REVISITING INTERBAU EXHIBITION 1957 IN BERLIN, FROM THE CITY OF STONE TO THE CITY OF TOMORROW

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ABSTRACT

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The city of Berlin inaugurated in 1957 the Interbau, the first architectural exhibition after World War II in the central district of Hansaviertel, which was almost entirely ruined during the War. The exhibition aimed to reconstruct the district with intentions to reflect the image of the “free western society” under the motto of "The City of Tomorrow" as a response to the urbanistic propaganda of the socialist east, which had already started its reconstruction programs in the East Berlin, with buildings on Stalinallee. At first a design competition was held for the reconstruction of the district; then a much more comprehensive project with diverse building typologies was developed by inviting numerous national and international architects recognized with their practice of modern architecture.

This thesis searches through the roots and history of the Modern Movement, the place of Interbau within the course of modern architectural discourse and its relation with exhibitions held before and after Interbau 1957. Due to the lack of scholarly studies in the English language on Hansaviertel, a comprehensive exposition of the project is aimed, focusing on its site planning, landscape and architectural characteristics. Following a detailed account of the project and its ideological grounds, the research undertakes to produce a descriptive catalog of all housing blocks in the neighborhood. This revisiting of Hansaviertel development after 60 years of its realization not only

was informative of a significant instance of modernism, but also provided opportunity to ponder the continual changes in the modernist discourse. In this respect, the IBA-Berlin project developed only 30 years after Interbau 1957, displays sufficient ground for observing the radical shift of paradigm in urban reconstruction and housing design.

Keywords: Interbau 1957, Hansaviertel, Urban Reconstruction, Modernist Housing

ÖZ

BERLİN'DE INTERBAU 1957 SERGİSİ, TAŞ KENTTEN YARININ KENTİNE

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Berlin şehri 1957'de, İkinci Dünya Savaşı'ndan sonraki ilk mimari sergisi olan Interbau'yu şehrin merkezinde, savaş sırasında neredeyse tamamen yıkılan Hansaviertel semtinde açtı. Sergi, "Yarının Şehri" sloganıyla "batılı özgür toplum" görüntüsünü yansıtmak ve Doğu Berlin'de sosyalist doğu tarafından Stalinallee'de başlatılmış olan yeniden inşa programlarının kentsel propagandasına cevap vermek istedi. Önce, bölgenin yeniden inşası için bir tasarım yarışması düzenlendi; daha sonra çeşitli yapı tipolojileriyle çok daha kapsamlı bir proje geliştirmek için, modern mimari uygulamalarıyla tanın çok sayıda ulusal ve uluslararası mimar davet edildi.

Bu tez, Interbau 1957'nin modern mimarlık söylemi içindeki yerini ve öncesiyle sonrasında düzenlenen sergilerle ilişkisini anlamak için, Modern Hareket'in kökleri ve tarihini araştırıyor. İngilizce dilinde konu üzerine uluslararası kullanıcıya hitap eden az sayıda akademik araştırmanın bulunması nedeniyle, projenin kapsamlı bir açıklaması hedeflenerek, Hansaviertel'in yerleşim planı, peyzajı ve mimari özelliklerine odaklanılmıştır. Gerçekleşmesinden 60 yıl sonra Hansaviertel'I yeniden ziyaret etmek, konutta modernist söylemin önemli bir örneği olarak öğretici olduğu kadar, modernist söylemin sıkça değişimi üzerine düşünmek için de fırsat tanımaktadır. Bu açıdan, Interbau 1957'den sadece 30 yıl sonra Berlin için geliştirilen

IBA projesi, kentin yeniden yapılanması ve konut tasarımındaki köklü paradigma değişikliğini görmek için yeterli zemini sergilemektedir.

Anahtar Kelimeler: Interbau 1957, Hansaviertel, Kentsel Yeniden Yapılanma, Modernist Konut

To my beloved family…

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INTRODUCTION

1.1. Introduction

Interbau - *Internationale Bauausstellung*, or International Architecture Exhibition, was an architecture exhibition held in Hansaviertel one of the central districts of Berlin, in 1957. The exhibition accommodated not only exhibition halls introducing architectural and urban manifestoes of the time and latest technological products of related industries, but also manifested the most recent architectural and urban practice renovating a vast part of the district bounded within Tiergarten park, railroad and the street of *Straße des 17. Juni.*

The exhibition held between July 6 and 29 of September of 1957. The construction of buildings begun in 1955 and completed in 1962 and the urban development plans dated back to 1953. Approximately 1,300 residential units built inside Hansaviertel and 530 units outside the neighborhood, in the Housing Unit of Le Corbusier. 50 architects from 14 different countries - 18 foreigners, 11 West Germans, and 20 West Berliners were attended. Among them were Walter Gropius, Alvar Aalto, JB Bakema, Arne Jacobsen, Paul Baumgarten, Egon Eiermann, Max Taut, Oscar Niemeyer and Le Corbusier. Only those architects who were notoriously engaged in the agenda of modernity were invited to participate (Conzelmann, 2019).

As it is obvious from names and numbers, the Hansaviertel project is a very special architectural creation, some of the most eminent architects from all around the world worked on their projects and created a “divergent typological collage” (Eskinazi, 2008). The realization of diverse building typologies which can be classified into single-family houses from 1 to 2 floors, towers from 16 to 17 floors, bars of 3 to 4

floors, and bars of 8 to 10 floors, did not have any other example in Germany at this scale before the Second World War.

The architectural importance of the project, its political identity, and its role in realization of the architectural paradigm developed through the first half of the century are major concerns of this research. The Interbau exhibition in the Hansaviertel district is revisited in this research under the three main themes: 1) The reconstruction of the Hansaviertel district in the city of Berlin, using architecture as a tool of the Cold War at the battle scene of opposing political regimes after the Second World War; 2) The City of Tomorrow, presenting a model for future: the "Free World" represented by free plan with varied types (slab and tower blocks + low-rise detached and row houses); 3) Lack of a comprehensive, thorough information on the subject in the English language, which inspired a descriptive account of the project, together with a catalog of the Hansaviertel buildings.

The city of Berlin suffered from problems brought by industrial boom like other fast grown industrial centers of the time. With the enormous amount of immigration to the city in the period of the industrial revolution and urgent housing developments, the historic fabric of the developed Berlin shaped by dense housing formations known as *Mietskasernen*, or "rental barracks". This dense stone development covering the entire blocks with dark inner courtyards, insufficient lighting and ventilation, poor hygiene, and lacking proper heating brings unhealthy living conditions and death was rampant in winters (Pugh, 2014).

Hansaviertel which was not an exception from this dense stone development, was one of the most perished parts of the city during the bombings of the Second World War, so the neighborhood offered the ideal conditions for the implementation of the new urbanistic concepts at the center of the city development, which under normal conditions were only possible in outer peripheries.

Hence the neighborhood offered the ideal conditions for a reconstruction program, the realization of the Interbau in that scale instead of elucidating the fact that a project was

needed and it was done brings more questions forward. Why and how a reconstruction project on a defeated side of the Second World War gathers a great number of well-known architects, allowing them to freely design their projects inside a freely developed landscape unseen in any part of the city. How it represents a model of the "free world" under the motto of "the city of tomorrow", and even how it is financed. Therefore, the complete appreciation of the Interbau would be impossible without a deeper look into the history of the city and the country, the importance of the politics, and the course of architectural paradigm and Interbau's stance as an interrelated phenomenon.

With enormous demand for housing after WWII, the rebuilding of cities of West Germany started with financial aids from the Marshall Plan. Meanwhile, West Berlin which lost its position as the capital and was located as an island inside the territory of East Germany was “cut off from its suppliers and sales markets, and because of the uncertain political situation, many companies left West Berlin for West Germany” (Conzelmann, 2019). “The Berlin Senate feared the economic, political and cultural marginalization of the city” and come up in 1951 with the idea of focusing attention on West Berlin by staging a large exhibition event and the largely idle economy of the city was to be boosted through the development of the project. The exhibition which was planned to be inaugurated in 1956 postponed to1957 with delay in the completion of architectural projects (Conzelmann, 2019).

Besides its immediate importance for the reconstruction of the Hansaviertel and Berlin, as stated before, Interbau was not just a project of mass construction and “it is also relevant in the wider discussion concerning the reconstruction of other West German cities destroyed in the war. …The exhibition considered to be a model of westward-looking democratic urban design and a prime example of the reconstruction of the western world and symbolically charged as ‘showcase of the west’.” (Conzelmann, 2019)

To understand the reasons for this credibility given to Interbau, first we have to understand the dimensions of the profound competition between East and West Germany. East Berlin had already become the capital of the German Democratic Republic (GDR) and its rebuilding had been declared part of the state's national development program. Large-scale housing projects have already been started in Stalinallee in 1951 and promoting aesthetic and political capabilities of the East. So, all the eyes were on the urban and architectural reconstruction programs of both sides, these projects could make or break the success of the opposing ideologies.

In his very first public statement on Interbau, the West Berlin Minister of Construction Karl Mahler made a direct reference to Stalinallee: Interbau is "a clear commitment to the western world. It should show what we understand to be modern urban development and decent housing in contrast to the false ostentation of Stalinallee" (Mahler, 1953). Embracement of the modern urban development as a testimony of success will also be discussed after a deeper look at the projects of domestic architecture used as political means of superiority during the Cold War.

With the foundation of the GDR in 1949, all urban and architectural developments of the so-called Eastern Bloc oriented towards the advocated guidelines of the Soviet Union. The Sixteen Principles of Urban Design, released in 1951, stated that architecture henceforth should be "democratic in substance and national in form". As part of the GDR's National Reconstruction Program, the municipal authorities announced an urban development competition for Stalinallee in the summer of 1951. Egon Hartmann's winning design was clearly influenced by the requirements for a "compact city", as laid down in the Sixteen Principles of Urban Design (Bolz, 1951).

> "His plan showed a streetscape composed of multistory residential buildings with projections and recesses, and with a sequence of squares. After several minor revisions with a planning collective, Stalinallee was developed into a wide main road, like a boulevard, which could also be used for parades and large gatherings, with Strausberger Platz and Frankfurter Tor forming two wide prestigious monumental squares, accentuated by high-rise buildings and busy with traffic. The buildings

> with their projections, pillared doorways, entablature, and cornices clearly displayed the historicist classical architecture of socialist realism."
>
> "Its first example in Berlin was by the architect Hermann Henselmann, who designed a prototype of GDR architecture with the high-rise building '*Hochhaus an der Weberwiese*' in 1951, fulfilling the requirement to follow national building traditions by primarily choosing the architecture of Friedrich Schinkel. On Stalinallee the residential buildings were designed for multipurpose use, with shops on the ground floor and apartments on the upper floors. As a "compact city" and with its use of historical forms, the reconstruction of Stalinallee was dismissed in the West as backward-looking, and the architecture was disparagingly labeled as gingerbread style." (Conzelmann, 2019)

The new Hansaviertel urban layout was defined concomitantly with the completion of the monumental avenue. The new Hansaviertel would be the replica of the "free and democratic society" and the difference in both projects are so evident in all aspects of urban and architectural development.

The "regimented communist" ideologies of the East were delivered by the linear style of urban planning with rectangular and uniform apartment blocks of Stalinallee, so the organizers of the West should get rid of any limitations to claim the realization of the "free society" (Cockcroft, 1985). In this respect in 1953 Berlin Senate decided the complete destruction of what remained from war and removal of rubble from the district. Using the motto "The City of Tomorrow" (*Die Stadt von Morgen*) the organizers wanted to redeem from the miseries of the past and destructions of the war and create a social housing model for upcoming reconstruction projects in other war-torn cities, so the reconstruction of the site linked to an international exhibition of modern architecture with an opportunity to practice the principles of the Athens Charter (Eskinazi, 2008). "Interbau organized by the Senate of West Berlin and promoted by the German federal government" and "for the duration of the exhibition, the documents for Berlin's bid to be Germany's capital were presented in the Berlin Pavilion." (Conzelmann, 2019)

As promised by Ludwig Lemmer, Senate's Director of Building, Interbau surpassed Constructa in Hannover which was an exhibition with a focus on reconstruction and

home building in post-war Germany held in 1951 and received great public attention. Never before there has been an architectural exhibition on such a grand scale. On an area of 25 hectares in the extensively war-damaged Hansaviertel, around 1,300 residential units, a library, two churches, a pre-school, an elementary school and a shopping mall were built, designed by more than 50 prominent architects from 14 countries and ten national and international landscape architects. A wide variety of exhibition halls promoting topics on urban planning, housing, and contemporary public life, drawing 1.3 million visitors, of whom 36% came from East Berlin and other parts of the GDR, as well as from Eastern Europe. (Conzelmann, 2019)

After understanding the importance of the Hansaviertel for West's reputation answering the East's propaganda in the course of Cold War now we can take a look on where Interbau stands in the course of modern architecture and why modernity was the solution to redeem from the miseries of past and brings hope for the war-torn cities of the West.

As mentioned before in the creation of the new Hansaviertel all efforts were to adapt it to the principles provided by CIAM and The Charter of Athens. The process of dissociation from past and historicism in the course of modernity and its application in the case of Interbau will be studied from the point of Garden City movement from the late 19th century where the rapid growth of the industrial cities and its effects on human life quality were also an issue.

Alienation of human life and nature as a result of the industrial city development criticized by Ebenezer Howard in the late 19th century. He observed the gradual death of the countryside, the last meeting point of civic life with nature. He writes his famous book The Garden City of Tomorrow and proposes his ideas and plans in creating self-sufficient Garden Cities. He founded a company and created two examples of the Garden Cities, where he also lived himself through his life. The ideas of Ebenezer Howard influenced the urban city developments of the future (Clark, 2003).

Tired from miseries of compact crowded metropolitan life and in search of living among nature with benefits of city life. Howard's intentions were so familiar to one of Interbau's most important specifications where the remaining buildings from old urban fabric completely disregarded and the buildings located organically among the pouring green vegetation from Tiergarten park up to the railroad border.

The gradual disintegration of the city into the park as can be seen in Hansaviertel site plan is completely evident even today when you pass from other neighboring districts to the Interbau Settlement. Free placement of the buildings inside the Hansaviertel works on behalf of receiving the green space in a different level from neighboring districts.

