

BAUHAUS MUSEUM DESSAU

answer to the design competition

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MASTER THESIS

BAUHAUS MUSEUM DESSAU

answer to the design competition



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Foreword

Introduction

This diploma thesis investigates the design of a new museum of Bauhaus in Dessau-Roßlau, Germany. In 2019 we celebrate the 100th anniversary of the foundation of the Bauhaus. To commemorate this anniversary an International Open 2 - phase realization competition held by Bauhaus Dessau Foundation (represented by Director/CEO Dr. Claudia Perren) and The City of Dessau-Roßlau (represented by Mayor Peter Kuras) was published in February 2015. This diploma thesis is a response to this competition and its outcome.

Since 1996 is the main Bauhaus building jointly with the Masters' Houses a UNESCO World Heritage Site. Together with other buildings of this period, Dessau attracts approximately 100 000¹ to 120 000² guests from all over the world each year.

The challenge is not only to present the second largest Bauhaus collection (Bauhaus Dessau Foundation) but also to introduce the school itself. The proposed site is located in Stadtpark (city park) of the city Dessau-Roßlau and thanks its placement - halfway between all Bauhaus related sites - suggests a close connection between nature and the Bauhaus heritage of the city. Chosen building site is well connected locally and nationally - to the north-west within the site's immediate vicinity is the city's main railway station and the site is directly adjacent to a locally important street - Kavalierstraße. The new construction should provide space as well as the technical conditions to facilitate a proper and professional presentation of the collection. The task for the new museum is to provide all national and international visitors and tourists, researchers or designers with the knowledge of the Bauhaus time, context, influence and legacy.

¹ C4C Team (2015), „competition brief“, page 15

² dwif-Consulting, Stephanie Schmidt. Kommunikation (2011):Marketingkonzept für die Stiftung Bauhaus Dessau, page 3

Einleitung

Diese Diplomarbeit beschäftigt sich mit dem Entwurf eines neuen Bauhaus Museums in Dessau-Roßlau, Deutschland. In 2019 feiern wir das 100. Jubiläum der Gründung des Bauhauses. In Verbindung mit diesem Jubiläum ein Internationaler, offener 2 - phasiger Realisierungswettbewerb wurde von der Stiftung Bauhaus Dessau (vertreten durch Direktorin/Vorstand Dr. Claudia Perren) und Stadt Dessau-Roßlau (vertreten durch Oberbürgermeister Peter Kuras) im Februar 2015 veröffentlicht.

Bauhausgebäude mit den Meisterhäusern gehören seit 1996 zum UNESCO-Weltkulturerbe. Zusammen mit anderen Gebäuden aus dieser Zeit zieht Dessau jährlich ungefähr 100 000¹ zu 120 000² Gäste aus der ganzen Welt.

Die Herausforderung ist nicht nur die zweitgrößte Bauhaus Sammlung (Stiftung Bauhaus Dessau), sondern auch die Schule selbst zu präsentieren. Der vorgeschlagene Standort liegt im Stadtpark der Stadt Dessau-Roßlau. Dank seiner Platzierung - auf halbem Weg zwischen allen Bauhaus verwandten Stellen - deutet auf eine enge Verbindung zwischen der Natur und der Bauhaus Erbe der Stadt. Ausgewählte Baustelle ist gut lokal und national verbunden - nach Nordwesten in der unmittelbaren Gegend der Baustelle befindet sich der Hauptbahnhof und direkt angrenzend ist auch eine wichtige Straße der Stadt - Kavalierstraße. Der Neubau sollte Raum sowie die technischen Voraussetzungen schaffen, um eine angemessene und professionelle Präsentation der Sammlung zu ermöglichen. Die Aufgabe des neuen Museums ist allen nationalen und internationalen Besucher und Touristen, Forscher oder Designer dem Wissen der Bauhaus Zeit, Kontext, Einfluss und Erbe zu vermitteln.

¹ C4C Team (2015), „competition brief“, page 15

² dwif-Consulting, Stephanie Schmidt. Kommunikation (2011):Marketingkonzept für die Stiftung Bauhaus Dessau, page 3

position of Dessau-Roßlau



Dessau-Roßlau

Located at the confluence of the rivers Mulde and Elbe, the city of Dessau - Roßlau was established by merging of two cities - Dessau and Roßlau in year 2007. Dessau is situated to the south of the confluence and Roßlau - on the right bank of the Elbe - about 6,5 kilometers to the north of the city centre of Dessau.

Dessau, first mentioned in 1213¹, was residence of Princes (Fürsten) of Anhalt-Dessau/Anhalt. Principality (Fürstentum) of Anhalt was dissolved and split in 1606 into the mini states of Anhalt-Dessau, Anhalt-Bernburg, Anhalt-Köthen, Anhalt-Plötzkau and Anhalt-Zerbst (Catherine II., Empress of Russia was a member of this family branch)². In 1806 was Anhalt-Bernburg and in 1807 Anhalt-Dessau, Anhalt-Köthen and Anhalt-Plötzkau promoted to duchies by Franz II. Emperor of the Holy Roman Empire of the German Nation and first of Austria³ and Napoleon I. Emperor of the French⁴. In 1863 were these territories partially re-united after the extinction of the lines in Köthen (1847) and Bernburg (1863) to a united Duchy of Anhalt with Dessau as the capital. Until the end of World War II served Dessau as the capital of the Free State of Anhalt.⁵ 80% of entire Dessau got destroyed on march the 7th 1945 by Allied air raids.⁶

According to the 2006 census, the city of Dessau had 77 394 inhabitants and Roßlau as the smaller city 13 849.⁷

1 Dr. Siegfried, Franz Ferdinand (2010): „Dessau – Versuch zur Gründung und Bedeutung einer Stadt“, page 3-4

2 Sowards, Kelley J. (1995): „Makers of world history“, page 131

3 Dollinger, Petra (1999): „Frauen am Ballenstedter Hof: Beiträge zur Geschichte von Politik und Gesellschaft an einem Fürstenhof des 19. Jahrhunderts“ Volume 1, page 1088

4 Köbler, Gerhard (1999): „Historisches Lexikon der Deutschen Länder: die deutschen Territorien vom Mittelalter bis zur Gegenwart“, page 17

5 Köbler, Gerhard (1999): „Historisches Lexikon der Deutschen Länder: die deutschen Territorien vom Mittelalter bis zur Gegenwart“, page 18-19

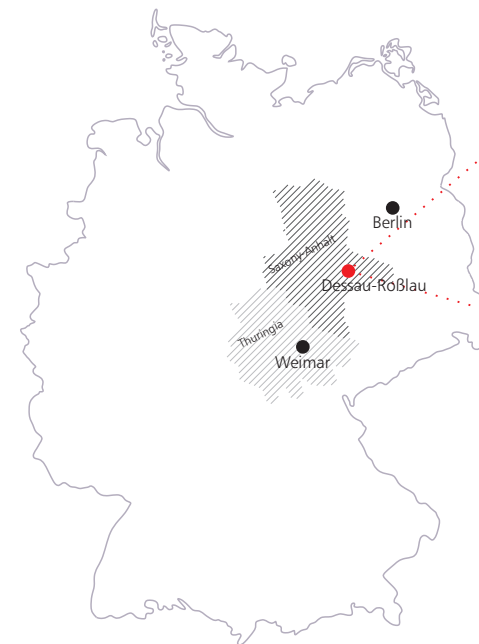
6 Schedler, Tobias (2012): „Master thesis - Student Housing in Dessau“, page 8

7 Statistisches Landesamt Sachsen-Anhalt (2007): „Bevölkerung“

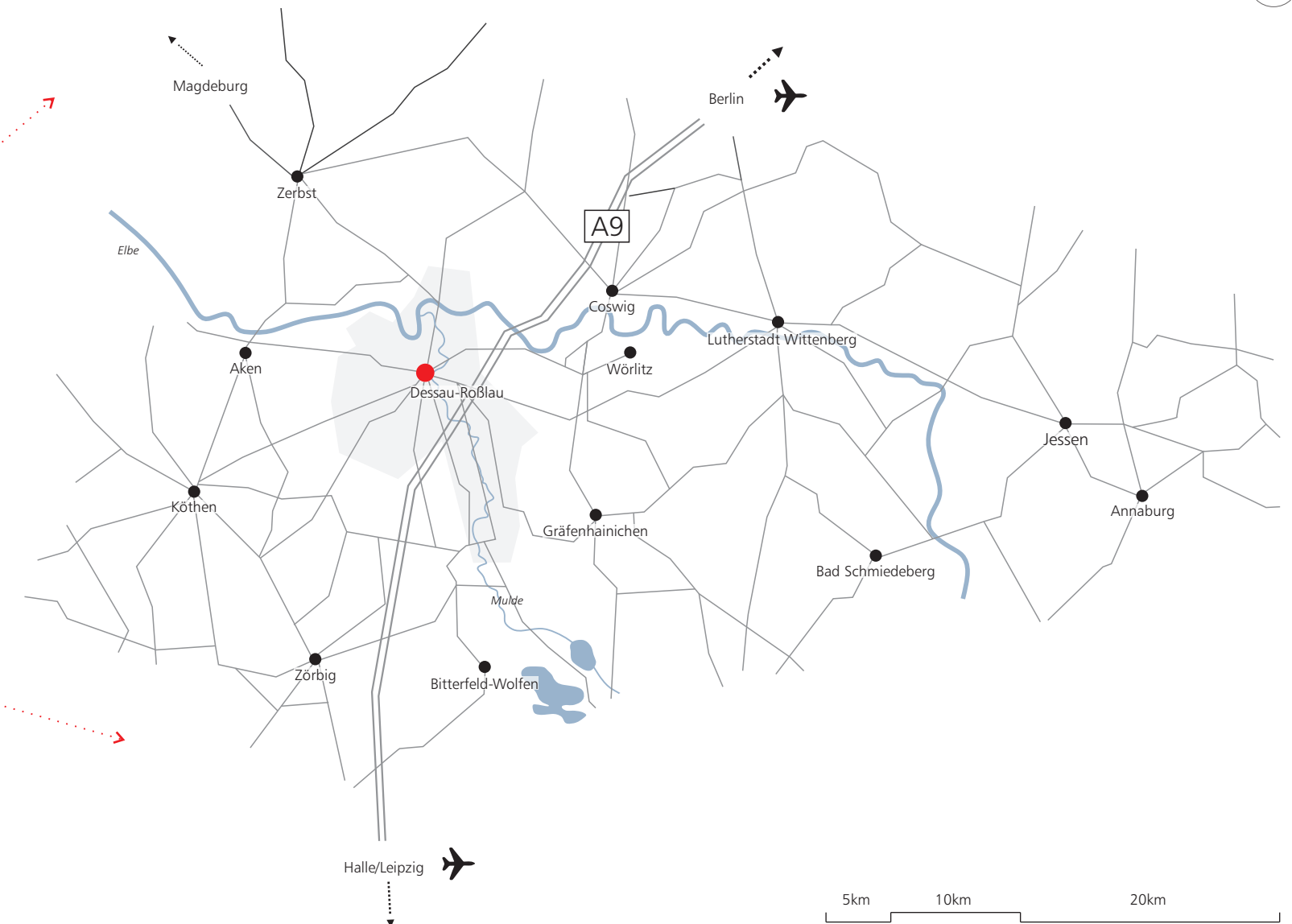
By bringing these cities together was formed a third largest town of Saxony-Anhalt by population (after Magdeburg and Halle/Saale). Beside the Bauhaus main building and Masters' Houses, the Dessau-Wörlitz Garden Realm is another of UNESCO World Heritage Sites near Dessau.

Dessau-Roßlau in numbers

area	244,74 km ²
woodland	95,14 km ²
watersurface	8,12 km ²
population (2014 census)	83 061
density	339/km ²
average elevation	63 m.a.s.l. ⁸

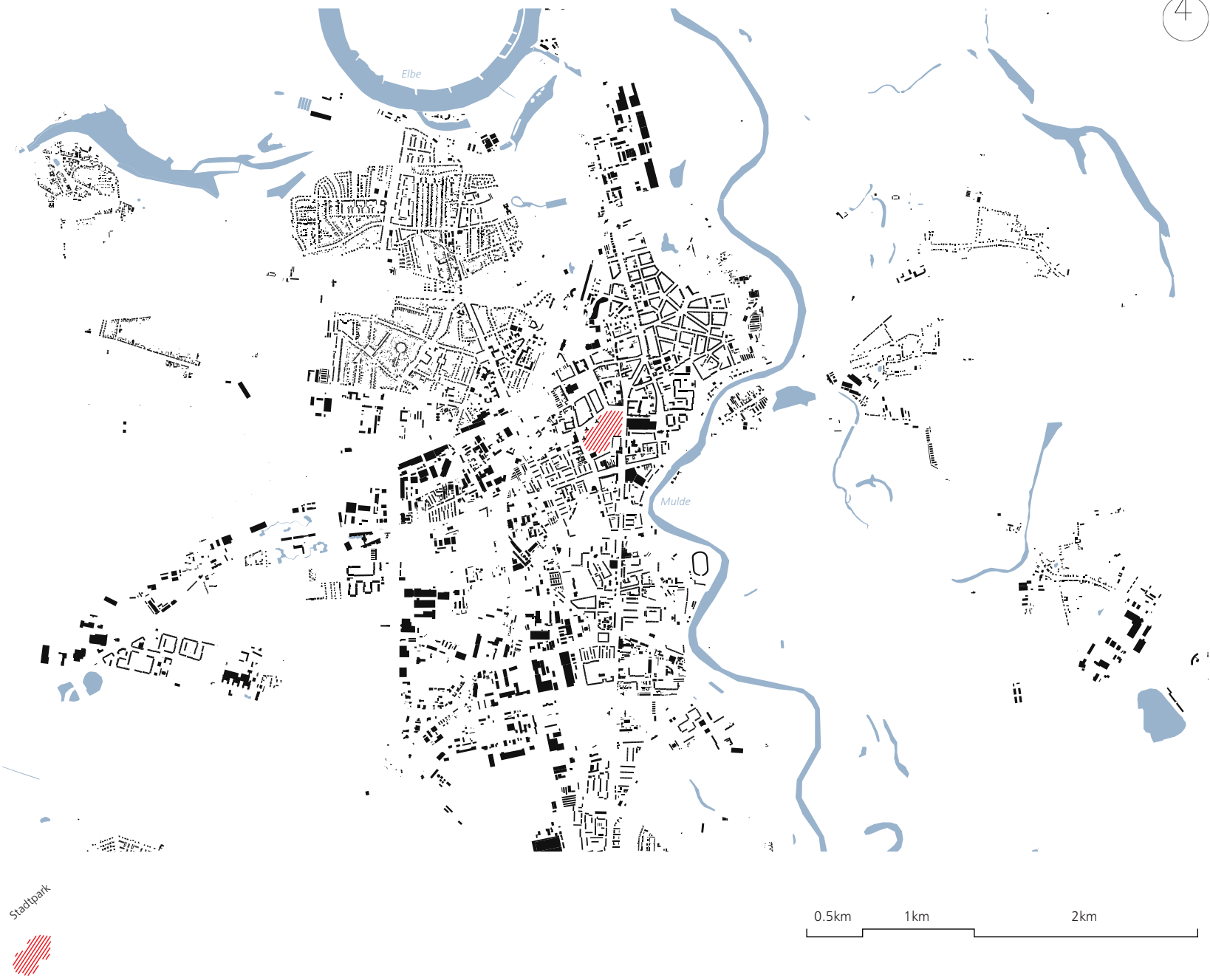


position of Dessau-Roßlau



8 Kommunale Statistikstelle (2015): „Dessau-Roßlau in Zahlen 2015“

Overview



Urban context

Dessau's close proximity to cities as Halle (52km), Magdeburg (59km), Leipzig (67km) or Berlin (128km) makes the city reachable for tourists. The city is well connected locally by port, nationally by motorway and rail services and internationally by airports (Berlin and Leipzig/Halle).

Dessau is embedded in a natural area worthy of protection. Namely, it is Palace and garden Großkühnau, Mosigkau, Wörlitz and Oranienbaum, Country house and garden Georgium and Luisium and Middle Elbe biosphere reserve.

The city is surrounded by a vast floodplain on both sides of the rivers Elbe and Mulde. Mulde flows directly along the eastern part of the downtown and flows into the river Elbe between the districts of Dessau and Roßlau. The rivers shape significantly the cityscape and considerably contribute to the quality of living and recreation in the city.

The future building site is located west of the historic city core in a recreational area called Stadtspark. The planned Museum and Stadtspark should mutually strengthen each other. The intention is to reinforce this location as green and cultural center.¹

City development concept

With the Master Plan adopted in 2011 and city development conception from 2013, Dessau-Roßlau has a significant basis for decisions concerning sustainable urban development. With master plan for downtown, the city of

¹ C4C Team (2015), „competition brief“, page 13

Dessau has also another supplementary guideline for development in this area over the coming years. In agreement with these essential principles of Dessau-Roßlau urban development one essential principle is important in relation to the planned museum – to use the history of the city as an inspiration for the future challenges.²

Dessau is proud of its history and the importance of Bauhaus that is up today one of the key drivers for the future urban development. And these progressive and modern aspects of the local history with essential and unique features are seen as a motivation and basis.

The primary concern of urban development in Dessau is to increase the attractiveness of the downtown - to enhance the identity of the area around Kavalierstraße, Ratsgasse and Zerbster Straße as a city centre. This is documented by decisions of the City Council for Urban Development and the Master Plan and is in relation with the overall concept for the city of Dessau.

Following this, the City Council decided on January 29th, 2014 to allow a new building of a museum - an exhibition center of Bauhaus in Stadtspark to the west of Kavalierstraße and south of Friedrichstraße. Decision to place the building site here was a result of an expert workshop.

With the planned construction of the Bauhaus Museum appears a chance to boost tourism as well as cultural and architectural attractiveness of the downtown of Dessau.³

² Büro für urbane Projekte, Leipzig (2013): „Integriertes Stadtentwicklungskonzept Dessau-rosslau 2025“, page 146

³ C4C Team (2015), „competition brief“, page 45



Palace and garden
Großkühnau



Country house and garden
Luisium



Country house and garden
Georgium



Stadtpark, Dessau



Middle Elbe biosphere
reserve



Palace and garden
Oranienbaum



Palace and garden
Mosigkau



surroundings of Dessau-Roßlau natural and historical sites

9

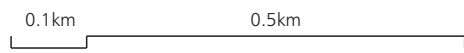
10



Stadtspark
areal view of the future site



1:10 000



Stadtpark

location 51°50'04.5"N 12°14'30.4"E

The Stadtpark in Dessau with an irregular shape occupies an area of about 8,14 hectares and is located in immediate vicinity of the historic city centre. The boundaries of the city park are formed in the north and west by Friedrichstraße, in the south by the houses on Willy-Lohmann-Straße with house numbers 14-14d and the Market Hall and in the east by the Kavalierstraße by the houses with numbers 42-56. In the west along the Willy-Lohmann-Straße and Friedrichstraße are located the Y-houses.¹ The Kavalierstraße is one of the main streets of the town serving as connection of the city center with the surrounding and neighbouring settlements.

Between the years 2007 and 2011 the German Federal Office for Construction and Regional Planning developed a concept for an upturn and revival of the mostly disliked and avoided city park. Later, this objective was implemented in an open planning process. Under consideration of the conservation and urban repair aspects, the Stadtpark was converted into a multigenerational park. It received the architecture prize of the State of Saxony-Anhalt in 2013.²

With its location and stretch, Stadtpark serves as a connection to the Town Hall and the adjoining marketplace via the Ratsgasse to the west, to the north to the Main Railway Station and also to the University and Bauhaus via Antoinettenstraße, as well as to various trade and service institutions via Kavalierstraße southwards. Taking in account the future development in the city and Stadtpark Ratsgasse and Antoinettenstraße are significant urban axes. All the important institutions including trading and public facilities can be reached in a few minutes on foot.

¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 2

² C4C Team (2015), „competition brief“, page 51

Important buildings

The edges of the Stadtpark are built up by block edge buildings alongside the streets in the north and east as well as buildings of different typologies in the south and west. In the northwest of the Stadtpark, there are three residential towers called “Y-houses”, each 14 - storey high and in the north the building of Main Post Office with a corner tower that dominates this urban area. Several memorials and monuments including the Tea House and a sporting area called “action field” are located in Stadtpark in the direct area of the building site. Important buildings close to Stadtpark are the “Rathaus-Center” - a shopping arcade, which links the marketplace with “City Hall” to Stadtpark, the administrative and district court at Willy – Lohmann Straße and the Anhalt Theatre at Friedensplatz. “St. Johanniskirche”, the “Old Theatre” at Lily-Herking-Platz, the “Philantropinum School”, the “Natural History Museum” and the historic job centre of Walter Gropius at the junction of Willy-Lohmann-Straße and Askanische Straße are distinctive for the inner city and within walking distance.

Preservation order

The project site is located in the surveyed area of the historical monument outline plan for the “Dessau-Wörlitz Garden Kingdom” and the Stadtpark is recognized as a historical monument in the register of historical monuments and requires sensitive planning in agreement with the historical monument specialist office of the historical monument preservation authority.

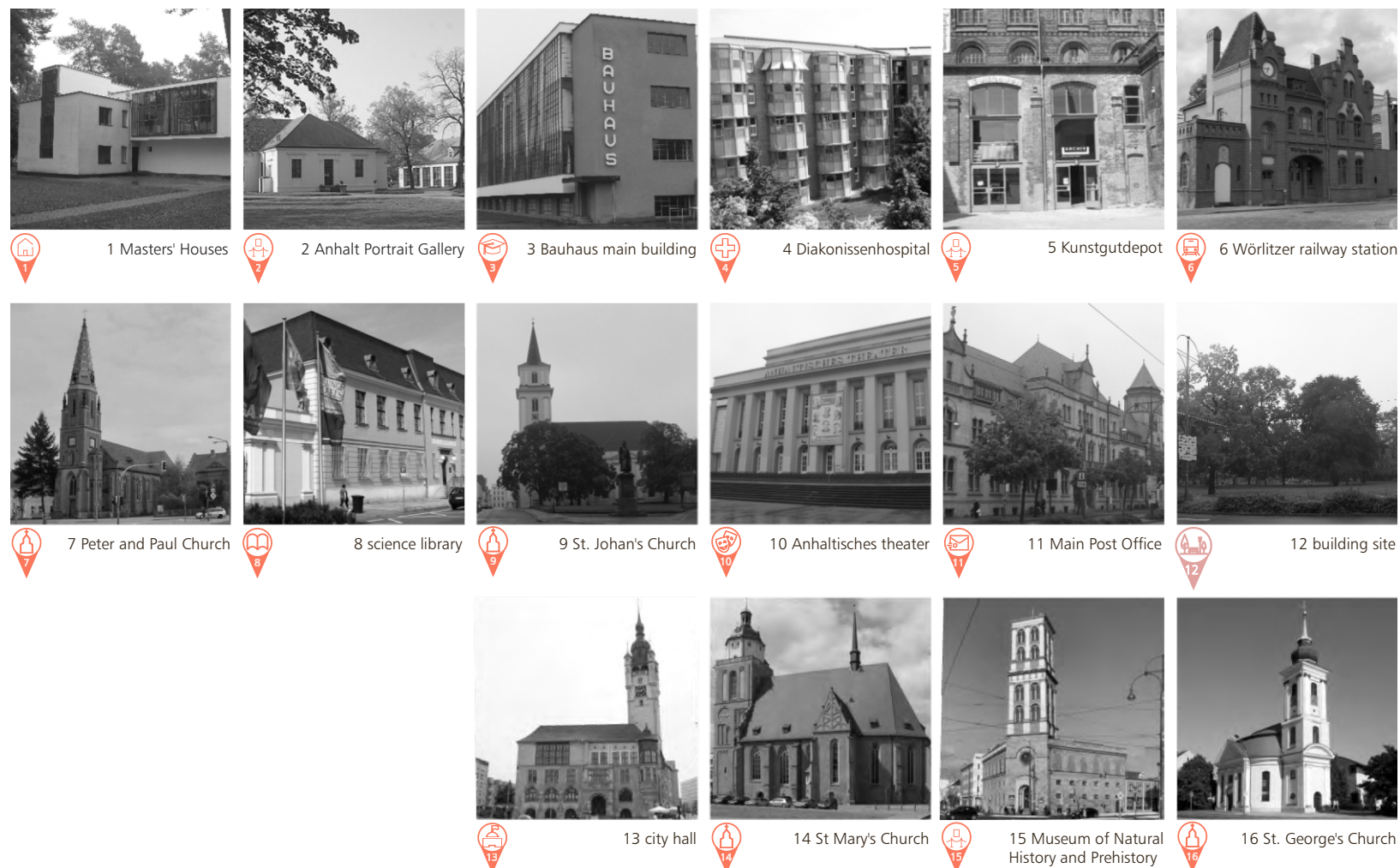
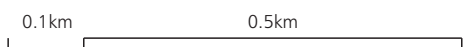
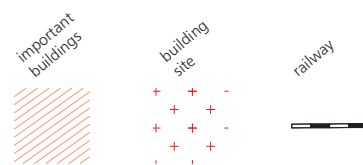
The competition site and neighboring areas are significant as a part of the archaeological and cultural monument of “Dessau inner city”. In the area of the construction field are remains of the “Anhalt Portrait Gallery” / “Palace Reina” and the “Landesbank” destroyed in the World War II.³

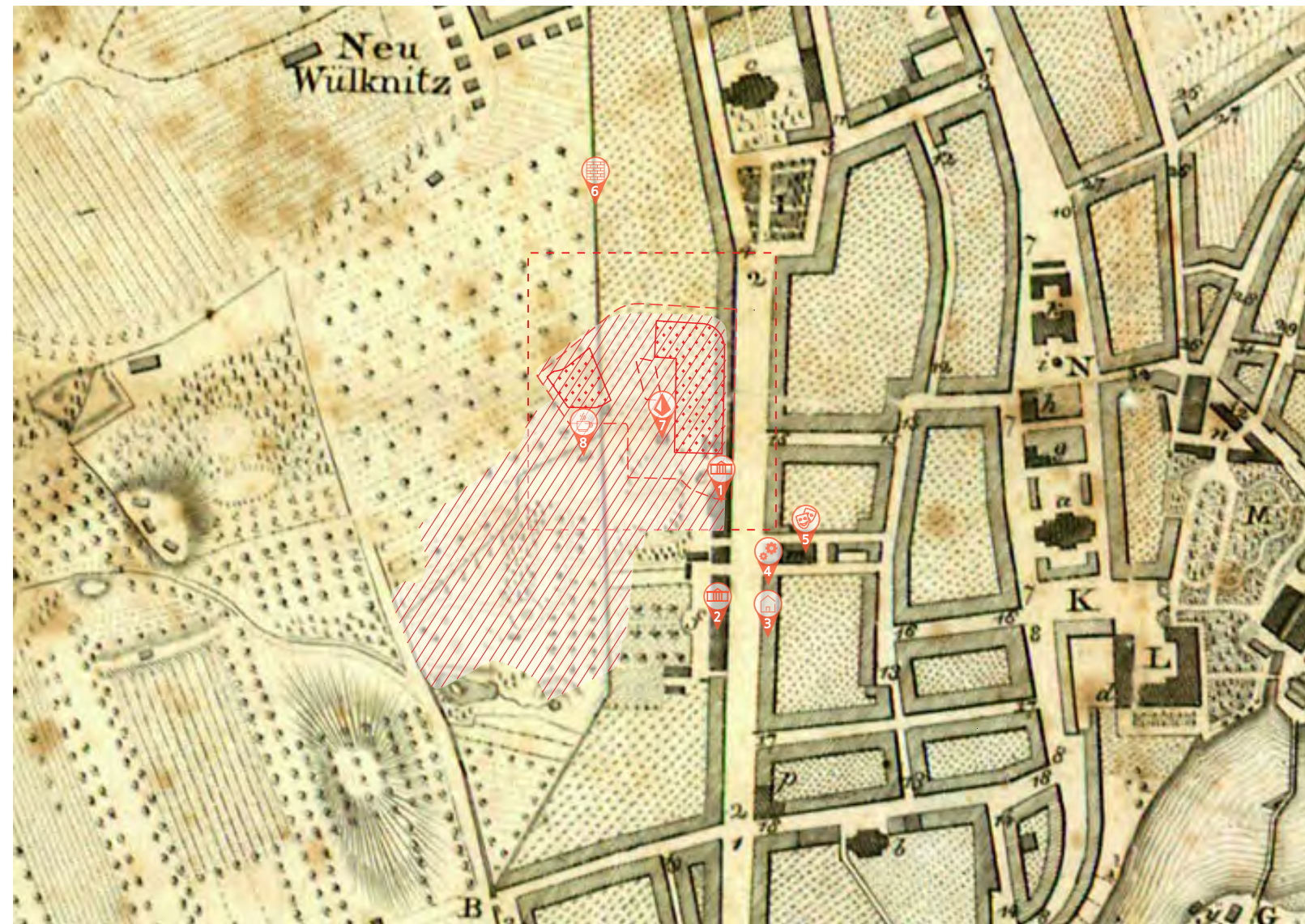
³ C4C Team (2015), „competition brief“, page 61

important buildings in Dessau-Roßlau



1:10 000





History of Stadtpak



1 Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace



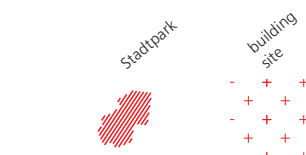
5 Ducal Hoftheater (1777-79) / Friedrich-Theater / Cafe "Altes Theater" (1922) / House of travel (1974-76) / Cultural center



2 Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtschule (1809) / Friedericianeum



7 Mausoleum (1780) / Eugene Pyramid



until 1809

The first document mentioning the use of the western part of the city and the area of Stadtpark dates back to 1475. From the original possession of the rulers individual plots of land were given to the church, nobility but also to the citizens of Dessau. These areas beyond the city walls and the trench were used as gardens, but were also loosely built up and inhabited. In the years 1711-12 Kavalierstraße was constructed as a representative avenue. Time parallel to this was built the Akzisemauer as the new city wall. Prince Leopold built two palaces for his sons prince Eugene (built 1741) and prince Moritz (built 1740). In the year 1780 a mausoleum was erected in the palace garden. The grave monument now formed a pyramid on the north side of the palace garden. The Eugen pyramid was planned in the axis with Georgium (George alley towards the river Elbe). An Orangerie was built under the crown prince Friedrich and is now known as the tea house (Teehäuschen). The design is attributed to Friedrich Wilhelm von Erdmannsdorff. In 1785 a secondary school (Hauptschule) was established in the former Moritz Palace. Between 1777-79 a Ducal Court Theatre was constructed on the eastern side of Kavalierstraße according to the plans by Erdmannsdorff.¹

- 1 - Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace
- 2 - Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtschule (1809) / Friedericianeum
- 3 - house Erdmannsdorff / AOK building / housing block
- 4 - court chapel (1720)/ tobacco manufacture (1770)/ pawnshop (1817-53)/ open space (2006)
- 5 - ducal court theatre (1777-79) / Friedrich-Theater / cafe "Altes Theater" (1922)/ House of Travel (1974-76)/ cultural center
- 6 - Akzisemauer (1711-12)
- 7 - mausoleum (1780) / Eugene pyramid
- 8 - Orangerie / Palmenhaus / Teehäuschen

¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 3-5

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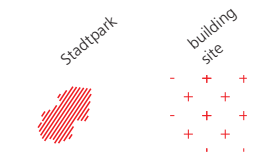


9 Palace of Prince Georg Bernhard (1822-24) / Palais Reina / Anhalt Art Gallery (1927)

until 1834

The widow of 1814 deceased crown prince refashioned the garden of Eugen palace in the English style. The terrain in the west part of the garden towards the present Willy Lohmann Straße and further on was already under Prince Franz modified into an acacia forest which extended up to today's Tivoli (approximately one kilometer to the west from Stadtpark). The palace of Prince George - Palais Reina was built facing the Cavalierstraße.¹

- 1 - Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace
- 2 - Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtenschule (1809) / Friedericianeum
- 3 - house Erdmannsdorff / AOK building / housing block
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- 6 - Akzisemauer (1711-12)
- 7 - mausoleum (1780) / Eugene pyramid
- 8 - Orangerie / Palmenhaus / Teehäuschen
- 9 - Palace of Prince Georg Bernhard (1822-24)/ Palais Reina / Anhalt Art Gallery (1927)
- 10 - Anhalt-Dessauische Landessparkasse / banking & office building / square "Scheibe Nord"



¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 6



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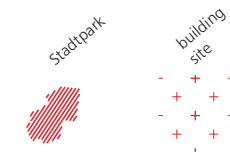
15 Anhalt-Dessauische Landesbank (1848)



16 Government house (1872-1875)



17 Headquarters German Continental Gas Company (1855)/ Town Square (1945)/ City Hall Center (1995)

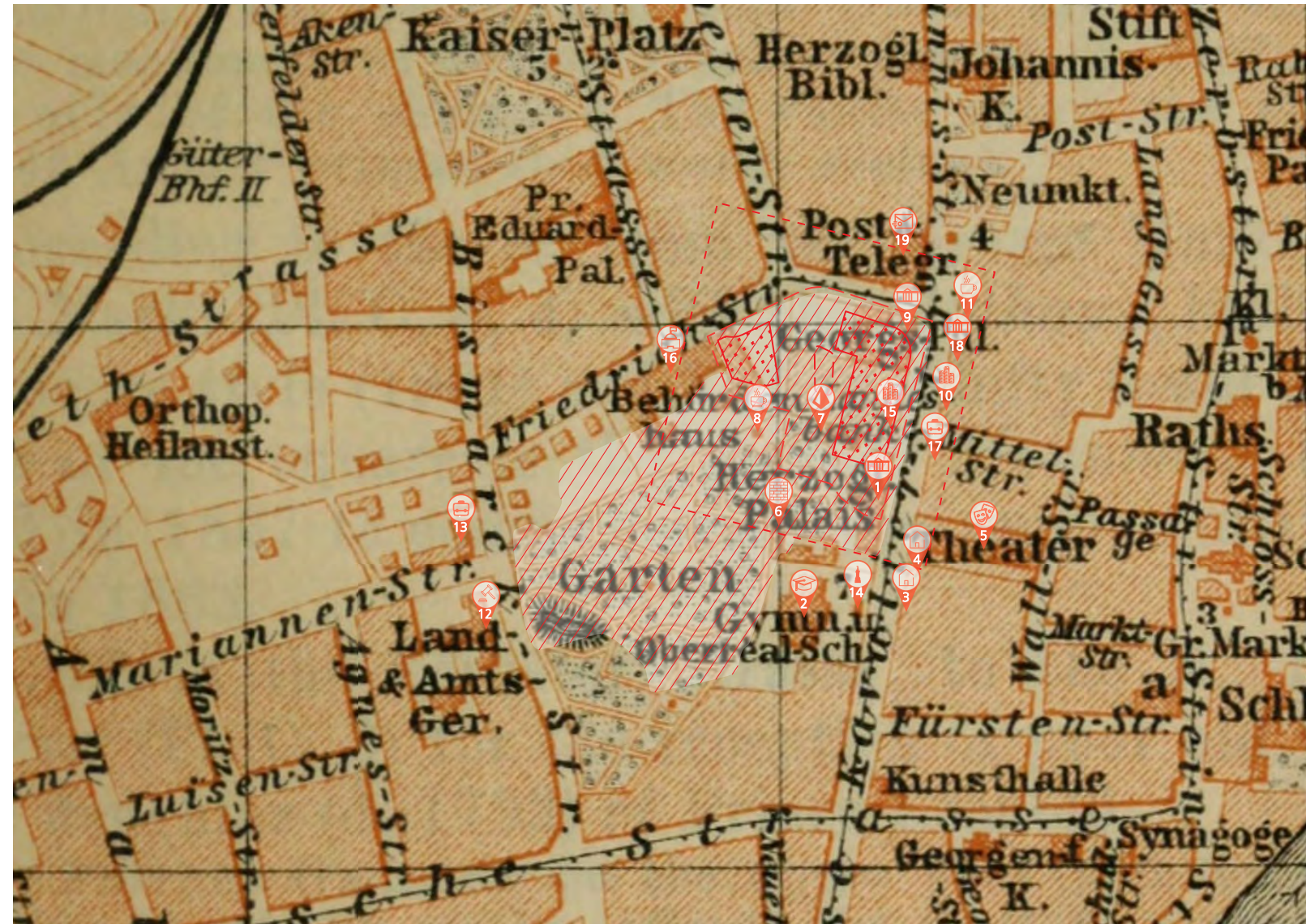


until 1891

The structure of the city drastically changed as a result of industrialization. The northern part of today's Stadtpark and the surrounding neighbourhoods were built. Connection with countryside was largely lost. Thanks to the building growth on the Friedrichstraße the park received its northern border. The Government house was built here between years 1872-75. A garden (Ministerialgarten) with a water feature was created between the Government house and Palace Reina.¹

- 1 - Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace
- 2 - Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtenschule (1809) / Friedericianum
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- 6 - Akzisemauer (1711-12)
- 7 - mausoleum (1780) / Eugene pyramid
- 8 - Orangerie / Palmenhaus / "Teehäuschen"
- 9 - Palace of Prince Georg Bernhard (1822-24)/ Palais Reina / Anhalt Art Gallery (1927)
- 10 - Anhalt-Dessauische Landessparkasse / banking & office building / square "Scheibe Nord"
- 11 - Coffee & pastry Altmann / tanzcafé Tirana (1958)/ hotel Stadt Dessau (1973)
- 12 - Ducal district court (1884)/ state prison (1986)
- 13 - masonic loge (1880)/ crafts house (1969-70)/ District Court and State Constitutional Court (1994-95)
- 14 - Wilhelm Müller memorial (1891)
- 15 - Anhalt-Dessauische Landesbank (1848)
- 16 - Government house (1872-1875)
- 17 - Headquarters German Continental Gas Company (1855)/ town square (1945)/ City Hall Center (1995)
- 18 - Palais Cohn-Oppenheim or Messel House (1900-02)/ "Scheibe Nord" (1963-65)

¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 7-8



4



18 Palais Cohn-Oppenheim or Messel House (1900-02) / "Scheibe Nord" (1963-65)



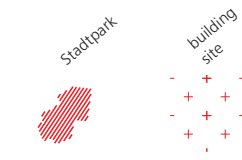
19 Main Post Office (1899-1901)

until 1910

The building of the Main Post Office was erected between the years 1899 and 1901.

Later in 1927 began demolition of the Ducal Palace. A consequence was a newly established access for the citizens to the former palace garden. First was this area intended to be a new location for the 1922 burnt down Friedrich-Theater, but is today's location of the fountain (former Springbrunnen, founded 1927) in Stadtpark.¹

- 1 - Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace
- 2 - Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtenschule (1809) / Friedericianeum
- 3 - house Erdmannsdorff / AOK building / housing block
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- 15 - Anhalt-Dessauische Landesbank (1848)
- 16 - Government house (1872-1875)
- 17 - Headquarters German Continental Gas Company (1855)/ town square (1945)/ City Hall Center (1995)
- 18 - Palais Cohn-Oppenheim or Messel House (1900-02)/ "Scheibe Nord" (1963-65)
- 19 - Main Post Office (1899-1901)



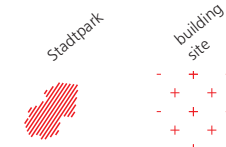
¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 8-9



look at the Zerbster street and the town hall after the bombing from March 7th 1945

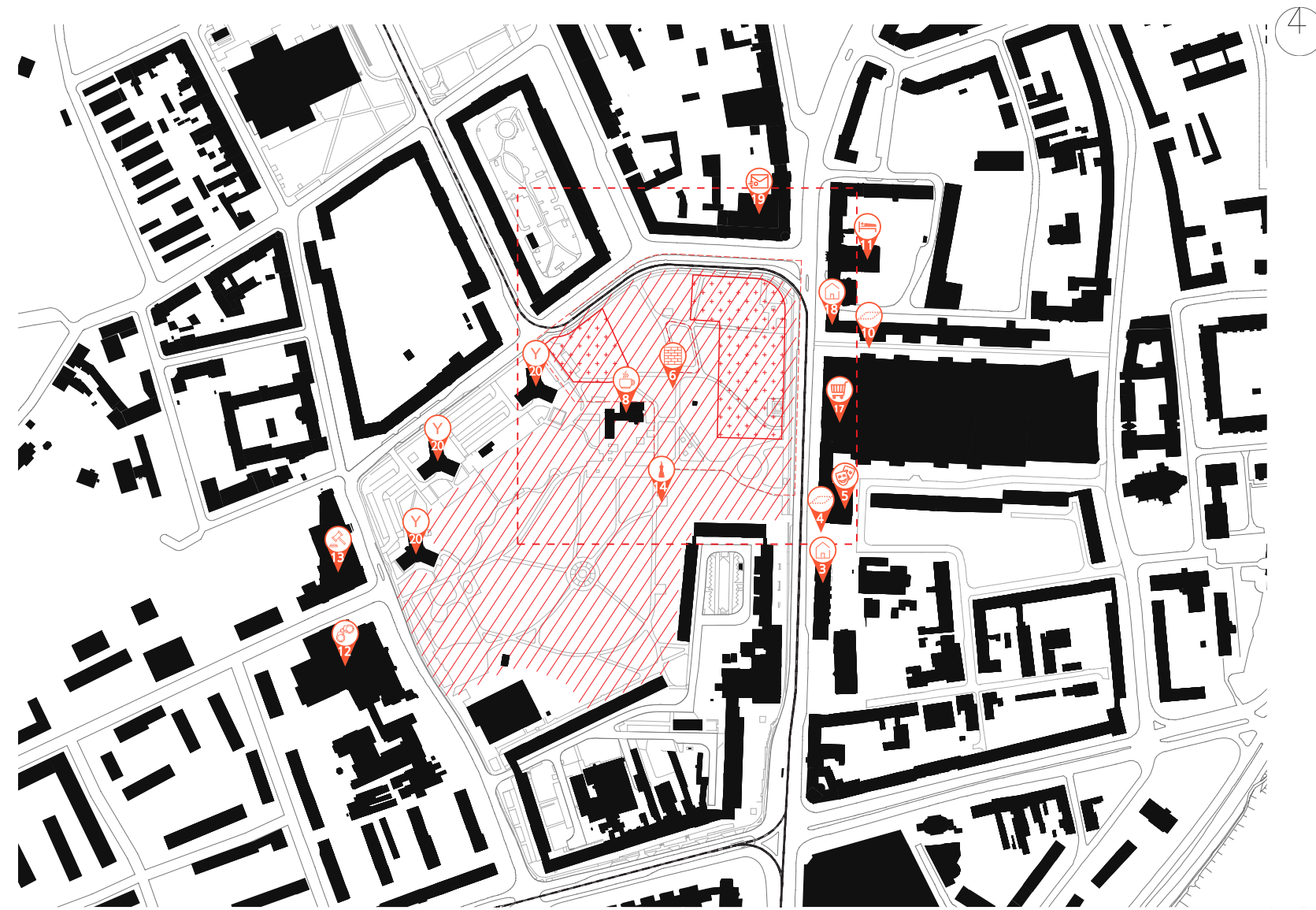
after March 7th 1945

During the war were in the Stadtpark planted vegetables, herbs and potatoes. Between 1940 and 1945 Dessau lied under several air strikes, but the bombing on March 7th 1945 sent the city into rubble. After the war started clearing of the ruins of Landesbank, Palais Reina / Anhalt Art Gallery and Government house. These areas were grassed and trees were planted. Cleared out received the park in 1950 the name Stadtpark.¹

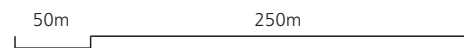


- 5 - Ducal Court Theatre (1777-79) / Friedrich-Theater / cafe "Altes Theater" (1922) / House of Travel (1974-76) / cultural center
- 6 - Akzisemauer (1711-12)
- 8 - Orangerie / Palmenhaus / "Teehäuschen"
- 12 - Ducal district court (1884) / state prison (1986)
- 14 - Wilhelm Müller memorial (1891)
- 19 - Main Post Office (1899-1901)

¹ Reisewerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 11



1: 5000



Building development until today

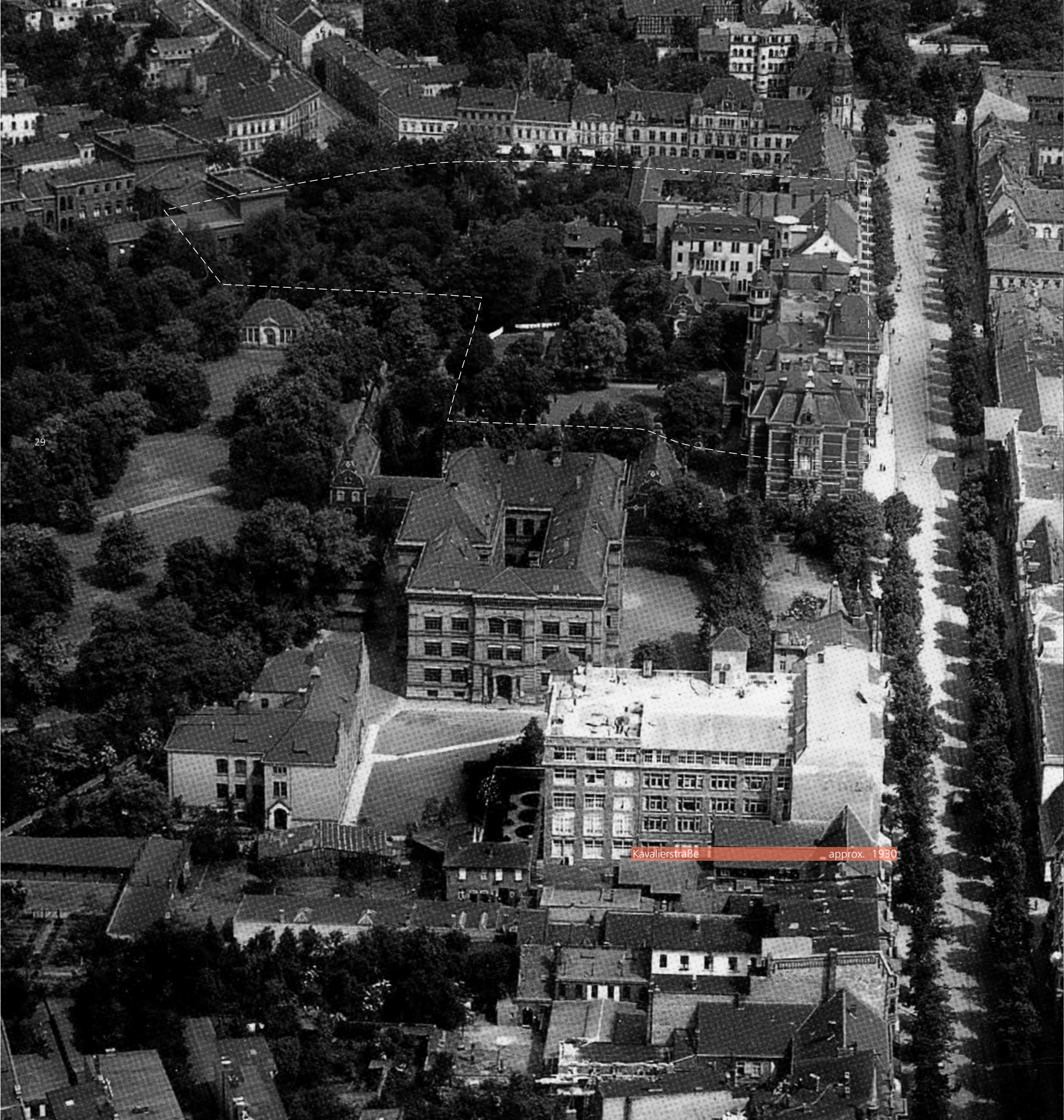
The border in the western part of park is formed by 3 "Y - Houses" built in 1969-71 and the extension of the tea house (Teehäuschen). On an area of eight hectares emerged Stadtpark in the 60s according to the plans of the landscape architect Hans Keller. The basin of the Springbrunnen was in 1970s enlarged to 20 x 20 meters and provided with a fountain. In 2002 was the fountain redesigned by Christine Rammelt - Hadelich and named "Stadtgespräch". The Adriano Stele was erected on a place, where a man was abused on June 11, 2001.¹

Considering the urban development in this area the position of the proposed building site covers a previously built up area. Historical building progress serves as a template for the future development.

