

# Ex IRFOP

Youth Empowerment Centre  
in Trieste

Marcin Jatczak



# Ex IRFOP

Youth Empowerment Centre  
in Trieste

Wien, 2024





# Contents

ABSTRACT	6 - 9
----------	-------

## TRIESTE

Group Research

Introduction	12 - 17
Arriving, the image of the city	19 - 21
Borgo Medievale	22 - 27
Borgo Teresiano	28 - 33
Borgo Giuseppino	34 - 41
Borgo Franceschino	42 - 47
The Periphery	48 - 53

## EX IRFOP - YOUTH EMPOWERMENT CENTRE

Thesis

Issues of the youth in Trieste	58 - 61
Youth Empowerment	62 - 69

## INDIVIDUAL AND COMMUNITY IN ARCHITECTURE

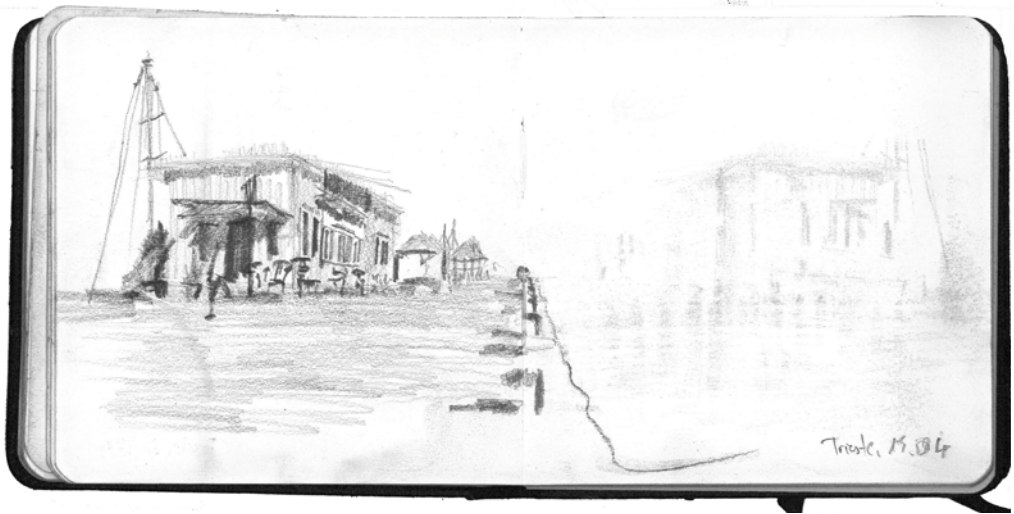
Aldo van Eyck	72 - 77
Lina Bo Bardi	78 - 85

## EX IRFOP - BUILDING COMPLEX

IRFOP - Institution history	88 - 91
Umberto Nordio	92 - 97
Ex IRFOP - Investigation of the complex	98 - 117

## REUSE CONCEPT

Urban Strategy	124 - 131
Functional Concept	132 - 137
Architectural Concept	138 - 171
Energy Concept	172 - 179
Process	180 - 187
Bibliography	188 - 192
List of figures	193 - 196
Acknowledgements	197

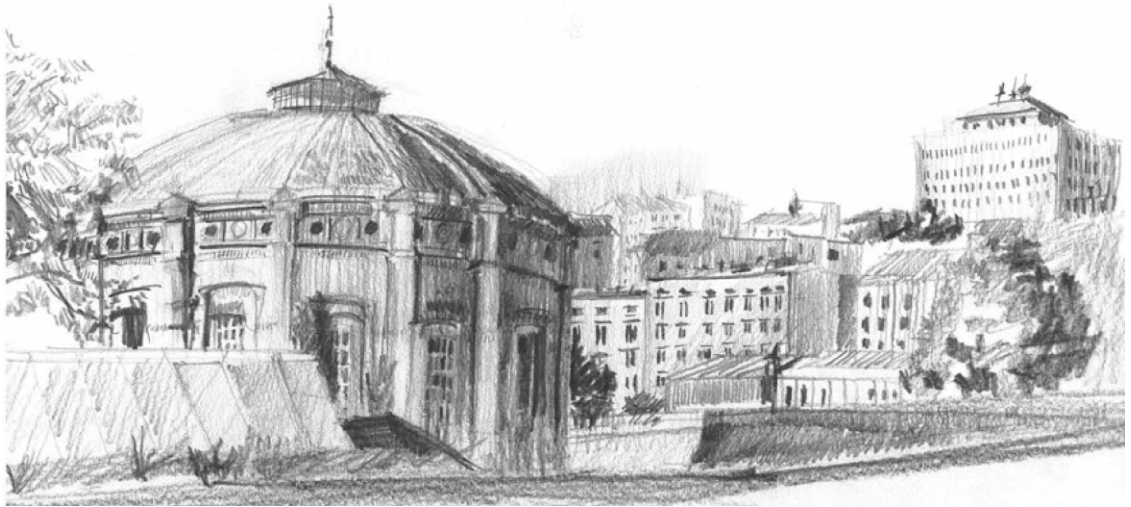


# Abstract

Trieste, as a shrinking city, experiences the phenomenon of vacancy, which shapes its landscape. It leads to decay of significant architecture and urban space in both the centre and the periphery. In this degrading urban context, the social group of youths faces challenges that affect their social life and personal well-being. This thesis investigates the sociological dimensions of adaptive reuse, focussing on how transformed spaces might promote social interaction and community participation.

The study of sociological findings in the topic of personal and collective empowerment is coupled with the analysis of architectural projects and theoretical work of Lina Bo Bardi and Aldo van Eyck. Their architectural activity deals with the problematic of human-centred architecture, revealing significant functional and architectural principles. Supporting personal and communal competencies by means of spatial articulation of individual and communal space, as well as the relation between them. In the further part, the theoretical findings are applied in a reuse project of a vacant shed, being part of the complex for vocational training 'Ex IRFOP', designed by Umberto Nordio, into a Youth Empowerment Centre. The projected facility consists of a centre for street sports, culture, and street art; co-working space for civic initiatives; and event space.

The implications of these findings underline the importance of human-centred design in the empowerment process of the youths and in fostering social cohesion, suggesting adaptive reuse as a catalyst for positive social change in regressing cities.



View on the Gasometro  
pencil drawing

# Kurzfassung

Triest, als schrumpfende Stadt, erlebt das Phänomen des Leerstands, das ihre Landschaft prägt. Es führt zum Verfall bedeutender Architektur und urbaner Räume sowohl im Zentrum als auch in der Peripherie. In diesem degradierenden städtischen Kontext trifft die soziale Gruppe der Jugendlichen auf Herausforderungen, die ihr Sozialleben und ihr persönliches Wohlbefinden beeinträchtigen. Diese Arbeit untersucht die soziologische Bedeutung vom Umbau mit dem Fokus auf die Förderung der Gemeinschaftsbeteiligung und soziale Interaktion.

Die Untersuchung soziologischer Erkenntnisse zum Thema persönliche und kollektive Ermächtigung wird mit der Analyse architektonischer Projekte und theoretischer Arbeiten von Lina Bo Bardi und Aldo van Eyck verbunden. Ihre architektonische Tätigkeit befasst sich mit der Problematik der menschenzentrierten Architektur und offenbart bedeutende funktionale und architektonische Prinzipien. Unterstützung persönlicher und sozialer Kompetenzen durch räumliche Gliederung der individuellen und gemeinschaftlichen Räume sowie der Beziehung zwischen ihnen. Nachfolgend werden die theoretischen Erkenntnisse im Umbauprojekt einer leerstehenden Halle, die Teil des ehemaligen Berufsausbildungszentrums 'Ex IRFOP' ist und von Umberto Nordio entworfen wurde, in ein Jugendförderzentrum umgesetzt. Die geplante Einrichtung besteht aus einem Zentrum für Straßensport, Kultur und Straßenkunst; einem Coworking Space für Bürgerinitiativen; und einem Veranstaltungsraum.

9

Die Ergebnisse unterstreichen die Bedeutung des menschenzentrierten Designs im Förderprozess der Jugendlichen und bei der Unterstützung der sozialen Kohäsion und weisen auf die Adaptive Wiederverwendung als Katalysator für positiven sozialen Wandel in Städten mit zurückgehenden Bevölkerungszahl hin.



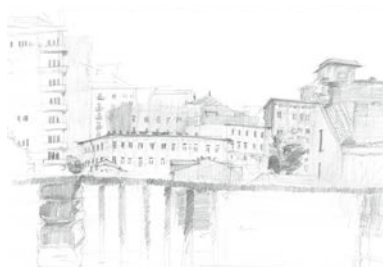
Trieste

*„Zone d’ombra dimenticate, immobilizzate in un limbo  
urbanistico colmo di contraddizioni.“*

*„Forgotten grey areas, immobilised in an urban limbo full of  
contradiction.“<sup>1</sup>*



# Introduction



View from Giardino di Via San Michele

This diploma thesis is the outcome of a collaborative project by a group of six students focused on systematically exploring the wide range of vacant buildings and derelict spaces in Trieste. Through shared research, field excursions, and direct engagement with the local community, key issues and challenges facing the city were identified. This collaborative analysis provided the foundation for the development of six individual design projects, each targeting specific neighbourhoods. The collective goal is to achieve sustainable reactivation of urban spaces through precise interventions.

Trieste was particularly interesting for this work due to several factors. The city presents a compelling case for the study of adaptive reuse, driven by its shrinking population and an excess of vacant building volumes. While much attention has been focused on the city's historic harbour as a symbol of its quiet decline, it is far from the only area illustrating this trend. A walk through Trieste's streets reveals numerous abandoned buildings—old palazzi, former factories, and empty residential properties—each a testament to a bygone era. These forgotten spaces, scattered throughout the city, also tell the story of Trieste's crumbling urban fabric.

13

The initial impulse for the current project came from the work „Buchi Neri - Indagine sui luoghi incompiuti o abbandonati della città di Trieste“ by the architect Roberto D'Ambrosi. This work documents the unfinished and abandoned places of Trieste, which visualise the gradual decay of the urban landscape. D'Ambrosi maps and classifies these so-called “black holes”, which have been created by unfinished construction projects, political instability and demographic changes. More than 90 such places have been identified, including important buildings such as the Palazzo Parisi, the Rotonda Pancera and the Palazzo Kalister, as well as large areas such as the former refugee camp in Padriciano or Piazzale

<sup>1</sup> Chiara Dínca, “La Trieste Dei Buchi Neri: La Parte Decadente Dell’urbanistica Cittadina,” February 18, 2020

Gretta. These abandoned spaces cover a total of more than 850,000 square metres. D'Ambrosi is analysing the causes of the vacancies and developing proposals for reactivating these sites in collaboration with the local population.<sup>2</sup>

The following part of this thesis presents a collective investigation of Trieste through a series of urban walks, so-called "passeggiata urbana." These explorations offer a comprehensive overview of the city's historical, urban, and social development, providing insight into its evolution and current condition. By examining its architectural heritage and the key forces that have shaped its urban landscape, this section seeks to capture the essence of Trieste.

2 I.Rossi, A. L. Govoni, D.Legovini  
R.Dambrosi, "Buchi Neri – Indagine  
Sui Luoghi Incompiuti o Abbandonati  
Della Città Di Trieste" (Trieste: Un  
áltra città-portovecchioimpressacollectiva,  
February 18, 2020).

*Then I climbed a steep slope,  
crowded at first, deserted further up,  
closed by a low wall:  
a nook where I sit  
alone; and it seems to me that where it ends  
the town ends too.*

*Trieste has a surly  
grace. If one likes it,  
it is like a rascal, harsh and  
voracious,  
with blue eyes and hands too big  
to offer a flower;  
like a love  
with jealousy.  
Up from this slope every church, any street  
I discover, whether it takes to the huddled beach,  
or to the hill where, onto the rocky  
top, a house, the last one, clings.  
All around  
circles all things  
a strange air, a tormented air,  
the native air.*

*My town that is in every of its part alive,  
has a nook made just for me and my life,  
pensive and reserved.*

[Saba Umberto, 1910-12]<sup>3</sup>

*Ho attraversato tutta la città.  
Poi ho salita un'erta,  
popolosa in principio, in là deserta,  
chiusa da un muricciolo:  
un cantuccio in cui solo  
siedo; e mi pare che dove esso termina  
termini la città.*

*Trieste ha una scontrosa  
grazia. Se  
piace,  
è come un ragazzaccio aspro e vorace,  
con gli occhi azzurri e mani troppo grandi  
per regalare un fiore;  
come un amore  
con gelosia.  
Da quest'erta ogni chiesa, ogni sua via  
scopro, se mena all'ingombrata spiaggia,  
o alla collina cui, sulla sassosa  
cima, una casa, l'ultima, s'aggrappa.  
Intorno  
circola ad ogni cosa  
un'aria strana, un'aria tormentosa,  
l'aria natia.*

*La mia città che in ogni parte è viva,  
ha il cantuccio a me fatto, alla mia vita  
pensosa e schiva.*

[Saba Umberto, 1910-12]<sup>3</sup>

3 Saba Umberto, Trieste. in Trieste e una donna. 1910-12 in Il Canzoniere. Einaudi tascabili. Torino. 2004. 79









Fig. 1 | Trieste from above

# Arriving, the image of the city

Jakob Traxler

Arriving, the image of a city

There are various ways to get to Trieste: via bus, train, or car. Upon arriving, the view of a city unfolds, characterised by its special geographical position. Wedged between the Karst plateau and the Adriatic Sea, Trieste stretches amphitheatrical from the harbour up to the hills, with the various districts reflecting the diverse and historical development of the city. The city is located in the northernmost point of the Adriatic Sea, the Gulf of Trieste, close after the border of Slovenia and is part of the Friuli-Venezia Giulia region.

The Gulf of Trieste covers around 20-25 km<sup>2</sup> from Grado to Piran and reaches a maximum depth of 25 m. The shallow and semi-enclosed basin has a notable and important influence for the region. It causes significant variations in temperature, salinity and the associated water density. In Trieste in particular, this leads to frequent outbreaks of the katabatic north-easterly to easterly wind, the so-called Bora or Burj in Slovenian. The Bora is a dominant meteorological phenomenon, especially during winter, where it induces coastal upwelling and intense air-sea heat fluxes. It typically persists for two to five days, with wind speeds reaching up to 100-120 km/h. The Scirocco, a southeasterly wind originating from the sea, is the second most prevalent wind, though considerably less intense. It is usually associated with rainfall. The alternating presence of these winds defines the region's winter climate.<sup>4</sup>

19

Looking up the hill, behind the city of Trieste, a unique landform emerges: the Trieste Karst, a limestone plateau known for its weathered landscapes. This rough terrain is defined by sinkholes, caves, and underground rivers, caused by the slow erosion of limestone. Because of its transitional nature between the Mediterranean and continental climates, the karst region provides a unique climatic feature to Trieste. The draughty soil and continuous dry breezes keep humidity

4 F. Raicich and F. Crisciani, "Time Variability of Atmospheric and Marine Parameters over the Adriatic Region," vol. 22, 1999

at a low of 65%. The average yearly temperature is 12.6 °C. Winter is harsh and persistent, summer starts suddenly after a short and stormy spring, is quite hot and often extends into autumn. These climatic peculiarities are clearly visible in the cityscape.<sup>5,6</sup>

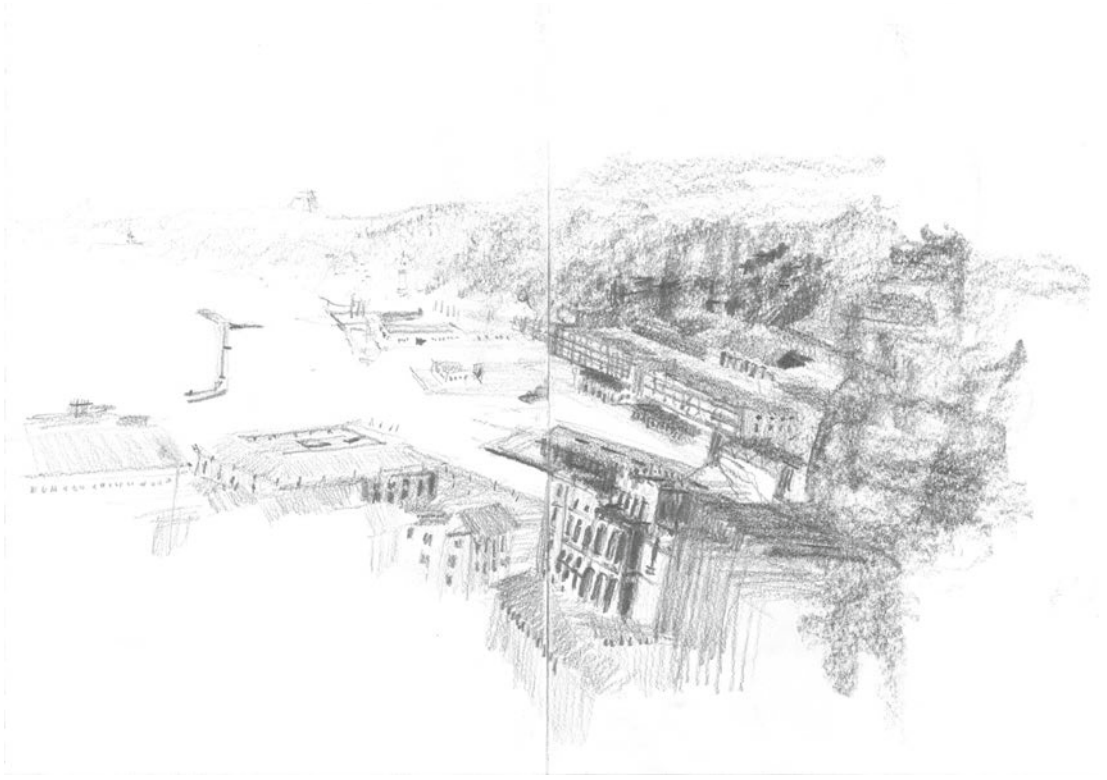
Descending the hill and heading towards the centre, the view of the city gradually clarifies. The diversity of Trieste's neighbourhoods underlines the city's layered and complex history. The districts tell the stories of the different cultures and empires that shaped it over the years. The Borgo Medievale, the oldest quarter, has kept its medieval urban fabric, while Borgo Teresiano and Borgo Giuseppino, shaped by Habsburg influence, exhibit neoclassical architecture from the 18th and 19th centuries. Borgo Franceschino, centred around Piazza Oberdan, showcases a blend of historical and modern elements. Further out, in the periphery, different typologies and neighbourhoods characterise the cityscape.

Continuing the way, the old harbour, 'Porto Vecchio', is not to be missed going through the city. Empty and derelict for years, this large area, once a vibrant centre of trade, is now a symbol for the development of the city. It symbolises the demographic development of the city, the steady decline in population since the middle of the 20th century due to the loss of its strategic importance and economic role after the Second World War. Here, the endless warehouses and abandoned buildings are shut down, as they are frequently brought up in discussions about the challenges of a shrinking city.

5 Livio Poldini, "UBERSICHT UBER DIE VEGETATION DES KARSTES VON TRIEST UND GORZ (NO-ITALIEN)," 1980

6 "Klima Trieste Daten Und Graphen Zum Klima Und Wetter in Trieste," accessed September 19, 2024







# Borgo Medievale

Marcin Jatzczak

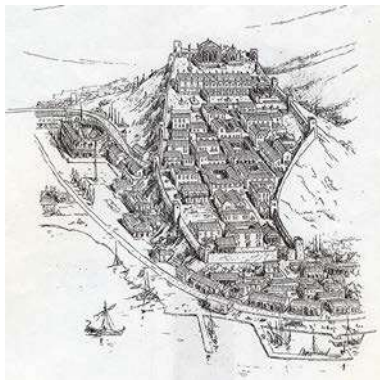


Fig. 2 | Speculative drawing of ancient Trieste



Fig. 3 | Foro romano

Standing on the hill of 'San Giusto' – the place of Trieste's origin - the historical past and former importance of the city are clearly legible. The architectural ensemble, constructed on its top, represents a true mosaic of different periods – Roman ruins, monumental mediaeval cathedral and fortress walls, dominating over the urban landscape. Although visible traces of the presence of initial creators have not survived until today, this area was inhabited long before the Romans arrived. Located on the hill, the settlement lived from maritime trade, profiting from its access to the Adriatic Sea. To keep control over the Gulf, the inhabitants raised a castle, called 'Castelliere', which was situated at the same place as the today existing fortress. It endured until the Roman times, when the landscape of the colony changed significantly.<sup>7</sup>

23

## Il Foro

Located throughout the whole city centre, it remains a witness of the Roman presence. On the hill, the few preserved pieces of the walls and columns mark the floor plan of the ancient forum - the antique most important political and social public space. One might think, the Roman remains were always a part of the landscape of 'San Giusto'. However, they were excavated barely 100 years ago, on behalf of the fascist authorities, and partially reconstructed with bricks to make them easier to recognise as such. This act was predominantly a part of Italian propaganda to underline Trieste's Roman heritage and, in consequence, 'justify' its belonging to the Italian State. For the same reason, after the excavations, directly next to it, was placed the monumental statue to the Fallen Soldiers of Trieste during the 'liberation war' against the Austro-Hungarian Empire.<sup>8</sup>

7 Istituto regionale per la storia della Resistenza e dell'Età Contemporanea nel Friuli Venezia Giulia 'Trieste. Città'

8 Comune di Trieste, Discover Trieste, 'Hügel San Giusto'



Fig. 4 | Cathedral San Giusto

## Castello di San Giusto

Not as old, but how characteristic for the city landscape is the 'Castello di San Giusto'. It's a common work of previous rivals for hegemony on this territory – Venetians and Habsburgs. Firstly, at the end of the 14th century, the Habsburgs constructed a fortified tower, simultaneously, as a residence and for control and protection of the city. During a conflict in the 16th century, the Venetians developed an extension project to create a fortress. They managed to finish only one tower before they had to retreat from the city. Nevertheless, the construction of further two towers and fortifications was continued under Austrian rule. In this state, the building survived up to the present moment.<sup>9</sup>

## Cathedral San Giusto

The cathedral of San Giusto completes the landscape of monuments on the hill. Formerly serving the ancient polytheistic cult, today it's the most important Christian temple of Trieste. The building presents itself as an architectural patchwork. The outer walls are an assembly of stones from different ages. Beginning with the propylon columns of the Roman temple that are included in the campanile built in the 3rd and 4th centuries, built by the Romans. The church's building itself is a compound of two independent mediaeval structures, united in the late Middle Ages.<sup>10</sup>

Right in front of the cathedral, a wide stair leads towards the rest of the 'Città Vecchia' and the harbour. Following the steep via della Cattedrale, the landscape changes gradually. The far view over the red tile roofs, green hills, and the blue sea turns into a narrow and crooked urban street. At the end of the way, at a square, there is another Roman relic embedded partially in the wall of a house - the Arch of Riccardo, marking the former entry to a sanctuary of 'Magna Mater'.<sup>11</sup> This little polygonal square is usually filled with people in the teraces during the day and at night.

## Rotonda Pancera

Only a few steps behind the arch, on the corner of Piazza del Barbacan and via Felice Venezian, there is a building distinguishing itself from others by the form and detail. A neoclassical palace that resembles, through its rounded corner

<sup>9</sup> Civico Museo del Castello di San Giusto-Armeria, 'Castello di San Giusto' - visit brochure

<sup>10</sup> SOCIETÀ FRIULANA DI ARCHEOLOGIA, 'TRIESTE. La Basilica di San Giusto', 2018

<sup>11</sup> SOCIETÀ FRIULANA DI ARCHEOLOGIA, 'TRIESTE. Arco di Riccardo', 2018



Fig. 5 | Rotonda Pancera



Fig. 6 | Via del pozzo di Crosada



Fig. 7 | Teatro romano

and ionic columns, a Roman temple. The design by Matteo Pertsch and named after its founder, 'Rotonda Pancera' hides on the inside rich and unique for the city interiors, decorated with elaborate frescoes.<sup>12</sup> But there is no one that inhabits this urban palace. All windows are shuttered; it seems to have stood abandoned for many years. The plaster has fallen off the façades. The downpipe at the wall is broken, and the running down water has left moss and mould traces. On the balcony in the first floor, nature has inhabited the façade, manifesting it with grass growing on the stone balustrade.

Going down via delle Mura and passing through an arch, unexpectedly, a jungle appears. A wild urban jungle fills the space of the square. Trees, ivy, and voluminous bushes emerge, dominating the view. But there is no entry to this green space in the dense city centre. It's enclosed by a high, falling apart wall that used to be the façade of a house, viewed through the bricked-up window and door openings. With the vegetation growing and putting pressure on the walls, it seems to be only a question of time before it degrades entirely and opens up.

25

### Teatro Romano and Casa del fascio

The Via del Teatro Romano, being today in the middle of the city centre, used to be at the sea border. Throughout the centuries, the coast line has moved around 250 m, revealing new ground. In this street, as the name indicates, stand the ruins of the Roman theatre. Initially, facing the sea, the rounded and inclined cave was built in the hill of 'San Giusto'.<sup>13</sup> On the other side, the scaenae frons were giving a scenographic background for the plays. In the course of time, the meaning of this, once culturally crucial, structure has been forgotten, and step by step, new housing has covered the Roman remains. First, in the 19th century, the theatre was identified by an Austro-Hungarian architect, Pietro Nobile. However, the excavation and reconstruction works were initiated only in the 20th century by the fascists as part of the urban renewal, including demolitions of all the housing in this area.<sup>14</sup> Streets so crooked and narrow, that only pedestrians could pass vanished and gave place to unused reconstructed ruins that can be seen only from behind a fence. Just in front of the theatre stands the building of 'Palazzo della Questura' - a

<sup>12</sup> Comune di Trieste, Catalogo dei Beni Culturali 'Fabbricato di Via Venezian 27, Rotonda Pancera' 10

<sup>13</sup> IRSREC FVG, 'Trieste. Città'

<sup>14</sup> SOCIETÀ FRIULANA DI ARCHEOLOGIA 'Trieste. Teatro Romano'





Fig. 8 | Casa del fascio

massive volume from fascist time, in its architectonic principles, looking similar to the 'Castello di San Giusto'. Originally, it housed the local headquarter of the Mussolini's party and was an architectonic and political statement in the city centre with cosmopolitan tradition.<sup>15</sup> Since the Middle Ages in these areas lived the Jewish community, until the project of reorganisation of the 'Città vecchia' implied the removal of the whole Jewish quarter and replacing it with new constructions, representing the dominance of fascist Italy over the city.<sup>16</sup> Nevertheless, due to the lack of economic resources and change of power, the masterplan could not be realised entirely.

The 'Borgo Medievale' may be described as a complex of contradictions.

On one hand, the long and continuous architectural activity in the Trieste's old town presents itself in an organic continuity of the urban development, but on the other hand, the vast interventions in the fascist period interrupt this picture and introduce contrasts, that are not easy to comprehend in this urban context, but at the same time these contradictions are undeniable part of Trieste's cultural identity.

<sup>15</sup> PromoTurismoFVG, 'Palazzo della Questura'

<sup>16</sup> Alessandra Marin, 'PROGETTI, CITTÀ, IDENTITÀ: SPAZI URBANI E IDEOLOGIE NAZIONALI A TRIESTE TRA XIX E XX SECOLO', 2012, p. 6 - 9



Fig. 9 | Piano particolareggiato della città vecchia





# Borgo Teresiano

Liselotte Bilak



Fig. 10 | Trieste Centrale

## Trieste Centrale

After a journey of two hours, the train arrives in Trieste Centrale from Venice. The imposing-looking but manageable station concourse through which one reaches the station exit acts as a buffer zone between the train and the city. It was designed by the German-Austrian architect and construction director of the Südbahn-Gesellschaft, Wilhelm von Flattich, and opened on 19 June 1878.<sup>17</sup>

In 1857, the first train arrived in Trieste at a provisional railway station. However, the beautiful landscape visible from the window upon arrival posed challenges during the construction of the railway network. Extensive interventions in the topography were necessary.

As the city is encircled between the sea and the mountains, the station buildings and parts of the railway network had to be built on a total of 145,000m<sup>3</sup> of sea bed. This caused problems during the foundation work for the buildings. In addition, parts of the mountain on the opposite side of the sea were removed to enable a rail network into the city, and torrents flowing from the mountains towards the sea were channelled into the sea in widely arched canals under the station.<sup>18</sup>

The railway station as built urban history, as the starting and final destination of the southern railway line between Vienna and Trieste. The line ran through the crown lands of Styria, Carniola and the coastal region, opening up areas that had previously been off the main transport routes.<sup>19</sup> The completion of the southern railway led to the establishment of a significant trade route to the Orient, while also boosting tourism. This marked the rise of the „Austrian Riviera“. <sup>20</sup> Initially known as a health resort and vacation spot for Empress Elisabeth of Austria,<sup>21</sup> Trieste evolved into a popular family-friendly tourist destination. The influence of Trieste's former affiliation to the

- 17 Wikipedia, Bahnhof Trieste Centrale
- 18 Kerstin Ogris, Der Bahnhof der Südbahn in Triest - Teil 1, Kerstin Ogris, Der Bahnhof der Südbahn in Triest - Teil 1
- 19 Wikipedia, Bahnstrecke Spielfeld-Straß-Trieste Centrale
- 20 Christian Rapp, Nadia Rapp-Wimberger, Astrid Götche, Alexandra Hönigmann-Tempelmayr, Österreichische Riviera
- 21 Regio Augsburg Tourismus GmbH, Triest

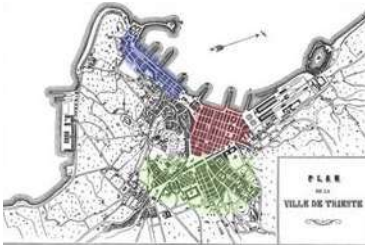


Fig. 11 | Trieste in 19<sup>th</sup> century, red: Borgo teresiano, blue: Borgo Giuseppino, green: Borgo Franceschino

Austro-Hungarian Empire is still noticeable as walking through the station concourse and into the open air. The square in front of the station is marked by grand, Wilhelminian-style buildings, giving it a Viennese character. It's no wonder Italians call the city „il piccolo Vienna“ (the little Vienna). Although the reality is completely different. Some of the buildings are surrounded by construction scaffolding and draped in billowing sheeting, while others appear abandoned and uninhabited.

### Borgo Teresiano

It is the border to Borgo Teresiano, also known as *città nuova*. This „new city quarter“ also dates back to the rule and urban planning of the Habsburgs. As early as 1382, Trieste was incorporated into the Holy Roman Empire of the German Nation and remained under Habsburg rule until its fall.<sup>22</sup> In 1719, Emperor Charles IV declared Trieste a free port and ordered the construction of a naval harbour in 1734. This led to a significant economic boom, causing the city to expand and the population to increase. Emperor Charles' daughter, Maria Theresa, took further steps by expropriating the salt fields outside the old city walls and initiating the construction of a new city district to serve as a commercial centre. However, the construction of this new district was delayed due to a shortage of labour for draining the newly dedicated fields and shore areas.

Building commissions laid down precise guidelines for newly constructed buildings, which defined two building types: Residential and commercial buildings. The clients, who were mostly wealthy merchants, commissioned renowned artists and architects to design their buildings.<sup>23</sup> The splendidly designed facades of the palaces catch the eye as one walks towards the city centre. Some of the window openings on the buildings are boarded up with wooden slats, indicating vacancy. This emptiness is noticeable not only near the train station but also in the centre of the Teresian borough.

Comparing the population figures of the last few centuries, this does not seem surprising. Trieste's population has been shrinking continuously since the 1960s. Back then, the population was just under 280,000,<sup>24</sup> but today the city only has 228,000 inhabitants.<sup>25</sup> Realising the strictly orthogonal

22 Wikipedia, Reichsunmittelbare Stadt Triest und ihr Gebiet,

23 Wikipedia, Borgo Teresiano,

24 Wikipedia, Triest - Demographische Entwicklung

25 citypopulation.de, Stand 01.01.2024



Fig. 12 | Canale Grande



Fig. 13 | San Spiridione Church

street network of the 'new city' with every step one takes, as every alley one walks down runs in a straight line of sight to the next intersection. In contrast to Vienna, but also to the 'old town' in Trieste, where it can often happen getting lost in the narrow, winding alleyways, here one is having no problems finding the way. Getting the feeling that everything follows a strictly organised, gridded logic. At the end of an alley, a canal is crossing. It is the Canale Grande. A visible aisle between the city and the sea. From here, goods were transported directly from the harbour to the city.<sup>26</sup> Whereas in the 18th century, merchants and traders bustled about in the lively market, this is now a canal promenade characterised by bars, cafés and restaurants. Tourists and locals alike linger over an aperitivo in the outdoor cafés.

However, the canal as a connection between the city and the sea also marks two defining parts of the new city with its start and end points. If one looks towards the end of the canal, towards Piazza Sant'Antonio Nuovo, as the name suggests, the imposing „Sant Antonio Nuovo“ church catches the eye.<sup>27</sup> Built by the Ticino architect Pietro Nobile, it was consecrated in 1842 and is the largest Catholic church in Trieste. Built in the neoclassical style, the interior contains numerous paintings by Venetian painters of the 18th and 19th centuries.

31

### Built religious freedom

The fact that Trieste, then as now, was characterised by a multitude of different cultures can also be seen in the churches of various religions. With Trieste's appointment as a free harbour, a large number of traders from Herzegovina, Bosnia, Montenegro and Dalmatia, as well as Greece, also arrived in the city.<sup>28</sup>

Maria Theresa's liberal attitude towards the freedom to practise religion prompted the various religious communities to build their own places of worship in the newly established quarter.<sup>29</sup>

The Serbian Orthodox church of San Spiridione the Miracle Worker is located just a block away from the Catholic church. It was built in 1869 by the Trieste engineer Pietro Palese, with decorative elements executed by the Milanese Antonio Caremmi. The intention was to construct a building inspired by Byzantine architecture, representing monumentality and

26 Borgo Teresiano s.r.l.

27 Wikipedia, Sant'Antonio Taumaturgo

28 Comunità Religiosa Serbo Ortodossa

29 Borgo Teresiano s.r.l.



Fig. 14 | Porto Vecchio

splendour. The exterior of the temple was covered with stones from the quarries of Santa Croce in the Karst and Brioni in Istria, while the interior is adorned with mosaics and frescoes. The mosaics and frescoes are depicted in large formats, and the gold of the mosaic surfaces is reproduced in the paintings.<sup>30</sup> Due to differences in customs and languages, the Serbian and Greek religions, which initially worshipped together, separated in 1770. In 1784, the construction of the 'San Nicolò and the Holy Trinity' temple of the Greek Orthodox religious community began, which is located not far from the canal, directly on the promenade.<sup>31</sup>

### Porto Vecchio

Looking to the starting point of the canal, the point where the waterway runs into the sea, one can see the old harbour of Trieste for the first time. Although parts of the Porto Vecchio could already be seen from the train, the enormous size of the area and the ruins, some of which are now in ruins, are only now becoming apparent due to the current location and the line of sight. Countless buildings, built between 1860 and the beginning of the 20th century,<sup>32</sup> can be found on the site directly next to the railway station, the arrival point for the journey to Trieste. After the completion of the southern railway, the city was developed into a transit port, and in 1861 the expansion of the harbour as the most important Austrian seaport, the Pun-to Franco, began.

The site consisted of storage facilities, functional buildings, warehouses, hanger-like transit sheds, office buildings, a canteen and buildings for customs clearance, as well as a hydrodynamic power station.<sup>33</sup>

Looking closer at the individual buildings, it's not easy at first. Walls, barriers, and a multitude of car parks and cars that now use parts of the former harbour area initially block the way. When arriving between parked coaches and wasteland, the sight of the dilapidated buildings and ruins gives the feeling of being in a ghost town. Some of the balconies of the administrative buildings are adorned with scattered items of clothing and food packaging.

The decline of the harbour began with the loss of Austria's connection to Trieste after the First World War. With the reunification of Italy in 1918, the border town was finally isolated due to its peripheral location and lost its economic

30 Comunità Religiosa Serbo Ortodossa

31 Comunità Greco Orientale di Trieste, Chi siamo?

32 AZW, Porto Vecchio

33 Dirk Schubert, Trieste Porto Vecchio. Neue Hoffnung für Erhalt und Umgestaltung? In: RaumPlanung 176 / 5 (2014) p. 61-62.



Fig. 15 | Refugee camp in Silos

importance.<sup>34</sup> Due to the expansion of the new harbour in the south of the city, the Porto Nuovo, the old harbour was increasingly relocated and finally ceased operations in 1983.<sup>35</sup> Although a large number of competitions and reutilisation concepts have been dedicated to the site in recent years, none of them has been realised.

Shouts from a distance attract attention. It is a group of young men on the roof of one of the old silos. They are trying to remove wooden slats from the roof to hand them to their colleagues on the ground, who are using the material as firewood. It is an image that will remain etched in the memory. Although the issue has been published in newspapers and television reports for some time, it is only from this perspective that now realising the extent of what is happening. Thousands of migrants are stranded every year in Trieste, the end point of the Balkan route. Too few facilities, but also no clear strategies on the part of the city government for the reception or integration of these refugees, force those arriving to spend the night in the old silos of the railway station and be left to their own devices.

34 Maria von Hartmann, No se pol?  
Der Porto Franco Vecchio. In:  
Bauwelt 4 (2007) 7

35 AZW, Porto Vecchio





Fig. 16 | Borgo Giuseppino

# Borgo Giuseppino

Keti Beka

Leaving the Piazza Unità d'Italia means leaving the Teresiano district and entering Borgo Giuseppino. Its name comes from Emperor Joseph II of Habsburg-Lorraine, the son of Empress Maria Theresa of Austria, who continued the legacy that was initiated by his mother in Trieste.

Like the previous one, this area follows a fixed grid system with the planning and expertise of the architect Domenico Corti, a street named in his honour in the neighbourhood.<sup>36</sup> Compared to the Teresiano district, the grid is stretched more into longitudinal rectangles than a fixed-blocks-grid. It mainly consists of residential buildings overlooking the seafront in two rows along two parallel streets: Riva Grumula and Via del Lazzaretto, the latter also mentioned by Umberto Saba in one of his poems:

35

"C'è a Trieste una via dove mi specchio nei lunghi giorni di chiusa tristezza; si chiama Via del Lazzaretto Vecchio." - Tre Vie, Umberto Saba

"There is a road in Trieste called the Lazzaretto Vecchio that I used to walk on long days of despair" - Tre Vie, Umberto Saba<sup>37</sup>

## Cavana district

The route continues from the piazza down Via di Cavana, where the urban noise gradually diminishes. This is where the small old city buildings meet the bigger Giuseppino blocks. The narrow street is lined with colourful facades, featuring a variety of pastel yellows, deep ochres, and soft terracottas, all of which have been weathered over time but remain in good condition. Above, shutters are open, allowing light to enter, and from the upper floors of the old buildings, one can hear the soft clatter of dishes or see laundry flapping in the wind.