The domination of industries doesn’t come only with low-quality housing developments, at the turn of century the quality of industrial goods in Germany also become an issue.

With the industrial fail of German products in international fairs during the first years of the century, designers start to question the adopted design approaches. The efforts to increase German product quality started with separating from classical doctrine and ornamentation. A design lobby was founded by a group of artists with the name of Deutscher Werkbund to improve German industrial production at all levels through joint action between art, industry, and crafts. They established numerous exhibitions to standardize design principals and educate other artists of the country (Röder & Elliott, 1998).

The architecture was also part of these collaborated educational exhibitions where artists and architects worked on manifestoes of the modern movement, share their ideas and even whole building projects were built in exhibitions like Weißenhofsiedlung which Interbau 1957 and IBA 1987 were the last examples.

After the First World War the ongoing opposition of the architects with established principles of the academies leads to the foundation of CIAM (*Congres Internationaux d'Architecture Moderne*) in 1928. The aim was to defend artists and architects of the

modern practice and create congresses to gather architects and designers to discuss the new concepts. The Charter of Athens which has declared principles of contemporary urbanism was based on the fourth congress. CIAM had ten congresses in total and the conceptions of the modern movement changed in the course of its history (Günay, 1988).

The main subjects of the first four congresses and principles of The Charter of Athens can be directly related to the creation of Interbau. Discussions on proper answers for contemporary urban life, different typological building types, and the functions of dwelling, recreation, work, and transportation, all materialized in the exhibition.

1.2. The Methodology and Major Sources on the Subject

The aim of this thesis is to study and introduce Interbau as a prominent example of the ongoing modern movement inside the history of modern architecture. A descriptive and analytical survey on the subject becomes important, since the major scholarly works on the subject are in the German language. An important portion of the research for this study was done before and during a trip to Berlin in 2016, which enabled me to understand the district in terms of the intended sense of freedom, the amalgamation of the green and the solid colorful structures, and to observe the buildings in a greater detail.

There are catalogs, theoretical and critical articles and some books on the origins, development, and consequences of Interbau published from the 1950s to the present day in German language, which are not very accessible to other countries. Also, there are not yet any studies that represent an analytical study of Hansaviertel on a comparative base with exhibitions before and after it.

Two original catalogs that were published at the time of the inauguration of Interbau listed all the projects previously planned to be built in the neighborhood, as well as providing information about the exhibition and the progress of the works. One of them is the official catalog, the *Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung*, and the other one, entitled *Wiederaufbau*

Hansaviertel - Sonderverufferlichung zur Interbau Berlin 1957 is published in four volumes (Eskinazi, 2008).

The magazines *Baumeister, Architectural Review,* and *L'Architecture d'Aujourd*'hui published critical articles on Interbau in 1957, the magazine *Módulo* publishes, in numbers 2 and 4, respectively the original version and the final version of the Oscar Niemeyer project for Berlin.

In 1995, a publication called *Das Hansaviertel 1957-1993* was published in Germany by the Bezirksamt Tiergarten von Berlin which compiled Hansaviertel's urban development from the opening of Interbau until 1993.

In 1999, Gabi Dolff-Bonekämper and Franziska Schmidt published the book *Das Hansaviertel - Internationale Nachkriegsmoderne in Berlin*, which is currently the most comprehensive publication on the neighborhood.

During the year 2007, on the occasion of the celebrations of the 50 years of Interbau, a series of books were published on the exhibition. Among them, we can cite *Das Hansaviertel: Ikone der Moderne,* by Stefanie Schulz and Carl-Georg Schulz, *Wohnlabor Hansaviertel. Geschichten aus der Stadt von Morgen*, by Lidia Tirri, *Das Hansaviertel in Berlin: Bedeutung, Rezeption, Sanierung," Landesdenkmalamt Berlin, Das Berliner Hansaviertel und die Interbau 1957,* Frank-Peter Peter and *Die Stadt von Morgen, Beiträge zu einer Archäologie des Hansaviertels Berlin,* by Jesko Fezer, Dorit Margreiter, Hanne Loreck, and Annette Maechtel (Eskinazi, 2008).

In 2008, Mara Oliveira Eskinazi published her master thesis "Interbau 1957 em Berlim: Diferentes Formas de Habitar na Cidade Moderna", a comprehensive analytic study of Hansaviertel in the Portuguese language based on their typological diversity. Her work paved the way for better visualization of Hansaviertel, finding more references on the subject, and continue on deeper studies on theoretical aspects. All descriptive background on Hansaviertel are compiled from Eskinzi, unless other names are cited.

The most recent material introducing Hansaviertel is the www.hansaviertel.berlin/en website provided by *Bürgerverein Hansaviertel e.V.* civic association. The website is completely refreshed and updated in 2019 at the duration of the completion of this study. The provided information is not just on architecture and history of Hansaviertel but covers all the recent social activities of the neighborhood in both English and German language.

Baykan Günay's article "History of CIAM and Team 10", published in 1988 is a critical work on the history of the CIAM and Team 10 and collects a brief data collection on all Congresses and their objectives. He analyzed the urban design processes in a "progressist-culturalist" duality. Günay's article prepares a proper base to position the Interbau in the history of modern architecture.

Sarah Williams Goldhagen's article "Something to Talk About: Modernism, Discourse, Style" explores shifts in the paradigm of style in 20th-century architectural history and theory and proposes the notion of modernism in architecture and conceptualize it as a discourse (Goldhagen, 2005).

In investigating this architectural project which belongs to a city and a country with an excessive number of events in its hectic history, the first move was to position it inside this history and understand the development of design and architecture in its course. Then the theoretical development of the ongoing movement is studied to understand first how the Interbau developed and then why it was criticized. At the end all the documents and materials are collected to create a comprehensive description of the exhibition and analyze its parts in detail. The cataloged introductions of the projects are placed inside the main body of the thesis but the more detailed analysis on plans and building materials are placed in the appendices.

As indicated before, in order to understand all the determinative events on creation of Interbau exhibition and grasp the deep pushing links in between, we must clearly imagine the country, the city, the urban life, and the living population at the time of

inauguration of the project and this will only be possible by studying the history of the city focusing especially on the first half of the twentieth century.

1.3. Structure of the Thesis

Chapter one pictures a general image of the study to understand why the Interbau exhibition is worthy to revisit after more than sixty years where the sources of data on the subject in the English language are fairly limited.

Chapter two takes a look at the history of Berlin and the history of Hansaviertel to understand the urban development of the city, the city's situation after the war, and the consequent division of the city. The political importance of the city in the Post-War period and the competition between the East and the West has a great role in the creation of Interbau. The area's urban plan competition and the exhibition itself are studied in the last part.

Chapter three traces back the ideas which took part in the creation of the Interbau, from the Garden City movement to Werkbund and CIAM, exploring to what extent Interbau has become a paradigm of the ongoing modern architecture, and compares Weißenhofsiedlung, Interbau, and IBA exhibitions within these ideas.

Chapter four is an attempt in creating a catalog to introduce all the buildings built for the exhibition. All the buildings are introduced by visual materials, plans, sections, and elevations. A more comprehensive analysis of the designs, plans, sections, and special characteristics of each housing project is also placed in the appendices.

Chapter five is the last chapter and the conclusion on how history, theory, war, and politics can all collaborate in some parts directly and in some parts indirectly in the creation of a project to become at the same time a political opposition, a model of "free world", a blueprint for other upcoming projects, and hope for the people of war.

CHAPTER 2

INTERBAU EXHIBITION

2.1. Introduction

The city of Berlin has passed a unique urban process after the end of World War II. "The city, which has an expressive tradition of architectural avant-garde, inaugurated in 1957 the *Interbau* (Internationale Bauausstellung), the first International Architectural Exhibition after WWII" (Eskinazi, 2008).

Figure 2.1. Entrance to the Interbau in the Hansaviertel District, 1957
Source: © Landesarchiv Berlin, F Rep. 290 Nr. 0054972 / Image: Willy Kiel

Interbau was constructed on an area almost completely destructed by bombing raids in 1943 to replace the old structure of dense industrial city. The design employs divergent housing typologies floating among open green spaces without any references to the old city fabric. With a selection of German and foreign architects

practicing the modern movement, it was intended to create a model of free world to be followed in other reconstruction works in western cities destructed by the World War II (Eskinazi, 2008). The particularity of the exhibition and the constructed neighborhood is not just in quality and intensity of the architectural practice; with adoption of the "motto *die stadt von morgen* (The City of Tomorrow)," the project acts as a political medium "answering propagandas of socialist East in the course of sheltering projects "promising a better future to remaining population of the war-torn city (Pugh, 2014).

Figure 2.2. Hall of the exhibition "die stadt von morgen" shown as part of Interbau, 1957
Source: © Landesarchiv Berlin, F Rep. 290 Nr. 0054926 / Image: Willy Kiel

The project's political role in the course of intense history of the city and the country and its steering position in forsaking classical building regulations and industrial city Developments made it impossible to study the Interbau without looking to the current history of the city and its architecture. The narrative historical data with focus points of the Hansaviertel and the Interbau are based on texts from Stefanie Schulz and Carl-Georg Schulz's book *Das Hansaviertel. Ikone der Moderne* (pp. 9-33) in German language and Mara Oliveira Eskinazi's thesis *A Interbau 1957 em Berlim: diferentes formas de habitar na cidade moderna* (pp. 9-88) in Portuguese language.

2.2. Development of City Fabric Shaped Within the Hectic History of the City

2.2.1 History of Berlin

"Although for the most of its history Berlin was a relatively unimportant regional capital, its development from the 1840s is characterized by incredibly rapid economic and physical growth, as well as its increasing political and cultural significance for Germany as a whole." (Pugh, 2014)

After the German nation was declared in 1871, "the political importance of Berlin was solidified," and the pace of the city's economic and cultural development quickened. As the city's economy grew, so did its population. "In 1871, the city's central district and outlying communities were home to 932,000. Only twenty-seven years later, the city's inhabitants numbered 2.7 million, (…) that figure had risen to 3.8 million by 1919." (Erbe, 2002) The city grew physically during this period as well; and the "surrounding districts were gradually incorporated until Greater Berlin was officially designed in 1920. The creation of Greater Berlin made it the third largest city in the world, raising Berlin's total land area from 22.8 to 340 square miles and the total population to 4 million." (Mattern, 1991)

In 1861, James Hobrecht, a young engineer who had only recently completed his studies, was chosen to draw up city's plan. Influenced in part by Georges-Eugène Haussmann's work in Paris, the Hobrecht Plan, completed in 1862, featured extremely broad boulevards interspersed with squares and laid out on a grid comprising very large blocks of forty-three hundred square feet. These large blocks were to have been subdivided into a smaller grid of streets, but the speculators who rushed to buy these plots were more interested in reaping profits than in adhering to Hobrecht's plan (Ladd, 1990).

In the absence of any real city building regulations, the blocks were densely built up with *Mietskasernen*, or "rental barracks," for which Berlin would become infamous (Matzerath, 1984). "A regular city block was occupied intensely by *Mietskasernen,* large multistory apartment blocks arranged around comparatively small interior

courtyards (*Höfe*).” The outer layer units of the *Mietskaserne* with direct openings to the street were recognized as “more prestigious accommodations”, while “not much desirable apartments were located toward the interior of the block with windows opening to the deep and small courtyards and accessed only by walking through the linked courtyards.” (Pugh, 2014) (Figure 2.3)

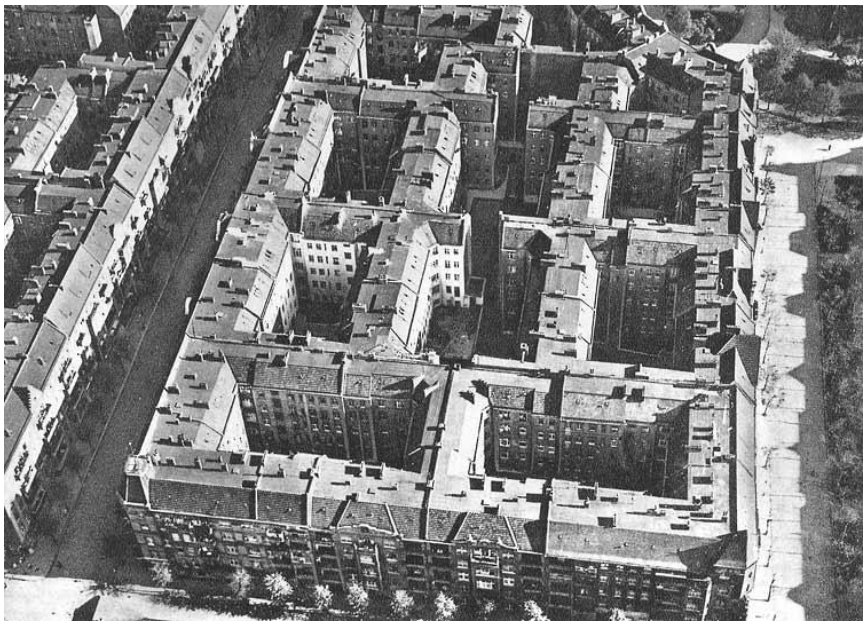


Figure 2.3. The mietskasernen in Berlin
Source: http://www.weimarberlin.com/2018/03/the-mietskasernen-in-berlin.html

From the 1870s to the 1890s, as large numbers of people moved to Berlin to work in its factories, *Mietskasernen* became hopelessly overcrowded. In the winter, sickness and death were rampant, as many of the apartments did not have heating of any kind (Erbe, 2002). Because of the dire conditions in the *Mietskasernen*, Berlin was often cited as having the worst housing in what was a nationwide crisis (Ladd, 1990).

2.2.2. History of Hansaviertel

With the founding of the empire and the proclamation of Berlin to the imperial capital in 1871, the population grew rapidly; in this year alone, 50,000 people flocked to the young capital, which increased the demand for housing (Schulz & Schulz, 2007). In 1872, Berlin-Hamburger real estate company Immobilien AG acquired the undeveloped marshy land on the south bank of the River Spree, which appears on the

old maps under the name Schöneberger Wiesen (Figure 2.5). On March 21, 1874, the development of the site was cancelled by cabinet orders. In the process, only the construction of residential buildings was envisaged (Dolff-Bonekämper & Schmidt, 1999).