- 3 - House Erdmannsdorff / AOK building / housing block
- 4 - Hofkapelle (1720)/ Tabakmanufaktur (1770)/ pawnshop (1817-53)/ open space (2006)
- 5 - Ducal Court Theatre (1777-79) / Friedrich-Theater / Cafe "Altes Theater" (1922)/ House of Travel (1974-76)/ Cultural center
- 6 - Akzisemauer (1711-12)
- 8 - Orangerie / Palmenhaus / "Teehäuschen"
- 10 - Anhalt-Dessauische Landessparkasse / banking & office building / square „Scheibe Nord“
- 11 - Coffee & pastry Altmann / Tanzcafé Tirana (1958)/ Hotel Stadt Dessau (1973)
- 12 - Ducal district court (1884)/ state prison (1986)
- 13 - Masonic Loge (1880)/ Crafts house (1969-70)/ District Court and State Constitutional Court (1994-95)
- 14 - Wilhelm Müller Memorial (1891)
- 17 - Headquarters German Continental Gas Company (1855)/ Town Square (1945)/ City Hall Center (1995)
- 18 - Palais Cohn-Oppenheim or Messel House (1900-02)/ „Scheibe Nord“ (1963-65)
- 19 - Main Post Office (1899-1901)
- 20 - Y Houses (1969-1972)

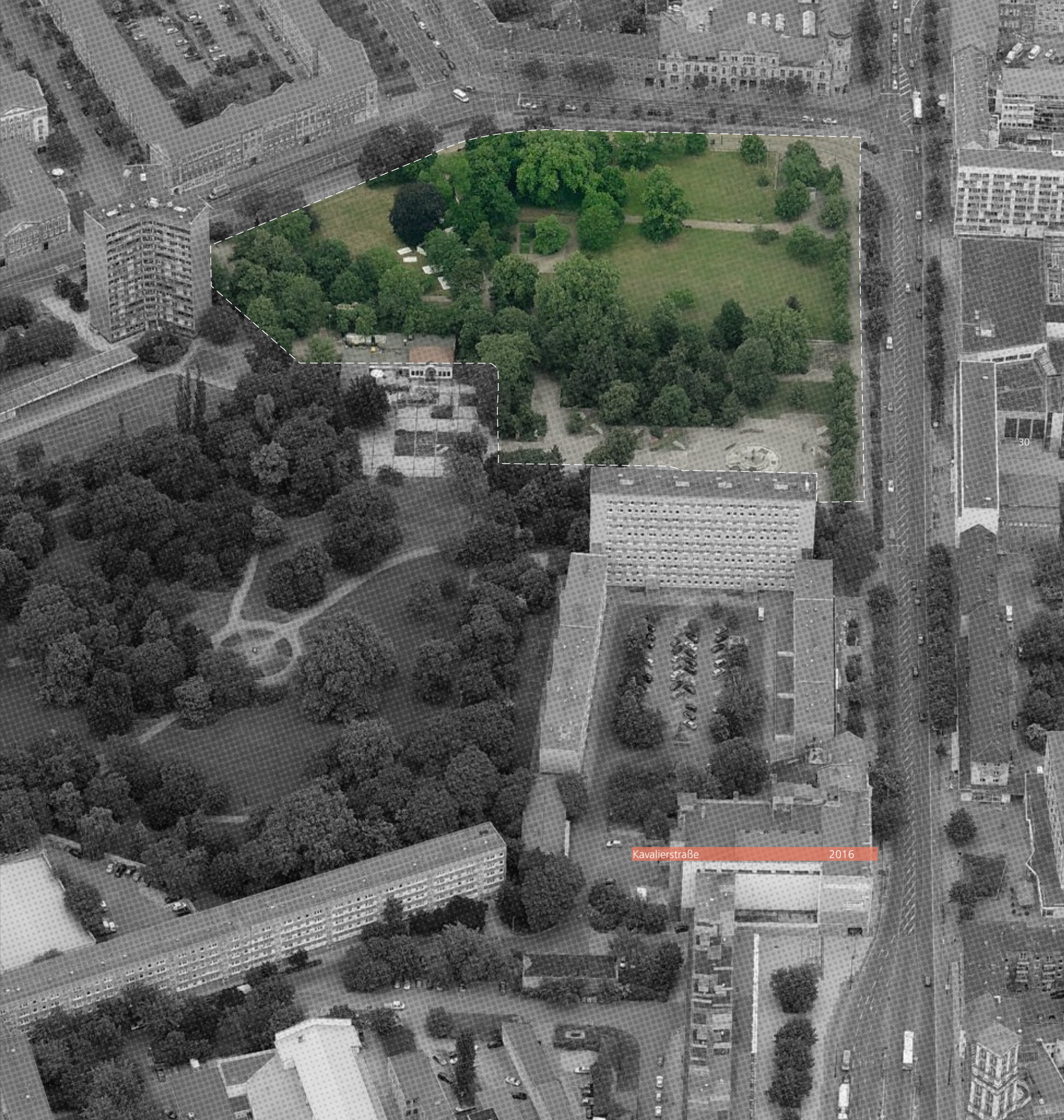


¹ Reiserwerk (2007): „Daten und Hintergründe zum Dessauer Stadtpark“, page 11



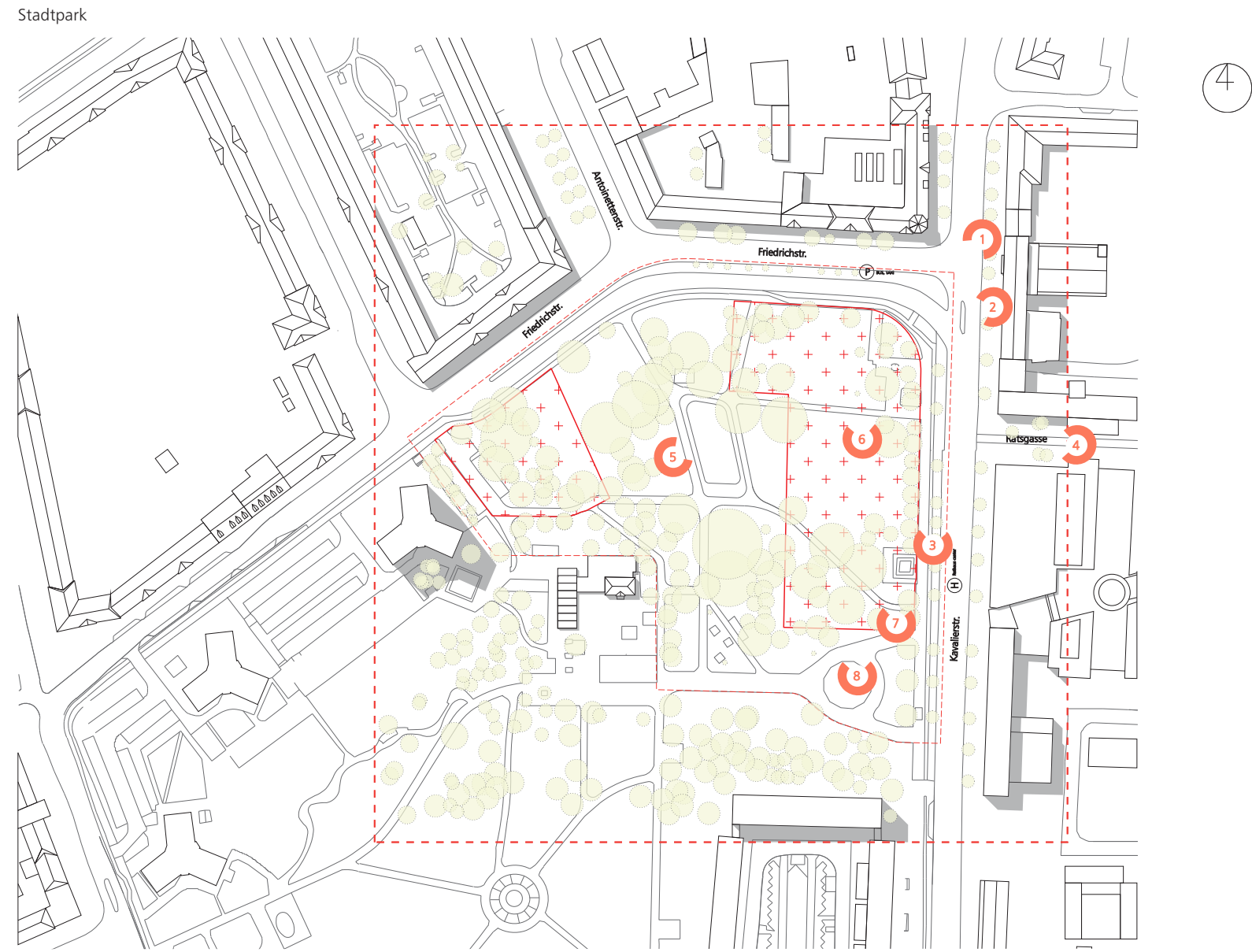
29

Kavallerstraße approx. 1930

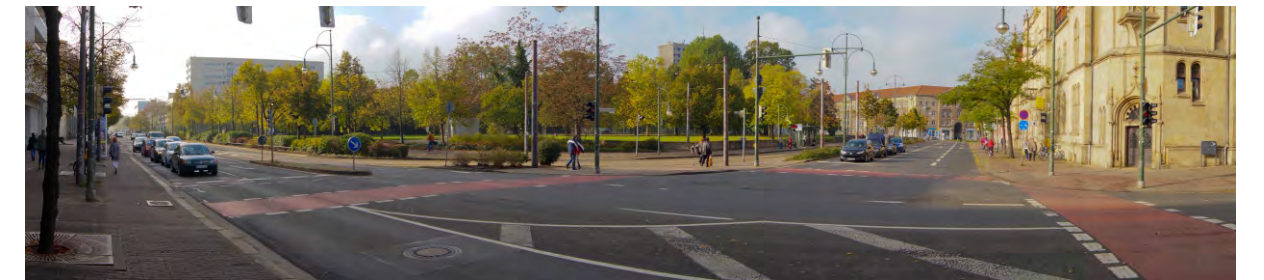


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Kavallerstraße 2016



Photos of the site



1 view from Kavalierstraße - Friedrichstraße junction



2 bird's eye view from Kavalierstraße - Friedrichstraße junction



3 view along Kavalierstraße towards the Main Post Office



4 view from Ratsgasse



5 view from action field



6 view from the middle of the building site towards the Main Post Office



7 view from OdF memorial



8 view from the park entrance east

Research of existing

the spatial view of the building site

33



4

Building site

The borders of the competition site are defined in the north by Friedrichstraße and in the east by Kavalierstraße. The western and southern border runs through the Stadtpark.

The competition site consists of "museum construction field" at the corner of Kavalierstraße and Friedrichstraße with an area of 8300m², and the "car park construction field" with an area of 2650m² in the western part of the site. The car park should be designed up to Fritz – Hesse Straße and be approached from Friedrichstraße.

The designated "museum construction field" is binding and it can't be exceeded. The defined "L" shape represents construction border. It specifies the maximum expanse of the area plot available for the building. The limitation defined in the competition brief is that only a maximum of 6000m² of the construction field can be used for building - including outdoor facilities (but without parking spaces).¹

The surrounding area and the walkways in park in particular should be adapted in sensible way observing the uses and qualities of the park. The toilet house at the north-east corner in the "museum construction field" is decommissioned.

Memorials

Victims' associations have modeled memorial culture in the competition area and recommend keeping of the OdF Memorial and the Alberto-Adriano stele.

¹ C4C Team (2015): „competition brief“, page 47, 71

34

To convey this objective in the future, it is important to observe the memorial culture during design process. A dislocation of the OdF Memorial in the plot is not excluded, but there should be assigned a replacement site within the surrounding area.

The design proposal should support sense of security in public space. This include, for example, visual relationship between the public streets and the Stadtpark and creation of clear and well lit rooms to avoid dark corners and areas on the walkways, parking lot and outside and inside of the building.²

Historical Monuments in the immediate surroundings

The building site is located in an area with extensive building development during the past centuries. Protected historical monuments located directly on the building site or in close distance have to be observed.

Area of building site

- Akzisemauer (former city wall, remains in Stadtpark)
- Centaur group

Park area

- Orangerie ("Teehäuschen" today)
- Wilhelm-Müller monument
- Friedrich-Schneider monument

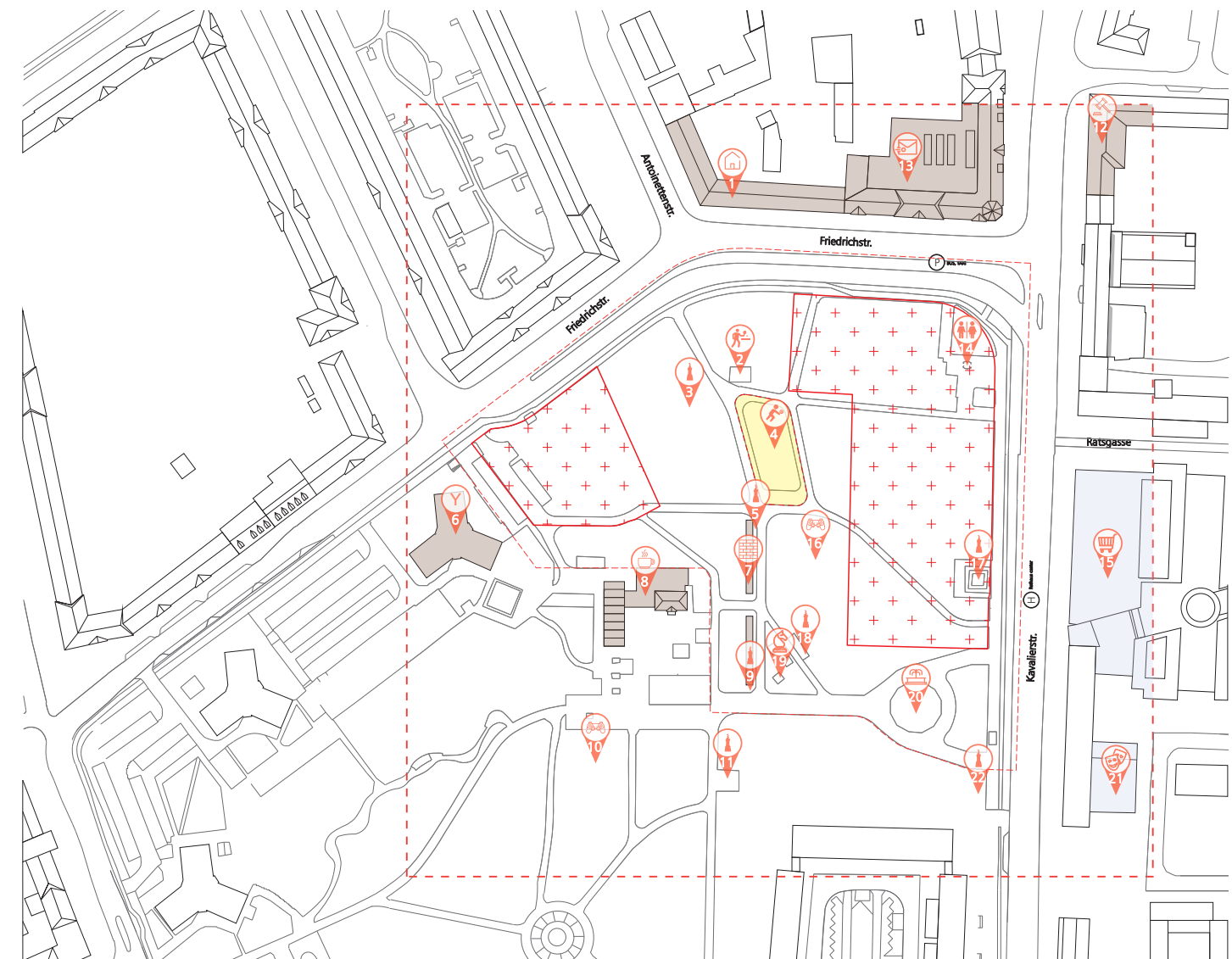
Surrounding area

- Main post office (Kavalierstraße 30 and 32)
- Administration building (Kavalierstraße 31)
- Y-high-rise buildings
- Building at the north side of Friedrichstraße³

² C4C Team (2015): „competition brief“, page 89





³ C4C Team (2015): „competition brief“, page 61

building site and its surrounding area



4

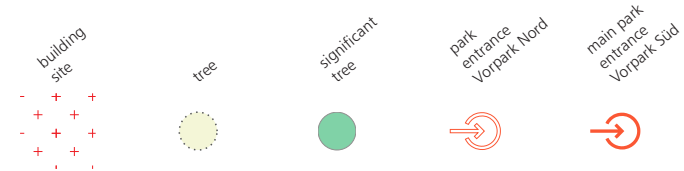
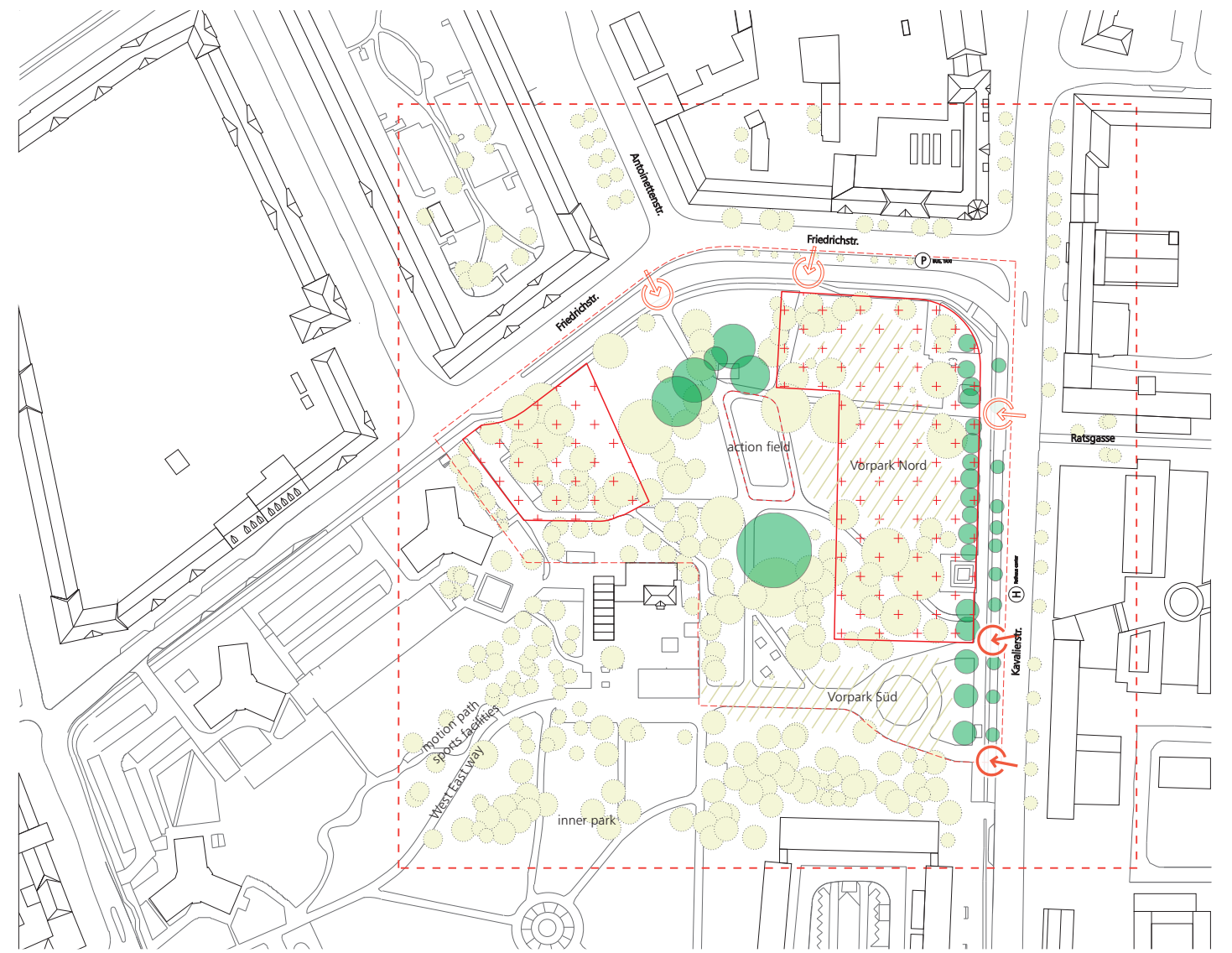
1:2500

-  building site
-  protected building
-  protected area
-  locally important building

25m 100m



- 1 building at the north side of Friedrichstraße
- 2 sport facilities
- 3 Adriano stele
- 4 action field
- 5 sculpture "Frühling"
- 6 Y-houses
- 7 Akzisemauer (former city wall)
- 8 Tea House (Orangerie)
- 9 Centaur group
- 10 Spielbox 1
- 11 Wilhelm-Müller monument
- 12 state court (audit)
- 13 Main Post Office building
- 14 toilet house
- 15 Town Hall Centre
- 16 Spielbox 2
- 17 OdF (Opfer des Faschismus) memorial
- 18 sculpture "Hemdausziehende"
- 19 chessboard
- 20 fountain
- 21 Old Theatre
- 22 sculpture "Anette"



Vegetation

Master plan for downtown of the city of Dessau designated to the Stadtpark function of an "exchange point" of pedestrian and cycling routes. This objective was achieved by restoration and reinstatement of facilities during the park recovery.

"Vorpark Nord" is an open space area located in the north-east part of the building site and serves as an entrance point to the park and was used as a location of large events. Open space area with the fountain and water features called "Vorpark Süd" links the park to Kavaliertstraße. The central main entrance to the park is located here. In the centre of the park next to an area with several chessboards at the main path through the park is situated the "Teehäuschen". The sports facilities are complemented by motion sports devices along the "west play area". The inner park connects the building site area of the park with a children's playground located in the south-west corner of the Stadtpark.

A report dealing with the protection of vegetation assigned high importance to the preservation of important trees and groups of trees in the Stadtpark in connection with the construction of the future Bauhaus museum. The boundary of the construction field along the Kavaliertstraße runs between the first and second row of trees of double - alleyway. These lime trees are protected, but a removal is possible. This would allow a survey of the historical building line.¹

At the "action field" sporting area ball games such as volleyball, handball, football and basketball can be played. Southward from the sports field are situated table tennis tables, benches and loungers. The area of "action field" is excluded from the building site.²

1 C4C Team (2015): „competition brief“, page 51

2 C4C Team (2015): „competition brief“, page 55

Objective

The overall objective is the aim to create a green east - west connection from the Stadtpark to the green space of river Mulde. The aim is to connect the green spaces of the city centre and at the same time to connect important locations within the city.³

Fauna and Flora of the Stadtpark

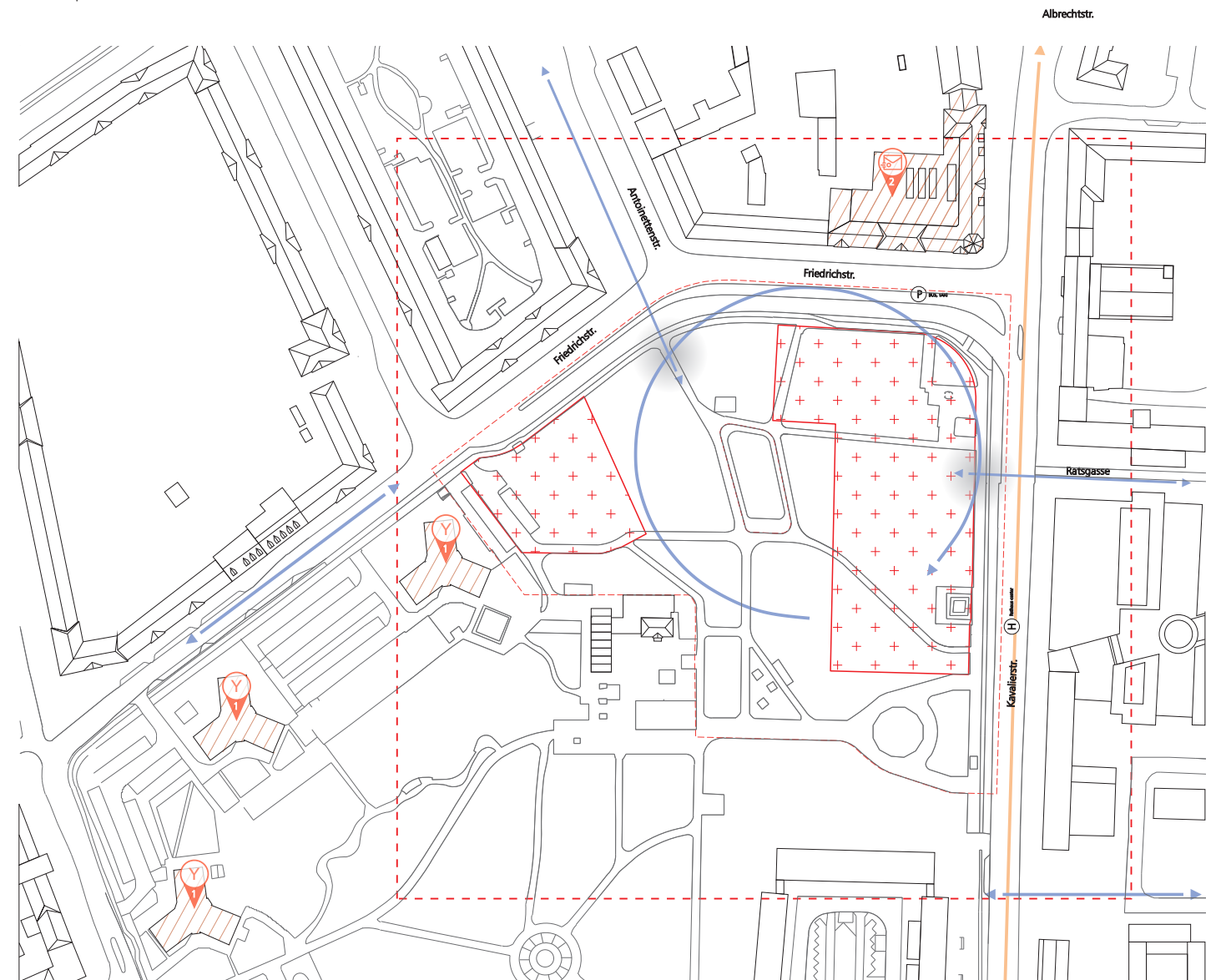
The building site and its surroundings are characterized by tree-covered meadows. Open space areas of "Vorpark Nord" and "Vorpark Süd" alter with areas covered by groups of trees.

With its pattern of growth and size is the tree population of the entire park considered to be of high ecological value. In the park are represented nearly all common European species as maple, oak, ash tree, lime, chestnut, conifers, sycamore, black locust, willow, dog rose, elder bush etc. Rare types such as the gold poplar and trees over one hundred years old are also included.

Protected animals living in Stadtpark are various types of bats, 19 species of breeding bird and saproxylic species of beetle, but these are not influencing the designing nor building process. Trees that are used as the nesting sites for protected species are of particular importance. The only important species of breeding bird in the Stadtpark is the jackdaw. It is an endangered species in Saxony-Anhalt. Incidentally, the population of jackdaws in the Stadtpark is currently limited by the lack of breeding grounds. A similar, but less significant variety of species can be identified on the building site.⁴ This survey supports the location of the museum at the proposed building site.

3 Amt für Stadtentwicklung Stadt Dessau-Roßlau (2013): „Integriertes Stadtentwicklungskonzept“, page 16-17

4 Amt für Stadtentwicklung Stadt Dessau-Roßlau (2014): „Artenschutzrechtlicher Fachbeitrag“, page 6-15



Masterplan of Dessau-Roßlau

In this chapter is described the foreseen development of the area of Stadtpark from the point of view of the master plan. Because of its position between the city center, Stadtpark and the Johannisviertel (to the north and east from the building site) has the Kavalierstraße a prominent role in the city as a networking element. As one of the targets in the strategic planning of the future urban development is anticipated a change in the outlook of the street.

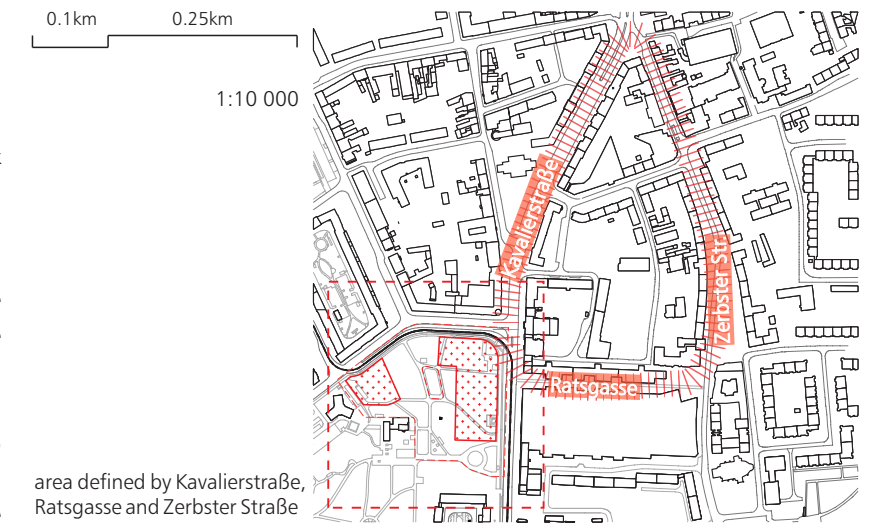
The section of Kavalierstraße from crossing at the museum up to Albrechtstraße (to the north of the building site) should be converted from a busy main road into a boulevard with pedestrian qualities. By 2018 the section from Askaniische Straße (to the south of the building site) to Friedrichstraße should be redesigned as an avenue with reduced traffic. In relation with this the permitted speed will be reduced to 30 km/h and use of trucks over 3.5t will be permanently prohibited. As a part of the axis "main train station - Stadtpark" is the Antoinettenstraße another important access route to the future Bauhaus museum. The access is via open spaces at the train station, by the Fürst-Leopold-Carre garage and the Friedensplatz up to the Antoinettenstraße and Stadtpark. In 2011 essential facilities and structures at Friedensplatz or open space at the train station were already remodeled.

By 2016 the last part of a green belt of Antoinettenstraße up to the Stadtpark should create a promenade. The aim is to create readable and inviting gestures for travelers on the way up to the Stadtpark and Museum.¹

Traffic organization

The plan is to change the organization of the automotive traffic at the

¹ C4C Team (2015): „competition brief“, page 49



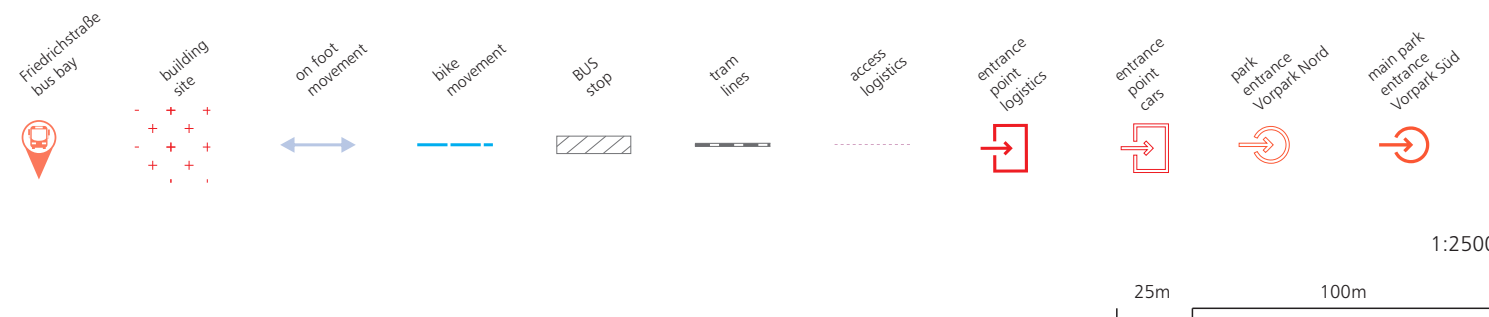
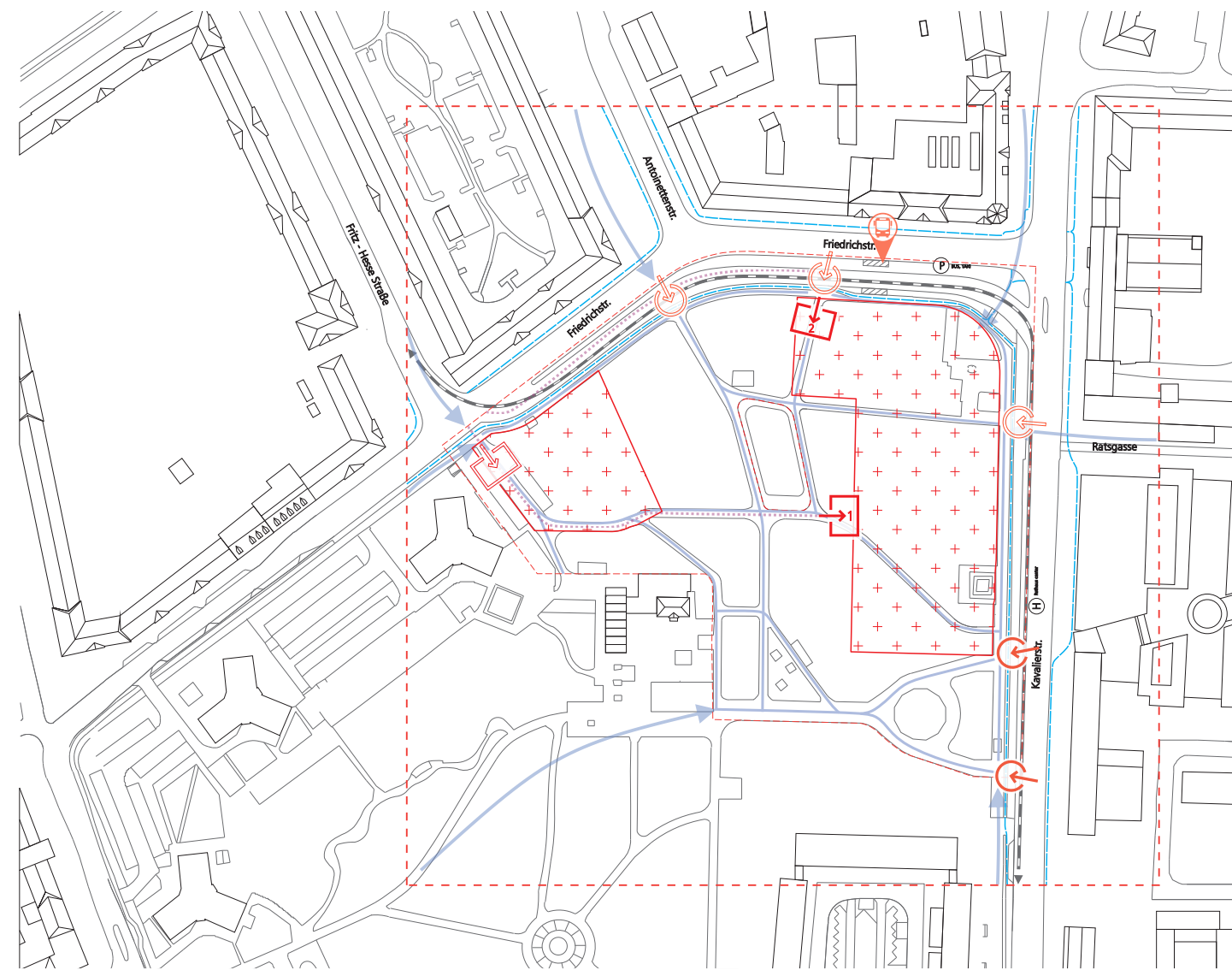
area defined by Kavalierstraße, Ratsgasse and Zerbster Straße

Kavalierstraße and Friedrichstrasse junction by 2018. Access Friedrichstraße - the left turn from Friedrichstraße to the northern part of Kavalierstraße will be permitted. The present day right-hand turn from Friedrichstraße to the southern part of Kavalierstraße will be permanently prohibited for all motor vehicles. Access Kavalierstraße (from Askaniische Straße) - the left turn from the Kavalierstraße into Friedrichstraße will be prohibited permanently for all motor vehicles. The present-day through traffic will remain unaffected. The public transport stop "Main Post Office" located at Friedrichstraße will be relocated to the Kavalierstraße and serve as a new central station for trams and buses.²

Neither of the foreseen traffic changes will substantially affect the new museum, but all decisions are following the aim of the master plan to reinforce the identity of the area defined by Kavalierstraße, Ratsgasse and Zerbster Straße as a city centre of high touristic, cultural and architectural attraction.³

² C4C Team (2015): „competition brief“, page 49

³ Amt für Stadtentwicklung Stadt Dessau-Roßlau (2013): „Integriertes Stadtentwicklungskonzept“, page 24-27



External space and logistics

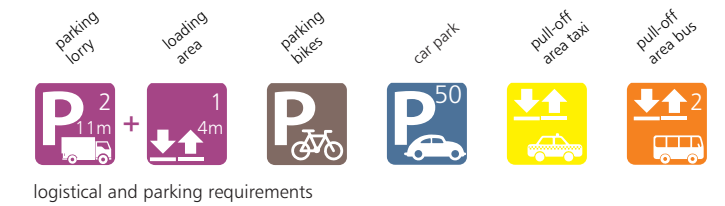
The main factors in approach to design of the external spaces are efficient use of land, careful handling and maintaining of the character and features of the park. A clear orientation by easily recognizable access roads and routes to the museum should be ensured for everyone (arriving by car, coach, public transport, bicycle and on foot).

Friedrichstraße bus bay

Is located on the southern side of the Friedrichstraße to the north of the tram tracks and parallel to the public transport stop "Main Post Office". This station is served by lines of city public transport 1, 3, 4 (bus lines) and 14, 15 (tram lines). The bus bay should provide an approach area for at least 2, possibly three coaches and two taxis. The bus bay also serves as a stop for the shuttle bus and as an area for loading and unloading of taxis or cars.

Lorry and car access to the site and parking

The City of Dessau appointed two access possibilities for lorries (supply and disposal) either through the existing parking facility north of the Y-houses with navigable route up to "Action field" or another one opposite the "Main Post Office" crossing the railway tracks. The two potential access to the site are marked on the site plan. Car parking spaces of a total number of at least 50 (including disabled spaces) could be situated on the building site and on the further car park construction field at the level of the Y-houses. Access to this site will take place from Friedrichstraße and Fritz - Hesse Straße junction. Underground garages are excluded. Bicycle parking spaces should be provided in a reasonable number and placed in the close proximity of the entrance area.



Delivery area

This area should provide optimal conditions for logistic requests. It should be easy to access and navigate vehicles up 11 meters long. Two of these vehicles should be able to park here at the same time. One of the lorry parking spaces should have a 4m loading and unloading area. The access can only take place from Friedrichstraße.¹

Museum's immediate surrounding

The task for the design proposal is to design the surrounding environment of the museum - to integrate the future building within the park and existing pathway connections.

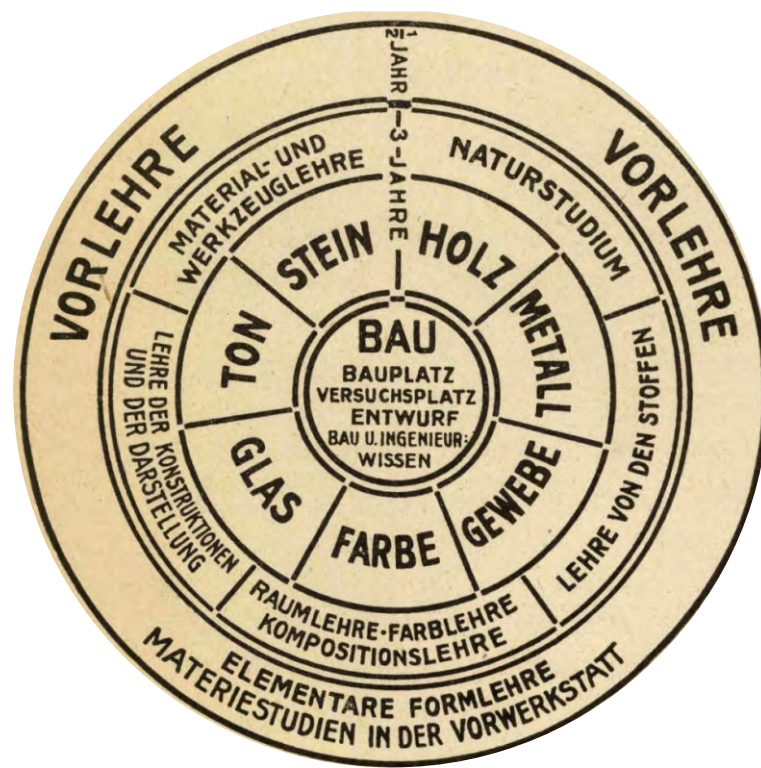
The path connections to the future museum are following the main access from Antoinettenstraße, Kavalierstraße, Ratsgasse and from the Stadtpark. A proposal is expected that links Stadtpark with the city center (according to the master plan), while dealing with the existing trees as sensitively as possible. A recognizable ground level entrance should be provided, accessed from the level of the neighboring sidewalk.

The cafeteria and the Museum Education (event and workshop area) should be directly adjacent to external areas, allowing the activities to take place outdoor. A terrace in front of the cafeteria should be used for outdoor catering and also to strengthen the public character of the building.²

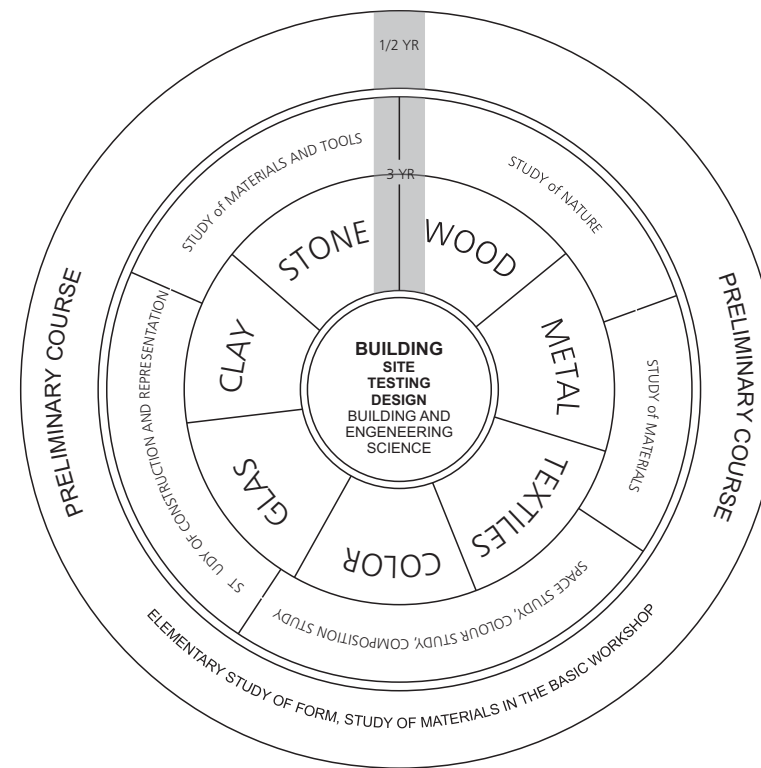
¹ C4C Team (2015): „competition brief“, page 83

² C4C Team (2015): „competition brief“, page 87

Bauhaus



1 Scheme of the course of studies at the Bauhaus DE



2 Scheme of the course of studies at the Bauhaus ENG

School

The Bauhaus was founded in 1919 in Weimar, Germany by a Berlin born architect Walter Gropius (1883–1969) and its primary ambition was to reinterpret the world to reflect the unity of the arts. The founding date of the Bauhaus on April the 1st, 1919 coincided with the negotiations of the Constitutional Assembly in Weimar Hoftheater. In between the founding and closure are two relocations - to Dessau in 1925 and to Berlin in 1932 - and two changes of director - Hannes Meyer in 1928 and Ludwig Mies van der Rohe in 1930 - which were all motivated mostly politically. The development on the Bauhaus was determined by local government – by the Thuringian Parliament in Weimar until 1925 and the Dessau city council until 1932.

State Bauhaus in Weimar - 1919 to 1925

The Bauhaus became the focus point of the vanguard in design and architecture education of its time. In 1923 Bauhaus captivated with the great Weimar Bauhaus exhibition and the 1st International Modernist Architecture Exhibition. Residence in Weimar ended to March the 31st, 1925 when the local government partially cancelled funding of Bauhaus.¹

Bauhaus Dessau, Academy of Design - 1925 to 1932

When it became known that the Bauhaus should be concluded in Weimar, several German cities competed for a takeover. It had by then reached a level of awareness which prompted cities such as Frankfurt/Main, Mannheim, München, Hagen, Hamburg, Krefeld, Darmstadt and the City of Dessau to take interest in takeover of the school. The Bauhaus spent seven years in Dessau. During this period were created buildings and design products that have shaped the image of the Bauhaus until the present day.

¹ Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 8-20

The substantive clarification process, which had begun with the Weimar exhibition of 1923, resulted in Dessau to consolidation. Herein the workshops developed into "laboratories for the industry". Bauhaus spirit spread with buildings in Dessau (1926) or the Bauhaus - Travelling Exhibition (1929, 1930) and the exhibition initiated by the German Werkbund Division at the Exposition de la société des artistes décorateurs and headed by Walter Gropius in Paris in 1930s. However even in Dessau there were conservative circles which did not like the school in the city. External and internal conflicts meant that there were two other directors after Walter Gropius and after the change of local government in Dessau the school moved on the last September day 1932 to Berlin. The political, social and economic changes in Germany were reflected in changes at Bauhaus.

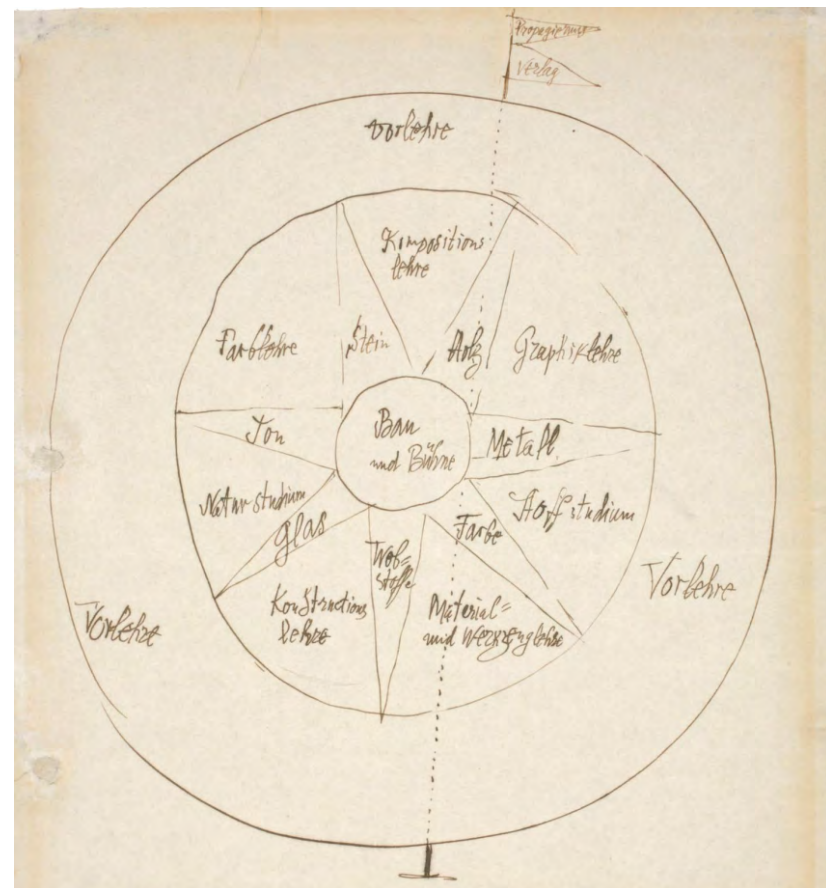
Bauhaus Berlin, Free Teaching and Research Institute from 1932 to 1933

However, Mies van der Rohe decided before the closure of the Bauhaus in Dessau to transfer the school to Berlin as a private institute with its seat in the former telephone factory J. Berliner at Siemensstraße. Just a few weeks after Hitler rose to power (January 31st, 1933) the Bauhaus Berlin was examined on April 12th, 1933 by the police in search after communist materials and closed. The school was self-dissolved on July 19th, 1933.²

Preliminary course

The preliminary course - also called pre-apprenticeship - is one of the important educational benefits of Bauhaus, which was developed by Johannes Itten and continued under the lead of Laszlo Moholy-Nagy and Josef Albers. As an idea is the preliminary course not an invention of Bauhaus. The tradition of pre-apprenticeship classes in the education of artists goes back to the 19th century and is closely linked to the process of art education

² Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 22-46



Paul Klee, idea and structure of the Bauhaus, 1922

On the top of the drawing are two flags that emphasize the significance of public relations and marketing for the Bauhaus (propagation and publishing). In the middle is a circular schema with inscribed lectures in stage and building. The shape of a star represents practical training in the individual workshops and supporting subjects. Graphics represents interdisciplinary exchange important for the education at the school.

reform at the beginning of the 20th century. Trial and introduction semester made the preliminary course at the Bauhaus the basis to familiarize young people with different educational backgrounds with university studies in creative disciplines. Only the successful completion of the preliminary course entitled to enter the Bauhaus workshops. The Bauhaus prospective students got in the preliminary course the opportunity to test whether they are suitable at all for this profession. At the same time, they have the opportunity - even without the constraints of the regular education - to explore their passion for a particular course of study or a particular material in the various workshops.

Workshops and lectures

Pottery

Pottery workshop was established in 1920 under the direction of sculptor and "form master" Gerhard Marcks and the master craftsman Max Krehan and developed by 1925 to one of the most creative and productive Bauhaus workshops.

Book binding

The book bindery of the Bauhaus represents a special case among the Bauhaus workshops. Similar to the weaving, Bauhaus resorted to a workshop of the former School of Applied Arts.

Stained Glass

The stained glass workshop at the Bauhaus in Weimar is a special case. Workshop was established under the direction of Johannes Itten with the support of the Weimar stained glass enterprise of Ernst Kraus in October 1920. With Josef Albers workshop had only one student and from 1923 only one member.¹

¹ Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 39-81

Printing

In 1919, very soon after the foundation started the graphic printing on the basis of a solid, from the former Weimar Academy of Fine Arts inherited technical equipment and teaching and production facility.

Typography and advertising (in the graphics on p. 47 together with printing)

Typography and advertising played an important role from the beginning. The school depended on adequate presentation of itself to the public - seeking more effective ways of communication.

Wall painting

Teachers alone held inconsistent ideas about the criteria by which construction and color match. The Bauhaus has largely kept out of the verbal contemporary discussion about the color design in architecture, but is widely known for its own predominantly white exterior and multi-colored interiors of the buildings.