The historic Cavana district is now a thriving commercial hub,

36 Zubini, F. (2002). Borgo Giuseppino

37 Saba, U. (2019). Trieste, Tre Vie. Mimesis



with a vibrant local community and a rich cultural heritage. Many popular streets are lined with bars and cafés, which extend onto the pavement and are occupied by locals sipping espresso and going about their day. The narrow alleyways are characterised by their winding routes and cobbled surfaces, creating an ambience conducive to a slower pace and offering insight into Trieste's maritime history. Here and there, abandoned houses falling apart and being taken back from nature, await their end by demolition.

Following along Via della Pescheria, where once the centre of the city's fish market was - hence the name, it is now filled with the sounds of conversation, laughter, cutlery and the steady rhythm of Trieste's daily routine filling the air.

Another small square takes place in between the blocks, Piazza Attilio Hortis, where the city noise appears to exhale. A market is held here each morning, offering fresh produce from local farmers, and still, the square is less populated than the surrounding streets. It helps that it is lined with tall trees that sway gently in the breeze, casting long shadows against the pale stone buildings.

### Piazza Venezia

A small, intimate square follows - Piazza Venezia, also known as Piazza Giuseppino, sharing the Emperor's name together with the Pier in front of it. The mild breeze, carrying the salty aroma of the sea and the sounds of gulls overhead, lightly shakes the heads of the surrounding trees of the piazza. While the gaze is lost on the blue water, the gulls try to steal the lunch of the bystanders out of their hands, sometimes successfully.

Highlighting the Habsburg presence, in the middle of the square, a statue of Emperor Maximilian of Mexico from 1875, (brother of Franz-Joseph of Austria-Hungary) was built to commemorate him, dressed in his uniform as an Austrian fleet Admiral with his arm stretched into the direction of the sea and his former castle, Miramare.<sup>38</sup> The water stretches out behind his arm and various white sailboats bob gently in the harbour. Some fishermen are fixing their nets while residents stroll along the harbour, as time seems to stand still in the warm spring sun.



Fig. 17 | Piazza Venezia

38 MisterKappa.it: cartoline e storia postale di Trieste.





Fig. 18 | Museo Revoltella

## Museo Revoltella

In the afternoon, the sun casts a soft glow over the neoclassical facade of the Museo Revoltella, illuminating it with a subtle radiance. This monument belonged to Baron Pasquale Revoltella, who after his death left his house and all the possessions in it to the Municipality of Trieste with the condition of making them accessible to the public, which later became one of the most prestigious modern art galleries in the country.

The museum is made up of three buildings from the second half of the nineteenth century, namely the Palazzo Revoltella by architect Hitzig, the Palazzo Brunner, and the modest Palazzo Basevi.

The architect Carlo Scarpa was given authorisation for renovating the museum in 1963. The Brunner underwent extensive measures, whilst the Revoltella was almost entirely saved and is also maintained in the museum as a memory of the Baron Revoltella and Pinakothek of the 19th century. A reinforced concrete skeleton was inserted into the empty shell, highlighting it and turning it into an ornament that shielded the inside (which was lined with stone walls) from the outside. In order to establish a formal distinction and a substantial comparison with the light-filled entrance situation from the roof, Scarpa employs the Palazzo Revoltella as the motif of the inner courtyard for the vertical orientation. This space and the theatre on the ground floor are those parts of the museum which were most obviously realised in the context of Scarpa's planning.<sup>39</sup>

37

## Coastal strip

Josefvorstadt (as it was known in the Austrian-Hungary Empire) - or Borgo Giuseppino - was broken down into two areas parallel to one another: the internal zone - with more representative and residential buildings; and the coastal strip - composed of a linear chain of buildings that were more linked to the port activity.<sup>40</sup>

The previous residential villas and palaces belonging to the city's wealthy residents have been transformed due to its advantageous location on the seafront. It now consists mostly of hotels, offices and various shops, which have been constructed on the site of the former residences.

39 Architectuul. „Revoltella Museum“

40 Trieste nell'800. (2016, April 7).  
MOVIO



Fig. 19 | Sachetta

In the direction of the hilly area situated farthest from the sea, there were several villas belonging to the wealthiest families back then. These Villas are characterised by a simple and dry style, which were not designed as seasonal vacation spots; rather, they were intended for use as Sunday retreats, which is why they were located near the city centre.<sup>41</sup>

### Sachetta

Continuing at the end of one of the two parallel roads to the shorelines, and exiting the Borgo Giuseppino, the area remains predominantly residential, with newer buildings from different decades situated at the foot of Sant'Andrea Hill. Despite the variety of architectural styles, almost every building features a long balcony, a typical characteristic of a warmer climate with more generous weather conditions.

There is a twenty-plus-storey building, difficult to miss as it's one of the tallest in the neighbourhood, extending its neck as if reaching for the sea, almost like making a statement for the area.

While the waterfront is visible from the balconies, direct access to the beach within the city is highly restricted (if one excludes the possibility of jumping headfirst from the pier into the sailing water). The seashore extends from the Old Port to the numerous piers, which accommodate a multitude of sailing vessels. Still, only a narrow strip of beach remains to the public throughout the entire area of the inner city. On the other side of the beach strip, the therapeutic swimming pool "Aquamarina" was previously in operation. However, it was subsequently abandoned and demolished, making way for new construction and a significant change to the appearance of the neighbourhood with the name of Sachetta.<sup>42</sup>

### Campo Marzio

On the other side of the street lies a former industrial area with the Campo Marzio Station. This station was the second most important railway station in Trieste, previously known as Trieste Sant'Andrea, commenced operations as the terminus of the railway Opicina and was linked to the Central Station via a dedicated track, the Linea delle Rive. Furthermore, it facilitated connections to Pula and Rovinj. After the First World War,

41 Revoltella Museum. Architectuur

42 Al via l'abbattimento della "collassata" ex piscina terapeutica acquamarina in "Sacchetta" a Trieste. Comune di Trieste



Fig. 20 | Railway Station Campo Marzio



Fig. 21 | Porto Nuovo

the station was incorporated into the operational framework of the Italian State Railways (FS), subsequently undergoing a renaming to Trieste Campo Marzio. Since 1960, the station has been closed to passenger traffic and is now used for the operation of historical trains.<sup>43</sup> The station also houses the railway museum, which bears the same name. Some of the wings are currently undergoing renovation, while the northern side has been demolished recently, whereas the rest of the industrial area remains an empty, abandoned space.<sup>43</sup>

### Porto Nuovo

The start of this industrial area leads to the beginning of the New Port, Il Punto Franco Nuovo, also known as the Free Port of Trieste. Starting from the Campo Marzio Area and stretching further south until the Servola neighbourhood, the whole coastline is in service of the port.

The view of white sailing boats has been replaced with that of containers and big yellow cranes operating daily shipments from all over the world.

One of the initial measures implemented by Maria Theresa upon assuming control was to expand the boundaries of the Free Port region to encompass the outskirts of the town, effectively integrating the emporium, the port, the newly established city, and the existing one. As previously mentioned, the enactment of the law of "Editto di Tolleranza" which guaranteed the freedom of worship, the ability to engage in commercial transactions without interference, and the right to possess personal property, attracted a diverse population from various countries and a range of socioeconomic backgrounds.<sup>44</sup>

39

### Sant'Andrea

Because of the railway, and the importance of the port, the whole area around Sant'Andrea developed rather quickly. The residential blocks took over the industrial areas, and the remainder of a whole factory quarter is just a forgotten abandoned structure of the Mensa from the famous architect Marcello D'Olivio.

A lot of these blocks, around the neighbourhood, were built to house the railway workers, like the ones opposite the Ricreatorio Edmondo De Amicis, that have now been empty for some time, and for sale as a whole unit.. Similar to the

43 Porto Franco. (2005). Autorità Portuale Trieste.

44 Ansa, A. (2017). Trieste e i 300 anni Maria Teresa d'Asburgo - Friuli Venezia Giulia - Ansa.it. Agenzia ANSA.



Fig. 22 | Between the blocks

Gründerzeit-Viennese ones, these four-to-six-storey buildings had shared bathrooms in the hallways, and laundry in the basement and were divided into one-to-two-room apartments with small kitchens. With fewer renovations made, bathrooms being moved inside the apartments and the ones in the hallways used as storage or laundry rooms for example, the structure remains the same still to this day. Even the ground floor remains taller and is mainly used for storage or many other functions rather than apartments. In the wealthier blocks, the courtyard hides their private green areas, with high trees casting shadows in the harsh summers, while the others have given up their gardens for more parking space.

Walking further away into the neighbourhood, the typology of the building changes. Now, two three-storey Villas with small gardens in front of them take the place of the blocks. Although the buildings are of different typologies and were constructed at various points in time, the residents exhibit a consistent pace of life.

The entire area becomes noticeably quieter, almost as if it is standing still, and the salty breeze is now barely perceptible. From a distance, it is easier to catch a glimpse of the vast expanse of blue water, with the contrasting yellow cranes in the distance emerging their metal masts from the port.



Fig. 23 | View from up the hill into the Porto Nuovo





# Borgo Franceschino

Orsoloya Nyulas

In the northwest inland area of the city, Borgo Franceschino took shape. Built-in 1796 with a primarily residential character, thanks to a concession from Emperor Francis II, it was designed similarly to Borgo Teresiano, although with larger block sizes. In the district, between 1817 and 1827, the new city theatres (the Mauroner and the open-air Arena) were established beside the promenade along the Aqueduct (constructed on the initiative of Domenico Rossetti) and numerous cafés.<sup>45</sup>

Borgo Franceschino is a historic district in Trieste. Its development was facilitated by a concession from Emperor Francis II (Franz II), the first Emperor of Austria. Similar in design to the nearby Borgo Teresiano, Borgo Franceschino featured larger block sizes and was built during a period of significant urban development in Trieste, which reflected the growing importance of the city within the Austro-Hungarian Empire.<sup>46</sup>

43

The area developed significantly during the Habsburg period (from 1382 to 1918) when Trieste was the main seaport of the Austro-Hungarian Empire. This expansion was part of a broader effort to modernise Trieste and support its growing role as a crucial hub for trade and commerce in the empire. Under Habsburg rule, Trieste underwent well-planned urban development that included the creation of new districts like Borgo Franceschino. The planning reflected the need for orderly expansion, efficient infrastructure, and attractive architecture to showcase the city's prosperity.

Like other parts of Trieste developed during the Habsburg era, (like Borgo Giuseppino or Piazza della Borsa) the district follows a structured grid layout. The plan was intended to facilitate easy navigation and efficient movement of people and goods, which is crucial for a growing port city. The

45 Vivere l'Ottocento a Trieste - Percorso tra residenze nobili e borghesi+ translation

46 <https://movio.beniculturali.it/pmfv/viverelottocentoatrieste/it/9/introduzione>



Fig. 24 | Palazzo Panfilli



Fig. 25 | Palazzo Vianello

district's streets are relatively broad, reflecting the urban planning principles of the time, which prioritised accessibility, ventilation, and light. These streets allowed for smooth traffic flow and provided large spaces for pedestrians.<sup>47</sup>

As Trieste grew, Borgo Franceschino became a vibrant district, home to merchants, artisans, and officials who were integral to the city's economy. The district reflects the diverse social fabric of Trieste under Habsburg rule, with a mix of Italian, Austrian, Slovenian, and other communities. This diversity was further enhanced by the district's proximity to Piazza Oberdan, one of the critical squares in Trieste. Located near Borgo Franceschino (in the northeastern part of the city, near the city centre), Piazza Oberdan acts as a central transport hub and a symbolic site in the city's history, linking the district to other parts of Trieste and serving as a gateway for movement in the town. The square's strategic position facilitated the flow of people and goods. The square is named after Guglielmo Oberdan, an Italian irredentist martyr, symbolizing the complex nationalistic tensions in Trieste during the late 19th and early 20th centuries. The Piazza has historically been a focal point for mobility, featuring tram lines, buses, and other forms of public transportation. It connects Borgo Franceschino to essential transit routes, from historical view the Opicina tramway, or nowadays several public transportation lines, which are strengthening the district's accessibility and integration with the rest of the city.<sup>48</sup>

The area around Piazza Oberdan includes several significant buildings (Palazzo Panfilli, Palazzo Vianello, Tempio Israelitico di Trieste, Casa di Cura Triestina) that embody the influences of Habsburg architecture and modern architectural styles. As an example Palazzo Panfilli and Palazzo Vianello, both located near the Piazza, exhibit features typical of the neoclassical and historicist architectural styles. These buildings reflect the glory and elegance favoured by the Habsburg Empire, characterised by symmetrical facades, detailed cornices, and arched windows. The use of neoclassical elements like columns and decorative sculptures reflects the Austro-Hungarian influence, with a focus on monumental urban development.<sup>49</sup>

47 <https://upcommons.upc.edu/bitstream/handle/2099/3931/annex.pdf;jsessionid=F3597D671BC284504258F48325752323?sequence=1>

48 [https://it.wikipedia.org/wiki/Piazza\\_Oberdan\\_Trieste](https://it.wikipedia.org/wiki/Piazza_Oberdan_Trieste)

49 [https://elearning.unite.it/pluginfile.php/273198/mod\\_resource/content/0/presnitz\\_piazza\\_nostalgia\\_trieste.pdf](https://elearning.unite.it/pluginfile.php/273198/mod_resource/content/0/presnitz_piazza_nostalgia_trieste.pdf)



Both Borgo Franceschino and the Piazza Oberdan area were part of Trieste's urban expansion under Habsburg rule, reflecting structured city planning, neoclassical architecture, and a blend of modernist influences that began to emerge in the so called "Otto Wagner Areal".

The Otto Wagner Areal refers to an area of Trieste influenced by Otto Wagner's designs. Although Wagner did not directly design buildings in Trieste, his architectural philosophy and urban planning principles significantly influenced the city's development during the late 19th and early 20th centuries.

Wagner, a professor at the Vienna Academy of Fine Arts, mentored several architects who later brought his ideas to Trieste, including Max Fabiani. Fabiani played a significant role in Trieste's urban transformation and was directly influenced by Wagner's modernist approach, emphasizing functionality, simplicity, and integrating new materials.

"Max Fabiani introduced the elegant and rational style of his master Otto Wagner to Trieste, and Giorgio Zaninovich (also a student of the Wagnerschule in Vienna) embellished certain residential buildings on Via Commerciale with an imaginative and, at times, surprising interpretation of the Secession Style. A Wagnerian play of solids and voids and exterior shells that seem to disintegrate into large windows on the ground and mezzanine floors (which were intended for commercial activities) are just two of the features that characterize some of Trieste's most beautiful Art Nouveau buildings."<sup>50</sup>

45

Fabiani's buildings often feature straightforward, practical designs with restrained decoration, embodying Wagner's belief that architecture should serve its purpose while remaining beautiful. Inspired by Wagner, Fabiani was among the early adopters of materials such as reinforced concrete, steel, and glass in his designs in Trieste, pushing the boundaries of traditional construction methods. His approach to blending buildings with urban context ensures that each project contributes to the city's broader visual and functional coherence. Max Fabiani's work around Piazza Oberdan shows his approach to modernist architecture and urban planning. His contributions to the district helped shape

50 The TERNI - DEI ROSSI building, where Palace Suite is located, is one of Trieste's most beautiful buildings



Fig. 26 | Parco San Giovanni

Trieste's urban character, blending functionality with a modern aesthetic. Fabiani's projects (for example, Casa Bartoli or Narodni Dom) are emblematic of the rapidly changing cultural and architectural shifts Trieste underwent during the early 20th century.<sup>51</sup>

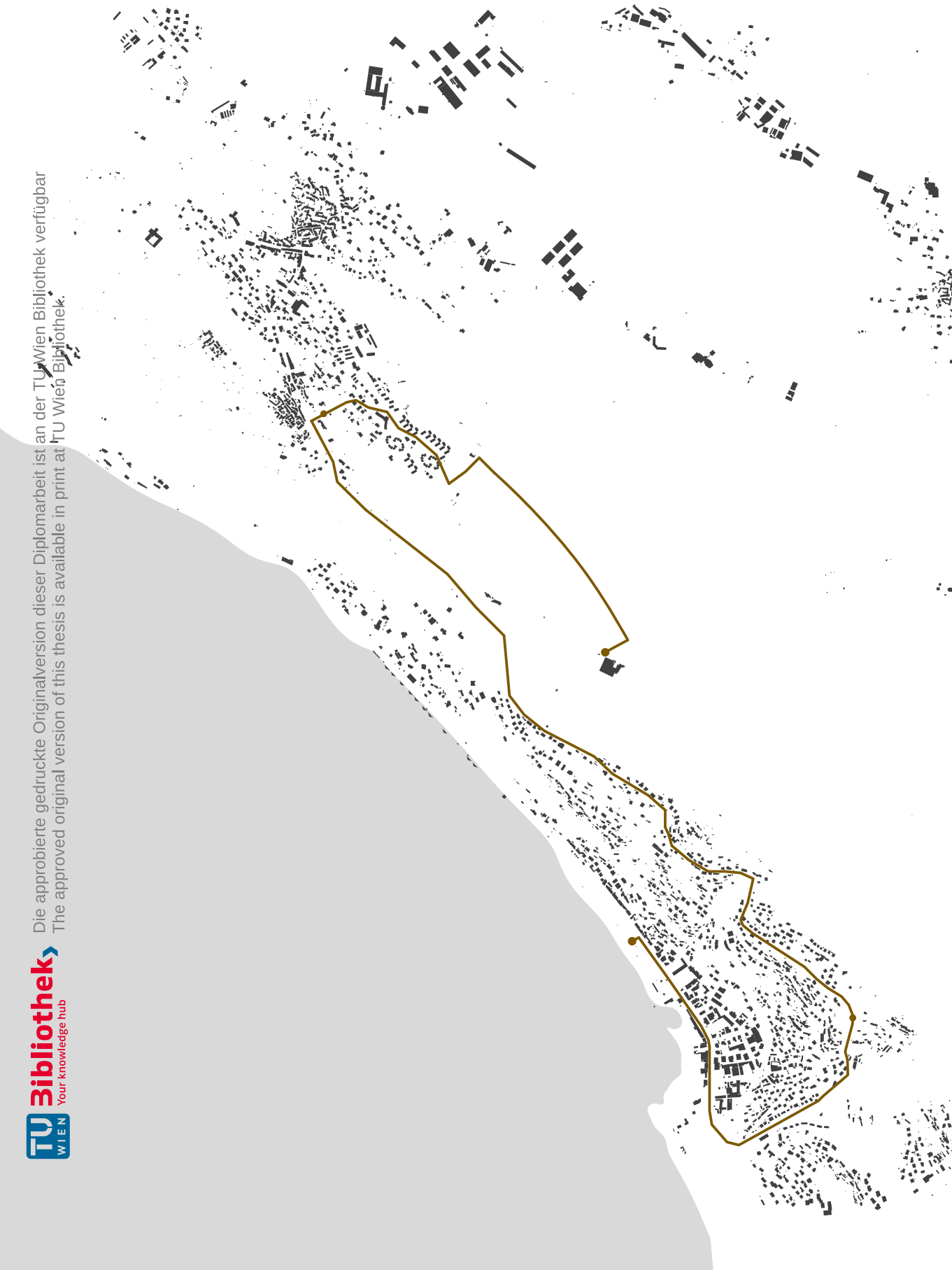
The Parco di San Giovanni in Trieste plays a significant role in the broader narrative of the „Otto Wagner Areal“ and the city's architectural transformation during the late 19th and early 20th centuries. Originally, the area was the site of the psychiatric hospital complex (Ospedale Psichiatrico di Trieste), which was designed in the late 19th century and remained in use until the late 20th century. The hospital complex reflects Otto Wagner's philosophy, which emphasised functionality, rationality, and the harmonious integration of buildings within their natural surroundings. The park itself represents a blend of historical and modern architectural elements, embodying the city's transition from its imperial past to its modern identity. The area has been repurposed in recent decades, transforming the former hospital grounds into a public park and cultural hub. This reimagining of space ties into the broader modernist principles of adaptive reuse and the integration of old structures into new, functional urban landscapes. In line with the architectural values of Otto Wagner and his disciples like Max Fabiani, the park is now an area where history and modern use intersect, demonstrating how public spaces can evolve while maintaining respect for their original design and function.<sup>52,53</sup>

51 <https://martinrandall.ontigerbay.co.uk/content/files/ITTheImperialRiviera.-1.pdf>

52 <http://www.toujoursetreailleurs.com/2017/09/trieste-art-nouveau-liberty.html>

53 The Man Who Closed the Asylums: Franco Basaglia and the Revolution in Mental Health Care





# The Periphery

Andrea Huber



Fig. 27 | Barcola



Fig. 28 | Sanctuary of Monte Grisa

Leaving the center of Trieste and heading northeast, you reach the coastal suburb of Barcolas. Here, the noise of the city gradually fades away and is replaced by the sound of the sea. While the surrounding area is characterized by hilly vegetation in the middle of the Karst and small detached houses and blocks of flats, there are some striking landmarks. These have cultural and historical significance, create a sense of identity, and serve as landmarks. On the pine-tree-lined promenade of Barcola, high up on the hill, stands one of the town's landmarks, the Sanctuary of Monte Grisa.

## The Sanctuary of Monte Grisa

The Sanctuary of Monte Grisa, commonly known as Cheese Corner, is one of the most remarkable Brutalist buildings in Europe. Antonio Santin, former mayor of Trieste and Koper, promised in 1945 to build a church if the city was not completely destroyed in the Second World War. The sanctuary was built between 1963 and 1965. Since then, it has become a symbol of peace and unity among all people. The Sanctuary was designed by Antonio Guacci, who used triangular modules to symbolize the letter M for the Holy Mary. The triangular shape also recalls the Trinity in biblical symbolism. The building is 40 meters high and is made of reinforced concrete, modular, and self-bearing.<sup>54</sup> The Sanctuary of Monte Grisa is undoubtedly part of the legacy of Brutalism, which sought to offer a new beginning to a society wounded by war.<sup>55</sup>

49

## Excourse Brutalism

Brutalist architecture sought to free itself from rigid modernism and reduce it to its essentials. In the 1960s and 1970s, Team 10 promoted structuralism and brutalism with theoretical contributions.<sup>56</sup> In Europe, brutalism was influenced by Le Corbusier. One of the most important Brutalist buildings is the

54 Architectuur, „Temple of Monte Grisa.“, 2023

55 Domus, „20 Brutalist Works in Italy.“, 2023.

56 Brutalismus.com, „Brutalism. Architecture of Everyday Culture, Poetry and Theory.“



Fig. 29 | Rozzol Melara

Unité d'Habitation in Marseille, which was built in France and Germany between 1947 and 1965. The aim was to alleviate the housing shortage after the Second World War.<sup>50</sup> The idea was to create housing for the masses, a classless society. The purpose of building for everyday use came to the fore. The English architectural theorist Christopher Beanland argued that the style was characterized by aggression against the city, not against people. Brutalism emphasizes the right to the city and to housing and reflects the desire and belief in a society based on justice and solidarity.<sup>57</sup>

Heading south from the Sanctuary towards the Slovenian border, another of the city's landmarks rises from the hilly vegetation: the Rozzol Melara social housing complex. The Brutalist building was built in the 1970s and, due to its geographical location, offers a panoramic view over the city as far as the Adriatic Sea.

### Rozzol Melara

The Rozzol Melara social housing complex, which resembles a fortress, stands out visually from the rest of the city. Also known as quadrilatero, it consists of two L-shaped volumes facing each other, 200 meters long and over 40 meters high. The volumes rest on massive concrete supports designed to represent tree trunks. The building was designed and built between 1969 and 1983 by the Triestine architects Celli and Tognon. At the time, it was one of the first to be built on the outskirts of the city, which was gradually being urbanised.<sup>58</sup> The idea was to create an independent city within the city for 2500 inhabitants.<sup>59</sup>

The lower floor is open to the outside with large portholes, while the other floors are subject to a strict façade grid. In the centre of the building is a big courtyard, which makes the vast dimensions of the complex tangible. The interior of the building is divided into private and public areas. The uses are fixed and therefore severely restrict flexibility. As a result, many common areas are empty and subject to vandalism. Human appropriation of the spaces is difficult to discern, and the lives of the residents seem closed off. The housing complex thus demonstrates the complex relationship between Brutalist architecture and the needs of a socially disadvantaged society.<sup>60</sup>

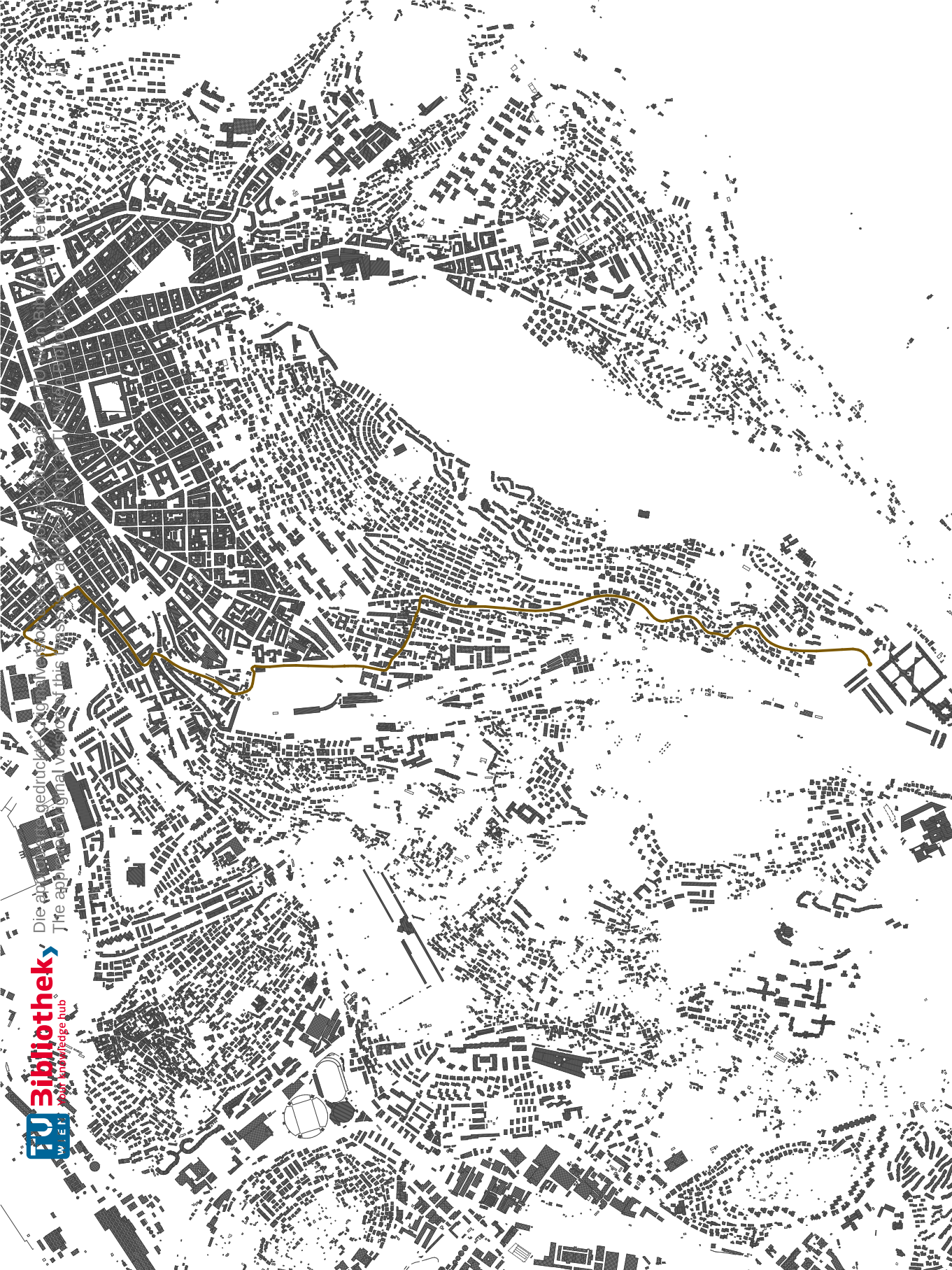
57 Domus. „20 Brutalist Works in Italy.“

58 Katharina Schmidt, „Rozzol Melara Transformation, Zukunftsfähiges Wohnquartier im Haus,“ (Master's Thesis at Leopold-Franzens University of Innsbruck, February 2018) p. 55

59 Schmidt, „Rozzol Melara Transformation,“ page 14-17

60 Ministry of Culture, „Chiesa Parrocchiale di San Giuseppe Lavoratore.“ National Census of Second Twentieth Century Architecture





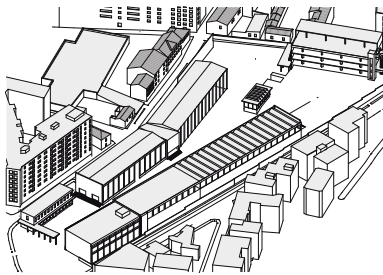


Fig. 30 | Ex Fiera

- 61 Gustavo Corni, "The Exodus of Italians from Istria and Dalmatia 1945–1956," in *The Disentanglement of Populations*, 2011, p. 71-72
- 62 Trieste Prima, „Trieste: Popolazione Cresciuta Grazie agli Stranieri.“ Last modified March 31, 2024
- 63 "Analisi degli arrivi nel corso del 2023," in *vite abbandonate 2023*, June 2024, p. 16
- 64 Roberto D'Ambrosi, "Ex Gasometro" in *Buchi Neri*, indagine sui luoghi incompiuti o abbandonati della città di Trieste, 2020
- 65 Giraldi, Nicolò. „Fiera di Trieste: al via i lavori per il nuovo centro congressi.“ *TriestePrima*, March 22, 2024
- 66 Italy for Movies, „Former Gasometro of Broletto, Trieste.“
- 67 D'Ambrosi, "Ex Gasometro."

## Excource demography

The great housing shortage after the Second World War was due to the influx of Italians from Istria, Dalmatia, and other areas that came under the control of socialist Yugoslavia after the Paris Peace Treaty. The migration was partly voluntary and partly forced. Many Italians moved to Trieste because of discrimination and communist rule, which led to a sharp increase in the city's population.<sup>61</sup> However, in 2023, the population increased again due to migration from abroad. The population on 31 December 2023 was 199.400<sup>62</sup>, including the influx of 16,052 refugees from the Balkan route (as of 2023). To sum up, the city of Trieste has always been living from migration and its cultural diversity.<sup>63</sup>

The traffic signs in Italian and Slovenian point to the city center, and the way back passes two empty *Buchi Neri*. A final view of the city reveals landmarks such as the Castle of San Giusto, the University, and the Cattinara Hospital.

## Ex Fiera

The Ex Fiera in Via Rossetti is made up of several buildings that once housed the Trieste Trade Fair Centre. The area played an important role as a venue for local and international fairs, events, and exhibitions. However, with the passage of time and changes in the use of exhibition centers, the importance of the site diminished, and it was eventually closed.<sup>64</sup> Since then, the buildings have stood empty and derelict. In recent years, the former Fiera site has been the subject of public debate. The site is now being transformed into a multifunctional shopping center. It will include areas for leisure, sports, shopping, children's play, restaurants, and gyms. The mayor of Trieste, Roberto Dipiazza, said the project would boost the local economy and create a new leisure center.<sup>65</sup>

## Ex Gasometro

The gasometer in Via Barolomeo d'Alviano was built in 1901 and was the first gas reservoir for residential and industrial buildings in Trieste.<sup>66</sup> The circular building has a diameter of 45 meters and a height of 35 meters. It held 20.000 cubic meters of gas and was shut down in 1952.<sup>67</sup> Since then, the building has stood empty. It has architectural resemblances to the Viennese Gasometer and is a listed monument.<sup>68</sup>



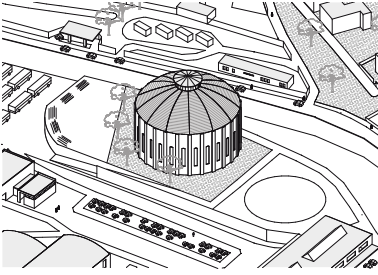
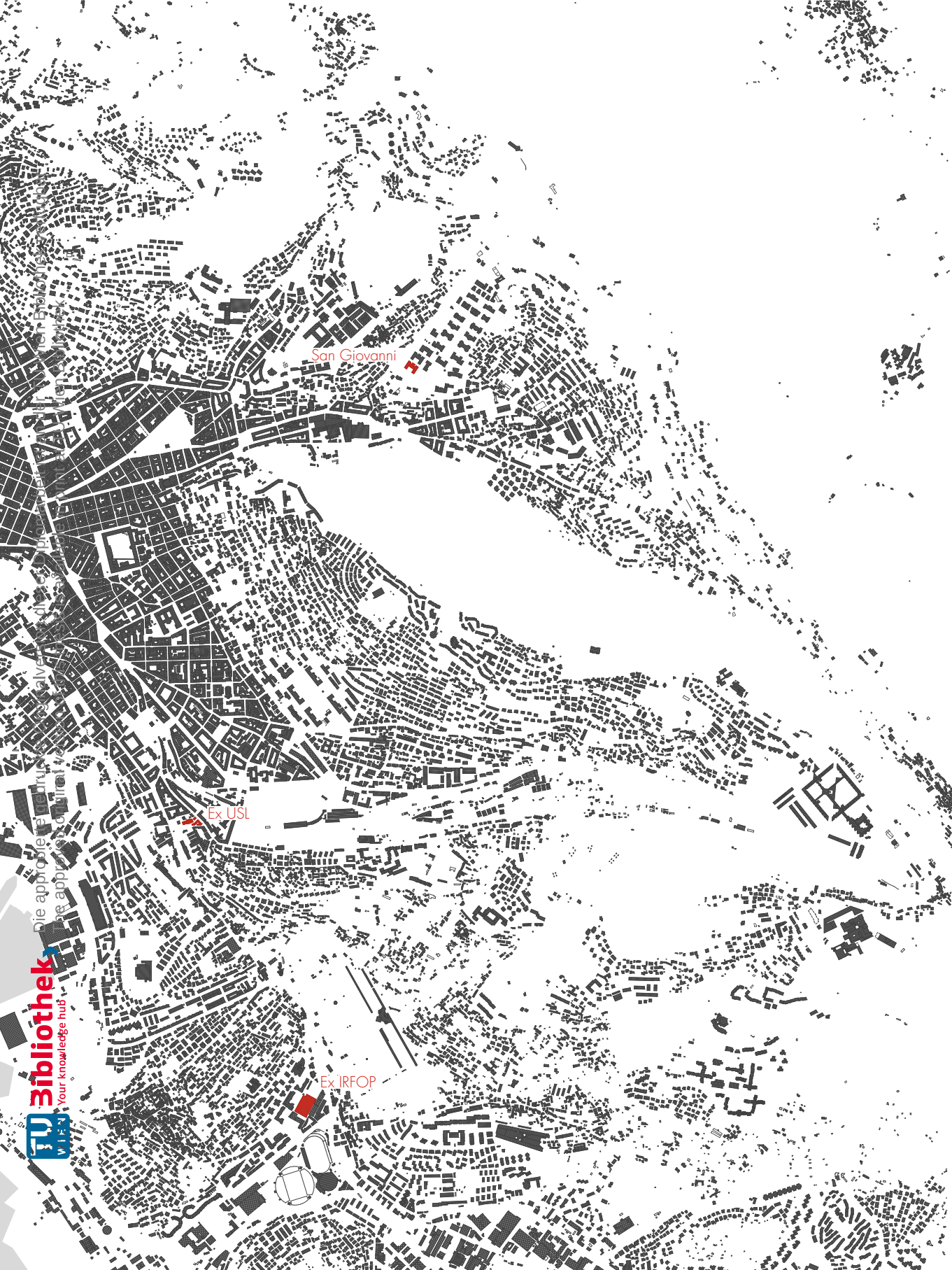


Fig. 31 | Ex Gasometro

Finally, the peripherality has been left behind, and the dynamism of the city has been regained. The green spaces are disappearing, and the dense buildings and narrow alleys are closing in. In short, Trieste combines the vibrancy of a historic port city with the rural, nature-loving periphery—an interplay between urban and rural diversity.







# Ex IRFOP

Youth Empowerment Centre  
in Trieste

Marcin Jatczak



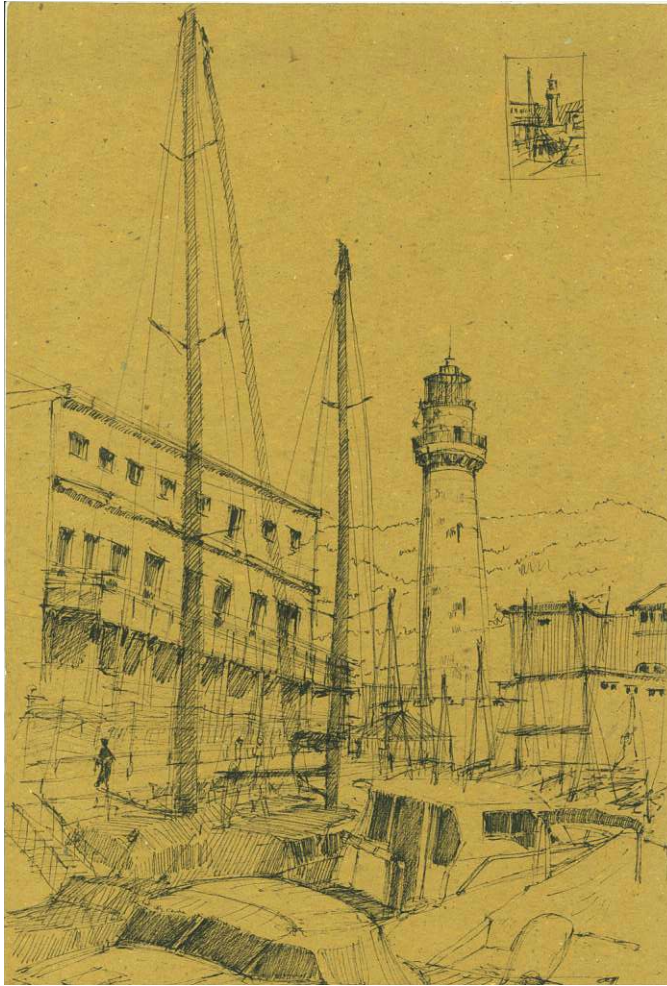


Fig. 1 | At „Aquamarina“

# Issues of the youth in Trieste

Globally, young people are at a disadvantage in various ways when compared to older social groups. They have unique challenges in the economic setting, such as work life. They are under-represented in political discussions and have a lower likelihood of influencing legislation and representing their interests. Since general civic involvement begins in adolescence, it is critical to promote it during the transitional period between childhood and adulthood. Therefore, this work tackles the topic of teenagers by addressing their general difficulties based on local data for Friuli Venezia Giulia and in particular Trieste, defining the areas for improvement. The issues of the youth of Trieste are multilayered and interrelated. The following overview, in fact, does not give a complete listing of them but a certain choice, enabling the development of a targeted functional and architectural strategy. The here listed facts present challenges faced by the social group of youths in the region of Friuli Venezia Giulia and, in particular, the city of Trieste and constitute the ground for the further research of this work.