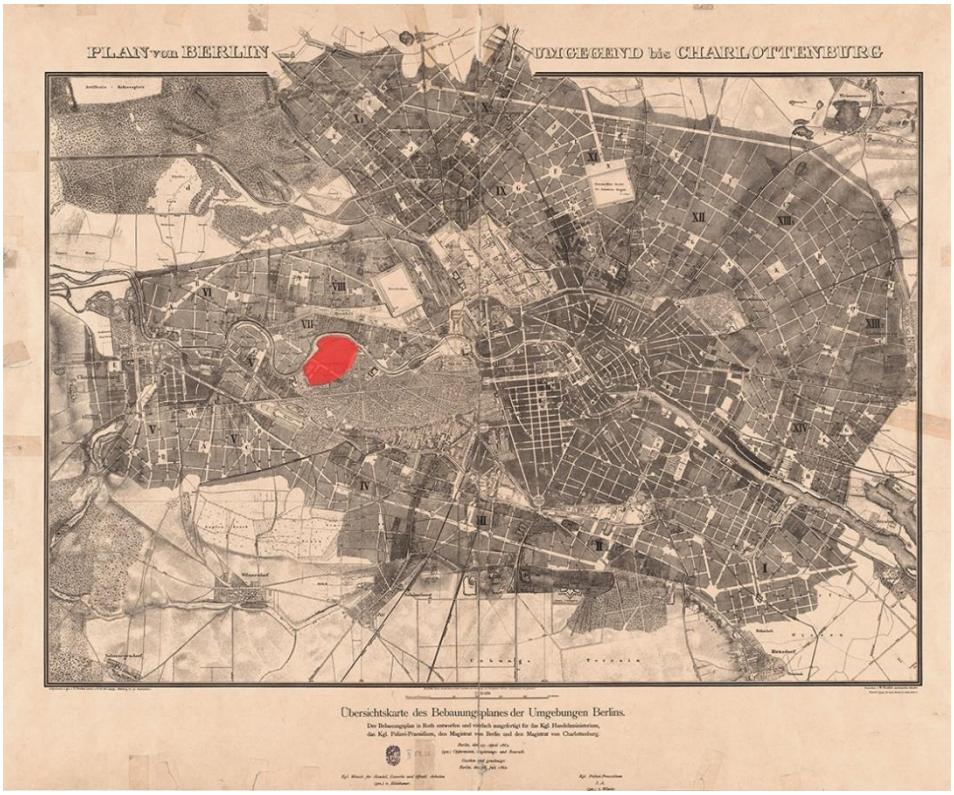


Figure 2.4. Hansaviertel's location in City plan 1862, the indication mark is made by author
Source: https://upload.wikimedia.org/wikipedia/commons/1/1a/Boehm_Berlin_1862.jpg

The construction of the first residential buildings on the area started by late 1870, four years after "the company baptized the new district of Hansaviertel and began to drain the area in 1876." With construction of the *S-Bahn* viaduct in the form of a large arc from south to west crossing the neighborhood, the region divided into a southern and a northern area in 1880. (Figure 2.6) With inauguration of Bellevue station in 1882, Hansaviertel become more attractive as a residential area, since with the train, the route to *Charlottenburg* or the old center in the *Mitte* district lasted only a few minutes. "At the turn of the century, the urbanization of the neighborhood was almost complete, and then about 15,000 people lived there." (Eskinazi, 2008) (Figure 2.7)

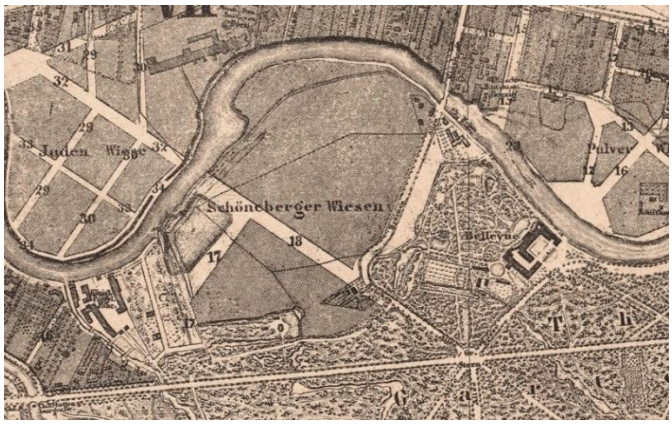


Figure 2.5. Schöneberger Wiesen (Hansaviertel) in City plan 1862
Source: https://upload.wikimedia.org/wikipedia/commons/1/1a/Boehm_Berlin_1862.jpg

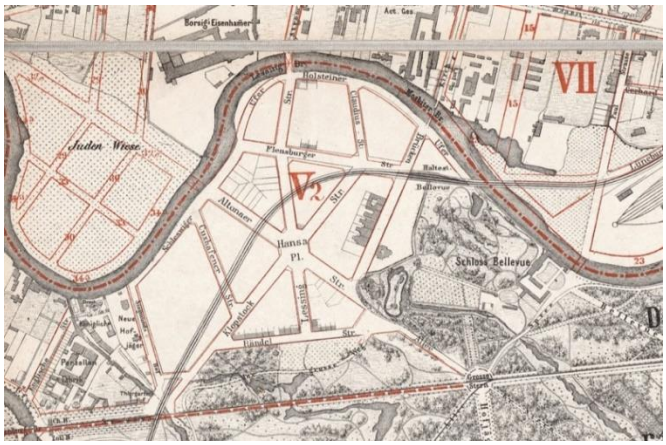


Figure 2.6. Hansaviertel in City plan of 1882
Source: https://commons.wikimedia.org/wiki/File:Sineck_Situations-Plan_von_Berlin_1882.jpg

Figure 2.7. Hansaviertel in City plan of 1905
Source: https://commons.wikimedia.org/wiki/File:Sineck_Situations-Plan_von_Berlin_1905.jpg

The Hansa quarter was characterized by good living conditions and higher building qualities. 343 buildings built in Hansaviertel were designed by architects, where masons were responsible for the design of the buildings in the formation of other Berlin districts, such as *Prenzlauer Berg*. "Alfred Messel and Hans Griesebach, well recognized in the architectural history of Berlin due to the construction of representative commercial buildings and some residences, were very active in the construction of the neighborhood". Hart & Lesser, Holst & Zaar and Solf & Wichards, which are among well-known offices of the time also designed buildings for Hansa district (Eskinazi, 2008).

Few buildings of historicist architecture that remained of the old conformation of the district in the *Claudiusstraße*, the *Flensburger Straße* and the *Holsteiner Ufer*, north of Hansaviertel, with ornamented facades revealing the power of the construction company - of Hanseatic origin - responsible for the foundation of Hansaviertel made it possible to realize the panorama that is then desired (Eskinazi, 2008). In spite of many, sometimes narrow, backyards, the Hansaviertel was considered a posh, heavily Jewish district, home to doctors, lawyers, senior civil servants, bankers, business people, as well as intellectuals and artists (Schulz & Schulz, 2007).

By the standards of the time, the old Hansaviertel with wide wooded streets and lands almost entirely occupied with buildings was presented as an urban model of population concentration in large cities (Figure 2.8). However, the buildings had insufficient lighting and ventilation, poor hygiene, and dark inner courtyards. "The nineteenth-century Hansaviertel had no significant influence on the general urban planning of the area" (Eskinazi, 2008).

Figure 2.8. The Hansaviertel in the 1930s
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 24

2.2.3. World War II Destructions in Berlin

"World War II drew to a close with the siege of Berlin, which began on April 16, 1945. Fighting the last resistance street by street, the Soviet army took the city on May 2, and the war officially ended on May 8, 1945, with Germany's unconditional surrender to the allies." (Pugh, 2014)

After the end of World War II, huge areas of Berlin, and especially the more central areas, were devastated. About 75 percent of the city's homes were destroyed or became uninhabitable, and the number of inhabitants dropped from 4.33 million before World War II to about 2.0 million after it. The bombings, among other consequences, cut a strip from east to west in the historic structure of the city and caused an evacuation of the center (Imhof & Krempel, 2008).

Statistics show that in 1945 in Berlin, out of approximately 245,000 existing buildings, 11.3% were totally destroyed, 8.2% seriously and 9.3% partially destroyed, the damage caused by the Second War was distributed unbalanced through the city (Dolff-Bonekämper & Schmidt, 1999). The *Neukölln*, *Prenzlauer Berg*, *Wedding* or *Schöneberg* neighborhoods concentrated most of the intact buildings, while large

areas of *Tiergarten*, *Mitte*, *Kreuzberg*, and *Friedrichshain* were heavily devastated. In these regions of the city, then totally ruined, the urban landscape had been lost amid the wreckage (Eskinazi, 2008).

The Hansa quarter was heavily damaged by bombing raids on the nights of 22, 23 and 24 November 1943. The destruction of the original social structure of the neighborhood's population had already begun with the emigration and deportation of the Jewish population. After the bombings, only 70 buildings throughout the neighborhood were in habitable condition (Schulz & Schulz, 2007).

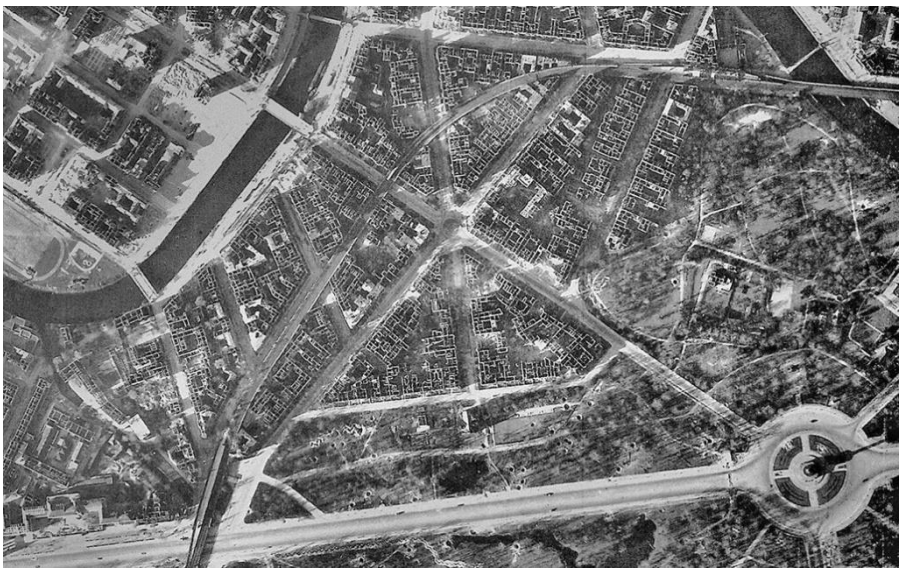


Figure 2.9. Aerial view of the war-destroyed Hansaviertel
Source: https://hansaviertel.berlin/en/interbau-1957/geschichte-der-interbau-1957/

2.2.4. Plans to Redesign the Capital

The reconstruction work of the city began in 1946 after division of Berlin into four sectors by Allied forces of the United States, Soviet Union, England and France. The demands for tasks were enormous, and the available technical equipment and workforce were insufficient. The problems stemming from the enormous pressure of production and the introduction of the industrialized methods of construction emerged against a largely unprepared architectural culture. Naive traditional design and place-management methods were no longer adequate in the face of project size and the complexity of requirements. This situation resulting from the war provoked the

execution of urbanistic projects with the purpose of renewal of the city, that did not come to be executed, like the *Kollektivplan*, realized by Hans Scharoun in 1946 (Imhof & Krempel, 2008).

“In both parts of Berlin, different urbanistic concepts were followed, presenting themselves generally concurrent with each other.” After the city had been turned into ruins, the post-war urban planners, both in the east and in the west, “materialized their radical ideas in the city's historical planning, making Berlin, during the decades of the division, the scene of an ambitious competition between the capitalist system and the socialist system in matters of urbanism and architecture.” (Eskinazi, 2008)

The Allies appointed Hans Scharoun in May 1945 as a city councilor for construction in the city council. In the August 1946 Scharoun presented his planning considerations from the previous year as a kind of accountability report from the building administration in the Berlin City Palace. “The proposal as a whole involved breaking up the city's growing, concentric urban structure in favor of a linear grid of freeways that would also cut through the old city center.” This grid was to form large units of about 80,000 inhabitants, divided into municipal units of about 5,000 inhabitants. “But this goal of complete restructuring seemed to the public to be unrealistic both in the short term and in the long term. It was also disproportionate to the post-war situation, which was dominated by general supply and housing shortages.” (Schulz & Schulz, 2007)

Karl Bonatz, the successor of Hans Scharoun as head of the construction department formulated essential problems of the plan. “He criticized the high scores that would be incurred for the new road grid by demolition of the building fabric and relocation of the existing pipeline routes. The benefits of the existing city plan would not be maintained.” Furthermore, “Bonatz criticized the fact that the financial and material consequences of the motorway network (intersections and connections from the highways to the residential areas and the highways) were insufficiently processed and

presented. Therefore, in his view, the economic outlay needed to realize the concept was not recognizable." (Schulz & Schulz, 2007)

A counter-proposal to the collective plan, which was also exhibited in the city palace, was the so-called *Zehlendorf* plan, written by Walter Moest. This provided for the inclusion of existing urban structure, the transport network, and existing building substance (Schulz & Schulz, 2007).

Bonatz integrated these different plans into a single plan known as the Bonatz-Plan. "Further developments happened in terms of planning policy after the political turmoil of the Berlin Blockade by the Soviets in 1948. (…) The General Assembly Plan applied to East Berlin, while the Bonatz-Plan was the basis for the construction of West Berlin from mid-1949 onwards." (Schulz & Schulz, 2007)

The separation in urban designs and concepts for East and West Berlin took place in 1950 with "Sixteen Principles for Town Planning of 27 July 1950": "The principles form the basis for the draft of a Law on the Development of Cities in the German Democratic Republic and the Capital of Germany (Berlin)", in short, the "Building Act." They also form the basis for the draft of the "Principles for redesign and reconstructions of the center of the capital Berlin." The ideas of the socialist city contrasted with Western theories of the dissolution of the traditional city based on the Charter of Athens. The Sixteen Principles sought a compatible mix of uses. It should do justice to the real needs of people, working, living, culture, and recreation (Schulz & Schulz, 2007).