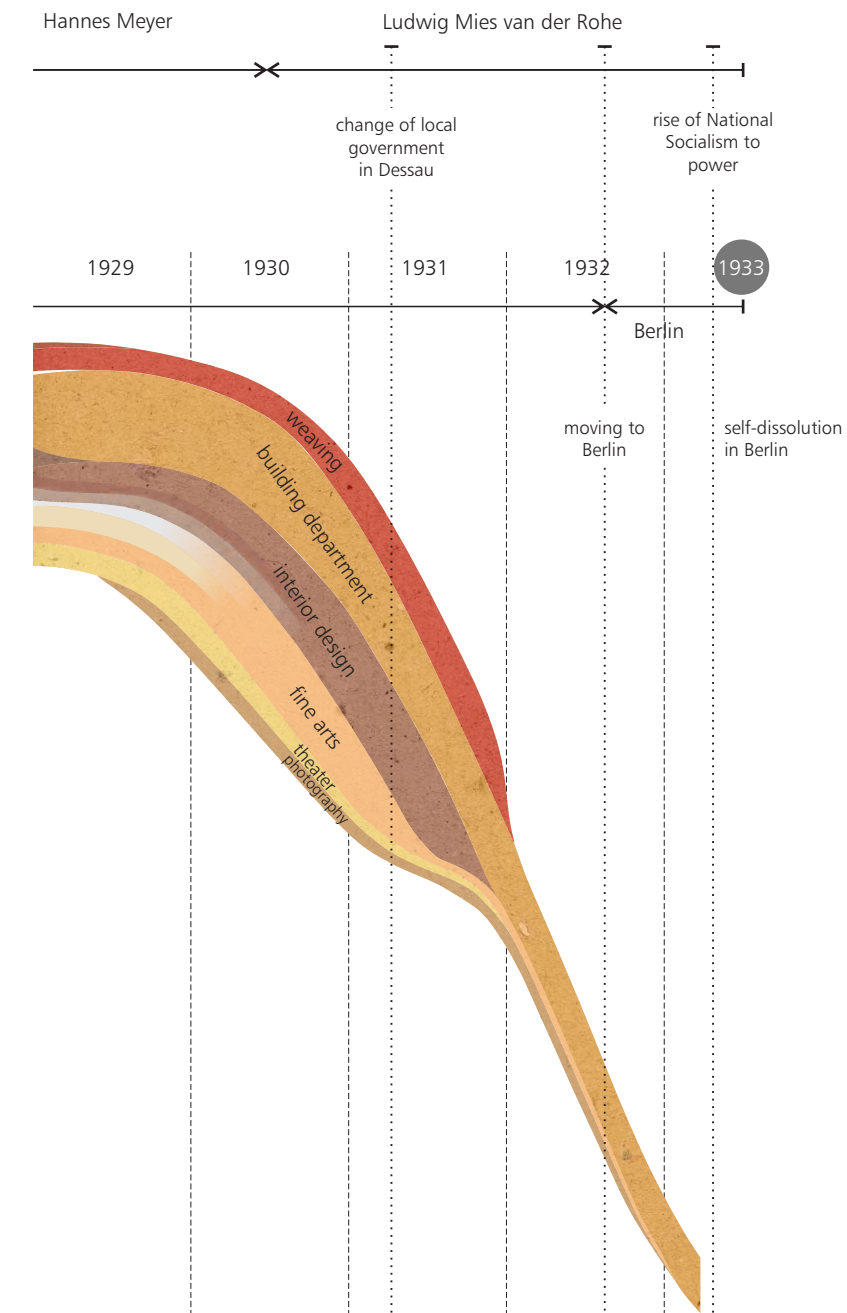
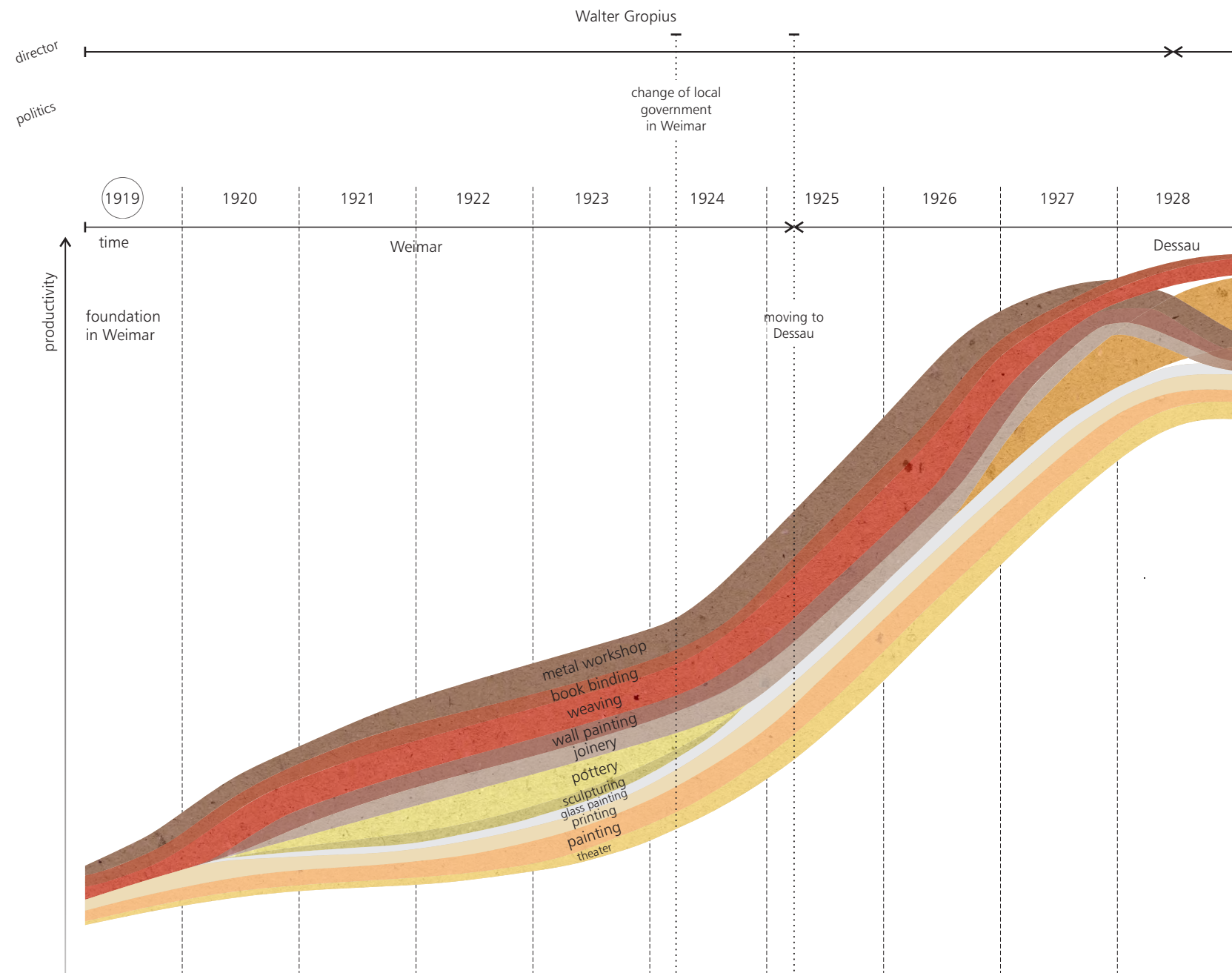
Stone and wood Sculpturing

Oskar Schlemmer became after Richard Engelmann the head of stone carving and from 1922 even woodcarving as "form master". In these workshops were educated sculptors, masons and plasterers. After moving to Dessau no sculpturing workshop was reopened.²

Textile workshop

The textile workshop, called at Bauhaus "weaving", was one of the profiled workshops and was with an average of 15 to 20 students well ahead of the carpentry, the metal workshop and the wall painting workshop. Helene Börner was the head of workshop in 1919-1925 and presented the Bauhaus with her own looms. The responsibility was in the hands of the "form master" Johannes Itten (1920/1921) and Georg Muche (1921/1927), then the

² Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 87-126



range of teaching over time by infographic created at Dessau Institute of Architecture

Bauhaus graduates Gunta Stölzl (1925/1931), Anni Albers (1931) and Otti Berger (1931/1932) and lastly in 1932 Lilly Reich.

Joinery

No other workshop has such a lasting impression of the Bauhaus as the joinery workshop. Furniture of Bauhaus became an epochal expression with design classics as bar stool (1922) or functionalist steel furniture (1926) by Marcel Breuer.

Metal workshop

The metal workshop was one of the first workshops. It proved to be one of the profile forming workshops, where the structural and content changes of the Bauhaus education can be comprehended.

Theater

Construction and stage were the focus of the Bauhaus concept presented in the discussion about the teaching scheme of the Bauhaus by Paul Klee in 1922. Dance, music, theater, pantomime, performance, space, light and sound experience - teamwork and a new working and living community at the Bauhaus were a part of the continuing vision of the unity of art.

Architectural/ Building Theory

The architecture of the Bauhaus still stands in the center of reception of the Bauhaus. From 1919 Gropius organized architecture courses, but first in Dessau from 1927 began the architecture education under the lead of Hannes Meyer. Buildings as Haus am Horn, Masters' Houses, numerous buildings in the Siedlung Dessau-Törten and the Federal School in Bernau or others belong to points of interest to the present day.¹











Photography

Only in 1929, after the school existed already for ten years was photography

¹ Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 137-202

later places of work of former Bauhaus teachers network that helped Bauhaus to extend its legacy

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scheme of several places of work of former Bauhaus teachers		Holland	Soviet Union	Germany			France	United Kingdom	Mexico
		Amsterdam printing company	Moscow WASI	Berlin stage designer	Akademie Breslau	Düsseldorf Akademie	Berlin`s Vereinigte Staatsschulen	Paris living-room studio	London Isokon group
	Marcel Breuer 1902– 1981 architect designer							(1935-1937) ¹	
	Walter Gropius 1883–1969 architect							(1934-1937) ³	
	László Moholy-Nagy 1895–1946 painter photographer	(1933-1935) ⁶		(1928-1933) ⁷				(1935-1937) ⁸	
	Ludwig Hilberseimer 1885–1967 architect urban planner								
	Ludwig Mies van der Rohe 1886 – 1969 architect								
	Paul Klee 1879 – 1940 painter				(1931-1933) ¹²				
	Oskar Schlemmer 1888 – 1943 painter sculptor designer choreographer				(1929-1932) ¹³	(1932-1933) ¹⁴			
	Josef Albers 1888 – 1976 painter								
	Wassily Kandinsky 1866 – 1944 painter						(1933-1944) ¹⁷		
	Hannes Meyer 1889 – 1954 architect		(1930-1936) ¹⁸						(1939-1941) ¹⁹

*¹ New Bauhaus Chicago (1937-1938) became later School of Design (1939-1944) became later Institute of Design(1944-1949)
 *² Chicago's Armour Institute of Technology became later Illinois Institute of Technology

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United States of America					
Black Mountain College	Yale University	New Bauhaus Chicago* ¹	Illinois Institute of Technology* ²	Harvard Graduate School of Design	Massachusetts Institute of Technology
				(1937-1946) ²	
		(1937-1946) ⁹		(1937-1952) ⁴	at the end of his career ⁵
			(1938-1967) ¹⁰		
			(1938-1958) ¹¹		
(1933-1949) ¹⁵	(1950-1958) ¹⁶				

scheme showing dissemination of several former Bauhaus teachers ensuring spreading of the school ideas

firmly integrated into the curriculum and as a workshop in one of the Bauhaus departments.

Fine arts

At the Bauhaus was until 1927 no place for the training of fine arts and teachers appointed by Walter Gropius were mainly painters. This changed with opening of Seminar for free sculptural and scenic design and free painting classes of Paul Klee and Wassily Kandinsky.¹

Directors

Walter Gropius (1883 - 1969) was the director from foundation in Weimar until he abandoned his position in 1928. Swiss architect Hannes Meyer (1889–1954) took over on April the 1st 1928 and continued to stress out the significance of mass-producible design and removed elements of curriculum he considered to be only formalist in nature. Among others one of his preferred priorities was the social aspect and public good of architecture and design before the luxuriousness. Subjects as advertising or photography kept on gaining on importance. Under the hardship of newly risen right-wing municipal government in Dessau, Hannes Meyer resigned his position in 1930 and left with several students to the Soviet Union.

His replacement was architect Ludwig Mies van der Rohe (1886 – 1969). The school was shortly closed and reopened in autumn 1930. He again rearranged the school curriculum and elevated significance of architecture.

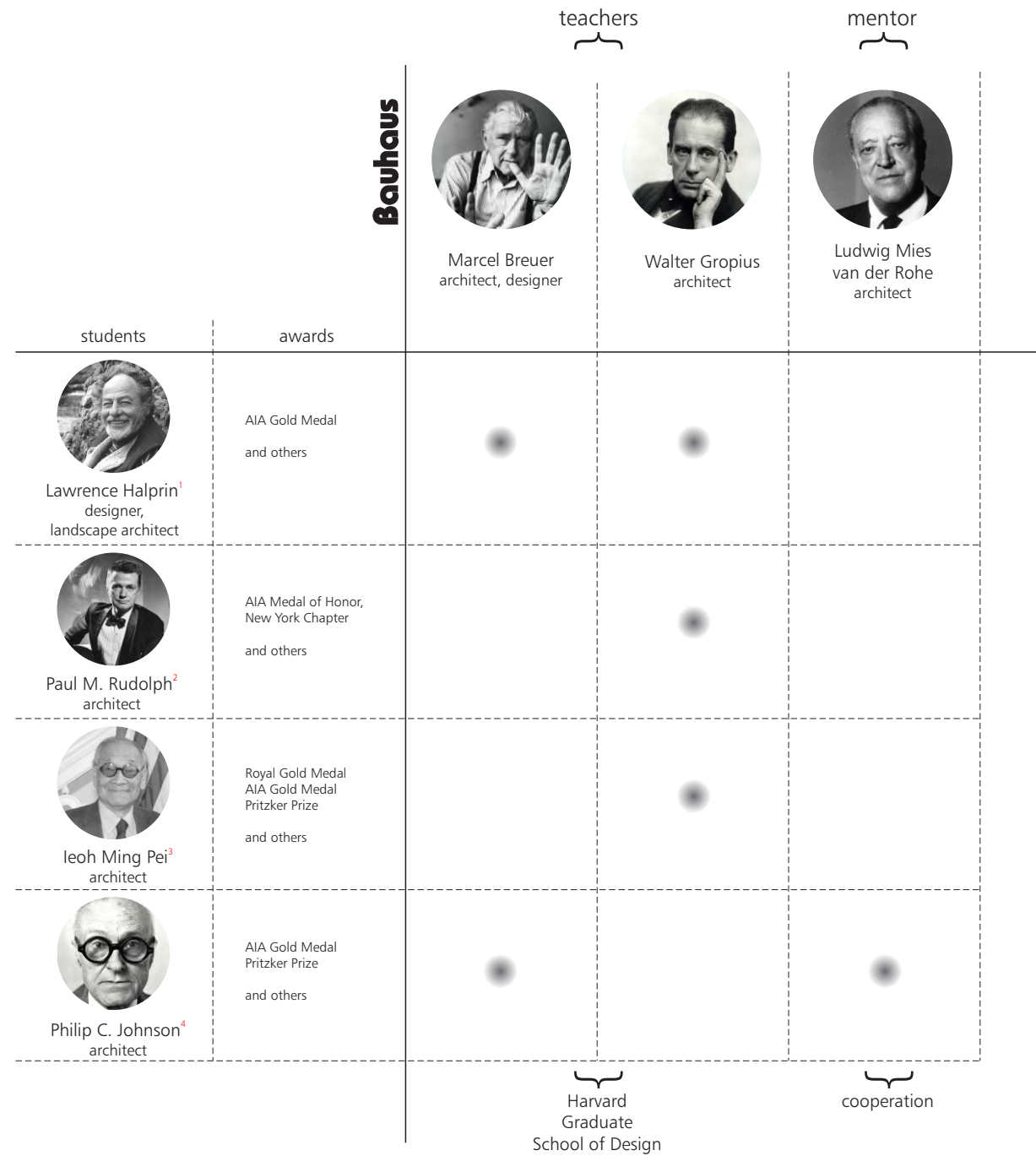
Mies van der Rohe had tried to keep the Bauhaus politically neutral. In the final phase of the Bauhaus in Dessau, the relationship with the city reached the absolute depth point. In May 1932 country election led in Anhalt to downfall of the government, which had previously defended preservation of Bauhaus and the rights won the majority. The school relocated to Berlin and after short time was the Bauhaus self - dissolved.²

¹ Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 205-224

² Siebenbrodt, Michael; Schöbe, Lutz (2009): „Bauhaus 1919-1933“, page 12-36

scheme of former Bauhaus teachers and their later students and collaborations

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After the closure

After closing the school, many of the important Bauhaus pupils and teachers left Germany. And it was later in the United States where some of them continued in their career. Among others it were Walter Gropius and Marcel Breuer at Harvard Graduate School of Design or László Moholy-Nagy who founded the school New Bauhaus in Chicago.

White City of Tel Aviv

Additional legacy is located in Tel Aviv, Israel where from the 1930s around 4,000 Bauhaus inspired buildings were built by German Jewish architects who immigrated to then British mandated territory (Palestine). The White City of Tel Aviv became a World Cultural Heritage site in 2003.¹

Bauhaus legacy in Dessau-Roßlau

Directly in Dessau are buildings attributed directly to Bauhaus movement or influenced by it.

1. Bauhaus, main building - by Walter Gropius (1925-26)
Walter Gropius in cooperation with Carl Fieger, Ernst Neufert and others designed the building on behalf of the City of Dessau.
2. Masters' Houses - by Walter Gropius (1925-26)
City of Dessau commissioned Walter Gropius with the construction of three semidetached houses for the Bauhaus masters and a detached house for its director.
3. Employment office - by Walter Gropius (1927-29)
One-storey circular building with a glazed shed roof open to the public and adjoining two-storey administration building.²

¹ Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) (2015):

„Tel Aviv White City: Modernist buildings in Israel and Germany“, page 12

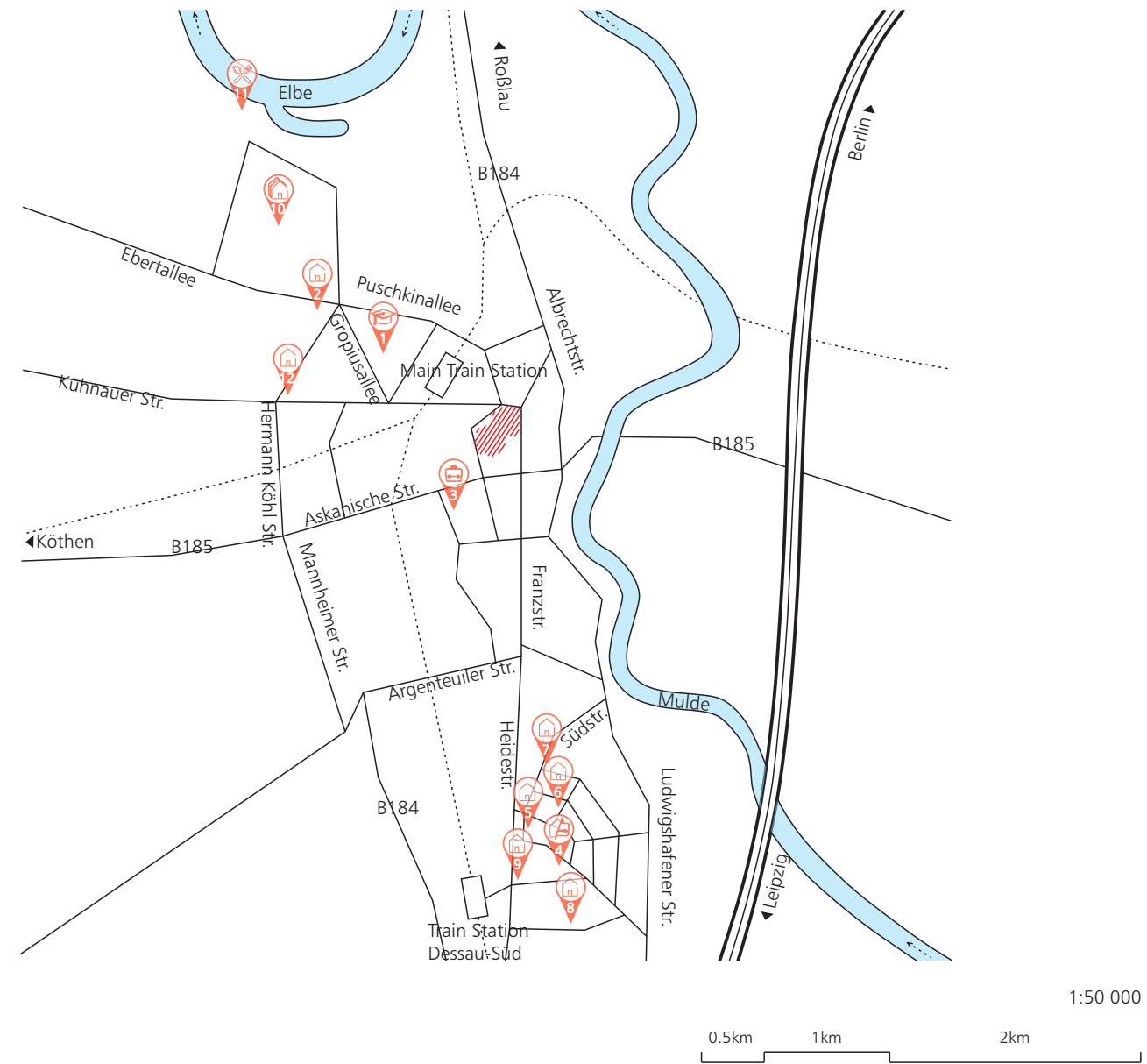
² exhibition materials Bauhaus Dessau

4. Konsum building - by Walter Gropius (1928)
The four-storey residential and office building with a large shop, later run by a local cooperative society, forms the heart of the settlement. Today it houses a permanent exhibition devoted to the history of the former experimental site.
5. Anton house (Törten housing estate) - by Walter Gropius (1926-28)
Formerly 314 single family units of three different types combined in groups. The 350–450m² gardens promoted self-sufficiency. There is only one house largely preserved in its original state on the otherwise significantly modified Bauhaus settlement.
6. Steel house – by Georg Muche, Richard Paulick (1926-27)
Experimental building constructed from prefabricated steel plates.
7. Fieger house – by Carl Fieger (1927)
Prototype of a small private house with flexible room partitions built along rational lines, with furniture designed specifically for the house.
8. Balcony access houses – by Hannes Meyer (1928-30)
Five three-storey apartment buildings with a total of 90 small and functionally optimized housing units (floor space 48m²), rented out to workers and employees.
9. Dewog settlement – by Richard Paulick, Hans Waloschek (1930-31)
Four-storey residential buildings on the Heidestraße. Today, their original modern look has been almost completely obstructed by major redevelopment.
10. Knarrberg settlement – by Leopold Fischer, Leberecht Migge (1926-28)
One of the first housing and self-sufficiency colonies in Germany, conceived along ecological principles by the Anhalt settlers association. Its construction rivalled that of the Törten settlement.
11. Kornhaus restaurant – by Carl Fieger (1929-30)
Scenic restaurant with terrace situated on the banks of the river Elbe.
12. Naurath and Hahn houses – by Richard Paulick (1928)
Two private residences in the classical modernist style.³

³ exhibition materials Bauhaus Dessau

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scheme of Bauhaus buildings in Dessau



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4



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Objects in Bauhaus Dessau Foundation

More than 40 years separate us from the closure and re-discovery of this school. In year 1976 the Bauhaus buildings were renovated and later reinstated as a scientific and cultural centre reflecting the 50th anniversary of their construction. Later in reunited Germany the preparation for a revival of the public perception of the significance of the Bauhaus legacy in Dessau was ensured by establishing of a foundation with its own collection.

Later development brought restoration and renovation of more buildings which were opened to the public. The foundation in Dessau is enlarging its collection inventory with aim of presentation to the national and international professional and general public.¹

To this day the collection of Bauhaus Dessau Foundation contains more than 40 000 catalogued objects, what means that it is after the Bauhaus Archive Berlin second largest collection. This collection contains various items presenting the Bauhaus history in all its diversity. Design, architecture, graphics, film, theatre and photography.²

All these objects are works of the students that took part in the preliminary course, all different workshops or other classes as advertisement department, theatre or building department. The collection contains a particular interesting international stock of furniture.

Regarding the material of objects – it spans from paper, textile, leather, metal to wood. The aim is to present these objects in groups according specific environmental requirements.³

Conceptually, there will always be a mixture of all materials, due to the

¹ C4C Team (2015): „competition brief“, page 73

² C4C Team (2015): „competition brief“, page 25

³ C4C Team (2015): „competition brief“, page 101



1 Bauhaus identity card for Alma Else Engemann; 1931; 11 x 8 cm



2 landscape; Franz Ehrlich; 1927; 42,3 x 61,7cm



3 invitation to Bauhaus Carnival on March 1; Franz Ehrlich; 1930; 29,8 x 14,9cm



4 semester graduation exhibition winter 1928; collage "Sie brauchen das Bauhaus"; Grete Reichardt; 1928; 69,4 x 51,2 cm



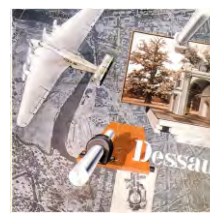
5 grotesque font, exercise from the lecture with Joost Schmidt; Rossig Reinhold; 1929; 46x61cm



6 three-storey terraced houses, detail, cutaway view of stairwell, plan and axonometry; Reinhold Rossig; 1930; 19,8 x 29,1 cm



7,8 Bauhaus advertisement, 1928 compared to a poster advertising Obama's visit to Berlin in 2008



9 Brochure for the city of Dessau; Joost Schmidt; 1931; 23,5x23 cm

thematic exhibition concept, so room-specific environmental differentiation does not appear expedient. However, within the overall building services system, it should be possible to create different environmental zones to meet special requirements, using room-specific control when needed.¹

Dimensions range from several centimeters (graphics, photographs, paper works of preliminary course) to medium sized objects (sculptures and textile works) to relatively large in size (furniture).

The Bauhaus Dessau Museum seeks a dynamic approach to the collection. In one - to two - year intervals new thematic issues should be picked up and supported by objects from the collection selectively enhanced by outstanding loans, especially in exchange with Weimar and Berlin. The presentation of the permanent collection should also provide new offers, just like the temporary exhibitions.

Exhibition concept

Bauhaus legacy can be translated into six main topics. They are organized in the following way: "Inventor space - Factory - Department store - Museum - School - Clubhouse". The spatial metaphor of the Museum refers to these topics or topoi (Greek τόπος - "place", pl. topoi), which formed the institution in Dessau. This issue is discussed in chapter "Exhibition rooms concept".

These six topoi provide us even with a sense of understanding of the Bauhaus buildings in Dessau. The Directorhaus (one of Masters' Houses) was built as showcase of modern living - reference to topos Department store, the Törten housing estate as an experimental housing - reference to topos Inventor space, and restaurant "Kornhaus" is a reminder of entertainment culture of 1920s - as topos Clubhouse.²

¹ C4C Team (2015): „competition brief“, page 101

² C4C Team (2015): „competition brief“, page 79



10 color wheel, exercise from the teaching of the theory of color with Wassily Kandinsky; Reinhold Rossig; 1929; 20,9 x 29,7 cm



11 plastic ball, material exercise from the preliminary course; Josef Albers; 1926/1927; diameter 11cm



12 settlement Dessau-Törten; model Type SieTö I; draft 1926 - model 1978; 20x38,5x27 cm



13 glassware; Wilhelm Wagenfeld; manufactured by Jenaer Glaswerk Schott & Gen.; 1931; teapot height/diameter 14 cm/16,8cm, teacup height/diameter 4cm/11cm, saucer height/diameter 1,4cm/16,3cm, plate height/diameter 1,8cm/20cm, sugar bowl height/diameter 4cm/9,6cm, milk bowl height/diameter 4,5cm/9,6 cm



14 teapot; small version as a tea extract pot (model for mass production); Theodor Bogler; 1923; height 7,5cm, diameter 7 cm



15 table lamps; Friedrich Karl Engemann; 1930; middle one - height 45 cm, diameter of the foot 17 cm, diameter of glassholder 26,5 cm

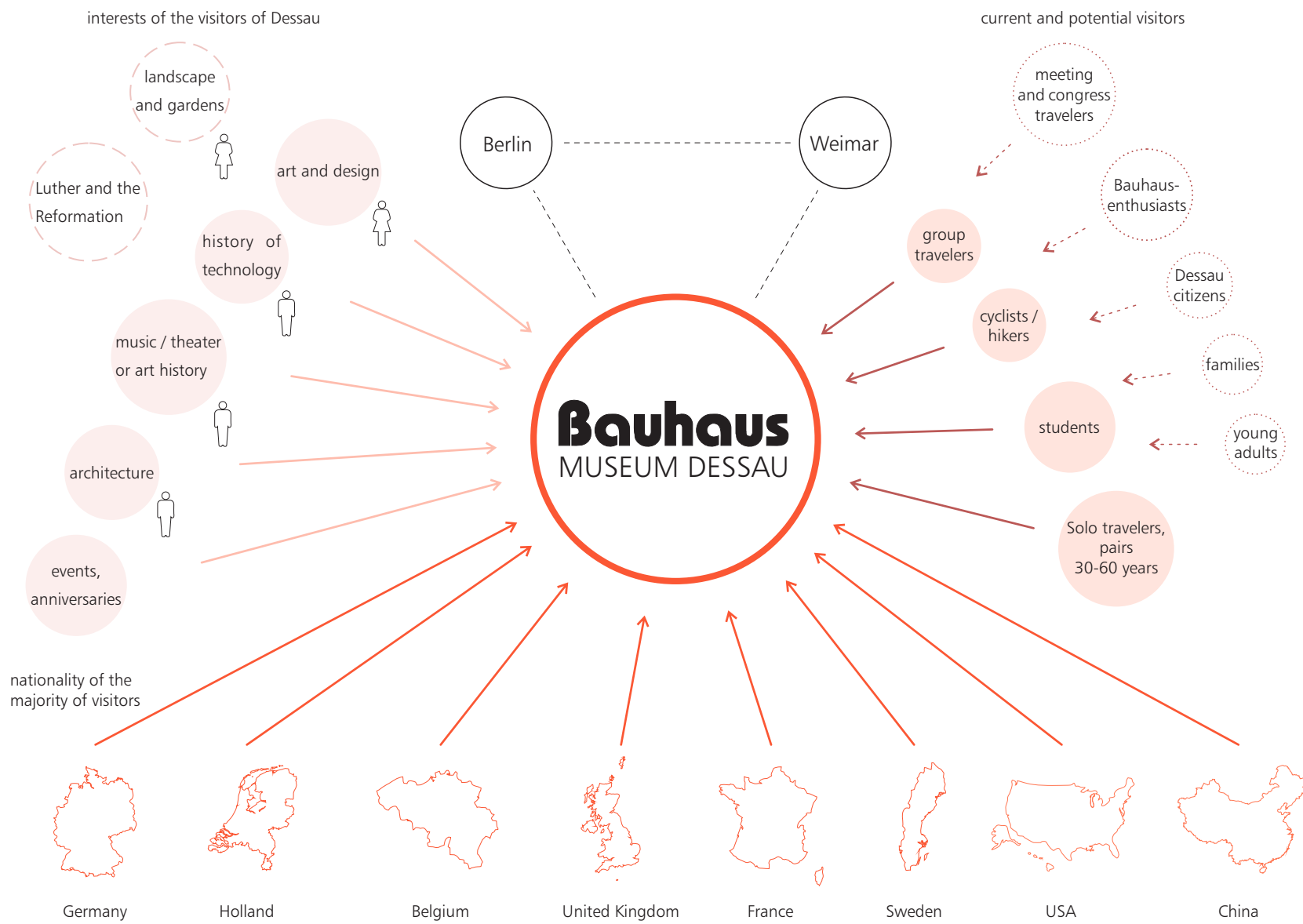


16 bedroom furniture; Carl Fieger, carpentry workshop Bauhaus Dessau; 1927; Beds 64,2 x 95 x 199 cm, bedside tables 64,3 x 49,7 x 37,3 cm, stool 53,5 x 55,5 x 41 cm, dresser 74,8 x 82,9 x 53,7 cm



17,18 Marcel Breuer, lath chair, ti 1a, 1922 compared to Jerzy Seymour, Workshop Chair, 2009

scheme of existing and potential Bauhaus interested visitors



Marketing concept for the Bauhaus Dessau Foundation

Marketing concept was elaborated by dwif-Consulting and Stephanie Schmidt.Kommunikation. Based on the findings concerning visiting potentials and structures took place a quantification of the expected future visitor numbers. Current number of visitors on the subject of Bauhaus Dessau in total: Round 120 000 per year (paying and non-paying visitors in Bauhaus, Masters' Houses, other buildings, participants at events, etc.). For the estimation of potential visitors are four guest groups relevant:

1. population of Germany (overnight guests and day visitors incl. excursions, group business) - 100,000 visitors per year
2. foreign guests – 35 000 visitors per year
3. cyclists Elbe cycleway – 20 000 visitors per year
4. student groups - 10,000 visitors per year

Data situation

- Group 1: Potential of representative survey well quantified
- Group 2: no quantification possible only qualitative assessment
- Group 3: survey of cyclists enables rough approximation
- Group 4: potential not exhausted

The visitor's potential is not mathematically-statistically derivable. Estimated total potential is then 165 000 visitors per year (+38% in comparison to 120 000). Under strict compliance of the principle of commercial prudenc's is assumed that this potential cannot be tapped immediately. Therefore, a reduction to approximately 150 000 visitors per year is considered realistic. These figures are also the basis for the calculation of profitability for the new visitor and exhibition centre.¹

¹ dwif-Consulting, Stephanie Schmidt. Kommunikation (2011):Marketingkonzept für die Stiftung Bauhaus Dessau, page 3-11

The typical Bauhaus interested (adult German citizens over 18 years)

- ... Is Professional academics or student
- ... Belongs to no particular age group, but is between 18 and 70 years old
- ... Has an average monthly household income from 3,000 euros
- ... Is very interested in art and design (more women), landscape and gardens (more women), architecture (more men), music / theater or art history (more men)
- ... Connects to the Bauhaus personalities Paul Klee, Wassily Kanddinsky and Walter Gropius; rarely Lyonel Feininger, Oskar Schlemmer, Ludwig Mies van der Rohe (special interest group)
- ... Interested in (more on the edge) for Luther and the Reformation
- ... Comes mainly from North Rhine-Westphalia, Bavaria, Thuringia, Saxony, Saxony-Anhalt and Berlin
- ... Is interested in a combination trip with Berlin and Weimar

For the future attracting and addressing of the visitors should be applied these strategies and principles:

- Differentiation:** activities for existing and new visitors
- Rejuvenation:** to open up to new international design audience
- Active source marketing:** domestic and abroad with focus on main source markets
- Comfort & Service Quality:** incl. accessibility (demographic change)
- Sustainability:** target group of LOHAS (Lifestyle of Health & Sustainability)
- Combination deals:** Dessau - Weimar - Berlin; topics combinations (Dessau; Region)²

These recommendations (such as cooperation with Berlin and Weimar) are incorporated in the competition brief. Their impact on the architecture of the building is mainly in the introduced spatial program that emphasizes the versatility of the object.

² dwif-Consulting, Stephanie Schmidt. Kommunikation (2011):Marketingkonzept für die Stiftung Bauhaus Dessau, page 16-17

Competition



Competition brief

As a basis for the elaboration of a design proposal was published a competition brief. All the regulations, requirements and important relations are summarized in overall eight chapters (Dessau and the Bauhaus, Occasion and Objective, The Bauhaus Dessau Foundation, The Competition Site, Purpose, Usage and spatial program of Bauhaus Museum Dessau, Technical Requirements, Procedure).

Project goal

The new Bauhaus Museum intends to highlight the actuality of the ideas and program, the vitality of the heritage and the importance of the Bauhaus for the contemporary time.

The Museum should equally have references to the city park such as the city centre. An essential contribution for the development of the city is made by linking park, museum and city.

Urban planning objectives

The equally attractive use of the Museum and the city park offers the potential for mutual appreciation, the possibility of becoming a new source of inspiration for the urban area and generate complementary benefits for the Museum, the green and urban space.¹

This includes in particular the axis of Stadtpark - Town Hall with the Ratsgasse, the axis of Kavalierstraße in this part of the city as well as the Antoinettenstraße with the axis of the Stadtpark – Main train station. In this context, attention is drawn to the junction of the passage of the Town Hall

¹ C4C Team (2015): „competition brief“, page 69

Centre, which comes to the minor road from the historic town hall, opposite the main entrance to the Stadtpark.

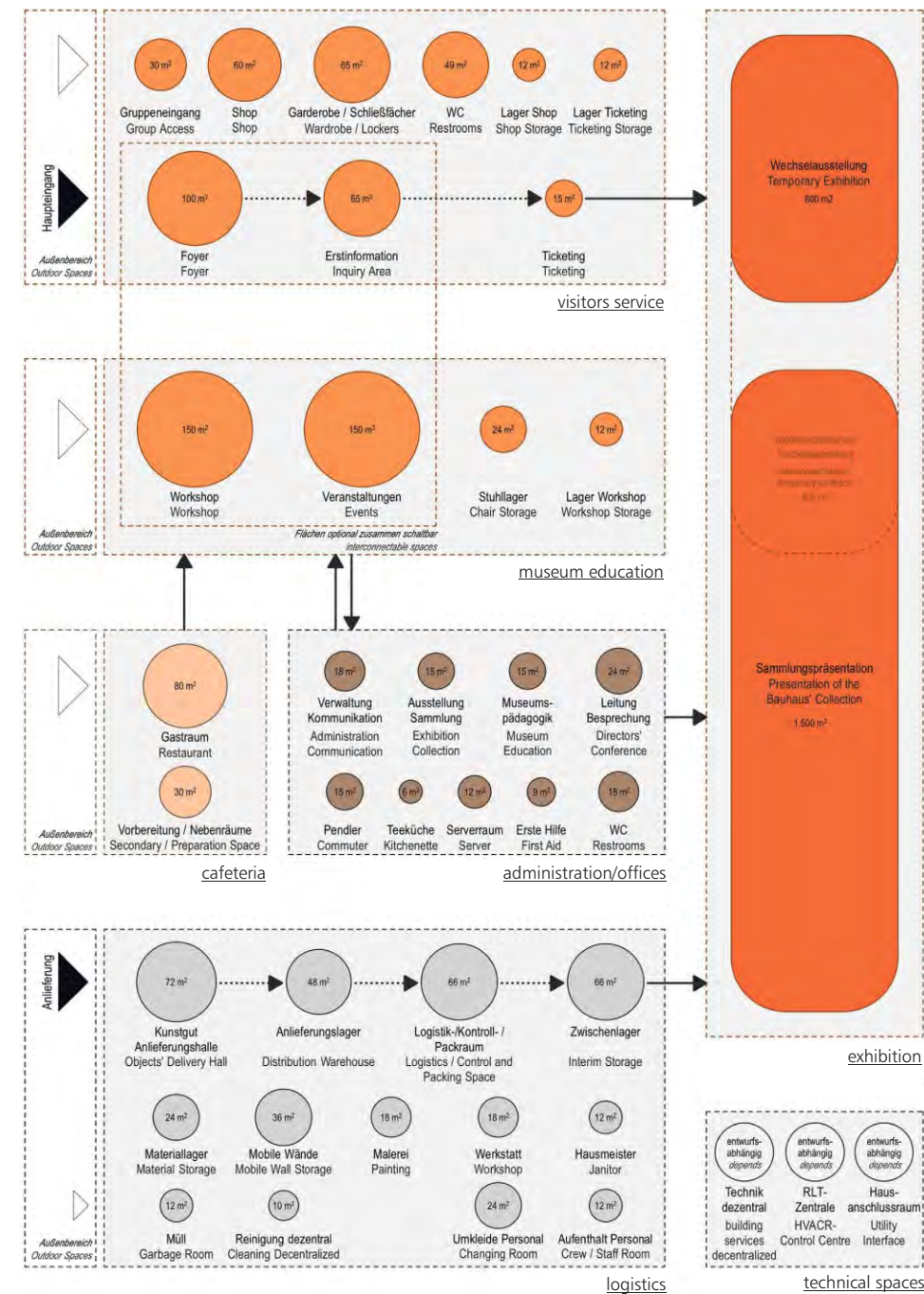
Key aspects are the respectful treatment of the functions of the Stadtpark and its users, the strengthening of the city centre, a worthy use of the places of commemoration and remembrance in the vicinity, a welcoming and safe access for all and conscious approach regarding the feeling of security of the citizens.

Another task is to link the different functional areas within the city. To expand and strengthen relationships of certain foot and cycleway paths and "hubs" respectively. New Bauhaus Museum is at this point centrally located and within the structure of all buildings of the Bauhaus-forming period as a kind of a node.

This Museum is understood - from the point of view of the public - from the outset as a place of aesthetic education and cultural production, as a lively contribution to the urban culture of Dessau-Roßlaus in collaboration with the municipal cultural and educational institutions.

The construction of the Bauhaus museum Dessau aims to strengthen and enhance the tourist, cultural and architectural appeal and attraction of the Dessau city centre. The connection of the new building with the existing conditions, as well as other urban development in the context of the site provides opportunities for the creation of an attractive urban ensemble which satisfies the special design and functional requirements of the Bauhaus museum Dessau and the city centre equally well.²

² C4C Team (2015): „competition brief“, page 71-73



1 program requirements defined in the competition brief

Spatial program

Operation diagram includes the expectations of the competition brief concerning the size, equipment, lighting and working places. Functions included in the spatial program are “wrapped” under the main operational areas of Visitors service, Museum Education, Exhibition, Administration/office spaces, Cafeteria and terrace, Logistic and Outdoor facilities.

Visitors service

Spacious areas with entrance and foyer, inquiries and ticketing are required for the visitors service. These are areas that do not necessarily relate to closed spaces. Also the requirements of the desired opening for events outside the regular opening hours of the Museum must be observed. The transparency to the outside is not defined. The entrance represents the first contact point between visitors and collection. As a ticket-free zone, it works in connection with the inquiry area as a buffer zone. This zone should control visitor's traffic to shop, meeting facilities, toilet, lockers and if necessary also to the cafeteria. An additional entrance for groups and connection to the bus area at the Friedrichstraße is expected. A separate staff entrance depends on the location and the organization of administration and logistics in the building. Inquiry area is placed before the access control and should open to the foyer and provide introductory information. Ticketing and ticket storage can stand freely in the foyer depending on the design proposal. Shop and shop storage - should be accessible outside the museum's opening hours. Daylight is required.

Museum Education

Workshop space, one of the most important spaces, should be divisible into¹

¹ C4C Team (2015): „competition brief“, page 93-97

two or three smaller areas. Access to the workshop material storage and wardrobe and toilet area is required. Workshop area should be accessible outside the museum opening hours. Event space including podium should be connected to the foyer, workshop and the group entrance, closeness to gastronomy is recommended. Chair storage will serve as the storage mostly for event space, but eventually for the foyer and inquiry area.

Exhibition

Three guiding principles connect the historical achievements of the Bauhaus Dessau with the requirements of an exhibition concept that is related to a contemporary society - local networking, international contextualization and exhibiting as publishing. An area of 2100m² is required for the exhibitions. A basic structure of 1500m² of collection exhibition and 600m² of rotating exhibition is presumed. In special cases, it should be capable of being used all together. An area of 400m² should be switchable - it should be possible to attach it to the temporary exhibition in order to achieve the international exhibition format of 1000m². The spatial structure and relationship of spaces and themes should be substantially determined by the architectural design.

Administration/office spaces

The Museum itself has five offices intended for the management of the museum. Internal and external curators, the museum director, the museum education and project management are provided with the assistance of the administration. A tea kitchen and a computer/server room with a workplace should be included.²

² C4C Team (2015): „competition brief“, page 95-99



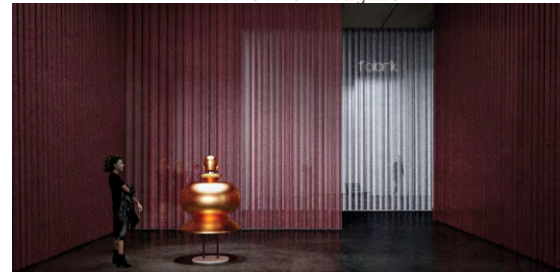
1 site plan



2 spatial depiction of the design proposal



3 view from Ratsgasse



4 view of the exhibition space

Competition winning proposals

In the competition to design a new home for the Bauhaus Museum Dessau, the jury received 831 entries and awarded four winners, two with first prize. These two teams - from Barcelona - architects Gonzalez Hinz Zabala and New York - architects Young&Ayata have been awarded joint first place. The two winning proposals introduced completely different architectural concept. Further negotiations had to take place and architecture studio Gonzalez Hinz Zabala is expected to build the Bauhaus Museum.¹

Gonzalez Hinz Zabala, Barcelona (Spain)

Excerpt from written jury assessment

The glass envelope of the entire building provides a maximum of curatorial freedom for staging. The shell takes up the original Bauhaus intention – to be an open school in terms of both functionality and display capabilities in all spaces. The contribution of the design is that the museum’s building is an instrument of expression of activity and productivity – creativity and social interaction.²

Description: The design proposal submitted by Gonzalez Hinz Zabala is a prismatic “box in a box” volume. Architects decided to respect buildings down the Kavalierstraße and position the volume in alignment with them. However, the proposal is set back in comparison with former historical structures. The “inner box” is elevated and the glass facade, or in other words the “outer box” with its visual transparency maintains communication between the Stadtpark on one side and the city on the other. This solution allows people passing by to be included into the happening in the museum. The northern part of the building toward the Friedrichstraße in front of the Main Post Office serves as logistics area. There are two main entrances in the middle of the volume, one from the Stadtpark and an opposite one on the pavement at Kavalierstraße.³

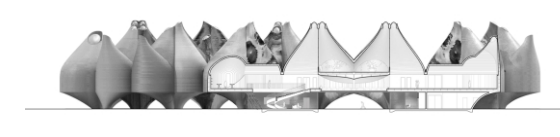
¹ announcement of Stiftung Bauhaus Dessau

² press announcement, page 2

³ description by architects Gonzalez Hinz Zabala



5 site plan



6 spatial depiction of the design proposal



7 view from Ratsgasse



8 view of the exhibition space

Young & Ayata, LLC, Brooklyn, New York (USA)

Excerpt from written jury assessment

The building conceives of itself as an open collective of “vessels”. It is a stand-alone structural shell that will become a new point of reference in its heterogeneous urban environment. The design concept boasts a suggestive power and has a high recognition value. References to various Bauhaus approaches have been formulated in a conclusive manner. The design proposal created a powerful, daring and fascinating 21st century architectonic testimonial that not only holds its own in the global competition, but clearly leaves its own mark.¹

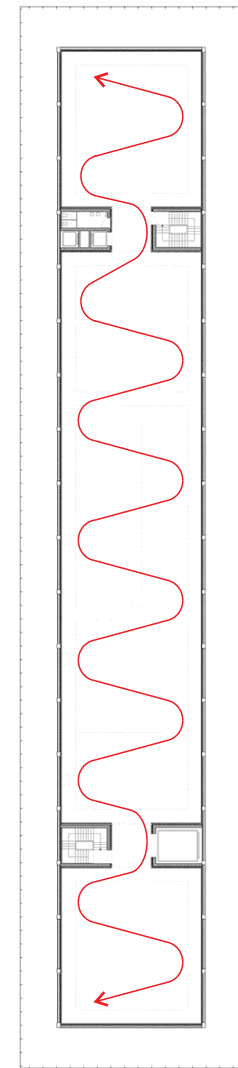
Description: The design proposal introduced by the architecture duo Young&Ayata presents a “collection of individual masses” or as architects call them vessels placed on a grid.

Base of each of these volumes is attached to each other and create arch like passage between the Stadtpark and the city. All the volumes are touching approximately in the middle and create a single floor. This passage is enriched with a small open space, which is surrounded by interconnected multicoloured volumes.

All these volumes have an opening towards the sky with a “diffuser” allowing the sunlight to illuminate the exhibition spaces. The main entrance to the building lies on a pathway connecting corner at Friedrichstraße and Kavalierstraße with Stadtpark. The museum shop lies opposite the main entrance and is accessed from the same pathway. The northern part of the building toward the Friedrichstraße in front of the Main Post Office has enlarged base and serves as logistics area.²

¹ press announcement, page 4

² description by architects Young & Ayata, page 1-3



1 view of the exhibition space and free movement of visitors

Design proposal - architectural concept of Gonzalez Hinz Zabala, Barcelona (Spain)

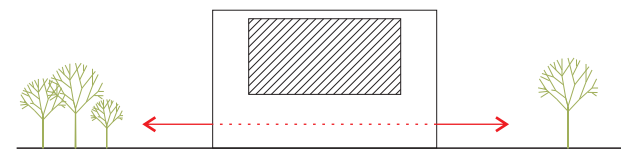
The “inner box” is a black beam structure supported on both ends by two “boxes” containing staircase, technical spaces and some functions of visitors service.

The space for temporary exhibitions is placed under the inner “black box”. The glass “outer box” sets this temporary exhibition space in a dialogue with the immediate surrounding and allows the transparent facade to be changed with every new exhibition. The logistics and administration spaces defined in the competition brief are located hidden behind the supporter facing the north of the “inner box”. Museum education is located on the opposite side hidden behind the second supporter and facing the fountain in the park.

The separation of the northern facade from the area intended for logistics is solved by metal framing that follows the grid of the main facade. In the area close to the southern facade are situated the museum education spaces. Here, the grid of the facade is followed by an arrangement of curtains and mobile partitions. To insure the protection of the objects in temporary exhibition a glass membrane equipped with solar protection is installed alongside of the “outer box”.