59

## Poverty

The economic situation is regarded as one of the most serious challenges and might trigger additional social issues. A big disparity in the wealth of individuals increases the differences in many aspects of their everyday life. Youth who cannot afford the same standard of living as others in their environment, whether in terms of material things, services, or educational opportunities. If permanent, this situation is taken over by the next generation, as the state of their social and living standard is associated with financial security.<sup>1</sup>

The term relative poverty is a state where the adolescent with a household having a lower revenue than 60% of the average household income per capita in the country. In Friuli Venezia Giulia every seventh (14,2%) adolescent lives in relative

- 1 Habitat for Humanity® Great Britain, 'Relative vs Absolute Poverty, Defining Different Types of Poverty', accessed 18 July 2024
- 2 Gruppo CRC, 'I Diritti Dell'infanzia e Dell'adolescenza in Italia, Il Edizione, I Dat Regione per Regione', 2021

poverty and 25% is at risk of poverty.<sup>2</sup>

### Mental health

Another concern associated with poverty is the prevalence of psychoneurological diseases among children and adolescent teens. The causes of mental illness are numerous and sometimes intertwined, including social marginalization, sorrow, communication challenges within the family, and access to social and sanitation services. Furthermore, 50% of persons with mental health disorders in FVG experienced their first symptoms when they were young. This shows the need to act and prevent or treat emotional instability among young people, as it does not go away on its own with maturity.<sup>3</sup>

### NEET

The term NEET stands for ‚Not in Education, Employment, or Training‘ and refers to young individuals who are not in school, employed, or pursuing vocational training. It is likely that NEETs remain unemployed, destitute, and might be socially excluded in the future.<sup>4</sup> In FVG it concerns 11% of people aged 15 - 24, and 16% of those aged 18 - 29.<sup>5</sup>

### Cultural offer for young people

Although Trieste’s university attracts many young students, the cultural and leisure offerings do not meet the aspirations of the population aged 18 - 35. For many of them, the weak cultural life is a reason not to live in Trieste. They decide whether to leave the city (if they grew up in Trieste) or to relocate to other places that provide a wider range of free-time activities. Furthermore, 35.1% of young people believe there is insufficient space dedicated to associations and youth.<sup>6</sup>

### Lack of physical activity

Overweight in youth ranges from 14% for 11 - 15 years old to 17% for 18 - 34 years old. Obesity rates are 2% for children aged 11 - 15, and 3% for adults aged 18 - 34. Although young individuals have fewer health difficulties than adults and the elderly, their consuming habits and lack of physical exercise often linger into adulthood. There is also a link between obesity and some types of cancer. It is predicted that morbidly obese persons live 8 - 10 years less than people without weight issues.<sup>7</sup>

- 3 Daniela Vidoni ‘Conference: L’adolescenza Tra Rischi e Opportunità’, Asugi Salute Mentale Adolescenti: Adolescenti a Rischio, 2023.
- 4 Dennis Tamesberger, Heinz Leitgöb, and Johann Bacher, ‘How to Combat NEET? Evidence from Austria’, Intereconomics 49, no. 4 (2014): 221–27
- 5 Ufficio Studi Confindustria Udine su dati Istat e Eurostat, ‘NEET’, 2022
- 6 Riccardo Laterza and et al., ‘COSA FARAI DA GRANDE?, Esiti Della Fase Di Raccolta Dati Del Progetto TS4 Trieste Secolo Quarto’, 2019
- 7 Daniela Germano and PASSI e PASSI D’Argento per la Regione FVG, ‘Abitudini Alimentari e Profilo Di Salute Delle Persone in Eccesso Ponderale Residenti in Friuli Venezia Giulia: I Dati 2016-2019 Dei Sistemi Di Sorveglianza’, 2021





Fig. 2 | Bar Mauri



# Youth Empowerment

Starting from the assumption that the level of individual and communal empowerment is correlated with the quality of life,<sup>8</sup> This chapter analyses the theory of these qualities and methods of their sustainable development. Youths as the group without or with a low income are dependent financially on their relatives or public services and infrastructure, which in less wealthy conditions may be limiting in fulfilling their own aspirations and personal objectives.<sup>9</sup> In consequence, they are also limiting their well-being.

With the stated social challenges facing Trieste's youth, there is an urgent need for action to better their status. One of the social development approaches is 'community empowerment', which has shown promising results for social change and improving quality of life in impoverished and disadvantaged areas. According to this development model, communities have the resources (social capital) to respond to local challenges and discover appropriate solutions. However, the community must identify this resource in order for it to be implied. Empowering and supporting underprivileged groups with psychological will, skills, and coordinated group support is critical to mobilising them to overcome their powerlessness and, ultimately, achieve personal and communal goals. Two cases demonstrate how voluntary and self-organised communities use their social capital to foster social cohesion in their neighbourhood. In a quarter of San Francisco, residents organise escorts for older people so that they can go about their daily lives without fear of becoming crime victims.

Another example is the implementation of a program to address child maltreatment in the Cleveland Metropolitan Area. The program consists of reporting child abuse, providing material assistance to concerned children, and volunteering to watch neighbours' children.<sup>10</sup>

- 8 Snehendu B Kar, Catherine A Pascual, and Kirstin L Chickering, 'Empowerment of Women for Health Promotion: A Meta Analysis\*', PERGAMON Socia! Science & Medicine, vol. 49, 1999
- 9 Majid Ali Shah and Zainullah Khan, 'The Role of Youth Activism in Facilitating Social Change: A Catalyst for Transformation in the Contemporary Era', Qlantic Journal of Social Sciences and Humanities 4, no. 4 (30 December 2023): 1–11
- 10 Snehendu B Kar, Catherine A Pascual, and Kirstin L Chickering, 'Empowerment of Women for Health Promotion: A Meta Analysis\*', PERGAMON Socia! Science & Medicine, vol. 49, 1999

An essential topic is determining which social and personal abilities are desirable and how to acquire them. Community Capacity Building (CCB) is a social concept that aims to help all members of the community, even the most disadvantaged, build skills and competences that would allow them to take more control of their lives while also contributing to inclusive local development. As a result, communities are stronger and more robust to both economic and social crises. National and local governments, as well as existing community capacity, can all help to inspire and encourage effective community capacity growth.<sup>11</sup>

The process of empowering community members is complex, with multiple issues. Giving only opportunities that are not targeted at a specific social group, or in situations where group members are unaware of their potential effect, may result in the opportunity being underutilised.

Empowerment can be divided into three levels that build upon one another.:

- psychological empowerment
- community empowerment
- organisational empowerment

Psychological empowerment aims for the development of individual critical consciousness, belief in self-efficacy, awareness and knowledge of the problems' source and the solutions, and personal competency for proactive actions to deal with the problems adversely affecting their quality of life. Community empowerment points to the enhancement of community resource bases such as leadership development, communications systems, community support, and networks to address common concerns. Organisational empowerment is the enhancement of community-based organisations and resources, voluntary organisations, associations, and cooperatives to represent and protect the issues of the disadvantaged.<sup>12</sup>

Scientifically proven strategies to youth empowerment and social cohesion are sports initiatives. Members of communities

- 11 OECD, Antonella Noya, and Emma Clarence, 'Community Capacity Building:Fostering Economic and Social Resilience. Project Outline and proposed Methodology', 2009
- 12 Kar, Pascual, and Chickering, 'Empowerment of Women for Health Promotion: A Meta Analysis '.

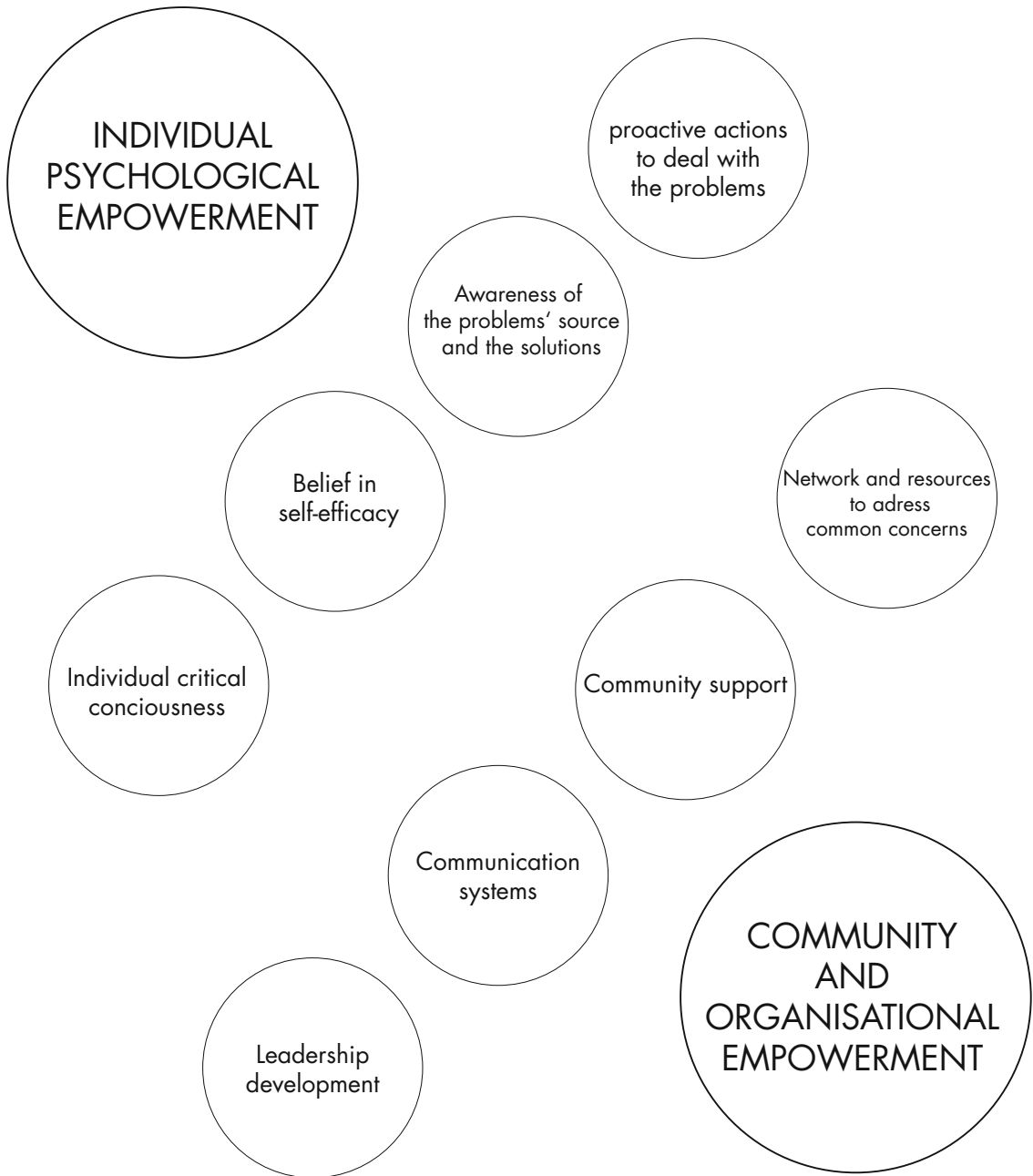


Fig. 3 | Youth Empowerment



Fig. 4 | GAME Streetmekka Viborg



Fig. 5 | GAME Streetmekka Viborg



Fig. 6 | GAME Streetmekka Aalborg

with such programs report higher community engagement and greater community capability, particularly among the most socially disadvantaged populations.<sup>13</sup>

### Functional solutions

The empowerment concept of a Danish NGO, 'GAME', is founded on similar concepts and has been turned into a youth-led street sport and culture facility for young people, which has been successful and has inspired the establishment of additional facilities in other countries. Through accompanying sports games and other courses, youngsters not only increase their physical capacity but also learn how to emotionally deal with circumstances such as defeat, success, acting under pressure, seeking creative solutions, and improving their own conscience of their emotions.

Participants in team games can gain skills for respectful and effective communication, as well as trust and empathy for other players. They find themselves in various team responsibilities, like as captains, and are challenged with referee decisions, prompting them to reflect critically on their behaviour, leadership, or role models. Through their functional model, the organisation creates a network of people, giving them the opportunity to take part as participants or later as volunteer co-creators of the program.<sup>14</sup>

According to the 'GAME' organisation's evaluation report, the Streetmekka in Viborg was successful in including children and young people under the age of 18 of non-Danish ethnicity, without working parents, and from families where no one else participates in sports or exercise. According to sports participation studies, these are the qualities that statistically describe adolescents who participate in fewer sports. Another major discovery is the importance of Streetmekka's position near disadvantaged residential areas.<sup>15</sup>

In Trieste, there is a long tradition of socio-cultural institutions for children and youths (5 - 25 years old). The 'ricreatori' (singular: 'ricreatorio') are secular places, concentrating their activity on the personal and social development of an individual in the community. They are open exclusively in the afternoon, for those who in the after-school time would like to participate in some organised activities. The recreation centres have existed since 1908 and count today 14 establishments.<sup>16</sup>

13 Ivana Matteucci, 'Sport Participation and Community Capacity Building in Disadvantaged Urban Communities', Sociology Study 13, no. 1, 2023

14 Ida Brix and Marianne Hjort, 'GAME Annual Report 2023', 2024

15 Signe Højbjerg Larsen et al., 'Evaluering Af GAME Streetmekka', 2021

16 università e ricerca sede degli uffici dell'area educazione and servizi educativi integrati per l'infanzia i giovani e la famiglia, 'Carta Dei Servizi', 2018



Fig. 7 | Haus der Statistik - Creation of Making Future School



Fig. 8 | Werkstatt - the infopoint of HdS

Youth empowerment on the organisational level is widely known in the form of youth movements and organizations. Recently, youth activism has gained prominence like never before. Climate justice, racial fairness, and gender equality are examples of contemporary movements that have grown in popularity around the world as a result of the Internet and social media. Their motivation for action is frequently based on personal experiences, challenges to inequalities, or observations of vulnerable people.

Because young people's involvement in social projects is a regular organisational activity that has a genuine impact on political plans and discourses, thorough knowledge of this phenomenon is vital.<sup>17</sup>

In Berlin, a group of social activists collaborated with local municipalities to construct a model project called 'Haus der Statistik', a place for groups and NGOs in a vacant building in the city centre. They developed guiding principles for future tenants based on the concept of a socially responsible quarter, which were required in order to use the 'Haus' area. The so-called 'pioneer usages' must function for the general good, particularly in the areas of culture, education, art, neighbourhood, and social affairs. They should have an experimental nature and be ready for synergies with other social projects, while also being able to function independently and support themselves financially. Because finances are sometimes a concern for non-profit organisations, the rental pricing for ateliers, offices, event spaces, and equipment is tailored to the tenant's needs. The currently formed associations would pay extra in solidarity with the new ones.<sup>18</sup> The initiative 'Haus der Statistik', by engaging with the residents of the neighbourhood, including projects for disadvantaged social groups, contributes to Community Capacity Building in the area. To summarise, they represent a reproducible approach for community empowerment.<sup>19</sup>

This theoretical framework, along with the functional references described earlier, serves as inspiration and justification for the project's ideological, programmatic, and architectural evolution.

- 17 Shah and Khan, 'The Role of Youth Activism in Facilitating Social Change: A Catalyst for Transformation in the Contemporary Era'
- 18 Kim Gundlach, 'Modellprojekt Haus Der Statistik, Band 3, Pioniernutzung', 2021
- 19 'Haus Der Statistik: Räume Mieten', 2024.



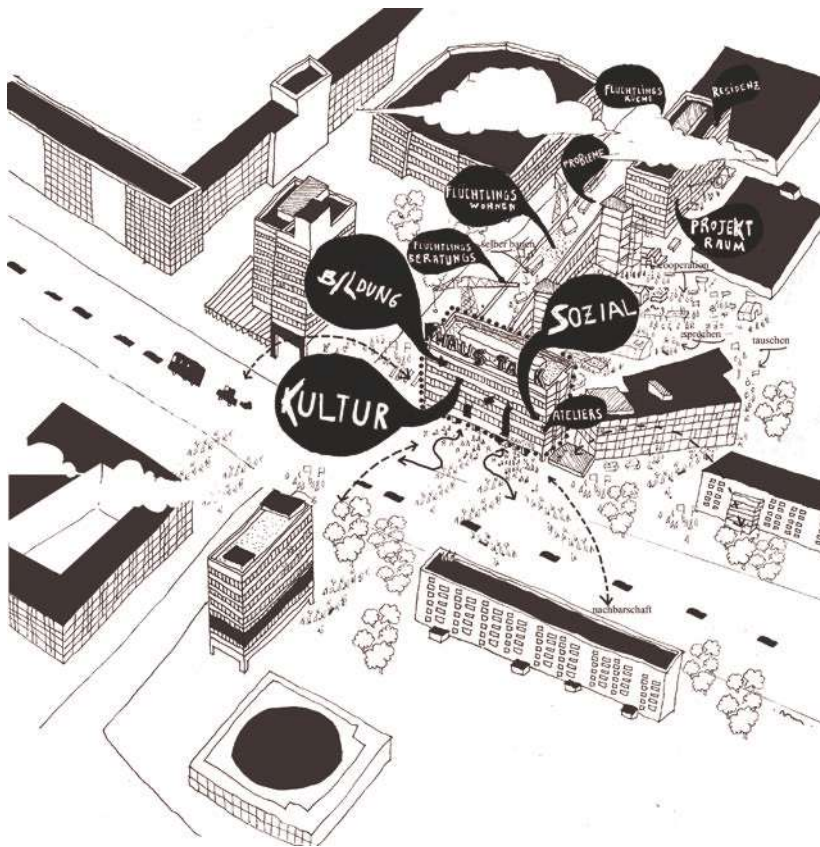


Fig. 9 | Haus der Statistik - Leitbild



# Individual and community 71 in architecture

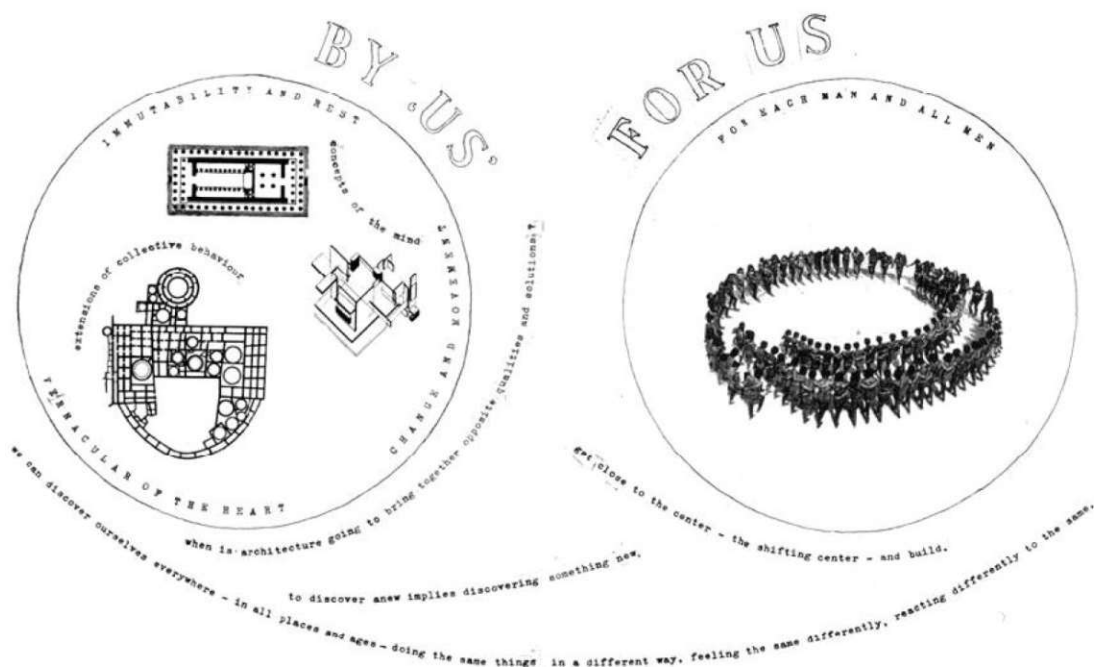


Fig. 10 | Otterlo Circles

# Aldo van Eyck

Aldo van Eyck, as an architect dedicating his projects to the theme of human design, and notably the spatial representation of democratic society, is an important reference for this work.

The analysis of his projects serves elaboration of spatial strategies and principles supporting the empowerment process. In this study are presented two projects which in a clear and explicit way demonstrate the architectural concept as an instrument for creating a pleasant socioemotional environment – Amsterdam Municipal Orphanage, and spatial relation of the built architecture to the existing context – Pavilion in Sonsbeek.

73

Expressed in this famous diagram of the 'Otterlo circles' statement of complementary aspects of architecture. In one circle, the Greek temple stands for harmony and order, the Van Doesburg's drawing means plurality and relativity, and the Pueblo village symbolises the extension of collectivity into a built form. In the other circle is a circle of people dancing together, indicating the universality of architecture for everyone and the equality in the relation between the planner and the user.<sup>20</sup>

He investigated and developed the concept of 'inbetweenness', claiming that a refugee is found as such after having passed a threshold.

Aldo van Eyck was born in the Netherlands, although he grew up in England, where he gained his education. He attended the progressive non-authoritarian schools where art and literature were the focal points. For his architecture studies, he moved to Zurich, where he got influenced by the professor Alphonse Laverrière, teaching the students how to establish an anti-classical, decentralising relationship in architecture. At the

20 Vincent Ligtelijn, 'Aldo van Eyck, Werke', 1999

end of his studies, he got more into contact with avant-garde art of the 20th century and became acquainted with the concept of opposites that emerge as the fundamental structure of existence and the concept of relativity, implying that every viewpoint is equivalent and therefore can be understood as a center. At the end of his studies, convinced of the paradigm of relativity, he reckoned that all of the cultures are equally sophisticated.

Starting his architectural activity, he quickly found out that architecture without meaningful associations does not satisfy him. Designing playgrounds, he still used simple geometrical forms, although making them into anthropomorphic compositions. After years of designing with elementary forms, he did his first iconic project, the Amsterdam Municipal Orphanage. He co-created 'Team X,' which influenced the CIAM and the approach to urbanism. During his career, he did important projects, such as the Roman Catholic church at Loosduinen or Sculpture Pavilion in Sonsbeek.



Fig. 11 | Amsterdam Municipal Orphanage



Fig. 12 | Amsterdam Municipal Orphanage

### Amsterdam Municipal Orphanage

Doing the project for the Amsterdam Municipal Orphanage, Van Eyck reconciled different polarities. The created architecture is at the same time a building and a city, polycentric and compact, static and dynamic, referring as much to modern as to classical architecture. Rooted in the classic geometrical order, expressed in the grid of modular domes resting on supports, is the base for the whole layout, which is combined with a transversal public space. The units for children are orientated to individual courtyards and seem to be put as independent structures into a matrix that creates a negative space in between, melting the elements into one entity. All of the functions within the building, including the living rooms, festive hall, gymnasium, and central court, are related primarily to their centre, established by the large dome shapes and axial organisation of the smaller building parts. In his design, there are legible references to a Renaissance 'cortile' in the inner courts, and the interior streets resemble Romanesque cloisters. This multiplicity of monocentric components results in a polycentric architecture recalling a layout of a city. In the design of the individual units, the architect followed consequent principles. On one

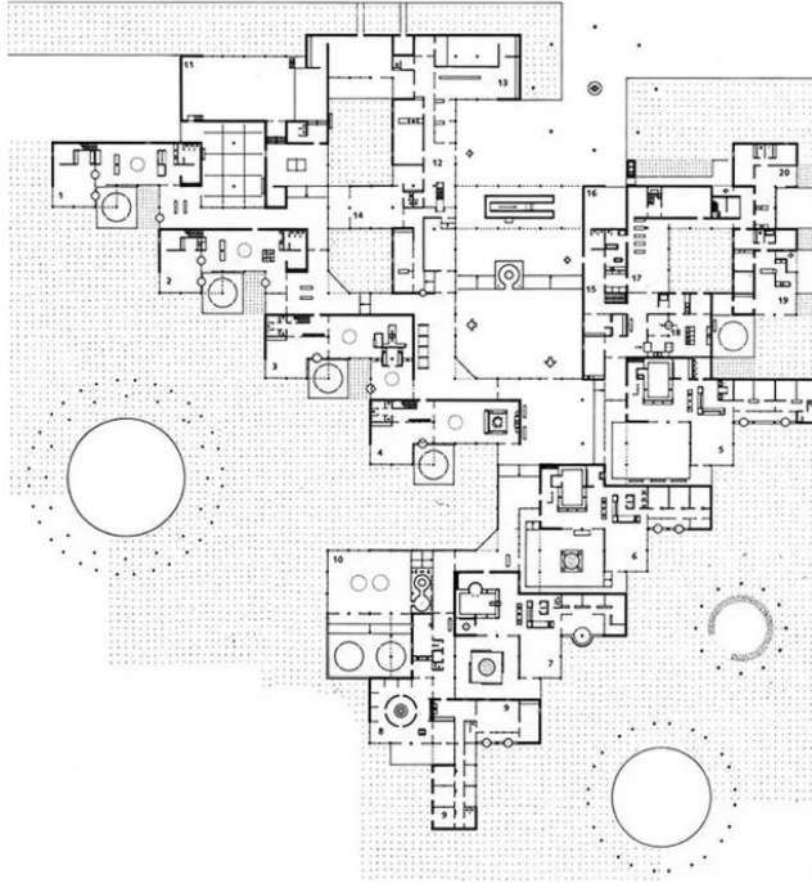


Fig. 13 | Amsterdam Municipal Orphanage  
ground floor





Fig. 14 | Pavilion Sonsbeek

hand, the northern walls consist of continuous walls without a single opening, except for the entry. On the other hand, the southern is entirely glazed, opening the space to the courtyard and sunlight. Embodying the extreme positions, juxtaposed and contrasting, Van Eyck clearly represents his philosophy of 'space breathing, just like humans do, in and out'.<sup>21</sup>

The principles of the orphanages' architecture were adapted to their users, 'children'. The reciprocity of the architectural decisions encourages children's development as independent individuals, being an integral part of society. Using a uniform system, within which there is a certain diversity, the architecture underlines this ideological value. The contemporary architecture of the 1950s aimed to remove any transitional spaces or thresholds. Van Eyck, opposing this, developed the concept of 'inbetweenness', claiming that a refugee is found as such after having passed a threshold. In the orphanage, the spatial transitions are articulating the relation between individual and collective.<sup>22</sup>

By planning the orphanage, Van Eyck intended also demonstrating an alternative way of conceiving modern cities. His concept was opposing the, popular at that time, functional separation of the cities into four zones (dwelling, work, recreation, and circulation). Instead, he wanted to prove the advantages of an integrated design, encouraging human communication.<sup>23</sup>

### Pavilion Sonsbeek

Although the mentioned principle of 'breathing space' is certainly present in the Municipal Orphanage, it is more prominent in the design of the Pavilion in Sonsbeek. Here the spatial experience focuses not only on the built architecture, but on the relativity of the context – Sonsbeek park and the constructed components. The complete arrangement consists of six parallel walls, with punctually situated round niches, seats, and sculptures. The exhibition architecture follows the principle of continuity; the park, pavilion, and people are reconciled in one place. One could not tell what was on the inside, while approaching the walls of the pavilion. First, by walking through it, step by step, the walls create rather open, or enclosed, areas with the exhibits. Intentionally placed

22 Ligtelijn, 'Aldo van Eyck, Werke'.

23 Strauven, 'Aldo van Eyck-Shaping the New Reality'

24 Ligtelijn, 'Aldo van Eyck, Werke'.

25 Strauven, 'Aldo van Eyck-Shaping the New Reality'.



Fig. 15 | Pavilion Sonsbeek

„A house must be like a small city if it's to be a real house, a city like a large house if it's to be a real city.“<sup>25</sup>

openings connect the 'layers of the exhibition. However, they are only visible from a close distance.<sup>24</sup>

Aldo van Eyck's architecture is characterised by the balance between contrary tendencies. The aspects that do not conflict each other but complement and create, through the equal proportioned relevance, an ambivalent character. And this ambivalence nears the architecture to the equivocal nature of the human.<sup>25</sup>



Fig. 16 | Bo Bardis' sketch for SESC Pompéia

# Lina Bo Bardi

Examining architectural design principles and addressing disadvantaged social groups in an existing context, Lina Bo Bardi's life work is a valuable reference. Notably, Bo Bardi's conversion projects for public use present remarkable qualities by their relational use of space, which can contribute to an empowerment process of community.

The relationship between users and the physical environment is an important consideration when designing a public building. Lina Bo Bardi was one of the architects dealing with the issue. Her attention to common life, simplified technical solutions, and belief in popular ideals. The works exhibit a significant multiplicity of expression, resulting in a tension between diverse ideas and attitudes: innovation and tradition, abstraction and realism, rationalism and surrealism, revolutionary and melancholic. Her position as architect is founded on her life experiences.<sup>26</sup>

79

Lina Bo Bardi was born in 1914 in Rome, where she grew up in relatively poor circumstances and received her architectural education. During her academic studies, she was exposed to discussions about the stylistic continuity of classical and vernacular architecture, as well as its abstraction to rationalist architecture. The university lecturers had clearly influenced Bo Bardi's sensibilities. Her designs always included elements of symmetry, hierarchy, axial composition, and simple and solid volumes. After graduation, she relocated to Milan, which was a more progressive region of Italy, and devoted herself to editorial work as a freelancer, as well as working with Carlo Pagani or Gio Ponti on various projects.

After meeting her husband, Pietro Maria Bardi, they chose to leave country in 1946 and relocate to South America, where Pietro was selling his art collections. At first, the stay

<sup>26</sup> Zeuler R.Lima 'An Architect Committed to Life' published in 'Arcitectura Viva Monografias' 80, 2015



Fig. 17 | SESC Pompéia Library



Fig. 18 | SESC Pompéia Library

in Sao Paulo and Salvador was intended to be brief, but Bo Bardi immediately discovered professional opportunities and launched her own project, 'the Glass House', in 1951, which served as her private residence and meeting place with artists. Beginning with her own home, she created a variety of design concepts using fundamental architectural features and construction processes. Nonetheless, her oeuvre consists of design with partially experimental solutions tailored to the present situation.<sup>27</sup>

The two emblematic examples of popular architecture in existing context are SESC Pompéia and Teatro Oficina in Sao Paulo.

### SESC Pompéia

An abandoned metal barrel and refrigerator factory in Pompéia's less wealthy quarter was scheduled to be replaced with a new public sports and culture centre. During the visits to the building site, Bo Bardi met neighbours who spent their weekends in the post-industrial zone. One of the most significant aspects of her proposal was to maintain this activity while retaining the current buildings of the manufacturing sheds. As a result, the accessible surface was reduced to a corner of the enormous parcel. On the somewhat tight site, the answer was to stack the sports and dressing facilities in towers, one next to another with a staircase and bridges connecting them. The sports buildings were designed with a rough appearance out of reinforced concrete to create a legible distinction between the old and new structures.<sup>28</sup>

### Attitude to the past

The spacious sheds house cultural purposes. All of them are openly accessible via a pedestrian street that connects the production buildings. On the inside, Bo Bardi uses minimal but precise interventions to vary the impression of each space. The largest area accommodates a library, an exhibition room, and a multifunctional area. In the middle of the hall sits a concrete structure that resembles a table, giving a logical specific structure to the entire area and creating an intermediate level with a more intimate character above and below it. In the exhibition and library areas, a large concrete platform with hip-high walls creates an illusion of an articulated smaller

27 Zeuler 'An Architect Committed to Life'.

28 'Arcitectura Viva Monografias' p.80-89.

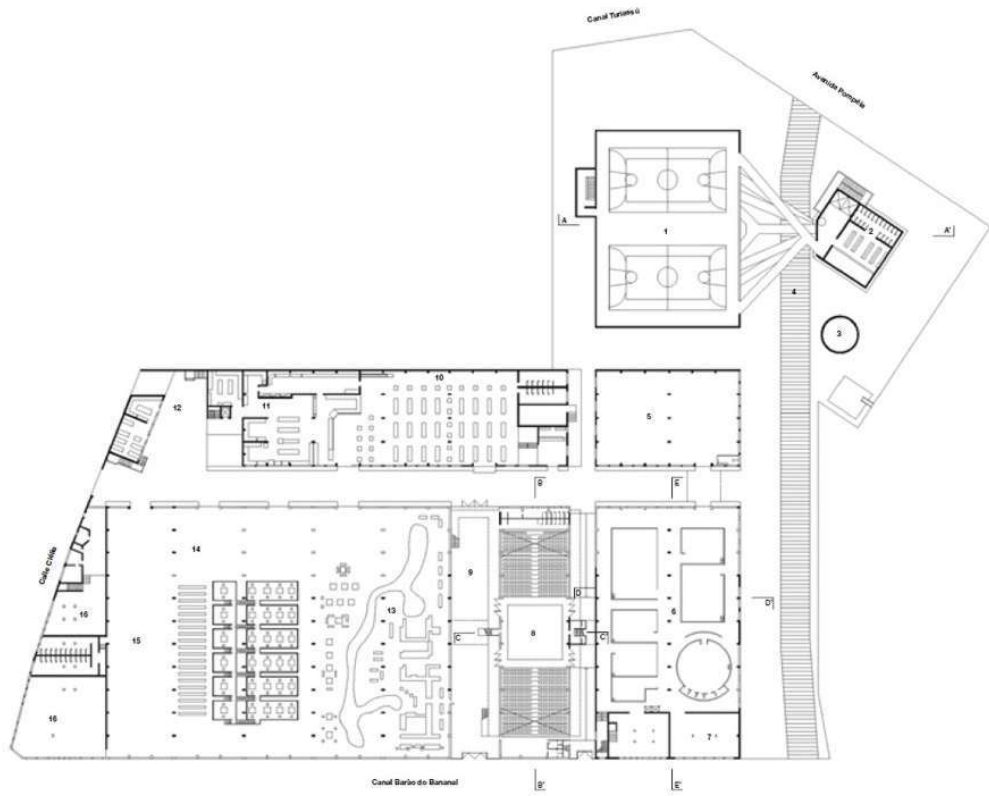


Fig. 19 | SESC Pompéia ground floor plan

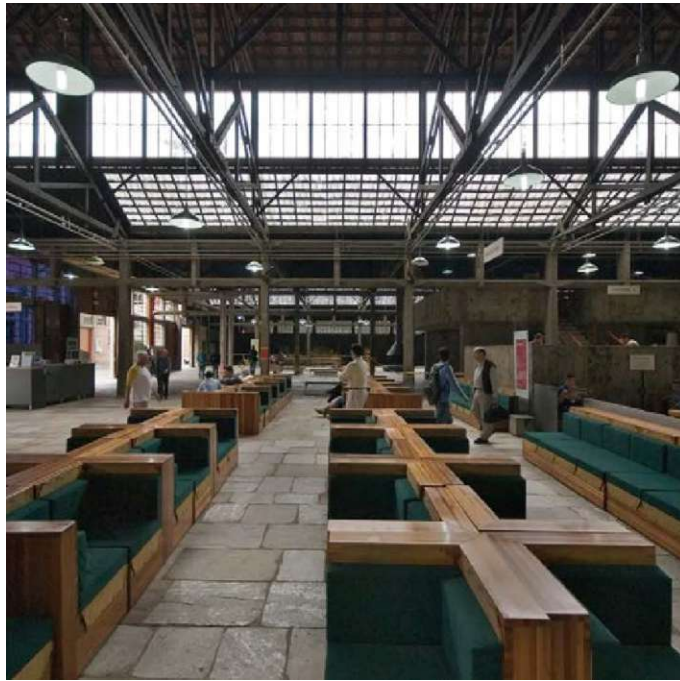


Fig. 20 | SESC Pompéia Library





Fig. 21 | Workshops

space while being a vital component of the overall design. Wooden chairs and tables allow visitors to rest and read. On the other side of the 'table' construction, modular wooden benches are organised into groupings. In between, there is a flowing river-like stretch of water that changes the approach to the inside and connects it to the natural surroundings. A natural barrier that divides the immense size of the hall. A theatre is located in a shed directly next to it. It is also the only component of the complex that is closed except during show times. The traditional theatre has been reformed. The existing structure's measurements would be troublesome for a traditional audience and stage configuration. As a result, the stage has been positioned in the centre, with spectator spaces on either side. The workshops are also worth highlighting. Walls are the only architectural element in this hall. Simple brick walls at the height of a standing person or larger locker. Four brick walls and a garden gate separate sections for several workshops (ceramic, painting, typography, upholstery, etching, and woodworking), but they are still accessible and visible from the outside.

83

The technological building equipment is an integral part of the sincere and modest design. All technological arrangements, including the bearing structure, are apparent. Electric cables, water pipes, and air ducts are completely exposed along the walls and ceilings. Colourfully painted, they decorate the inside and outside of the sheds.

Although the structural modifications were kept to a minimum, they serve many varied functions and provide user-friendly and enjoyable architecture.<sup>29</sup>

### Teatro Oficina

The Teatro Oficina institution was founded in the 1950s as an experimental play group. Following a fire that partially destroyed the building and went through a few modifications, Bo Bardi was involved in the theatre's rehabilitation.

This project also involved reinventing the typology. A standard theatre organisation's exceedingly long layout would result in very awkward proportions of audience space and viewpoint on the stage. Bo Bardi and Edson Elito chose to blur the lines between the performer and the audience. The entire

29 Clémentine Dufaut et al., 'Étude d'une Pensée Constructive d'architecte Lina Bo Bardi, SESC Pompéia', 2014

interior turned into a stage. The installation of conventional scaffolding all around the space, producing open balconies for countless spectators and necessary technical equipment. One outside wall and a part of the roof are turned into large glazed openings that let in light and air while also merging the interior with the outside, which is further strengthened by organised plants dispersed around the theatre. The inner space transformed from a longitudinal corridor to an urban street.<sup>30</sup>

## Conclusion

The two examples of Bo Bardi's work highlight not only low-budget adaptive reuse projects with reinterpreted and well-working typologies but also how to design modest architectural measures that can produce an inclusive public space that is integrated in the architectural and social environment.

30 'Teatro Oficina: Lina Bo Bardi's Theatrical Masterpiece of Modern Brazilian Architecture', 2016.