The two systems had in common the inclination to destroy the existing structure of streets and squares, as well as the almost total demolition of the old buildings. Thus, with the emergence of the new era, Berlin of the past should become a new city, dependent on partisan positions, but in both cases, a city made for the car (Eskinazi, 2008).

The Hansaviertel itself was still occupied by ruins, the removal of the rubble began in 1954 and was completed in 1955, and most of the still-inhabited houses were vacated

in 1954, approximately 4,000 people were still lived throughout Hansaviertel. Clean-up and reconstruction works were initially conducted by the women's hands, the so-called *Trümerfrauen* - or, in a literal translation, "women of the ruins" (Eskinazi, 2008).

Figure 2.10. The Hansaviertel before reconstruction
Source: © Landesarchiv Berlin, F Rep. 290 Nr. 0039740 / Image: Schütz, Gert

2.2.5. Evading the Memories of Past and Reconstructing the District

In 1953, the Berlin Senate decided to destroy what had been left from the Hansaviertel, and established that its reconstruction be linked to an international exhibition of modern architecture. (Eskinazi, 2008)

These demolitions, as in the case of the Hansaviertel, "manifested themselves mainly in the effort to readapt the city to the new urbanistic concepts in force at the time," an effort that was concretized in significant opportunities to put into practice the principles of the Athens Charter. (Eskinazi, 2008)

Hans Stimman, the sector director responsible for coordinating Berlin's construction policy between 1991 and 1996, confirms this post-war inclination in the city for promoting demolitions by stating that "Post-war architects, urban planners, and

politicians lived so long on the western side as on the eastern side of the city with hatred of the past and confidence in progress" (Stimmann, 2001).

The synagogue on the *Levetzöstrasse*, much destroyed in the war, was served as a station for the storage of people and the center for deportation, from it were gathered every once around 1000 Berlin Jews and taken to extermination camps. It is one of the examples for Interbau organizers and participants to expressed too narrow concerns about the area's historical background. According to Dolff-Bonekämper, the Interbau organizers' wish was that the future of the area should not be seen as a place for cultivation of the recent past.

Of the 20 surviving buildings, 18 were demolished in favor of the new development and two of these old buildings are still preserved today in the *Klopstackstrasse*.

2.3. The Cold War and Political Significance of Architecture

The post-war period shows an enormous housing deficiency in entire Berlin and the conflicting styles between East and West had great impact on the housing projects in both sides. West Berlin in 1949 under the rule of the United Kingdom, France and the United States, became the Federal Republic of Germany (FRG) and the Eastern Bloc, under Soviet Communist rule, became the German Democratic Republic (GDR).

Emily Pugh considers modernism as both instrument and a product of the Cold War in her book "Architecture, Politics, and Identity in Divided Berlin". She emphasizes how important was for governments to become successful in the case of the city of Berlin, on both sides of the wall and specially with physical isolation of West Berlin, its unique political status, and its significance as a symbol of the western world. The display of solidarity and economic success within West Berlin was critical for western governments' success in the Cold War struggle. According to Pugh, the importance of creating the national identity in Germany after WWII and the role of design, architecture, and urban planning was: (Pugh, 2014)

> Throughout the Cold War, ideas about and images of home, belonging, and national identity were often presented by the regimes of east and west via

> architecture, urban planning, and design. For example, with the construction of new housing during the Cold War, authorities sought to prove they could provide for the citizens in their sphere. Using "representational" architecture, such as model homes or cityscapes shown in propaganda films, authorities offered images of the prosperous present they had created and of the progressive future promised to those who lived under their leadership. Residents in West Berlin, West Germany, and East Germany often measured the success or failure of their governments by the extent to which they lived up to the standards established by the representational media and official rhetoric around architecture and building. Governments, in turn, measured their own success in part by the numbers of "hearts and minds" won over to their way of life. (Pugh, 2014)
>
> Because victory in the Cold War was tied closely to public perception, contemporary popular discourses about housing and architectural design are critical to gaining an understanding of how these concepts influenced political and national identity formation in both spheres of the Cold War. (Pugh, 2014)

A comparison between the styles of architecture in East and West Berlin during the early Cold War period clearly reveals the political opposition between the capitalist democracy over Soviet-style socialism.

The socialist rulers of the GDR had realized between the summer of 1951 and January 1953 the construction of the *Stalinallee*, a highway on the remains of Frankfurter Allee, the main axis route along the East German capital of Friedrichshain. The buildings described as "workers' palaces" presented as a model for the urban planning principles of the east and developed according to historical structures of the urban organism. Instead of abstractions or constructive schemes, standardized housing cells, sets of bars or solitary bars were placed in the landscape and rigidly marked by buildings that refer to the classicism of Berlin (Eskinazi, 2008).

The site plans demonstrate the difference between the linearity and order in urban planning of the East and free composition and organic style in the West. The apartment blocks along Stalinallee are all of a uniform, rectangular shape, where the apartment blocks in Hansaviertel, on the other hand, differ greatly in shape, and size. David Crowley describes both housing developments as significant exercises in ideologies (Crowley & Pavitt, 2008).

Figure 2.11. View from Haus des Kindes to Strausberger Platz and Stalinallee, 1956
Source: https://www.open-iba.de/en/geschichte/1957-interbau-berlin// Image: Horst E. Schulze

The post-war reconstruction of western German cities followed very different standards from those used by the eastern cities, and thus the reconstruction of the Hansaviertel is not only established as an architectural and urbanistic opposition to *Stalinallee* but also as a mirroring of the different political systems. Thus, opposing the *Stalinallee*, the Interbau also represented a meeting of desires - the desire to show in West Berlin a neighborhood with modern apartment buildings, imposing itself on the architecture that was being built in the east, and at the same time the desire to demonstrate political power through the expression of a free and democratic society (Eskinazi, 2008).

Both parties were keen to demonstrate that the lifestyles in their sector, prompted by the differing Communist and Capitalist ideologies, were more successful than the other. West Berlin achieved this by embracing Modernism, through imaginative exteriors and high-tech interiors. Meanwhile on the Eastern Stalinallee, the success of the regime was alluded to through the 'elegance' of the neoclassical exteriors and their promotion of order, in a period of post-war disorder (Jaquand, 1991).

In 1957, 2.2 million people were living in West Berlin, with only 1.3 million in the East, which shows that the east propagandas were not as successful. In addition to this, the building of the Berlin wall in 1961 can be used as evidence to suggest that it was intended to prevent the west's propagandas affect people from the east. (Rosner, 1957)

2.4. Interbau Exhibition

2.4.1. The Urban Design Competition

Almost totally destroyed, the Hansaviertel offered, considering its location between the Tiergarten park and the River Spree, two natural elements of the urban landscape, ideal conditions for the implementation of a landscape transformation operation. The marks of its original urbanization were eliminated with the bombings, which made the border between the nature of the park and the area of the neighborhood diffuse and difficult to distinguish. The few buildings that were not destroyed ended, at the wish of the speculators, remaining without maintenance (Eskinazi, 2008).

The area was due to its exceptional location in the city an object of interest to various governmental and private organizations. The proximity to the *Tiergarten* and the *Reichstag*, the seat of the German Parliament, also contributed to the appreciation of the area. This justifies, in part, the delay in its reconstruction process being put into practice. Various ideas for its occupation have been raised, from its complete annexation to the Tiergarten area and consequent transformation into a park, until its incorporation into projects located in neighboring areas, such as the project for the new *Regierungsviertel* (governmental district), or the project of Georg Pniower in 1947 for a university town on the Ernst-Reuter-Platz, where *Technische Universität Berlin* is now located; Finally, it was suggested that the area should pass an expressway tangent to the city, towards the north (Eskinazi, 2008).

In November 1951, the *Bezirksamt Tiergarten* announced the opening of the Hansaviertel Reconstruction Ideas Competition in Berlin, which aimed to define Hansaviertel as a modern and privileged residential area for the city. At this moment, the complete destruction of the neighborhood was already decided. "Nothing should

stand in the way of the new urban model, which, in addition to exemplifying what modern architecture and urbanism best offered in terms of social housing, should demonstrate West Berlin's ability to project itself into the future, with the Western world." (Eskinazi, 2008)

However, almost two years later, on June 13 1953, the Berlin Senate made the contest known to the public. "A Senate ruling of August 3, 1953, officially defined the area south of the Hansaviertel as the nucleus of the first International Architecture Exhibition to be held after World War II, which had originally been planned to open in 1956." (Eskinazi, 2008)

Above all, the Hansaviertel urban development competition for the reconstruction of the Hansaviertel had to meet the demand for an urban renewal for the neighborhood, starting with the negation of the late 19th century city and its structure of small-scale parceling. The solutions should not be directed towards creating densely built blocks, but rather large free areas that correspond to the ideals of decreasing population density and greening of cities, themes that are very widespread in modern culture. Thus, the contest sought to create an urban concept that was independent of the old parceling structure of the neighborhood and sought proposals for a new space arrangement between buildings (Eskinazi, 2008).

The competition launched in 1953 sought suggestions for the new configuration of Hansaviertel, as well as contributions in relation to the new parceling and land consolidation. The creation of a new way of organizing the land, that is, the destruction of the old structure parceled out in small lots, was one of the main objectives of the contest, and the neighborhood should be re-divided and re-parceled in large areas. Therefore, it can be affirmed that the use of modern urbanism in Hansaviertel was only made possible by the implementation of a policy of urban land re parceling (Eskinazi, 2008).

From the outset, it was decided that the new Hansaviertel would consist of isolated buildings among open green spaces and that the established density would be achieved

in large part by tall buildings, leaving most of the land free. Thus, the relationship between the *Tiergarten* and the new neighborhood, implanted in the middle of the green, would also be redefined. The only requirement in the competition rules is to maintain the width of the *Altonaer Straße*. From there a new layout of streets to the west of the *S-Bahn* viaduct could be configured. All other streets and roads could be modified or redefined (Eskinazi, 2008).

The proximity to natural elements, such as the *Tiergarten* park and the river *Spree*, was extremely important for the configuration of the new Hansaviertel. However, besides the natural elements, the surroundings of the Tiergarten would also include government buildings, with the installation of the future *Regierungsviertel* (governmental district). Even if, at the time, the capital of Germany was established in Bonn, it was already foreseen that, soon, Berlin would once again become capital. Thus, the banks of the *Tiergarten*, in addition to residential buildings, should also include government buildings (Eskinazi, 2008).

The reconstruction of the Hansaviertel was financed by the United States and the Marshall Plan for European reconstruction and was made possible by the founding of a Corporation, whose capital was brought in housing and housing societies of public interest. Hansa AG took on the role of builder, and buildings were to be built to meet state requirements for social housing - which implied a higher limitation on rental prices and a restriction on the size of apartments (Eskinazi, 2008).

Among the 98 entries submitted for the competition, the first was the urban project of the team of architects Gerhard Jobst and Willy Kreuer, both professors at the Technische Universität Berlin, and Wilhelm Schließer, responsible for designing traffic planning. The project of the architect Herta Hammerbacher was awarded the first place in the area of landscaping.

“The project and the descriptive memo of Jobst and Kreuer are evidenced as the background for a modern-and western-manifesto of ambitions of freedom, not only freedom in urban planning, but also in political opposition to the buildings left of

inheritance by Hitler's national-socialist dictatorship over the socialist East constructions." (Eskinazi, 2008) In 1954, shortly after winning the contest under the title "The urban order", Gerhard Jobst explained in an open letter the concept of his project:

The urban order may be in a simple geometric composition of straight lines and angles. An organization in this way can be easily understood and can be carried out in a spontaneous and uncompromising manner. The urban organization can also, contrary to this, be lively in a place of free nature, where it does not need to lodge and represent lines and right angles. The most noble form of organization, as Edwin Redslob once said, is freedom. (...) This organization does not allow to be placed in a force jacket. (...) Free people do not want to live like an army, and they do not want to live in houses lined up one after the other like workers' tents. In naturally organized places, buildings organize themselves as people, who address each other at random, or stand in position to be contemplated. Not in a queue, but in a more casual position. The casual places liberate the buildings from the fascination of the masses, which are surrounded by a reinforced geometry (Dolff-Bonekämper & Schmidt, 1999).

The architectural arrangement of non-orthogonal geometry was clarified by the authors in the descriptive memorial written on the occasion of the contest: "The buildings are planned to be naturally placed free in a bay that opens to the Tiergarten, and must present themselves, through this lack of obligation, as an expression of clear contrast against dictatorially constructed buildings." (Dolff-Bonekämper & Schmidt, 1999).

2.4.2. Modifications on the Winning Project

The Berlin Senate's decision in 1953 to connect Hansaviertel's reconstruction with an International Architecture Exhibition led to changes in the award-winning project, as the Jobst and Kreuer plan failed to meet some essential needs and purposes of this type of exhibition.

The exhibition should be organized with "an abundance of architectural individualities through the participation of recognized national and foreign architects". In addition, the conceptual lines of the project were also criticized by senators, since, according to them, the project of Jobst and Kreuer contradicted his intention to provide an overview of all the architectural and constructive possibilities of the time. For the consolidation of a real demonstration of the modern housing architecture scenario, essential typologies such as towers, low bars and sets of houses were lacking (Figure 2.12.). Thus, a typological diversification should demonstrated the different possibilities of living in a modern city, as well as allowing the accommodation of a greater functional variety from the implantation of important urban equipment, such as commerce, school, library, churches and kindergarten (Bezirksamt Tiergarten, 1995).

The winning project in the contest did not meet all these conditions so it suffered, initially, several modifications with the consent and participation of Gerhard Jobst, before its execution. Willy Kreuer was at that time occupied with the project of St. Ansgar-Kirche at Hansaplatz and therefore he gave up his participation in the work of reformulating the urban project. In a second step, the plan was reformulated under the coordination of Otto Bartning (Eskinazi, 2008).