The permanent collection is placed upstairs and accessed from the supporters. It is a hermetic and columnless open space. Architects designed a flexible floor to ceiling curtain rail system. Each set of these curtains defines two zones – the central area for objects exhibited in the middle and a corridor space designed for providing information as introductory text, graphics or other two-dimensional materials. This curtain wall system can be reconfigured and allows changes in exhibition space. Exhibition space is illuminated by artificial light.¹

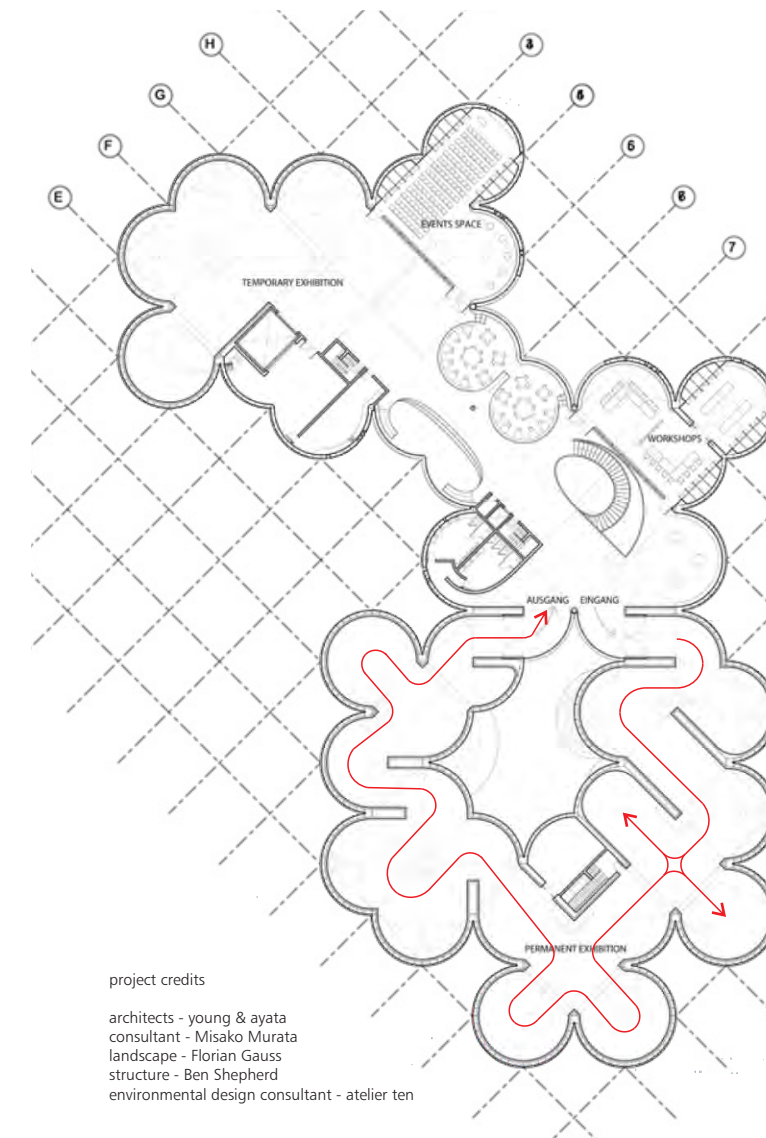
¹ description by architects Gonzalez Hinz Zabala



2 visual transparency between Stadtpark and Kavalierstraße

project credits

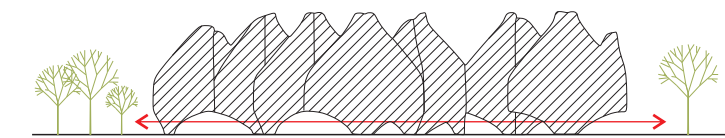
architects - addenda architects s.l.p.
(Gonzalez Hinz Zabala + Sastre Vielba)
landscape - Roser Vives de Delas
material and envelope design - Xmade
climate engineering - Transsolar
curator in art and architecture - Moritz Küng
structural engineer consultant - Manuel Arguijo
model - Gonzalez Modellbau



project credits

architects - young & ayata
consultant - Misako Murata
landscape - Florian Gauss
structure - Ben Shepherd
environmental design consultant - atelier ten

3 view of the exhibition space and programmed movement of visitors



4 interconnecting space between Stadtpark and Kavalierstraße

Design proposal - architectural concept of Young & Ayata, LLC, Brooklyn, New York (USA)

The structure of the building consists of two main systems. The columns hidden in the volumes supporting the concrete slab which creates the base for most of the spaces of the museum - and the load-bearing shell of the volumes, which is created out of timber. The floor is raised above the concrete slab and creates void for all plumbing, electrical and mechanical installation services.

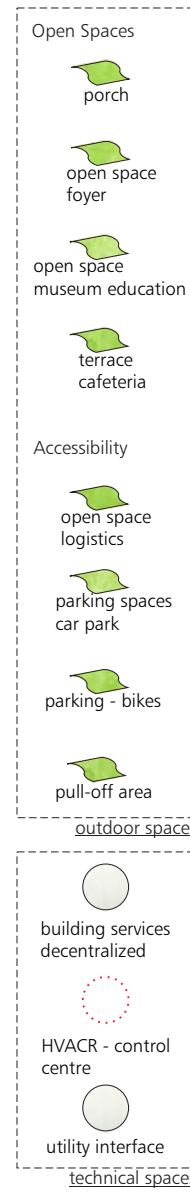
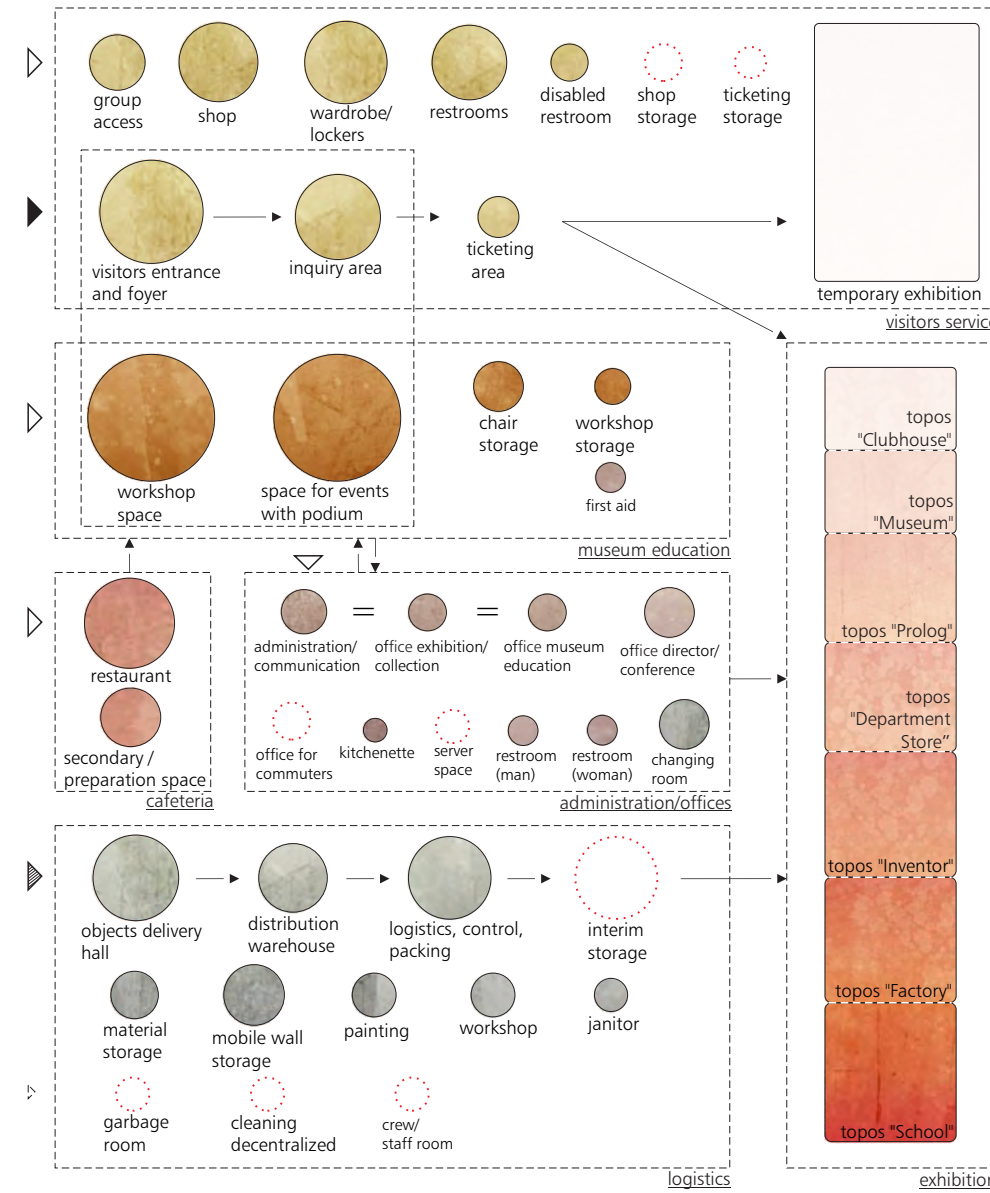
Visitors entering the museum use stairs which lead them to the centre of the main floor - to the inquiry area. This area of the building is connecting other functions defined in the competition brief. Cafeteria with its windows opens towards the junction Friedrichstraße – Kavalierstraße and Stadtpark. Workshop space is adjacent to the entrance and inquiry area. Architects inspired by historical examples decided to introduce an altered enfilade. This part is intended to host permanent exhibition. Visitors are led through predefined continuum of rooms. Space is designed in a circle letting the visitors to enter and leave the exhibition space at the same spot. The temporary exhibition is placed on the other side of the entrance and designed as an open space. Exhibition space is lightened by diffused daylight.

Temporary exhibition space can be used as an extension of event space. The administration and office spaces are located on another level in a mezzanine over the cafeteria.

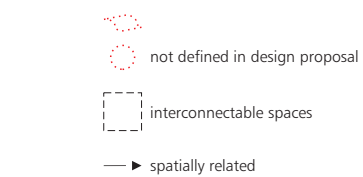
As the material solution of the exterior of the volumes the architects decided to use recycled sintered glass tiles from car windshields. The base for the color solution of the cladding was Bauhaus graphics and textile design which was transferred using digital scan into a modular grid. Every volume has its own distinct color pattern. Architects consider this cladding as an update on the connections between crafts and technology typical for Bauhaus ideology.¹

¹ description by architects Young & Ayata, page 1-3

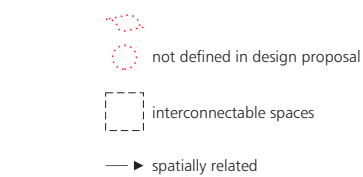
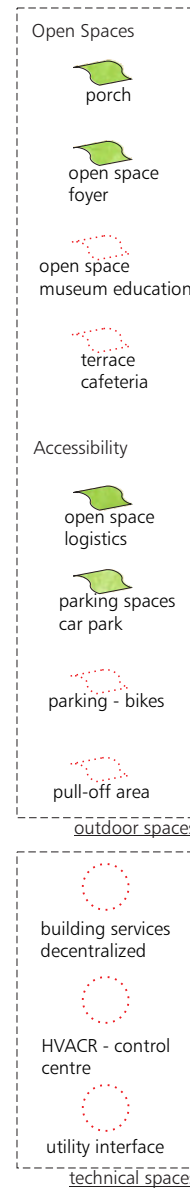
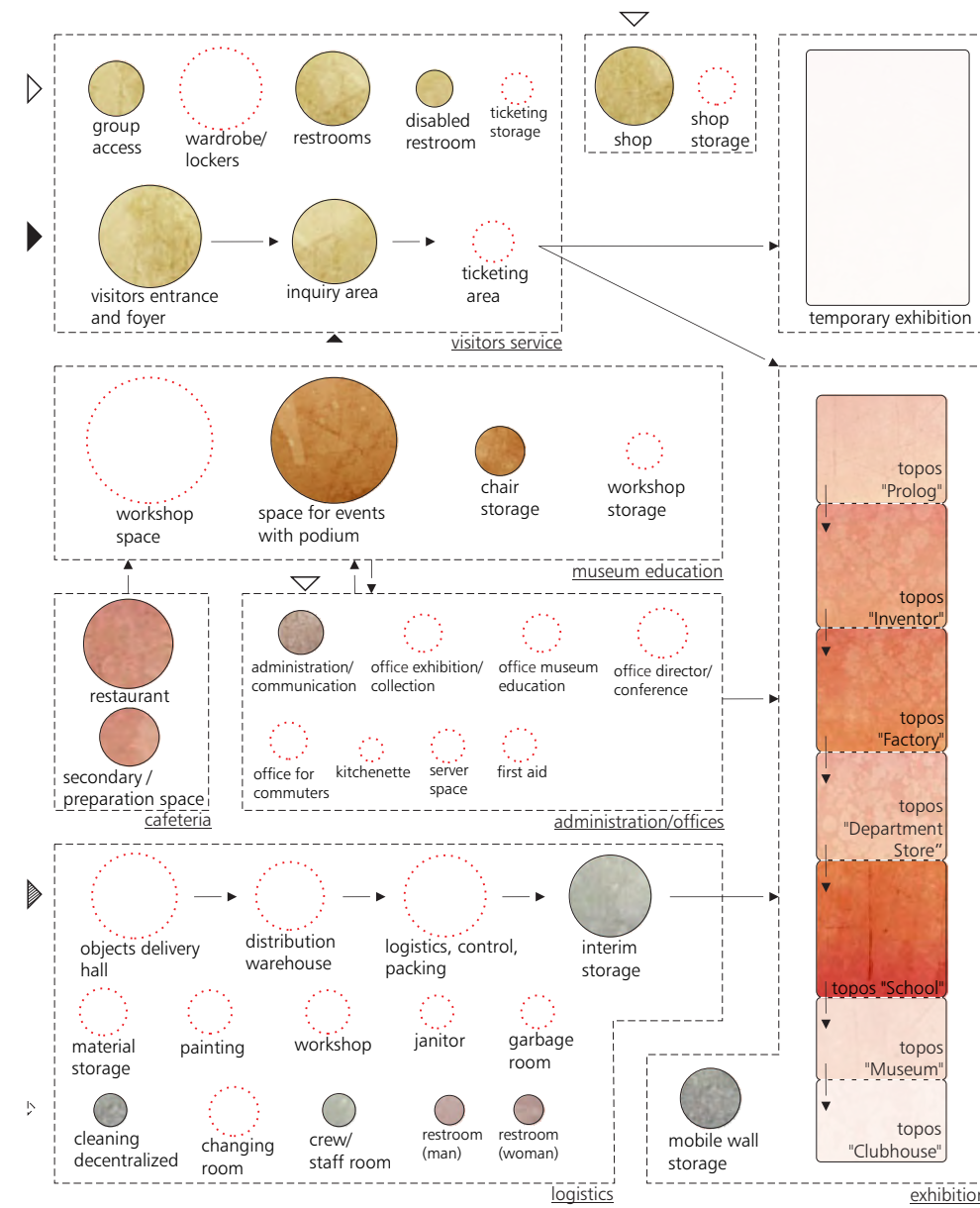
Comparison of the winning design proposals



Gonzalez Hinz Zabala, Barcelona (Spain)



operational diagram of the winning design proposal in comparison with competition expectations



operational diagram of the winning design proposal in comparison with competition expectations

Young & Ayata, LLC, Brooklyn, New York (USA)

Museum as an institution in architecture

Historical development

The Latin word museum (Greek: museion) has had a variety of meanings through centuries. In classical times it signified a temple dedicated to the Muses. Though the Greeks and Romans thought of the museum in different terms from those we use today, the ancient world did possess public collections of objects valued for their aesthetic, historic or religious importance.

The museum idea was barely kept alive in western Europe during the Middle Ages. Churches, cathedrals and monasteries venerated relics and embellished them with gold, silver and jewels, manuscripts in sumptuous metal bindings and rich oriental fabrics. The crusaders brought back art objects to add to these treasuries or to the palace collections of princes and nobles.

The “modern” museum is a product of Renaissance humanism. Two new words appeared in the 16th century to express the museum concept. The gallery (Italian: galleria), a long, grand hall lightened from the side, came to signify an exhibition area for pictures and sculptures. The cabinet (Italian: gabinetto) was usually a square-shaped room filled with stuffed animals, botanical rarities, small works of art such as medallions or statuettes, artifacts, and curiosities - the Germans called it Wunderkammer. Both types of collection rarely were opened to the public and remained the playthings of princes, popes and plutocrats.

The museum began to go public in the late 17th century. Basel opened the first university museum in 1671, and the Ashmolean Museum appeared at Oxford a dozen years later.¹

¹ Alexander Edward P., Alexander Mary (2008): „Museums in Motion: An Introduction to the History and Functions of Museums“, page 4-7

Once the museum admitted the public, its exhibition function became predominant. Collecting, conservation and research in the main supported the development of exhibition. At first the displays were arranged with a minimum of interpretation arranged either aesthetically or according to the principle of technical classification in chronological or stylistic order – as a kind of a visible storage. In the 19th century the exhibition function began to move from displaying of objects. Natural history specimens or historically significant artifacts were organized with some overarching system (taxonomy) to culture history arrangement – placing objects in period rooms or halls presenting different stages of history.

With the 20th century came ever more emphasis on attracting visitors, which had led to more of an emphasis on public service over the basic maintenance of collections. This rapid sketch of museum development through the ages underlines the origins of the flexible nature of today`s museum.²

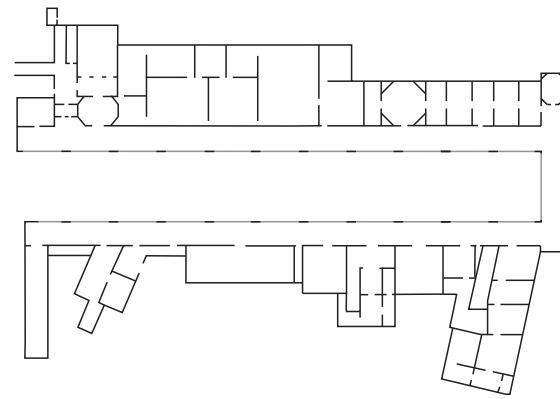
The early development of museum as a building type can be observed to present days. Former palaces adapted to museums - as Galleria degli Uffizi in Florence - affected the way of exhibiting of the objects – interconnected rooms and prerequisite order influenced the linear viewing of objects.

Later development introduced different types of museums. The selection of projects shows a historical example and then museum projects with similar urban conditions as are those in the Stadtpark of Dessau-Roßlau or as a point of reference for material solution or for lighting of the exhibition spaces.

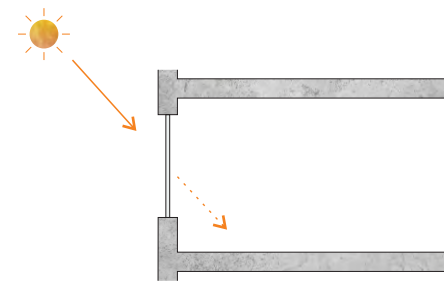
² Alexander Edward P., Alexander Mary (2008): „Museums in Motion: An Introduction to the History and Functions of Museums“, page 7-10



1 Uffizi, Florence



2 floor plan



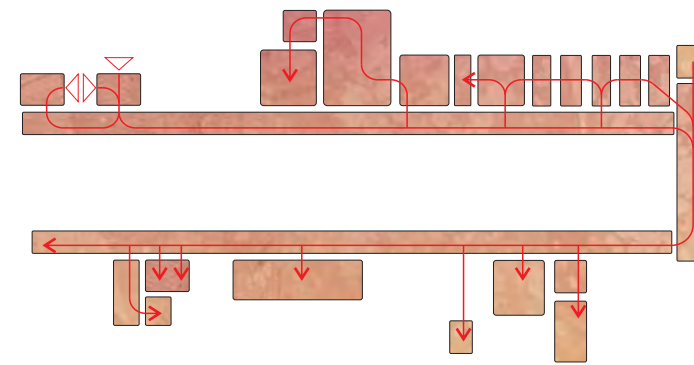
3 scheme of illumination, Uffizi

Selected projects

Galleria degli Uffizi, Florence, Italy,
by Vasari

The Galleria degli Uffizi is one of the most visited galleries in Italy and among the best known in the world for its art collections. It was founded and developed by the patronage of the de Medici family, whose members gave rise in the sixteenth century to a state – the Grand Duchy of Tuscany – able to act on the international political stage. The Galleria was founded in 1581, when Grand-Duke Francesco I began to transfer items from his family collections to the palazzo commissioned by Cosimo I de Medici on a design by Vasari. The Palazzo degli Uffizi had in fact been conceived to house the magistracies and the offices of state, but upon order of the Grand-Duke its second floor was turned into a museum. The gallery was visitable upon request.

Uffizi became one of the most visited galleries in Italy and the world. Besides this openness to the outside, and in continuity with the past, the Galleria degli Uffizi maintains today a close bond with its city, towards which it addresses large-scale popularization and education programmes.¹

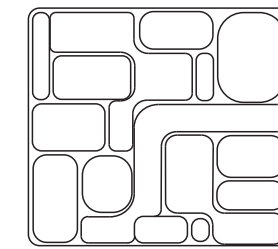


4 scheme of exhibition spaces, Uffizi (Palazzo Vecchio, second floor)

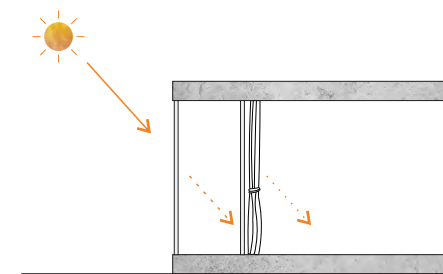
¹ Troilo S. (2011): „National Museums in Italy: A Matter of Multifaceted Identity“, page 476-479



5 Glass Pavilion at the Toledo Museum of Art



6 plan of the ground floor

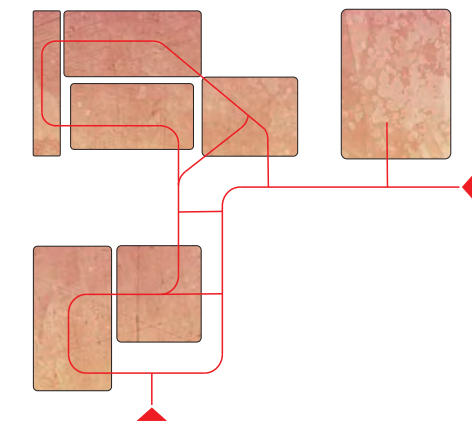


7 scheme of illumination, Glass Pavilion

Glass Pavilion at the Toledo Museum of Art, Toledo, Ohio, USA
by SANAA (Kazuyo Sejima + Ryue Nishizawa)
area: 7000m²
year: opened in 2006

A freestanding cubic extension to the Toledo Museum of Art is referred to as The Glass Pavilion. The building is located in the park and houses a collection of glass artifacts on the ground level and an exhibit about glass-making underground. The pavilion's ground level is wrapped in glass, organized on a deformed grid, and consists of eighteen cell-like rooms, also made mostly out of glass with filleted corners. The building maintains direct visual contact with the park.

The exhibition space is conceived as a series of interconnected rooms. As the position of each "cell" in relation to its context gives different numbers of glass layers on each side of the room, a visitor's experience fluctuates between fluidity, a sense of immateriality, layering of visual effects and solidity. Daylight is distributed through glass walls and if needed rooms can be darkened by curtains.¹

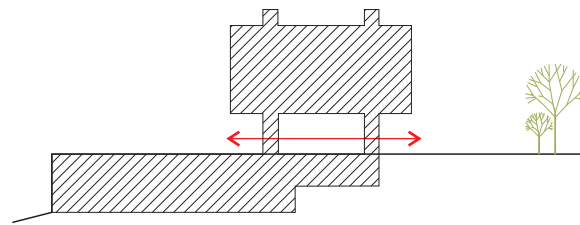


8 scheme of exhibition spaces, Glass Pavilion

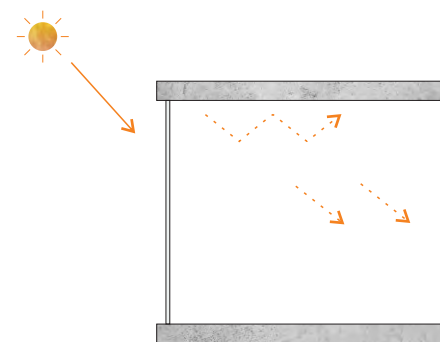
¹ Bergdoll Barry, Bettum Johan (2009): „The pavilion - Pleasure and Polemic in Architecture“, page 115



1 São Paulo Museum of Art



2 scheme of public space, section



3 scheme of illumination, São Paulo Museum of Art

São Paulo Museum of Art, São Paulo, Brazil

by Lina Bo Bardi
 area: approximately 10000m²
 year: project and construction 1957 - 1968

Lina Bobardi's solution was a radical one: she organized the building in two parts, one raised and the other semi-buried, surrounded by gardens and vegetation. In this way an empty space remained as a third element intercalated between the other two. As a result, public space as a plaza remained open, preserving visual contact between the city and park. It had shown that museum could exhibit objects on one hand and serve as stage for public events on the other.

A box like construction with 70 meter span, 29 meters wide and 14 high is suspended on four concrete pillars eight meters above the ground. The two central beams are propped on consoles on the pillars and support the decking of the first and second floor. Due to this the entire interior of the gallery is free of all structures. The paintings in the collection "float" in this light-filled box. They are presented as autonomous objects mounted on transparent structures.¹ Later was this system replaced by solid wall display system, which was lately reversed.² Daylight was originally provided as diffused lateral daylight distributed furthermore by the ceiling.

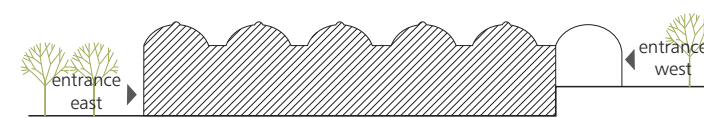


4 scheme of exhibition spaces, Pinakothek (second floor)

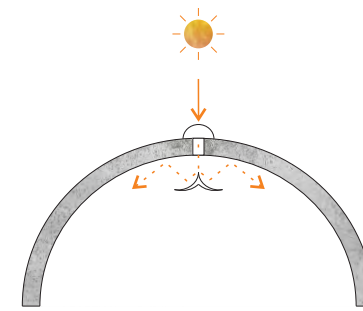
1 de Oliveira Olivia (2014): „Lina Bo Bardi : obra construida = Built work“, page 60-61
 2 Gibson Eleanor (2015): „Lina Bo Bardi's "radical" glass easels revived for exhibition of Brazilian art“



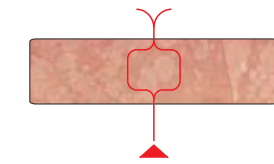
5 Kimbell Art Museum



6 scheme of two storey layout, section



7 scheme of illumination, Kimbell Art Museum



8 scheme of exhibition space, lower level

Kimbell Art Museum, Fort Worth, Texas, USA

by Louis Kahn
 area: 11150m²
 year: opened in 1972

Building consists of sixteen parallel 30,5 x 6 meters roofed vaults of architectural concrete, cast in place. These are massed as tripartite units of six, four and six, separated by two sections. Each vault is supported on four corner columns, each of these two square feet. Three open porticoes on the west form the museum's principal facade. A glass wall with doors is sheltered under the recessed center portico.

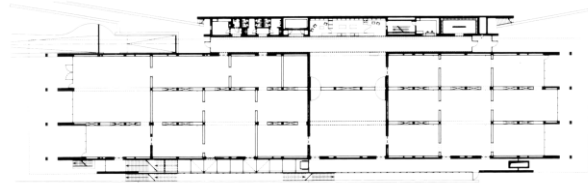
On the upper level are the public spaces of galleries, courts, restaurants auditorium, bookstore, and, for the museum staff, a library with a mezzanine. On the lower level there is a single public lobby doubling as a gallery, together with a divided stairway rising to the upper floor, museum offices, conservation laboratory, photography studio and darkroom, workshops, storage and an entrance from the parking court on the east.

Daylight in the galleries was required at a time when controlled artificial light was the norm in contemporary museums. It was believed by the owner and the client to be the best possible light for viewing works of art.¹

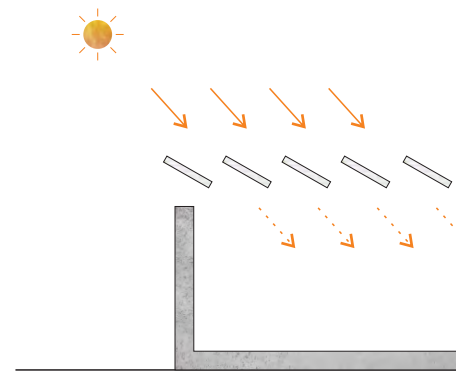
1 Bellinelli Luca, Kahn Louis I. (2007): „Louis I. Kahn: The Construction of the Kimbell Art Museum“, page 13-15



1 Beyeler Foundation Museum



2 plans of the ground floor



3 scheme of illumination, Beyeler Foundation Museum

Beyeler Foundation Museum, Riehen, Switzerland

by Renzo Piano

area: 5490m²¹

year: planning from 1991 and construction 1993 - 1997, extension 1999 - 2000²

The Museum with one storey exhibition space was built in the park of a 18th century Villa Berower park. The task was to design a building that is lit by natural light and connected with surrounding greenery. The border to the east is formed by a road and to the west by fields.

Access to the main entrance at the Baselstraße is formed by the eastern wall of the building and the fence. On the narrow sides to the north and south the exhibition rooms are enclosed by up-to-ceiling glazing. On the western side is a long, glazed gallery connected by a staircase and an elevator to the basement. In the basement there are side rooms and a large hall for lectures or special exhibitions.

The outside concrete walls are covered in porphyry and the inner space is organized by parallel walls creating interconnected exhibition spaces. Windows create a connection between the interior with the landscape.

The exhibits are lit thanks the glass roof that allows 30% of the sunlight to penetrate into the exhibition spaces.³

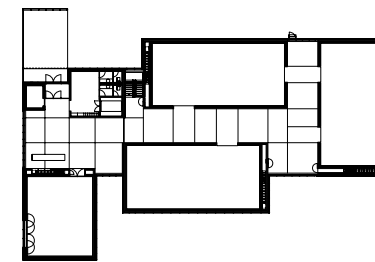


4 scheme of exhibition spaces, ground floor

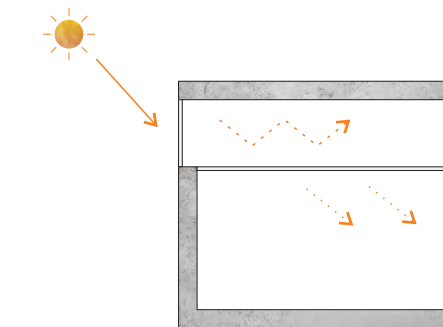
¹ Jodidio Philip (2008): „Renzo Piano Building Workshop 1966 to Today“, page 321
² Renzo Piano Building Workshop: „Beyeler Foundation Museum“, page 1
³ Fondation Beyeler (1998): „Renzo Piano - Fondation Beyeler: Ein Haus für die Kunst“, page 45-55



5 Kirchner Museum



6 plans of the building



7 scheme of illumination, Kirchner Museum

Kirchner Museum, Davos, Switzerland

by Annette Gigon and Mike Guyer

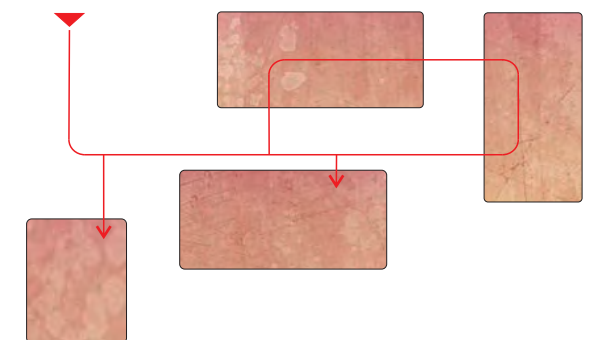
area: 2208m²

year: planning and construction 1990 - 1992

The objective was to create a neutral space for exhibiting of works of painter and printmaker E.L. Kirchner. The museum consists of four interconnected cube volumes located in park, reflecting settlement structure of Davos - detached flat-roofed buildings.

The building consists of four main rooms connected by a hallway and illuminated through glass ceiling using primarily daylight with possibility of use of artificial light located in overhead spaces above the exhibition rooms. Daylight enters sideways through windows in the upper part of the cubical volume. Passing through the exhibition spaces visitors return to the hallway, from where one has a view of the surrounding park and the town of Davos.

The exhibition space uses neutral white walls and oak parquet flooring. Facade consists of transparent, polished and dimmed glass-cladding.¹

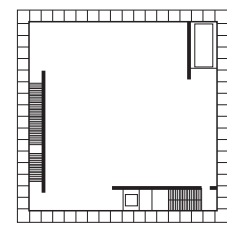


8 scheme of exhibition spaces

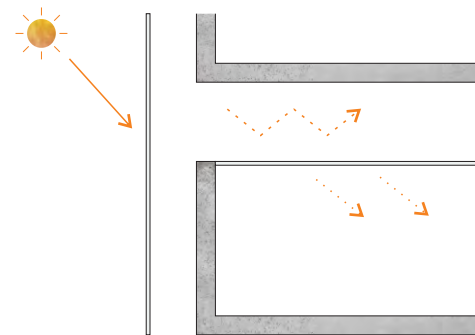
¹ Annette Gigon / Mike Guyer Architekten: "Bürodokumentation mit Auswahl unserer Bauten und unserer Werkliste", page 33



1 Kunsthau Bregenz



2 plans of the 1-3 upper floor



3 scheme of illumination, Kunsthau Bregenz



4 scheme of exhibition spaces, 1-3 upper floor

Kunsthau Bregenz, Austria

by Peter Zumthor

area: 3440 m²

year: planning from 1989 and construction 1994 - 1997

Within the urban context, the Kunsthau Bregenz was conceived as a solitary building near a lake shore.

The building is conceived as a concrete building with an open floor covered by a fully independent and freestanding facade. In the subterranean level are placed storage and maintenance rooms as well as sanitary facilities, archive, workshops and educational centre accessible to the public, a cleaning room as well as electrical, heating and climate controls.¹ The top three floors of exhibition differ only in terms of ceiling height. On the ground floor are situated entrance, multifunctional room used as a foyer, wardrobe and cashier's desk. The third floor with the best daylight conditions has a height of 4,70m, the second and the first 4,20m. The gallery spaces are designed using materials as polished concrete for the walls and floor.

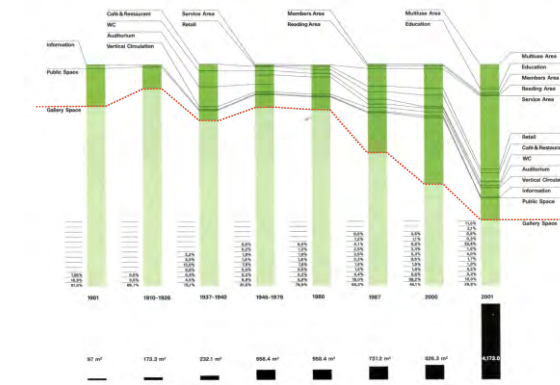
Daylight is captured by the glass facade and further distributes through the gallery spaces - illuminating the halls differently - depending on the time of day or year.² The ceiling filtering the light is made of frosted glass.

1 description by Kunsthau Bregenz

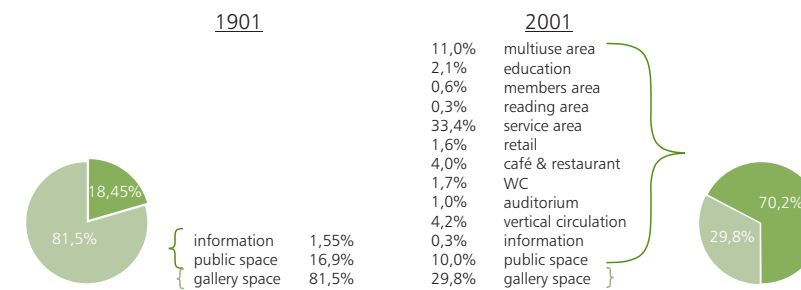
2 Vittorio Magnago Lampugnani, Sachs Angeli (1999): „Museen für ein neues Jahrtausend : Ideen, Projekte, Bauten“, page 117-120



5 Tate Modern - modern art gallery



6 changes in the use of space in Tate gallery during the last 100 years - in picture



7 changes in the use of space in Tate gallery during the last 100 years - in chart and numbers

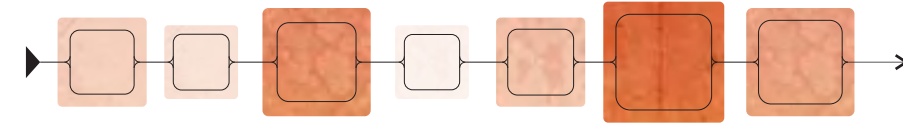
Recent development in Museum as an institution

How can one critically assess the relation between architecture and exhibition? The conflict between one and the other is more than critical in museum architecture: Is museum architecture a mere container for exhibition? Is it more than the stable frame for a constantly changing curatorial practice? Museums architecture - despite its stabilizing and preservationist agenda - follows a logic of permanent change. The over 100-years evolution of the Tate Gallery in London is a prime example of the accelerating rhythms of art institutions and their spatial transformations. At various phases, a comparison of the programmatic structure shows a dramatic decrease in the percentage of exhibition spaces from eighty to thirty percent. These were replaced by an increasingly diverse and differentiated mix of programs such as education, cafés, bookshops, and other secondary functions. The differentiation of spatial structure is not only the result of increasing economization through programs such as retail, but also a consequence of a changed artistic practice that increasingly involves art meditation, lecture, film and performances.¹

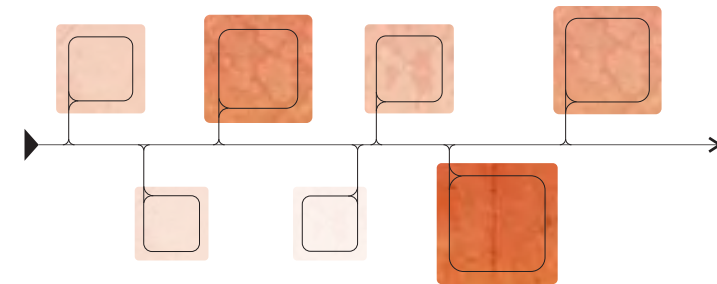
From the late 20th century, the museum is often a stage of the tour of artworks, not only the presentation venue for permanent exhibition. The museum should now be multiple interpretable and playable. The museum itself is - in some cases - a cultural attraction, as for instance Lyon Musée des Confluences (Coop Himmelb(l)au) from 2014 or Bilbao Guggenheim Museum (Frank O. Gehry) from 1997. These museums change the exhibition of art objects to a secondary experience. On the other side are buildings like Fondation Beyler (Renzo Piano) from 1997 presenting approach preferring exhibition of art objects over the architectural expression. Both types of museums have been tendered in the current international competitions. And more or less international juries had the exciting and challenging task of decision making.²

1 Cachola Schmal Peter (2009): „Der Pavillon : Lust und Polemik in der Architektur“, page 54

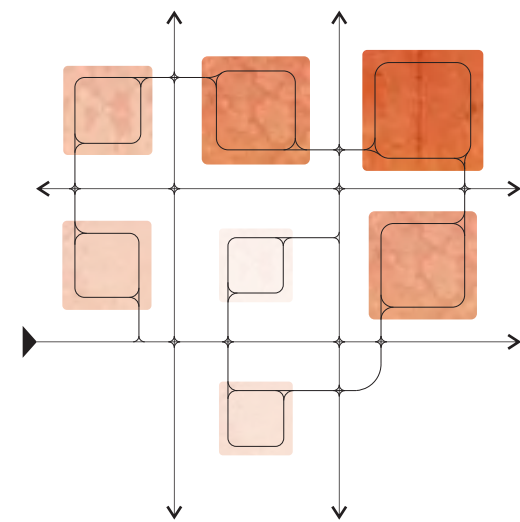
2 Karr Susanne (2016): „Wo wohnen die Museen im 21. Jahrhundert?“, page 6-11



1 enfilade



2 inter-mezzo corridor



3 street grid

Types of arrangement of exhibition spaces

Enfilade

Historically, the rooms of the art gallery have been arranged in an "enfilade," a layout of rooms usually orthogonal in nature, wherein their thresholds are designed to align along a linear axis. This room configuration, typically constructed at the domestic scale, has been the predominant spatial relationship exercised in museum design. Before the turn of the twentieth century, the museum would diverge from this long access tendency in light of a room configuration spread in all directions, but still employing a domestic scale room to room axial alignment of the enfilade. Central floor space between the adorned walls would house cases for small sculpture, fine crafts, and textiles. Curators became accustomed to use rooms thematically, whereby each work within was linked by a time-period or concept and viewers would follow the walls with thresholds as breaks between each thematic world of art. Perhaps the most prototypical example would be the Dulwich Picture Gallery designed by Sir John Soane as England's first public art gallery, opened in South London in 1817.¹ According to Rémy Zaugg (Swiss painter, primarily known as a conceptual artist. He played an important role as a critic and observer of contemporary culture, especially with regards to the perception of space and architecture), rooms in a row, arranged in a rectangle or otherwise, ruin the qualities of the exhibition rooms, along with the possibility of creating perceptive places for the human being and the work within them. Additionally, it means, whether one likes it or not, being subjected to all the works along the way, before arriving to the desired one.²

Inter-mezzo corridor

This paradigm of domestic scale enfilade extended successfully throughout the first half of the twentieth century. However, the latter half of the 20th century has witnessed both the changing of the scale and very nature of the art exhibited in museums, which has forced for the advent of a new

¹ Scelsa Jonathan A. (2014): „MONU 21 Interior Urbanism - Enfiladed Grids: The Museum as City”, page 4-10

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 46-47

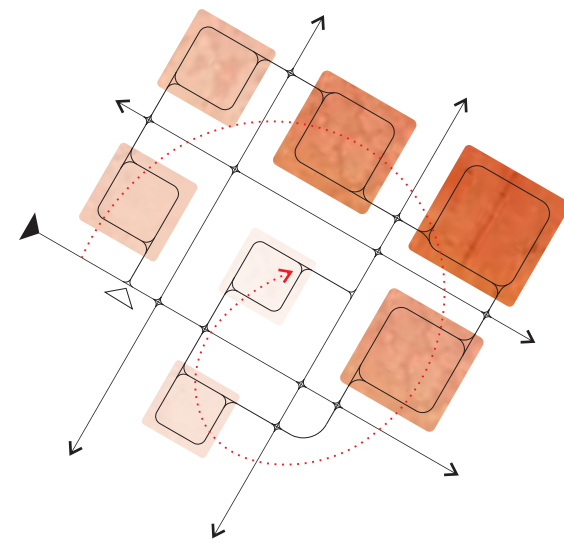
typological space. The differentiated nature of contemporary art demands an "intermezzo". This concept has been formalized in the exhibition concept as a neutral internal street or corridor. This is particularly useful given that exhibitions have switched from small objects into installation based media that encompasses the totality of the room inclusive of the walls, floor, ceiling and light conditions. The corridor provides a respite between these overwhelming sensory experiences allowing the viewer a return to the accustomed equilibrium of conventionality. The early stages of this intermezzo corridor can be noted in MoMA's Contemporary Art Annex in Queens, PS1, which opened its doors in 1997 in a former public school with a double-loaded typology. The classrooms that flank the corridor on either side serve as the grounds for art intervention, where each room would be "let" to a different artist by the curator with the common hallway corridor providing access and pause in between exhibits.³ According to Rémy Zaugg, this structure, legible and simple because of its rigidity, leads to a familiar prison-like or cellular world. We revert to the classical schemas of town planning. The only advantage, compared to the row (enfilade), is the freedom to enter the room or not. This principle of juxtaposition and opposition can stretch to infinity, like that of the row. It also leads to an architecture whose scope transcends the receptive faculties of human beings.⁴

Street grid

Several contemporary art museums have further developed the use of this concept, favoring a plan modeled more closely as an urban grid, whereby the proliferated space of the corridor begins to resemble the infrastructural space of the street or arterial system within the city. These museums are suggestive of a new approach to gallery and museum design that emphasize the space of the museum not as a collection of enfilade galleries bound together,

³ Scelsa Jonathan A. (2014): „MONU 21 Interior Urbanism - Enfiladed Grids: The Museum as City”, page 4-10

⁴ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 49



street grid with spiral movement
enfilade bound together with street grid

but as a field of both dedicated circulation corridors and spaces of program activity more similar to that of an urban conglomerate.¹ The arrangement that respects the absolute architectural integrity of each room - each room is an entity of its own. It is not subjected to a classification or an order. It does not depend on an authoritarian system that would make it different. It is autonomous. Its autonomy corresponds to the autonomy of the work and that of the human being.²

This possibility of a museum architecture that is informed and driven by an urban grid, questions what is the relationship between the formality of the grid and the display of the resultant art.

The injection of the urban grid into the museum allows each of the individual rooms to function as their own autonomous world with pure circulation space for repose all underneath the curatorial umbrella of the larger exhibition complex. It is possible to imagine that the intermezzo corridor serves as an augmentation of the space of the threshold that existed between rooms in the historic enfilade. Further, it could be argued that the amount of circulation space, provided under this new paradigm, makes for a much less efficient building due to the redundancy of ways to move through the plan. However, this redundancy has some functional and institutional benefits beyond the experiential, including several curatorial merits that are afforded by the now detached free-standing galleries. One of the frequent disputes in museum design is the friction between the Architecture and the Curatorial control of the gallery.

This paradigm offers each agent its own place in which to operate without restraint from the other, allowing curators and artists to work in the space of the gallery while leaving the circulation space to that of the architect.

¹ Scelsa Jonathan A. (2014), MONU 21 Interior Urbanism - Enfiladed Grids: The Museum as City, page 4-10

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 48-50

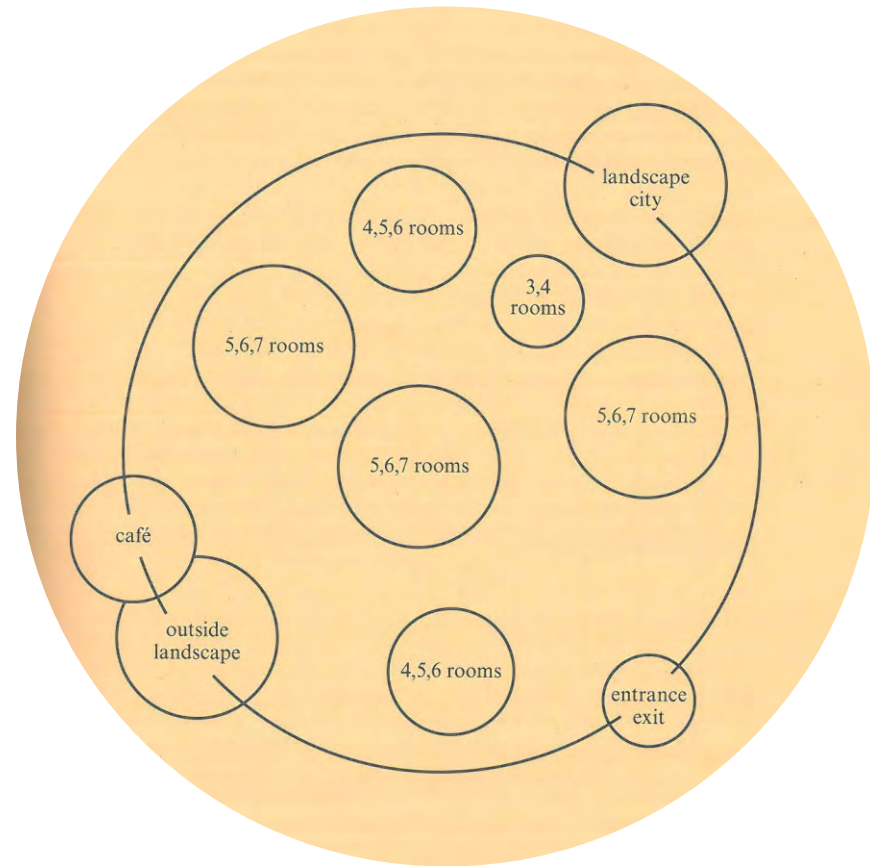
Furthermore most museums have temporary exhibitions that change-over three to four times in a given year. This paradigm's redundancy of circulation allows each exhibit room to be closed without affecting the larger circulation network, allowing these detached galleries to be re-constructed in phases as if urban lots redeveloped over the life of the city.

Another argument for the recognition of the museum as an interior urbanism, which can be evidenced in these case studies as well as a survey of the building of museums in the past two decades, is the conclusive growth in size into gargantuan public projects. Contemporary museum briefs call on architects to design projects that house space at areas equivalent to that of the great impermanent expositions in the middle of the last century. These expos such as the 1964 New York World's fair, though impermanent in nature, were designed and planned as micro-cities. The contemporary museum not unlike the fair-ground and expo, are inconclusive of dining facilities, retail opportunities, event halls and educational facilities in addition to the increasing size of exhibition space. This acknowledgement of the growth of the museum, combined with the knowledge of the tendencies demonstrated via the Intermezzo, is suggestive of a possible movement towards a museum without walls.³

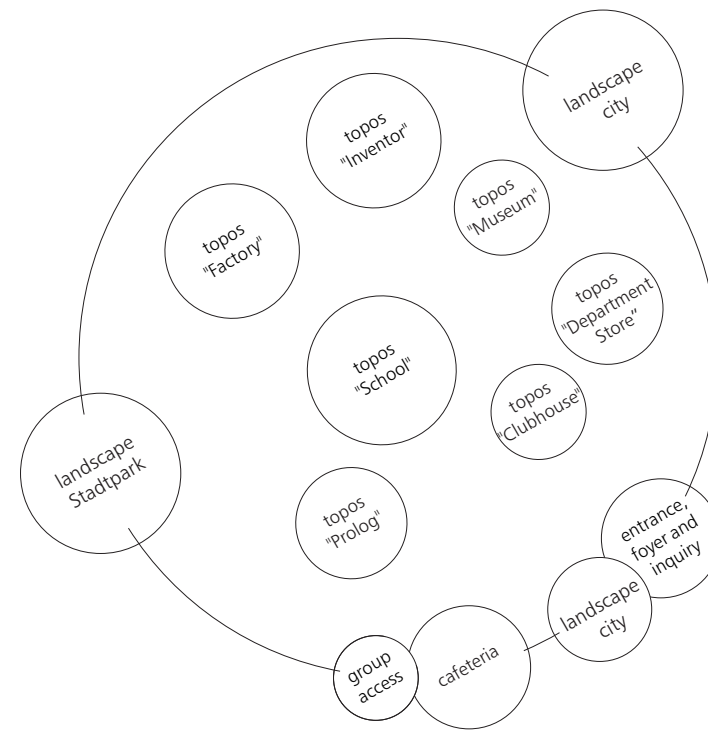
Rémy Zaugg's ideas about museum and its architecture introduce a way of planning reflected in recent projects as Abu Dhabi Louvre by Jean Nouvel, 21st Century Museum of Contemporary Art by SANAA - Ryue Nishizawa and Kazuyo Sejima or National Art Museum of China design proposal by OMA. This approach can be used in project of museum in Dessau, too - having anticipated the building site in a park and city context of Dessau.

