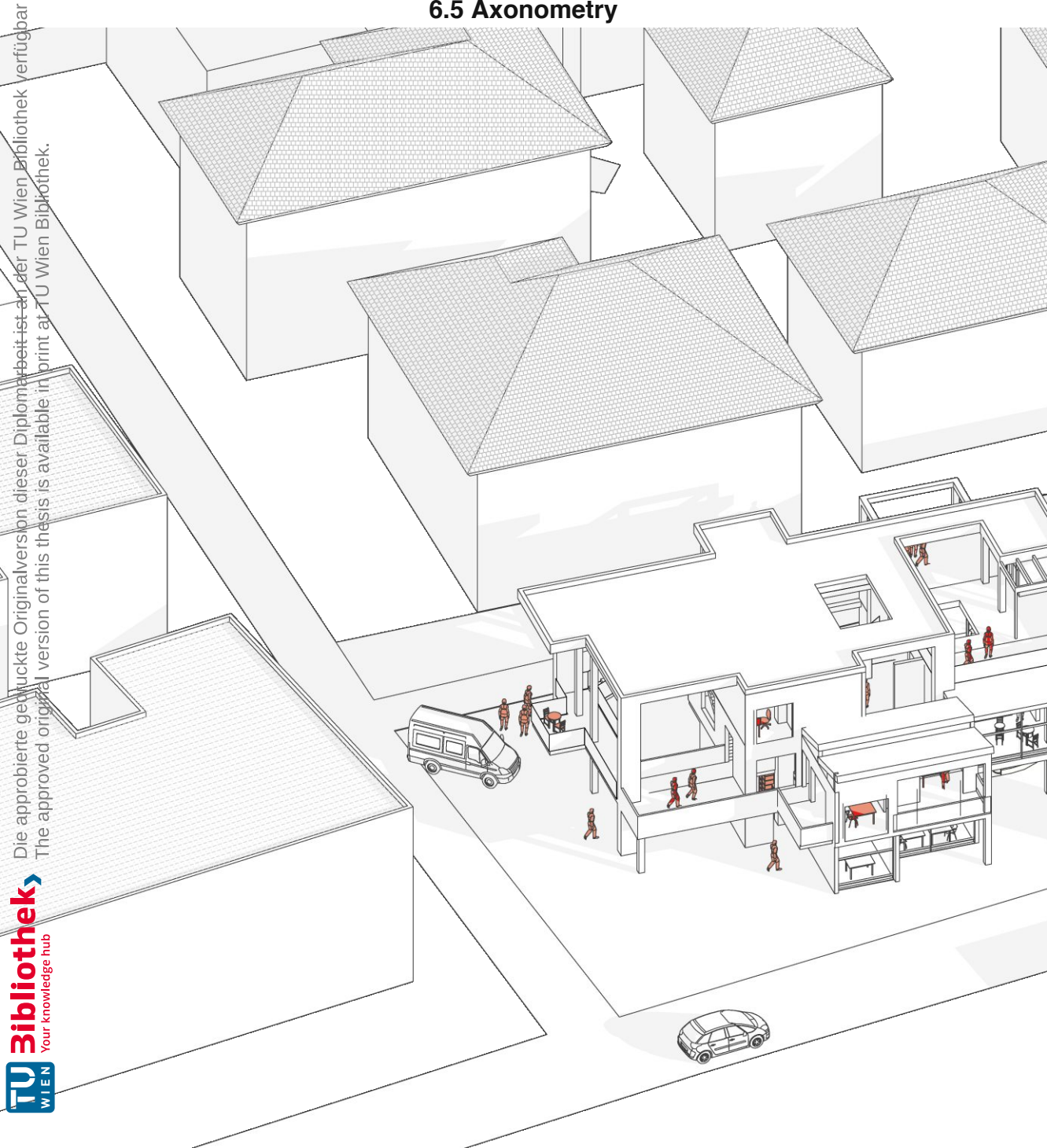




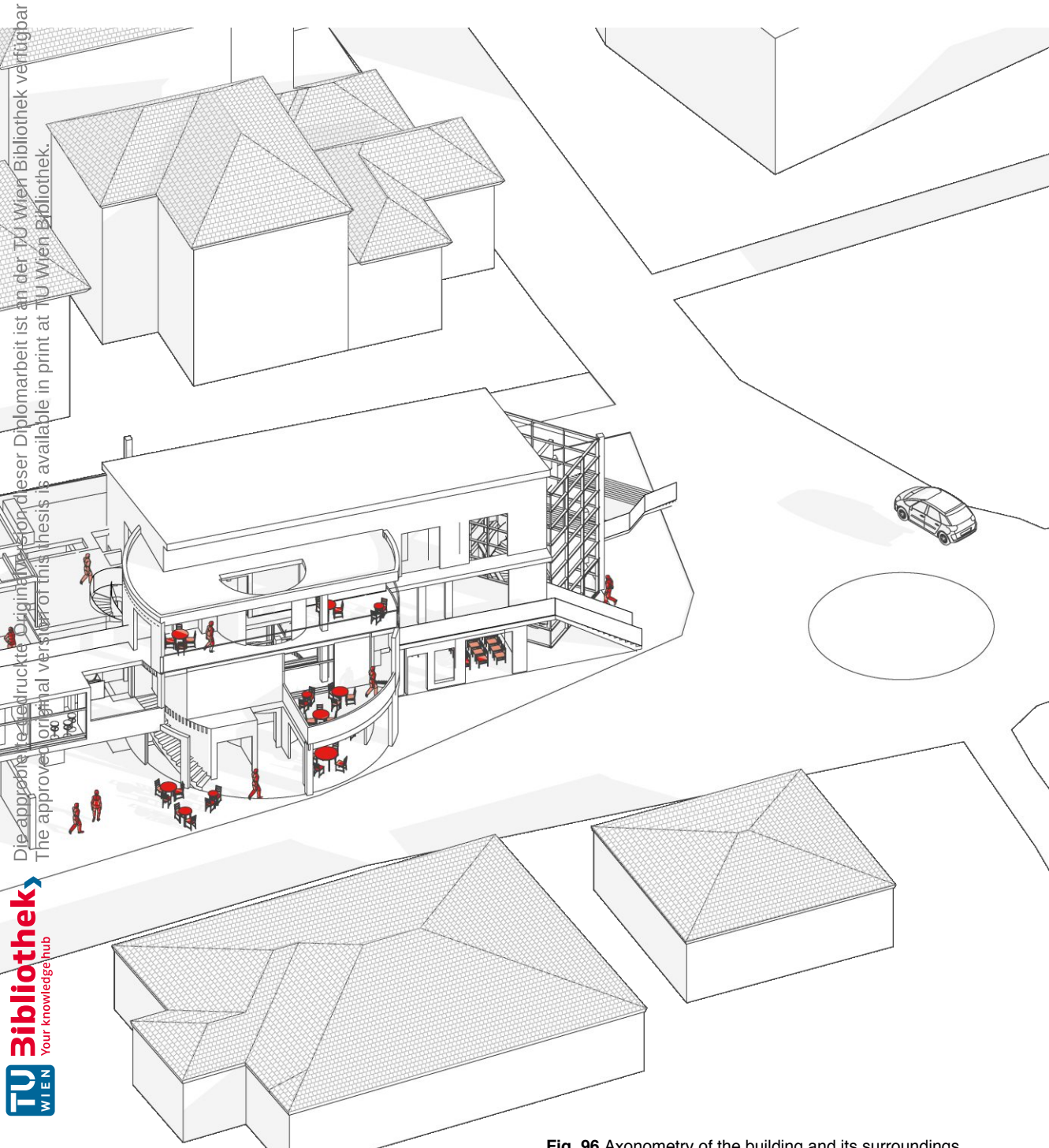
Fig. 95 Perspective of the rooftop and the view of the sea