Fig. 22 | Teatro Oficina



Ex IRFOP  
building complex <sup>87</sup>

*'Non si trattava più soltanto di inserire rapidamente, né di inserirsi stabilmente, né di dare capacità di adattamento solo nel campo del lavoro, ma che si trattava ormai di inserire responsabilmente i giovani nel contesto sociale in cui avrebbero dovuto operare.'*<sup>31</sup>

# IRFOP Institution

To understand the layout and architectural qualities of the exIRFOP complex in Trieste, it is crucial to analyse the history and development of the institution, which had clear social targets and principles, dictated by the actual political tendencies that both evolved throughout the decades. The zeitgeist of postwar Italy accompanied not only the values of vocational education but also the design of Umberto Nordio in the 1960s, and both constitute the 'genius loci' of the place, influencing the architectural and functional concept.

## Orogin of vocational education in Italy

The 'Istituto Regionale per la Formazione Professionale' (IRFOP) traces its evolution back to the 1860s, when two significant events in Italian and world history occurred: the Industrial Revolution and Italy's unification. At the time, agriculture employed the vast majority of Italy's inhabitants. Despite the fact that other European countries had seen rapid industrial development decades before, a significant part of the Italian political elite was confident that agricultural investments would lead to economic growth. Milan, Turin, Genoa, and Naples served as the country's productive centres.

The Unification of Italy portrayed itself not as a new country but as an expansion of the Kingdom of Sardinia, with its capital in Piedmont. In a similar spirit, administration and development methods have been enforced on other parts of the country. This method is also known as 'piemontizzazione' in Italy. The adaptation involved, among other things, the law, the army, and the education system, which included the establishment of non-obligatory free technical schools that provided professional education.

The awareness of the country's industrialisation and its relationship to social changes was present in political conversations at the time. Carlo Cipolla, an Italian historian,



Fig. 23 | Vocational school in Milan

- 33 Alessandro Cometto, 'Evoluzione degli aspetti tecnici della formazione professionale nella esperienza dell'INAPLI 'I problemi attuali della formazione professionale' Cited in Fulvio Ghergo 'Storia della formazione professionale in Italia 1947-1977' Volume II | Dal dopoguerra agli anni 70"





Fig. 24 | Vocational training in 1967

*„Non sono soltanto problemi professionali quelli che l'istruzione tecnica deve risolvere, ma anche problemi umani (...). Una educazione tecnica deve avere gli scopi di qualsiasi altra educazione: l'esercizio del discernimento e della riflessione e lo sviluppo dello spirito critico“*<sup>32</sup>

Georges Friedmann

summed it up: „La futura società industriale richiede un nuovo tipo di uomo. L'agricoltore poteva essere analfabeta, ma non c'è posto per l'analfabeta nella società industriale.“

Because industrial society is confronted with current technical advancements and new inventions, it is crucial that they constantly adapt to new instruments and procedures. Cipolla also represents the new dynamic between the individual and the collectivity. Individualism was a trait of the agrarian society; collectivism and cooperation describe the industrial one, and the school should educate the kids in this direction.<sup>32</sup>

### 1960s

Between its founding and the 1960s, the institution went through numerous significant modifications. During the development of Nordios' scholar complex, professional education in Italy began to see new aims for the youth who attended IRFOP institutions. Until this time, the pupils were primarily prepared to obtain the skills required for manual labour. The new pioneers concerned with the form of education in industrial reality, such as Georges Friedmann, shifted the attention to the retraining capacity of future manual, office, and commerce workers while also emphasising social integration. Supporting the development of cognitive, operational, and relational abilities in adolescents, according to this theory, should not only make them more versatile on the job market but also critically think.

The offered classes were therefore ordered in four categories:

- socio-cultural
- technic-scientific (general)
- technic-scientific (specific)
- practical

Since the vocational education was not mandatory, the institution attracted a wide range of participants regarding their age and qualification spectrum. From unqualified, without any professional experience, to people with a degree and a certain work practice.<sup>33</sup> Under one roof, the underaged, who constituted the majority of students, and adults could have a close opportunity to interact, exchange, and indirectly learn from each other.

32 Fluvio Ghergo, Storia Della Formazione Professionale in Italia, Volume IV, Gli Anni 1860-1879, 2020

33 Fulvio Ghergo, 'Storia Della Formazione Professionale in Italia 1947-1977, Volume I, Dal Dopoguerra Agli Anni '70', 2009



Fig. 25 | Advertisement of IRFOP in 1990s

In spite of the fact that the IRFOP institution, primarily, had a target to train young citizens for their professional life, the aspect of socio-cultural education, such as the intention of creating a sense of belonging to the society, have become one of its fundamental values.

*„(...) i nostri Centri si riempivano di giovani in età dai 14 ai 16 anni, ai quali non si poteva non offrire una formazione di base, culturalmente avvertita e con caratteristiche di larga polivalenza.”<sup>33</sup>*



Fig. 26 | Umberto Nordio

# Umberto Nordio

Umberto Nordio went down in history as one of the most significant architects of the 20th century in Trieste. He was born in Trieste in March 1891 into a family with a construction background. Nordio, like his forebears, graduated in architecture from the Politecnico di Milano in 1919. Only one year after returning to his hometown, he begins freelance work. Working for his father's office allows him to gain expertise while helping with projects such as Palazzo di Giustizia and the INAIL headquarters. Soon after, he begins directing his own architectural projects, beginning with social housing for ICAM in Piazza Foraggi (1926) and INCIS in Viale Miramare (1929), reflecting the first academical design phase of neoclassicism.<sup>34</sup>

93



Fig. 27 | Stazione Marittima

## First project

With the construction of Garage Sea (1927, demolished 1963) and Stazione Marittima (1930), constructed in collaboration with Giacomo Zammattio, Nordio begins to shift his architectural vocabulary. He deviates from academic to more rationalistic and functionalistic perspectives. Although various composition rules are followed and details have a different character, there is a clear relationship to classical architecture. The accentuation of the station's centre nave is an obvious reference to the classical tympan. This places Umberto Nordio with other architects reinterpreting architectural features in the modern architecture of industry or so-called „profane“ functions of the early twentieth century, such as Auguste Perret or Peter Behrens.<sup>35</sup>

## 1930s

Nordio's professional activity in the 1930s of the twentieth century had a considerable impact on the cityscape of Trieste, since it was the most „fertile“ time of the architect's designs. Following his success with public contracts, like the Stazione

34 Cecilia Ghelli and Valentina Ferneti, 'Raffaello Fagnoni e Umberto Nordio', 2010

35 Gianni Contessi, 'Umberto Nordio: Architettura a Trieste, 1926-1943', 1981



Fig. 28 | Casa del combattente

Marittima, his agency is invited to design more projects for the town. 'Casa del combattente', located near Piazza Guglielmo Oberdan, is Nordio's first project in which he uses entirely modernist vocabulary. The 'Casa' combines two separate times. The former Habsburgian military barracks, which were previously located on the same parcel, had a restored cell where Guglielmo Oberdan (an Italian political activist fighting for Trieste's independence from the Habsburg monarchy) was confined. The proposal disrupts the sequence of street buildings with aligned facades, leaving the wall with arches from the demolished barracks crossing the Via XXIV Maggio. On the historical site arises a horizontally ordered brick façade topped by an asymmetrical bell tower, generating a dramatic and graphic composition through wall subdivision. The ground floor, with its independent arches, is visually connected to the upper floors by a reworked motif of arches on the first floor, made of Orsera marble. Nordio's method addresses the subject of the past in modernist architecture. His attitude is a comprehensible statement of how to incorporate historical architectural relics, as well as expressions of forms and materials, into a single coherent entity. The old and new complement each other, emphasising not only the relationship of the volumes and functions within the building but also the symbolic value of Trieste's Austrian past on the ground floor, as well as Italy's presence and aspirations in the city on higher floors and the striving upwards tower.<sup>36</sup>

### Università degli Studi



Fig. 29 | Università degli Studi

Umberto Nordio and Raffaello Fagnoni were awarded one of Trieste's most important projects in 1938: the offices of the University of Trieste, namely „building A.“ Because of the symbolic significance of the investment, Italy's former prime minister, Benito Mussolini, was involved in decision-making and most likely had a significant impact on the building's design. In the historical setting, the public building should convey a political and monumental statement of Italian domination in the ethnically and culturally diverse territory adjacent to the border. Already, the location on the hill and near the main route heading from Yugoslavia was part of the ideological manifestation.<sup>37</sup> The intended building, also known as the „cittadella“ or „palazzo degli Studi“, was based on the geometry of the letter ‚H‘ with a grand front

36 Paolo Nicoloso and Federica Rovello, 'Trieste 1918-1954. Guida All'architettura', 2005

37 Contessi, 'Umberto Nordio: Architettura a Trieste, 1926-1943', 1981

stairway, bas-reliefs, and a loggia with pillars on the fronts of the wings, formally referring to the city's historic heritage. Combining it with fascist architecture and antique influences, the architects create symbolic continuity in their work. Because of its formalistic structure, the utility of the interior circulation has been overlooked. As a result, users have to walk vast distances to reach their objectives. Umberto Nordio worked on the project until his death in 1971.<sup>38</sup>

### Postwar activity

Nordio's postwar projects, like the IRFOP complex, have received little attention. However, all of them were mentioned in a publication accompanying the 1972 show honouring his life. Despite a paucity of documentation, Nordio's subsequent projects showcase valuable architecture and the growth of his design.

38 Ghelli and Ferneti, 'Raffaello Fagnoni e Umberto Nordio'

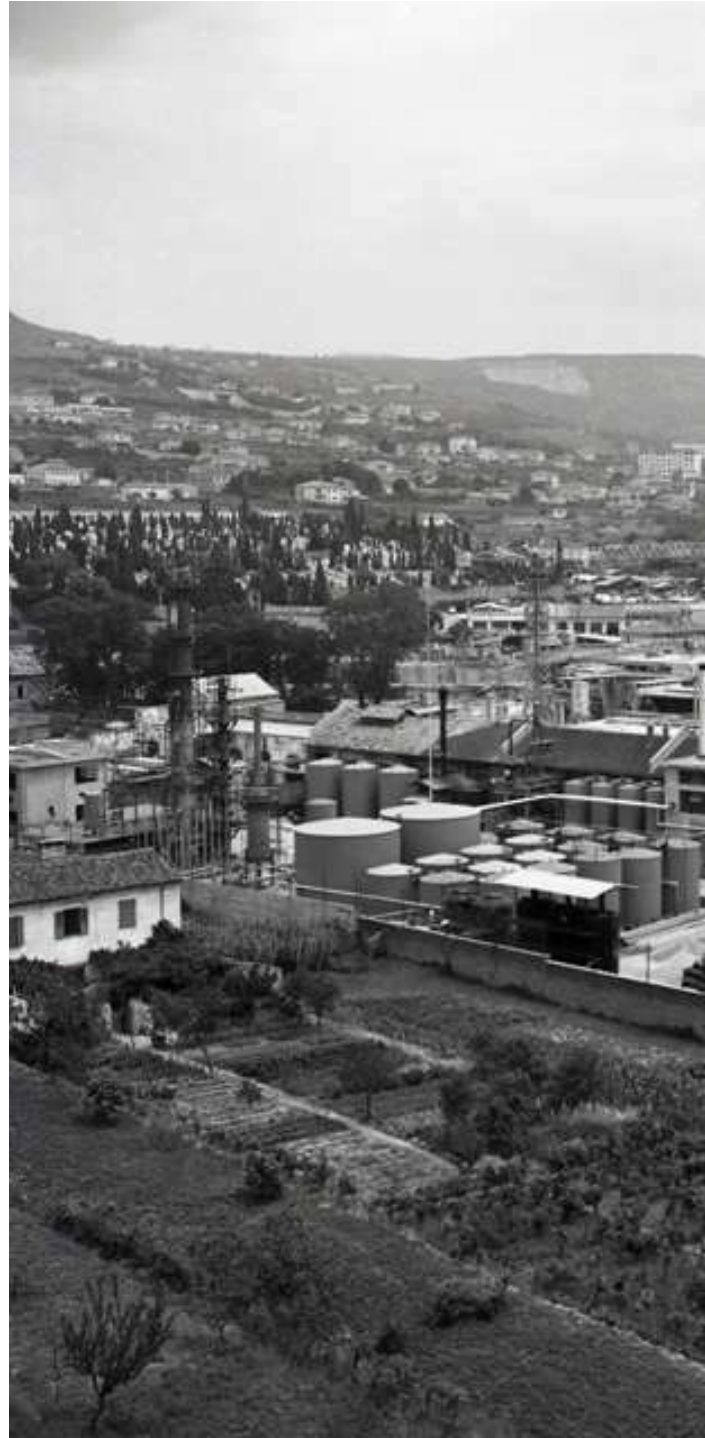
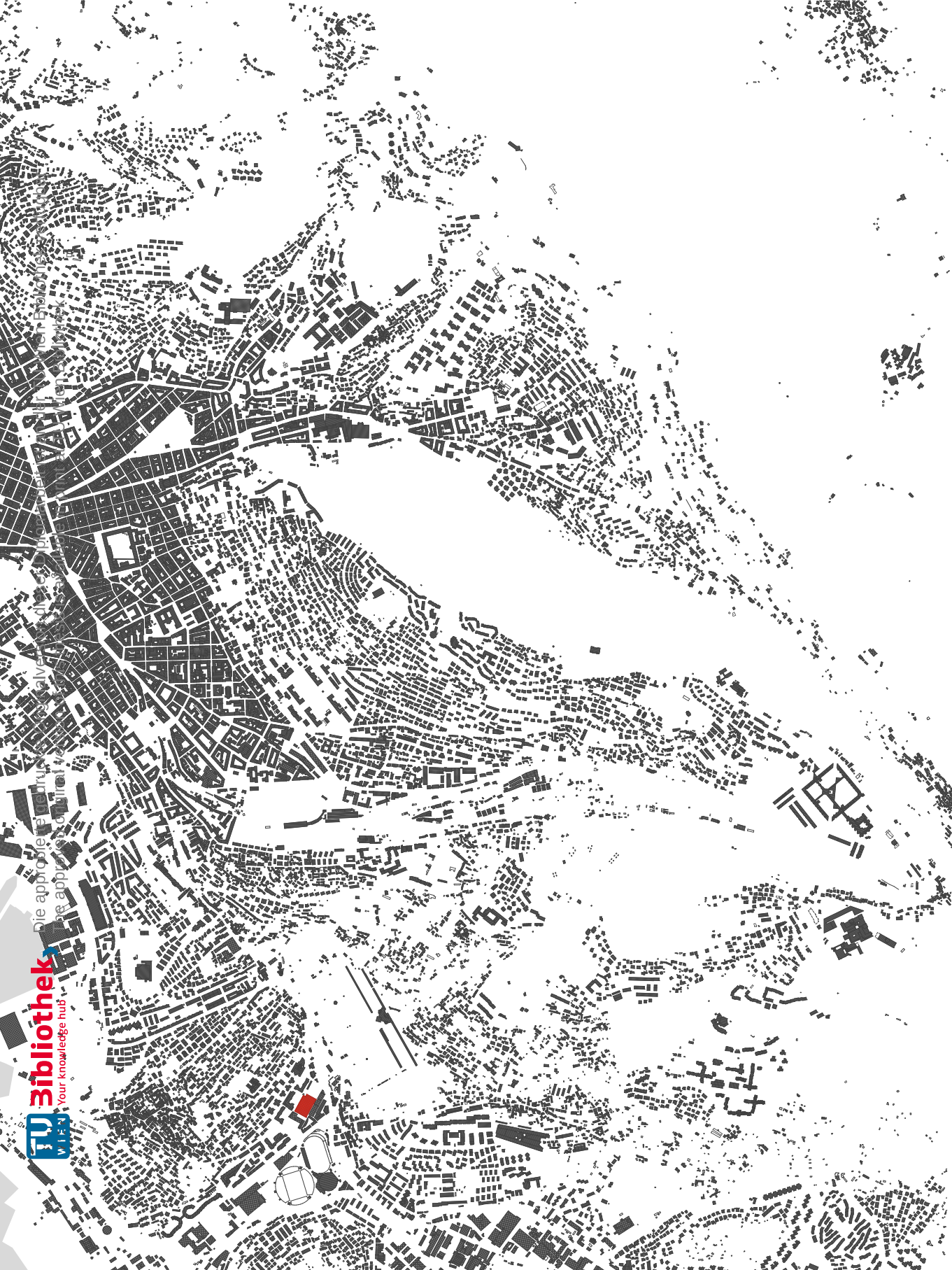


Fig. 30 | IRFOP complex under construction

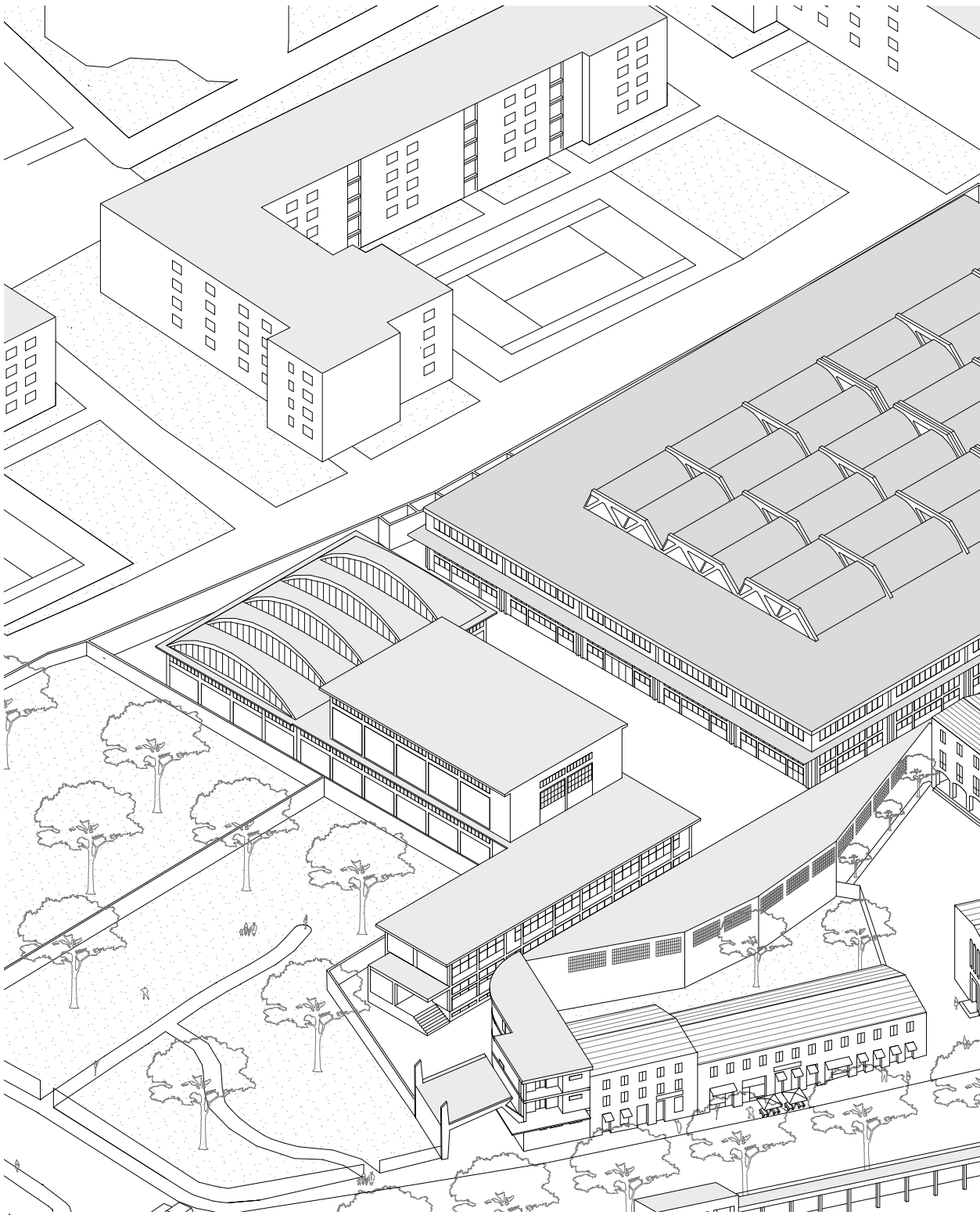




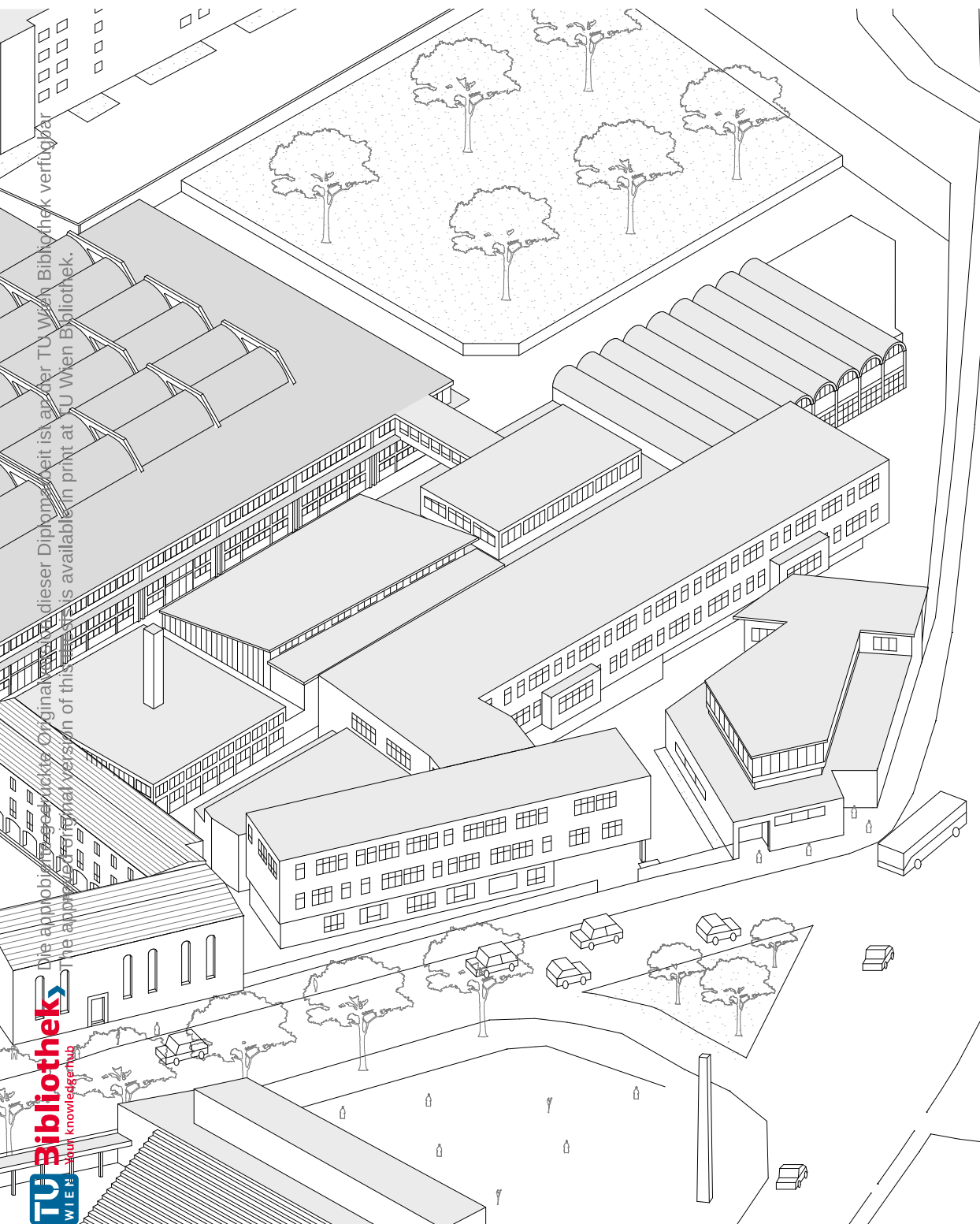








Axonometric view  
Ex IRFOP complex





Figs 31 - 34 | Impressions of Valmaura





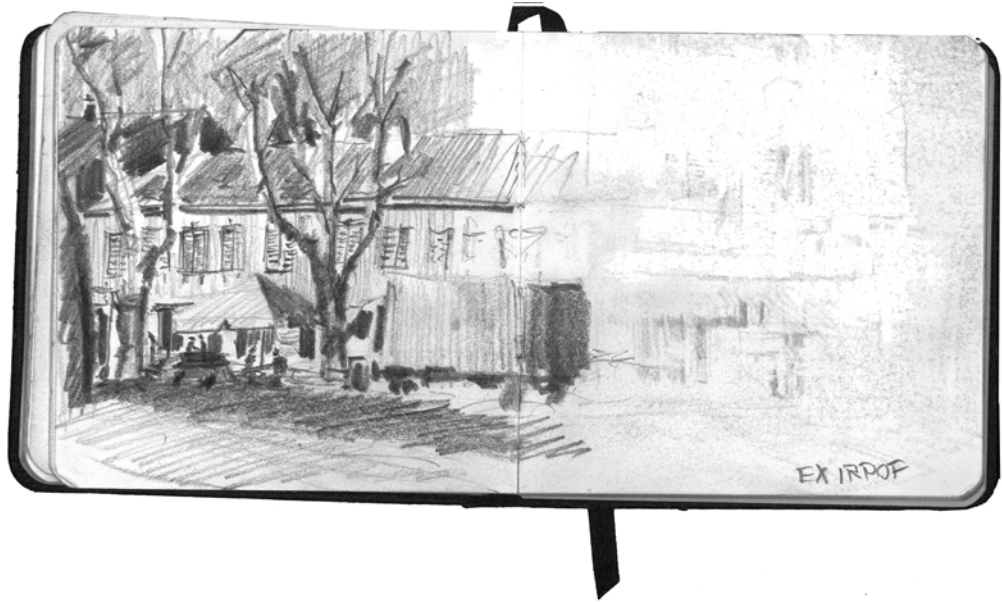


Fig. 35 | via Valmaura

# Ex IRFOP

## Building complex

In the following paragraphs, the observation and investigation of the architectural 'missing' puzzle piece of Nordio's oeuvre will be presented. The findings are based on personal visits of the area and plan documentation.

### Valmaura

The complex is situated in the peripheral district of Trieste - 'Valmaura'. It's generally known through its important sports venues (Stadio Giuseppe Grezar, Nereo Rocco, and PalaTrieste). This sports centre was developed and used since the 1930s for national and international competitions.<sup>39</sup> Another most known place is the 'Risiera di San Sabba', an old rice mill, which has been transformed into a police detention camp during World War II and after the war into a national monument and museum.<sup>40</sup> Besides, the district has a very modest offer of social services and is mainly a 'dormitory area' of the city or a location to do shopping in one of its large supermarkets. Amongst the multiple linear residential buildings stands out the social housing 'ATER'. Its architectural form of a curved line, connected by hanging in the air bridges, makes it unique in the scale of the city. Despite the uniqueness of the design, the public housing and the surrounding area are in a challenging situation. The cleanliness and respect for the public property are the main issues and affect the neighbourhood.<sup>41</sup> The reasons for that may be found in the difficult financial situation of a significant part of the inhabitants. A big impact on the quarter is the traffic. The two main streets (Via Flavia and Via Valmaura) conduct the vehicles through the middle of the district to the highway and create barriers for its inhabitants.<sup>42</sup> From the street infrastructure, apart from cars, profit also buses of the public transport. The crossing of the main streets is simultaneously an important transfer point, where numerous lines stop. All of these factors influence the reception of Nordio's architecture and are the basis for the

- 39 Claudio Visintin, 'Penultimo Rione \_ Visitato \_ Valmaura ', 2014
- 40 Civico Museo della Risiera di San Sabba Monumento Nazionale, 'Civico Museo Della Risiera Di San Sabba Monumento Nazionale - Depliant', 2024
- 41 Pierpaolo Pllich, 'Ater, a Valmaura Intervento Di Bonifica', Il Piccolo, 2013
- 42 Habitat Microaree - Comune di Trieste, 'Valmaura - Habitat Microaree', 2024



Fig. 36 | IRFOP complex - entry from Via Valmaura (A)



Fig. 37 | IRFOP complex - scholar building (D)

project's development.

### Location

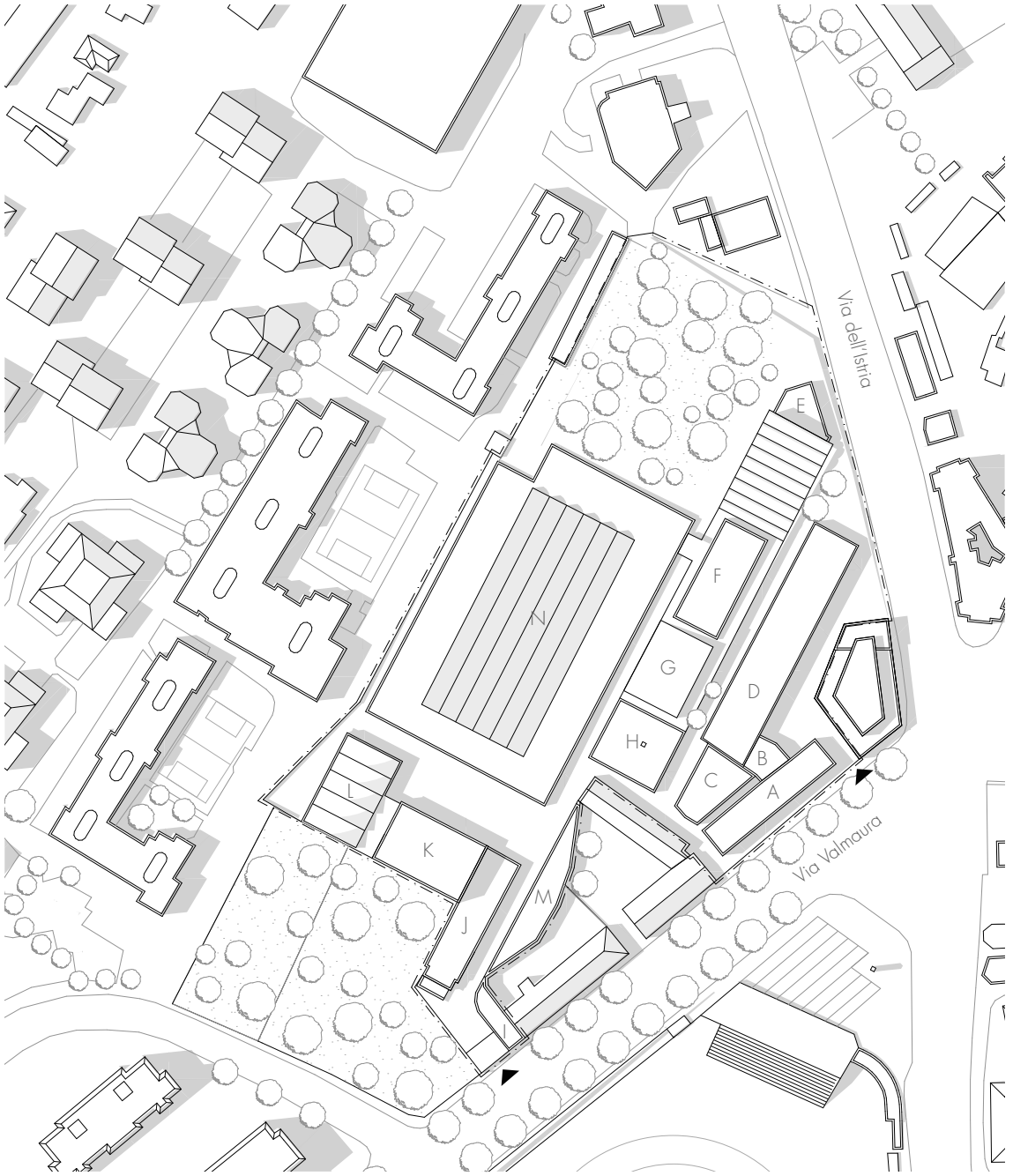
The complex extends between the Via Valmaura, Via dell'Istria, Via del Carpineto, and green area, including the park 'Antollovich'. All of the sides present different circumstances. The Via Valmaura on the length of the complex is a typical urban street. The houses, together with the local church, stand densely in a row along the street. The ground floors house services such as bars, restaurants, or grocery shops, while below are situated apartments. This street, under the aged platans, is always well frequented, filled with people sitting at the tables or standing around and talking. The Via dell'Istria, due to the slope of the terrain, is located higher than most of the complex and forms a wall on its northern side, limiting access to the parcel. This street is predominantly used for the transit of vehicles between the city centre and the highway. Via del Carpineto is a street belonging to a private gated estate and has limited access reserved only for the inhabitants. However, in the plans of the municipality of Trieste, this way is planned as a pedestrian connection to the Via dell'Istria.<sup>43</sup> On the southern border of the parcel is a green area, being partially a public park and partially fenced, inaccessible space.

### The complex

The ensemble is made up of numerous buildings, each with a unique functional and programmatic logic. Because the sources and access to the parts of the complex are limited, this description describes the qualities visible from the outside in the manner of an on-site inspection using personal observations and plan documentation. The following specialised description concentrates on the largest shed, which is the topic of this thesis.

Standing in the Via Valmaura, there are two options for entering the site. First, the institution's main building (A) is located near via dell'Istria. The longitudinal, three-story-high façade is clearly organized. The ground floor wall, which has horizontally orientated windows, is covered with a fine square-shaped mosaic in various shades of brown, but primarily in a deep tone. Above it, significantly lighter, with a shade line

43 Comune di Trieste, 'Piano Regolatore Generale Comunale Regione Autonoma Friuli Venezia Giulia PO3 Schede Progetto', 2021



Site plan



Fig. 38 | Auditorium building (C)



Fig. 39 | Inner street and the gym building



Fig. 40 | Canteen annex

and an overhang on the entry side, a two-story section. The openings are arranged in the same order and dimensions, despite their larger size. This elevated area contrasts with the ground floor. The surface is coated in brilliant brown mosaic tiles, and between the apertures are continuous, slat-like concrete lesenes that emphasise the rhythm of the façade. The volume is topped with a protruding flat roof.

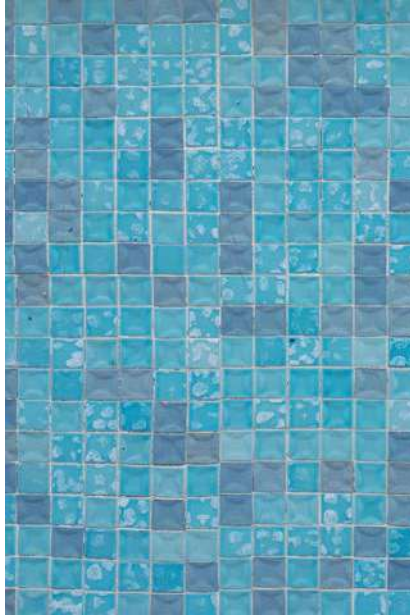
Directly behind it, a polygonal volume (B) with slim horizontal windows with a deep brown mosaic-covered façade on its entire height. Visually, it complements the ground level design. It serves as a connector between the administrative and academic areas, complete with a stairway and restrooms. Its polygonal shape affects the orientation of the subsequent building components.

The auditorium (C) is located on the southern side of this building, and its conical shape corresponds to its function. The ground level is covered in brown tiles, with openings for wooden doors. The wall below is set back, covered in grey tiles, and has large windows that enlighten the inside.

Classes took place at the 'scholar' building (D). Its ground floor is totally glazed and partially exposed facing Via dell'Istria, with no walls but covered by the floor of the upper storey. The façade's architecture is quite similar to the upper floors of the administration building, with two exceptions. Two cuboid bay windows protrude from the wall's surface, emphasising the classrooms on the inside and standing out from the rest of the yellow tiled façade with dark brown mosaic. The previously listed buildings are currently being renovated by ASUGI into a „Casa della Comunità," a healthcare centre.

In the back emerge five interconnected annexes, each with a unique appearance. The first two constitute a gym and restrooms (E). On the outside, the restroom is an irregular polygon with few windows. Next to it, the gym stands out with its spherical concrete barrel vault ceiling, which creates a rhythm throughout the façade. Its east wall is completely closed, but the west is fully open. The façade exposes the carrying structure's pillars and beams, which form a compositional grid. Rainwater pipes hang prominently in front of the pillars. The next building section (F), which houses the changing and





Figs 41, 42 | Facade mosaic



Fig. 43 | Inner street



Fig. 44 | Changing room



Fig. 45 | Gym building

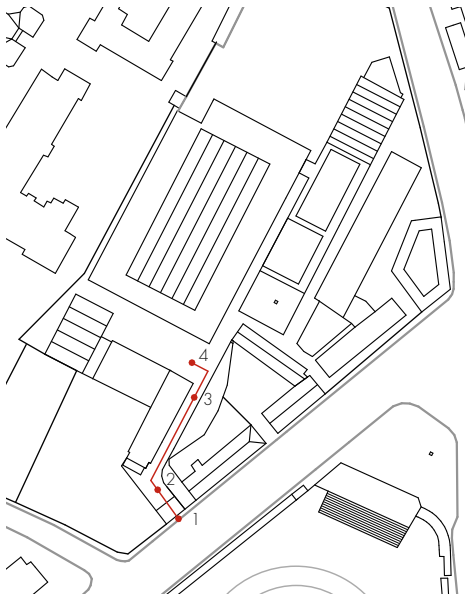
shower rooms, adheres to the gym's design principles and is capped with a horizontal slab and flat roof. The walls are built with strip windows and glass door apertures. The first floor's walls are set back and have again strip windows. A connecting bridge emerges from the façade and connects this part to the grand hall on the other side of an internal street. The old canteen (G) is located further away. Except for the framework, the walls are as tall as the gym and are completely glazed with frames that resemble urban store windows. The structure has a pent roof that lets in light from the eastern side. The final annexe from this section housed culinary and technical spaces (H). Once again, the grid provides an order for the composition. It differs from the adjacent canteen building by having a smaller window surface at ground level. From the flat roof emerges a round and tall chimney, indicating the technical function.

The complex also has another notable entrance. A characteristic concrete gate, forming a coherent entity with the 3-story building (I) on the other side of the Via dell'Istria, marks the entrance to the ex IRFOP area. This building most likely housed surveillance crew offices and residences on the upper floors. The walls on the ground floor feature the same façade cladding as the administration building, with light blue tinted tiles above. The front façade, with its windows and loggias, blends into the surrounding urban dwellings. The concrete stripes on the ground level are reminiscent of the rusticated old buildings in the neighbourhood. The back corner, where the back balconies are located, is rounded, articulating the path through the ensemble and revealing to visitors the current archive building.