The first version presented by Gerhard Jobst after the contest in April 1954, maintains a very similar configuration with the winning version of the contest; however, the area of intervention had been reduced and limited by the area between the park and the *S-bahn* viaduct - the area between the railway and the river was suppressed. In the next plan, presented in 1954, even without renouncing one of the most striking concepts employed in the winning proposal of the contest, in which the bars form two semi-circles open towards the Tiergarten, Jobst now plans a clear mix of different typologies, adding concepts used by the authors of the proposals classified in 2nd and 3rd place in the contest of 1953: series of towers were added from Kurt Kurfiss project; ideas for a shopping center at Hansaplatz added from the project by Ruegenberg and van Möllendorf; and the single-story flat house developments added from Thiele and

Wittig project which, on the other hand, revealed some aspects of Hans Scharoun's project for the housing cells of *Friedrichshain* (Eskinazi, 2008).

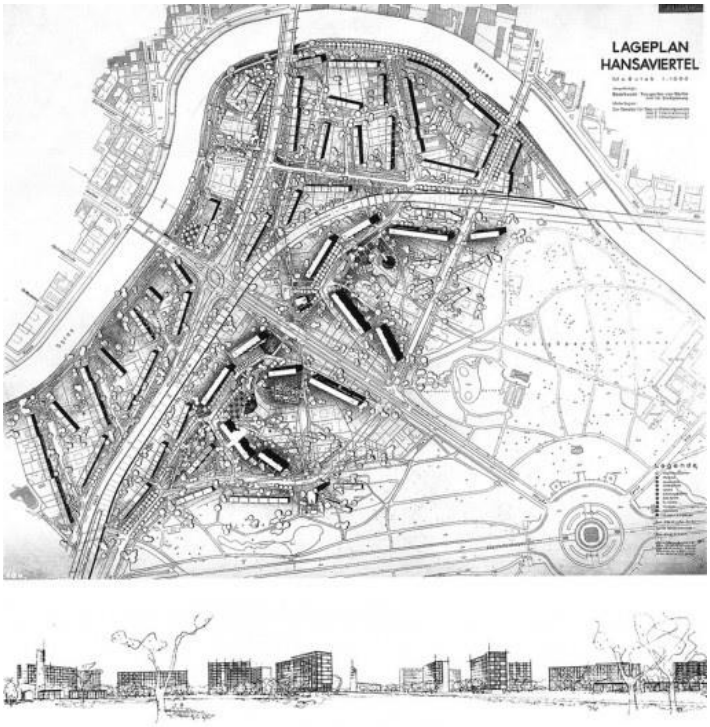


Figure 2.12. Implementation of the urban plan winning the 1953 contest, by Gerhard Jobst and Willy Kreuer
Source: Wagner Conzelmann, Sandra. Die Interbau 1957 in Berlin, 2007, p. 36

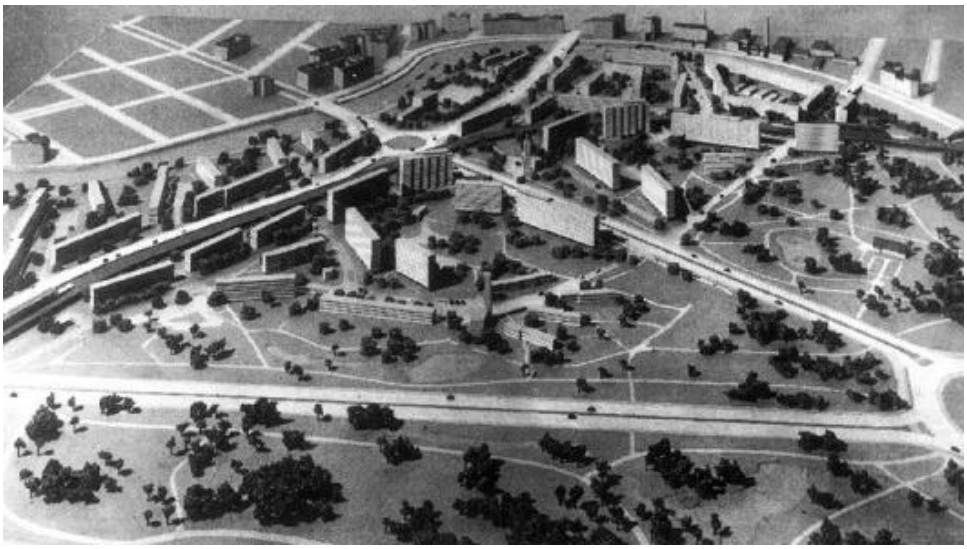


Figure 2.13. View of the model of the urban plan winning the 1953 contest
Source: Dolff-Bonekamper, Das Hansaviertel – Internationale Nachkriegsmoderne in Berlim, 1999, p.16

Jobst introduces new urban elements, besides bars of varied heights, two towers - one near the southwest access, near the future *Straße des 17. Juni*, and the other next to the Hansaplatz. With the use of the two towers, Jobst sought to mark key urban development points that established a dominant position in the landscape. In addition, a shopping center connected to a subway station was created at Hansaplatz, and a pedestrian walkway was planned on the *Altonaerstraße*. With this, Jobst reached a greater number of residential units and a greater typological differentiation between the buildings(Eskinazi, 2008).

The plan developed by Jobst served as the basis for all further considerations and reflections. However, between the end of 1954 and February 1955, the plan took another path and was developed under the direction of Otto Bartning, who at that time was the head of the project committee and was president of the *Bundes Deutscher Architekten*. Bartning should assist in the resolution of formal problems, in the determination of the exhibition areas, in the composition of the different typologies of buildings to be used, in the elaboration of the existing financial possibilities, as well as in the choice and coordination of the participating national and foreign architects and their respective locations of their buildings (Eskinazi, 2008).

Figure 2.14. Le Corbusier, Otto Bartning and Hans Scharoun (from left to right) during the opening of the exhibition "Le Corbusier - Architecture, Painting, Sculpture, Tapestries" on September 7, 1957 in Berlin
Source: © Marie-Agnes Gräfin zu Dohna, https://www.stylepark.com/en/news/otto-bartning-has-shaped-the-modern-architecture-in-germany

2.4.3. Interbau Exhibition

The idea of a building exhibition in Berlin was born in 1951, when the former Berlin Senator Karl Mahler and his Senate Director Ludwig Lemmer, accompanied by the head of Constructa[1] in Hanover, Albert Wischek, made a tour of the exhibition (Geist & Kürvers, 1989). The idea of what kind of show this would be like, and what you put out to where changed forever. Initially, a construction performance show in Berlin

[1] For the first time after the War, professional associations and specialist organizations of the entire federal territory took over the ideal sponsorship for two national exhibitions in Hannover, the *"First Federal Garden Show"* (until October 31, 1951) and the construction exhibition *"Constructa "*(from 3 July to 12 August 1951).

was planned, similar to the Constructa in Hanover… Finally, when the concept of building a residential area was discussed, the *Charlottenburg-Nord* area between the *Jungfernheide* train station and *Siemensstadt* was initially planned as the location. From the beginning, an international building exhibition was planned over a period of three months, at the end of which 7,000 apartments were to be completed. The date of the exhibition was originally planned for 1953, but was initially postponed to 1954 at the beginning of 1953 (Schulz & Schulz, 2007).

The objectives of the International Building Exhibition were summarized in a senate report of February 1956:

The goal of the 'International Building Exhibition Berlin 1957' is to present the current issues of urban planning and housing in terms of the development of the Hansaviertel. Development of Berlin and other cities will be of the highest interest. The construction of the Hansaviertel will be a cross-section of the architectural and technical possibilities of our time. In housing construction, solutions are sought which are intended to guide the further development of the social housing standard.

The illustrative material provided by spacious construction site of 'Hansaviertel' will be complemented and explained by the thematic show entitled 'The City of Tomorrow'. (Schulz & Schulz, 2007)

With the exhibition “The City of Tomorrow,” Interbau wanted to contribute to “transforming people's awareness of the problems of reconstruction and rebuilding German cities and to directing them all to the responsibility for shaping our future carry.[2]” “The redesign and reconstruction of the Hansaviertel in the framework of the Interbau 1957 are not imaginable in their radicalistic in the immediate vicinity of the City West without the Great War devastation and without the systemic competition of

[2] Karl Otto, Idea and Aim of the Exhibition Department "The City of Tomorrow", in: lnterbau-Katalog, p. 35 f, cited in Schulz & Schulz, 2007.

the socialist states and the western democracies after the Berlin blockade.” (Schulz & Schulz, 2007)

“The City of Tomorrow” implied that the historic city was no longer able to cope with the differing demands placed on it. The traditional city was no longer considered to be functional because it had too high a density of buildings and occupancy. The standard of living often did not meet the hygienic requirements which not only concern the sanitary equipment, but also the sufficient supply of the apartments with light, air and sun. Commercial, industrial and residential areas were mixed. The existing road network would no longer be able to cope with the increasing swelling in the future, which would result in a significant impairment of the quality of life. The functional mixture present in the traditional city was regarded as dysfunctional in terms of urban planning and sociology (Schulz & Schulz, 2007).

As a solution the separation of functions was propagated. Interbau was promoted from the perspective of an architecture identified with the Modern Movement and the Western world, prioritizing, in its planning, the free deployment of buildings within a wide green area. It thus promoted the adoption of different typologies within the same composition logic, not aiming to redeem the urban pattern of the place, once it was implanted in an area of dense urbanization, whose streets and blocks are well defined by the alignment of the buildings (Bronstein Passaro, 2002).

"The new urban configuration of this neighborhood of the city, with a total area of approximately 25ha, must be in accordance with the new spirit of the time, materializing as a manifestation of an architectural attitude that corresponds to the peoples' demands of free thinking and free living. The content of this new urban conformation is in the quest to provide buildings with an architectural root that represents the time and that is configured as a solution to the problem of "people in the big city", from the ways of living in a highly central neighborhood connected with the green." (Bezirksamt Tiergarten, 1995)

The exhibition was planned to be inaugurated in 1956. As of July 1955, there was still no individual building project ready, it was decided to postpone it to 1957. The show remained open to the public between July 6 and 29 of September of 1957; however, as the construction of housing units, begun in 1955, was only completed in 1962, many of the buildings were not ready at the time of its inauguration (Eskinazi, 2008).

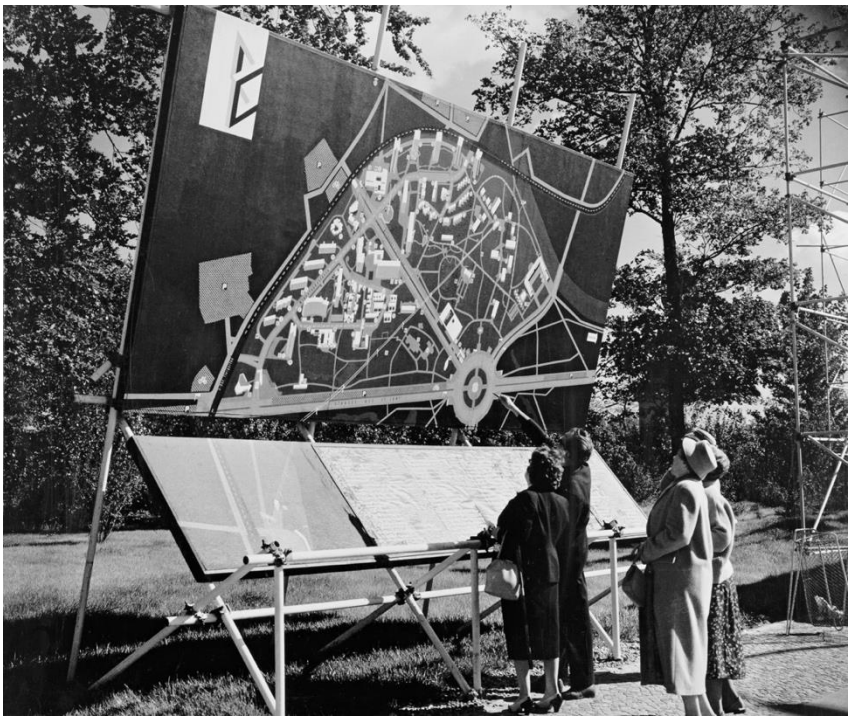


Figure 2.15. How does the new arise? Visitors ogle the overview map of the Interbau 1957 in West Berlin
Source: © Otto-Bartning-Archiv TU Darmstadt, https://www.stylepark. com/en/news/ otto-bartning-has-shaped-the-modern-architecture-in-germany

Interbau's main quantitative results were the construction of approximately 1,236 residential units within Hansaviertel, which can be classified into the following types: single-family houses from 1 to 2 floors, towers from 16 to 17 floors, bars of 3 to 4 floors and bars of 8 to 10 floors; in addition, another 530 units were built outside the neighborhood, in the Housing Unit of Le Corbusier.

Figure 2.16. Final model of the Hansaviertel, view from the west
Source: https://www.bildindex.de/document/obj20556591?medium=fmlr356_66

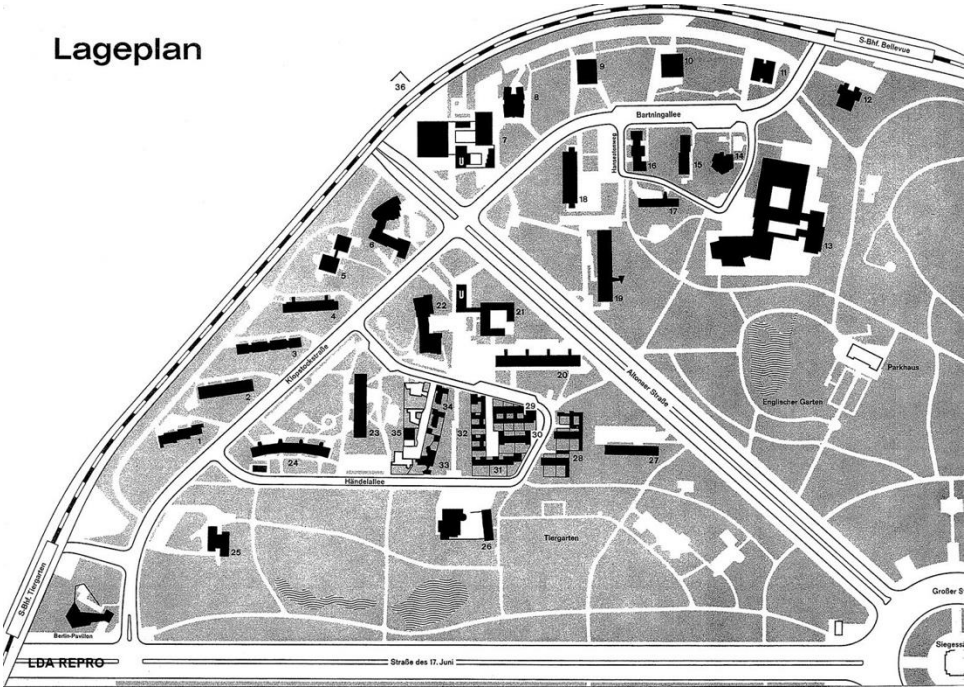


Figure 2.17. Interbau 57 site map
Source: http://www.stadtentwicklung.berlin.de/denkmal/liste_karte_datenbank/de/denkmaldatenbank/daobj.php?obj_dok_nr=09050387,T,002

Its design principles were partly supported by the theories of the progressive model of urbanism published by the Athens Charter of 1933, which disseminated the concept of mono functional zoning and the consequent land-use planning from the so-called

key functions of urbanism - to inhabit, to work, to recreate and to circulate. Housing should be developed in loose buildings on the ground, thus recovering free areas needed for leisure spaces, creating large green areas and lighting and ventilation needs of residential units (Eskinazi, 2008).