³ Scelsa Jonathan A. (2014): „MONU 21 Interior Urbanism - Enfiladed Grids: The Museum as City“, page 4-10

Organization scheme of the exhibition spaces based on the concept of Rémy Zaugg showing exhibition adjoining to the landscape of the city and Stadtpark.



1 the organization scheme of museum by Rémy Zaugg



2 the organization scheme of the design proposal

Rémy Zaugg and architecture of the museum

Rémy Zaugg argues in his work "The Art Museum of my Dreams" in favour of exhibition space or spaces shaped as a cube. According to him, the orthogonal architecture reflects the elementary structure of the perceptive relationship. For the rectangular room seems obvious that it is grasped or recognized immediately, and that the encounter with the work can take place without repeated expectations or investigations of the place. The subject finds the orthogonal architecture evidence of one of the elementary structures of his perceptive relationship with the world. In the orthogonal architecture, perception is comfortable. It feels this is where it belongs. According to Zaugg perception feels "at home", it is in its home.¹

The exhibition rooms - the place for the work and the human being does not host only one work and has not been made for only one human being. There are several works and several subjects, there are therefore several places of perspective exchange between the work and the human being. Each room proposed may serve to establish one or several places of perceptive exchange. Given the number of works, a single room will not suffice. Rooms are needed. Each room, irrespective of its architectural context, maintains its integrity as well as its spatial and functional qualities.²

Arrangement of the rooms

As discussed in the chapter about "Types of arrangement of exhibition spaces" – integrating an urban grid into the museum allows each of the individual rooms to function as their own autonomous world with pure circulation space. This arrangement respects the absolute architectural integrity of each room. The dispersal of rooms imposes nothing on the subject, or on the works. It is an invitation to haphazard wandering and to an immediate encounter with things or works.

¹ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 29-30

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 45

An architecture, devoid of any rigid and authoritarian system in which everything is said even before one opens one's mouth, an architecture deprived at first glance of an intelligible system, where everything is accomplished before one has the time to act, and an architecture with scattered elements, with neither order nor constraining classification, teaches the freedom of the direct and immediate, unpredictable and surprising encounter of the human being with the work.

Each entity, architecturally significant, distinguishes itself from the spaces for people to move about in or from the other places that do not serve the perceptive exchange between the human being and the work. The access to each entity is direct from the entrance. Access from one entity to another, access to the café or to any other place where one can momentarily stand back from the work, sit down, think, stroll about, talk or look at the landscape, and, of course, access to the exit, are direct.³

Passageways

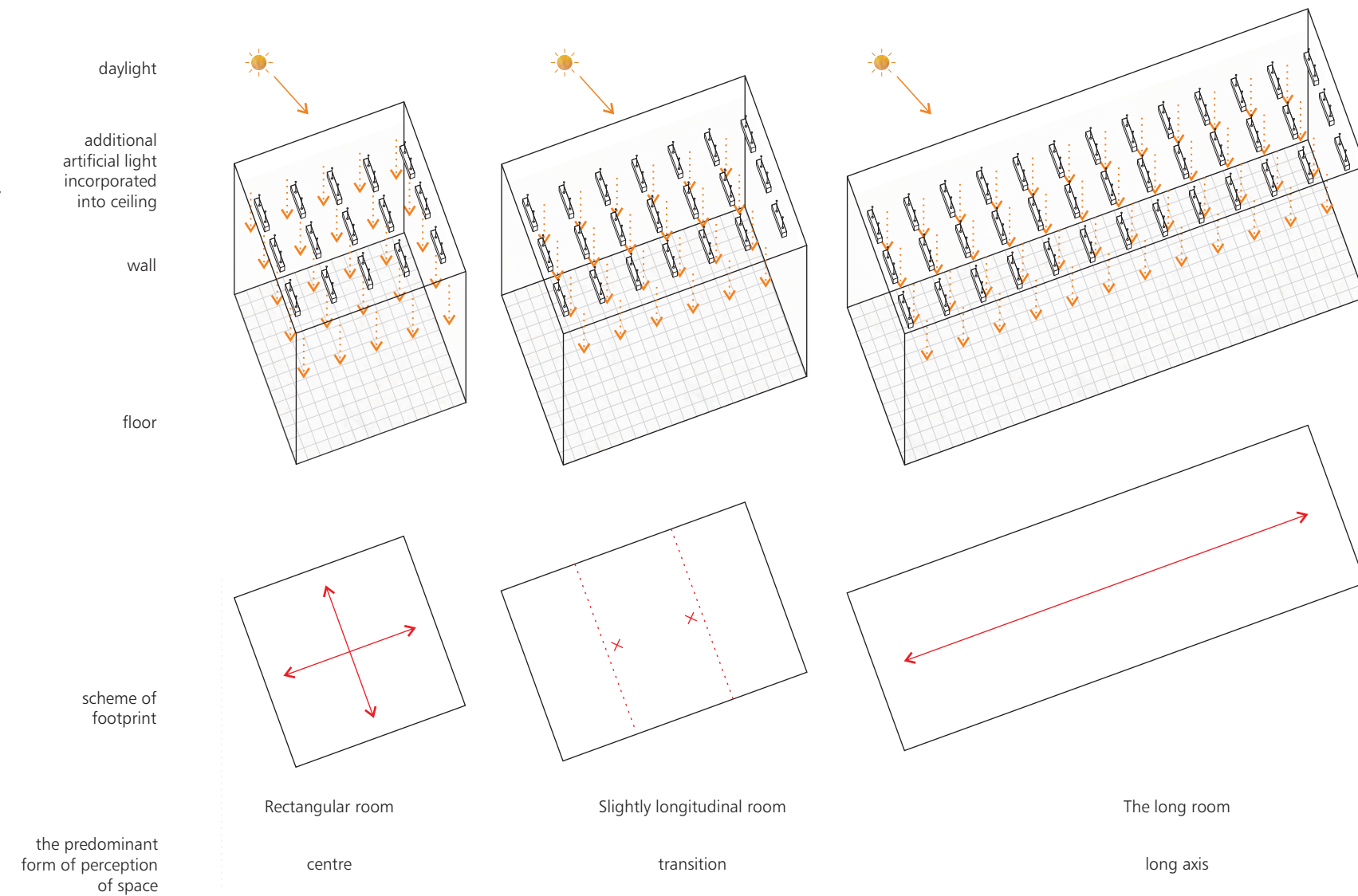
It is therefore essential to distinguish the spaces used for moving about from those used to perceive interaction. Access to the room is through a space reserved for moving about. The physical approach to the place in which the work is situated is direct. Access to the work is direct.

The spaces for moving about lead to the work but also enable one to move away, momentarily or definitively, from the work. While these spaces enable one to go to the work and to get closer to it, they also prepare the encounter with it. They introduce the work. They condition the subject. Their architectural qualities can therefore be similar to those of the place of the work. Needless to say, crooked, extravagant or amusing shapes, a red floor or green fluorescence light, the impact of which would accompany the subject throughout his encounter with the work, are according to Zaugg absurd.⁴

³ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 53-58

⁴ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 47-59

Perception of the exhibition room according to Rémy Zaugg in relation with the aspect ratio.



The dissemination of rooms offers every work, from every period and on various topics, as it is to the human being, who in turn is free to move about to be independent. How can the excessive number of routes and the plethora of possible paths be reduced? The excessive network is linked to the number of architectural units, each of which comprises a room. But if each architectural entity consists of several rooms rather a single one, the network of paths would be limited and the freedom to go wherever we like would lead, not to an almost pathological feverish wandering, but to a serene, almost carefree exploration. Each architectural entity can be therefore divided curators into about five, six or seven rooms. This is a number of rooms that is appropriate for human receptive capacities.¹

Four walls

The flat and vertical walls cut across one another perpendicularly. The enclosed place is made up of four walls. Its perimeter is rectangular. Only the right angle respects the frontal nature of the relationship with the work. Only vertical walls and surfaces meeting at a right angle and opposed to a horizontal floor are subordinate to the direct and immediate perceptive relationship of the erect, mobile human being with a frontal gaze.²

Ceiling

The ceiling, a commentary of the floor, is also horizontal. It cuts across the walls simply and clearly, at a right angle.

The ceiling is of the same material and colour as the walls. As in the case of the floor, the components of this type of ceiling could only be rectangular and oriented perpendicularly to the walls. The overall solution should respect proper illumination of object in the collection.

¹ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 56

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 29

What are the proportions of rooms conducive to dialogue or to face-to-face encounter?

The long room

The long room is an incentive to walk. It invites one to move about, to go from one end to the other along the longitudinal axis, from one extremity to the other alongside the two long walls. The space-time of the corridor can be expressed as 1`m here, because 1`m passing through - 1`m here the time it takes to go through. Main area of perception in the room is along the axis.

Rectangular room

Rectangular room is suitable for face-to-face encounter and is one that prompts one to say: 1`m here, in front of the work, and 1`m staying here with it. Main area of perception in the room is in the centre.

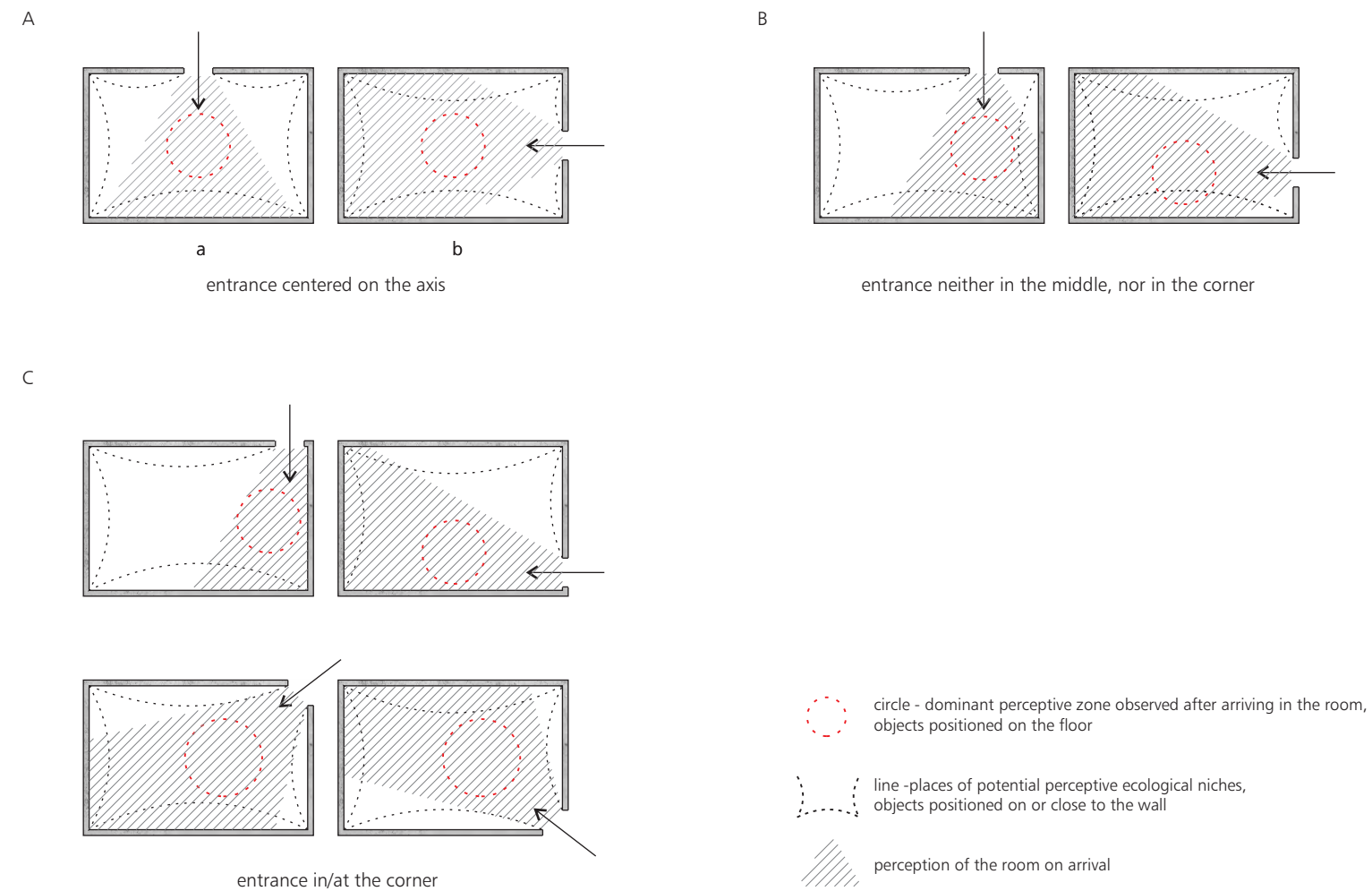
Slightly longitudinal room

The slightly longitudinal room is able to maintain the qualities of the square room. Its centre, doubled, is no longer that point governing the space of the square room. Instead, it corresponds to a rather vague elliptical zone-or at least one that is less constraining. Without a single centre, it no longer spins on its axis. The distance between the two centres, each shifted outwards, is too short to generate a longitudinal movement.³ This room` s perception is transition between rectangular and long room.

It is beneficial for the visitors experience when all types of exhibition spaces - by respecting the face-to-face encounter with the work - can be included in the project.

³ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 24-36

Perception of the exhibition room according to Rémy Zaugg in relation with the position of the entrance.



The entrance to the exhibition room

Where should the opening for entering and exiting the exhibition room be located?

Entrance location - A

In case of the long room or the slight rectangular room can be the entrance in one of the walls centered on the axis. These two situations each determine a symmetrical bi-partitioning of the architectural space. It signifies an intention, that of being at the centre and nowhere else. Hence, a certain solemnity that is somewhat pompous, even ceremonious.

Placing the entrance on the long wall, according to Zaugg excellent in itself, is done at the expense of the other walls. In relation to the walls, the position of the door spatially defines three zones, three places or three potential perceptual ecological niches. In (a) are the zones hierarchized. The direct and immediate encounter with the longest wall tends to relegate the two smaller walls to an inferior laterality. Offered frontally from the start, the zone of the large wall is central, primary, while the other two are secondary.

In (b), the entrance points towards the small wall, which is also the most distant one. Distance and smallness neutralize the primacy granted by the door to the small wall. The perceptual zones of the three walls are equivalent, the axis of symmetry introduced by the door seals the absence of any differentiation of the two large walls. The symmetrical position of the entrance that establishes a rigid and static authoritarian hierarchy is also detrimental to the work placed on the floor and occupying space.¹

Entrance location - B

By shifting the entrance off centre towards the corner - the wall in which the entrance is set is no longer sacrificed. There is no longer symmetrical bi-

¹ Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 37-39

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 29

partitioning. The position of the entrance does not seem to impose a certain type of display. However, the space is partially a passageway. The subject enters and, on his way, passes close to the wall, in front of the wall. This same subject is disturbed, on the periphery of his visual field, by the movement of outside visible through the entrance. The usable space is reduced to a more or less square space preceded by a sort of vestibule.

The position of the entrance neither in the middle, nor in the corner creates an intermediary situation. It no longer imposes a precise type of use. Most of the wall that has the entrance serves as a fourth wall. The sterile opposition of the two pairs of same wall is cancelled out, each wall has a different architectural context, a particular spatial or perceptual zone. The axis of the door is no longer a symmetrical axis, the entrance no longer favours the wall facing it.

Entrance location - C

By placing the entrance in the corner, straddling the two walls, is the room divided into two triangular zones. This diagonal structuring is fundamentally opposed to the frontal relationship of the work and the subject. It deforms space, stretching it out. The works seem no longer to be presented frontally to someone entering the room, they seem to escape and defy a perceptual encounter.

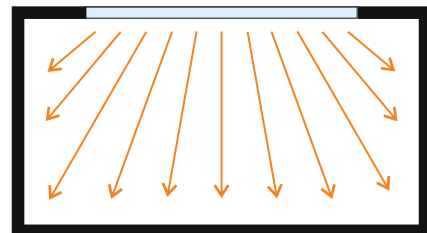
What are the dimensions of the entrance?

Although Zaugg leaves the question of closable door on designer, he proposes the entrance to be not large in size, intended not for a large moving crowd, but for an individual visitor.²

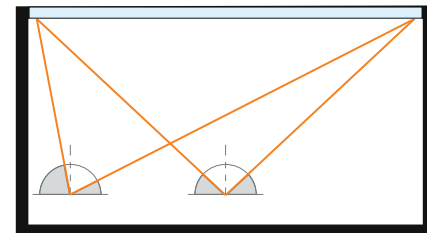
In summary - the position and dimensions of an entrance should enhance the visitor's experience, allow adjustment of the room by curators and allow proper functioning of the exhibition space.

² Zaugg Rémy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being”, page 40-43

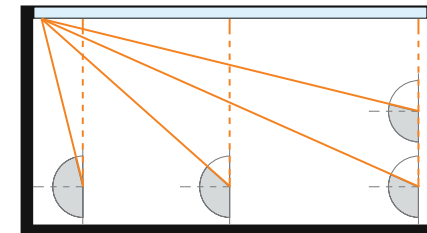
daylight



Daylight enters from above through a luminous ceiling.

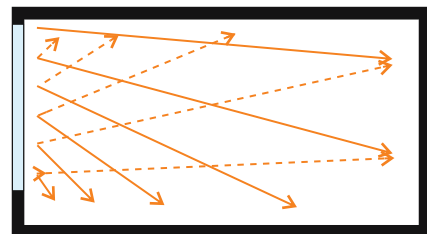


With light from above, more falls on horizontal surfaces in the middle of the room, than on surfaces at the edge.

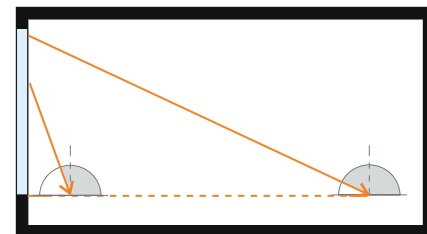


Even less daylight falls on vertical surfaces close to the edges.

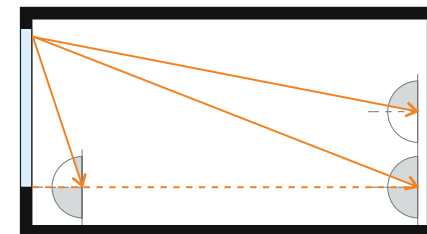
91



Daylight enters from the side through a window.

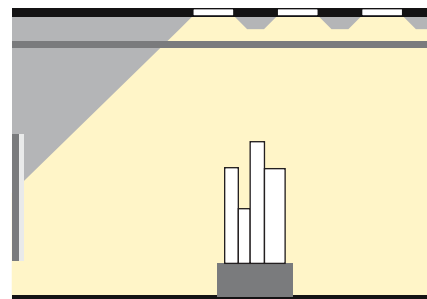


With light from the side, the further it has to travel from the window wall, the lower the illuminance on horizontal surfaces.

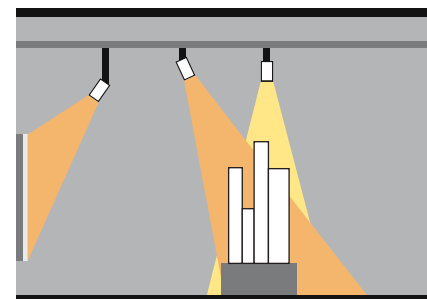


The further it has to travel from the window wall, the lower the illuminance on vertical surfaces, although they are better illuminated because of the more favourable angle of incidence.

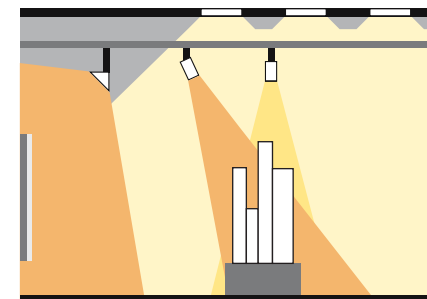
artificial light



Diffuse lighting for the room.



Solely directional light.



Diffuse lighting for the room with supplementary directional lighting for objects in the room.

use of light shown in cross-section of room

Types of lighting of exhibition space

Lighting is vital for spatial impression and enjoyment of art. Different light colours and beam spreads, different designs and arrangements of luminaires and lamps create different lighting situations – light spaces – designed to meet the relevant needs of the exhibition. Special attention needs to be paid to conservation requirements. Light protection plays an important role in any exhibition room.¹

The design and configuration of exhibition room lighting depends on many planning parameters. Foremost among these is the architecture of the building with which the lighting is required to harmonize. Other factors are room proportions, interior design, colour scheme, available daylight and, last but not least, the nature of the exhibition.

Room lighting

Lighting for exhibition rooms in museums is made up of diffuse and directional light. The relative amounts and resulting mix of the two types of light determines the harshness of the shadows cast by picture frames and the three dimensional impact of sculptures and spatial objects. The diffuse and directional light mix also defines the overall impression made by the room.

Exhibit lighting

Exhibit lighting uses directional light to accentuate individual items on display. As a general rule, it needs to be supplemented by softer room lighting. Exhibit lighting based on spots alone is advisable only where a particularly dramatic effect is required. Otherwise, a stimulating spatial experience is obtained with a mix of diffuse (room) and directional (exhibit) lighting.

¹ Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 1

Diffuse lighting

Diffuse lighting illuminates room zones or objects from a surface that radiates light in all directions. At the site of illumination, i.e. in the room zone or at the object illuminated, the direction from which the light comes cannot be clearly determined: the light flowing into the room and over the objects is not directional. Where it comes from very many directions, i.e. where the radiant surface is large, the lighting produces little or no shadowing.

Directional lighting

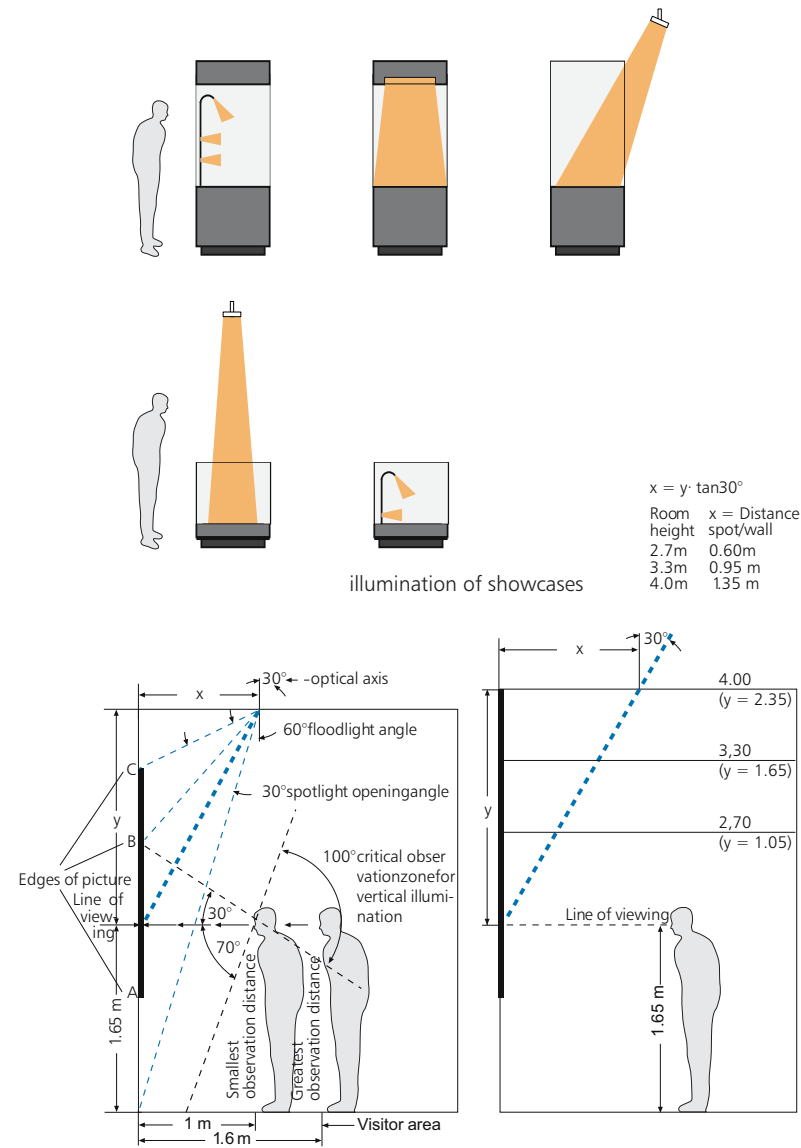
Directional lighting is generated mostly by punctual light sources – i.e. lamps that are small in relation to the lighting distance – or spots of similar design. The light falls directly onto the object illuminated, striking it, or parts of it, at an angle defined by the geometry of the lighting arrangement. Where the surface of the object is uneven, clearly defined shadows occur. This enhance the visual impact of three-dimensional surfaces, but can also be a source of visual interference if they are too dominant or too large.²

Diffuse/directional lighting

In many applications, light cannot be clearly defined as wholly diffuse or wholly directional. This is the case where the surface radiating the light is neither large nor punctual – e.g. a spot with a diffuser disc. Depending on the diameter of the disc and on the lighting distance, shadows are narrower or wider, harsher or softer. Diffuse/directional lighting also occurs where a surface is illuminated or back-lit to produce diffuse lighting and part of the light is made to radiate in a particular direction and is thus partially directional. The direction from which the light comes can be seen on the objects illuminated. However, the shadowing that occurs on exhibits is less clearly defined than if the light was entirely directional. The visual display is rendered more subtle by the brightening effect of the diffuse lighting component. Diffuse/directional lighting can also be produced, for example,

² Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 2

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Calculation of the optimal positioning of a luminaire for pictures on a wall – room height, observation zone, size of picture and optimal viewing angle (fig. on left) are the parameters defining the optimal position of a wall-lighting luminaire. The upper edge of the picture determines the spotlight opening angle (B: 30°, C: 60°) with a constant angle of inclination of 30°. Angles less than 30° can result in reflections at the upper edge of the picture (critical observation zone). The mathematical formula for calculating the distance “x” between spotlight and wall for illuminating a picture with the height “y” is: $x = y \tan 30^\circ$ (fig. on right).

by linear lamps in appropriately designed luminaires. Here, shadowing depends on the position of the luminaire in relation to the picture: wall washers with tubular fluorescent lamps mounted horizontally or parallel to the upper edge of the wall produce hard-edged shadows beneath horizontal picture frames, whereas the shadows cast by the vertical part of the frame are barely noticeable. Directional light produces form shadows. Here it also results in cast shadows on neighbouring objects, the hard contours and obscure origin of such shadows are disturbing. Cast shadows are avoided by ensuring an appropriate mix of diffuse and directional light, correct positioning of the light source producing the directional light or appropriate positioning of the illuminated objects in relation to one another.

The most important lighting systems (artificial light) used in exhibition rooms are luminous ceilings with opal glass enclosure (diffuse light) or satinized and textured glass (diffuse/ directional), indirect luminaires (diffuse), cove luminaires (diffuse), wall washers (directional or diffuse/directional) and spot lamps.¹

Daylight

Daylight planning is a matter for experienced professionals. Today, our knowledge of lighting engineering coupled with modern control and regulation technology makes it possible for daylight to be precisely directed and dosed. So once again daylight plays a major role in museum construction and design.²

Skylights

Skylights are classic day lighting elements for picture galleries. They provide uniform, diffuse lighting. Because the light is admitted over a large area, the

shadows produced are soft. The incident daylight that passes through a skylight reaches nearly every part of the room, including freestanding display cabinets, sculptures and partitions. Because no windows are present, more wall space is available for paintings. There is also no problem with reflections on exhibition walls due to incident daylight from the side. With large skylights, unwelcomed interference may occur and needs to be tackled by appropriate positioning of the skylights and providing of precise optical control. There is a risk, for example, of light being unevenly distributed over the walls. In rooms with dark furnishings, in particular, the vertical illuminance at eye level is often too low. The contrast between wall and ceiling brightness can cause glare. And even with light entering from above, reflections can sometimes occur on pictures on the wall.

The use of skylights to harness daylight is confined to the upper storeys of a building or calls for single storey design. Skylights are no substitute for the visual contact with the outside world provided by windows.

Windows

Oversized windows are not necessarily a suitable alternative to skylights and not actually the right tool for making maximum use of daylight. On the other hand, there are many ways today to direct daylight and “lock out” direct sunlight even in rooms with lateral windows. Having said that, these non-transparent systems do not fulfill the requirement met by daylight. Through museum windows can be observed daily and seasonal change – as well as the alternation of the weather. But windows reduce the amount of wall space for exhibits. Indirect and unfiltered daylight can give rise to reflections on exhibition walls. If daylight and artificial light are mixed, their rays should be fully blended before they fall on an exhibit. This also means that the spatial distribution of the two types of light needs to be coordinated.¹

The reasons: the lamps used for artificial lighting radiate light of particular colours, while the spectral composition of daylight changes all the time. In addition, the two have different angles of entering and different beam angles. This gives rise to conflict; the appearance of exhibits is distorted if the two light forms are not fully blended. The only alternative to blending is “segregation”. This means keeping the daylight zone and the zone illuminated by artificial light far enough apart to ensure that the two types of light do not interfere with one another – unless the twilight is deliberately used to create a particular atmosphere in the room.²

Artificial light? Natural light? Either one or the other. To use the natural, moving and unpredictable daylight that needs to be homogenized when entering the building? This remains to be discussed with and designed by the light engineer. Compared to natural light, artificial light is constant, which is why it may seem sterile. Zaugg argues in favour of diffused, neutral light, but do not specify the amount of artificial nor daylight. For him is important that the exhibition room and its lighting is composed the way that the work and the human being are both in the light - the work is not more in the light than it is the human being.³ Solution using skylights provides adequate daylight for one floor building and can be used in combination with artificial light during the night use (Kirchner museum - Davos, Kunsthaus - Bregenz). Where it is not possible to harvest daylight - artificial light can be used.

From the point of view of objects in collection - materials vary in their sensitivity to light. It is recommended reducing periods of exposure, such as excluding light when the museum is closed and of presenting the most delicate objects (textiles, watercolours, prints, dyed leather or costumes) only in temporary exhibitions or provide a space specially equipped for it.⁴

¹ Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 3-4

² Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 22

¹ Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 22

² Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and Exhibitions“, page 23

³ Zaugg Remy (1986): „The Art Museum of My Dreams or A Place for the Work and the Human Being“, page 43-44

⁴ Tregenza Peter, Loe David: „The Design of Lighting“ (2009), page 108-109

Design proposal

Comparison of the proposed volumes

95



"Tower"

The highest possible variation. According to the brief the building should not exceed the height of surrounding buildings. The highest in the immediate surrounding are the "Y houses" with 42m. Positioning the volume in alignment with Ratsgasse allows the lowest possible rate of cut down trees.
Exhibition space: more floors organized one over the other.
Daylight: through side walls of the volume.

0



"Slab"

The solution with the largest footprint. According to the brief the spatial program of the future museum should consist from around 3500 m². The volume is positioned across the Ratsgasse. It is also trying to respect more the existing trees and position of the Odf memorial than the historical street line.
Exhibition space: can be organized on one single floor allowing a variety of approaches to organisation.
Daylight: through roof and side walls of the building.

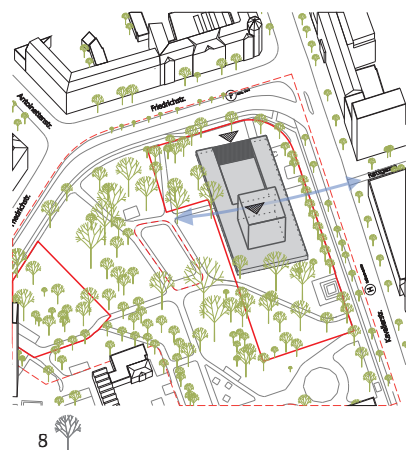
9



"Corner"

The building site gives possibility to position the volume into the corner at the Kavalierstraße and Friedrichstraße junction. This solution respects the former outlook of Kavalierstraße. Its volume is cut in the corner of the frequently passed by point.
Exhibition space: one or more floors.
Daylight: through roof and side walls of the building.

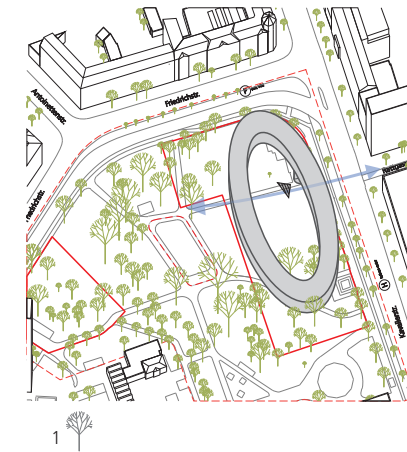
8



"Tower + atrium"

Volume consists of two main parts – tower positioned across the Ratsgasse with the main entrance from ground floor level and a subterranean atrium with entrance through stairs leading to Friedrichstraße. The aim is to visually connect the Ratsgasse with park.
Exhibition space: multiple floors in tower and one floor beneath the earth connected to atrium.
Daylight: through side walls.

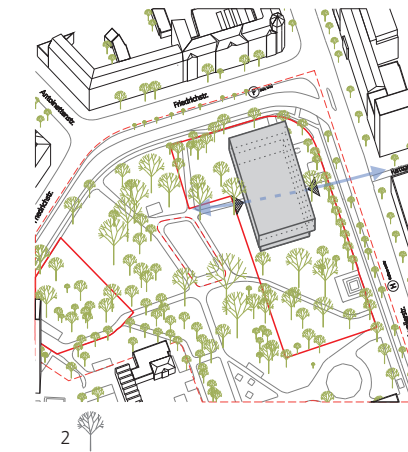
8



"Above the park"

Volume answers question of no interference with vegetation of the park, but raises the question of shadow-casting. Volume is accessible from a part touching the ground positioned across the Ratsgasse and close to Kavalierstraße and Friedrichstraße junction.
Exhibition space: one single floor.
Daylight: through roof and side walls of the building.

1



"Two slabs"

By respecting the park (instead of former building line of Kavalierstraße) can be created a prismatic pavilion consisting of two slabs. By separating the volume into two a clear definition of exhibition and visitor's service is defined.
Exhibition space: one or multiple floors.
Daylight: through roof and side walls of the building.

2



"Hill"

Volume addresses park and enlarges it in a form of a hill. Respecting the line of trees the volume is set-back from Kavalierstraße.
Exhibition space: one or multiple floors.
Daylight: if the volume should be designed as a hill like extension the orientation of the volume on the site would allow daylight from side walls and depending on the design even from the roof.

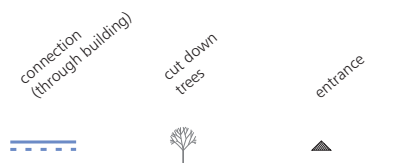
8



"Village"

By merging of more cubes a single volume can be achieved. Functioning as pavilion all the single volumes can be adjusted to the situation on the site (by proportion and positioning on the building site).
Exhibition space: one or multiple floors.
Daylight: through roof and side walls of the building.

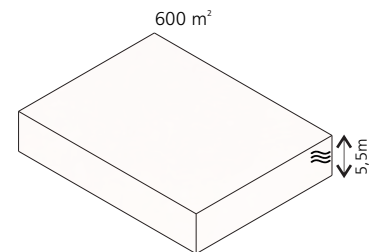
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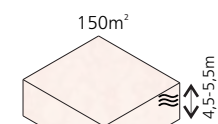
Exhibition rooms concept

topics of the exhibition



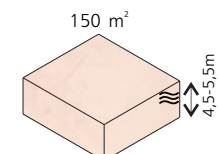
temporary exhibition

Area of display of collection objects during a major international exhibition and for special projects in multiannual rhythm with additional 400m² overlapping with permanent exhibition to achieve the usual international exhibition format of 1000m².



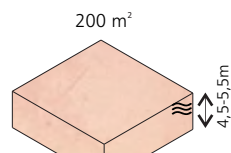
topos "Clubhouse"

Refers to experiences and dealings with societal upheavals in the modern era that were articulated in the Bauhaus community - mixture of guild community and bohemian artists' colony and later international networks. Presented in photographs, documents and other objects. Topics are the local network and international Bauhaus community (including the Bauhaus network after 1933 and into the migration).



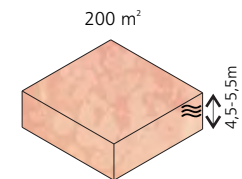
topos "Museum"

The school exhibited its own work and designed exhibition spaces and novel displays with its curatorial approach trying to underlay relationship of objects - in apartment like atmosphere. Presented should be visual artworks and travelling exhibitions.



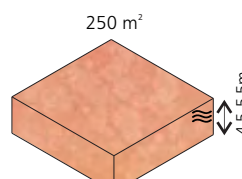
"Prolog"

Tries to explain the transformation from Weimar to Dessau in images, models and visions following the topics of Bauhaus directors, architecture, industry, cultural and political figures.



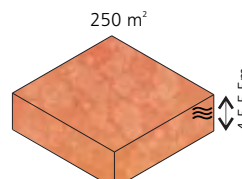
topos "Department Store"

A reminder of Bauhaus participation in the emerging consumer society. Presented should be everyday mass-produced consumer goods that changed habits and consumer behaviour, involving furniture, design products, advertising and the discussion about the need for luxury at Bauhaus.



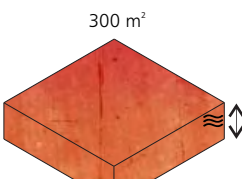
topos "Inventor"

Tries to explain ideas behind workshops, inventions and innovations for the modern household, in architecture, city planning, art and new media. What was really innovative about this school's work, knowledge transfer and inventions? Topics include modern household, art and new media, Bauhaus and the humanities, politics and society.



topos "Factory"

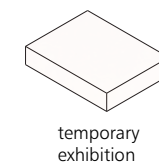
Mass-production, using modern technology was a goal of the Bauhaus. Topic behind this topos is large-volume manufacturing by simulating industrial production using craft methods, industry as an aesthetic ideal and in the household, cooperation with industry and standardisation.



topos "School"

Topos "School" is about presentation of the new approach in education, where research, teaching and practice should be connect in new unity. Presented should be reception, impact and emulation of this educational theory.

objects in Bauhaus Dessau Foundation in accordance with exhibition concept - topos



temporary exhibition



1,2 Marcel Breuer, lath chair, ti 1a, 1922 compared to Jerzy Seymour, Workshop Chair, 2009



3,4 Bauhaus advertisement, 1928 compared to a poster advertising Obama's visit to Berlin in 2008



topos "Department store"



11 table lamps; Friedrich Karl Engemann



12 bedroom furniture; Carl Fieger; carpentry workshop Bauhaus Dessau



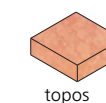
topos "Clubhouse"



5 Bauhaus identity card for Alma Else Engemann



6 invitation to Bauhaus Carnival on March 1; Franz Ehrlich



topos "Inventor"



13 grotesque font, exercise from the lecture with Joost Schmidt; Rössig Reinhold



14 three-storey terraced houses, detail, cutaway view of stairwell, plan and axonometry; Reinhold Rössig



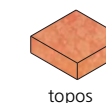
topos "Museum"



7 semester graduation exhibition winter 1928; collage "Sie brauchen das Bauhaus"; Grete Reichardt



8 landscape; Franz Ehrlich



topos "Factory"



15 glassware; Wilhelm Wagenfeld; manufactured by Jenaer Glaswerk Schott & Gen.



16 teapot; small version as a tea extract pot (model for mass production); Theodor Bogler



topos "Prologue"



9 settlement Dessau-Törten; model Type SieTo I; draft 1926 - model 1978



10 Brochure for the city of Dessau; Joost Schmidt



topos "School"

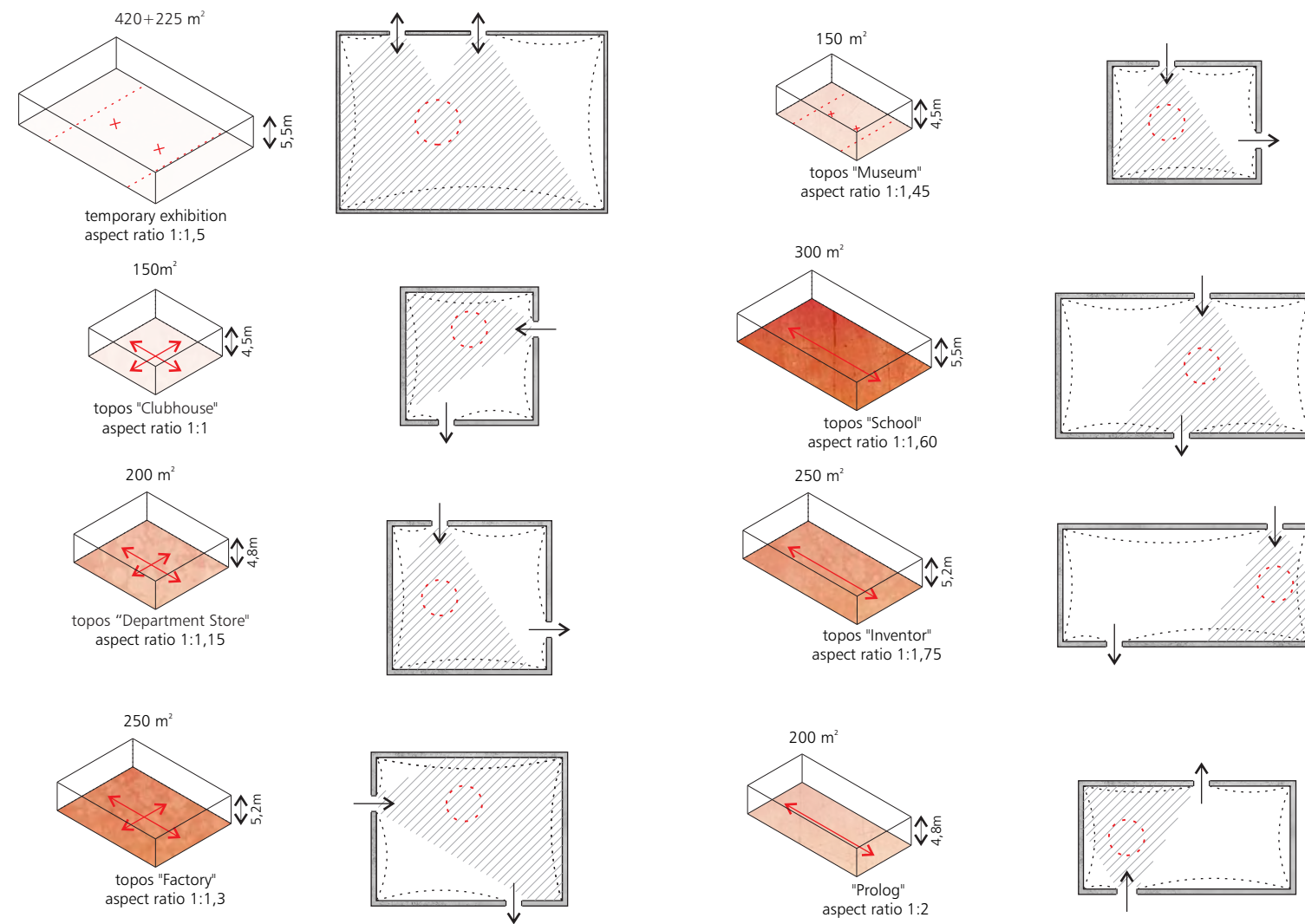


17 color wheel, exercise from the teaching of the theory of color with Wassily Kandinsky; Reinhold Rössig



18 plastic ball, material exercise from the preliminary course; Josef Albers

Perception of the exhibition rooms of the design proposal according to Rémy Zaugg.



↔ arrow - prevailing axis in the room

○ circle - dominant perceptive zone observed after arriving in the room, objects positioned on the floor

--- line - places of potential perceptive ecological niches, objects positioned on or close to the wall

/// perception of the room on arrival

Exhibition

The competition organizers expect a museum that goes far beyond the quantitative designation of program areas and serves as a didactic framework and appropriate space for discovery and telling of the Bauhaus themes.

Essential to the success of this principle is that the collection presentations are marketed as temporary projects and framed by an imaginative and exciting education program. They can alternate a collection presentation with a large elaborate special exhibition. This dynamics makes reference to the space program which expects 1500m² for the Bauhaus exhibition and 600m² for temporary exhibitions, which can each be presented in different combination. It follows that the collection presentation may sometimes have 2100m², but also can be represented in a temporary viewable storage area of 600 square meters for the most important collection objects during a major international exhibition.¹

The entire exhibition area must therefore be organized for flexible subdivision. The corresponding determination of physically defined, connected spatial units and their divisibility using flexible systems was an element of the competition task.

This approach favours the dissemination of exhibition rooms that enables easy change of exhibition objects based on the street grid and Zaugg's approach to exhibition spaces.

Exhibition program

As already described in chapter "Objects in Bauhaus Dessau Foundation", the new exhibition of the Bauhaus Museum Dessau consists of six chapters – so

¹ C4C Team (2015): „competition brief“, page 77-79

called topoi. After a prologue – the starting point of a narrative about the Bauhaus Dessau exhibition continuous with the topics – inventor space – factory – department store – museum – school and club house, which were crucial for the formation of the culture of modernity. Assuming a semi-permanent collection presentation, each object can appear under more parent topics in alternating pattern.

Another cornerstone of the Bauhaus museum opts for a great art – and cultural-historical exhibitions on themes that presents the work of international significance and heritage and historical impact of the Bauhaus teachers.

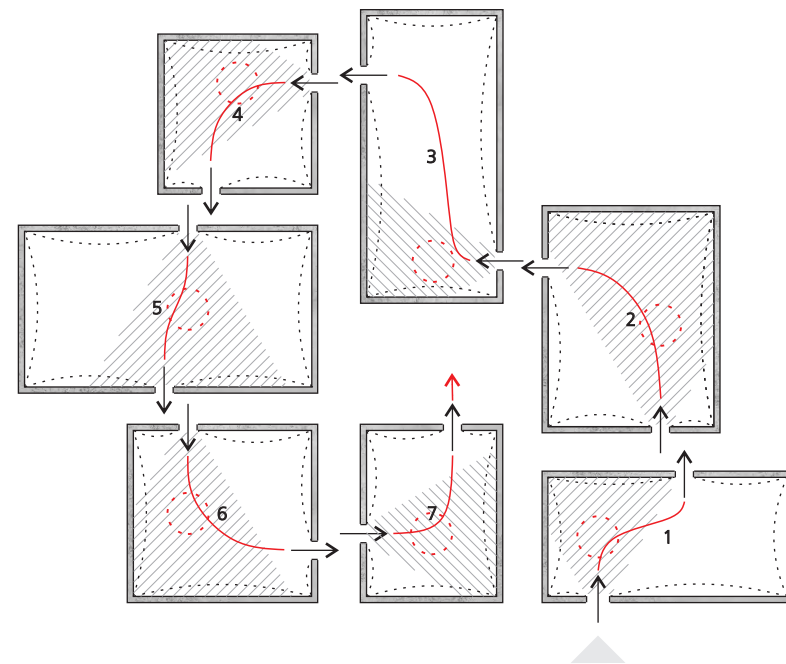
Temporary exhibitions

The Bauhaus Dessau Foundation was founded in 1994 with two objectives: in addition to the care, placement, research and presentation of the history of the Bauhaus, it aims to update this heritage with contributions to the design of today's everyday world. This dual purpose distinguishes the Bauhaus Dessau Foundation not only from the two other leading institutions in Weimar and Berlin, but also has consequences for the Dessau exhibition dramaturgy. The exhibition follows three agendas

1. exhibitions on various subjects as presentations on the migration history of the Bauhaus
2. to develop the new and advanced views of the exhibition with the topoi structuring collection exhibition
3. to present contemporary design in a broad international discourse²

² C4C Team (2015): „competition brief“, page 97

scheme of the permanent exhibition with visitors path and perception of the rooms



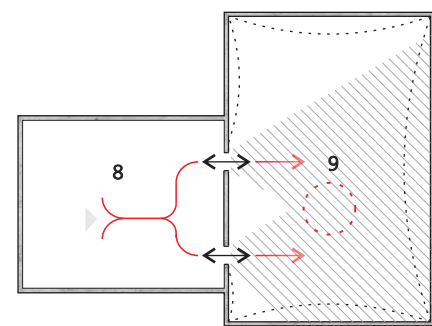
Description of exhibition rooms





Some of the "topos" have types of objects prescribed, but the majority is variable and can be exhibited according to the topic, material, dimensions or provenience. By respecting the prescribed area for every topos, a variety of spatial experiences defined by Zaugg and modifiable by curators can be incorporated into the project. Variety of aspect ratio of the exhibition rooms ranges from a rectangular central room - 1:1 to long room with aspect ratio of 1:2. The same applies for the ceiling height. The smallest exhibition rooms of 150m² with 4,5 meters - 200m² with 4,8 meters - 250m² with 5,2 meters and 300m² with ceiling height of 5,5 meters. This is the height range expected by the competition brief. These are not significant changes, but help to differ the visitors experience.

All exhibition spaces are placed on the street grid and interconnected through spiral enfilade which end in a courtyard. By connecting them in this manner it is possible to close and adapt one or more exhibition rooms without effecting the daily routine of the museum. The position of the entrances allow the curators to divide the room into smaller rooms or spaces according to the curatorial intentions.

Temporary exhibition is positioned in the underground level and with close connection to logistics can serve as already mentioned temporary viewable storage area. During major international exhibitions is this space made available and connected with the permanent exhibition. This space is connected to the rest of the building through a staircase leading to the main entrance and can be, therefore, rented out - or work outside the main museum`s opening hours. Because the objects to be presented are not specified, the aspect ratio of this room is close to the ideal one defined by

scheme of the temporary exhibition with visitors path and perception of the room



-  visitors movement
-  circle - dominant perceptive zone observed after arriving in the room, objects positioned on the floor
-  line - places of potential perceptive ecological niches, objects positioned on or close to the wall
-  perception of the room on arrival

- | | |
|---------------------|--------------------------------|
| 1 "Prolog" | 6 topos "Department Store" |
| 2 topos "Factory" | 7 topos "Museum" |
| 3 topos "Inventor" | 8 preface temporary exhibition |
| 4 topos "Clubhouse" | 9 temporary exhibition |
| 5 topos "School" | |

Rémy Zaugg - 1:1,5. It leaves curators the possibility to alter the room layout for every exhibition because the room does not possess certain predominant feature. Temporary exhibition consists of two parts - preface and the exhibition room itself. Visitors enter the preface by stairs or lift. This area serves as an introduction of the temporary exhibition and depending on the size of the display, this space can serve as a part of the exhibition or as a connecting element between the main entrance and the exhibition. Area of personal hygiene is incorporated into this space.