The archive building's (J) past usage is supposition based on structural plans from the time before the renovation. It has a conspicuous covered entry with a large stairway running along the axis of the entrance gate. The rooms' relatively tiny size (17 - 30m<sup>2</sup>) suggests that they were most likely offices. The façade design resembles that of the residential building. Again, the concrete framework defines the fundamental rhythm of the apertures, as does the blue tile covering.

Orthogonally connected to it with a staircase is a 2-story hall





Figs 46 - 49 | Walkthrough sequence

1



2

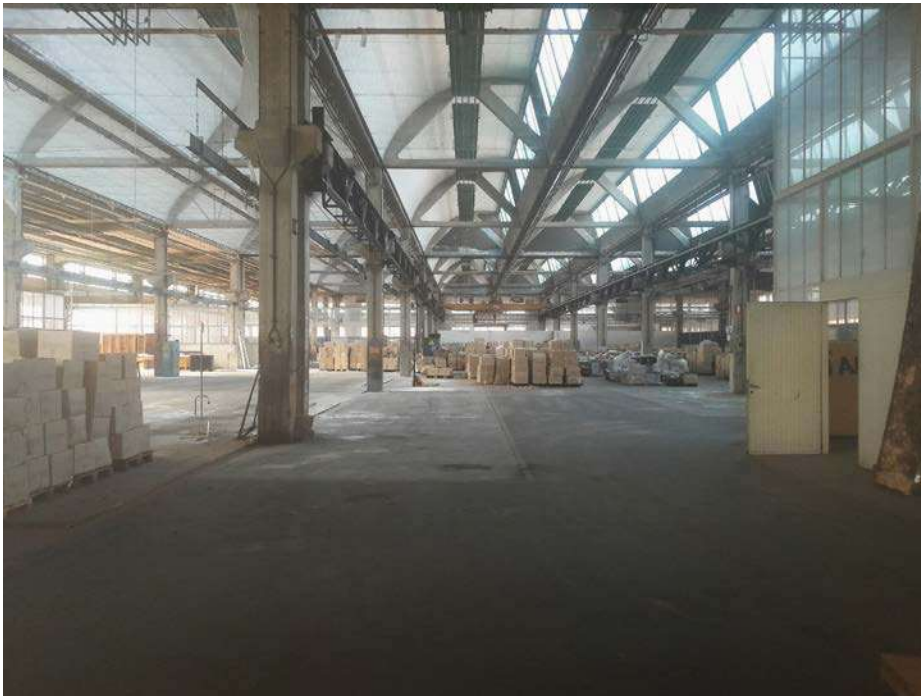


3



4





Figs 50, 51 | Main shed interior



Fig. 52 | Main shed façade module



Fig. 53 | Window openings

building (K), originally without any spatial subdivision on the inside, except from the structural pillars in the middle. On the outer walls, the openings are placed high, near the ceiling. Larger windows are only found on the first level, along the hall's shorter sides. On the bottom floor, a sliding gate made of metal and glass provides direct access from the courtyard. Since the renovation, they are separated into smaller sections, each with a staircase. The prior usage was likely a workshop hall for vocational instruction with machines or storage.

Another hall (L) can be found on the western side of the halls, sharing a wall. It has the same wall height as the stated hall and the same configuration of openings, and it is covered by a rounded saw-tooth roof that faces south, extending its room height and substantially brightening the inside. It may be presumed that the room was used for vocational or storage purposes.

On the complex's east side is an other two-storey building (M). It was most likely a warehouse, as the interior space is inefficient for anything other than a repository due to the highly conical walls. The building's exterior is distinguished by blue mosaic and horizontally aligned window strips, as well as an inclined wall on the upper story.

113

The main hall (N) is located in the centre of the terrain. As the subject of this study, it is described in greater depth than the rest of the complex.

## Façade

The building's façade features a repetition-based design. The dimensions of the exterior walls are approximately 60x96 m, based on a 12 m module that runs the entire length of the façades and corresponds to the structure's support distance on the interior. The carrying structure, with supports and beams, is apparent in the façade, just as it is in the other buildings in the ensemble. Its surface bears clear remains of the wooden formwork. One module has two pillars that divide it into three fields, the central one being brighter. The connecting section of the module is a concrete wall with red rainwater pipes bordered by concrete lesenes. Between the ground and the lowest window is a wall with colourful tile covering. In contrast, the colours alternate amongst the modules (blue,



Fig. 54 | Main hall façade colour order

brown, and yellow). On the wall, between the pillars, square windows form strips. Today, they are partially covered in metal plates to prevent degradation. Above the windows, there are structural beams and two strips of windows. All of the windows use basic glazing and steel framing. Between some of the pillars, instead of a wall and windows are large sliding gates, dictated by the structure of the façade, around 4,30m wide and 4,20 high. A canopy wraps the entire structure in the middle of the higher beam, projecting considerably to the south and north and barely highlighted on the east and west. At the top, the parapet protrudes, completing the facade.

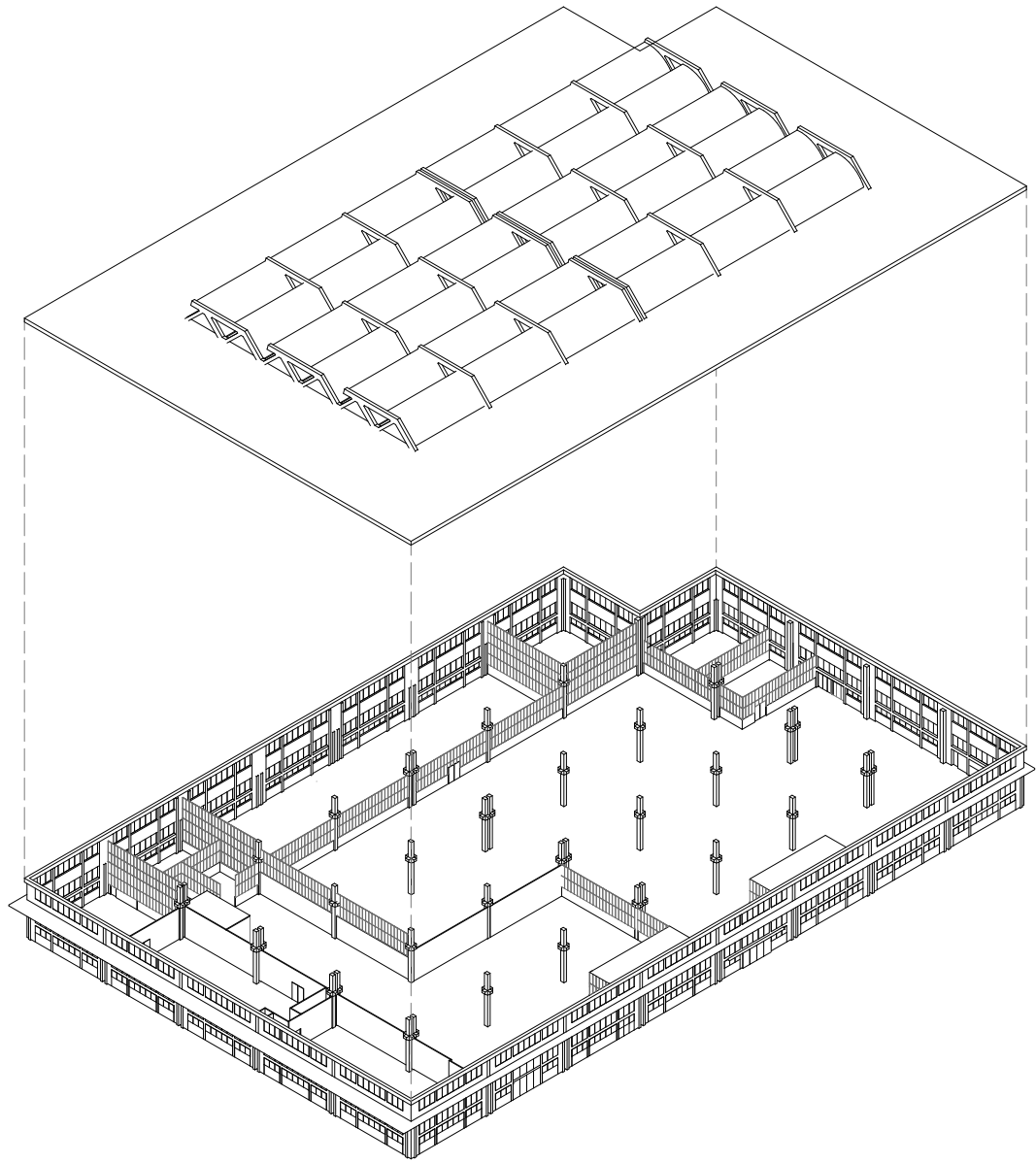
### Interior

On the inside, the hall is vast and filled with light. The sunshine shines through large, numerous windows in the walls, as well as saw-tooth windows that span nearly the whole roof surface. Room-high transparent walls with opaque strips split the large space into smaller spaces. There are smaller units along the exterior walls and two large ones with uneven shapes. The position of the supports determines the rhythm of the divisions. Cables, ventilation, and heating pipes dangle from the ceiling at regular intervals determined by the structure of the building and its roof form. The flooring is primarily screed, with certain areas including concrete tiles or bricks. Although the documents do not clearly indicate the previous use, the presence of sanitary facilities, situated in the sectors - water sinks, electronic switches, workbenches, and hanging between the supports of steel cranes - permits to deduce that it was purposed for practical vocational training. Today the partially used shed is used as storage for the archive of the FVG region.

### Structure

The carrying structure of the building consists of reinforced concrete skeleton construction. The supports are raised with the truss girder enabling the construction of the saw-teeth roof and rectangular beams touching the outer walls in in-situ concrete. The pillars have on all four sides supports enabling fixing of hanging constructions, for example cranes. The roof structure is a ribbed ceiling uniaxially stressed between the beams. On the north and south sides, since the deck span direction is turned 90°, the edge supports are doubled. The same occurs





Exploded axonometric view  
Existing

at the middle axis of the construction. Here, probably, the supports and beams have been doubled, creating a dilatation joint because of distortions due to thermal expansion or restraint stresses. The horizontal bracing is supposedly by the outer concrete walls and the roof construction, although because the norms in the 1960s in Italy were different from current, the taken measures may not be sufficient and could require an additional bracing in the form of shear walls or struts and ties. The outer walls are built of concrete skeleton, the opaque parts are made of masonry with hollow bricks, mortared, and cladded with colourful tiles on the exterior side. A similar structural principle is employed for the construction of the sawtooth roof. The bearing shell, fabricated in concrete, is covered with a layer of hollow bricks on the inside.

### Technical building equipment

The technical equipment of the shed is predominantly located at the ceiling. The lighting and fluorescent tubes hang consequently below the beams carrying the sawtooth windows. The heating pipes in the space between the windows and the rounded roof are partially also placed at the external walls. All electric cables are fixed exposed on the walls and beams. For the ventilation, there are ventilation grates fixed in the windows and ventilation pipes going through the roof.

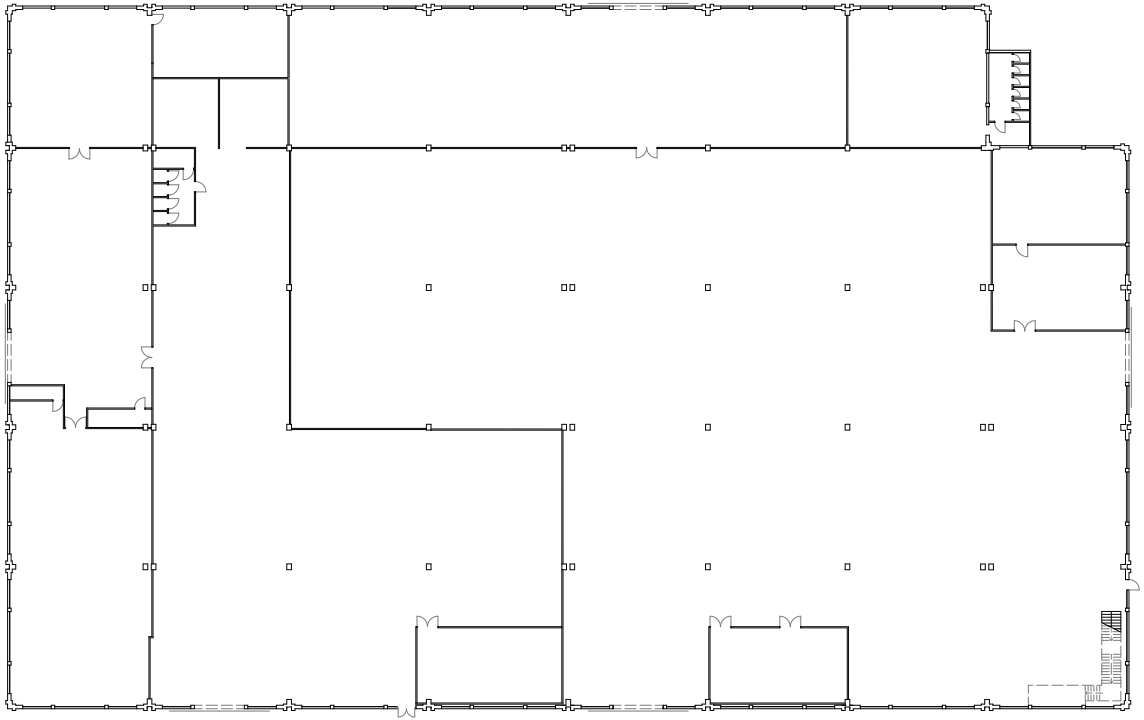


Fig. 55 | Technical equipment at the ceiling





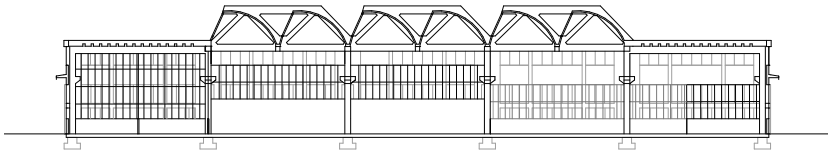
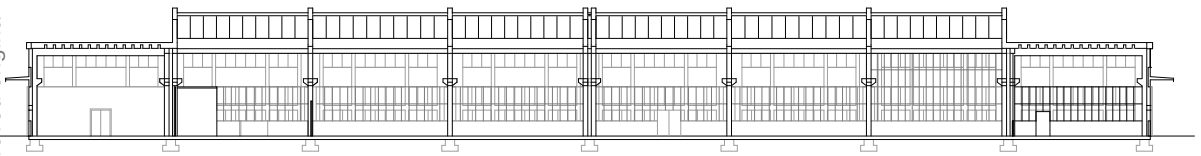
Ground floor plan  
Existing



0 5 10 20

Sections  
Existing

0 5 10 20



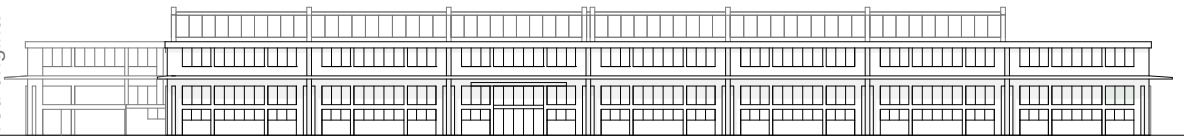
Elevations South and East  
Existing

0 5 10 20



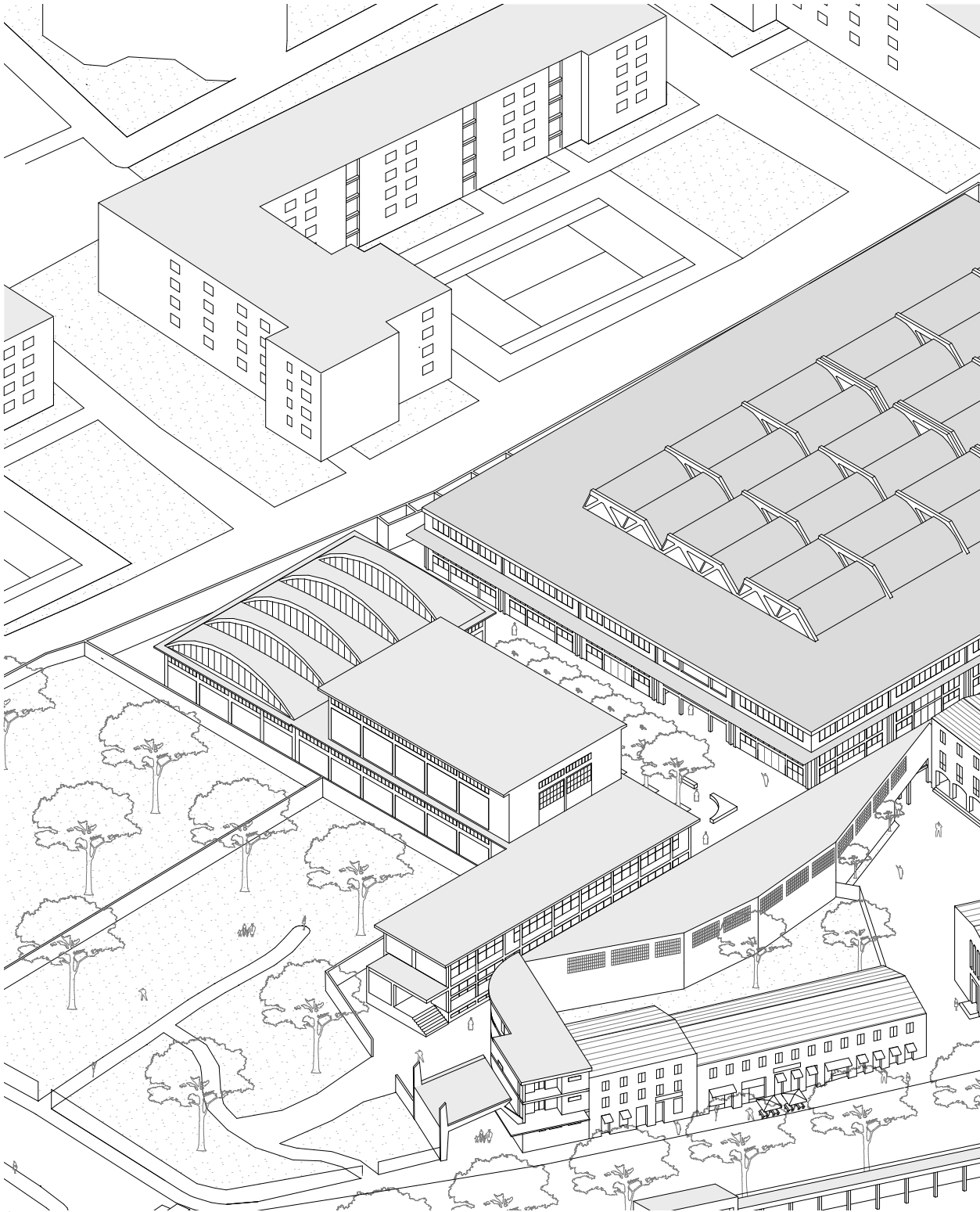
Elevations North and West  
Existing

0 5 10 20



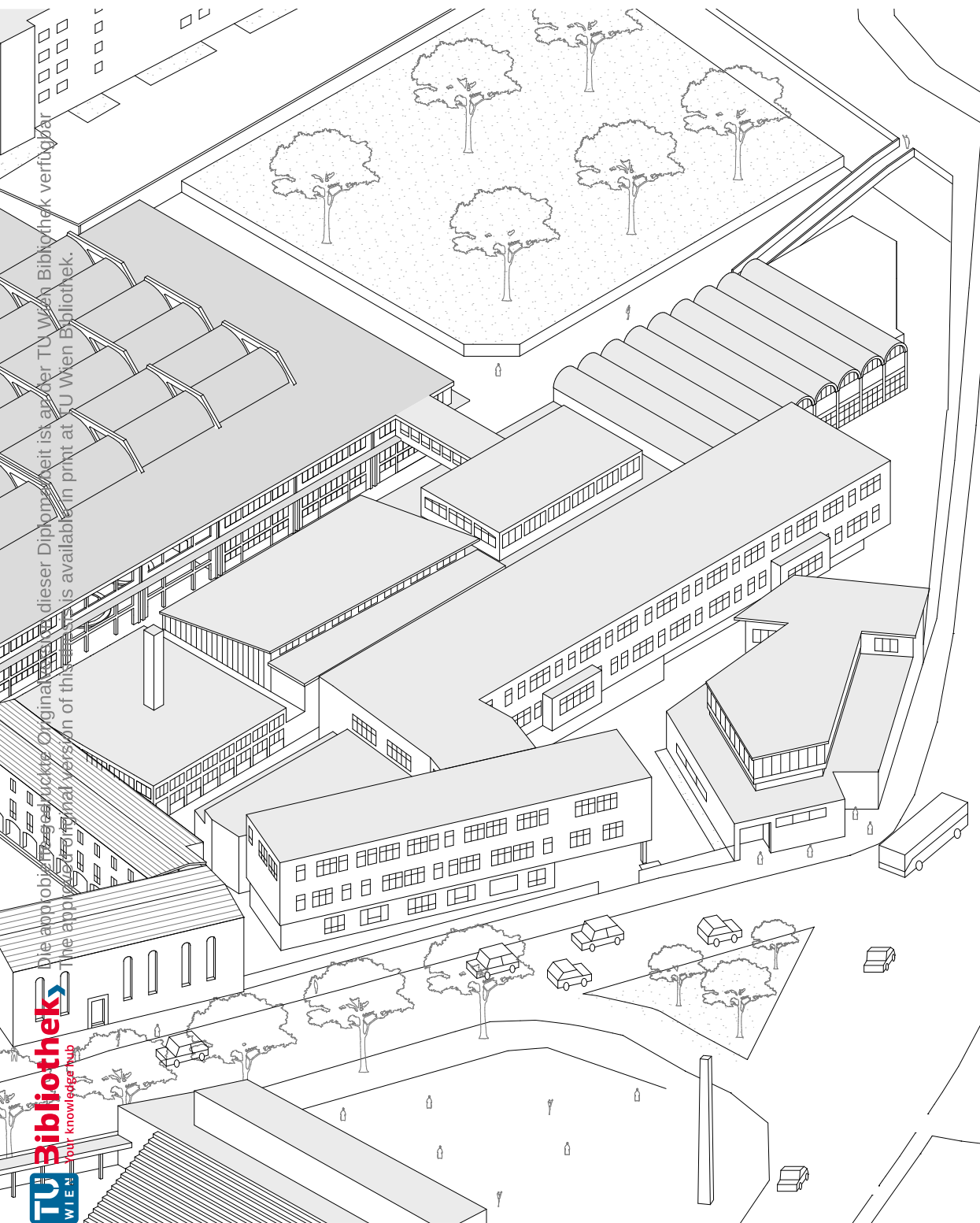


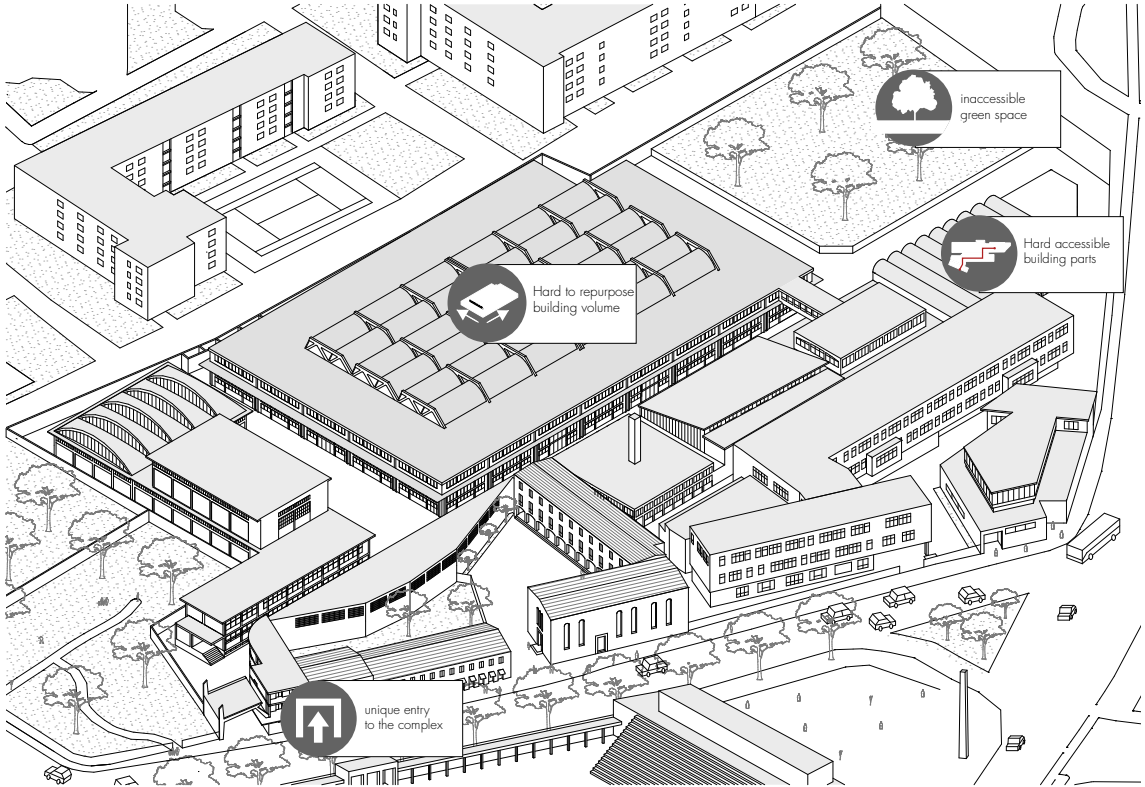
Reuse concept



Axonometric view  
Ex IRFOP complex - project







# Urban Strategy

The central location of the ex IRFOP complex in the district of Valmaura makes it essential to integrate this area of around 22 000 m<sup>2</sup> surface to the urban context. The city council's strategy for the neighbourhood is in favour of a revitalisation of the area in order to reach a higher unity and continuity of the urban space. Although the industrial character of the ensemble is clearly legible, the buildings composition, with articulated street and courtyard layout, and the facades resembling shopwindows in the city centre make it easy to transform it into a coherent part of the neighbourhood.

## Issues

The complex has some fundamental issues, influencing its conversion potential in terms of urban development. First and foremost, consider the buildings' accessibility. The main building, where the Casa di Comunità is to be housed, is accessible directly from the via Valmaura. All of the other buildings have their own entries to the inner dead-end street that can be reached uniquely through the main gate from the via Valmaura. What is more, in the back of the complex and directly next to the Via dell'Istria is located a densely overgrown green space of 3600 m<sup>2</sup> that remains unused since the ensemble is separated from the city by a wall and level difference. Today, it's only visible from the Via dell'Istria and the gated residential estate next to it. At last, the main shed in the area, due to its size, is difficult to readapt for another use than industrial or storage.

127

## Interventions

The essential intervention in the complex is opening it up to the neighbourhood and incorporating it into the local centre. By enhancing the public space through the inner streets of ex IRFOP and making them pedestrian friendly, the hard-accessible buildings become attractive spaces for diverse reuse projects in the zone. The first step is the removal of spatial barriers at the crucial points around the complex: demolition of the wall between the park 'giardino di via Carpinetto' and the ex IRFOP, creation of a passage between the church's square and the principal courtyard by partial demolition of the walls in the ground floor of the storage building, and a new



Fig. 56 | Wall of the storage building to the church courtyard



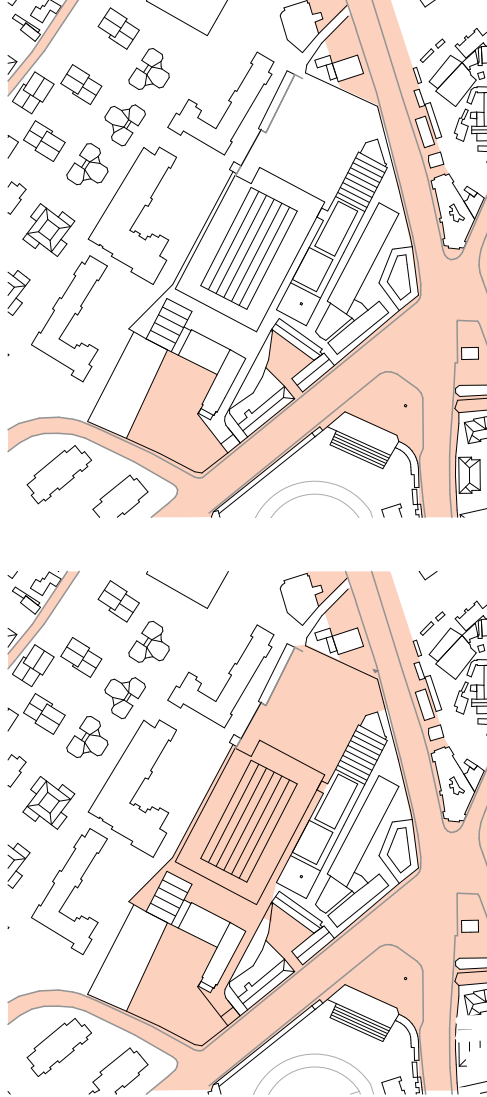
Fig. 57 | View on the interior street from Via dell'Istria

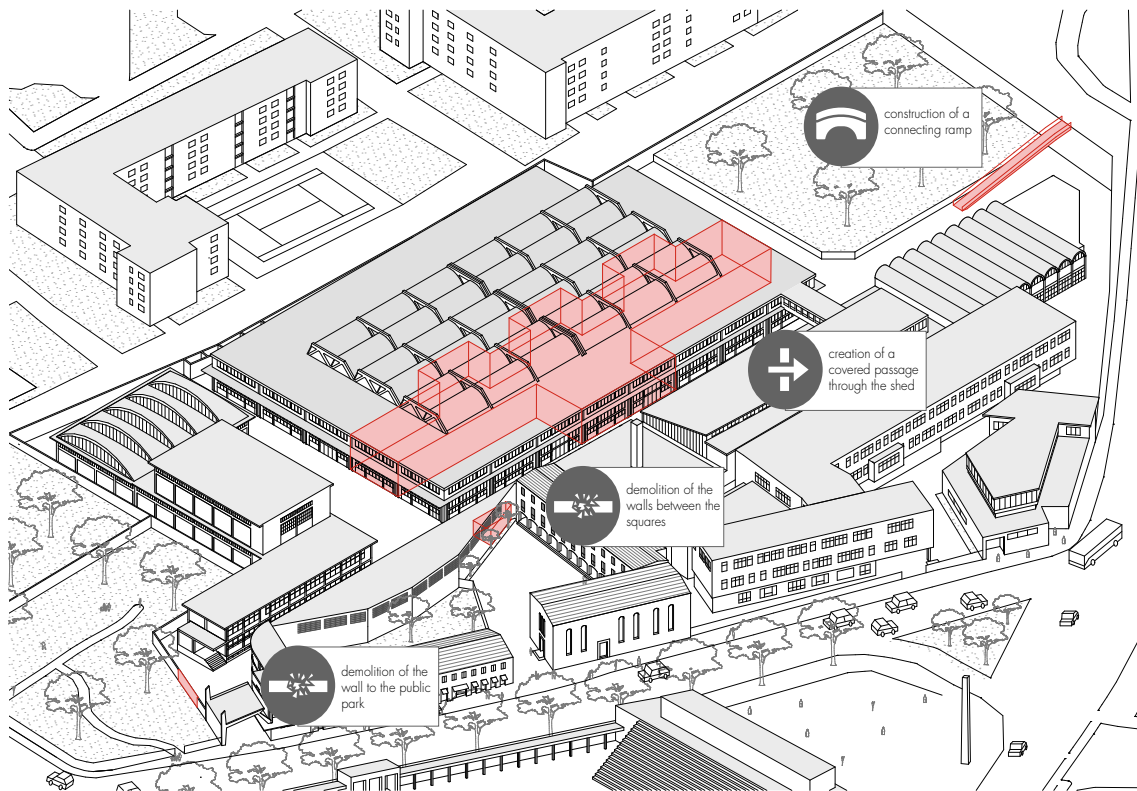


Fig. 58 | Wall between the interior street and the park

pedestrian ramp from the via dell'Istria to the northern part of the complex in the continuation of the inner street's axis.

The volume of the main shed is divided into three, from each other independent, units in order to improve the adaptability of the building. In that way, the project development can be organised in phases, timely independent from each other. The three created building volumes create between them a passage linking the main courtyard in the south and the wild green area on the northern side. The covered part is creating a new urban landscape in the form of a skate street - a public space dedicated for youth interaction and expression.

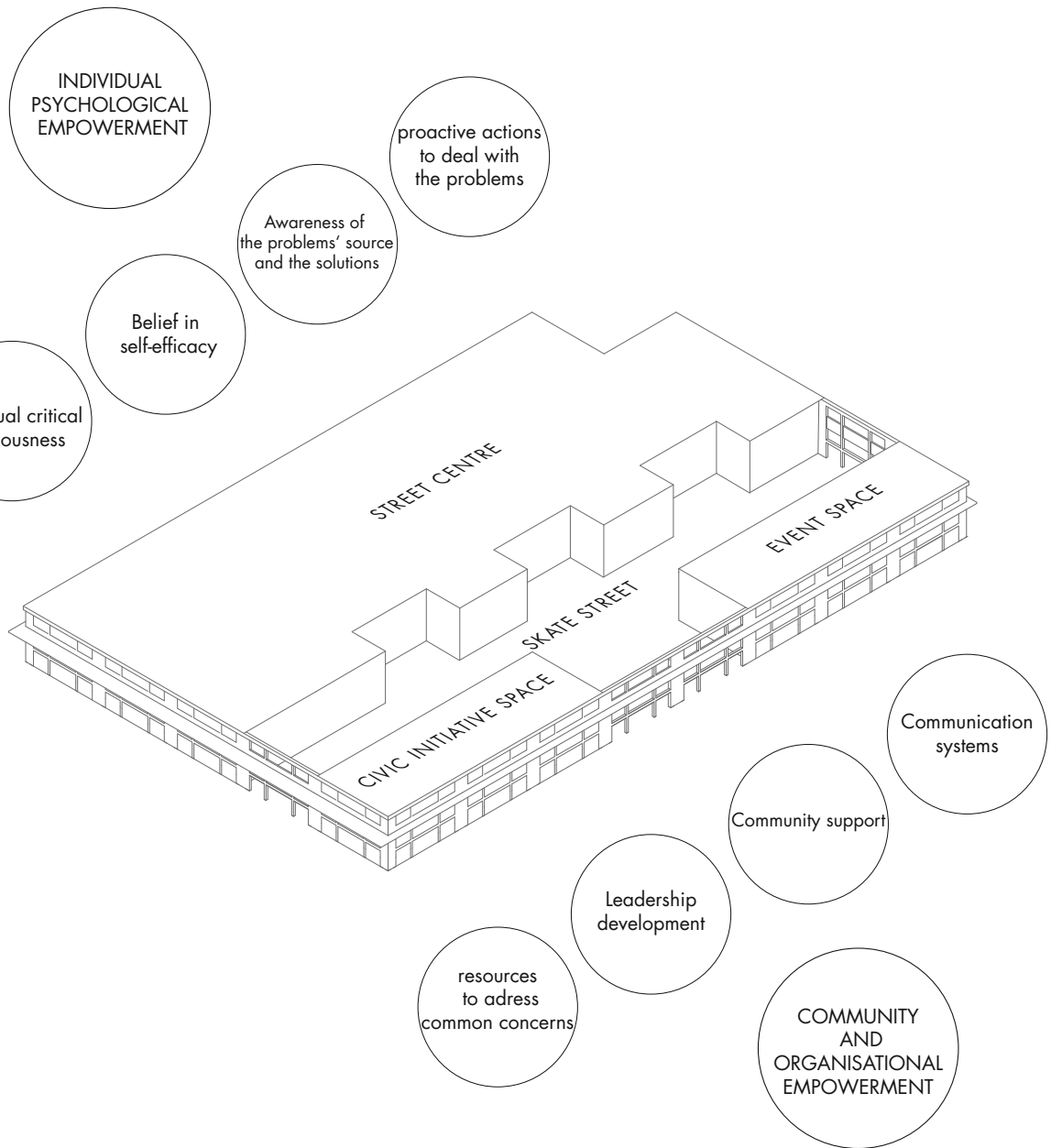












Axonometric view  
Functional concept

# Functional Concept

Viewed the social conditions in Trieste and its periphery, the offer of cultural facilities for the youths, the project's aim is to face those issues and contribute to a meaningful social change. Given the good accessibility with public transport and spatial potentials of the architecture, the area has important advantages. What is more, the shed building with its clear room height of 7 - 8 meters gives the possibility to use it either as a spacious hall or subdivide it into two floors with conventional ceiling height.

The functional concept is based on the existing circumstances. Using the potential and local advantages, it aims to develop a project integrated in the urban context. The ex IRFOP ensemble is located in the direct neighbourhood of Trieste's sport centre for professionals and the civic centre of the district. Referring to the 'ricreatorio' institutions, the municipality of Trieste already has the necessary organisational structures and personnel to address the issue. In the neighbourhood there are also known non-governmental activities that have an objective improvement of the recreational and cultural offer of Valmaura. The associations such as 'Basketball Trieste' or 'Pietro Pettini Foundation' and the local parish are already contributing to improvement in this field.<sup>44</sup>

133

Based on the mentioned empowerment theory, the functional concept follows the development of the social group—youths, where the provided functions accompany the stages, from the individual to the communal empowerment, which is split into three institutions. In the first place, the young visitors learn how to gain self-conscience in the centre for street sports and culture. Secondly, for the people that are aware of some communal problems and have motivation to unite and act for improvement, the project offers a space for their activities, which target the broadly defined 'common good'

44 InTrieste, 'Trieste's Basketball Renaissance Initiative to Revitalize Valmaura Playground', 2024

with similar organisational and administrative principles as the 'Haus der Technik' in Berlin. As the interface between the activists, initiatives, and the neighbourhood is a multipurposed event space that enables the creation of exhibitions, concerts, theatre performances, dance events, or markets.

### **Street Centre**

The biggest part of the shed is consecrated to the centre for street sports, culture and street art, inspired by the 'Streetmekka' institution developed by 'GAME' NGO. It targets the achievement of fundamental qualities of individual empowerment. Through the programmed activities, young participants can, in an informal and casual way, learn self-awareness in regard of their body and mental perception. The facility provides space for various street sports activities with different requirements. Disciplines including football, basketball, volleyball, parkour, bouldering, calisthenics, gymnastics and object manipulation have high spatial requirements, especially ceiling height. Meanwhile other activities, including dance, yoga, gym and also not sportive ones – art workshop, music studio need certain degree privacy and peace. An essential aspect of the whole facility is not a pure training centre, but most of all, a place of social encounter and informal exchange. For that reason an equally important functions of the program are space and arrangements to rest, observe, relax and talk, which are usually left out in conventional sports establishments.