Only those architects who were notably engaged in the agenda of modernity were invited to participate, and the encouragement of a mix of participants from different backgrounds underscores the unique policy of the Interbau organizers, which aimed not only to give space to Berlin architects but also to linking West Berlin with West Germany and announcing the opening of the city to the world. The exhibition should have as little to do with the National Socialist architects as with the architecture of this regime (Eskinazi, 2008).

In a first round held in August 1954, the steering committee was defined by 34 objects for all 12 foreign architects and teams, three of whom were in exile during the Nazi regime: Ludwig Mies van der Rohe (Germany / USA), Alexander Klein (Israel) and Fritz Jaenecke (Milan). However, over the years 1954 and 1955, the list with the participating architects underwent some modifications: Mies van der Rohe and Eero Saarinen refused the invitation, while Otto Bartning and Hans Scharoun retired (Dolff-Bonekämper & Schmidt, 1999). Le Corbusier demanded the assignment of another major site for the deployment of its Housing Unit further west in Charlottenburg, south of the Berlin Olympic Stadium and next to the Grünewald forest.

The architects invited to participate in Interbau have, in addition to Germany, Denmark, Sweden, Finland, Italy, France, England, Switzerland, the Netherlands, Brazil and the United States. The exhibition was attended by approximately 50 architects from 12 different countries - 18 foreigners, 11 West Germans and 20 West Berliners. Among them were Walter Gropius, Alvar Aalto, JB Bakema, Arne Jacobsen, Paul Baumgarten, Egon Eiermann, Max Taut, Oscar Niemeyer and Le Corbusier (Eskinazi, 2008).

Interbau is distinguished from other architectural exhibitions already held in Germany due to both the proportions of its exhibition area and the size of individual buildings. In fact, comparable projects are found neither in Central Europe nor in Scandinavia, despite the recognized tradition of some countries in these regions to promote social housing projects (Eskinazi, 2008).

The Interbau 1957 was divided into four areas:

- The building exhibition, which essentially showed the reconstruction of the southern Hansaviertel.

- The exhibition part "The city of tomorrow".

- Thematic special shows and special exhibitions of the participating countries.

- The industrial exhibition of the German construction industry at the exhibition center at the Funkturm.

The building exhibition was a great success and sometimes had the character of a folk festival. About one million people visited it, of which about 345,000 came from East Berlin, about 88,000 from abroad (Schulz & Schulz, 2007).

CHAPTER 3

INTERBAU EXHIBITION IN THE COURSE OF THE DEVELOPMENT OF THE MODERN MOVEMENT

3.1. Looking Back to the Roots

With announcement of Hansaviertel urban development competition from the outset it was obvious that reconstruction of the district should be independent of the old parceling structure in order to get rid of the historical dense block configuration and create a new arrangement of free-standing buildings inside spacious green landscape. The plan was to blend the building masses with the natural green coverage of Tiergarten.

The flow of green vegetation inside the urban fabric of the neighborhood was not a new concept of modern practice in 1950s, and Interbau was not the first exhibition to exert such an application and obviously not the last one, but it was one of the most important aspects of the new configuration for authorities.

Comparing the historical fabric of the neighborhood with the new model declares the differences between the aspects of the industrial city and the ongoing modern movement at the first half of the century. Understanding Interbau's position inside the discourse of modern architecture, is the main focus of this chapter. The chapter is structured in two main parts. In the first part, roots of the ideas leading to creation of the Interbau are traced back from Ebenezer Howard's reunion of city life with nature in Garden City movement to Werkbund's desires to break from historicism and excessive ornamentation of the Gründerzeit and to the achievements of CIAM from 1928 to 1956 which was completed a year before Interbau. In the second part the Interbau is compared with two international exhibitions, Weißenhofsiedlung in 1927 and IBA in 1987, respectively before and after it.

3.1.1. English Garden City Movement

Comparing the Hansaviertel of before WWII and the Hansaviertel of after the Interbau, the first difference that directly influences the residents' life quality is the lack of open green spaces in the industrial city fabric which developed in 19th century. The growth of industries in 19th century resulted in a huge population growth of the central cities craving for human working power. Massive population migration from all parts of the country to the centers of industrial capitals creates enormous demand for housing units for the working society.

The organic fabric of old city development was not sufficient and the construction processes were hardly keeping up with the drastic city boom. Friedrich Engels in his classic work, *The Condition of the Working Class in England* in 1844 "described the consequences of industrial capitalism on the urban poor. Dilapidated buildings, filthy alleys without drainage, housing without means to rid human waste, and coal-stained walls characterized the physical setting. Poorly ventilated houses and factories exposed people to toxic substances, fibrous dust, and carbon gases" (Clark, 2003). The growth of building mass was not limited to the urban area of towns it invades to the country side and fades away completely the characteristic differences between town and country. The human life which finds its relief from city atmosphere in the country drown in the mass of capitalism urban system.

Alienation of human society from nature compelled Ebenezer Howard to publish his ideas on "integration of the social world into the surrounding environment" in his famous book *Garden Cities of To-morrow*. Howard's intention was not just to redeem the qualities of the country life, he proposed garden cities that "combine the energetic and active town life, with all the beauty and delight of the country without the negatives of either town or country," which "provided a model for an ecologically sustainable society" (Clark, 2003).

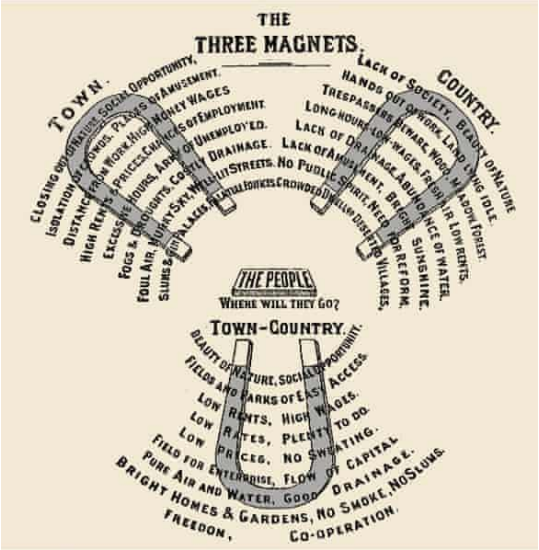


Figure 3.1. The Three Magnets from Garden Cities of Tomorrow by Howard
Source: https://www.theguardian.com/cities/2014/dec/05/ebenezer howards-three-magnets

In 1903 Howard formed a Limited Company to finance the first Garden City at Letchworh, outside London (Tomlinson, 1960) and after the first world war in 1919, Welwyn Garden City created with his amazing efforts (Osborn, 2015).

Figure 3.2. Letchworth Garden City
Source: https://www.letchworth.com/who-we-are/about-us

However, Howard's ideas of creating sustainable cities by eliminating the long-distance trade and focus on local production and agriculture are not directly

operational in the case of Hansaviertel.[3] His ideas emphasizing the collaboration of nature and city in his book, "Human society and the beauty of nature are meant to be enjoyed together" (Howard, 1902) "town and country must be married, and out of this joyous union will spring a new hope, a new life, a new civilization" (Howard, 1902) are completely evident in Interbau's creation mentality. The diversity of forms, one of the most outstanding aspects of the Interbau is also manifest in Howards plans of the Garden City where "the architecture and design of the homes were varied, allowing for personal expression and satisfaction, rather than enforcing a lifeless uniformity in structure" (Clark, 2003). According to Lewis Mumford, Howard's book "has done more than any other single book to guide the modern town planning movement and to alter its objectives" (Mumford, 1972).

3.1.2. Deutscher Werkbund

At the turn of the century, in 1900, with Germany's failure in the Universal Exhibition in Paris with context of displaying applied arts in everyday domestic wares, the Deutscher Werkbund, a design lobby formed by a group of artist, craftsmen, and businessmen founded, in 1907 (Röder & Elliott, 1998). The aim of the organization was "to improve German industrial production at all levels through a joint action between art, industry and crafts, in a permanent search for a reconciliation of the principles of good design with the needs of the machine" (Curtis, 1999).

With creation of Werkbund, founded by leading artists of the day, the need for an institution to collect, promote and exhibit the best modern applied arts became obvious. The Museum of German Art in Trade and Industry established by proposition of Karl Ernst Osthaus one of initiators of Deutscher Werkbund and patronized

[3] According to Baykan Günay (1988) "schemes of self-sufficient units in the rural landscape would find application in the Unite de Habitation of Le Corbusier".

enormous amount of progressive exhibitions, lectures, publications on most recent modern architecture and applied arts (Röder & Elliott, 1998).

The 1914 exhibition in cologne demonstrated the rich variety of protomodernist works in Germany, ranging from the model factory of Gropius and Meyer to the Glasshaus , by Bruno Taut, and the Werkbund Theater, an expressionist theater designed by Henry van de Velde (Eskinazi, 2008). “At any rate, the Deutsche Werkbund served to offer the most significant and advanced set of formal icons of an era and a century, the nineteenth, which, indeed, only then, with the outbreak of World War I, actually arrived at the end” (Eskinzi, 2003).

The second exhibition of Werkbund in 1927, “Die Wohnung” is also created with continuation of the efforts to enhance the quality and international reputation of German products in a cooperation of the arts, industry and crafts, but the project will be examined after understanding the CIAM thinking in a comparative context with Interbau exhibition.

3.1.3. CIAM

CIAM (*Congres Internationaux d'Architecture Moderne*) as defined by Alison and Peter Smithson was “the product of 19th century rationalism and the urge for social development. It was essentially a move towards integration: to use the forces of the society, industry and the arts in a coherent and harmonious way. Thus the 19th century preoccupation with style was ignored and architects become interested in method-organization and technology” (Smithson & Smithson, 1967). The congress was founded in 1928 after elimination of Le Corbusier from League of Nations Competition by “intrigues of a member of the jury, a professor of the *Academie des Beaux-Arts*”, “as an instrument to defend the helpless individual architect if a similar case of intrigue should hamper the implementation of an important contemporary building” (Giedion, 1964) and terminated in 1956 with ten congresses in its history. According to Sigfried Giedion “CIAM had only one thing in mind: to protect the right

to existence of contemporary architecture against the powerful antagonistic forces of the academic ruling taste of the period“ (Giedion, 1964).

Baykan Günay, in his article History of CIAM and Team 10, study the basis of CIAM within the context of Françoise Choay's classification of the models developed in the industrial society searching for new forms of urbanization under the headings of "progressist" and "culturalist"[4]. After listing all ten congress with their major theme and list of discussions, he divided the "Development of Space Understanding of CIAM" into two chronological phases of "Pre-war period (1928-1937), first five congresses", and "Post-war period (1928-1937), second five congresses", which are important to understand the differences between the Interbau 1957, and IBA 1987 (Günay, 1988).

In the first congress in La Sarraz, Le Corbusier drew the long picture of the forward march of the CIAM. A picture, which according to Giedion at first seemed completely utopian but was not over optimistic (Giedion, 1964). This also indicates Le Corbusier's influence on creation of CIAM thinking. The first congress ends up with declaration of the need for new conception of architecture, which fulfills demands of the present day life, and "the determination of primary functions of dwelling, work, recreation and transportation" (Günay, 1988), one of the most known issues of CIAM was one of its statements.

The second congress held with the theme: Housing for the Lower Income Classes. Walter Gropius, Alvar Aalto, and Jose Luis Sert made their first appearances in this congress. In the third congress the task was to find the best form of habitation that would suit needs of the community appropriately. Variety of examples from low,

[4] "One of these models looking to the future and inspired by a vision of social progress we shall call progressist. The other nostalgic in outlook, is inspired by the vision of a cultural community and may therefore be called culturalist." (as cited in Günay, 1988, p. 25).

medium, and high building applications were examined and the high apartment model highly prized at the end (Günay, 1988). The creation of high buildings, medium buildings, and also single and double floor buildings inside a single collective project realized in Interbau.

The fourth congress was the most fruitful of all CIAM congresses, according to Giedion. This congress held on a cruise ship, sailing from Marseilles to Athens, and Athens to Marseilles, 18 national groups analyzed plans of 33 cities under the theme of "The Functional City", which formed the basis of the "Charter of Athens" that outlined the principles of contemporary urbanism (Giedion, 1964).

The Charter is made up of three sections and the four functions of the city are described completely in second section, all functions along the fifth one -historical heritage-, which was taken into consideration with the insistence of the Italian group, are in relation with creation of Interbau. High-rise apartments away from traffic and receiving sufficient sunrise with arrangement of open spaces are recommended in the function of "Dwelling" to replace the dense and unhealthy dwellings. New residential areas should maintain sufficient amount of open spaces with slum clearance in the area, this application of the "Recreation" function is also done in Hansaviertel, but the area was cleared in this case from rubbles and the remnants of existing buildings not slums.