Topos "Department Store" involves presentation of furniture and design products. Museums in Weimar and Berlin present this topic centrally placed or hung on the wall. Inspiration for the layout of the slightly longitudinal room with aspect ratio of 1:1,15 comes from an 1942 exhibition of School of Design, Chicago organized by Bauhaus "emigrants".

Topos "Factory" - is presented in a slightly longitudinal room with aspect ratio of 1:1,3 that can be easily divided for presentation of collection of design objects. In this layout is area presented divided in several areas where different industries can be presented.

Topos "Museum" - is supposed to present Bauhaus as an institution which presented objective relationship of objects. Room is designed with ideal aspect ratio of 1:1,45. In layout is used design by Lina Bo Bardi who presented visual art works in neutral way pinned on a glass transparent plate and placed freely in the space.

Topos "School" with longitudinal design presentation of new approach in

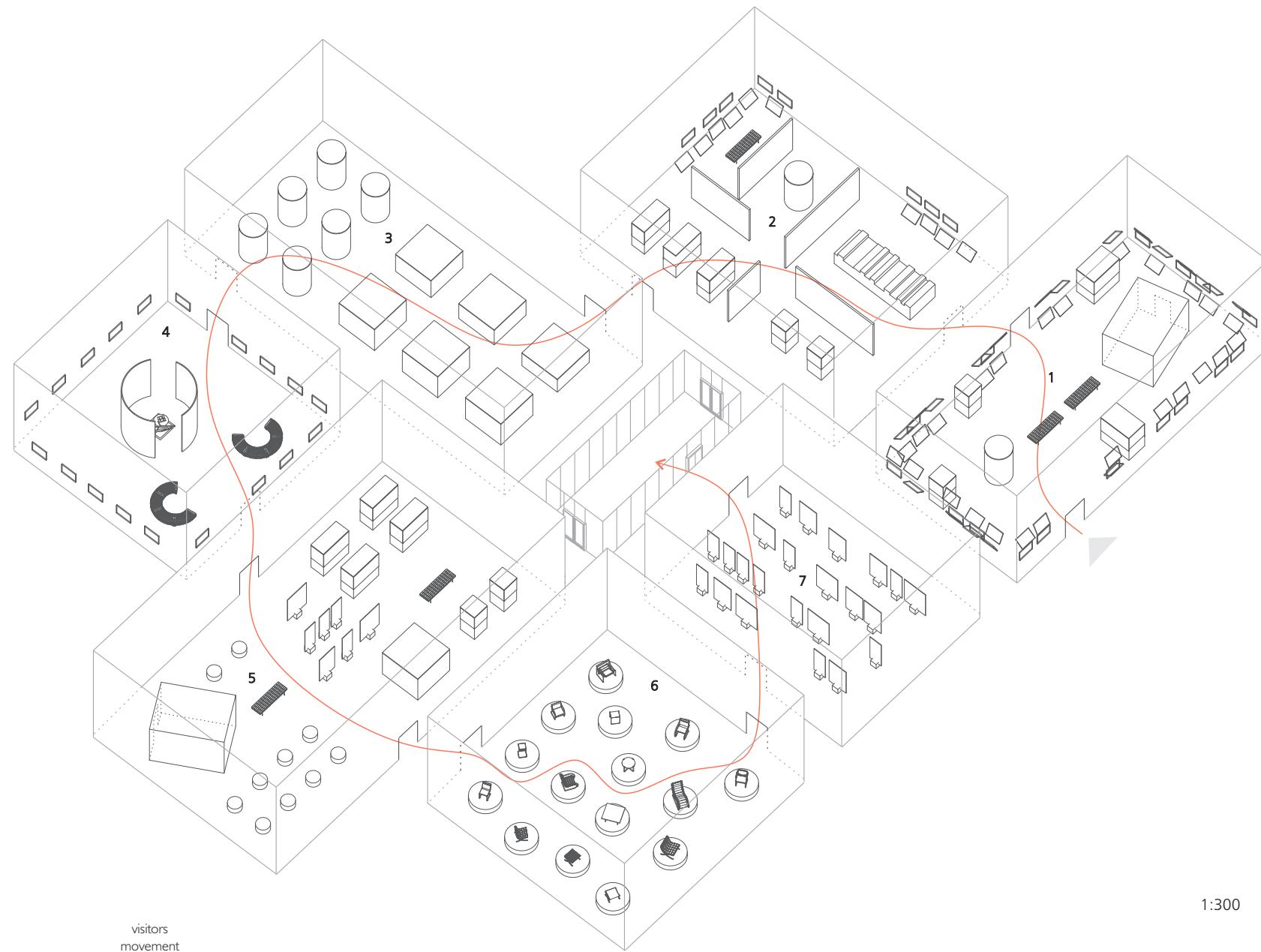
education. All products of the workshops can be presented as a mixture of showcases, exhibits placed in frames and freely in space. This type of presentation is used in Weimar and partially in Berlin.

Topos "Inventor" presents innovations of this school`s work in topics architecture, city planning, modern household and new media and is presented in a room with aspect ratio of 1:1,75. The objects are not defined, but aim is to present development which can be presented in longitudinal room which invites visitors to move from one end to another. Illustration made by Kurt Kranz and exhibition design by L. M. van der Rohe L. Reich serves as an inspiration.

"Prolog" is a first room of the exhibition where the visitor should be introduced to the topic of Bauhaus. Road from Weimar to Dessau and the change bound with it is presented in longitudinal experience through images and models in a scheme created by Herbert Bayer which has been used even in 2012 London exhibition by Architects Carmody Groarke and graphic designers "A Practice For Everyday Life". Aspect ratio of the room is 1:2.

Graphics on the left shows a scheme of the exhibition rooms with visitors path and perception of the rooms. The permanent exhibition consists of dissemination of interconnected rooms and the temporary exhibition located underground of one main exhibition space with preface.

Inspiration for establishing of permanent exhibition spaces with scheme of movement.

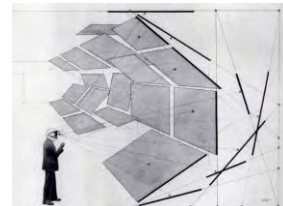




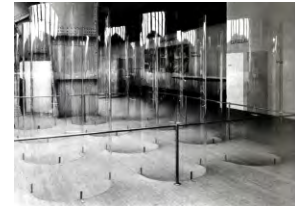

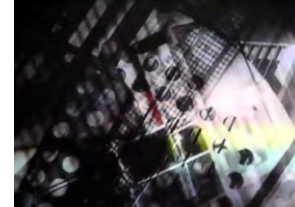


visitors movement



1:300

Inspiration for establishing of exhibition spaces.

<p>1 "Prolog"</p>  <p>Herbert Bayer, scheme and design for „Room 5“ at international exhibition „Société des artistes décorateurs français“ in Paris, 1930</p>	<p>5 topos "School"</p>  <p>Mensch Raum Maschine Stage Exhibition at the Bauhaus Stiftung Dessau</p>
<p>2 topos "Factory"</p>  <p>Bauhaus Archiv Berlin</p>	<p>6 topos "Department Store"</p>  <p>joint exhibition by students at the School of Design, Chicago, 1942</p>
<p>3 topos "Inventor"</p>  <p>Kurt Kranz, illustration of the exhibition hall of the German pavilion at the International Exhibition in Paris, 1937</p>	<p>7 topos "Museum"</p>  <p>Lina Bo Bardi, São Paulo Museum of Art (MASP)</p>
<p>4 topos "Clubhouse"</p>  <p>László Moholy-Nagy, Light Prop for an Electric Stage 1930, Archiv Berlin</p>	<p>7 topos "Museum"</p>  <p>Lina Bo Bardi, São Paulo Museum of Art (MASP)</p>

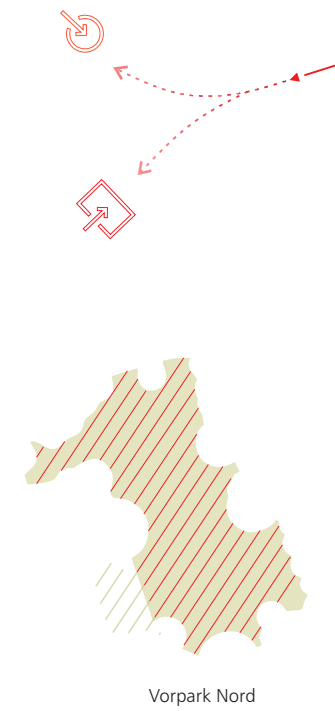
Workshops at Bauhaus and their possible presentation

<p>freely in space</p> <ul style="list-style-type: none"> 1 Stone and wood sculpturing 2 Joinery 	<p>frames</p> <ul style="list-style-type: none"> 1 Printing 2 Typography and advertising (in the graphics together with printing) 3 Wall painting 4 Theater 5 Architectural/ Building theory 6 Photograph 7 Fine arts
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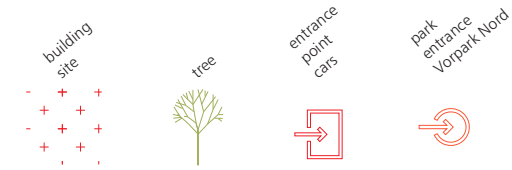
showcases

- 1 Pottery
- 2 Book binding
- 3 Stained glass
- 4 Textile workshop
- 5 Metal workshop
- 6 Preliminary course

Concept of the design proposal
the spatial view of the building site with "flowline"



Vorpark Nord



Basis of the concept is to define the movement of visitors and residents of the city. Ratsgasse connects the site with the city center and extension of this connection through the park establishes a pair of flowlines.

The first one links the city center and main train station. This path is used by visitors arriving to the city by train, bus and public transport.

The second flowline is formed by connecting Ratsgasse and parking lot that is used by visitors arriving by cars.

Because of considerate treatment of the vegetation a vast treeless area of Vorpark Nord can be used to place the volume.

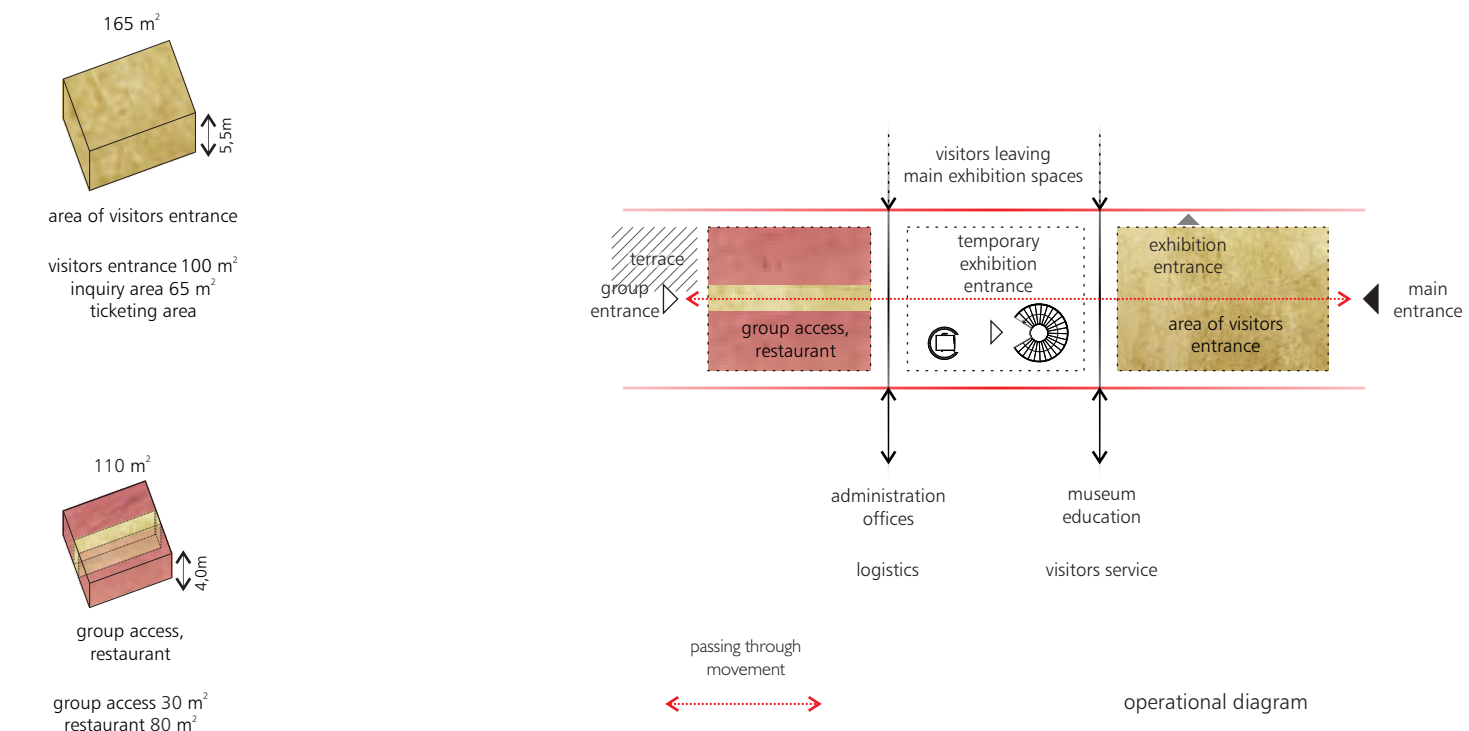
The main idea behind the architecture of the museum building is use of "street grid". In forming of the "internal urbanism" were used functional relations and requirements of each function of the museum.

Cubature of the individual volumes are placed on a "chessboard" of "street grid" and their deployment allows visitors to discover step by step the building and the surrounding areas thanks the views from the building.

Examination of the volume

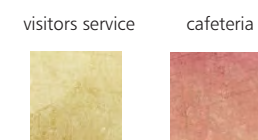
Entrance, restaurant

linking of functions into volumes according to the height and operational relationship

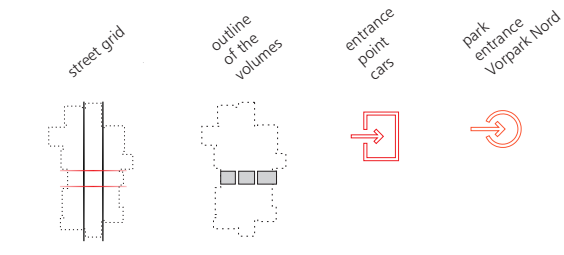
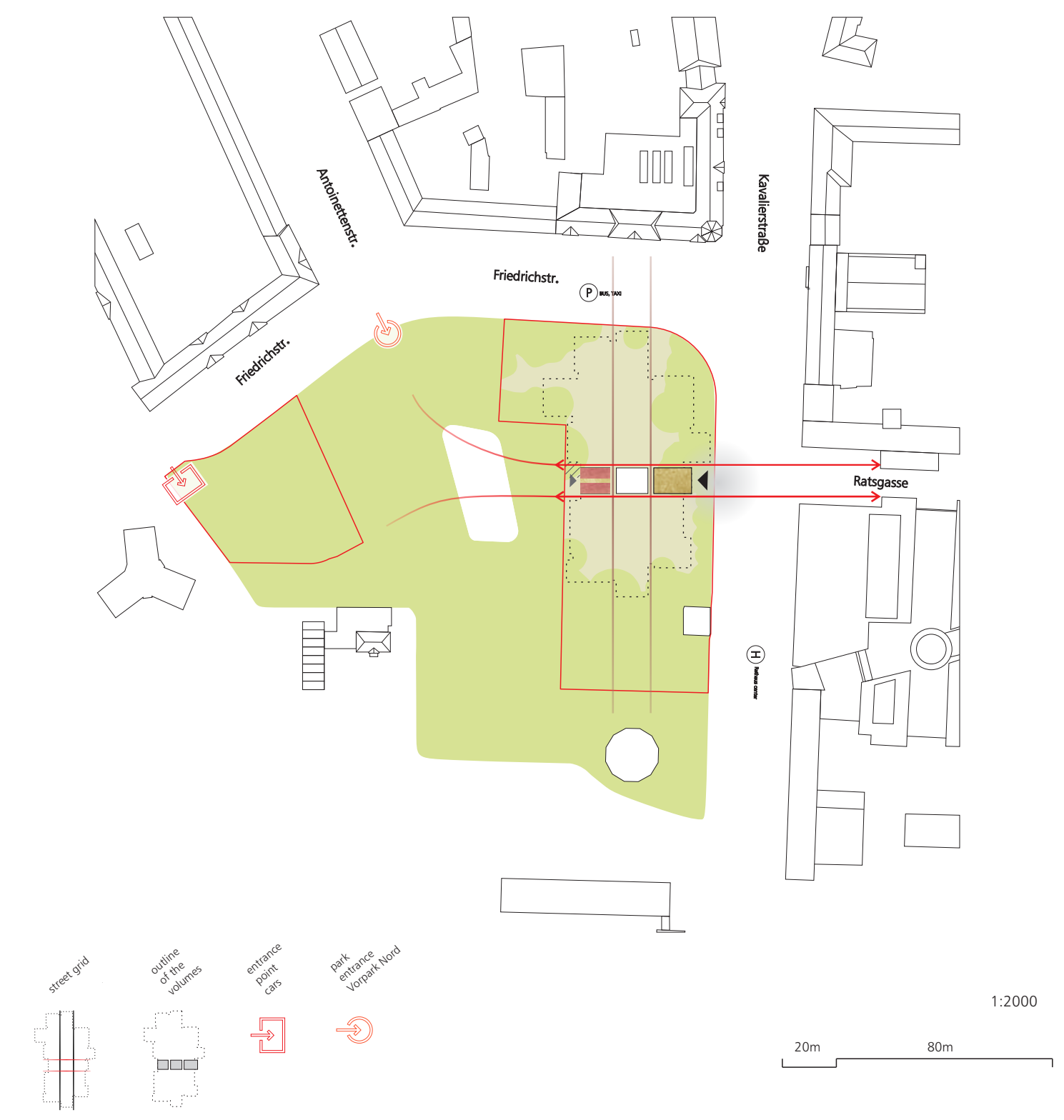


After establishing the movement patterns is the main and group entrance positioned in alignment with Ratsgasse and on the free space area of Vorpark Nord. This part of the street grid connects the city center with Stadtpark. The area defined by the first main pair of street grid is a "buffer zone" between the main functions. It consists of transparent volumes.

The aim is to create visual connection between Kavalierstrasse - Ratsgasse and the park that attracts people. The program includes entrances with inquiry area, cafeteria and entrance to the temporary exhibition. The second pair of the street grid is defined by architecture of adjoining site - by Main Post Office and the fountain.

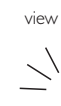
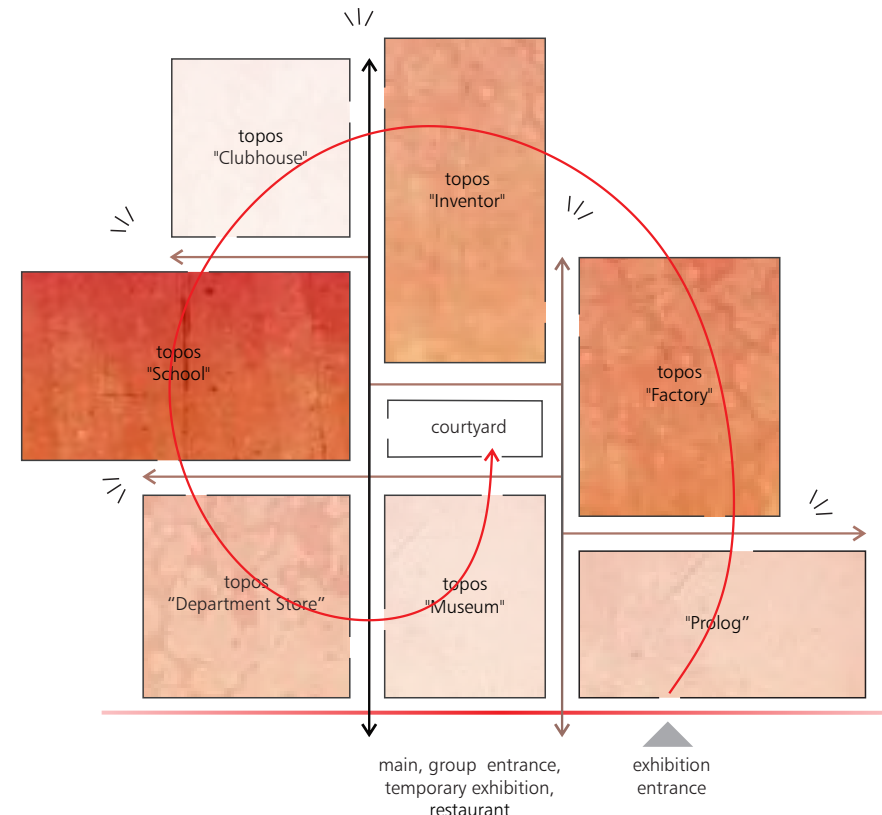
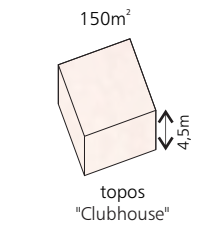
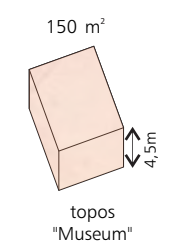
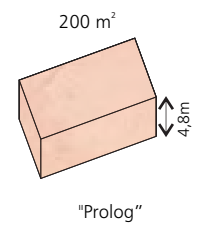
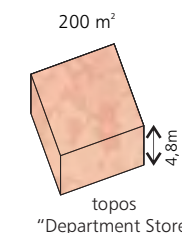
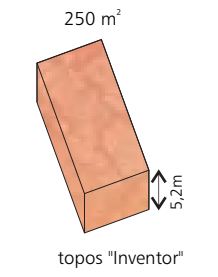
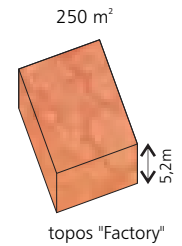
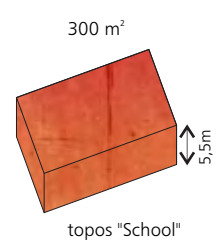


positioning on the building site - entrance, restaurant



Exhibition spaces

linking of functions into volumes according to the height and operational relationship



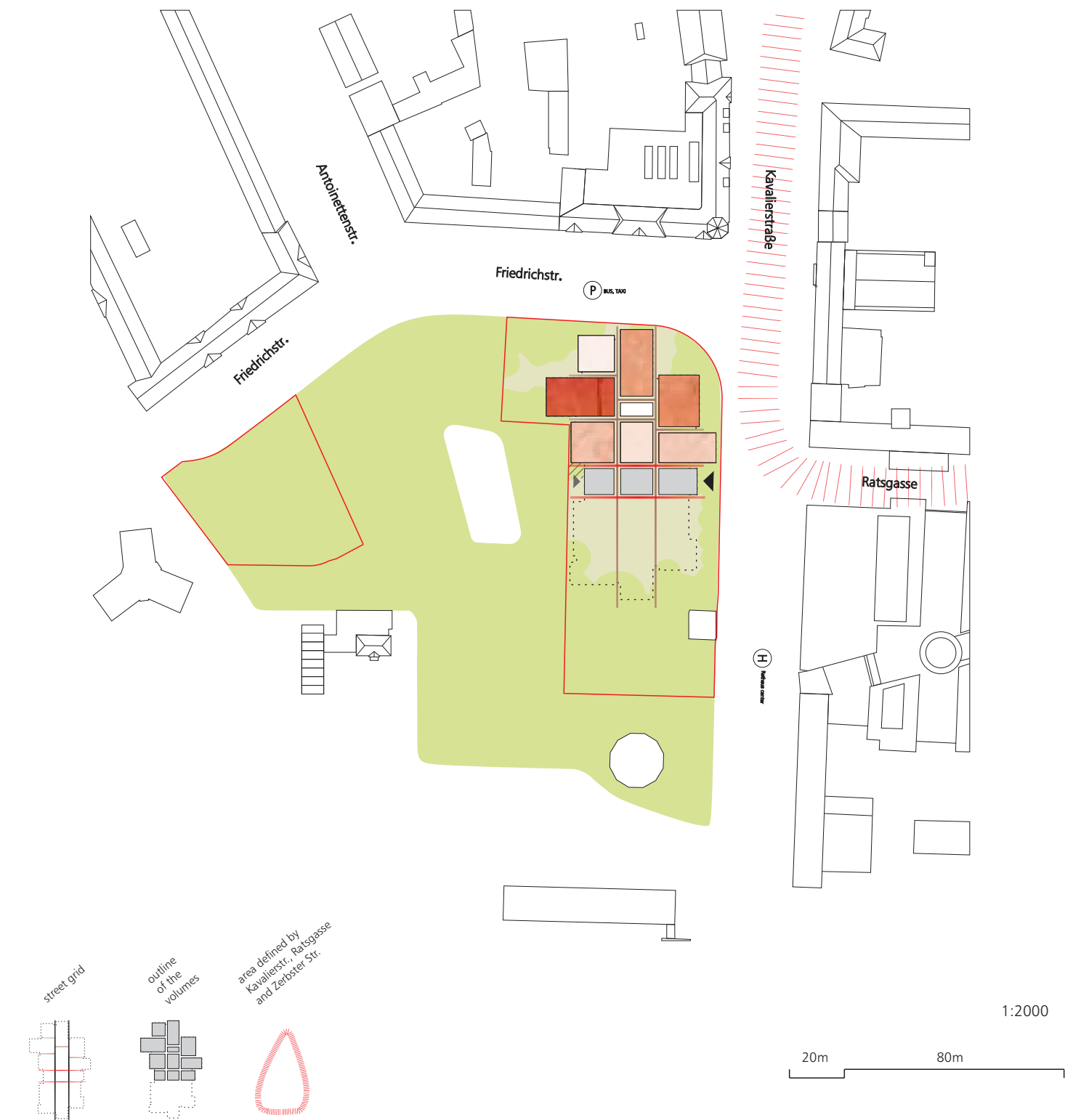
operational diagram

Masterplan of the city defined the importance of the north-east area of the building site and exhibition rooms are placed on the street grid in this area. These spaces are higher and represent their importance in the overall volume of the building.

exhibition

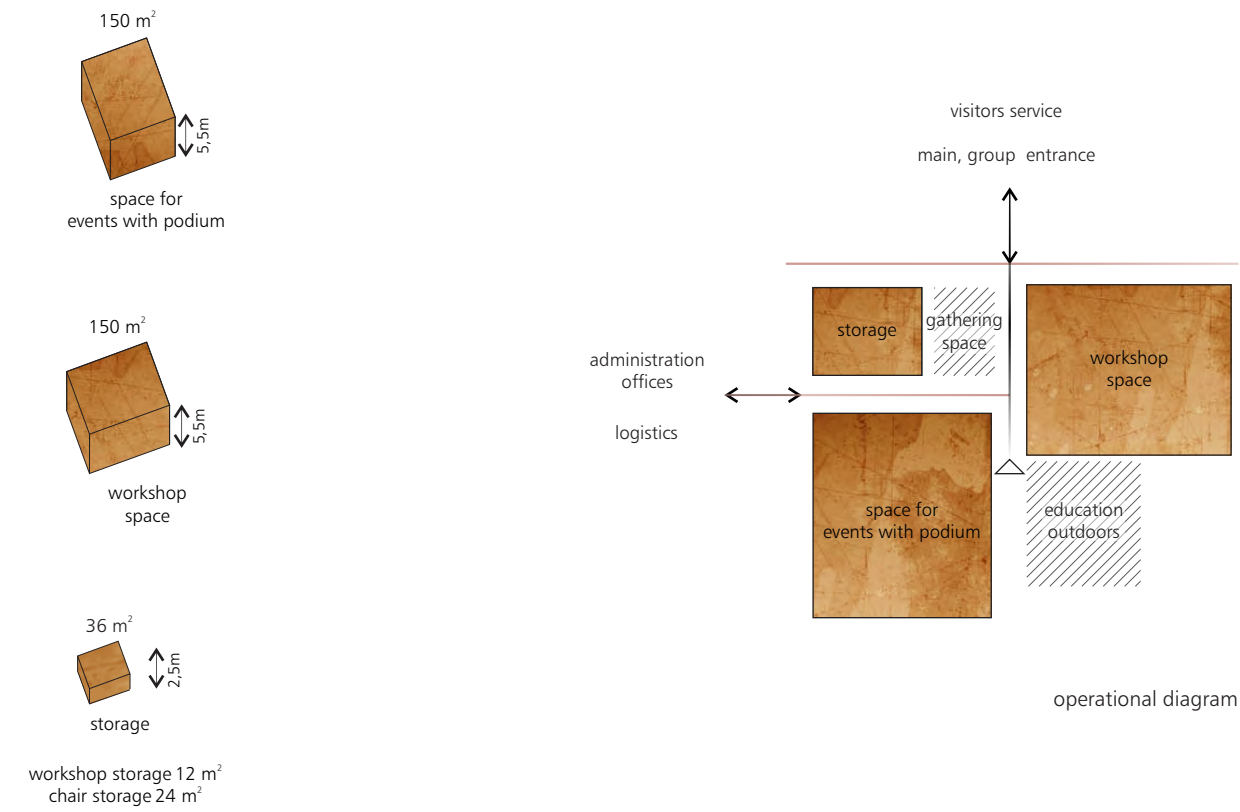


positioning on the building site - exhibition spaces



Museum education

linking of functions into volumes according to the height and operational relationship



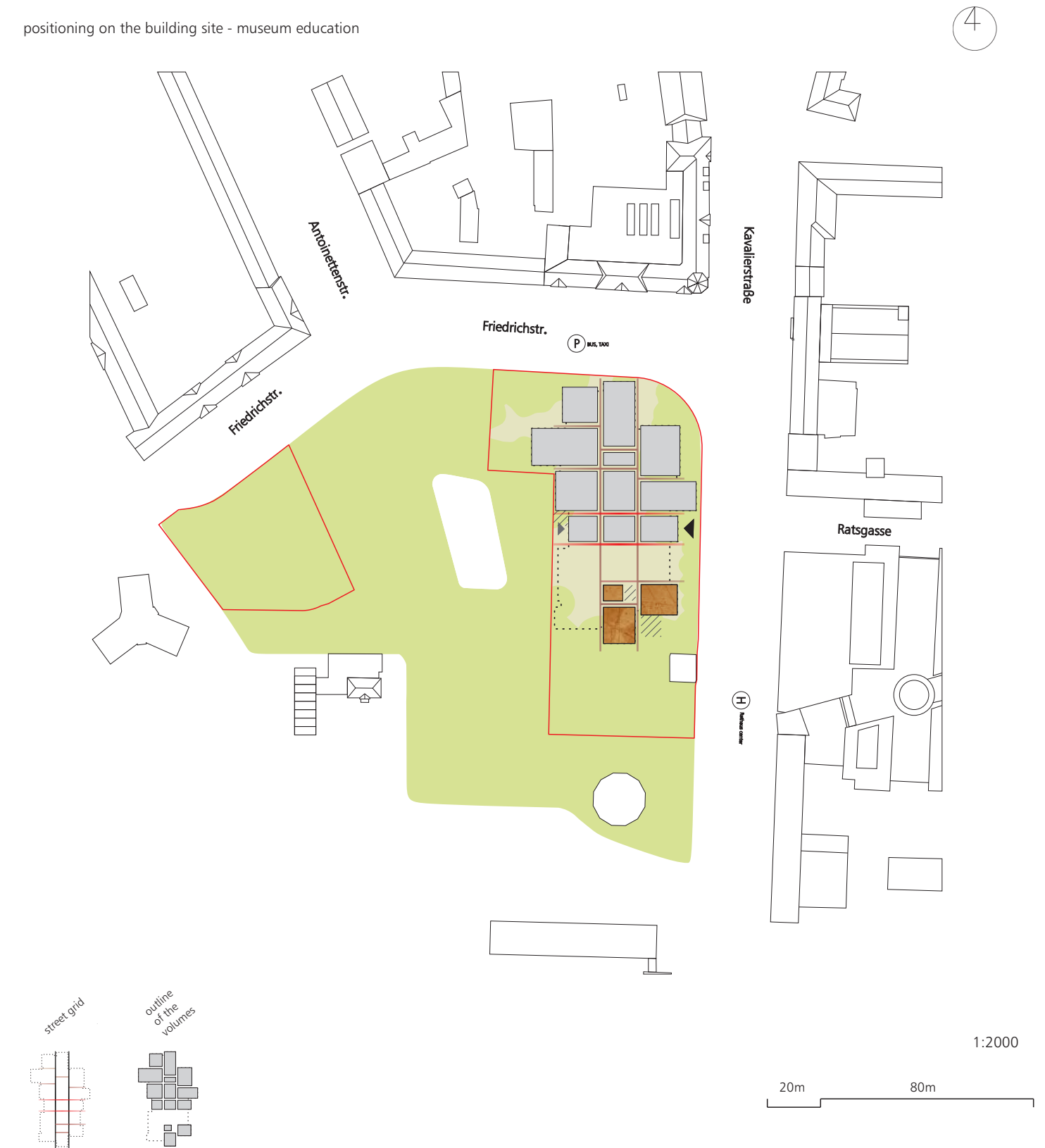
Placed on the grid on the other side of the building is the museum education. These volumes are connected via street grid with exhibition, but placed on the other side of the overall volume as a counterpart to the most important

museum education



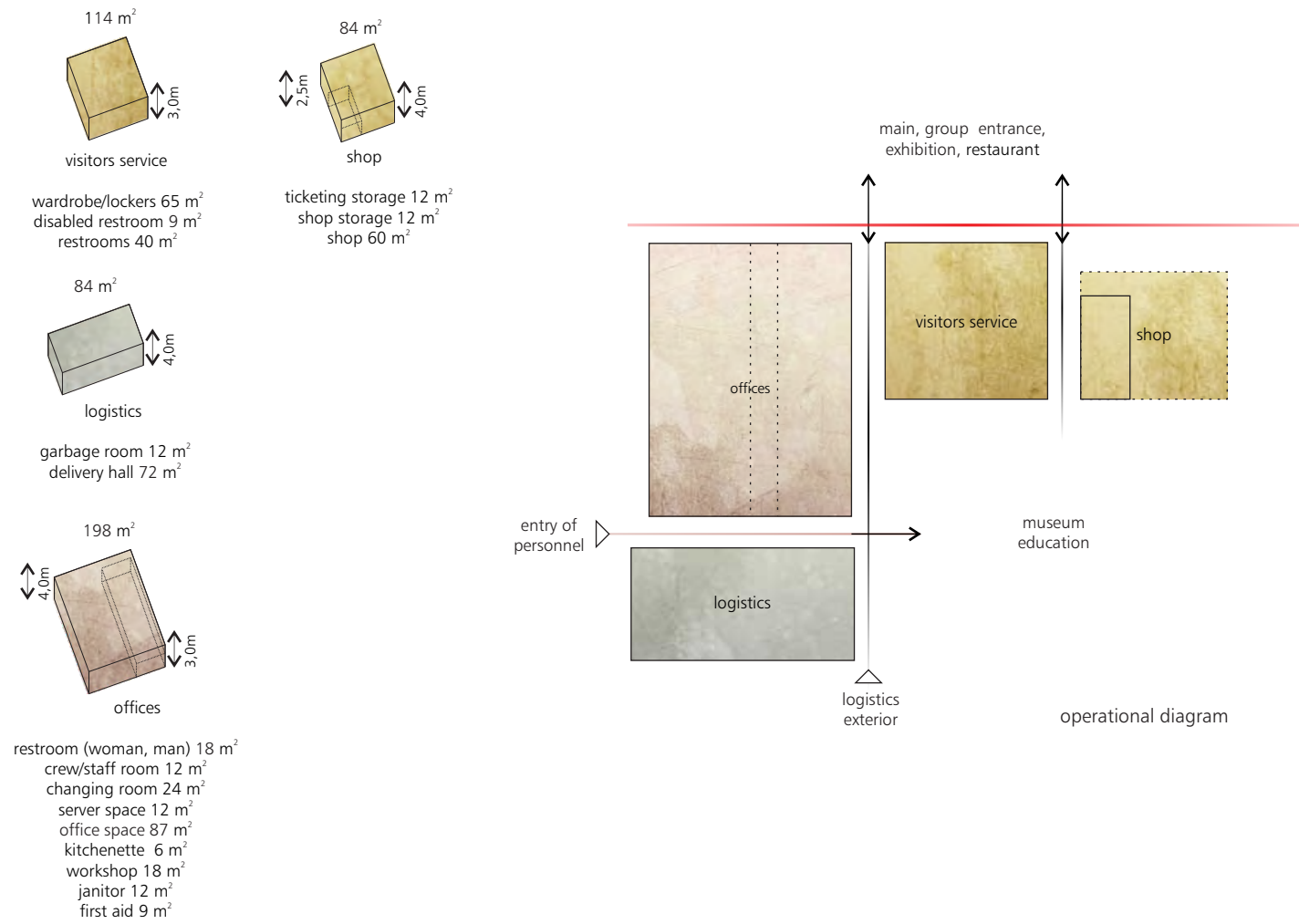
exhibiting function. Museum wants to attract new visitors with this function and therefore is placed in visual connection with Kavalierstraße.

positioning on the building site - museum education

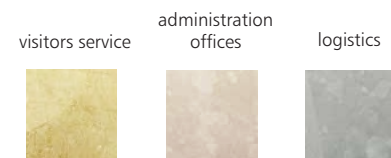


Administration, logistics and visitors service

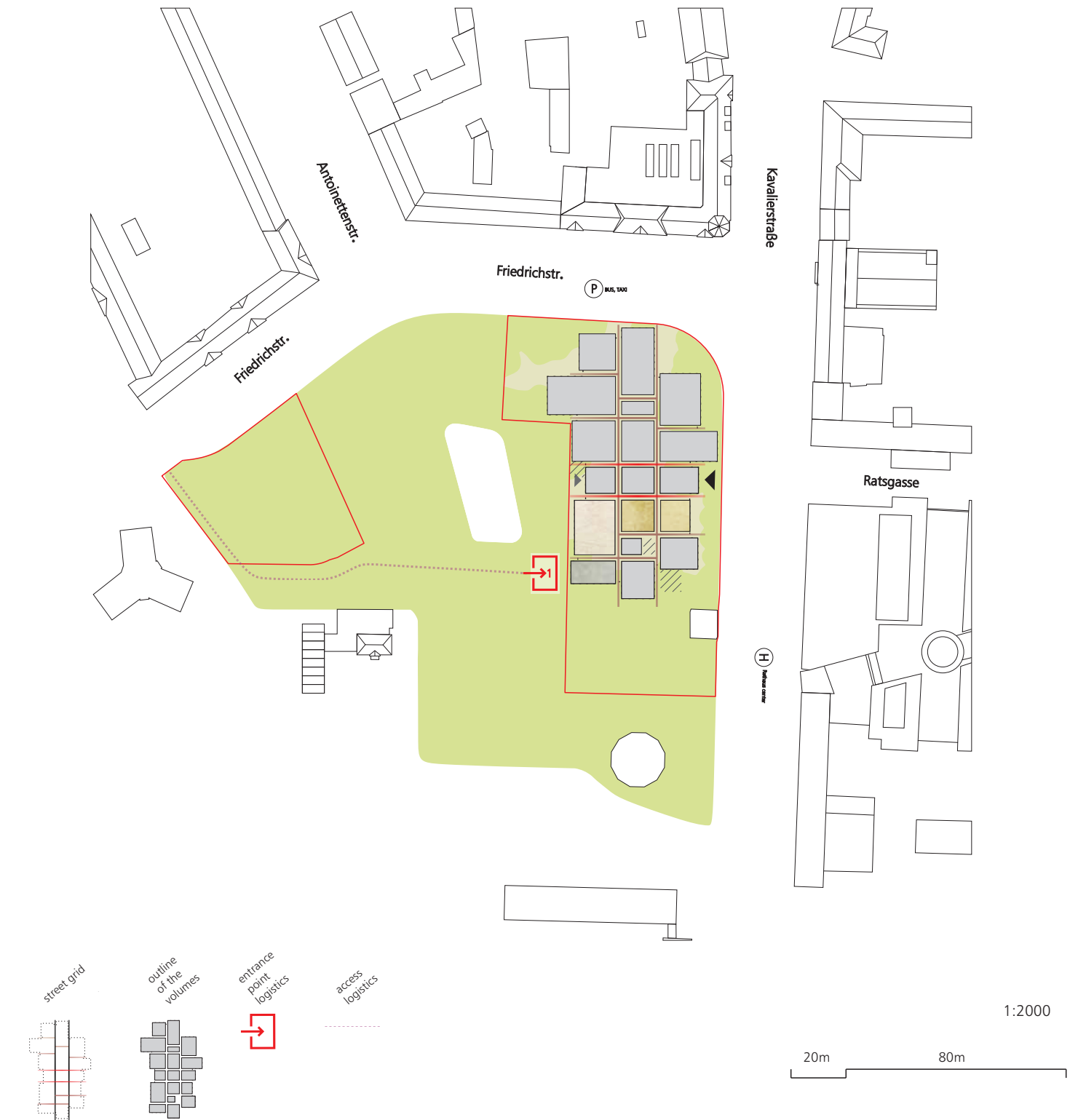
linking of functions into volumes according to the height and operational relationship



Other required functions as visitors service, administration and logistics are placed on the rest of the grid between the main two functions by respecting their program connections and requirements.



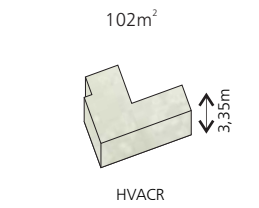
positioning on the building site - administration, logistics and visitors service



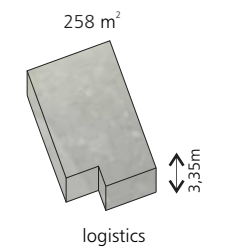
Logistics, technical spaces and temporary exhibition

linking of functions into volumes according to the height and operational relationship

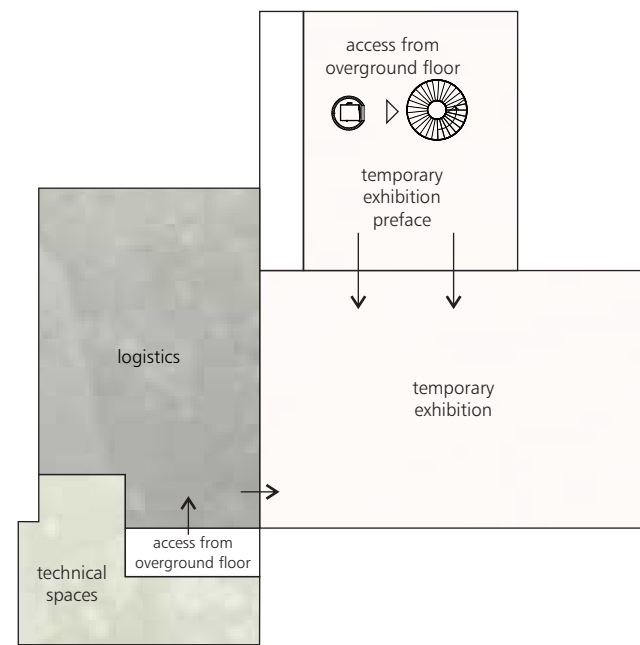
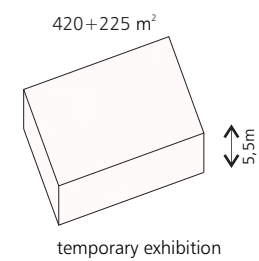
115



HVACR control centre 82,5 m²
utility interface 19,5 m²



logistics, control, packing 66 m²
distribution warehouse 48 m²
mobile wall storage 36 m²
material storage 24 m²
interim storage 66 m²
painting 18 m²



operational diagram

Functions placed underground are storages belonging to logistics, technical spaces and temporary exhibition. Exhibition space in the underground consists of two parts - smaller area of preface that can be secondary rented out and is connected to the main exhibition space that is secondary used as

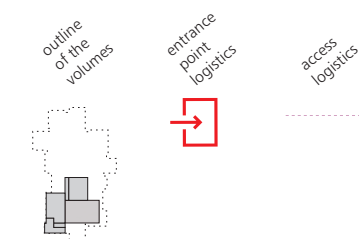
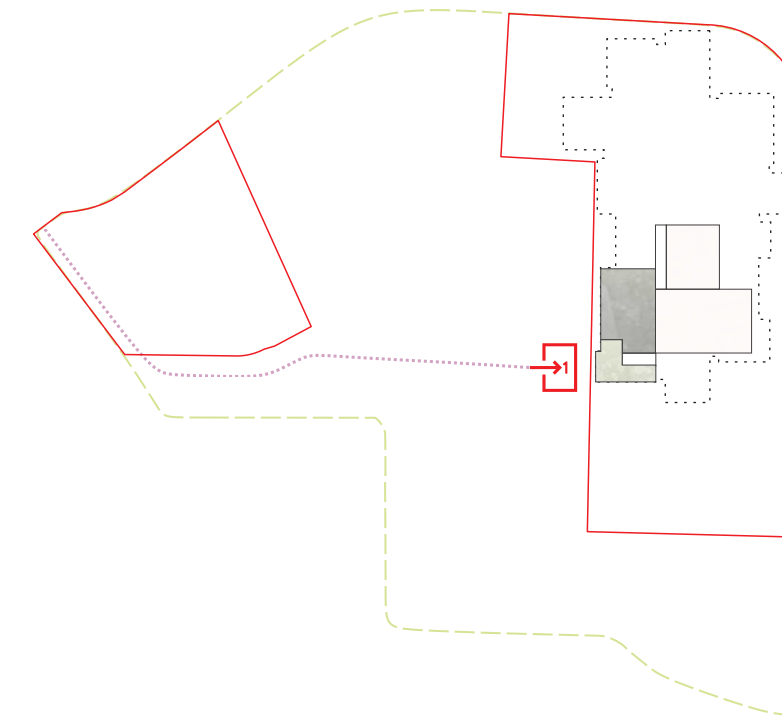
a storage area that is made available and connected with the permanent exhibition during major international exhibitions as already described in the chapter "Exhibition rooms concept".



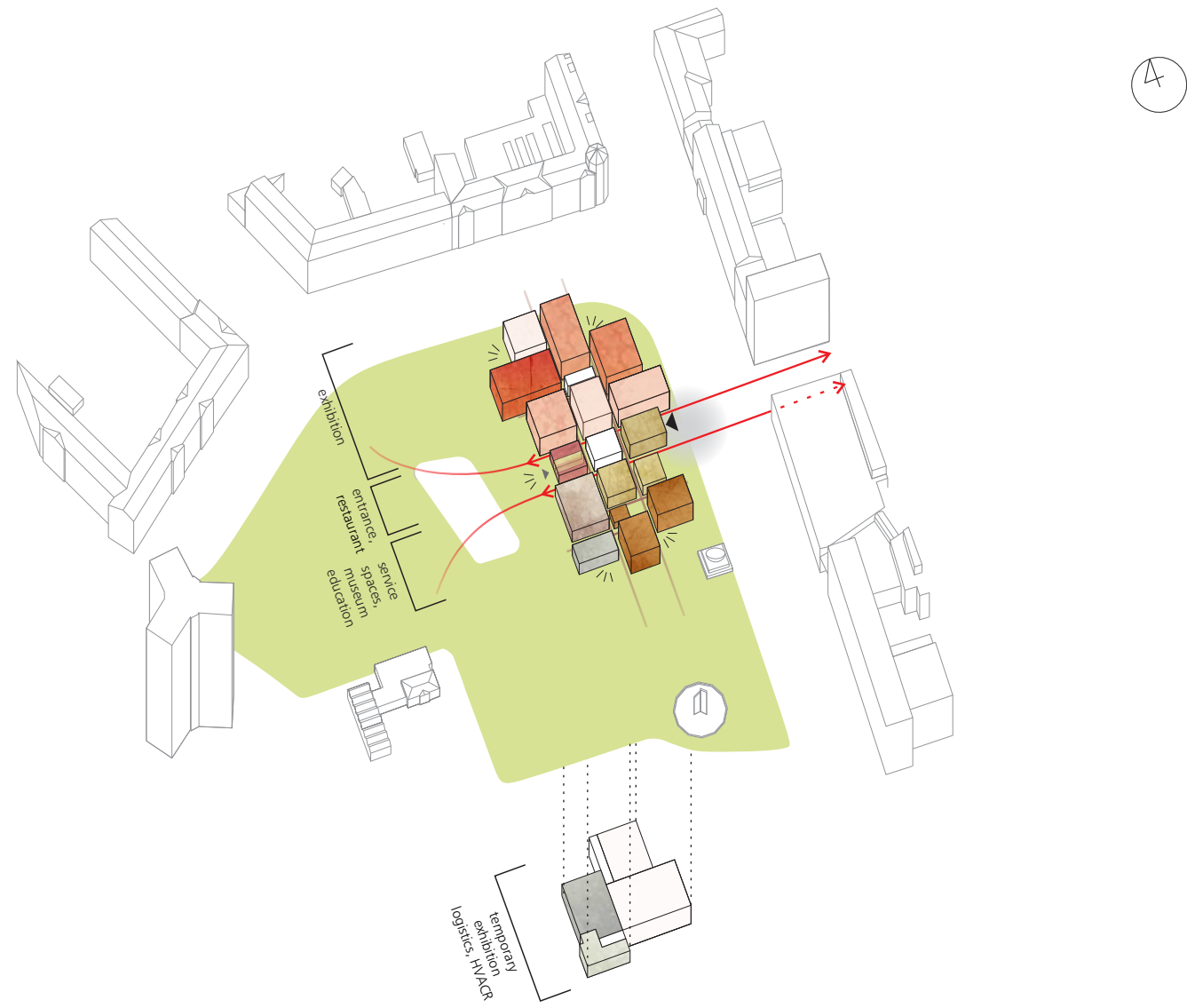
positioning on the building site - logistics, technical spaces and temporary exhibition

4

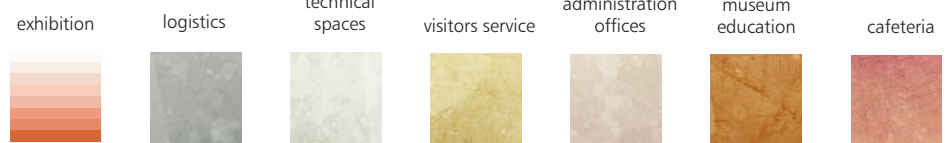
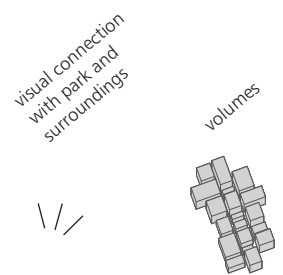
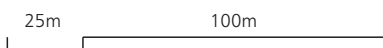
116



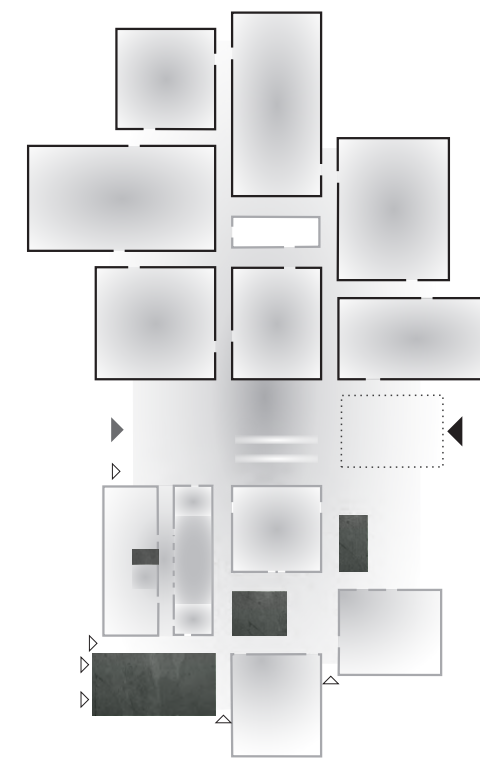
Graphic shows the program requirements defined in the competition brief in spatial relations.