### **Civic initiative space**

The second part, space for initiatives, is a co-working space for NGO's and citizen groups. It provides enclosed rooms for office space and a workshop for the creation of installations and small constructions. A big open space serving simultaneously for the inner circulation, relaxed work, and breaks in the café area. The appropriation and a feeling of responsibility are targets for the sustainable functioning of the place. For this reason, the most involved organisation groups can occupy the enclosed offices, which they can freely arrange; in return, they engage themselves to coordinate the functioning of the institution. The place should represent an inclusive character, open for new people. Through the combination of the space for bottom-up initiatives and an open café, the barrier of

## STREET CENTRE



Street football



Basketball



Calisthenics and  
gymnastics



Skating



Bouldering



Object  
manipulation



Parkour



Volleyball



Music studio



dance



Gym



Cooking



Workshop



Art workshop



Reception



Office



Changing

## CIVIC INITIATIVE SPACE



Workshop



Office



Café



Meetings

## EVENT SPACE



Exhibition



Performance



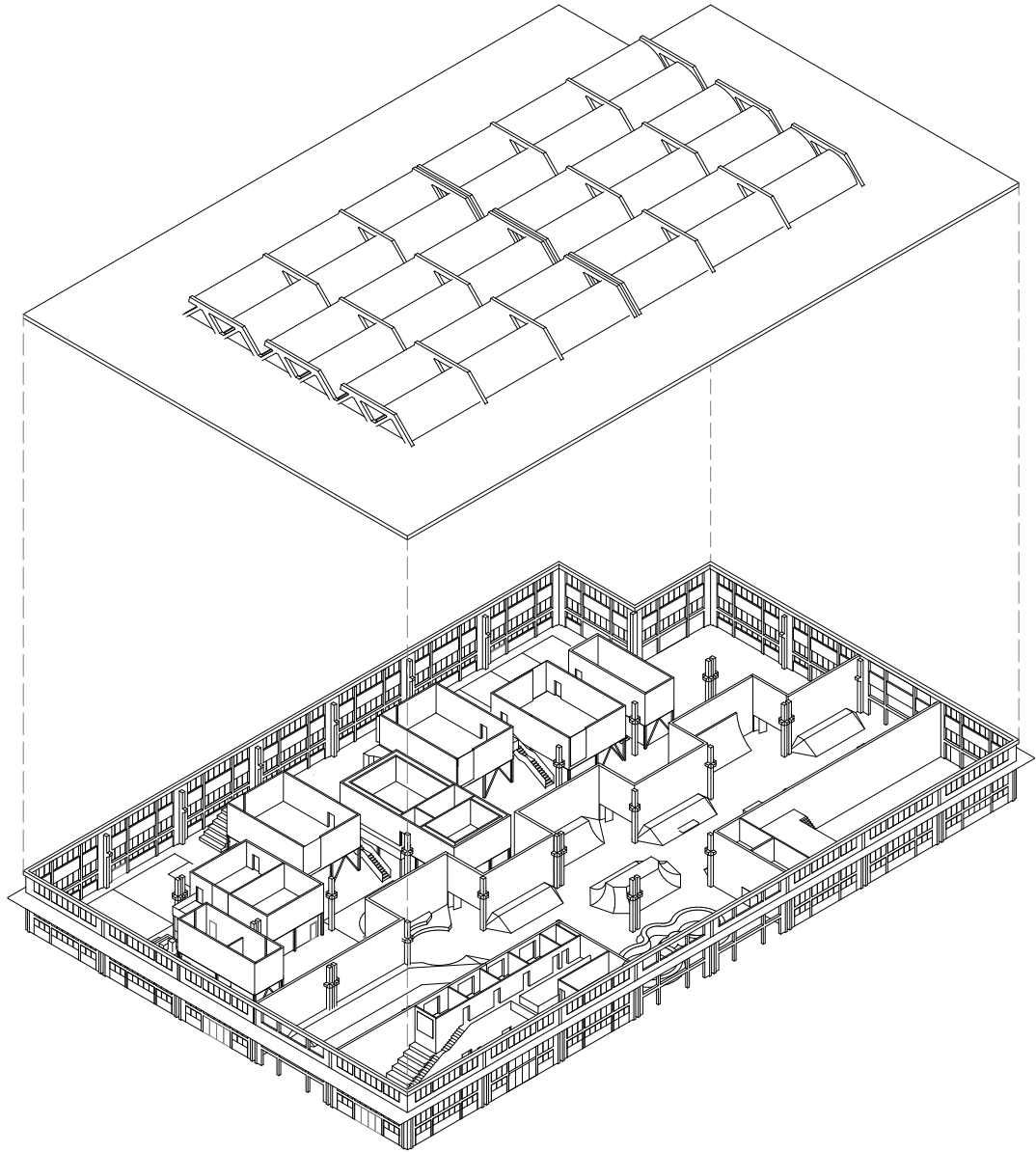
Market

accessibility to the institution is lowered for new potentially interested people, who may easily come into contact with the organisations.

### Event space

The third part, event space, is conceived as a flexible volume that can host bigger gatherings, organised on a pop-up principle, where the organisers and the form of the event vary regularly. The building has uniquely the essential arrangements for its use, including a stage and serving rooms. The backstage serves for performers, storage of equipment, and preparations. The audience space can accommodate 220 sitting spectators during a performance or up to 300 standing people during a dancing event.

The covered passage is the 'in-between' of the three sections of the project. Instead of a simple transitional space, it offers a landscape for skaters. As in the enclosed sports centre, the relation between the skating and casual social interacting is equally relevant. Thanks to its closeness to the sports centre, the activities can easily be extended from the inside on the 'skate street'. Being a unique public-covered skate street in Trieste, it can be used throughout the whole year.



Exploded axonometric view  
Project



# Architectural Concept

Regarding functional and social objectives of the Youth Centre, the architectural interventions need to create conditions, fulfil the practical aspects of the use, and conciliate them with the idea of creating informal places for encounters. Leaning on the theory of empowerment and the concept of architecture for community elaborated by Aldo van Eyck and Lina Bo Bardi, the design encourages its users to various kinds of social interactions, balancing between individual and collective. It is a play between niches, thresholds, and transitions.

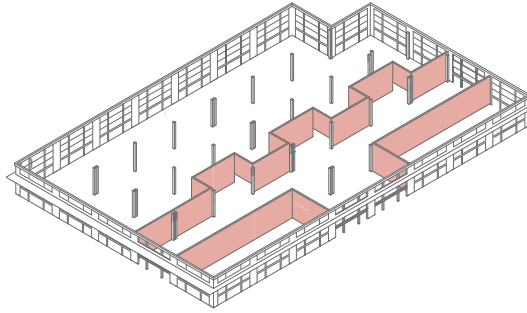
A partial demolition of external walls and windows creates the new openings. The construction of an inner façade forms the interior space into 3 building parts and the passage.

139

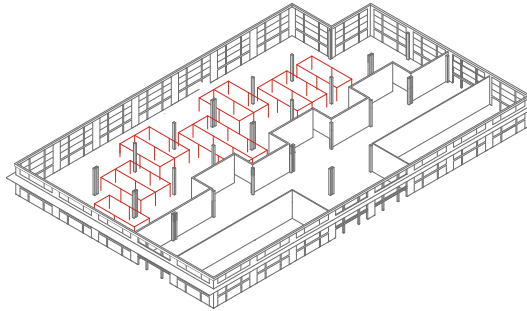
## Street Centre

The Street Centre is a place of motion. The ground floor gives the possibility to move around freely between the activities, rejecting the idea of separated circulation elements, like corridors. The perception of the space is not dictated by walls and can be experienced in different ways. This 'plan libre', already present in the existing hall, is enabled by the steel structures with rooms organised on two levels, giving the possibility to detach functions that require enclosed and more private ambient. Their structuring defines the layout of the program within the open space of the shed and gives to it a negative spatial form alternating between 'wide' and 'narrow', 'high' and 'low', creating a 'space, that breathes'. The ground floor is systematised in two alternating and interleaved zones, sportive and social. The open space between the structures is destined for sporting use; that includes courts and bigger arrangements with necessary equipment for curated activities. The space created underneath the structure, around 3 m high, is destined for the social zone, which contains furniture and little social games like ping-pong or table football for relaxed

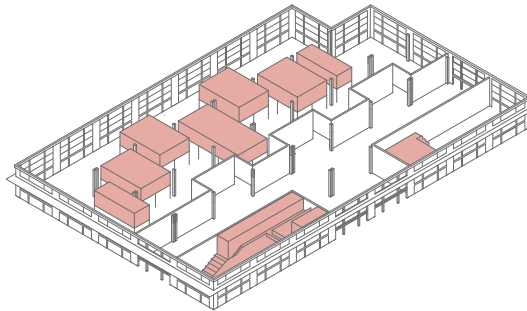
Subdivision with new walls  
Creation of covered passage



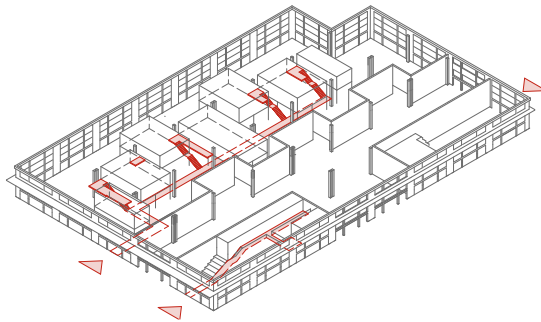
Plan libre in ground floor  
through new carrying steel structure



Lightweight walls subdivide the space  
into smaller units



Inner circulation in the building is  
organised is open and clearly organised



Architectural concept



breaks and conversations.

### Built-ins

The projected steel structures enable to position the demanding functions on the upper level, having access to the natural light and air through the sawtooth roof. At the same time, underneath it find places serving functions and social zones. Four straight stairways lead from the open ground floor to the upper floor. Their positioning, referring to the rhythm of the supports and the sawtooth roof, underlines the subordination of the intervention to the existing building by keeping the distance to the bearing structure along its axes and the placement of the walls in the regularity of the roof's beams - every 6 meters. All 'boxes' are covered with perforated trapezoidal aluminium sheet, improving not only the acoustics of the big hall, but also providing sight protection for the more intimate enclosed rooms.

The HEB beams, along the longer side, lay on similarly dimensioned supports as a continuous beam and are fixed with structural bolts to enable a simple assembly and also a potential future recycling of the components. The bracing is guaranteed by the diagonal steel profiles. The walls of the built-ins define the space and fulfil the requirements concerning the building engineering physics referring to acoustics and thermal isolation. Same as the exterior walls, they are lightweight walls with gypsum fibre panelling. Above, they are fixed at the existing ceiling of the shed and below at the new steel structure. The floor ceilings are constructed of cross-laminated timber (CLT) as the bearing element, footfall sound insulation, two-layer plasterboards, plywood panels, and PVC floor covering. The floor construction can be easily disassembled and almost entirely reused.

### Meandering Wall

Regarding the spatial qualities, the meandering wall fulfils two roles. Firstly, it forms niches for activities in the enclosed part, giving a sensation of a half-open room, designed for a group. Secondly, wide gates, positioned along the longitudinal axis, create an enfilade in a sequence between the 'Centre' and the 'Skate Street', melting the two areas into one coherent entity, if open.





Initiative space and café  
Rendering





Furthermore, the wall surface of perforated trapezoidal aluminium can serve the youths as a canvas to express themselves artistically in public space and, by this act, accentuate their presence and belonging to the community.

While the existing façade is conserved and the windows modernised, the new spatial layout requires a constructive partition, not interfering significantly into the existing walls and roof. The new walls to the skate street are carried out in a framing structure with wooden studs and plaster fibre panelling and perforated trapezoidal sheet on the outside to protect it from mechanical damages. The façade is fixed to the existing concrete structure and is self-carrying; in consequence, it does not negatively impact the structure of the shed and can be disassembled independently

### Skate street

In order to provide a high-quality skating space, the design follows established principles for such an arrangement. One of the most relevant requirements is the possibility to the users to continuously circulate in the space between the obstacles or to use them independently. This is given by the appropriate positioning and proportions of the ramps. A general approach to achieve this quality is to understand the skatepark as a 'house with rooms', meaning that the smaller spaces can be used separately and their spatial interconnection permits an easy transition to another one or a fluent passage through the entire area. This enables unhindered skating for multiple users simultaneously. Further point is the visibility. A skatepark should have a clear layout so that people skating can, on one hand, predict the movements of others and avoid accidents. What is more, good visibility gives a feeling of general security in public spaces during late hours. Creating an inclusive skate park, the arrangement should be accessible for people with every skating skill, which implies obstacles that can be used by beginners and their positioning, which can be used as a 'room' without disturbing other skaters. At the end, a skate park is used not only for sports but also as a social place. For that reason, it is recommended to plan rest and viewing areas where the observers can watch the area and do not give trouble to the skaters.

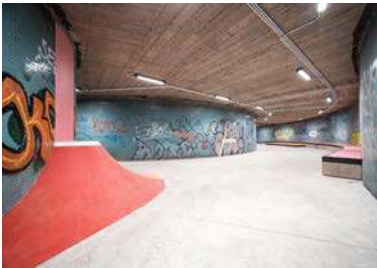
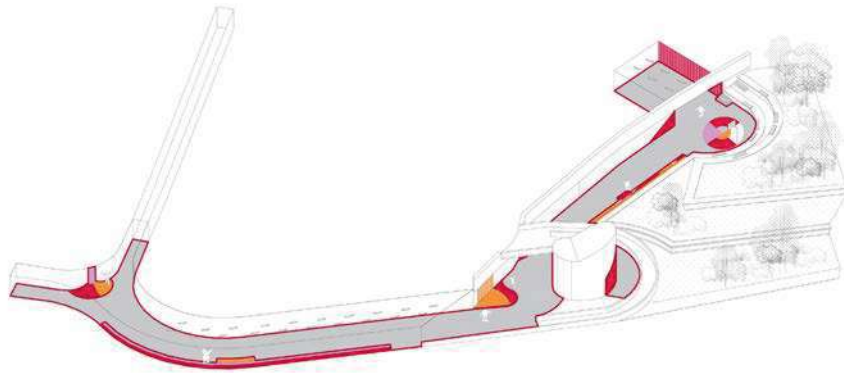


Fig. 59 | Skate park Vltavská Station in Prague



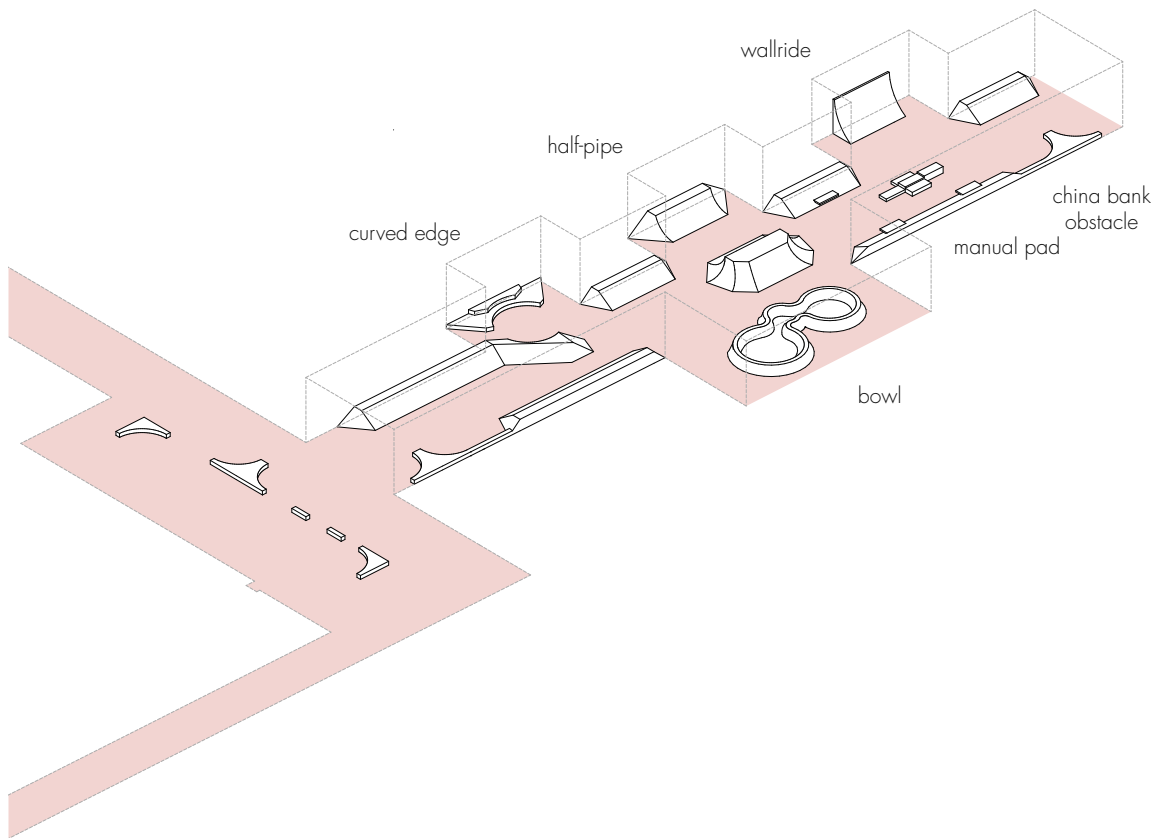
Figs. 60, 61 | Vltavská Station - Arrangement of the ramps and obstacles

The design of the Skate street reinterprets a regular urban covered passage into a new landscape for skaters. Ramps of custom concrete form the new topography. The placement of the lateral triangular ramps keeps the skaters in a flow on the nearly 100-meter-long passage. The niches, created through the meandering wall, house special ramps, like a big curved ledge, half pipe, and wall-ride ramp, and additionally structure the 'street' into a series of skating rooms. In the middle, between the initiative space and event space, where the space opens to the IRFOP's canteen building, skaters can use the bowl or drive out into the inner street of the complex. For the construction of the ramps and voluminous obstacles can be used the construction waste coming from the demolition works in the complex instead of foam blocks.

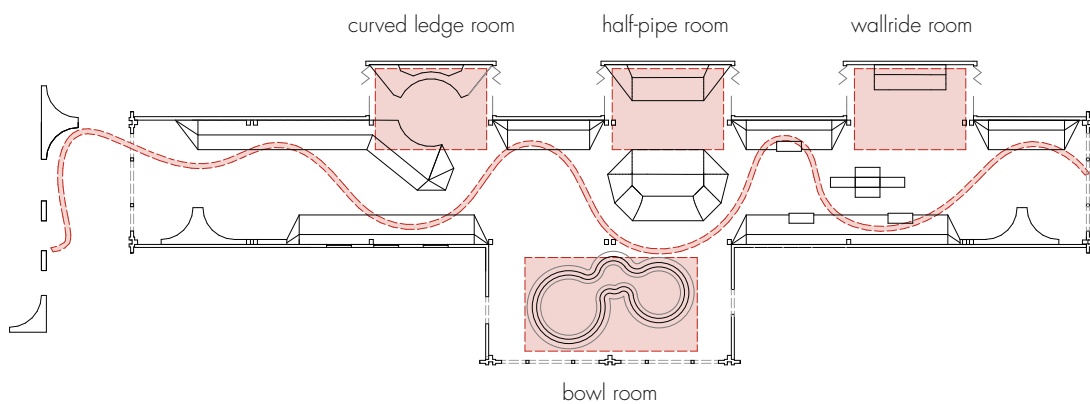
The design is inspired by the skatepark next to the Vltavská Station in Prague. As part of an urban renovation of the public space, an underpass from the 1970s has been transformed into a particular space for skating. Due to its longitudinal layout, the obstacles and ramps are disturbed at the walls, alternately enabling a fluent passage through the space. Next to the skating arrangements, there are also rounded seating steps, creating a 'room'. In this project, a relevant aspect is the illumination at night. Red fluorescent and white tubes lighten up the space and give a sense of security. This space has successfully been transformed from a space of fear into a recreational environment.

### **Civic initiative space**

The open design of the part for citizen initiatives supports exchange on different levels. On one hand, between the users actively participating and contributing to the everyday functioning of the shared space, and on the other hand, people from the neighbourhood, not involved but potentially interested in the initiatives. The café, placed at the entry, is the free-accessible zone, where customers and activists can come into contact. A seating stair, orientated towards the café, can be used as regular seats during the ordinary day or as an informal auditorium for interns or smaller public events. The main part in the back serves for the work in the offices, workshop, and meeting space. The offices are located predominantly along the eastern wall to the skate street and one to the western wall.



149



They can be reached directly from the main hall on the ground floor or using the open stair to those on the upper floor. On the ground floor, the offices, a part from the studio space, offer storage rooms. In all offices, big window openings bring in the light and give an insight on the Skate Street.

### Event space

A hall, a space of possibility, offers space for various events. It can be used for performances requiring a stage, with two levels and a landing in between; it gives different possibilities for the creators. For other activities, the place serves with a surface of 250 m<sup>2</sup>. The backstage consists of rooms that can be used for preparations, storage, and sanitary. Because of its irregular use, the technical equipment is reduced to necessary; a separate room with technical building equipment is not necessary. The required installations are built in a house connection niche.

### Courtyard

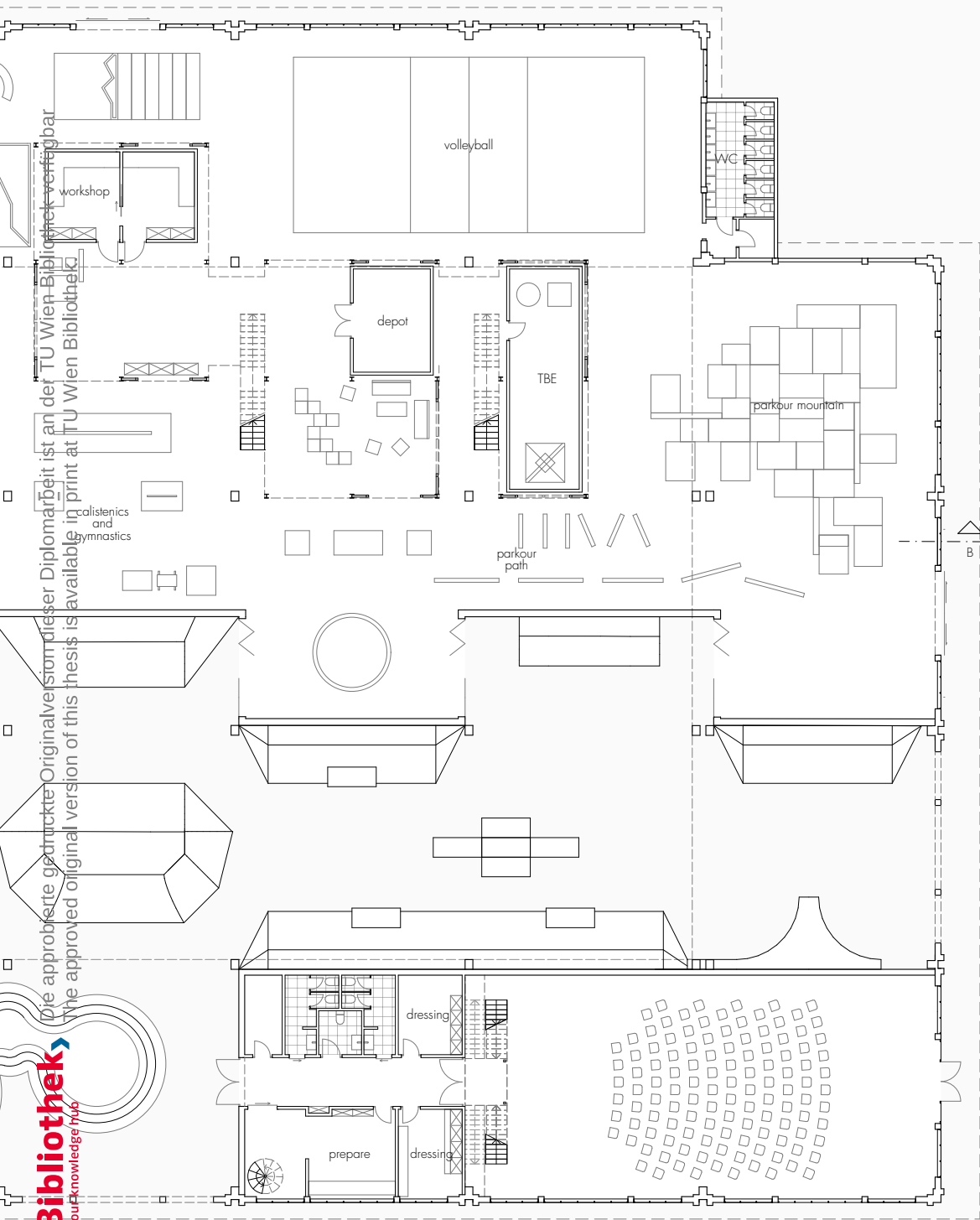
The inner courtyard is the principal outdoor space of the exIRFOP ensemble, where visitors access the buildings. The new arrangements are reduced to a minimum to preserve the industrial character of the place. Inspired by the project of parking lots in Lyon by Peter Latz, the asphalt surface is cut out and makes room for a row of planting holes for the field maples in the middle of the square. With the shade provided by the trees, people can enjoy a rest on concrete seating benches placed under their crowns. The concrete elements serve not only the people taking a break but also skaters that ride out of the covered skate park and can also use the structures as ledges for sliding or grinding. On the side of the archive building, the access for occasionally coming trucks is preserved and can happen without disturbing other users.



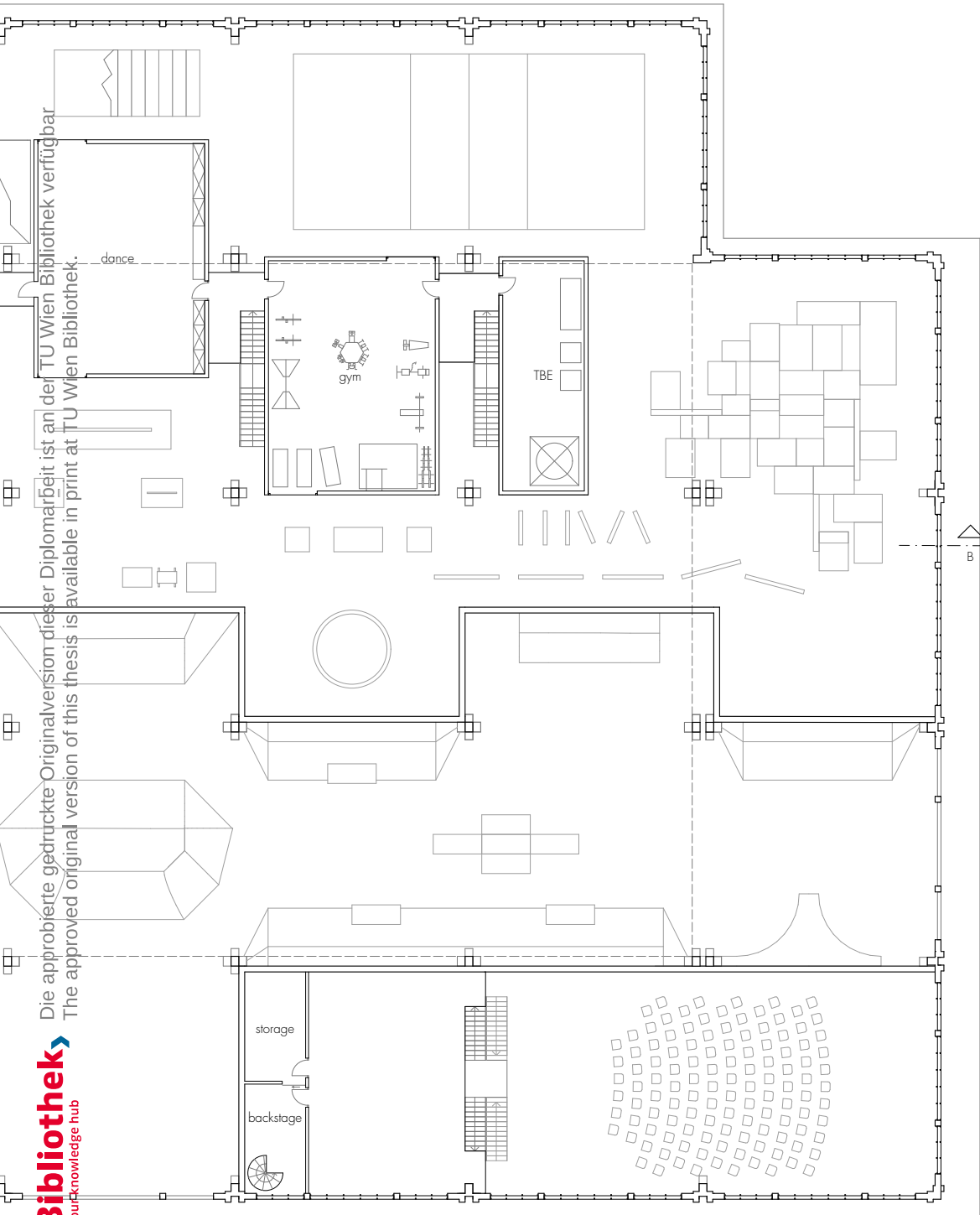


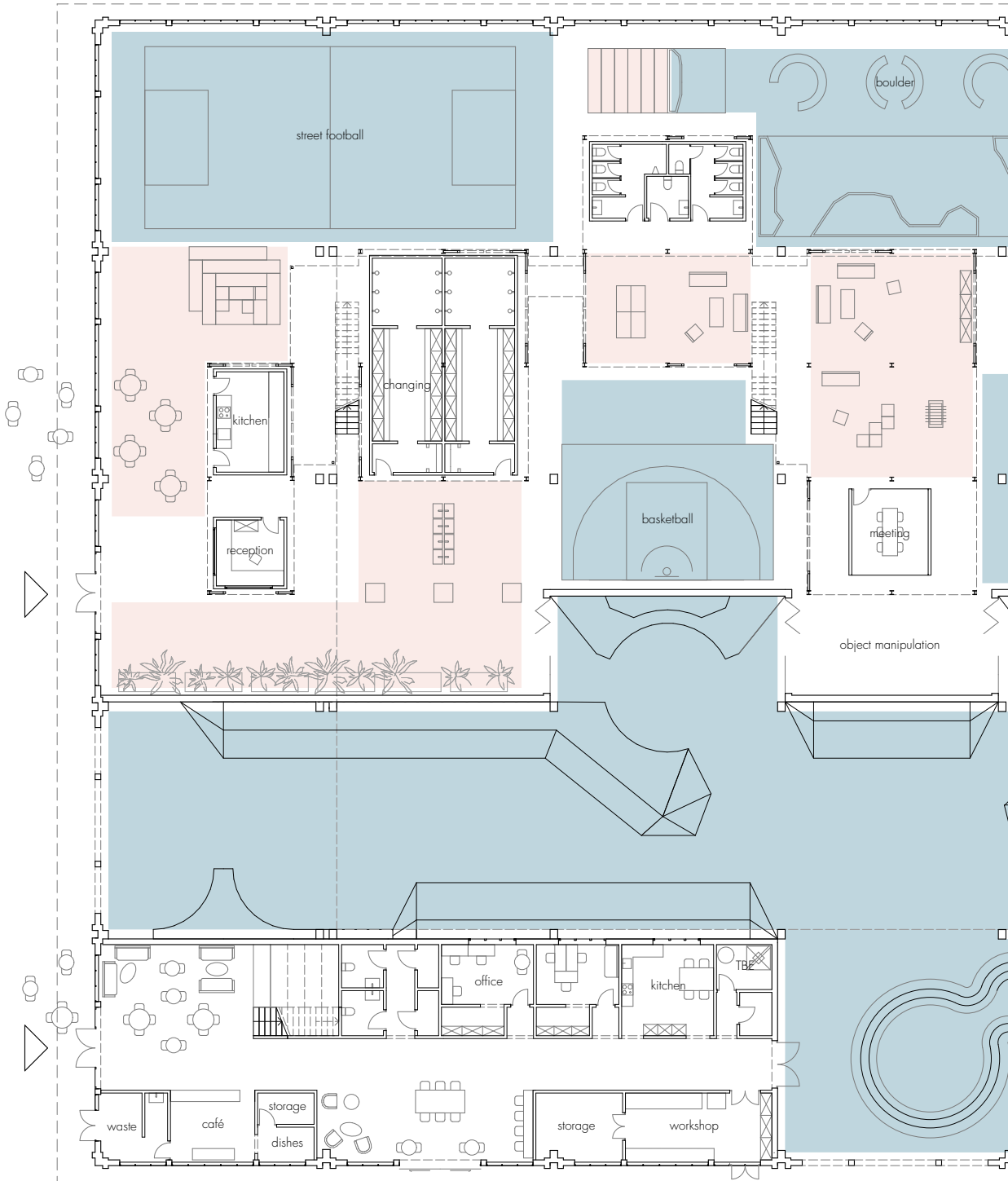
Ground floor plan  
Project





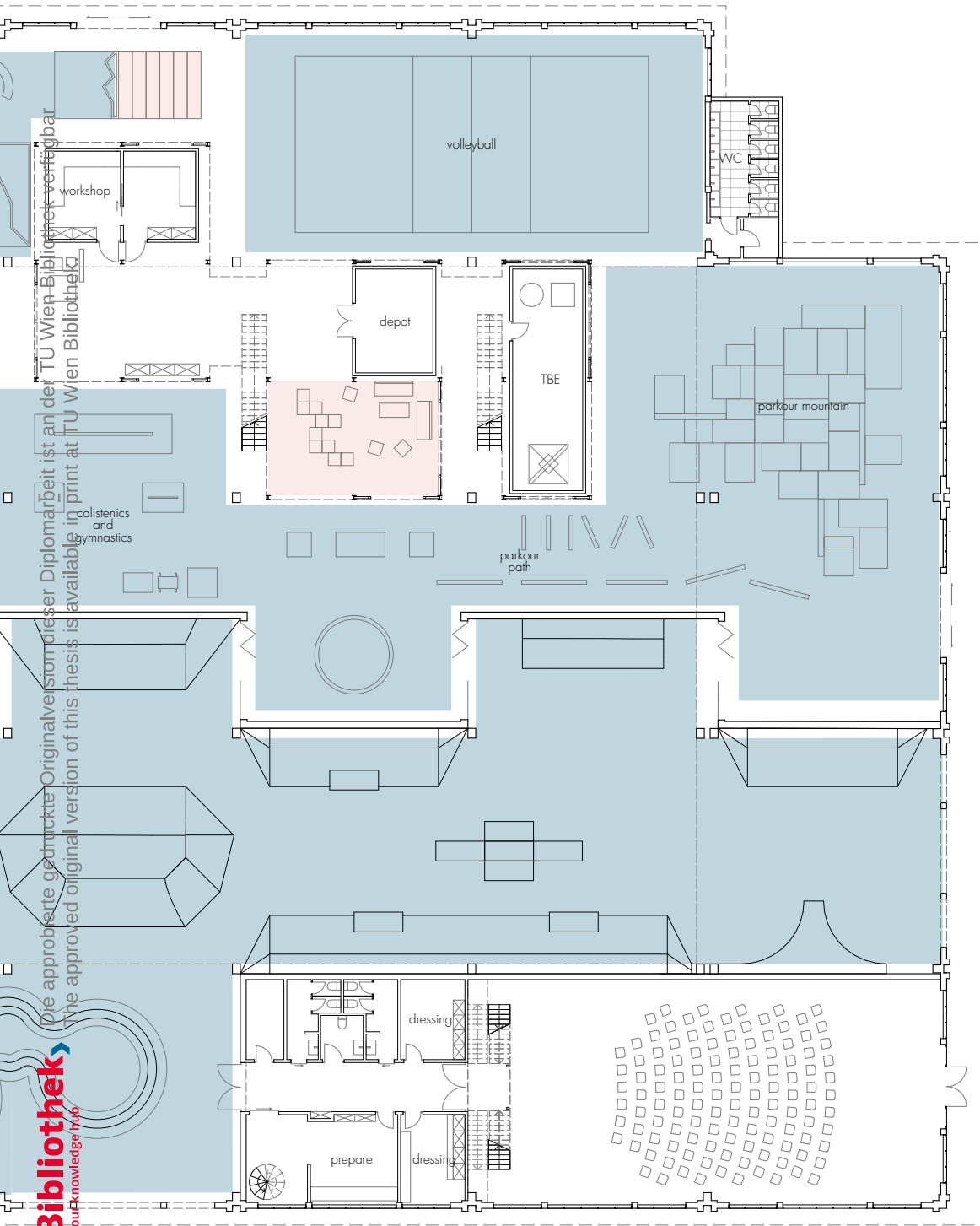


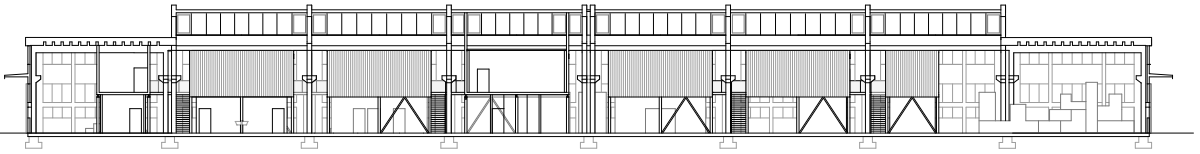




Activity zones in ground floor  
Project

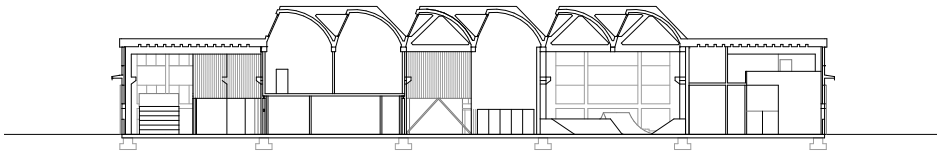
■ sports interaction zone    ■ relaxed interaction zone