In relation to the "Work" function however, it can be seen "the clear denial of monofunctional zoning, by combining residences with a wide variety of other functions, such as commerce, school, theater, library, subway station and churches, demonstrate that a fragment of a modern city is capable of containing attributes such as variety, multiplicity and heterogeneity" (Eskinazi, 2008). With restructuring the road systems inside the new configuration of Hansaviertel and pre-existence of railroad the demands of the "Transportation" function are answered in Hansaviertel.

The case of protecting and preserving "Historical heritage" in Hansaviertel, has become one of the most criticized aspects of Interbau and as mentioned in second

chapter. The complete destruction of the old fabric was of Interbau organizers main objectives, but it is necessary to remind that, two buildings of old hansaviertel fabric are maintained in Klopstockstraβe.

In the fifth congress the reorganization of rural areas discussed and according to these discussions the rural zones should be urbanized while preserving their regional culture. In the sixth congress MARS group of England proposed a plan for rebuilding London. “With this congress a change in space understanding of CIAM has occurred from mere functionalism to the consideration of spatial qualities” (Günay, 1988).

The seventh congress’s theme was “The CIAM Grid”. which was "a graphic file system for recording pertinent information in an urban study and for explaining a plan” (as cited in Günay, 1988). In the eighth congress the younger generation were being influential and they added new elements of the city to the four functions. The next two congresses were also become subject to the upheaval of this new generation (Günay, 1988).

The ninth congress also brings changes to the established system of the CIAM with changes in the meaning of the habitat. “The extension of the dwelling broke open the restricting four walls of housing and enabled to see more deeply into the multi-layer relationship between members of the family and members of the community”(Giedion, 1964) In this congress founding members like Le Corbusier, Gropius, Van Eesteren, Giedion, and Josep Lluís Sert announced their retirement.

The tenth and also the last congress was also accompanying some major changes in pure functional approach of CIAM and introduced new terminology like “association” and “identity” into architectural thinking (Günay, 1988). The organizers of the last congress known as Team 10 aimed to demonstrate that a specific form of “Habitat” must be evolved for each particular situation (Smithson & Smithson, 1967).

As can be seen from alteration of ideas, the last congresses are as much irrelevant to the Interbau as the first five are pertinent. Günay contextualize this variation with his division of the congresses to pre-war and post-war periods. He outlines the pre-war

period as a suitable arena for development of progressist ideas, the cities are facing problems of the industrial society and focuses are on problems of urbanization. Le Corbusier produced his schemes of Une Ville Contemporaine and Plan Vision the most influential projects in pre-war thinking of CIAM. The skyscraper ascending from vast open space and served by exaggerating vehicular system in his City of Tomorrow became the basis of the prewar CIAM ideology, and he realized his greatest obsession, the Unite de'Habitation (Günay, 1988).

According to Günay this progressist model develops in the years of depression and when the war was over -post-war period- we see the culturalist thinking is emerging. "This is a move from internationalism to particularism, and from the arrangement of discontinuous elements to the more compact design approach of low-rise buildings, though preserving other principals of CIAM." (Günay, 1988)

3.2. Berlin International Exhibitions of 1927, 1957, and 1987

3.2.1. Weißenhofsiedlung 1927 and Interbau 1957

In 1927, "Die Wohnung" (the residence), Werkbund's second exhibition is presented in Weißenhofsiedlung Stuttgart under artistic guidance of Ludwig Mies van der Rohe to improve German industrial production. He convened the Germans Walter Gropius, Peter Behrens, Hans Scharoun, Adolf Schneck, Bruno and Max Taut, Ludwig Hilberseimer, Hans Poelzig, Adolf Rading and Richard Döcker; the French Le Corbusier and Pierre Jeanneret; the Dutch Jacobus J. Pieter Oud and Mart Stam; the Belgian Victor Bourgeois; and the Austrian Josef Franke, to create an exemplary residential program for modern metropolitan man. The selective invitation of the architects with "extensive intention to build Modernist dwellings stood in sharp contrast to traditional building methods" (Hoffman, 2002) could pointed out as the first point of similarity with Interbau exhibition.

Figure 3.3. Overall view of the Weissenhof Estate Stuttgart, around 1927
Source: © Stadtarchiv Stuttgart

Prominent architects of the new approach performed an experiment displaying new town planning concepts like independency from roadside, separation of pedestrian and vehicular traffic and architectural concepts of functionalism, geometry, purism, standardization and using modern materials (Günay, 1988). However, application of diverse typologies is parallel in both projects, the application of high-rise building typology is yet to be discussed in CIAM's third congress "with powerful advocacy of Le Corbusier and Gropius, which in practice employed very rarely during 30's and become dominant throughout developed world in the decades following the Second World War" (Overy, 2004). According to Eskinzai the definition of the Existenzminimum, central theme of the second CIAM congress, permeated both the realization of the Weißenhofsiedlung, as it was present in the conception of some of Hansaviertel's buildings (Eskinazi, 2008).

3.2.2. IBA 1987 and Interbau 1957

The creation of the last international building exhibition, the IBA in Berlin has a completely different story from the previous exhibitions held in the city, which promoted the search for a model of urban ideal to be reproduced. The ideas to rebuild the area of Tiergarten in order to reassume its place at the center of reunited Berlin criticized by Josef Paul Kleihues and Wolf Jobst Siedler in series of publications in newspaper, blaming the absence of a cohesive architectural context for West Berlin's loss of identity and its consequent loss of population. This criticism and propagandas then resulted in commissioning Kleihues as the director of the exhibition (Miller, 1993).

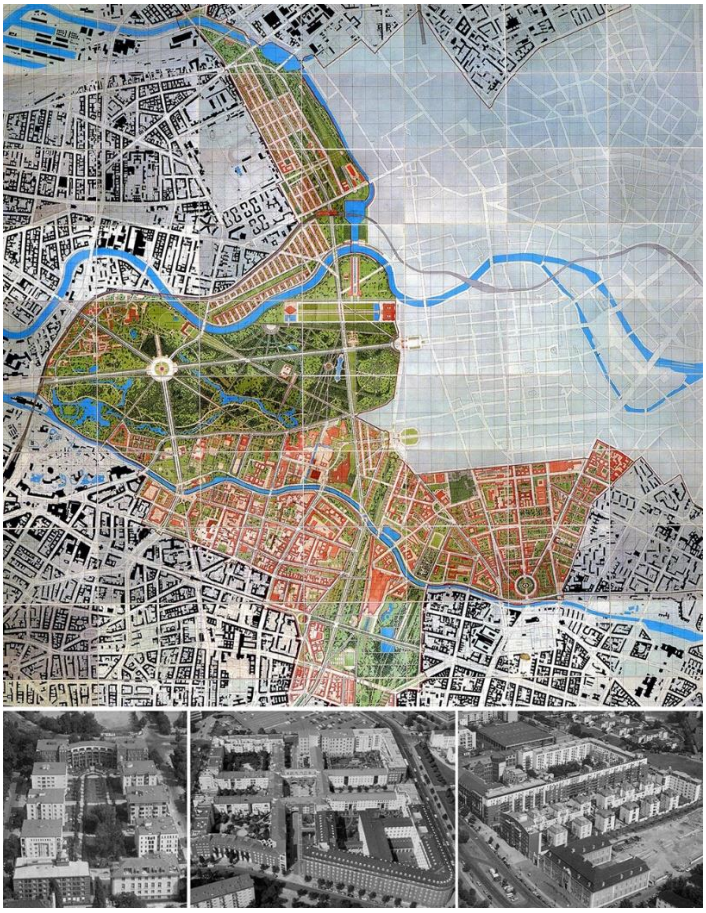


Figure 3.4. Controversial plan by Josef Paul Kleihues as contribution to the IBA Exhibition "Idea - Process - Result" 1984.
Source: http://www.arcduecitta.it/world/2013/02/critical-reconstruction-as-urban-principle-michele-caja/

IBA concentrated its works on five different regions of the city with completely complied with the existing city block. The plan was to build 3,000 new residential units and renovation of 5500 units. The exhibition acted through two intervention policies: The *Neubau*, or new construction sector - developed under the principle of "critical reconstruction"; and the *Altbau*, or renovation of old buildings - developed under the principle of "careful urban renewal". *Neubau* aimed to delineate a uniform image of the urban center, seeking a way of dialogue between the traditional and the modern; within this context “IBA has tried to particularize the treatment of urban problems according to their specific requests, by facing the reality of the existing city and its problems, not the creation of a new reality” (Eskinazi, 2008).

In one hand in Interbau, the site was cleared from the old fabric of the city and buildings of different typologies were placed in the green landscape freely without any trace of the old building. On the other hand, IBA 1987 aimed to reconstruct the city under restricted building codes complying with established urban blocks, on which the new building blocks are defining the streets.

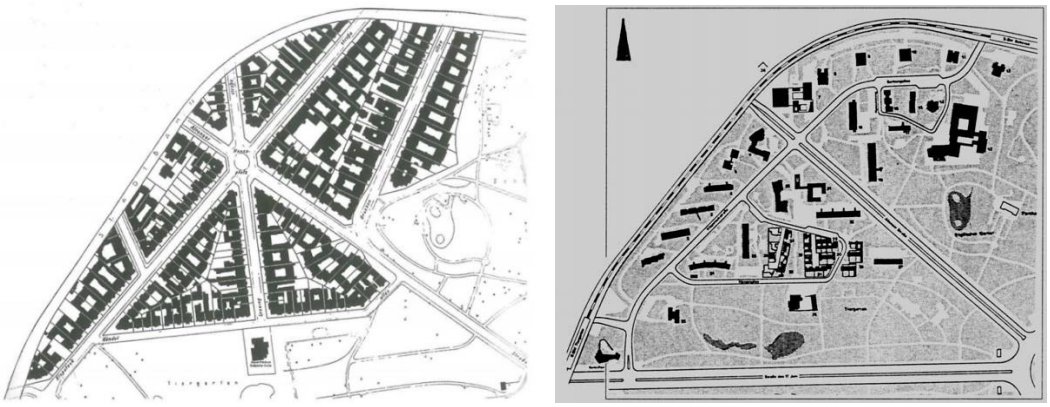


Figure 3.5. Hansavietel site plan, left: before WWII destructions, right: after Interbau exhibition reconstructions.
Source: http://urban-networks.blogspot.com/2015/02/de-la-weissenhof-1927-la-interbau-1957.html

Figure 3.6. Kleihues' master plan - above the current state, below the proposed design. Through block-edge development, the IBA rehabilitated historical roads and invented some new in the vicinity of the wall.
Source: https://zeithistorische-forschungen.de/2-2014/5097#footnote-42828-11

The IBA of 1987 is based on the re-composition of the semi-destroyed urban fabric in several points of the city with special attention to the central zones. “It attempted to embrace widespread aims… through the involvement of architects of differing theoretical and artistic persuasion in order to show that even with the narrowly restrictive framework of state-subsidized housing, the realization of ideas worthy in terms of both quality and variety is in fact attainable” (Kleihues, 1988). In other words, the aim was to show creating divergent design elements by different architects, with adherence to the existing urban block and its urban identity. So, the way these projects

deal with the existing urban morphology is one of the major distinction points of IBA and Interbau.

Both projects involved numerous national and international architects, but this time to apply different models. The application of the green spaces inside the building blocks is also done in IBA, not in an organic way but occasionally in locations set by building masses. IBA is also opposed to the monofunctional zoning dictated by Charter of Athens. “The project contained daycare centers, schools, old-age homes, youth centers, libraries, and water-treatment plant” (Miller, 1993).

CHAPTER 4

INTERBAU CATALOG

4.1. Introduction

In this chapter, I go through an introduction to all built housing projects of the exhibition including the projects added to the district after the exhibition. For a better understanding of the project's design aspects, buildings will be analyzed one by one within their formal architectural design characters. In completing the descriptive analysis of this chapter, the data is mainly compiled from Eskinazi's thesis and Stefanie Schulz and Carl-Georg Schulz' book *Das Hansaviertel Ikone der Moderne* unless other names are cited. This collective data also examined with published plans, sections, elevations and photos and on-site observations from author's trip to Berlin in 2016.

Figure 4.2. illustrates the map of Hansaviertel with all its built projects, it will be used as the legend to position and number the buildings according to their sequence on the map. Other functions designed in the district are also present in the plans. They also will be listed with their photographs, but since the focus of this work is on the housing, they will not be analyzed in detail.

Ten landscape architects who, coordinated by the Berlin landscape architect Helmut Bournot, would configure the green areas of the exhibition. The ten landscape architects, five from Germany and five from European countries, were divided into working groups that separated the exhibition areas into five major areas of intervention. The division of the work areas corresponds to the grouping of the typologies of buildings. The idea of treating the park as a single large and continuous green area was among the fundamental concepts of the architects who worked on Hansaviertel's landscape design (Eskinazi, 2008).

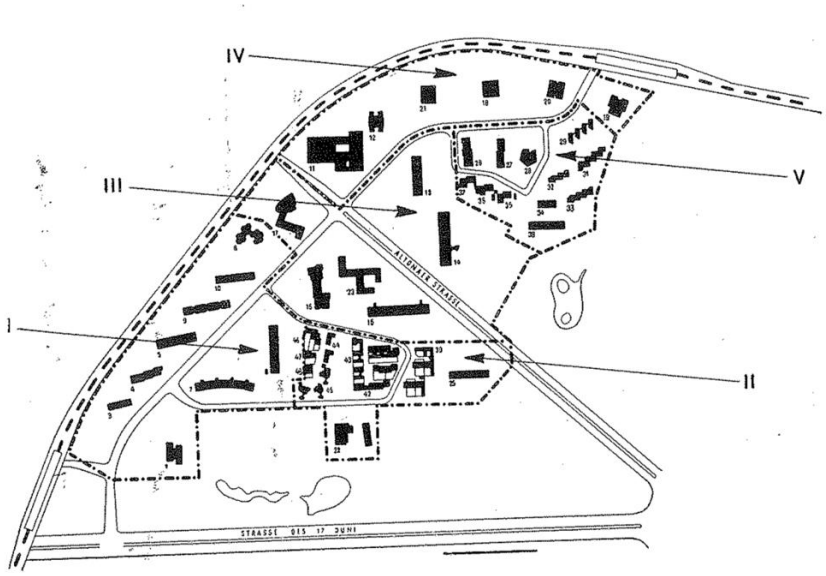


Figure 4.1. Building no.5 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, p.47

Group I, coordinated by landscape architects Hermann Mattern from Kassel and René Pechère from Brussels, covers the four-story bars between the Klopstockstraße and the train viaduct, the tall bars of Walter Gropius and Pierre Vago, and the tower Klaus Muller-Rehm and Gerhard Siegmann at the entrance of the exhibition.