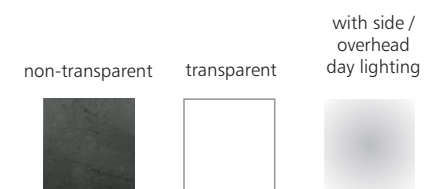
1:2500



transparency of the volumes



1:1000



Room schedule

Ground floor

Museum

1	topos "Prolog"	200 m ²
2	topos "Factory"	250 m ²
3	topos "Inventor"	250 m ²
4	topos "Clubhouse"	150 m ²
5	topos "School"	300 m ²
6	topos "Department Store"	200 m ²
7	topos "Museum"	150 m ²
8	courtyard	36 m ²

Visitors service

9	entrance and inquiry area	165 m ²
10	staircase, elevator	105 m ²
11	cafeteria	75 m ²
12	terrace	40 m ²
13	preparation space	11,5 m ²
14	storage	6,5 m ²
15	shop	60 m ²
16	ticketing storage	12 m ²
17	shop storage	12 m ²
18	lockers	65 m ²
19	WC	25,5 m ²
20	WC	24 m ²

Administration

21	director, conference	24 m ²
22	offices	78 m ²
23	kitchenette	6 m ²
24	staff room	12 m ²
25	first aid	9 m ²
26	server space	12 m ²
27	changing room	12 m ²
28	WC, shower	11 m ²
29	WC	3 m ²
30	WC, shower	14 m ²
31	changing room	12 m ²
32	workshop	18 m ²

Logistics

33	garbage room	12 m ²
34	storage, delivery hall	6,5 m ²
35	delivery hall	63,5 m ²
36	open space logistics	

Museum education

37	chair storage	24 m ²
38	workshop storage	12 m ²
39	workshop	150 m ²
40	space for events with podium	150 m ²
41	outdoor education	

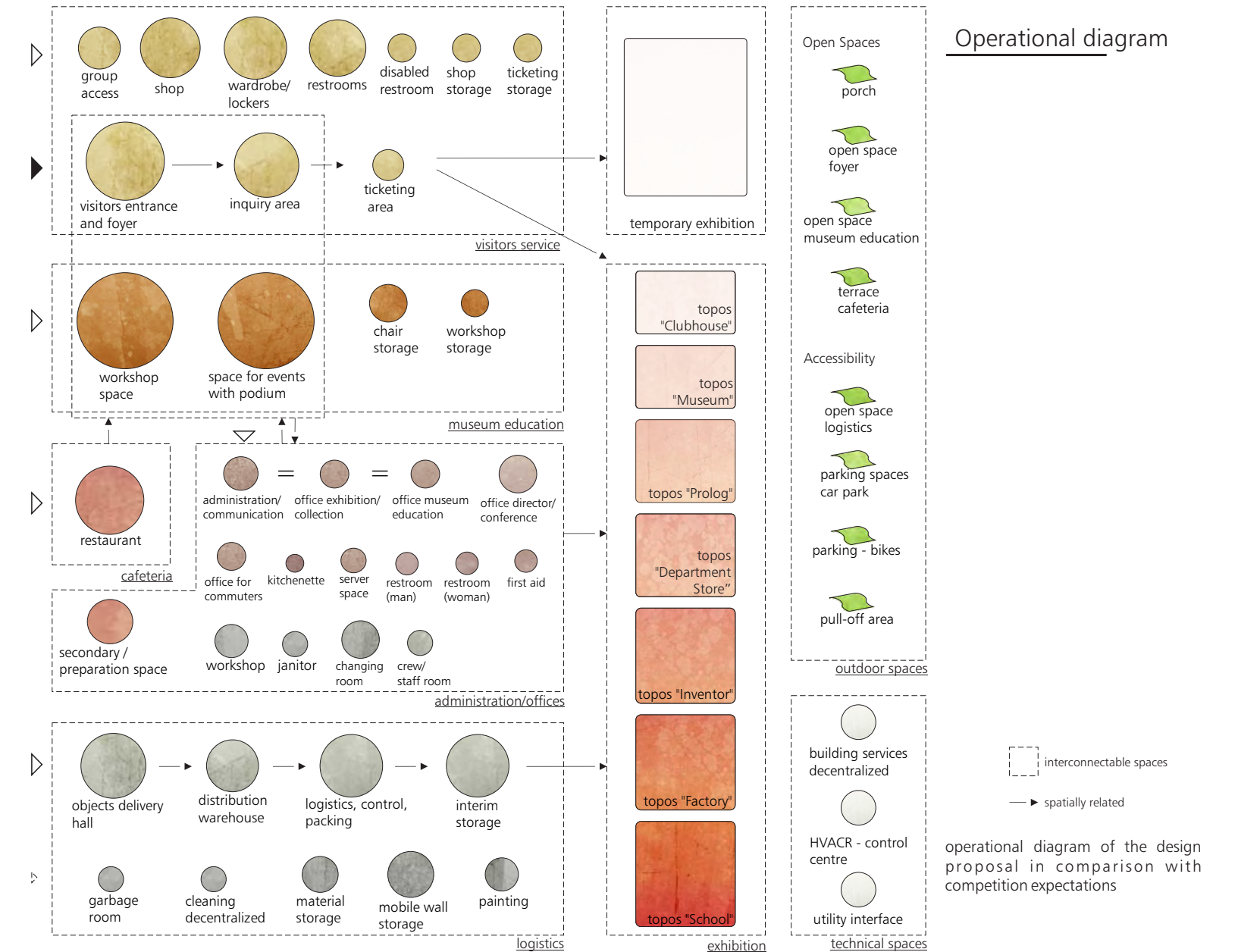
Underground Floor - logistics, technical spaces

42	logistics, control, packing	66 m ²
43	painting	18 m ²
44	material storage	24 m ²
45	distribution warehouse	48 m ²
46	interim storage	66 m ²
47	mobile wall storage	36 m ²
48	utility interface	19,5 m ²
49	HVACR	82,5 m ²

Underground Floor - temporary exhibition

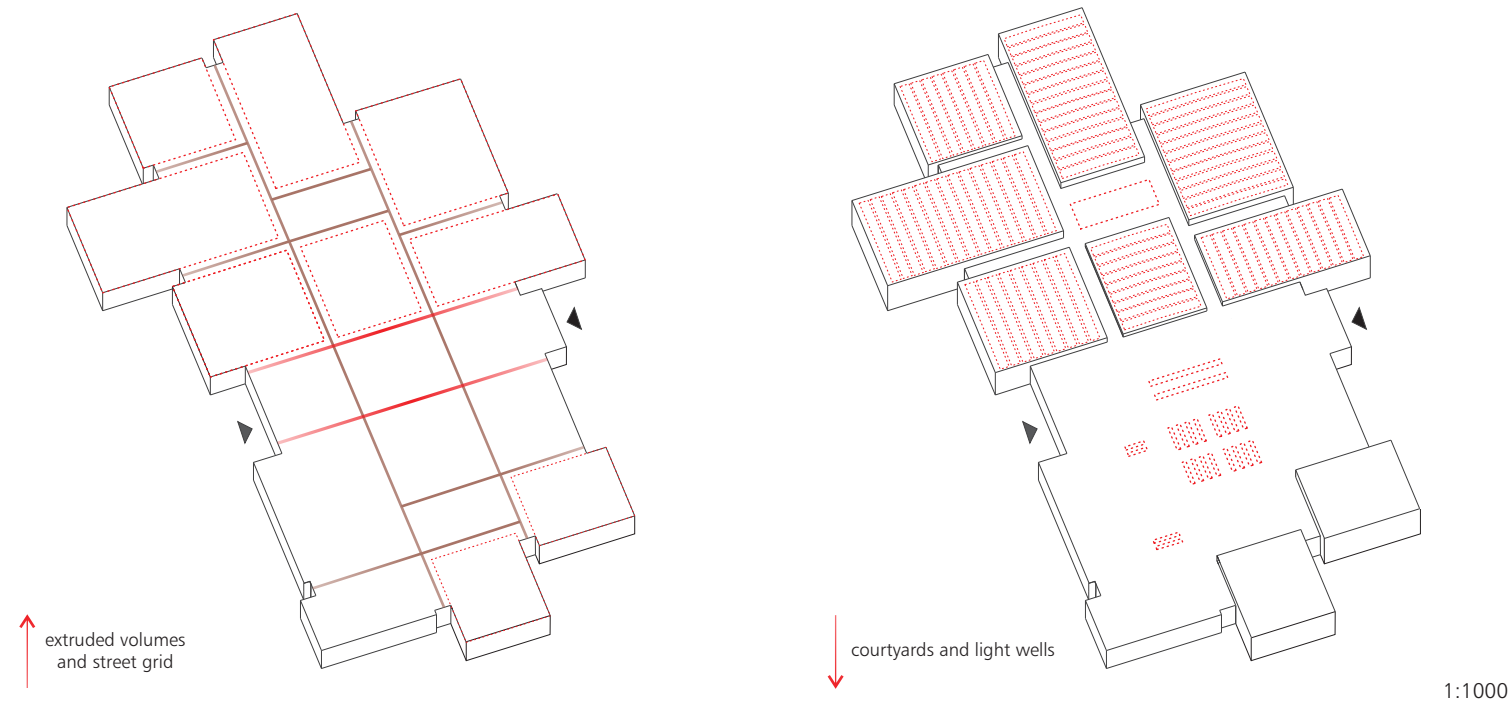
50	storage	5 m ²
51	WC	15 m ²
52	WC	15,8 m ²
53	temporary exhibition - preface	230 m ²
54	temporary exhibition	425 m ²

in total 3817,3 m²



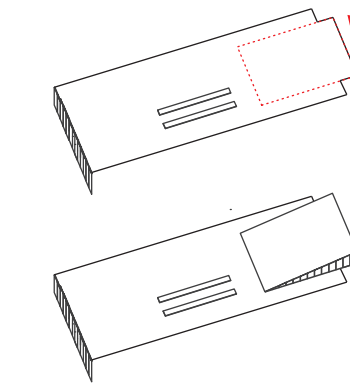
Modeling of the volume

121

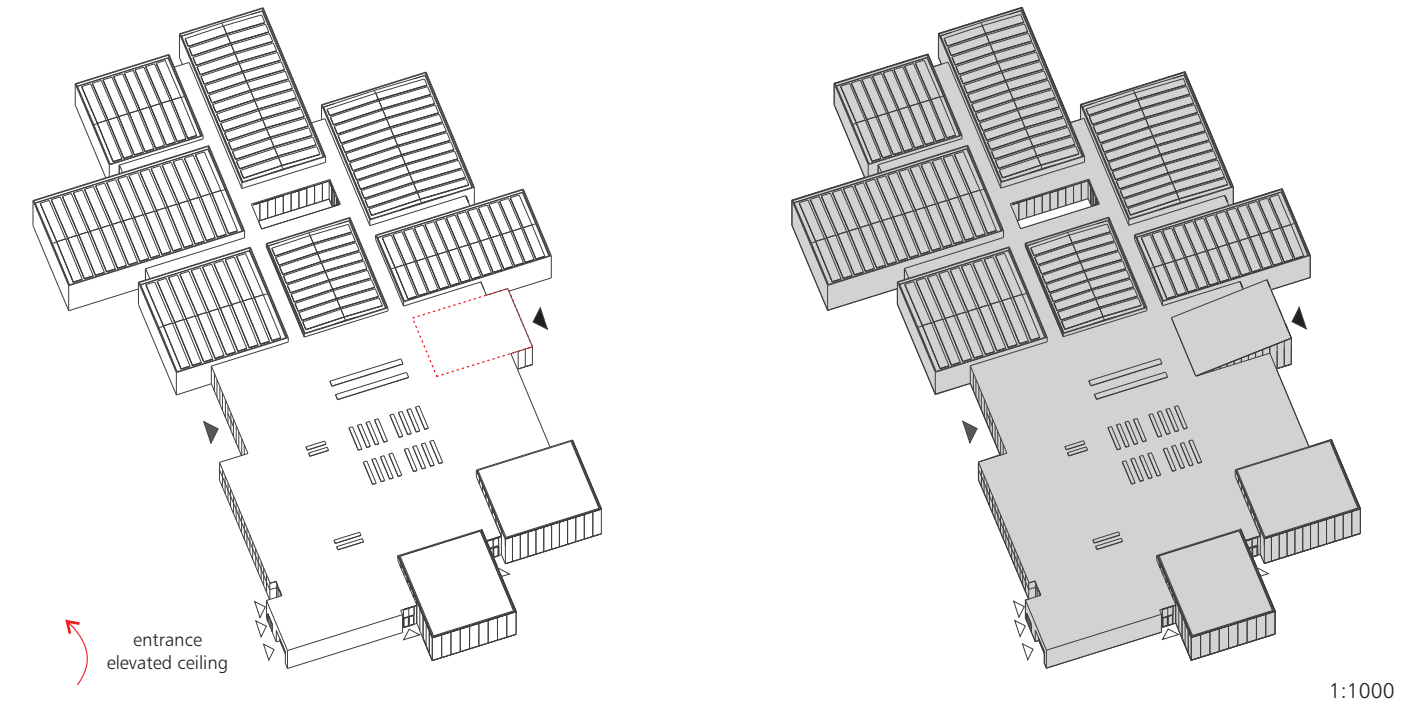


Bauhaus museum in Dessau wants to be presented as an exhibiting and educational institution. The volumes these functions are higher and visible in the overall concept. All other functions are "hidden under the ceiling" and embedded in the street grid.

Ceiling is perforated in places where there is a courtyard, functions with a lower ceiling height than the main one (visitors service, logistics, administration) and exhibiton rooms. The aim is to use these perforations as a source of natural light.



elevated ceiling in the area of the main entrance



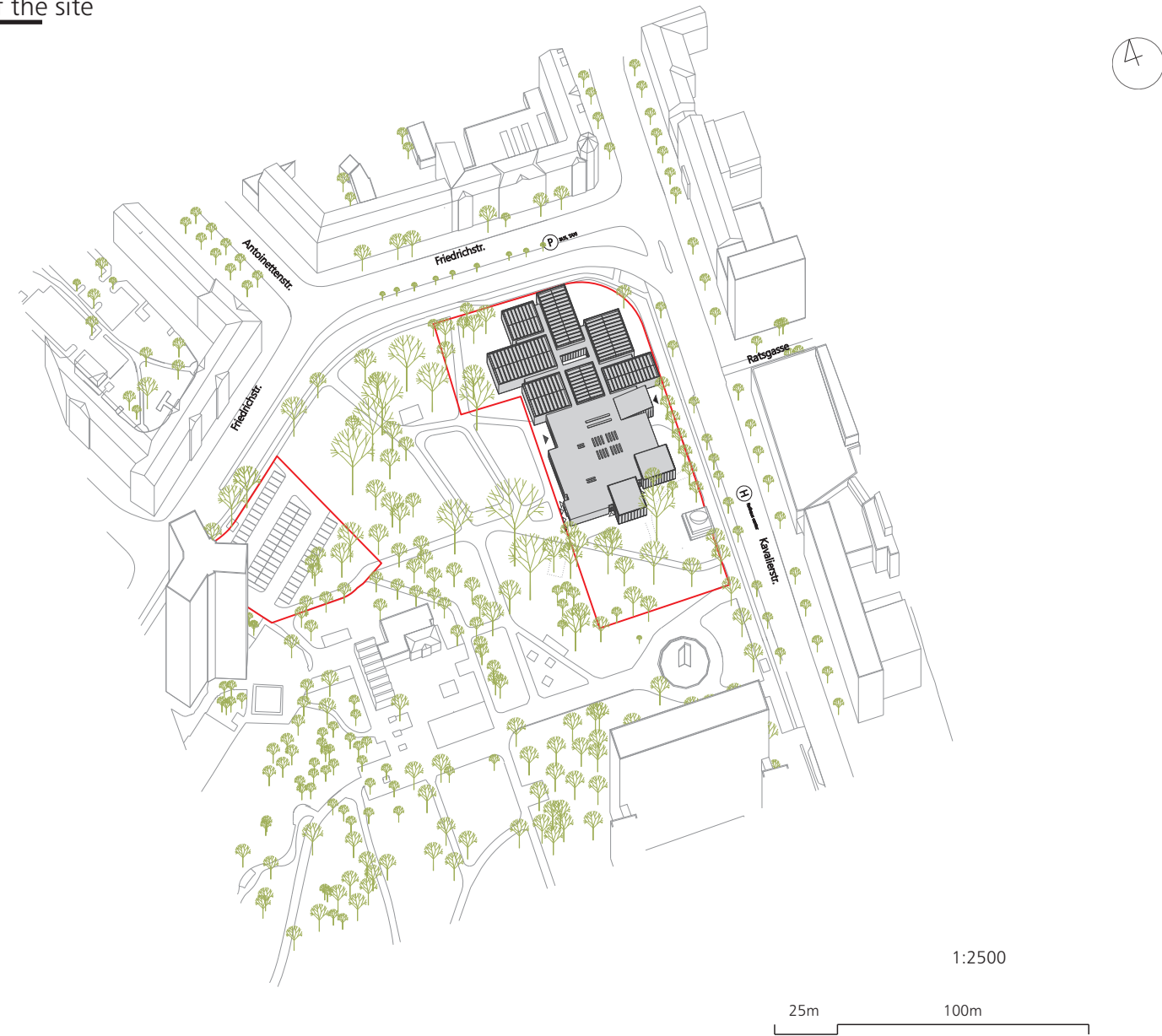
To articulate the main entrance and to ensure the desired height offset the ceiling over this space is elevated. This solution enables to the entrance to remain visually a part of the "street grid" but at the same time is highlighting its importance.

Axonometric projection of the design proposal.

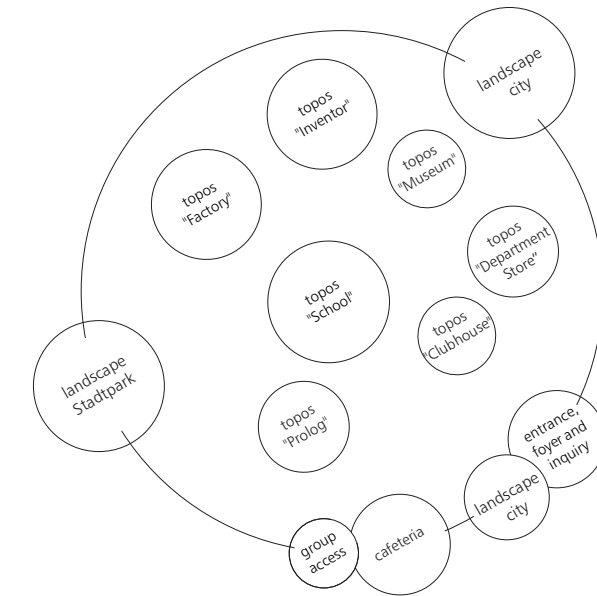
122

1:1000

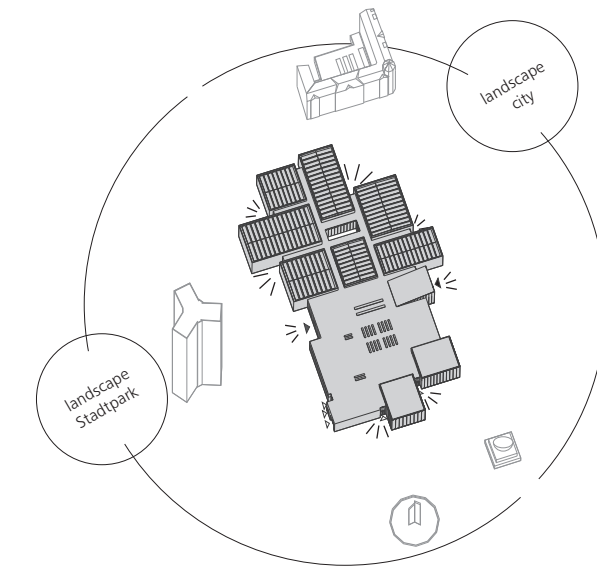
Context of the site



functional diagram according to the ideas of Rémy Zaugg



landscape and views









visual connection with park and surroundings

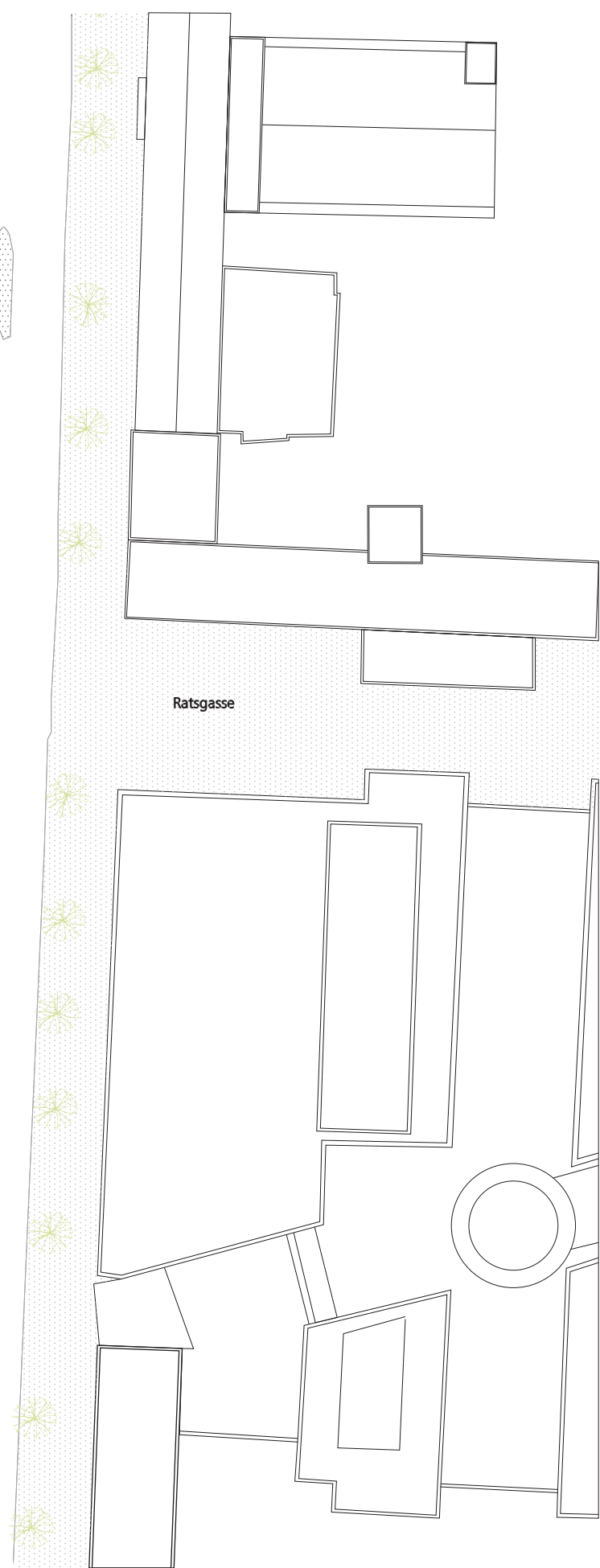
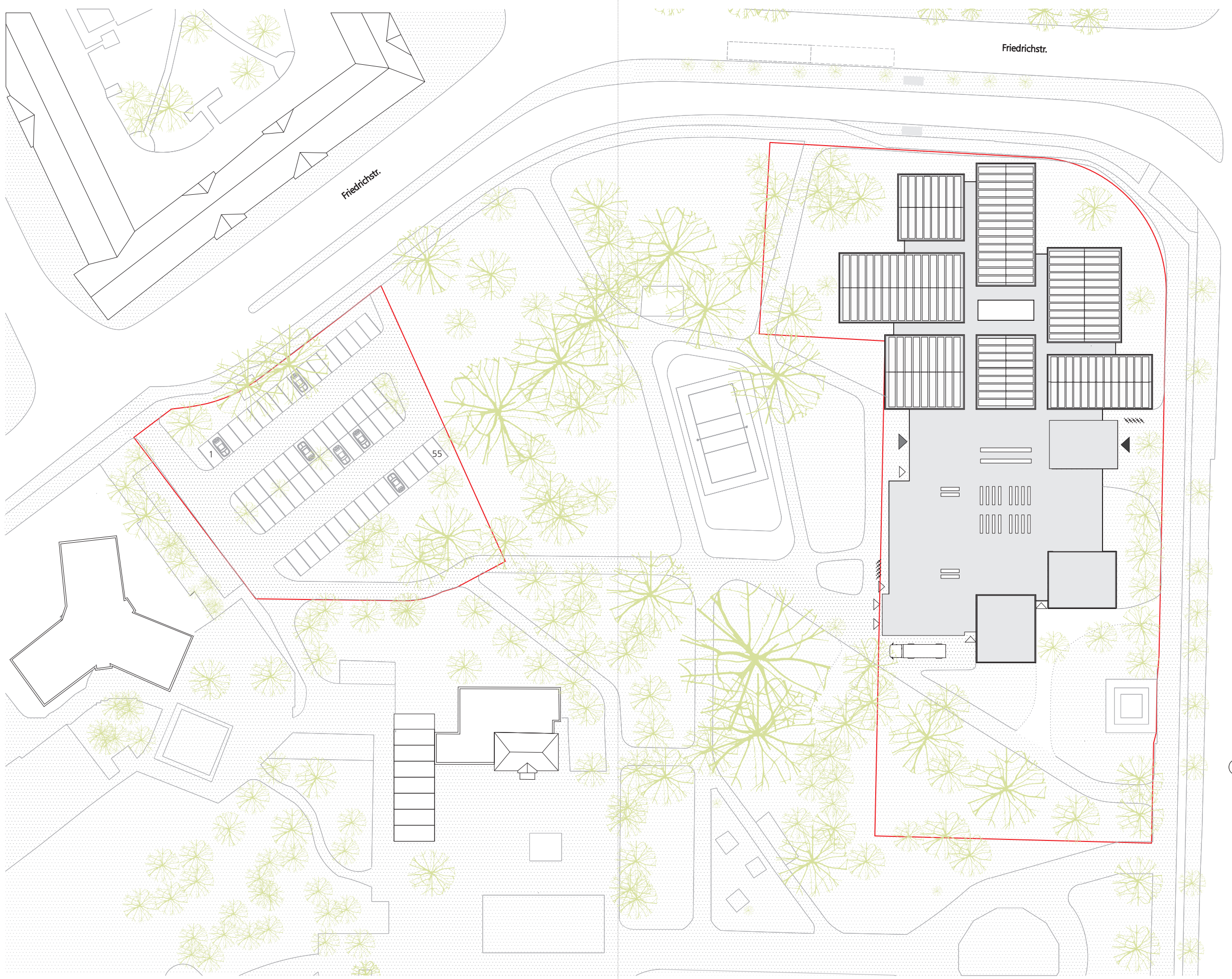


Plans

Site layout

4

-  design proposal
-  pull-off area
-  sports field
-  drivable paths in the park
-  footpath
-  tree



Floor plans
Ground floor

- Museum**
- 1 topos "Prolog"
 - 2 topos "Factory"
 - 3 topos "Inventor"
 - 4 topos "Clubhouse"
 - 5 topos "School"
 - 6 topos "Department Store"
 - 7 topos "Museum"
 - 8 courtyard

- Visitors service**
- 9 entrance and inquiry area
 - 10 staircase, elevator
 - 11 cafeteria
 - 12 terrace
 - 13 preparation space
 - 14 storage
 - 15 shop
 - 16 ticketing storage
 - 17 shop storage
 - 18 lockers
 - 19 WC
 - 20 WC

- Administration**
- 21 director, conference
 - 22 offices, conference
 - 23 kitchenette
 - 24 staff room
 - 25 first aid
 - 26 server space
 - 27 changing room
 - 28 WC, shower
 - 29 WC
 - 30 WC, shower
 - 31 changing room
 - 32 workshop

- Logistics**
- 33 garbage room
 - 34 storage, delivery hall
 - 35 delivery hall
 - 36 open space logistics

- Museum education**
- 37 chair storage
 - 38 workshop storage
 - 39 workshop
 - 40 space for events with podium
 - 41 outdoor education

127



visitors movement

Ground floor 1:250

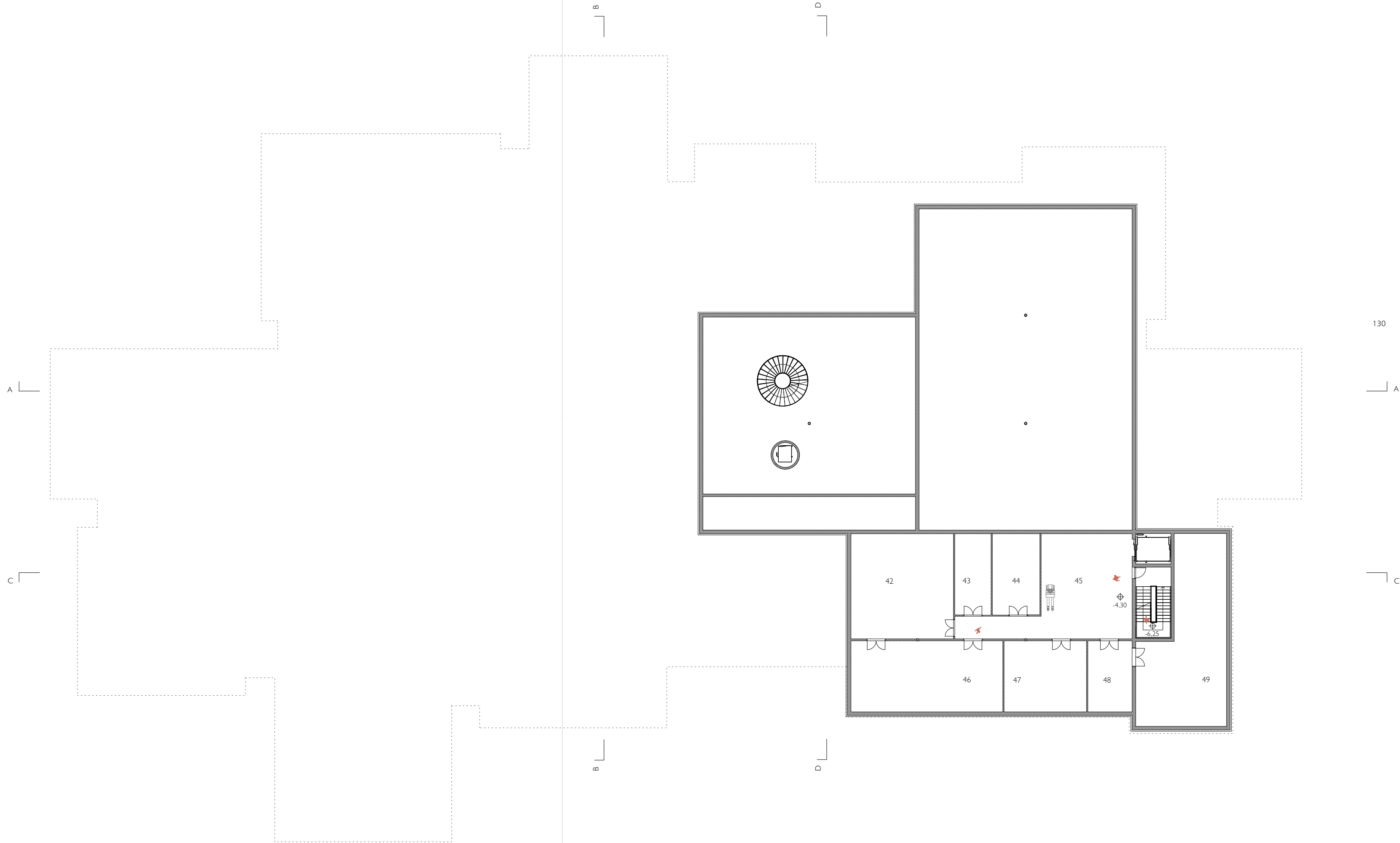


Underground - logistics, technical spaces

- 42 logistics, control, packing
- 43 painting
- 44 material storage
- 45 distribution warehouse
- 46 interim storage
- 47 mobile wall storage
- 48 utility interface
- 49 HVACR

129

130



Underground - logistics, technical spaces 1:250



Underground Floor - temporary exhibition

- 50 storage
- 51 WC
- 52 WC
- 53 temporary exhibition - preface
- 54 temporary exhibition

131

A

C

B

D

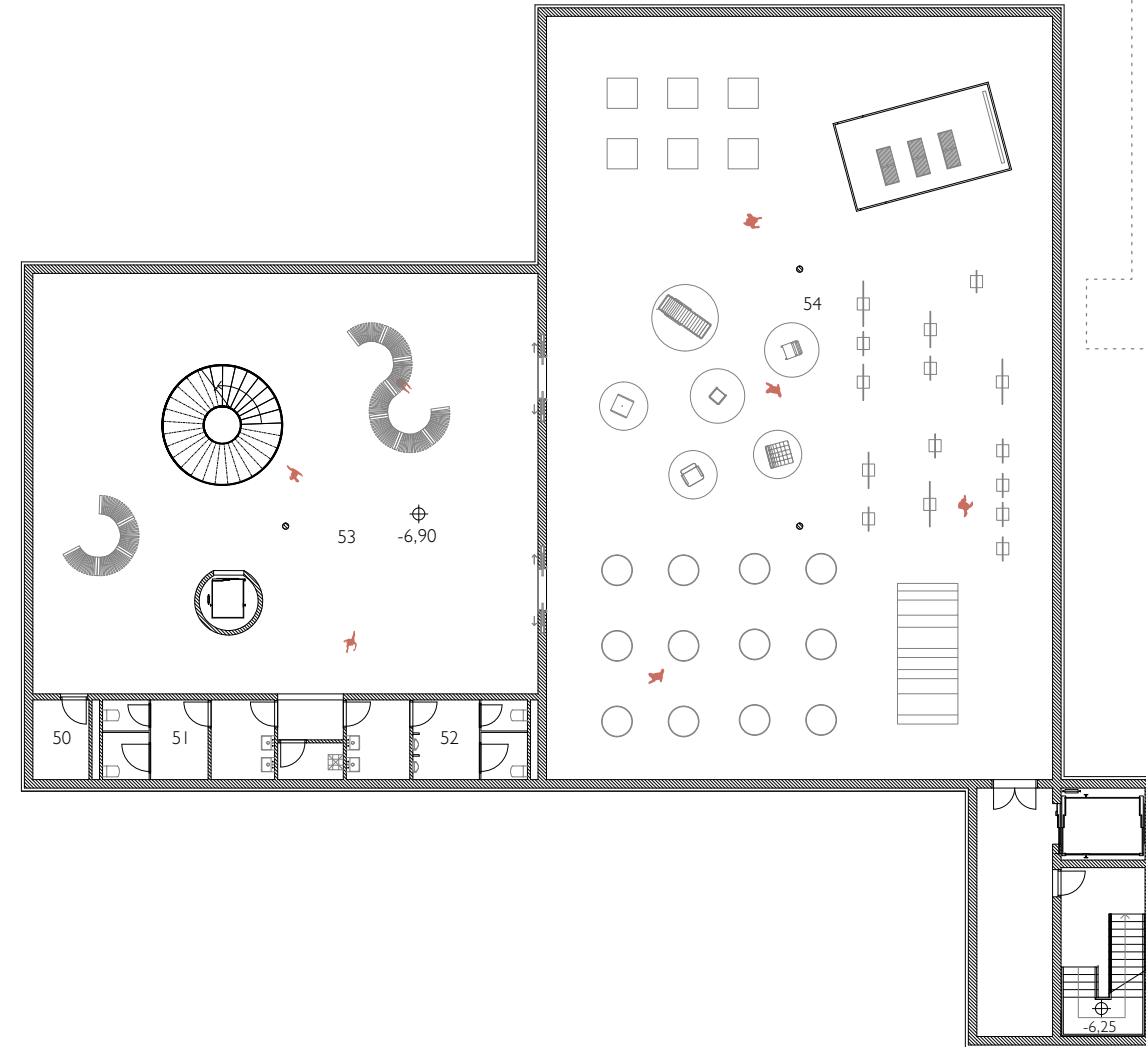
B

D

132

A

C



Underground - temporary exhibition

1:250

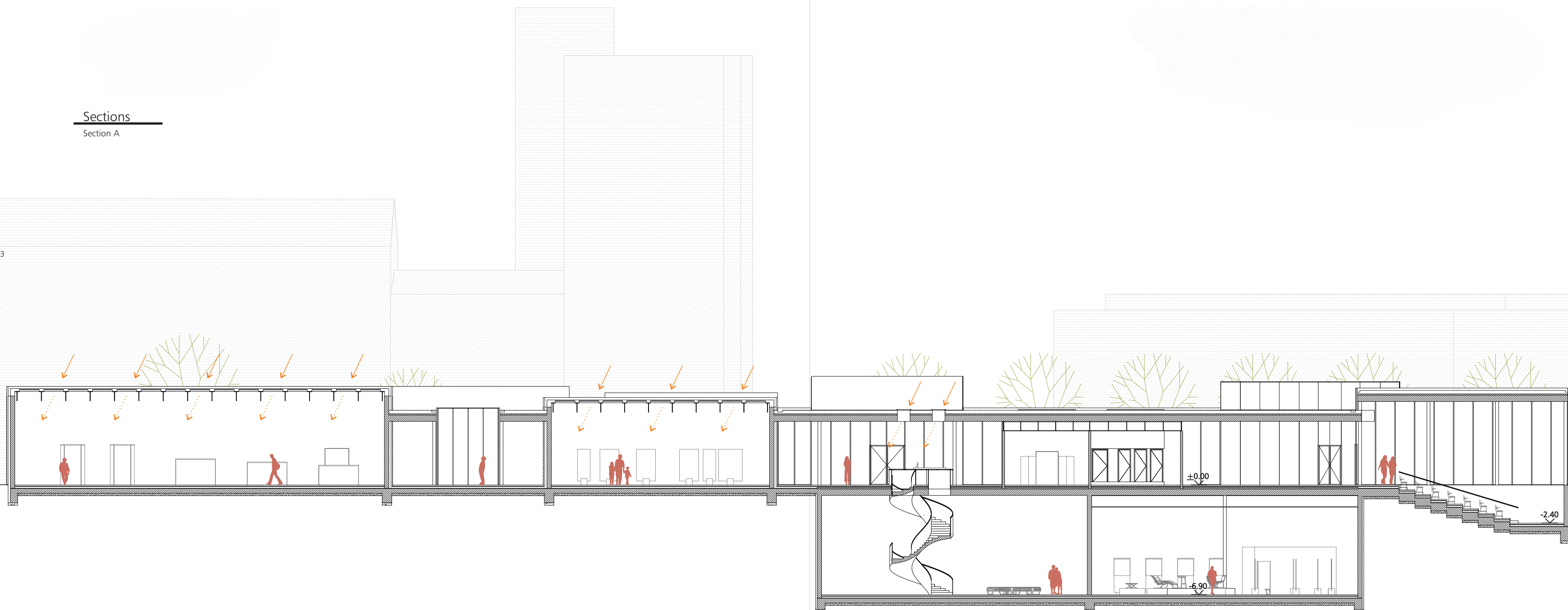


Sections

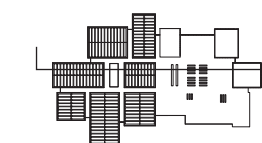
Section A

133

134



- daylight
- diffuse daylight



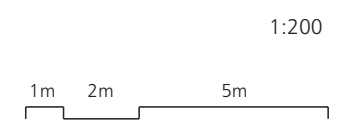
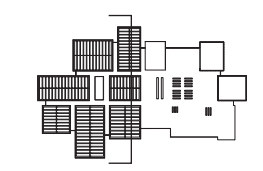
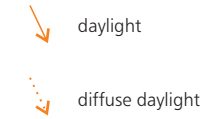
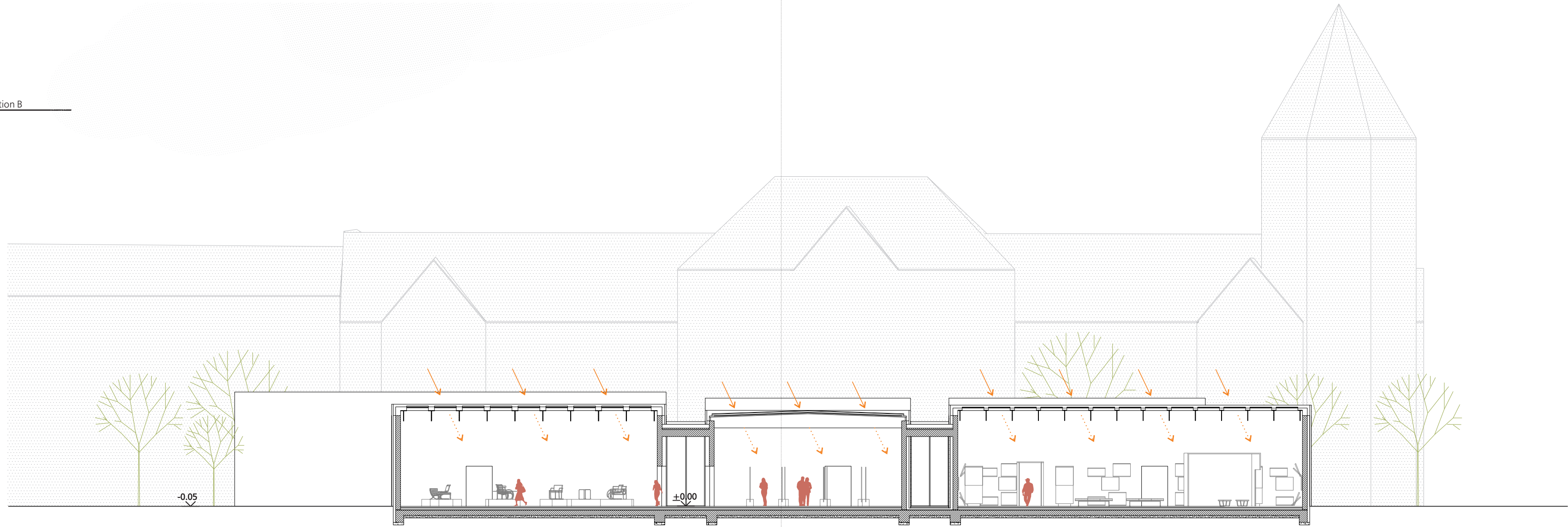
1m 2m 5m

1:200

Section B

135

136



Section C

137

138

-0.05

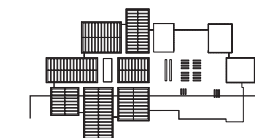
±0.00

-4.00

-5.90

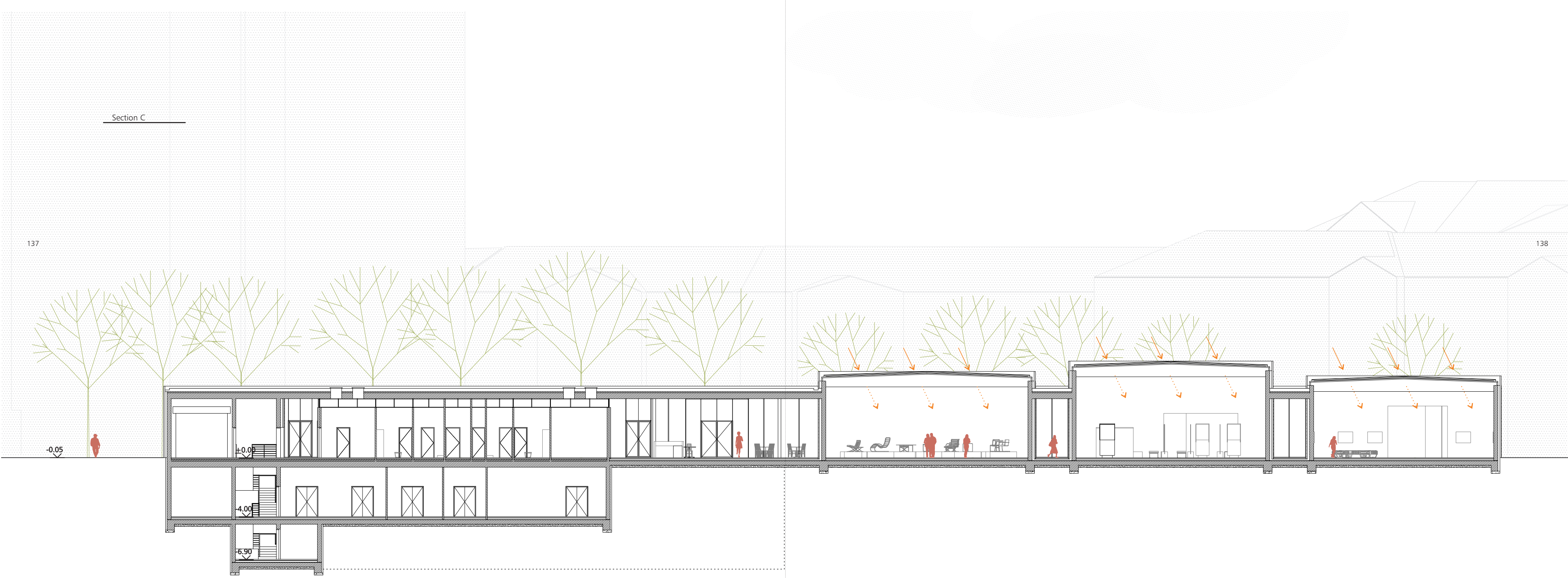
daylight

diffuse daylight



1:200

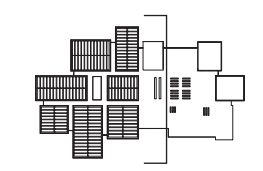
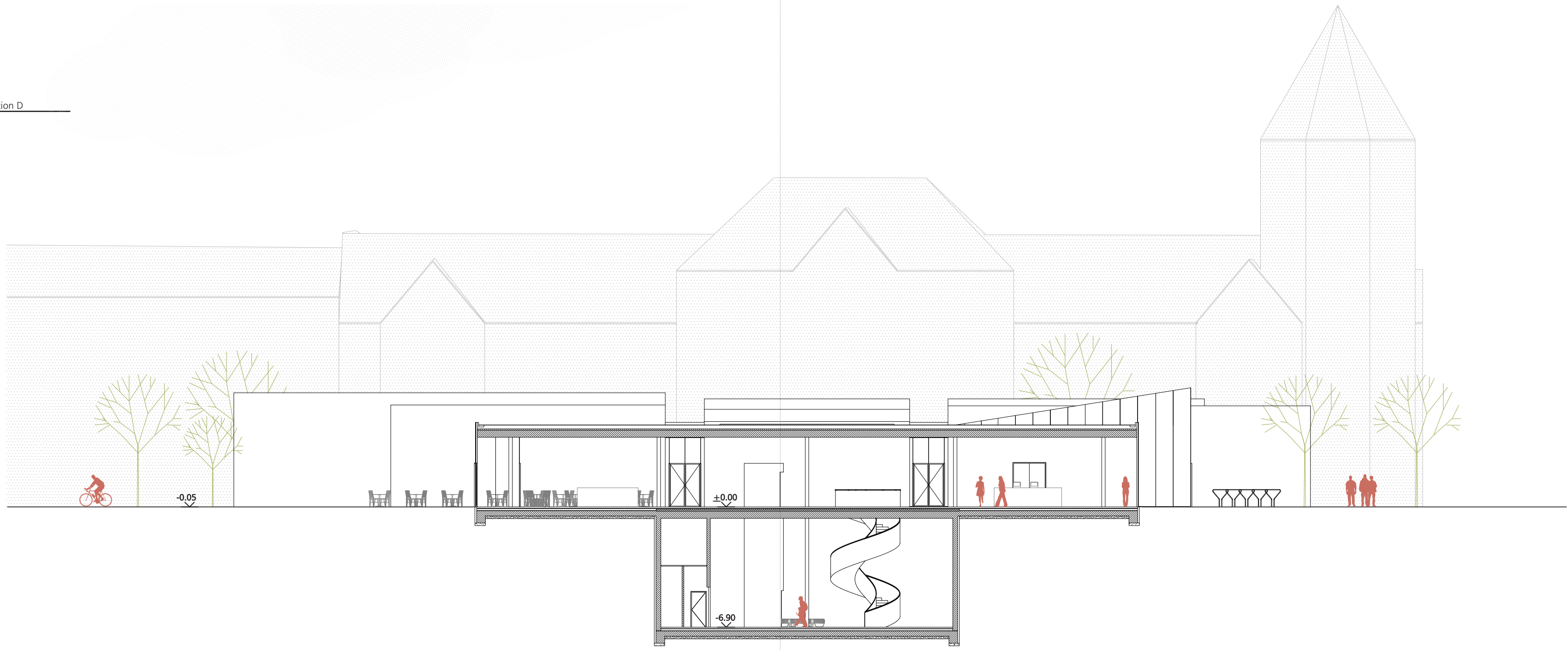
1m 2m 5m



Section D

139

140



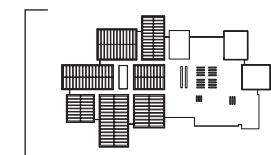
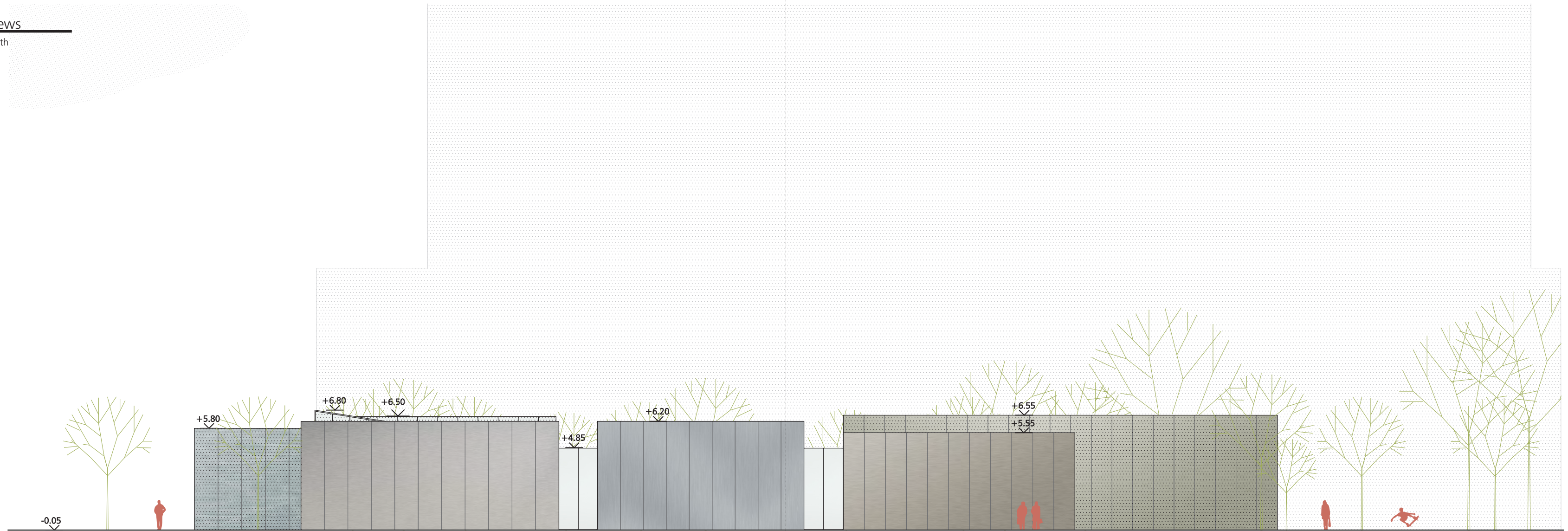
1:200
1m 2m 5m

Views

North

141

142

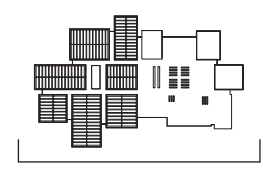


1:200

West

143

144

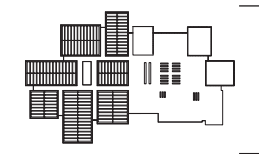
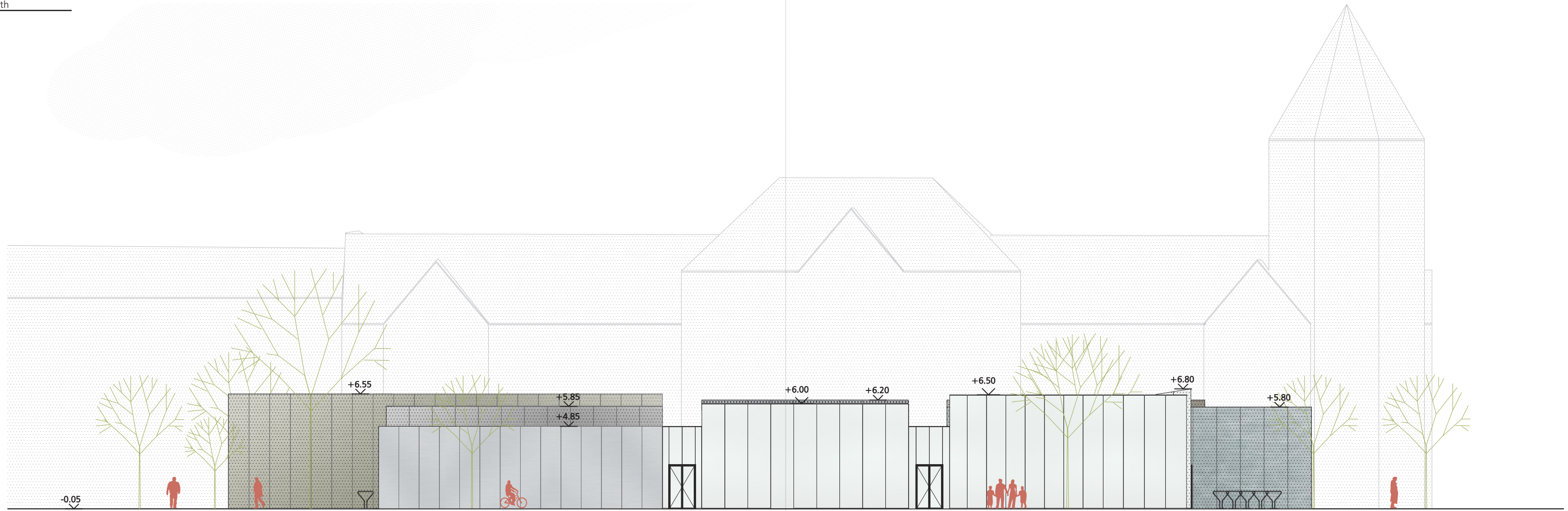


1:200
1m 2m 5m

South

145

146

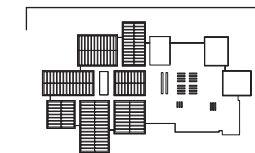


1:200

East

147

148



1:200

Material solution

Stainless steel is a material with a unique set of properties. The protective layer of the metal sheet can be modified by chemical process to produce permanent metallic colours.