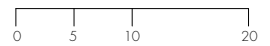
Section BB  
Project

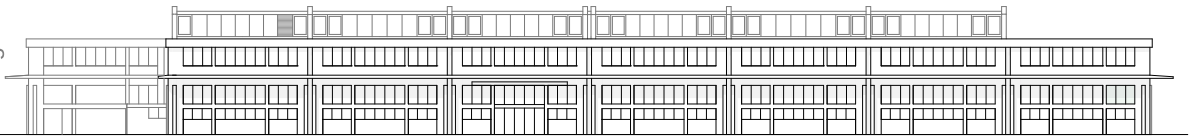
0 5 10 20

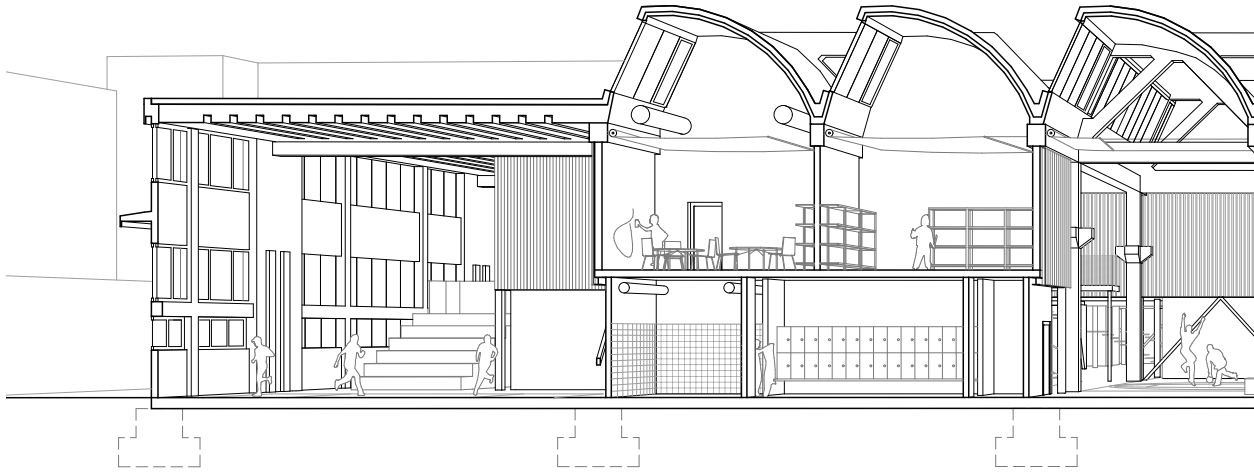




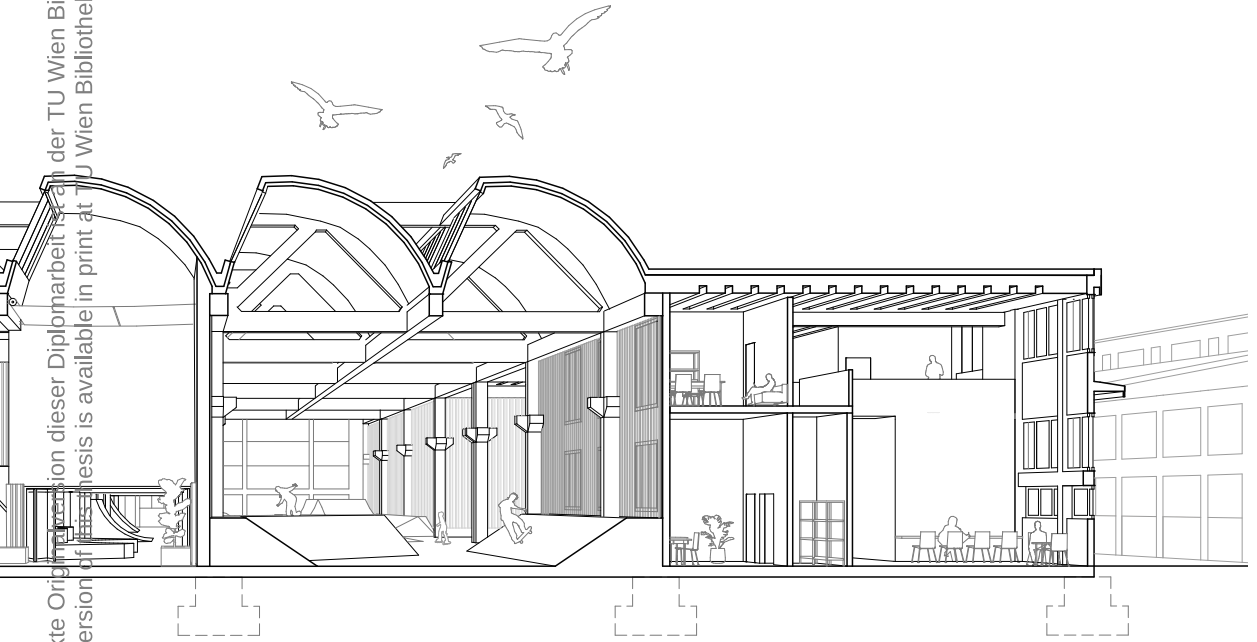
Elevations South and East  
Project

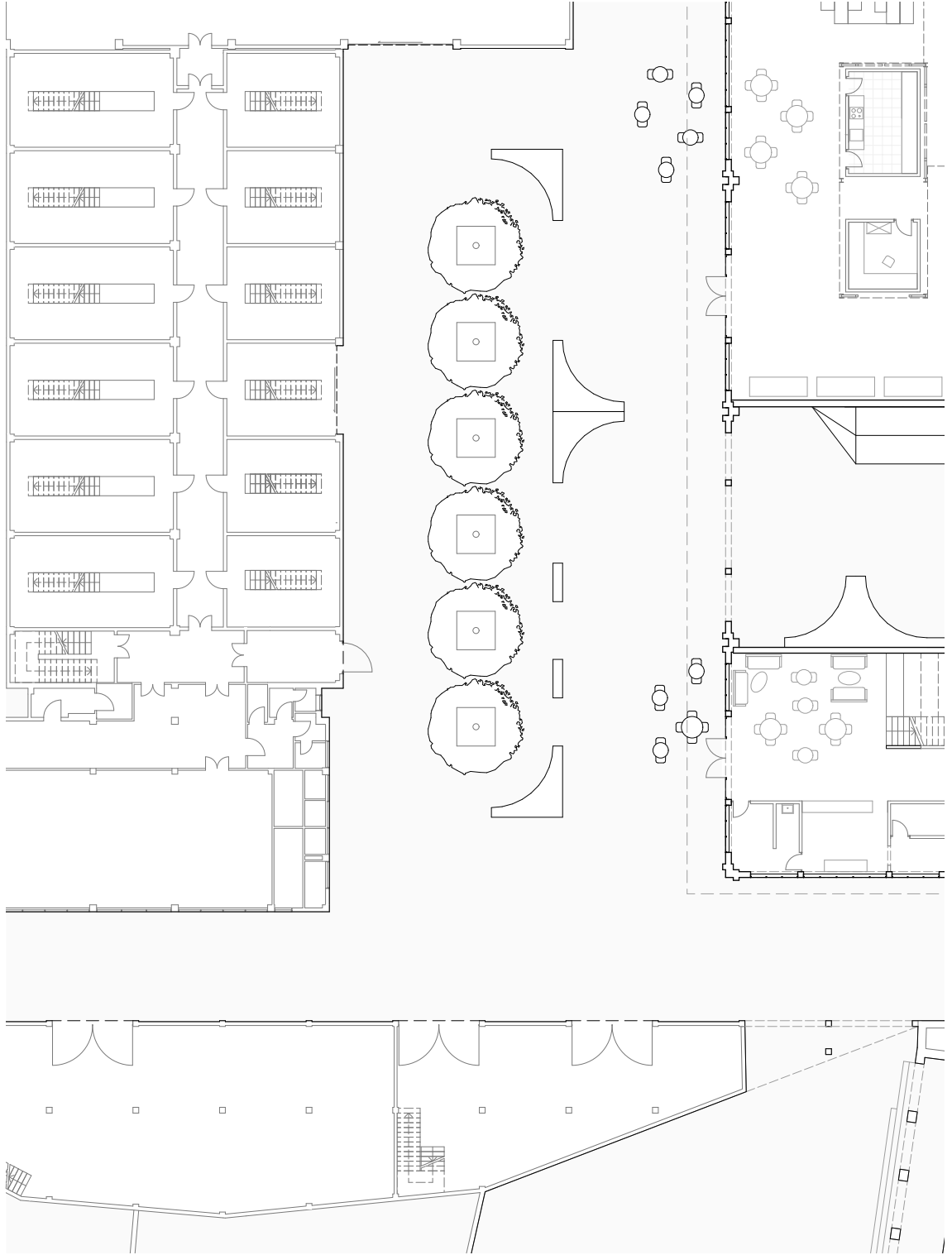






Sectional perspective  
Project

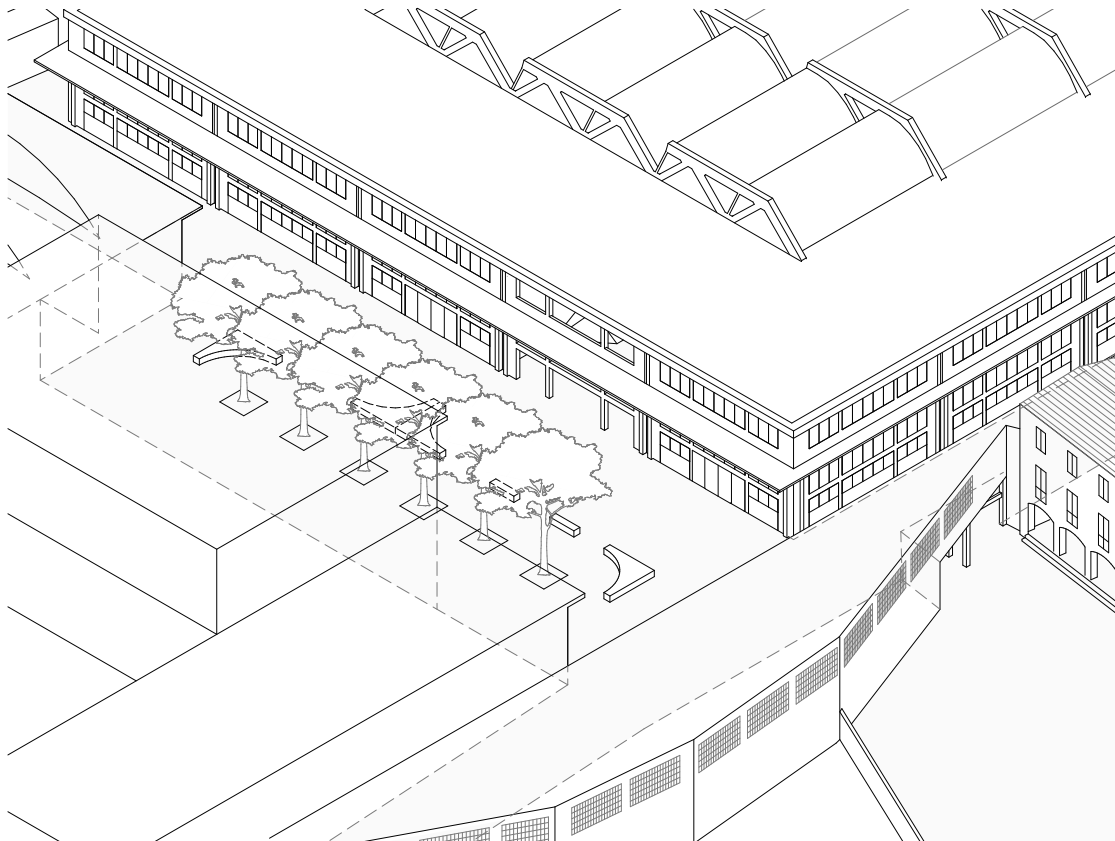


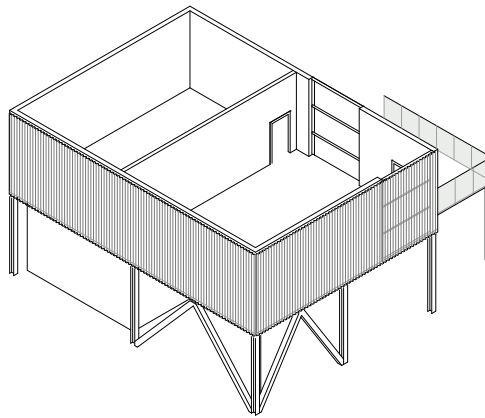


Outdoor space  
Plan



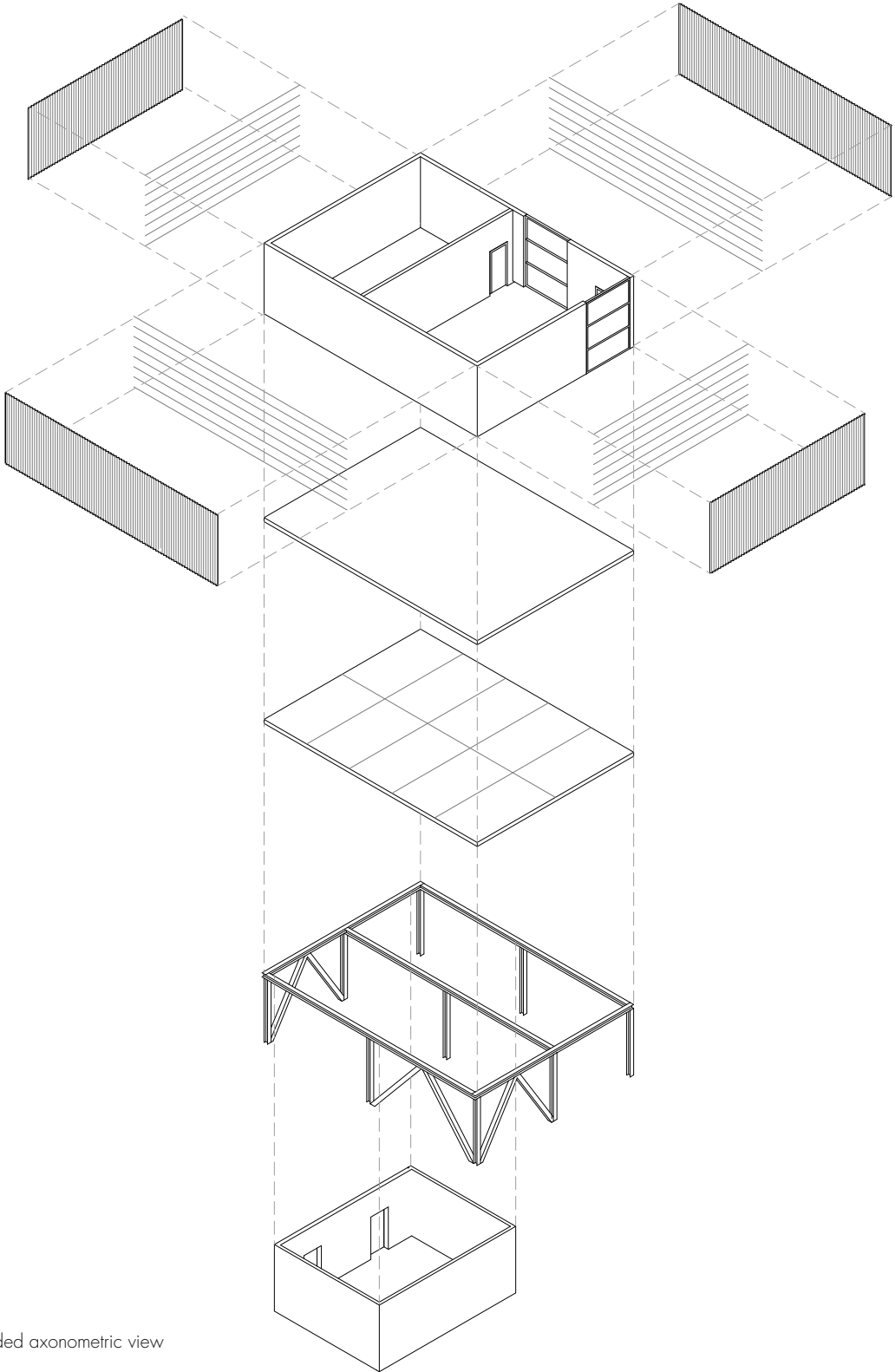
Outdoor space  
Axonometric view



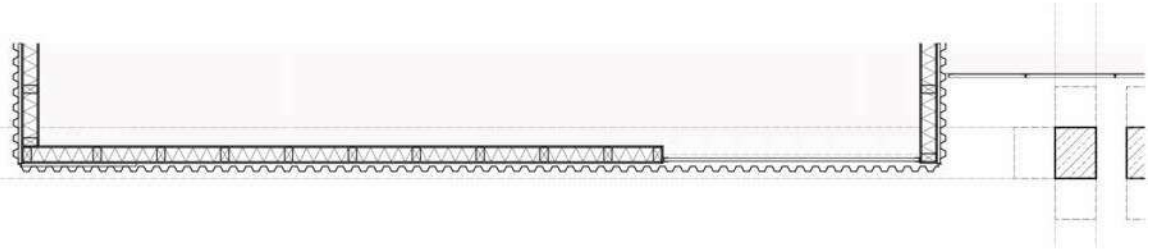


Axonometric view  
Built-in



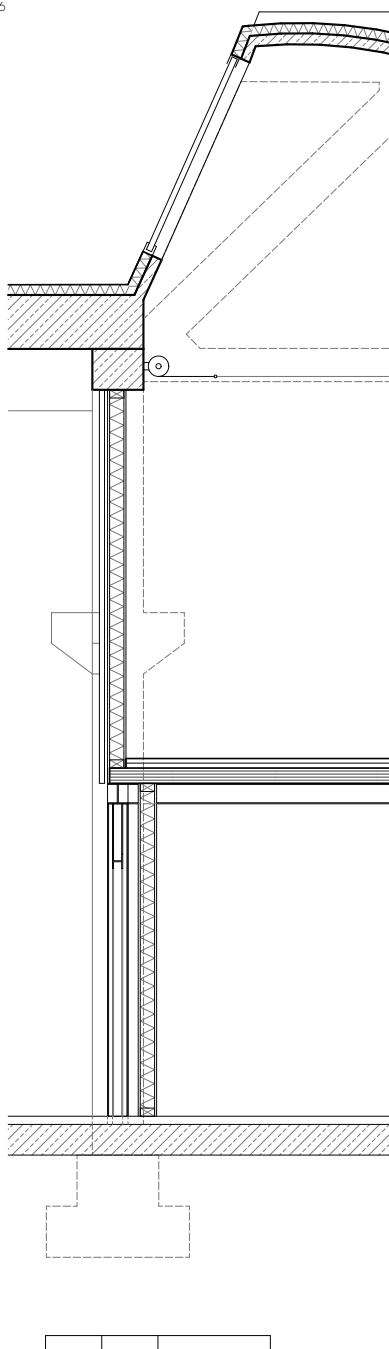


Exploded axonometric view  
Built-in



Facade elevation and plan  
Built-in





#### Roof construction

vapour barrier bitumen sheeting sealant layer  
100 mm mineral wool thermal insulation cladded  
with mineral fleece  
underlay sheet  
bituminous sheeting  
500 mm reinforced concrete ribbed ceiling

#### Skylight

50 mm polycarbonate multiwall panel  
aluminium frame fixed  
opening frame top hinged system

#### Wall construction

3 mm trapezoid sheet aluminium perforated  
30 mm aluminium battens  
15 mm gypsum fibre board  
60/140 mm spruce timber sections  
140 mm mineral wool thermal insulation  
15 mm gypsum fibre board

#### Floor construction built-ins

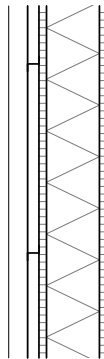
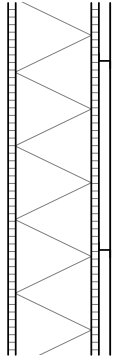
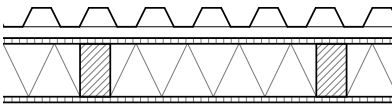
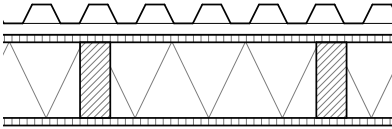
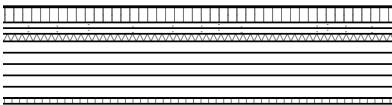
3 mm PVC  
39 mm plywood panel  
incl. shock absorbtion  
2x 15 mm gypsum fibre board  
20 mm mineral wool foot fall sound insulation  
150 mm cross-laminated timber floor slab  
15 mm gypsum fibre board

#### Bearing structure

steel beam HEB 200 screwed  
steel column HEB 200  
diagonal bracing steel HEB 100

#### Floor construction hall

80 mm screed  
250 mm reinforced concrete ground slab



#### Façade construction

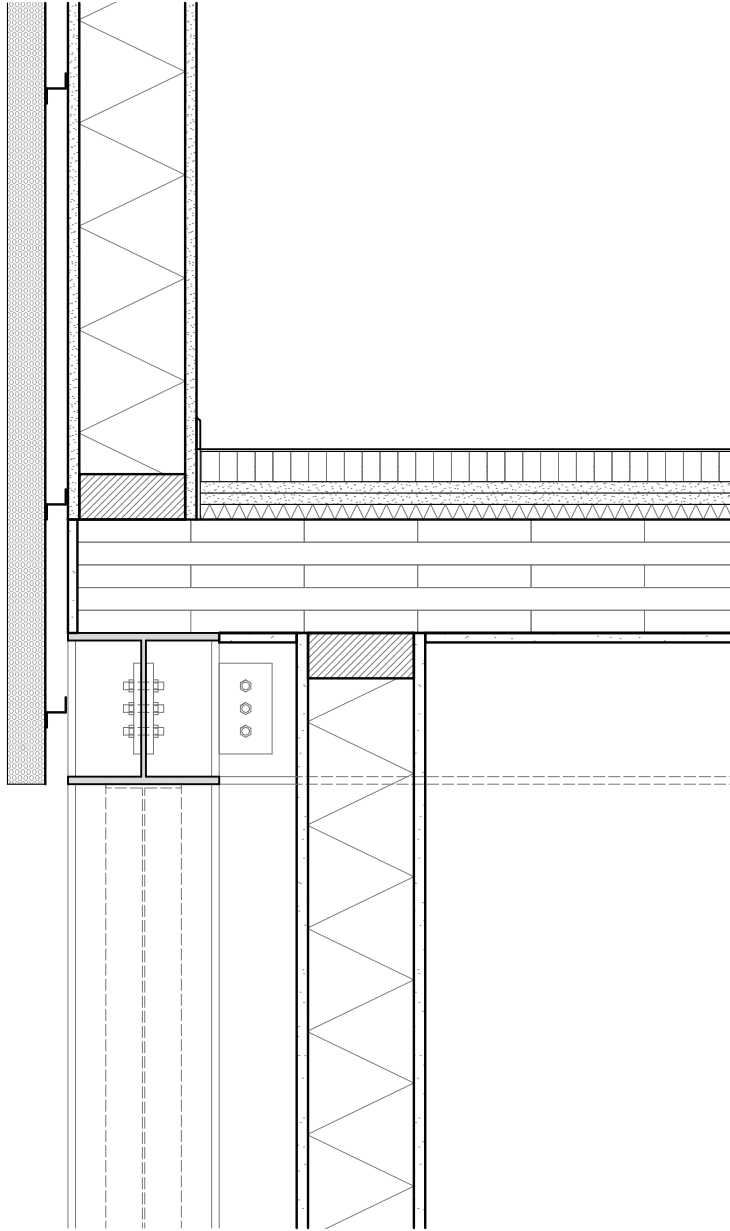
3 mm trapezoid sheet aluminium perforated  
30 mm aluminium battens horizontal  
15 mm gypsum fibre board  
membrane diffusion-open  
80/200 mm spruce timber sections  
vapour barrier  
200 mm mineral wool thermal insulation  
15mm gypsum fibre board

#### Wall construction

3 mm trapezoid sheet aluminium perforated  
30 mm aluminium battens horizontal  
15 mm gypsum fibre board  
60/140 mm spruce timber sections  
140 mm mineral wool thermal insulation  
15mm gypsum fibre board

#### Floor construction built-ins

3 mm PVC  
39 mm plywood panel  
incl. shock absorbtion  
2x 15 mm gypsum fibre board  
20 mm mineral wool foot fall sound insulation  
150 mm cross-laminated timber floor slab  
15mm gypsum fibre board

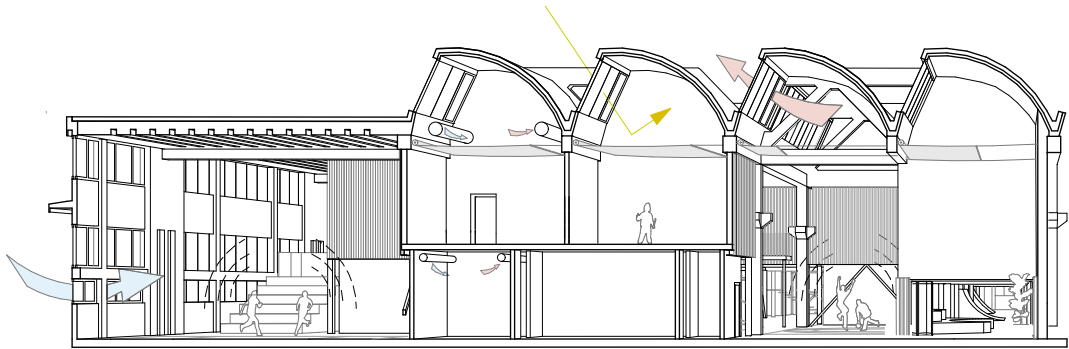


### Mechanical ventilation

Horizontal roller blinds enable light control and sun protection in the building

### Sunshade

Horizontal roller blinds enable light control and sun protection in the building



### Natural ventilation

The lowest window openings in the hall let the fresh air in, replacing the warm and dirty air that exits through the openings in the roof.

### Acoustics

The perforated trapezoidal aluminium cladding absorbs the sound and improves its clarity in the hall.

# Energy Concept

In the perspective of climate change and the common impact of the building industry on it, the project bears a shared responsibility for a change in this aspect. The energy concept assembles the measures aiming for the for the development of an architecture that contributes to increasing its energetic sufficiency through making use of its given conditions and potentials.

The existing building envelope does not fulfil the current energy performance requirements for buildings. In consequence, some constructive and technological adaptation is necessary. (Here are actually proofs needed.) The performance of the building envelope is one of the most relevant interventions. In order to reduce the impact on the existing building fabric and in particular the characteristic, covered with fine colourful mosaic, façade, the additional insulation is brought exclusively on the roof surface. The project applies the 'room-in-room' system. Using two thermal envelopes, subdividing the interior into two zones. The external, separated from outdoor space and with the whole height of the shed, is for the activities with lower temperature requirements (16 - 18°C), while the internal, separated by additional insulated walls, has higher thermal comfort (20 - 22°C). Because the volumetry of the zones influences significantly the heat dissipation and the comfort for the users, the heating systems are adapted for the two different zones. The open space with a high heat dispersion is tempered exclusively where people spend time during activities or a rest. For this reason, a suitable solution is installed at the ceiling with infrared heating lamps. In the industry, where the heating volume is similar, it is a commonly employed technology. Their radiation heats up the exposed surfaces and not the air, which would consume more energy. (here citation about infrared lamps) For smaller spatial units, a more efficient solution is air heating with radiators powered

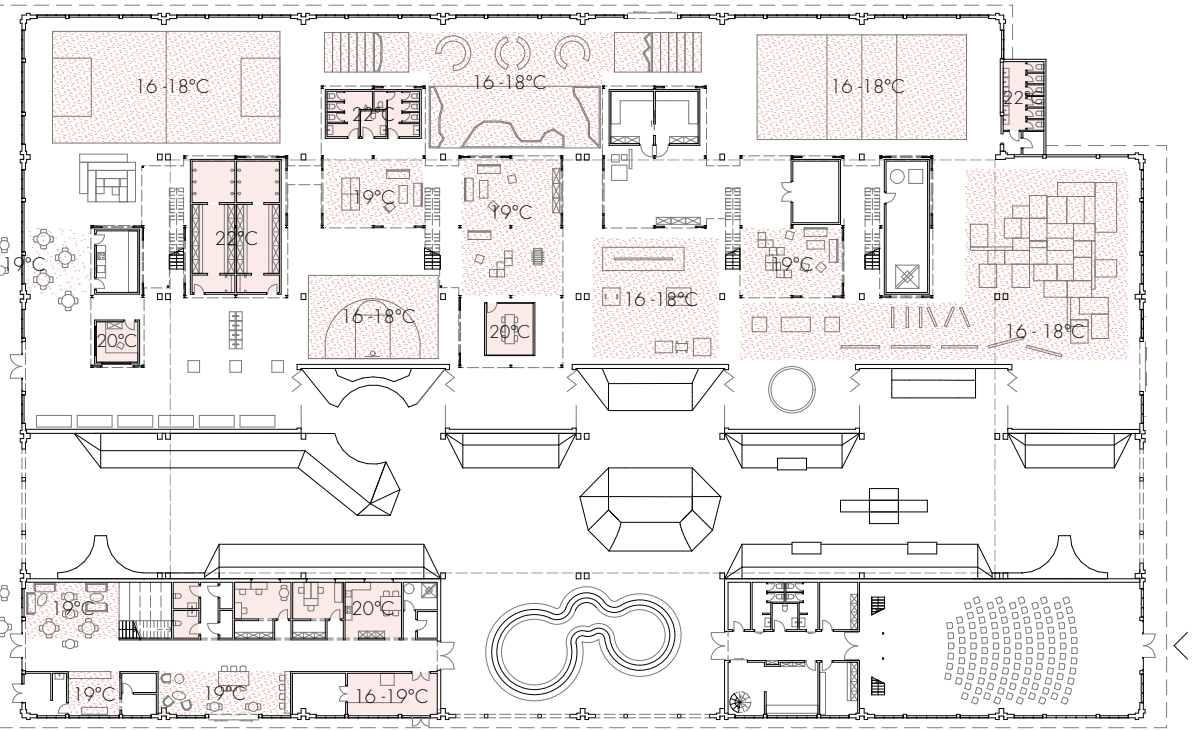




by heat pumps. (citation heat pump) Considering Trieste's mild sub-mediterranean climate, the degree of efficiency is very advantageous. (citation climate)

Regarding the buildings energetic self-sufficiency, on the entire flat roof surface are planned solar panels, which are exposed to the sun throughout the entire daytime all year long.

## Windows

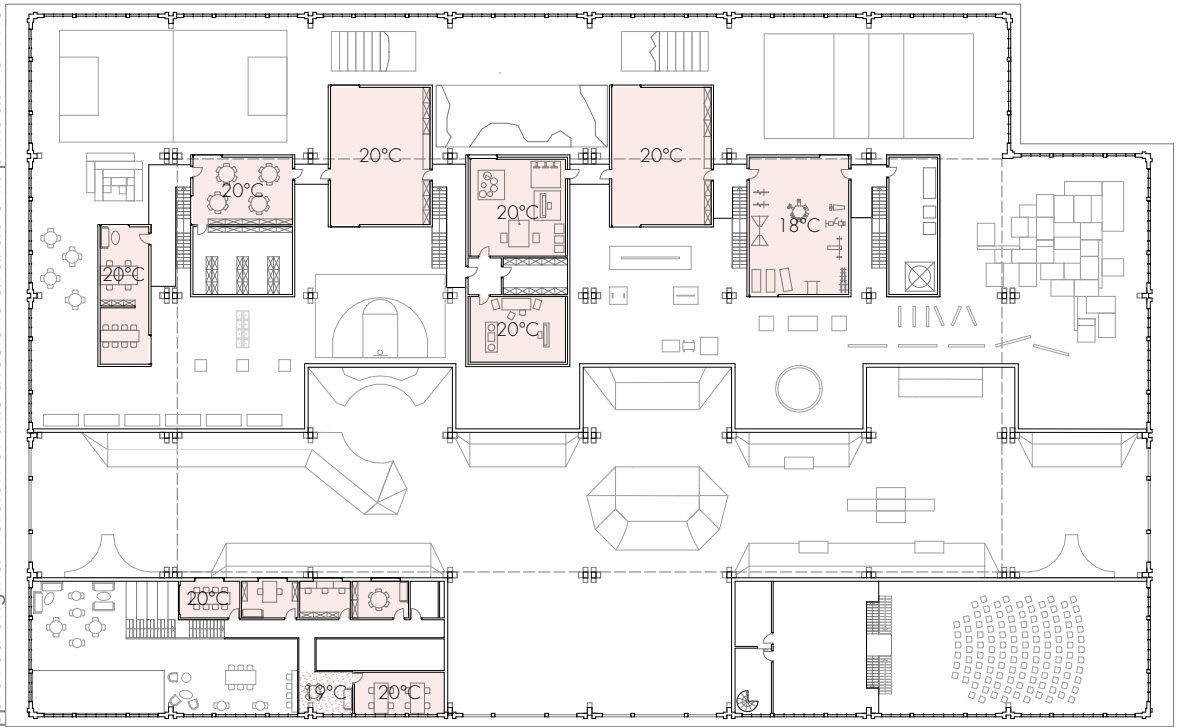
The original, from Nordio designed, façade window frames are a relevant design element and are similarly proportioned in the whole complex. Therefore, they are, as far as their state permits, conserved. The additions of new frames and glazing orient themselves on the proportion principles of the existing windows. The lowest square-formed and openable windows are to a greater extent damaged and thus are replaced by new top-hung frames with double-glazed, ball-proof glazing. The upper fixed glazing seems to be faultless, and so is conserved. To increase its insulating performance, additional ball-proof single glazing is installed on the interior side.



-  infrared heating
-  forced air heating

Temperature zones  
Ground floor





infrared heating

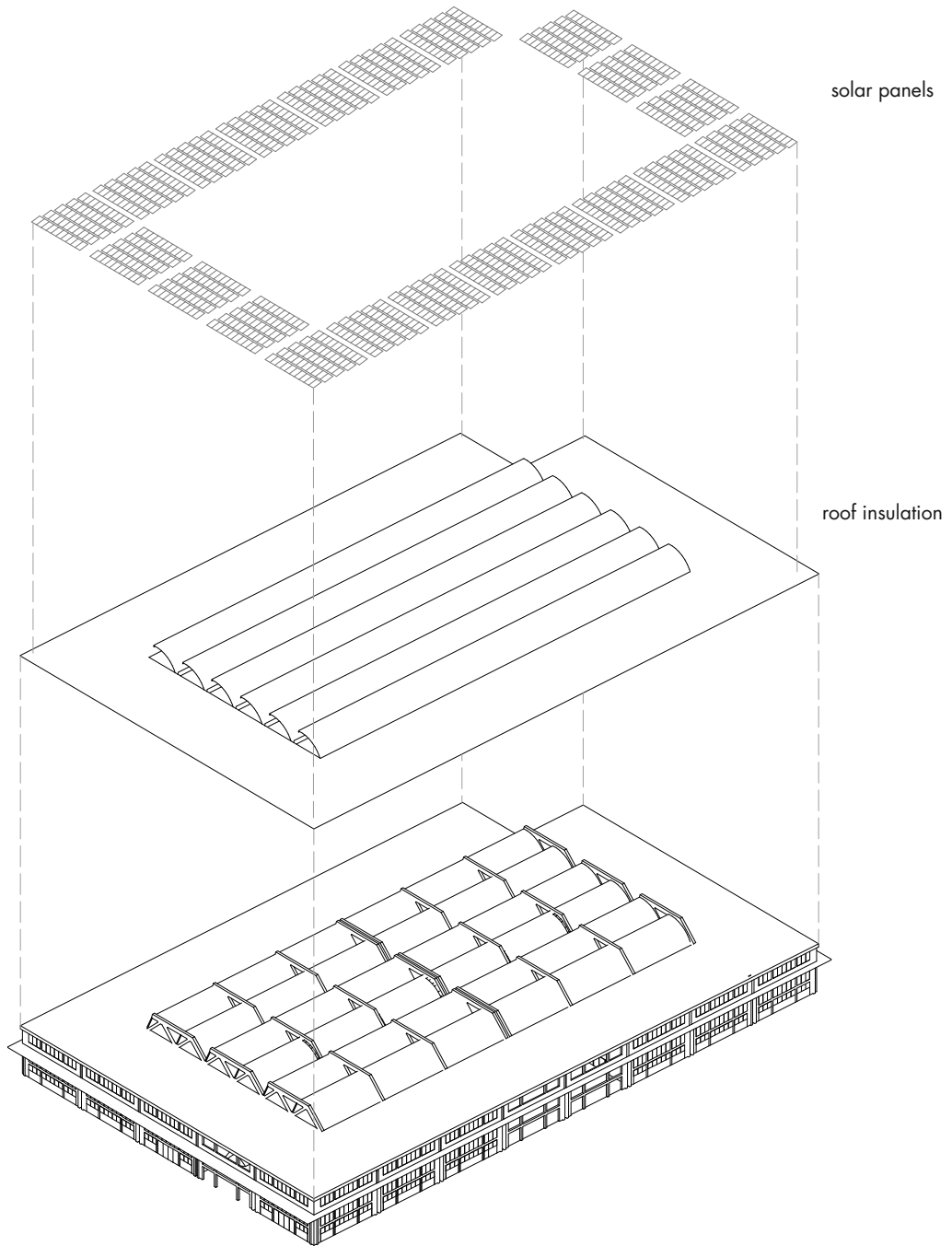


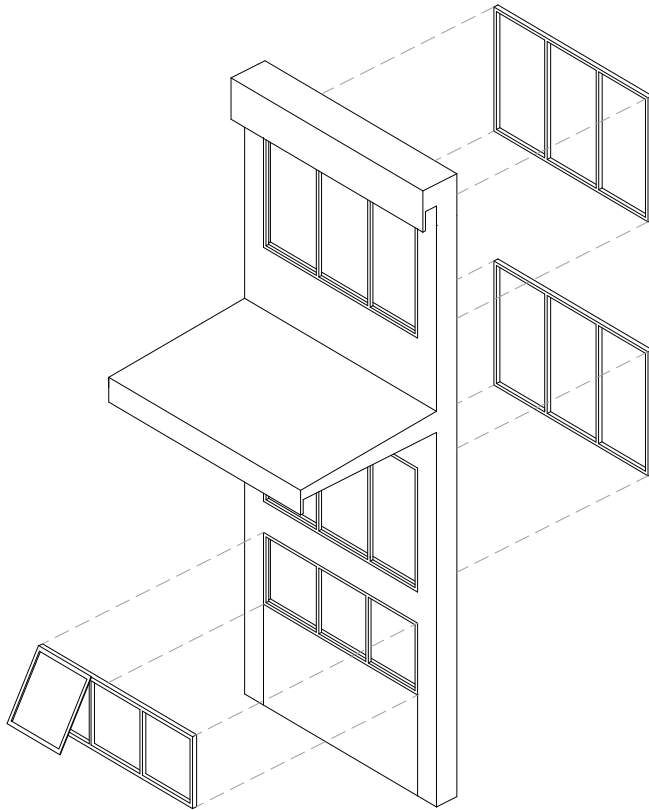
forced air heating

Temperature zones  
Upper floor



0 5 10 20





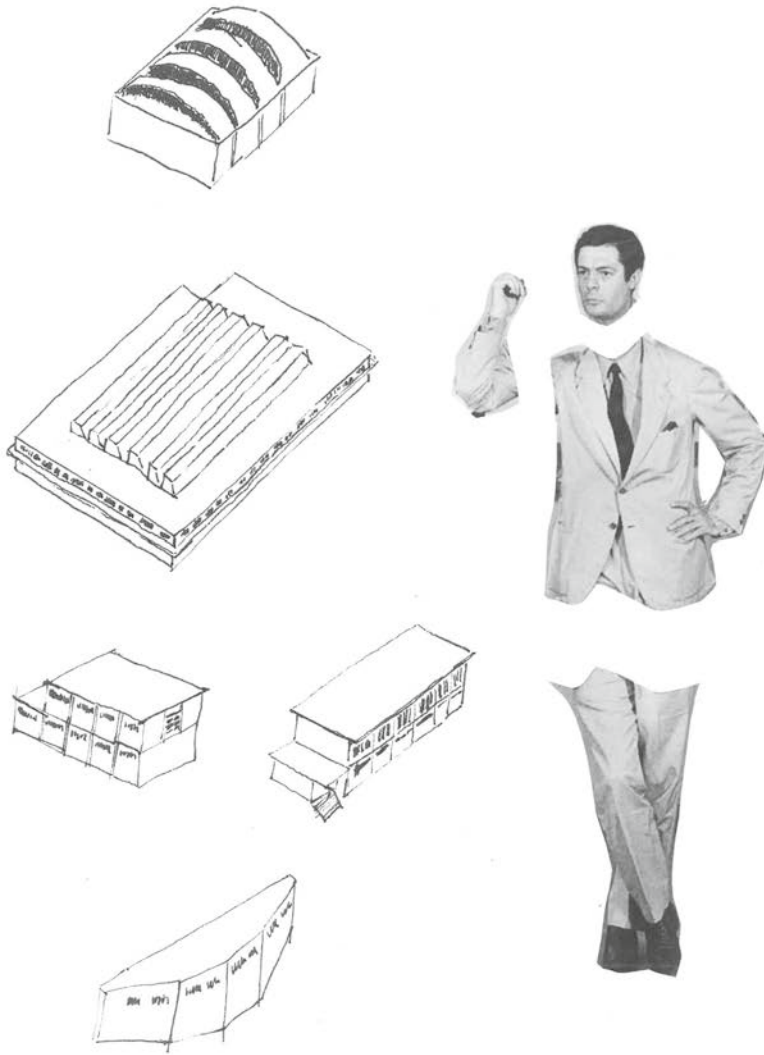
#### Preservation and addition

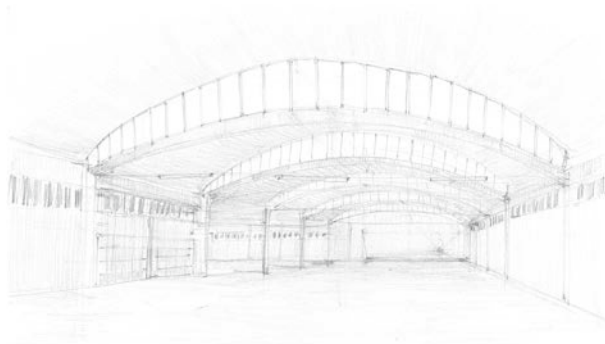
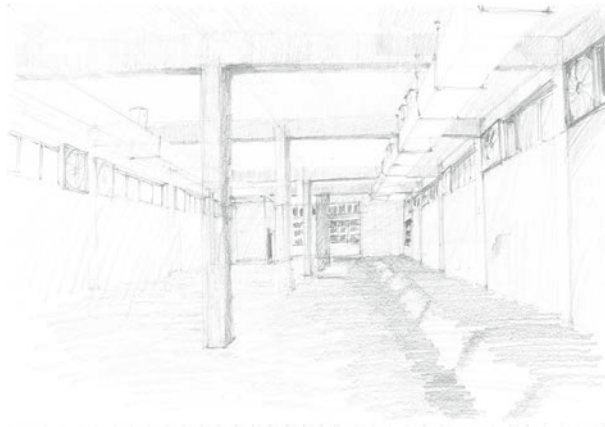
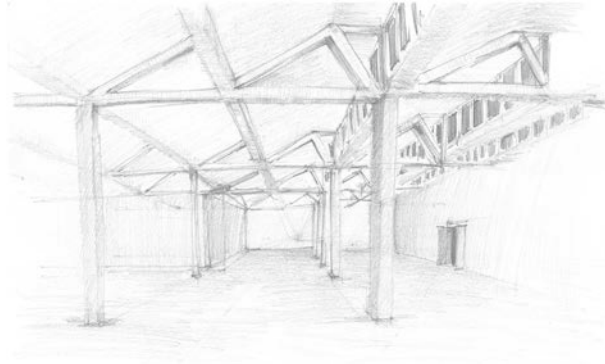
Preservation of the existing upper window frames with new glazing and addition of new ones on the interior with ball-proof single glazing