## 6.5 Axonometry

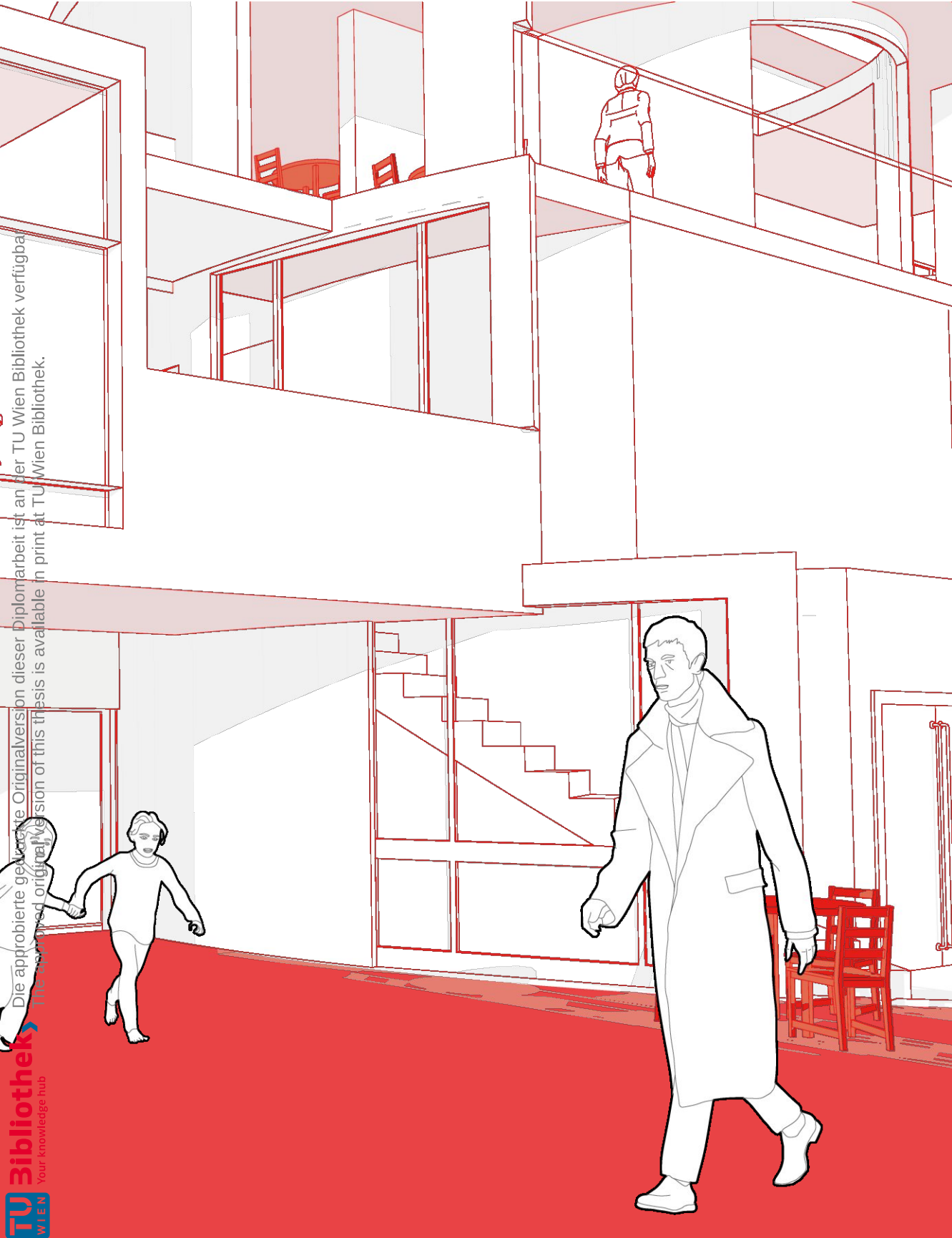


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**Fig. 96** Axonometry of the building and its surroundings





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Fig. 97 Perspective of the front of the building, with the entrance to the restaurant, cafe and gallery

## 6.6 Conclusion

The aim of this thesis was to understand what kind of architecture is present in this part of the Balkans. The trial of designing a concept fit to its surroundings was partly prevented by the lack of up-to-date public documents. Most of the information, as it was clear during the research, was either more than two decades old or simply not available to the public (this is mainly because of political reasons, where individual gain is the main goal). Another setback was the interethnic tensions, still visible even after decades, which in turn made information sparse.