Mechanically polished and brushed finishes involve the use of abrasive materials that effectively cut the surface of the steel to some degree. A wide choice of uni-directional finishes is available, depending on the original stainless surface, type and texture of the belts and brushes, and the nature of the polishing process used.

An uni-directional, non reflective surface is achieved by polishing belts or brushes.

A highly reflective ultra smooth mirror finish is achieved by polishing and buffing with soft cloth mops and special polishing compounds. This surface reflects a clear distinct image.

A smooth reflective surface makes it particularly suitable in exterior - where atmospheric performance is critical. The finish is obtained by the use of finer grit belts or brushes which give a clean cut finish with a roughness.¹ This type is used in the design proposal to achieve partial mirroring of park in the volume of the museum.

¹ Euro Inox (2005): „Guide to Stainless Finishes“, page 2-7

use of a smooth reflective surface - brushed stainless steel on the facade



Spatial views

axonometry - material solution of the volumes of exhibition spaces, logistics and administration

brushed stainless steel honeycomb panels



topos
"School"



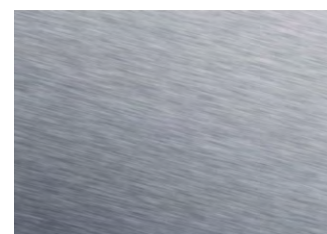
topos
"Inventor"



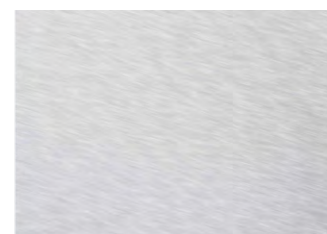
topos
"Department
Store"



topos
"Clubhouse"



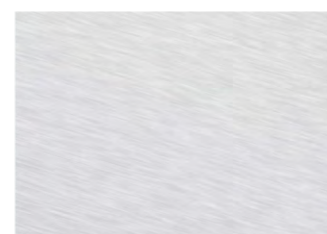
topos
"Factory"



topos
"Museum"



"Prolog"



logistics

in combination with glass



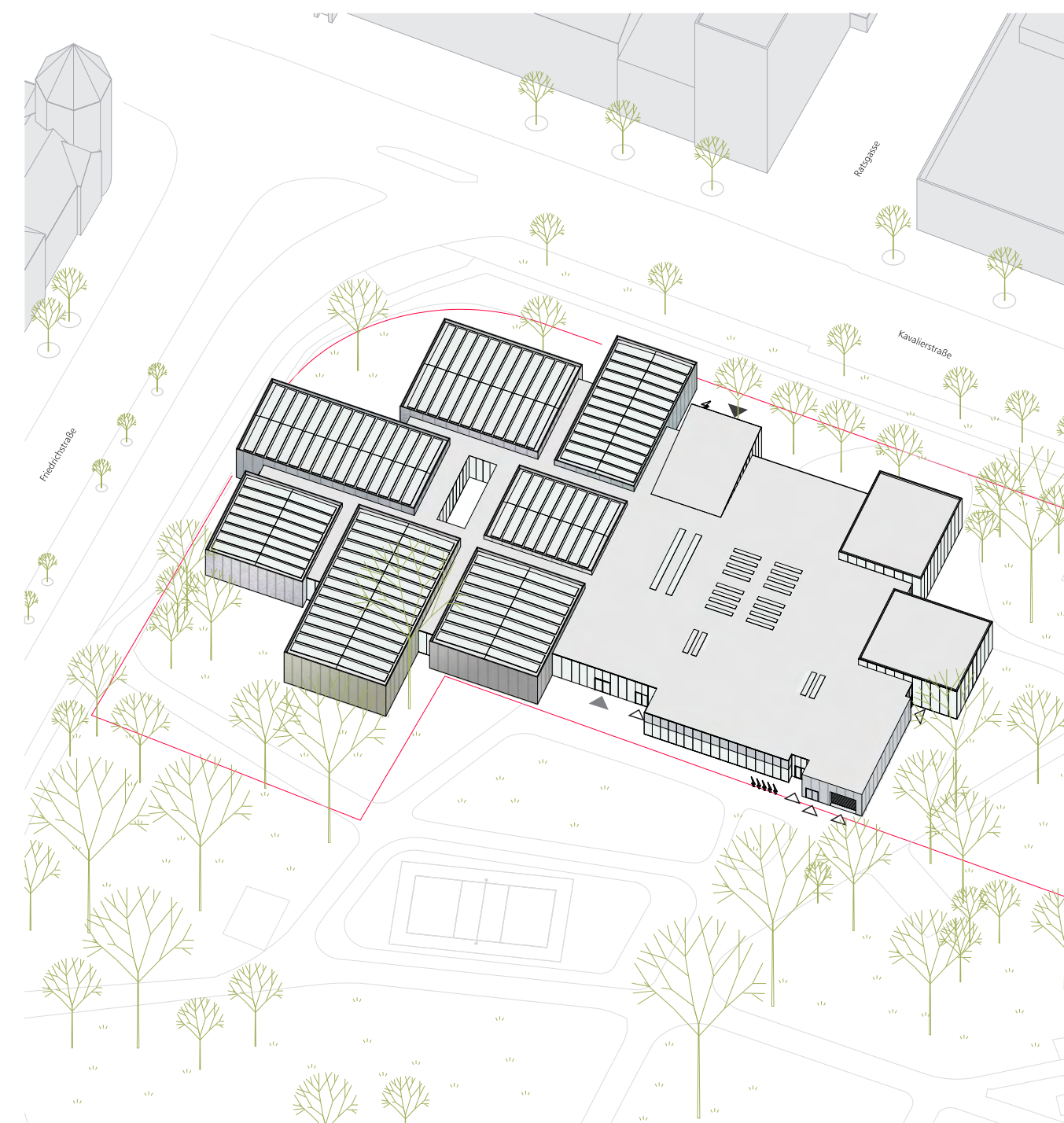
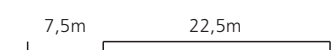
administration

glass



education
passageway
shop

axonometry 1:750



Passageway
material solution

wall
brushed stainless steel honeycomb panels



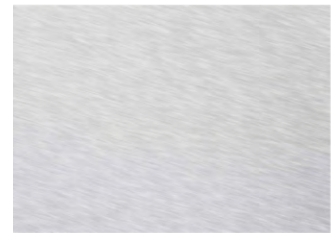
topos
"Department
Store"



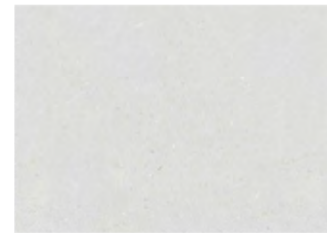
"Prolog"



wall
white concrete



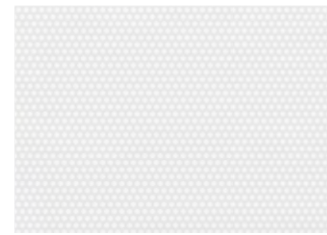
topos
"Museum"



floor
polished concrete



logistics



ceiling (suspended ceiling)
perforated metal

spatial view of the passageway



Courtyard, exhibition space
material solution

wall
brushed stainless steel honeycomb panels



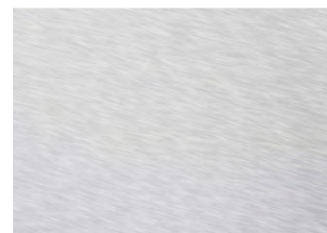
topos
"School"



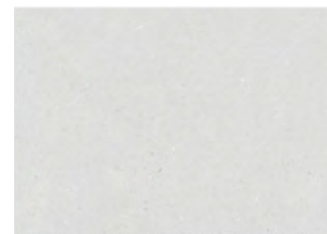
topos
"Factory"



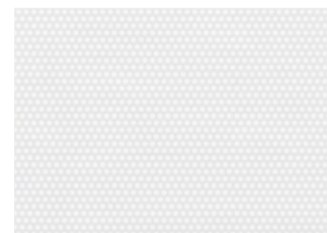
topos
"Inventor"



topos
"Museum"



floor
polished concrete



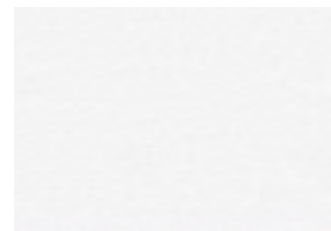
ceiling (suspended ceiling)
perforated metal

spatial view of the courtyard, exhibition space

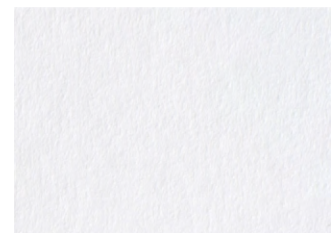


Exhibition space
material solution

157



white paint on T beam



wall
white paint on plaster



floor
polished concrete

spatial view of the exhibition space

158



Spatial view

view from Stadtpark, action field

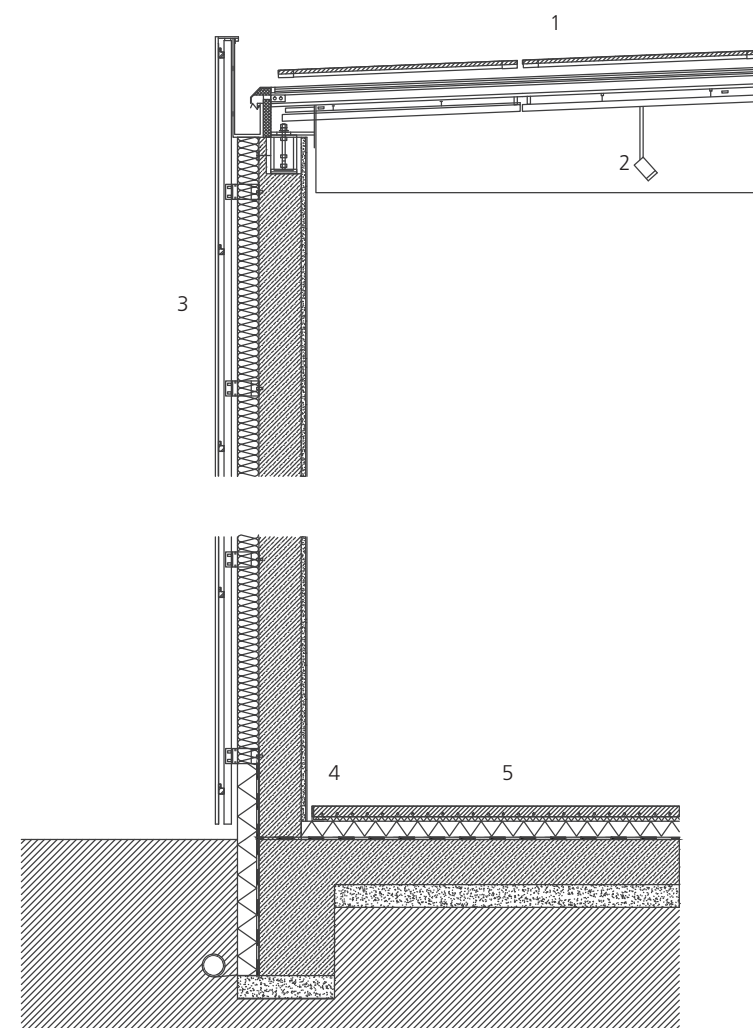


Details

detail of construction, exhibition space

cross-section

longitudinal section



load-bearing construction
reinforced concrete walls, steel T beams (roof)

1 roof
sunshade grille
sky-light, double glazing glass 10+(8+8)mm
interior movable louver

T beam 250mm, height 600-1100mm

2 light source

3 wall
brushed stainless steel honeycomb panel 2+20+1mm
facade supporting framework
mineral wool 140mm
reinforced concrete 280mm
plaster 35mm

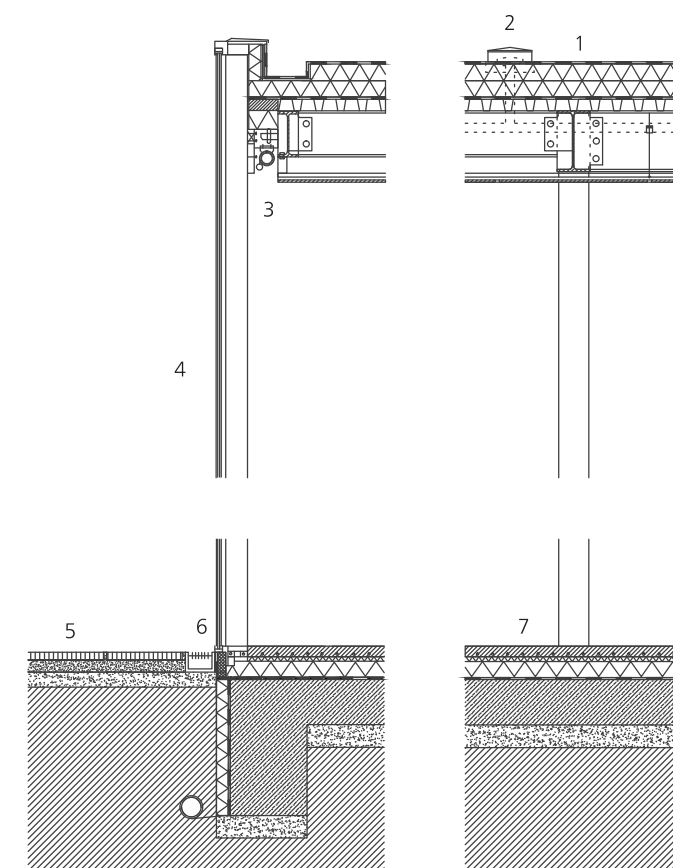
4 aluminium angle profile 100/60/7mm

5 floor
heating screed, polished 70mm
sound insulation 30mm
thermal insulation XPS 100mm
2 ply bitumen waterproofing membrane
reinforced concrete 300mm
crushed stone base 150mm

1:50

0,5m 1m

detail of construction, passageway (space accessible to the non-visitors of the museum)



load-bearing construction
steel structure - span 8,5m x 8,5m, composite steel-
concrete columns

1 roof
waterproofing PVC light gray
mineral wool 220mm
vapor barrier
trapezoidal sheet 80mm
main carrier steel profile IPE 400
carrier steel profile IPE 300

aluminum rails
perforated metal 1,8mm

2 roof drainage system
roof drainage system Geberit Pluvia

3 sunshade rolled screen

4 facade
double glazing glass 10+(8+8)mm
mullion
column

5 sidewalk
cobblestone 50mm
aggregate-sand 80mm
crushed stone base 100mm

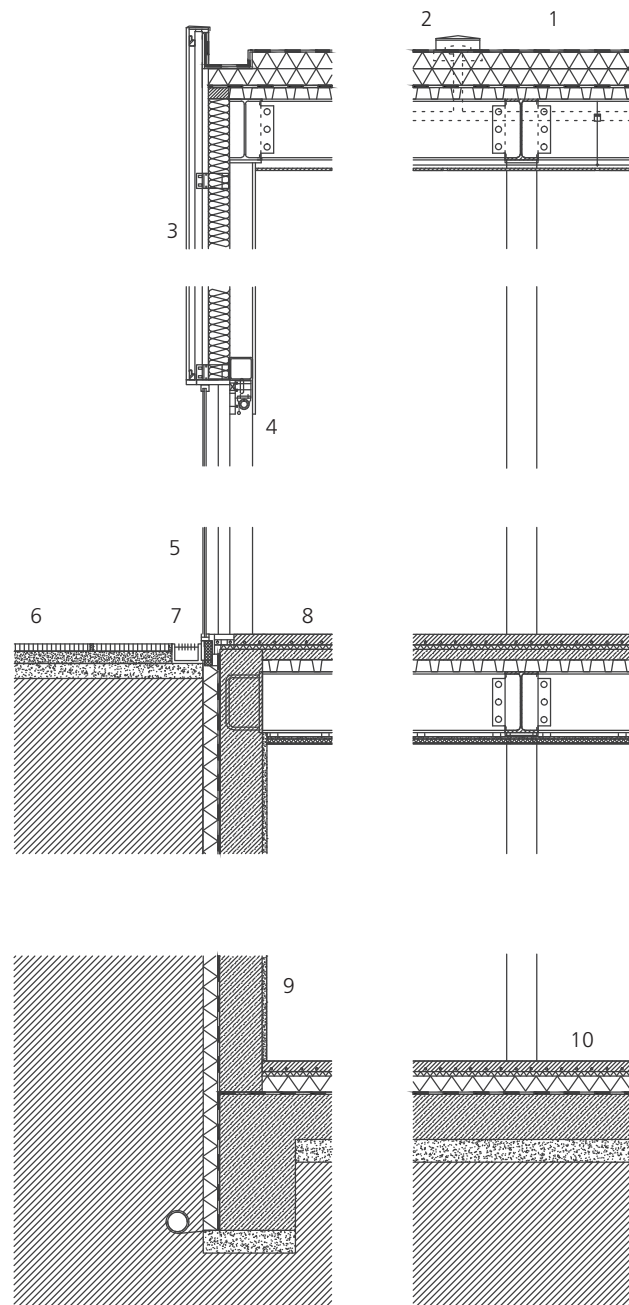
6 slot drainage covered 200x130mm

7 floor
heating screed, polished 70mm
sound insulation 30mm
thermal insulation XPS 100mm
2 ply bitumen waterproofing membrane

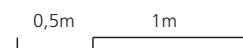
1:50

0,5m 1m

detail of construction, administration space, logistics



1:50



load-bearing construction
steel structure - span 8,5m x 8,5m, composite steel-
concrete columns
in combination with reinforced concrete wall (lower
level)

1 roof
waterproofing PVC light gray
mineral wool 220mm
vapor barrier
trapezoidal sheet 80mm
carrier steel profile IPE 400

aluminum rails
perforated metal 1,8mm

2 roof drainage system
roof drainage system Geberit Pluvia

3 facade
brushed stainless steel honeycomb panel
2+20+1mm
facade supporting framework
mineral wool 140mm
lightweight metal supporting framework
column
plasterboard 12,5mm

4 sunshade rolled screen

5 facade
double glazing glass 10+(8+8)mm
mullion
column

6 sidewalk
cobblestone 50mm
aggregate-sand 80mm
crushed stone base 100mm

7 slot drainage covered 200x130mm

8 floor
heating screed, polished 70mm
sound insulation 30mm
foil-separation layer
concrete reinforced with mesh 70mm
trapezoidal sheet 80mm
carrier steel profile IPE 400

aluminum rails
plasterboard 12,5mm
sound insulation 25mm
sound-absorbing coating 8mm

9 wall
thermal insulation XPS 100mm
2 ply bitumen waterproofing membrane
reinforced concrete 280mm
plaster 35mm

10 floor
heating screed, polished 70mm
sound insulation 30mm
thermal insulation XPS 100mm
2 ply bitumen waterproofing membrane
reinforced concrete 300mm
crushed stone base 150mm

Annex

Image index

The author of all pictures, graphics and photos, that are not listed is Andrej Malík. All pictures that are available online, are from the time period October 2015 - September 2016. The source of all aerial images and maps as well as tourist attractions in the surrounding area (page 9-10) is Google and Bing maps. The source of the historical maps of Dessau is stadttarchiv. dessau-rosslau.de/ .

Overview

History of Stadtpark

page 18:

Palace for Princ Eugen (1741) / Crownprinc Palace / Ducal Palace,
Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

Palace for Princ Moritz (1740) / Hauptschule (1785) / Gelehrtenschule (1809) / Friedericianeum

C4C Team: Prof. Achatzi, Hans-Peter; Achatzi, Lisa; Bade, Katrin; Dahms, Uwe; de Pedro, Laura; Frei, Barbara; Lammek, Navina; Schöttle, Maximilian; Schriner, Christopher: „competition brief“ (2015)
available online at <http://c4c-berlin.de/wp-content/uploads/2015/03/BMD-Auslobung-Doppelseiten.pdf>

Ducal Hoftheater (1777-79) / Friedrich-Theater / Cafe "Altes Theater" (1922) / House of travel (1974-76) / Cultural center

C4C Team: Prof. Achatzi, Hans-Peter; Achatzi, Lisa; Bade, Katrin; Dahms, Uwe; de Pedro, Laura; Frei, Barbara; Lammek, Navina; Schöttle, Maximilian; Schriner, Christopher: „competition brief“ (2015)
available online at <http://c4c-berlin.de/wp-content/uploads/2015/03/BMD-Auslobung-Doppelseiten.pdf>

Mausoleum (1780) / Eugene Pyramid

Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)

k-historie/Stadtpark_Historie.ebook.pdf

available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

page 20:

Palace of Prince Georg Bernhard (1822-24) / Palais Reina / Anhalt Art Gallery (1927)
Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

page 22:

Anhalt-Dessauische Landesbank (1848)
Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at <http://www.reisewerk.de/stadpar>

Government house (1872-1875)

available online at http://akon.onb.ac.at/preview/AKON_AK091_572.jpg

Headquarters German Continental Gas Company (1855)/ Town Square (1945)/ City Hall Center (1995)

Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

page 24:

Palais Cohn-Oppenheim or Messel House (1900-02) / "Scheibe Nord" (1963-65)
Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

Main post office (1899-1901)

Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007)
available online at http://www.reisewerk.de/stadtpark-historie/Stadtpark_Historie.ebook.pdf

page 26:

look at the Zerbster street and the town hall after the bombing from March 7th1945
available online at
<http://www.dessau.de/deutsch/interaktiv/fotogalerie/?GalleryID=129&ImagelD=1639>

page 29:

Kavalierstraße
C4C Team: Prof. Achatzi, Hans-Peter; Achatzi, Lisa; Bade, Katrin; Dahms, Uwe; de Pedro, Laura; Frei, Barbara; Lammek, Navina; Schöttle, Maximilian; Schriner, Christopher: „competition brief“ (2015)
available online at <http://c4c-berlin.de/wp-content/uploads/2015/03/BMD-Auslobung-Doppelseiten.pdf>

Photos of the site

page 32:

view from the Kavalierstraße - Friedrichstraße junction
materials provided by competition organizer

bird's eye view from Kavalierstraße - Friedrichstraße junction
materials provided by competition organizer

view along the Kavalierstraße towards the Main post office
materials provided by competition organizer

view from Rattgasse

materials provided by competition organizer

BAUHAUS

School

page 43:

Scheme of the course of studies at the Bauhaus DE
available online at <https://blogs.ethz.ch/prespecific/files/2013/05/Gropius-Graphic-school-plan-1024x993.jpg>

page 45:

Paul Klee, idea and structure of the Bauhaus, 1922

Siebenbrodt, Michael; Schöbe, Lutz: „Bauhaus 1919-1933“ (2009)

Workshops and lectures

page 47:

ange of teaching over time by infographic created at Dessau Institute of Architecture
available online at <http://infographix.tumblr.com/tagged/SS2010>

Bauhaus buildings in Dessau

page 54:

Dewog settlement
materials provided by Bauhaus museum in Dessau

Fieger house

materials provided by m´Bauhaus museum in Dessau

Naurath and Hahn houses

materials provided by m´Bauhaus museum in Dessau

Objects in Bauhaus Dessau Foundation

page 55:

Bauhaus identity card for Alma Else Engemann
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

landscape; Franz Ehrlich

Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

invitation to Bauhaus Carnival on March 1; Franz Ehrlich

Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

semester graduation exhibition winter 1928; collage "Sie brauchen das Bauhaus";

Grete Reichardt

Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

grotesque font, exercise from the lecture with Joost Schmidt; Rossig Reinhold; 1929
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

three-storey terraced houses, detail, cutaway view of stairwell, plan and axonometry; Reinhold Rossig; 1930
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

Bauhaus advertisement, 1928 compared to a poster advertising Obama's visit to Berlin in 2008
available online at <https://www.smashingmagazine.com/2009/08/bauhaus-ninety-years-of-inspiration/> and <http://www.scribblelive.com/blog/2013/01/16/six-lessons-from-the-bauhaus-masters-of-the-persuasive-graphic/>

Brochure for the city of Dessau; Joost Schmidt
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

page 56:
color wheel, exercise from the teaching of the theory of color with Wassily Kandinsky; Reinhold Rossig; 1929
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

plastic ball, material exercise from the preliminary course; Josef Albers; 1926/1927;
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

settlement Dessau-Törten; model Type SieTö I
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

glassware; Wilhelm Wagenfeld; manufactured by Jenaer Glaswerk Schott & Gen.; 1931

Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

teapot; small version as a tea extract pot (model for mass production); Theodor Bogler; 1923
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

table lamps; Friedrich Karl Engemann; 1930
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

bedroom furniture; Carl Fieger; carpentry workshop Bauhaus Dessau; 1927
Stiftung Bauhaus Dessau : „Bauhaus objekte- eine Auswahl aus der Sammlung Stiftung Bauhaus Dessau“ (2004)

Marcel Breuer, lath chair, ti 1a, 1922 compared to Jerszy Seymour, Workshop Chair, 2009,
available online at <https://www.yatzer.com/bauhaus-vitra-design-museum> and https://static.dezeen.com/uploads/2010/06/dzn_The-Workshop-Chair-by-Jerszy-Seymour-4.jpg

Competition Spatial program

page 61:
program requirements defined in the competition brief
C4C Team: Prof. Achatzi, Hans-Peter; Achatzi, Lisa; Bade, Katrin; Dahms, Uwe; de Pedro, Laura; Frei, Barbara; Lammek, Navina; Schöttle, Maximilian; Schriener, Christopher: „competition brief“ (2015)
available online at <http://c4c-berlin.de/wp-content/uploads/2015/03/BMD-Auslobung-Doppelseiten.pdf>

Competition winning proposals

page 65:
site plan
available online at http://c4c-berlin.de/wp-content/uploads/2015/09/BMD_Pressemappe_Preise-1-4-EN.pdf

spatial depiction of the design proposal, architects Gonzalez Hinz Zabala
available online at <http://hicarquitectura.com/2015/09/gonzalez-hinz-zabala-sastre-vielba-bauhaus-museum-dessau/>

view from Ratsgasse, architects Gonzalez Hinz Zabala
available online at <http://hicarquitectura.com/2015/09/gonzalez-hinz-zabala-sastre-vielba-bauhaus-museum-dessau/>

view of the exhibition space, architects Gonzalez Hinz Zabala
available online at <http://hicarquitectura.com/2015/09/gonzalez-hinz-zabala-sastre-vielba-bauhaus-museum-dessau/>

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available online at http://c4c-berlin.de/wp-content/uploads/2015/09/BMD_Pressemappe_Preise-1-4-EN.pdf

spatial depiction of the design proposal
available online at
<http://static1.squarespace.com/static/53d133fee4b088cc18049660/t/55ee79b8e4b02f474ccd45c4/1441692088155/Young+%26+Ayata+-+Vessel+Collective+Bauhaus+Museum+Text.pdf>

view from Ratsgasse
available online at
<http://static1.squarespace.com/static/53d133fee4b088cc18049660/t/55ee79b8e4b02f474ccd45c4/1441692088155/Young+%26+Ayata+-+Vessel+Collective+Bauhaus+Museum+Text.pdf>

view of the exhibition space

available online at
<http://static1.squarespace.com/static/53d133fee4b088cc18049660/t/55ee79b8e4b02f474ccd45c4/1441692088155/Young+%26+Ayata+-+Vessel+Collective+Bauhaus+Museum+Text.pdf>

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available online at <http://hicarquitectura.com/2015/09/gonzalez-hinz-zabala-sastre-vielba-bauhaus-museum-dessau/>

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view of the exhibition space
available online at
<http://static1.squarespace.com/static/53d133fee4b088cc18049660/t/55ee79b8e4b02f474ccd45c4/1441692088155/Young+%26+Ayata+-+Vessel+Collective+Bauhaus+Museum+Text.pdf>

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Uffizi, Florence
available online at
https://upload.wikimedia.org/wikipedia/commons/9/9d/Galleria_degli_Uffizi_court_cr_op.JPG

floor plan
available online at <http://www.uffizi.org/museum/uffizi-floor-plans/>

page 74:
Glass Pavilion at the Toledo Museum of Art
available online at <http://www.archdaily.com/54199/glass-pavilion-at-the-toledo-museum-of-art-sanaa-pritzker-prize-2010>

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Bergdoll Barry, Bettum Johan: „The pavilion - Pleasure and Polemic in Architecture“ (2009)

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Kimbell Art Museum,
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Jodidio Philip: „Piano: Renzo Piano Building Workshop 1966 to Today“ (2008)

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Kirchner Museum,
The 2000 Charles & Ray Eames Lecture Gigon & Guyer Museum Liner Appenzell
(archiv kunst architektur. Werkdokumebnte, Nr. 18) hg. Von Edelbert Köb, Kunsthaus
Bregenz Hatje Cantz Verlag, Ostfildern-Ruit

plans of the building
available online at <http://www.gigon-guyer.ch/de/buero/dokumentation/>

page 79:
Kunsthaus Bregenz
available online at <http://www.archdaily.com/107500/ad-classics-kunsthaus-bregenz-peter-zumthor>

plans of the 1-3 upper floor
Lampugnani Magnago Vittorio, Sachs Angeli: „Museen für ein neues Jahrtausend:
Ideen, Projekte, Bauten“ (1999)

Recent development in Museum as an institution

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100 years cycle of the Tate gallery
Bergdoll Barry, Bettum Johan: „The pavilion - Pleasure and Polemic in Architecture“ (2009)

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Zaugg Remy: „The Art Museum of My Dreams or A Place for the Work and the
Human Being“ (1986)

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Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and
Exhibitions“
available online at http://en.licht.de/en/info-and-service/publications-and-downloads/detailview/product/no_18_good_lighting_for_museums_galleries_and_exhibitions/bp/398/noc/1/

Artificial light
Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and
Exhibitions“
available online at http://en.licht.de/en/info-and-service/publications-and-downloads/detailview/product/no_18_good_lighting_for_museums_galleries_and_exhibitions/bp/398/noc/1/

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Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and
Exhibitions“
available online at http://en.licht.de/en/info-and-service/publications-and-downloads/detailview/product/no_18_good_lighting_for_museums_galleries_and_exhibitions/bp/398/noc/1/

Calculation of the optimal positioning of a luminaire
Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and
Exhibitions“
available online at http://en.licht.de/en/info-and-service/publications-and-downloads/detailview/product/no_18_good_lighting_for_museums_galleries_and_exhibitions/bp/398/noc/1/

Design proposal
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Herbert Bayer, scheme and design for „Room 5“ at international exhibition „Société
des artistes décorateurs français“ in Paris, 1930
available online at <https://www.tumblr.com/search/Herbert-Bayer>

Bauhaus Archiv Berlin
available online at <https://www.smow.com/blog/tag/walter-gropius/>

German textile industry stand at the Exhibition of Art and Technology in Paris, 1937,
design by Lilly Reich
Fiedler Jeannine, Feierabend Peter: „Bauhaus“ (2013)

Kurt Kranz, illustration of the exhibition hall of the German pavilion at the
International Exhibition in Paris, 1937
Fiedler Jeannine, Feierabend Peter: „Bauhaus“ (2013)

L. M. van der Rohe, Lilly Reich, design for exhibition “German people - German
work“, 1934
Fiedler Jeannine, Feierabend Peter: „Bauhaus“ (2013)

László Moholy-Nagy, Light Prop for an Electric Stage 1930, Archiv Berlin
available online at <https://www.smow.com/blog/tag/walter-gropius/>

Mensch Raum Maschine Stage Exhibition at the Bauhaus Stiftung Dessau
available online at <https://www.smow.com/blog/tag/walter-gropius/>

joint exhibition by students at the School of Design, Chicago, 1942
Fiedler Jeannine, Feierabend Peter: „Bauhaus“ (2013)

furniture by Breuer, Bauhaus Archiv Berlin
available online at <https://www.smow.com/blog/tag/walter-gropius/>

Lina Bo Bardi, São Paulo Museum of Art (MASP)
available online at <http://www.afterall.org/journal/issue.26/this-exhibition-is-an-accusation-the-grammar-of-display-according-to-lina-bo-bardi1>

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available online at <http://www.textures.com>

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Bibliography

Alexander Edward P., Alexander Mary: „Museums in Motion: An Introduction to the History and Functions of Museums“ (2008). URL: https://books.google.sk/books?id=owHSEk96qxQC&printsec=frontcover&dq=Museums+history&q=&redir_esc=y&hl=sk#v=onepage&q&f=false [state: 28 March 2016]

Amt für Stadtentwicklung Stadt Dessau-Roßlau: „Artenschutzrechtlicher Fachbeitrag“ (2014)

Amt für Stadtentwicklung Stadt Dessau-Roßlau: „Integriertes Stadtentwicklungskonzept“ (2013): URL: http://www.sessionnet.dessau.de/bi/vo0050.asp?__kvonr=4748&search=1 [state: 12 November 2015]

Annette Gigon / Mike Guyer Architekten: “Bürodokumentation mit Auswahl unserer Bauten und unserer Werkliste“. URL: <http://www.gigon-guyer.ch/de/buero/dokumentation/> state: 07 April 2016]

Bellinelli Luca, Kahn Louis I.: „Louis I. Kahn: The Construction of the Kimbell Art Museum“ (2007)

Bergdoll Barry, Bettum Johan: „The pavilion - Pleasure and Polemic in Architecture“ (2009)

Büro für urbane Projekte, Leipzig: „Integriertes Stadtentwicklungskonzept Dessau-roßlau 2025“ (2013),. URL: https://www.google.sk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwiR_N2HIPXNAhVIGsAKHXobD4kQFgggtMAE&url=http%3A%2F%2Fwww.dessau.de%2Fpush.aspx%3FDeutsch%2FBauen-und-Wohnen%2FStadtentwicklung%2FStadtentwicklungskonzept%2Ffinsek_de-rsl_2025_gestaltete_langfassung_201403.pdf&usg=AFQjCNErbK6xPYj9TErH8Zv5OcjEgp62UQ&sig2=P0sp5T2HzuwQwHPm3xsiw [state: 12 April 2015]

Cachola Schmal Peter: „Der Pavillon : Lust und Polemik in der Architektur“ (2009)

C4C Team: Prof. Achatzi, Hans-Peter; Achatzi, Lisa; Bade, Katrin; Dahms, Uwe; de Pedro, Laura; Frei, Barbara; Lammek, Navina; Schöttle, Maximilian; Schriener, Christopher: „competition brief“ (2015). URL: <http://c4c-berlin.de/wp-content/uploads/2015/03/BMD-Auslobung-Doppelseiten.pdf> [state: 10 Octobre 2015]

Dollinger, Petra: „Frauen am Ballenstedter Hof: Beiträge zur Geschichte von Politik und Gesellschaft an einem Fürstenhof des 19. Jahrhunderts“ Volume 1. URL: https://books.google.sk/books?id=oAlCwwUhnLoC&pg=PA1087&lpg=PA1087&dq=1806+F%C3%BCrst+von+Anhalt-Bernburg+Franz+II.&source=bl&ots=Ww7pKs1SJ&sig=_7q4Qs7vRG14ke6RrBCiyXvm-Tl&hl=sk&sa=X&ved=0ahUKEwiU29PF-LNAhVjJMAKHZe5CwEQ6AEIPDAF#v=onepage&q=1806%20F%C3%BCrst%20von%20Anhalt-Bernburg%20Franz%20II.&f=false [state: 25 April 2016]

dwif-Consulting: Prof. Dr. Feige, Mathias; Dipl.-Geogr. Hoffmann, Nadine; Stephanie Schmidt. Kommunikation: Schmidt, Stephanie: „Marketingkonzept für die Stiftung Bauhaus Dessau“. URL: http://www.dessau.de/downloads/Deutsch/Kultur-und-Tourismus/bauhaus_marketing-konzept.pdf [state: 5 July 2016]

Euro Inox: „Guide to Stainless Finishes“ (2005). URL: http://www.worldstainless.org/Files/issf/non-image/files/PDF/Euro_Inox/Finishes02_EN.pdf [state: 27 August 2016]

Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR): „Tel Aviv White City: Modernist buildings in Israel and Germany“ (2015). URL: http://www.bbsr.bund.de/BBSR/EN/Publications/SpecialPublication/2015/DL_TelAviv.pdf?__blob=publicationFile&v=2 [state: 27 Octobre 2015]

Fondation Beyeler: „Renzo Piano - Fondation Beyeler: Ein Haus für die Kunst“ (1998)

Fördergemeinschaft Gutes Licht (1986): „Good Lighting for Museums, Galleries and

Exhibitions“. URL: http://en.licht.de/en/info-and-service/publications-and-downloads/detailview/product/no_18_good_lighting_for_museums_galleries_and_exhibitions/bp/398/noc/1/ [state: 15 July 2016]

Gibson Eleanor: „Lina Bo Bardi’s "radical" glass easels revived for exhibition of Brazilian art“ (2015). URL: <http://www.dezeen.com/2015/10/29/lina-bo-bardi-glass-easel-revived-exhibition-brazilian-art-sao-paulo-museum-of-art/> [state: 29 March 2016]

Gonzalez Hinz Zabala, description by architects, URL: <http://hicarquitectura.com/2015/09/gonzalez-hinz-zabala-sastre-vielba-bauhaus-museum-dessau/> [state: 08 April 2016]

Jodidio Philip: „Renzo Piano Building Workshop 1966 to Today“ (2008) Karr Susanne: „Wo wohnen die Musen im 21. Jahrhundert?“ (2016). URL: http://www.wettbewerbe.cc/fileadmin/wettbewerbe.cc/Media/324/Wettbewerbe_1_2016_Kulturbauten_iPad.pdf [state: 02 June 2016]

Kommunale Statistikstelle: „Dessau-Roßlau in Zahlen 2015“. URL: <http://www.dessau.de/downloads/Deutsch/Wahlen-und-Statistik/Statistik/Statistische-Berichte/falt2015.pdf> [state: 15 April 2016]

Köbler, Gerhard: „Historisches Lexikon der Deutschen Länder: die deutschen Territorien vom Mittelalter bis zur Gegenwart“ . URL: https://books.google.sk/books?id=Fc9r8BbvIsUC&printsec=frontcover&hl=sk&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false [state: 26 April 2016] Renzo Piano Building Workshop: „Beyeler Foundation Museum“. URL: <http://www.rpbw.com/files/4781fc6cbc0c8dfa64ba1681d990e53d484552a2.pdf> [state: 05 April 2016]

de Oliveira Olivia: „Lina Bo Bardi : obra construida = Built work“ (2014)

Reisewerk: „Daten und Hintergründe zum Dessauer Stadtpark“ (2007): URL: http://www.reisewerk.de/stadpark-historie/Stadtpark_Historie.ebook.pdf [state: 25

November 2015]

Scelsa Jonathan A., MONU 21 Interior Urbanism - Enfiladed Grids: The Museum as City (2014)

Schedler, Tobias: „Master thesis - Student Housing in Dessau“. URL: <https://tsarchitecture.files.wordpress.com/2012/02/thesis-book.pdf> [state: 14 July 2016]

Siebenbrodt, Michael; Schöbe, Lutz: „Bauhaus 1919-1933“ (2009)

Dr. Siegfried, Franz Ferdinand: „Dessau – Versuch zur Gründung und Bedeutung einer Stadt“. URL: http://www.dessau-geschichte.de/dessau_gruendung_aufsatz_dr_siegfried.pdf [state: 10 February 2015]

Statistisches Landesamt Sachsen-Anhalt: „Bevölkerung“ . URL: http://www.statistik.sachsen-anhalt.de/Internet/Home/Daten_und_Fakten/1/12/index.html [state: 15 April 2016]

Stiftung Bauhaus Dessau, press announcement, URL: <http://bauhausmuseum-dessau.de/en/home.html> [state: 05 July 2016]

Sowards, Kelley J.: „Makers of world history“. URL: http://sites.harvard.edu/fs/docs/icb.topic782699.files/13_oct_catherine.pdf [state: 19 April 2016]

Young & Ayata, description by architects, URL: <http://static1.squarespace.com/static/53d133fee4b088cc18049660/t/55ee79b8e4b02f474ccd45c4/1441692088155/Young+%26+Ayata+-+Vessel+Collective+Bauhaus+Museum+Text.pdf> [state: 08 April 2016]

Tregenza Peter , Loe David: „The Design of Lighting“ (2009). URL: <http://books.google.sk/books?id=-vB4AgAAQBAJ&pg=PA110&lpg=PA110&dq=which+objects+cannot+be+exhibite>

d+on+daylight&source=bl&ots=oAk3M6Ge3y&sig=2evAKGjiwkWe_ExCEzn5ggU1vLg&hl=sk&sa=X&ved=0ahUKEwiz6ly_m4rPAhWKAcAKHUKMCAAQ6AEllzAB#v=onepage&q&f=false [state: 15 July 2016]

Vittorio Magnago Lampugnani, Sachs Angeli: „Museen für ein neues Jahrtausend : Ideen, Projekte, Bauten “ (1999)

Zaugg Remy: „The Art Museum of My Dreams or A Place for the Work and the Human Being“ (1986)

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Informations about places of work of the former Bauhaus teachers and their photos

- 1 https://en.wikipedia.org/wiki/Marcel_Breuer
- 2 <https://www.bauhaus100.de/en/past/people/masters/marcel-breuer/index.html>
- 3 <https://www.britannica.com/biography/Walter-Gropius>
- 4 https://en.wikipedia.org/wiki/Walter_Gropius
- 5 https://en.wikipedia.org/wiki/Walter_Gropius
- 6 https://monoskop.org/L%C3%A1szl%C3%B3_Moholy-Nagy
- 7 https://monoskop.org/L%C3%A1szl%C3%B3_Moholy-Nagy
- 8 https://monoskop.org/L%C3%A1szl%C3%B3_Moholy-Nagy
- 9 https://monoskop.org/László_Moholy-Nagy, <http://www.mome.hu/en/egyetem/143-l%C3%A1szl%C3%B3-moholy-nagy>
- 10 <http://thebiography.us/en/hilberseimer-ludwig>
- 11 <https://www.britannica.com/biography/Ludwig-Mies-van-der-Rohe>, https://sk.wikipedia.org/wiki/Ludwig_Mies_van_der_Rohe
- 12 <https://www.bauhaus100.de/en/past/people/masters/paul-klée/index.html>
- 13 <https://www.bauhaus100.de/en/past/people/masters/oskar-schlemmer/index.html>
- 14 <https://www.bauhaus100.de/en/past/people/masters/oskar-schlemmer/index.html>
- 15 <https://www.bauhaus100.de/en/past/people/masters/josef-albers/index.html>
- 16 https://en.wikipedia.org/wiki/Josef_Albers
- 17 <https://www.bauhaus100.de/en/past/people/masters/wassily-kandinsky/index.html>
- 18 <https://www.bauhaus100.de/en/past/people/directors/hannes-meyer/index.html>
- 19 <https://www.bauhaus100.de/en/past/people/directors/hannes-meyer/index.html>

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Informations about the teachers and their later students collaborations and their photos

- 1 https://en.wikipedia.org/wiki/Lawrence_Halprin
- 2 [https://en.wikipedia.org/wiki/Paul_Rudolph_\(architect\)](https://en.wikipedia.org/wiki/Paul_Rudolph_(architect))
- 3 <http://www.biography.com/people/im-pei-9436323#synopsis>
- 4 <http://www.biography.com/people/philip-c-johnson-9356274>

»Words of Appreciation«

to all whom it may concern
to all who enlightened the way
and safe passage to this point
in gratitude and devotion
I dedicate this work

special thanks belongs to Mrs Tina Gregoric