#### Replacement

Replacement of lower windows with new profiles, double-glazing, ball-proof glazing, with the same opening system

# Process

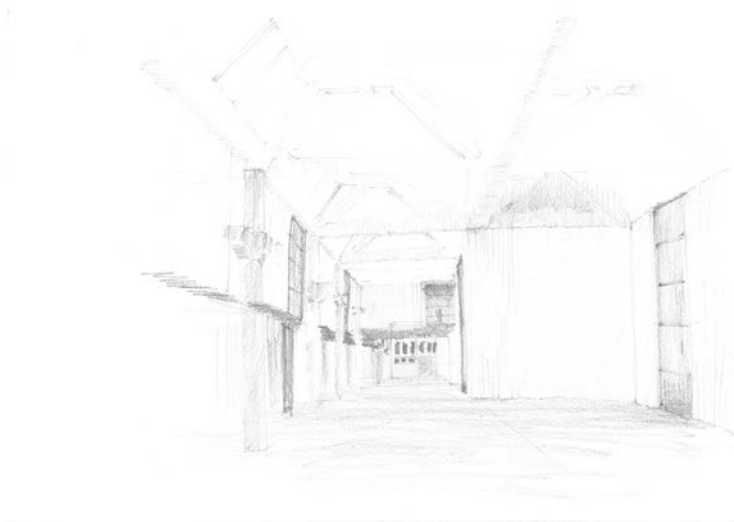


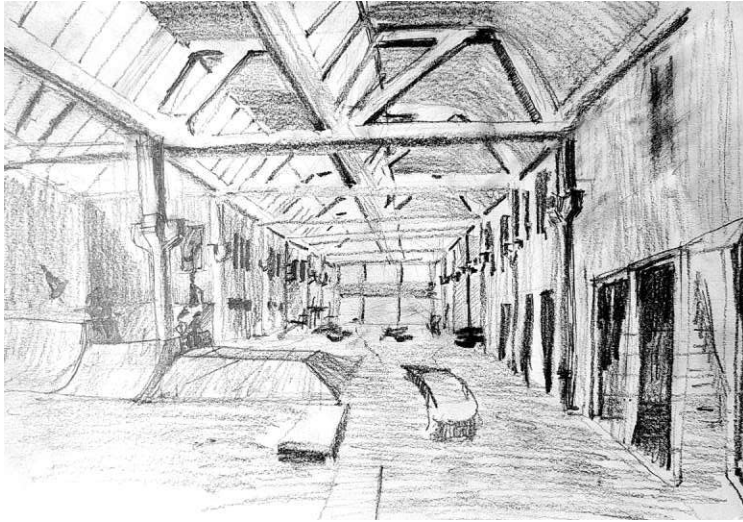






© 2019 TU Wien. All rights reserved. This document is intended for personal use only. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage or retrieval system, without prior written permission from TU Wien.





Skating landscape sketch







Street Centre pastel chalk sketch



Civic initiative space pastel chalk sketch



# Bibliography

group research

Ansa, A. „Trieste e i 300 anni Maria Teresa d'Asburgo - Friuli Venezia Giulia - Ansa.it. Agenzia ANSA". [https://www.ansa.it/canale\\_viaggi/regione/friulivenezia Giulia/2017/04/15/trieste-e-i-300-anni-maria-teresa-dasburgo\\_f4c12ba5-67f7-421d-bf32-f9fa8e7022c1.html#:~:text=Visto%20il%20grande%20afflusso%20di,tutti%20gli%20abitanti%20di%20Trieste](https://www.ansa.it/canale_viaggi/regione/friulivenezia Giulia/2017/04/15/trieste-e-i-300-anni-maria-teresa-dasburgo_f4c12ba5-67f7-421d-bf32-f9fa8e7022c1.html#:~:text=Visto%20il%20grande%20afflusso%20di,tutti%20gli%20abitanti%20di%20Trieste)

Architectuul. „Revoltella Museum". <https://architectuul.com/architecture/revoltella-museum>

Architectuul, „Temple of Monte Grisa." <https://architectuul.com/architecture/temple-of-monte-grisa>

Autorità Portuale Trieste. „Porto Franco". [https://web.archive.org/web/20070217172853/http://www.porto.trieste.it/site/sez\\_cms.php?menu\\_id=743278](https://web.archive.org/web/20070217172853/http://www.porto.trieste.it/site/sez_cms.php?menu_id=743278)

AZW. „Architektenlexikon - Max Fabiani". <https://www.architektenlexikon.at/de/119.htm>

AZW, Porto Vecchio, [https://past.azw.at/Sonntags\\_Triest\\_Gangart/Trieste/Porto.html](https://past.azw.at/Sonntags_Triest_Gangart/Trieste/Porto.html)

Bassett, Richard. „The Imperial Riviera Trieste, Ljubljana and the Istrian Peninsula". <https://martinrandall.ontigerbay.co.uk/content/files/ITTheImperialRiviera.-1.pdf>

Borgo Teresiano s.r.l., <http://www.palazzoteresiano.com/location/?lang=it>

Brutalismus.com, „Brutalism. Architecture of Everyday Culture, Poetry and Theory." <http://brutalismus.com/>

Caneva, Victor. „Freedom and Flowers: Lessons from Parco San Giovanni". <https://www.intrieste.com/2022/06/24/freedom-and-flowers-lessons-from-parco-san-giovanni/>

Dínca, Chiara. „La Trieste Dei Buchi Neri: La Parte Decadente Dell'urbanistica Cittadina", <https://www.triesteallnews.it/2020/02/la-trieste-dei-buchi-neri-la-parte-decadente-dellurbanistica-cittadina/>

Citypopulation.de. Stand 1.1.2024, [https://www.citypopulation.de/de/italy/admin/friuli\\_venezia\\_giulia/032\\_\\_trieste/](https://www.citypopulation.de/de/italy/admin/friuli_venezia_giulia/032__trieste/)

Civico Museo del Castello di San Giusto-Armeria, 'Castello di San Giusto' - visit brochure

Comune Di Trieste. „Al via l'abbattimento della "collassata" ex piscina terapeutica acquamarina in "Sacchetta" a Trieste". <https://www.comune.trieste.it/it/comunicati-stampa-14829/al-via-labbattimento-della-collassata-ex-piscina-terapeutica-acquamarina-in-sacchetta-a-trieste-205433>

Comune di Trieste. Catalogo dei Beni Culturali 'Fabbricato di Via Venezian 27, Rotonda Pancera', [https://beniculturali.comune.trieste.it/architettura/?s\\_id=366320](https://beniculturali.comune.trieste.it/architettura/?s_id=366320), 2005

Comune di Trieste. Discover Trieste, 'Hügel San Giusto', <https://www.discover-trieste.it/entdecke/wilkommen-in-trieste/we-are-trieste/hugel-san-giusto>

Comunità di San Martino al Campo ODV, Consorzio Italiano di Solidarietà (ICS), Diaconia Valdese (CSD), DONK - Humanitarian Medicine ODV, International Rescue Committee Italia (IRC), Linea d'Ombra ODV „Vite abbandonate" (2024), p. 16

Comunità Religiosa Serbo Ortodossa, <http://www.comunitaserba.org/comunita/>

Comunità Greco Orientale di Trieste , Chi siamo?, [http://www.comgreco.trieste.it/vw\\_Page.php?tp=VV](http://www.comgreco.trieste.it/vw_Page.php?tp=VV)

Corni, Gustavo. "The Exodus of Italians from Istria and Dalmatia 1945–1956," in *The Disentanglement of Populations*, 2011, p. 71-72

D'Ambrosi, Roberto. "Ex Gasometro" in Buchi Neri, indagine sui luoghi incompiuti o abbandonati della città di Trieste, (Trieste, 2020)

Domus, „20 Brutalist Works in Italy." <https://www.domusweb.it/en/architecture/gallery/2023/05/18/20-brutalist-works-in-italy.html>

Foot, John. *The Man Who Closed the Asylums: Franco Basaglia and the Revolution in Mental Health Care*

Giraldi, Nicolò. „Fiera di Trieste: al via i lavori per il nuovo centro congressi." *TriestePrima*, March 22, 2024. Last modified [19.10.2024]. <https://www.triesteprema.it/cronaca/fiera-trieste-lavori.html>



Hametz, Maura. „Presnitz in the Piazza: Habsburg Nostalgia in Trieste”. [https://elearning.unite.it/pluginfile.php/273198/mod\\_resource/content/0/presnitz\\_piazza\\_nostalgia\\_trieste.pdf](https://elearning.unite.it/pluginfile.php/273198/mod_resource/content/0/presnitz_piazza_nostalgia_trieste.pdf)

Istituto regionale per la storia della Resistenza e dell'Età Contemporanea nel Friuli Venezia Giulia 'Trieste. Città', <https://www.regionestoriatfvg.eu/tematiche/tema/414/frieste>

Italy for Movies, „Former Gasometro of Broletto, Trieste.” <https://www.italyformovies.com/location/detail/18035/former-gasometro-of-broletto-trieste>

„Klima Trieste Daten Und Graphen Zum Klima Und Wetter in Trieste,” <https://de.climate-data.org/europa/italien/friaul-julisch-venetien/triest-1130>

Marin, Alessandra. 'PROGETTI, CITTÀ, IDENTITÀ: SPAZI URBANI E IDEOLOGIE NAZIONALI A TRIESTE TRA XIX E XX SECOLO', 2012, p. 6-9

Ministry of Culture, „Chiesa Parrocchiale di San Giuseppe Lavoratore.” National Census of Second Twentieth Century Architecture, <https://censimentoarchitetturacontemporanea.cultura.gov.it/scheda-opera?id=4539>

MisterKappa.it. „MisterKappa: ieri e oggi - Il borgo Giuseppino” <https://web.archive.org/web/20080526225004/http://www.misterkappa.it/sto-iao03.html>

MOVIO. „Trieste nell'800”. <https://movio.beniculturali.it/pmfvg/viverelottocentoatrieste/it/9/introduzione>

Ogris, Kerstin. Der Bahnhof der Südbahn in Triest - Teil 1, <https://www.suedbahnmuseum.at/at/blog/der-bahnhof-der-suedbahn-triest>

Poldini, Livio. "ÜBERSICHT ÜBER DIE VEGETATION DES KARSTES VON TRIEST UND GORZ (NO-ITALIEN)," 1980

Polo Museale del Friuli Venezia Giulia . „Vivere l'Ottocento a Trieste. Percorso tra dimore nobili e borghesi”. <https://movio.beniculturali.it/pmfvg/viverelottocentoatrieste/it/9/introduzione>

PromoTurismoFVG, 'Palazzo della Questura', <https://www.turismofvg.it/it/65422/palazzo-della-questura>

Raich F. and Crisciani F. "Time Variability of Atmospheric and Marine Parameters over the Adriatic Region," vol. 22, 1999

Rapp, Christian, Rapp-Wimberger, Nadia, Göttche, Astrid, Hönigmann-Tempelmayr, Alexandra. Österreichische Riviera, <https://www.wienmuseum.at/oesterreichische-riviera>

Regio Augsburg Tourismus GmbH, Triest, <https://www.sisi-strasse.info/de/triest.html>

<https://www.sisi-strasse.info/de/triest.html>

Rossi L., Govoni A. L., Legovini D., Dambrosi R. "Buchi Neri – Indagine Sui Luoghi Incompiuti o Abbandonati Della Città Di Trieste" (Trieste: Un'altra città-portovecchioimpresacollectiva)

Saba Umberto. „Trieste. in Trieste e una donna. 1910-12 in Il Canzoniere”. Einaudi tascabili. Torino. 2004. p. 79

Saba, Umberto. Trieste, Tre Vie. Mimesis (2019)

Schmidt, Katharina. "Rozzol Melara Transformation, Zukunftsfähiges Wohnquartier im Haus," (Master's Thesis at Leopold-Franzens University of Innsbruck, 2018) p. 55

Schubert, Dirk. „Trieste Porto Vecchio. Neue Hoffnung für Erhalt und Umgestaltung?" In: RaumPlanung 176 / 5 (2014) p. 61-62

SOCIETÀ FRIULANA DI ARCHEOLOGIA, 'TRIESTE. Arco di Riccardo', <https://www.archeocartafvg.it/portfolio-articoli/trieste-arco-di-riccardo/>, 2014

SOCIETÀ FRIULANA DI ARCHEOLOGIA, 'TRIESTE. La Basilica di San Giusto', <https://www.archeocartafvg.it/portfolio-articoli/trieste-la-basilica-di-san-giusto/>, 2018

SOCIETÀ FRIULANA DI ARCHEOLOGIA 'Trieste. Teatro Romano', <https://www.archeocartafvg.it/portfolio-articoli/trieste-teatro-romano-2/>, 2017

Toujours etre ailleurs. „Trieste art nouveau”. <https://www.toujoursetreailleurs.com/2017/09/trieste-art-nouveau-liberty.html>

Trieste Prima, „Trieste: Popolazione Cresciuta Grazie agli Stranieri.” Last modified March 31, 2024. <https://www.triesteprima.it/cronaca/trieste-popolazione-cresciuta-stranieri.html>

Urbanismo Barcelona. 4/1986. <https://upcommons.upc.edu/bitstream/handle/2099/3931/annex.pdf;jsessionid=F3597D671BC284504258F48325752323?sequence=1>

Wikipedia. „Bahnhof Trieste Centrale”. [https://de.wikipedia.org/wiki/Bahnhof\\_Trieste\\_Centrale](https://de.wikipedia.org/wiki/Bahnhof_Trieste_Centrale)

Wikipedia. Bahnstrecke Spielfeld-Straß-Trieste Centrale. [https://de.wikipedia.org/wiki/Bahnstrecke\\_Spielfeld-Stra%C3%9F%E2%80%93Trieste\\_Centrale](https://de.wikipedia.org/wiki/Bahnstrecke_Spielfeld-Stra%C3%9F%E2%80%93Trieste_Centrale)

Wikipedia. „Borgo Teresiano”. [https://de.wikipedia.org/wiki/Borgo\\_Teresiano](https://de.wikipedia.org/wiki/Borgo_Teresiano)

Wikipedia „Piazza Oberdan (Trieste). [https://it.wikipedia.org/wiki/Piazza\\_Oberdan\\_\(Trieste\)](https://it.wikipedia.org/wiki/Piazza_Oberdan_(Trieste))

Wikipedia. „Reichsunmittelbare Stadt Triest und ihr Gebiet“. [https://de.wikipedia.org/wiki/Reichsunmittelbare\\_Stadt\\_Triest\\_und\\_ihr\\_Gebiet](https://de.wikipedia.org/wiki/Reichsunmittelbare_Stadt_Triest_und_ihr_Gebiet)

Wikipedia „Sant’ Antonio Taumaturgo“. [https://de.wikipedia.org/wiki/Sant’ Antonio\\_Taumaturgo](https://de.wikipedia.org/wiki/Sant%E2%80%99Antonio_Taumaturgo)

Wikipedia „Triest - Demographische Entwicklung“. [https://de.wikipedia.org/wiki/Triest#Demographische\\_Entwicklung](https://de.wikipedia.org/wiki/Triest#Demographische_Entwicklung)

von Hartmann, Maria. „No se pol? Der Porto Franco Vecchio“. In: Bauwelt 4 (2007) p. 7

Zubini, F. (2002). „Borgo Giuseppino“

# Bibliography

individual thesis

'Arcquitectura Viva Monografias' 180 (2015).

Brix, Ida, and Marjanne Hjort. 'GAME Annual Report 2023', 2024.

Civico Museo della Risiera di San Sabba Monumento Nazionale. 'Civico Museo Della Risiera Di San Sabba Monumento Nazionale - Depliant', 2024. [www.risierasansabba.it](http://www.risierasansabba.it).

Comune di Trieste. 'PIANO REGOLATORE GENERALE COMUNALE REGIONE AUTONOMA FRIULIVENEZIA GIULIA PO3 Schede Progetto', 2021.

'Conference: L'adolescenza Tra Rischi e Opportunità'. Asugi Salute Mentale Adolescenti: Adolescenti a Rischio, 2023. Contessi, Gianni. 'Umberto Nordio: Architettura a Trieste, 1926-1943', 1981.

Daniela Germano, and PASSI e PASSI D'Argento per la Regione FVG. 'Abitudini Alimentari e Profilo Di Salute Delle Persone in Eccesso Ponderale Residenti in Friuli Venezia Giulia: I Dati 2016-2019 Dei Sistemi Di Sorveglianza', 2021.

Dufaut, Clémentine, Rosemarie Faille-Faubert, Marianne Legault, and Gabrielle Turcotte. 'Étude d'une Pensé Constructive d'architecte Lina Bo Bardi, SESC Pompéia', 2014.

Ghelli, Cecilia, and Valentina Ferneti. 'Raffaello Fagnoni e Umberto Nordio', 2010.

Ghergo, Fluvio. Storia Della Formazione Professionale in Italia, Volume IV, Gli Anni 1860-1879, 2020. [www.cnos-fap.it](http://www.cnos-fap.it).

Ghergo, Fulvio. 'Storia Della Formazione Professionale in Italia 1947-1977, Volume I, Dal Dopoguerra Agli Anni '70', 2009.

Gruppo CRC. 'I Diritti Dell'infanzia e Dell'adolescenza in Italia, II Edizione, I Dat Regione per Regione', 2021. <http://gruppcrc.net/associazioni/>.

Gundlach, Kim. 'Modellprojekt Haus Der Statistik, Band 3, Pioniernutzung', 2021.

Habitat for Humanity® Great Britain. 'Relative vs Absolute Poverty, Defining Different Types of Poverty'. Accessed 18 July 2024. <https://www.habitatforhumanity.org.uk/blog/2018/09/relative-absolute-poverty/>.

Habitat Microaree - Comune di Trieste. 'Valmaura - Habitat Microaree', 2024. <http://habitatmicroaree.online.trieste.it/sportelli/valmaura/>.

'Haus Der Statistik: Räume Mieten'. Accessed 20 July 2024. <https://hausderstatistik.org/raeume-mieten/>.

Højbjerg Larsen, Signe, Zakarias Engell, Jens Høyer-Kruse, and Bjarne Ibsen Esbjerg. 'Evaluering Af GAME Streetmekka', 2021.

InTrieste. 'Trieste's Basketball Renaissance Initiative to Revitalize Valmaura Playground', 2024. <https://www.intrieste.com/2024/03/12/triestes-basketball-renaissance-initiative-to-revitalize-valmaura-playground/>.

Kar, Snehen B, Catherine A Pascual, and Kirstin L Chickering. 'Empowerment of Women for Health Promotion: A Meta- Analysis'. PERGAMON Social Science & Medicine. Vol. 49, 1999. [www.elsevier.com/locate/socscimed](http://www.elsevier.com/locate/socscimed).

Laterza, Riccardo, and et al. 'COSA FARAI DA GRANDE?', Esiti Della Fase Di Raccolta Dati Del Progetto TS4 Trieste Secolo Quarto', 2019.

Ligtelijn, Vincent. 'Aldo van Eyck, Werke', 1999.

Matteucci, Ivana. 'Sport Participation and Community Capacity Building in Disadvantaged Urban Communities'. Sociology Study 13, no. 1 (28 February 2023). <https://doi.org/10.17265/2159-5526/2023.01.001>.

Nicoloso, Paolo, and Federica Rovello. 'Trieste 1918-1954. Guida All'architettura', 2005.

OECD, Antonella Noya, and Emma Clarence. 'Community Capacity Building: Fostering Economic and Social Resilience. Project Outline and proposed Methodology', 2009. [www.oecd.org/dataoecd/54/10/44681969.pdf?contentId=44681](http://www.oecd.org/dataoecd/54/10/44681969.pdf?contentId=44681).

Pltich, Pierpaolo. 'Ater, a Valmaura Intervento Di Bonifica'. *Il Piccolo*, 2013. <https://ilpiccolo.gelocal.it/trieste/cronaca/2013/11/07/news/atera-valmaura-intervento-di-bonifica-1.8073098>.

sede degli uffici dell'area educazione, università e ricerca, and servizi educativi integrati per l'infanzia i giovani e la famiglia. 'Carta Dei Servizi', 2018. <https://www.triestescuolaonline.it/allegati/carta%20servizi%20ricre.pdf>.

Shah, Majid Ali, and Zainullah Khan. 'The Role of Youth Activism in Facilitating Social Change: A Catalyst for Transformation in the Contemporary Era'. *Qlantic Journal of Social Sciences and Humanities* 4, no. 4 (30 December 2023): 1–11. <https://doi.org/10.55737/qjssh.575688089>.

Strauven, Francis. 'Aldo van Eyck-Shaping the New Reality', 2007. <https://www.researchgate.net/publication/308875288>.

Tamesberger, Dennis, Heinz Leitgöb, and Johann Bacher. 'How to Combat NEET? Evidence from Austria'. *Intereconomics* 49, no. 4 (2014): 221–27. <https://doi.org/10.1007/s10272-014-0503-1>.

'Teatro Oficina: Lina Bo Bardi's Theatrical Masterpiece of Modern Brazilian Architecture', 2016.

Ufficio Studi Confindustria Udine su dati Istat e Eurostat. 'NEET', 2022.

Visintin, Claudio. 'Penultimo Rione \_ Visitato \_ Valmaura ', 2014. <https://www.triesteprima.it/social/segnalazioni/penultimo-rione-visitato-valmaura-2199274.html>.

# List of figures

group research

Fig. 1 | Trieste from above  
© Jakob Traxler

Fig. 2 | Speculative drawing of ancient Trieste  
© Giusto Almerigogna  
[https://www.regionestoriefvg.eu/upload/immagini/rid\\_trieste1.jpg](https://www.regionestoriefvg.eu/upload/immagini/rid_trieste1.jpg)

Fig. 3 | Foro romano  
© Pietro Opiglia  
[https://beniculturali.comune.trieste.it/fotografia/?s\\_id=267567](https://beniculturali.comune.trieste.it/fotografia/?s_id=267567)

Fig. 4 | Cathedral San Giusto  
© Tatiana Zoppelletto  
[https://cbc-fe-collaudo.regione.fvg.it/museo/?s\\_id=440650](https://cbc-fe-collaudo.regione.fvg.it/museo/?s_id=440650)

Fig. 5 | Rotonda Pancera  
© Giovanni Righetti  
[https://cbc-fe-collaudo.regione.fvg.it/architettura/?s\\_id=445064](https://cbc-fe-collaudo.regione.fvg.it/architettura/?s_id=445064)

Fig. 6 | Via del pozzo di Crosada  
© Fulvio Bullo  
<https://www.atrieste.eu/Forum3/viewtopic.php?t=4885>

Fig. 7 | Teatro romano  
© Comune di Trieste  
[https://cbc-fe-collaudo.regione.fvg.it/museo/?s\\_id=440646](https://cbc-fe-collaudo.regione.fvg.it/museo/?s_id=440646)

Fig. 8 | Casa del fascio  
© Fulvio Bullo  
<https://www.triestemetro.eu/itinerari/punto/135/20/casa-del-fascio-ora-questura-di-trieste>

Fig. 9 | Piano particolareggiato della città vecchia  
© Ministero dei lavori pubblici. Direzione generale del coordinamento territoriale. Archivio  
[https://www.rapu.it/ricerca/scheda\\_documento\\_grafico.php?id\\_documento=607](https://www.rapu.it/ricerca/scheda_documento_grafico.php?id_documento=607)

Fig. 10 | Trieste Centrale  
©Eugenio Merzagora  
In: strukturae. Internationale Datenbank und Galerie für Ingenieurbauwerke(Hg.), <https://strukturae.net/de/meldien/275774-bahnhof-trieste-centrale>, 20.10.2024)

Fig. 11 | Triest in 19<sup>th</sup> century, red: Borgo teresiano, blue: Borgo Giuseppino, green: Borgo Franceschino  
© Scaramangà-Stiftung  
<https://movio.beniculturali.it/pmfvg/vivere1ottocentoatrieste/it/9/introduzione>

Fig. 12 | Canale Grande  
<https://www.expedia.ch/Canal-Grande-Di-Trieste-Trieste-City-Centre.d553248621562150834.POI>

Fig. 13 | San Spiridione Church  
[https://de.wikipedia.org/wiki/Kirche\\_der\\_Dreifaltigkeit\\_und\\_des\\_Hl.\\_Spyridon\\_\(Triest\)#/media/Datei:Trieste\\_Serb-orthodox\\_church\\_of\\_San-Spiridione3.jpg](https://de.wikipedia.org/wiki/Kirche_der_Dreifaltigkeit_und_des_Hl._Spyridon_(Triest)#/media/Datei:Trieste_Serb-orthodox_church_of_San-Spiridione3.jpg)

Fig. 14 | Porto Vecchio  
© Ketí Beka

Fig. 15 | Refugee camp in Silos  
© Andrea Huber

Fig. 16 | Borgo Giuseppino  
© Ketí Beka

Fig. 17 | Piazza Venezia  
<https://cdn.makeitapp.com/55478dcf3580e1024x058de4eeb64a60.jpg>

Fig. 18 | Museo Revoltella  
© Ketí Beka

Fig. 19 | Sachetta  
© Andrea Huber

Fig. 21 | Porto Nuovo  
© Ketí Beka

Fig. 22 | Porto Nuovo  
© Ketí Beka

Fig. 23 | Porto Nuovo  
© Ketí Beka

Fig. 24 | Palazzo Panfili  
[https://commons.wikimedia.org/wiki/File:Trieste\\_Palac\\_Panfili\\_1.jpg](https://commons.wikimedia.org/wiki/File:Trieste_Palac_Panfili_1.jpg)

Fig. 25 | Porto Nuovo  
[https://www.tripadvisor.de/Attraction\\_Review-g187813-d20806326-Reviews-Palazzo\\_Vianello-Trieste\\_Province\\_of\\_Trieste\\_Friuli\\_Venezia\\_Giulia.html](https://www.tripadvisor.de/Attraction_Review-g187813-d20806326-Reviews-Palazzo_Vianello-Trieste_Province_of_Trieste_Friuli_Venezia_Giulia.html)

Fig. 26 | Parco San Giovanni  
<https://www.informatrieste.eu/ts/blog/bisogna-scongiurare-la-chiusura-del-mini-museo-dei-bambini-lappello-di-paolo-menis/parco-di-san-giovanni-trieste/>

Fig. 27 | Barcola  
© Andrea Huber

Fig. 28 | Sanctuary of Monte Grisa  
© Ketí Beka

Fig. 29 | Rozzol Melara  
© Paul Sebesta

All further figures are made by the author.

All Internet sources were accessible on the 30.10.2024.

# List of figures

individual thesis

Fig. 4 | GAME Streetmekka Viborg

© Morten Pedersen

[https://images.jfmedier.dk/images/3/30/309/3097129f-22fb-4790-a4b5-0fe4429c85d\\_1\\_90\\_0\\_0\\_4224\\_2895\\_1440\\_987\\_d9793b41.jpg](https://images.jfmedier.dk/images/3/30/309/3097129f-22fb-4790-a4b5-0fe4429c85d_1_90_0_0_4224_2895_1440_987_d9793b41.jpg)

Fig. 5 | GAME Streetmekka Viborg

© Rasmus Hjortshøj & EFFEKT

<https://www.rumsans.dk/artikler/game-streetmekka-viborg>

Fig. 6 | GAME Streetmekka Aalborg

© Rasmus Hjortshøj

<https://www.archdaily.pe/pe/916486/game-streetmekka-aalborg-jaja-architects>

Fig. 7 | Haus der Statistik - Creation of Making Future School

© Lena Giovanazzi

[https://www.dbz.de/artikel/dbz\\_Die\\_Pioniere\\_im\\_Haus\\_der\\_Statistik\\_Berlin-3521788.html](https://www.dbz.de/artikel/dbz_Die_Pioniere_im_Haus_der_Statistik_Berlin-3521788.html)

Fig. 8 | Werkstatt - the infopoint of HdS

© raumlabor berlin, ZKB eG

[https://raumlabor.net/wp-content/uploads/2018/12/190204\\_Shortdoku\\_Werkstatt.pdf](https://raumlabor.net/wp-content/uploads/2018/12/190204_Shortdoku_Werkstatt.pdf)

Fig. 9 | Haus der Statistik - Leitbild

© raumlabor berlin <https://www.iba-wien.at/projekte/projekt-detail/project/haus-der-statistik>

Fig. 10 | Otterlo Circles

© Aldo van Eyck Archive

Francis Strauven, Aldo van Eyck – Shaping the New Reality From the In-between to the Aesthetics of Number p. 2

Fig. 11 | Amsterdam Municipal Orphanage

© Aldo van Eyck

<https://fr.wikiarquitectura.com/wp-content/uploads/2017/06/Orf-Amsterdam-2-1024x418.jpg>

Fig. 12 | Amsterdam Municipal Orphanage

© Violette Cornelius;

<https://archeyes.com/the-amsterdam-orphanage-by-aldo-van-eyck-post-war-architecture/>

Fig. 13 | Amsterdam Municipal Orphanage

© Aldo van Eyck

<https://archeyes.com/the-amsterdam-orphanage-by-aldo-van-eyck-post-war-architecture/>

Fig. 14 | Pavilion Sonsbeek

© CCA Mellon Lectures

Francis Strauven, Aldo van Eyck – Shaping the New Reality From the In-between to the Aesthetics of Number p. 19

Fig. 15 | Pavilion Sonsbeek

© Kroller Muller Museum

<https://archeyes.com/aldo-van-eyck-sculpture-pavilion-sonsbeek-park/#jp-carousel-15304>

Fig. 16 | Bo Bardi's sketch for SESC Pompéia

© Lina Bo Bardi

<https://arquitecturaviva.com/works/sesc-fabrica-pompeia-9>

Fig. 17 | SESC Pompéia Library

© Mimi Maki

<https://www.flickr.com/photos/makimi-mi/2507282834/>

Fig. 18 | SESC Pompéia Library

<https://en.wikiarquitectura.com/building/sesc-pompeia-factory/#pompeia-18>

Fig. 19 | SESC Pompéia ground floor plan

<https://es.wikiarquitectura.com/edificio/sesc-fabrica-pompeia/#>

Fig. 20 | SESC Pompéia Library

© Julian Weyer

<https://archeyes.com/sesc-pompeia-factory-lina-bo-bardi-architecture-sao-paulo/#jp-carousel-27370>

Fig. 21 | Workshops

© Markus Lanz / Pk. Odessa Co.

[https://arquitecturaviva.com/assets/uploads/obras/40457/av\\_medium\\_av\\_86856.webp?h=fcbf8938](https://arquitecturaviva.com/assets/uploads/obras/40457/av_medium_av_86856.webp?h=fcbf8938)

Fig. 22 | Teatro Oficina

© Luisa Barreto

<https://outraspalavras.net/cidadesemtranse/teatro-oficina-destombando-o-tombamento/>

Fig. 23 | Vocational school in Milan



© Giancarlo Scalfati  
<https://immaginedelnovecento.fondazionegramsci.org/photo/detail/IT-GRAMSCI-FT0001-0059795/milano-scuola-professionale-all-umanitaria>

Fig. 24 | Vocational training in 1967  
© ANAPIA Nazionale  
<https://www.anapia.it/la-nostra-storia/>

Fig. 25 | Advertisement of IRFOP in 1990s  
<https://www.youtube.com/watch?v=ilG5JWGpZQE>  
time: 1:01

Fig. 26 | Umberto Nordio  
© Istituto d'arte „Enrico e Umberto Nordio“, Fondo Nordio  
[http://www.architetti.san.beniculturali.it/web/architetti/protagonisti/scheda-protagonista?p\\_p\\_id=56\\_INSTANCE\\_V64e&articleId=17915&p\\_p\\_lifecycle=1&p\\_p\\_status=normal&viewMode=normal&ambito=protagonisti&groupId=10304](http://www.architetti.san.beniculturali.it/web/architetti/protagonisti/scheda-protagonista?p_p_id=56_INSTANCE_V64e&articleId=17915&p_p_lifecycle=1&p_p_status=normal&viewMode=normal&ambito=protagonisti&groupId=10304)

Fig. 27 | Stazione Marittima  
© Wikipedia, Tiesse  
[https://it.m.wikipedia.org/wiki/Umberto\\_Nordio\\_\(architetto\)#/media/File%3AStazione\\_Marittima\\_di\\_Trieste.jpg](https://it.m.wikipedia.org/wiki/Umberto_Nordio_(architetto)#/media/File%3AStazione_Marittima_di_Trieste.jpg)

Fig. 28 | Casa del combattente  
O. Samengo, Cronache triestine. Il Sacario dell'Irredentismo – Il Monumento a Guglielmo Oberdan e la Casa del Combattente, in: "Emporium", maggio 1934, p. 303

Fig. 29 | Università degli Studi  
© Wiki, Tiesse  
[https://it.wikipedia.org/wiki/Universit%C3%A0\\_degli\\_Studi\\_di\\_Trieste#/media/File:UniversitaTrieste.jpg](https://it.wikipedia.org/wiki/Universit%C3%A0_degli_Studi_di_Trieste#/media/File:UniversitaTrieste.jpg)

Fig. 30 | IRFOP complex under construction  
© Ugo Borsatti  
[https://beniculturali.comune.trieste.it/fotografia/?s\\_id=358512](https://beniculturali.comune.trieste.it/fotografia/?s_id=358512)

Fig. 59 | Skate park Vltavská Station in Prague  
© U / U Studio s.r.o.  
<https://uustudio.cz/project/vltavska>

Figs. 60, 61 | Vltavská Station - Arrangement of the ramps and obstacles  
© U / U Studio s.r.o.  
<https://uustudio.cz/project/vltavska>

All further figures are made by the author.

All Internet sources were accessible on the 30.10.2024.

The plans of the IRFOP complex are based on the shared planwork of the Regione Autonoma Friuli Venezia Giulia.

# Acknowledgements

I would like to express my gratitude to everyone who contributed to the completion of this thesis.

especially to my supervisor

Lorenzo De Chiffre

for inspiring and constructive advising throughout the entire thesis.

Giulio Polita

for local expertise and his pertinent input

Marco Reglia

for introducing me to Trieste and its history

Andrea Gambardella

for enabling me the access to the complex and its documentation

Adrian

Emily

my flatmates

for personal support.