In spite of these problems, due to many personal conversations with many locals and my own personal experience, a better un-

derstanding of the architecture typical of the western Balkans was achieved. The house biographies helped create a set of parameters and functions that served as a basis, as they portrayed the typical turbo-architecture. Each of these structures had its own characteristics that were put into categories as a way to summarize their key points. The research on the country and the city also helped better understand the surroundings and thus create a suitable structure for the city. The aim was not to create a 'white box' appropriate for every space but, on the contrary, to create a space specifically working with the history, demographics, the city, and its surroundings. The elements generating movement, inspired by the case studies, help with the further design

process of adding, expanding, or subtracting the initial case studies. The last step was the definition of the functions of the structure. These were aided by the research of the city, the house biographies, and their different outcomes when they were woven into the concept.

The western knowledge, the local turbo architecture, the imported elements and how they are implemented, and the urban planning all helped bring this thesis forth and allow for eventual changes to the structure in the future, a practice that is very typical in this part of the world.

# 7. THE EP

# LOGUE

7.1 Acknowledgments

7.2 Literature



## 7.1 Acknowledgments

### Faleminderit,

Not only this Master Thesis, but my studies would not have been possible if it weren't for the following people:

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## 7.2 Literature

[https://ecfr.eu/article/commentary\\_western\\_balkans\\_statistical\\_black\\_hole\\_eu\\_enlargement/](https://ecfr.eu/article/commentary_western_balkans_statistical_black_hole_eu_enlargement/)  
Accessed May 2022

Census of Population, Households and Dwellings in the Republic of Macedonia, State statistical Office, Republic of Macedonia, 2002

Statistical Yearbook of the Republic of Macedonia, State statistical office, Republic of Macedonia, 2018

Statistical Yearbook of Yugoslavia 1987

<http://monumenttotransformation.org/atlas-of-transformation/html/t/turbo-architecture/turbo-architecture-srdjan-jovanovic-weiss.html> Accessed October 2022

S Am 06: Balkanology New Architecture And Urban Phenomena In South Eastern Europe

Vöckler, K. (2008). Prishtina is Everywhere: Turbo Urbanism : the Aftermath of a Crisis. Germany: Stichting Archis.

Urban identity revisited: The transformations of Struga between 1991 and 2019, Damjan Balkoski, Balkan Architectural Biennale 2019

Kliems, A. (2010). The Post Socialist City: Continuity and Change in Urban Space and Imagery. Germany: Jovis Verlag.

Joint action in architecture : getting political again? ; [im Rahmen des Symposiums "Joint Action in Architecture - Getting Political Again?", (2. - 4. Juli 2009 im HDA)]

Almost Architecture, Jovanović Weiss, Srdjan; Joly, Jean-Baptiste [Hrsg.]; Akademie Schloss Solitude [herausgebendes Organ]  
Stuttgart : Akad. Schloss Solitude; 2006

[https://www.wb6cif.eu/wp-content/uploads/2021/09/WB6-CIF\\_Construction-and-Infrastructure\\_5.-9.-21-FIN-003.pdf](https://www.wb6cif.eu/wp-content/uploads/2021/09/WB6-CIF_Construction-and-Infrastructure_5.-9.-21-FIN-003.pdf)

<https://www.britannica.com/place/Balkans> Accessed May 2022

Historical Minorities and Majority Nations, Eurominority, <http://www.eurominority.eu> Accessed May 2022

Bobic, N. (2019). Balkanization and Global Politics: Remaking Cities and Architecture. United Kingdom: Taylor & Francis.

Strategic plan for development of Municipality of Struga, 2007-2011, Struga, 2006

Dojdi vo Struga, prvot turistički prospekt za Struga, Risto Plajkovski, unknown date

Dojdi vo Struga, turistički prospekt za Struga, Risto Plajkovski, app. 1970

Labour Migration in the Western Balkans: Mapping Patterns, Addressing Challenges and Reaping Benefits, OECD, 2022

\*If not stated otherwise, the illustrations and/or images were done by me.