Group II, coordinated by Ernst Cramer from Zurich and Otto Valentien from Stuttgart, single-story houses are the main typology of this area and the intention was to involve the Tiergarten park with buildings by creating gardens without the demarcation of boundaries or borders. This section covers the Eternit house of Baumgarten, single-story houses Eduard Ludwig, Arne Jacobsen, Gerhard Weber, Alois Giefer and Hermann Mäckler, Johannes Krahn, Sep Ruf, Günther Hönow, two-story houses by Sergius Ruegenberg and Wolf von Möllendorf, and Klaus Kirsten, and the church and community center designed by Ludwig Lemmer.

The Hansaplatz area, designed by Hertha Hammerbacher from Berlin and Edvard Jacobson of Karlstadt from Sweden contains the group III. One of the most important prerequisites in the design of this central part was to continue the free flow of green started in the southern group and pass it to the northern parts and viaduct border. This section creates the connection between the buildings by Niemeyer, Jaenecke, Aalto,

St. Ansgar Church by Willy Kreuer, and Hansaplatz subway station and Hansa Library designed by Werner Düttmann.

Group IV, coordinated by Gustav Lüttge from Hamburg and Pietro Porcinai from Florence, covers the area made up of the five towers along the Bartningallee and the shopping center designed by Ernst Zinsser and Hansrudolf Plarre.

In group V, located in the eastern portion of the Hansaviertel and coordinated by landscape designers Wilhelm Hübotter from Hannover, and C. Th. Sörensen from Kopenhagen, the main concern also revolved around linking the built areas with the park. The area now occupied by the Akademie der Künste had been originally designed to house small groups of houses, which would help the gradual involvement of the park and the buildings but the construction of the Akademie der Künste slightly affects this involvement. Beside Akademie der Künste, 2 to 3-story buildings designed by Max Taut, Kay Fisker, Otto H. Senn, and Franz Schuster are placed in this section.

Beside buildings inside Hansaviertel three of the Interbau buildings were built outside the Hansaviertel area. Among these, a school and the Congress hall - are located in the vicinity of the Tiergarten, and the Housing Units designed by Le Corbusier, is implemented, mainly due to its large proportions, away from the center of Berlin.

The buildings of Hansaviertel can be categorized formally and functionally into groups of:

16 and 17 story tower blocks

8 to 10-story buildings

4 and 5-story buildings

2 and 3-story one or more family houses

1 and 2-story single-family houses

Churches, cultural and commercial buildings

Within the same groups of typologies, a series of varied solutions coexist, especially with regard to the relations between horizontal and vertical circulation. An analysis of each of the residential buildings will be carried out, in order to investigate the combinatorial alternatives in each typology proposed by Interbau.

Among the main aspects observed in each building are, mainly, the circulation system, the movement system, the alternatives of combination between horizontal and vertical circulation, and internal distribution. All the detailed analyses are located in the appendices part of the thesis.

4.2. Hansaviertel Map and List of Buildings and Architects

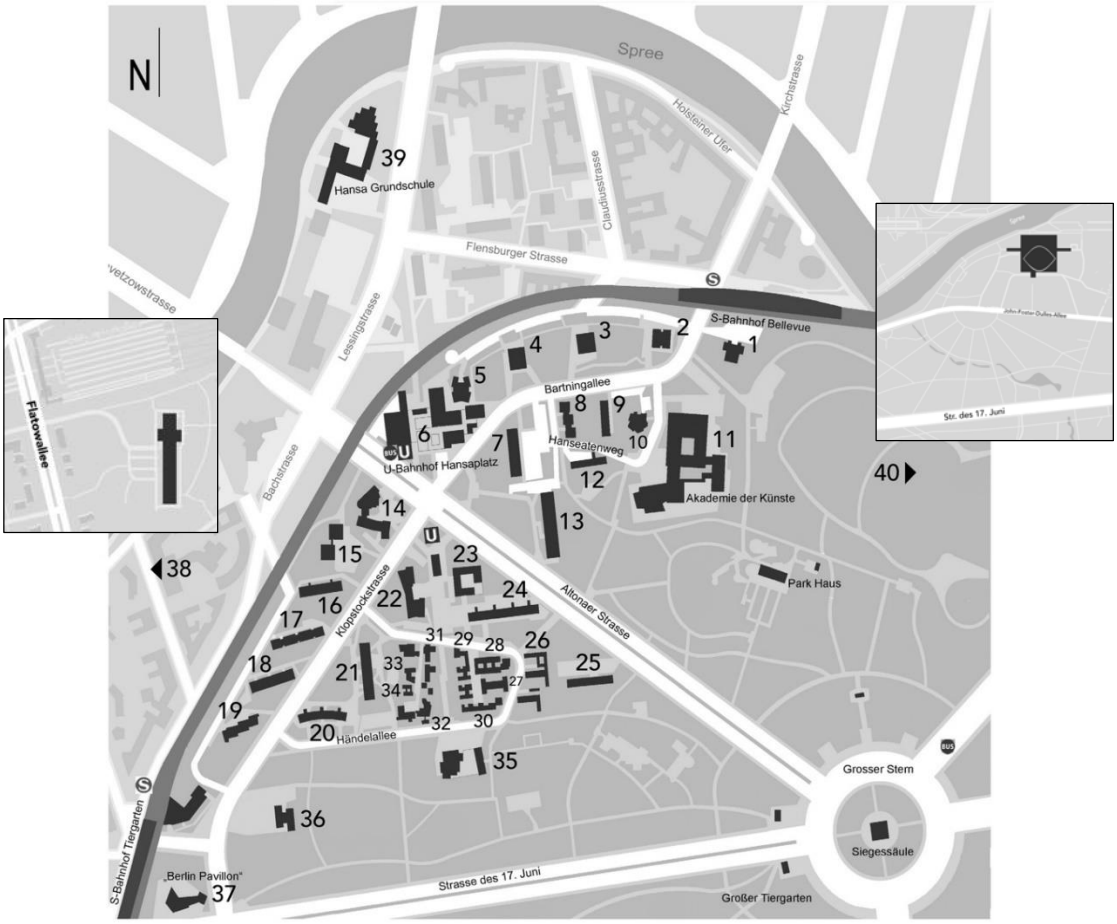


Figure 4.2. Hansaviertel map

Building no.1: Hans Schwippert, Düsseldorf

Building no.2: Raymond Lopez, Paris; Eugène Beaudouin, Paris

Building no.3: Gustav Hassenpflug, Munich

Building no.4: J.H. van den Broek, Rotterdam; J.B. Bakema, Rotterdam

Building no.5: Lucciano Baldessari, Milan

Building no.6: Ernst Zinsser, Hanover; Hansrudolf Plarre, Berlin

Building no.7: Egon Eiermann, Karlsruhe

Building no.8: Max Taut, Berlin

Building no.9: Kay Fisker, Copenhagen

Building no.10: Otto H. Senn, Basel

Building no.11: Werner Düttmann, Berlin

Building no.12: Franz Schuster, Wien

Building no.13: Oscar Niemeyer, Rio de Janeiro

Building no.14: Willy Kreuer, Paris

Building no.15: Bezirksamt Tiergarten, Amt Für Hochbau

Building no.16: Paul Schneider-Esleben, Düsseldorf

Building no.17: Wassili Luckhard, Berlin; Baurat Hubert Hoffmann, Berlin

Building no.18: Günther Gottwald, Berlin

Building no.19: Hans Müller, Berlin

Building no.20: Walter Gropius, Cambridge/ Massachusetts; Willy Karl (Wils) Ebert, Berlin

Building no.21: Pierre Vago, Paris

Building no.22: Alvar Aalto, Helsinki

Building no.23: Werner Düttmann, Berlin

Building no.24: Fritz Jaenecke, Malmö; Sten Samuelson, Malmö

Building no.25: Paul G. R. Baumgarten, Berlin

Building no.26: Eduard Ludwig, Berlin

Building no.27: Gerhard Weber, Frankfurt a. M.

Building no.28: Arne Jacobsen, Copenhagen

Building no.29: Johannes Krahn, Frankfurt a. M.

Building no.30: Alois Giefer, Frankfurt a. M.; Hermann Mäckler, Frankfurt a. M.

Building no.31: Sep Ruf, Munich

Building no.32: Sergius Ruegenberg, Berlin; Wolf von Möllendorff, Berlin

Building no.33: Klaus Kirsten

Building no.34: Günter Hönow, Berlin

Building no.35: Ludwig Lemmer, Berlin

Building no.36: Klaus Müller-Rehm, Berlin; Gerhard Siegmann, Berlin

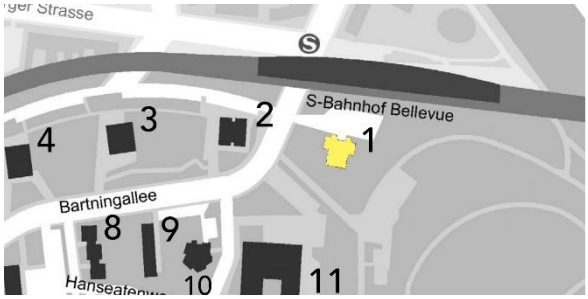
Building no.37: Herrmann Fehling, Berlin; Daniel Gogel, Berlin; Peter Pfankuch, Berlin

Building no.38: Le Corbusier, Paris

Building no.39: Bruno Grimmek, Berlin

Building no.40: Hugh A. Stubbins, Cambridge, Massachusetts, USA

Building no.1



Architect:

Hans Schwippert

Building:

Number of floors: 16

Number of apartments: 61

The Schwippert tower building is located at the north-east edge of the Hansaviertel near the Bellevue train station. The building has a complex organization of the simple and duplex apartments.

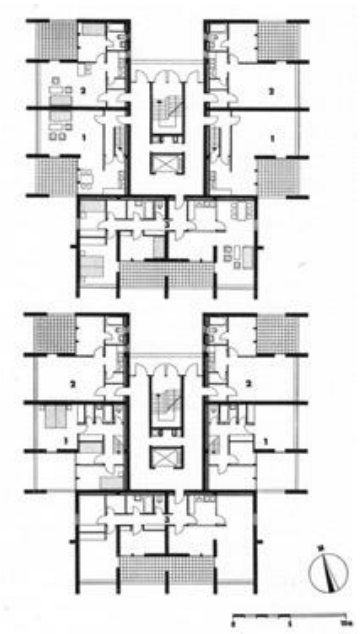
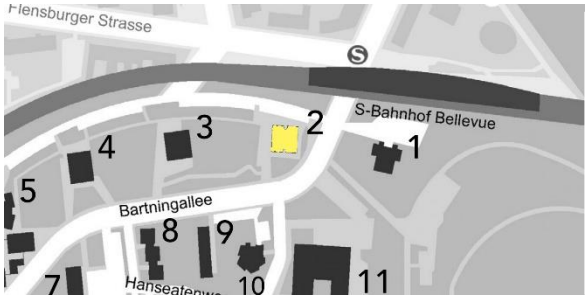


Figure 4.3. Building no.1 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, p.78

Figure 4.4. Building no.1
Source: https://commons.wikimedia.org/wiki/File:Bartningalle e_16_-_Hans_Schwippert.jpg#filelinks

Building no.2



Architect:

Raymond Lopez

Eugène Beaudouin

Building:

Number of floors: 16

Number of apartments: 87

The next tower on the northern edge of the Hansaviertel designed by Raymond Lopez and Eugène Beaudouin. Two main facades oriented to west and east and both are divided by vertical elements into nine equal parts.

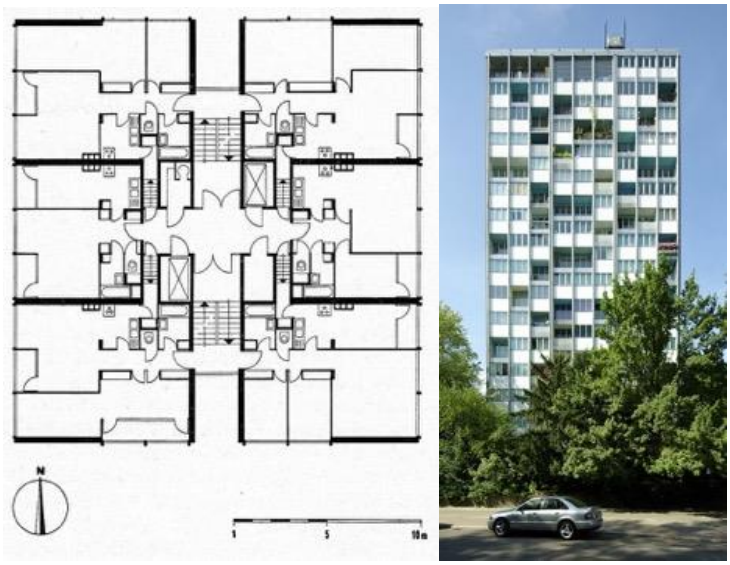
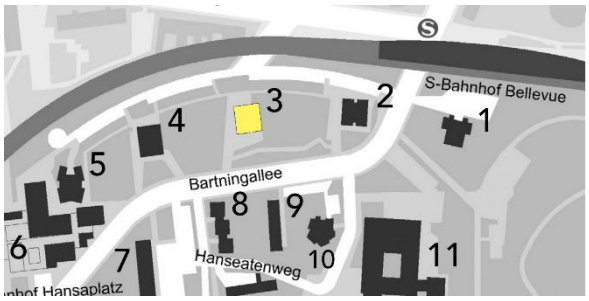


Figure 4.5. Building no.2 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, p.76

Figure 4.6. Building no.2
Source: https://www.archinform.net/projekte/5572.htm

Building no.3



Architect:

Gustav Hassenpflug

Building:

Number of floors: 16

Number of apartments: 76

The 16-story tower designed by Gustav Hassenpflug is located on the northern edge of Hansaviertel. Variety of floor plans and freedom to change plan configurations in order to answer user demands are the main ideas of the architect in this building.

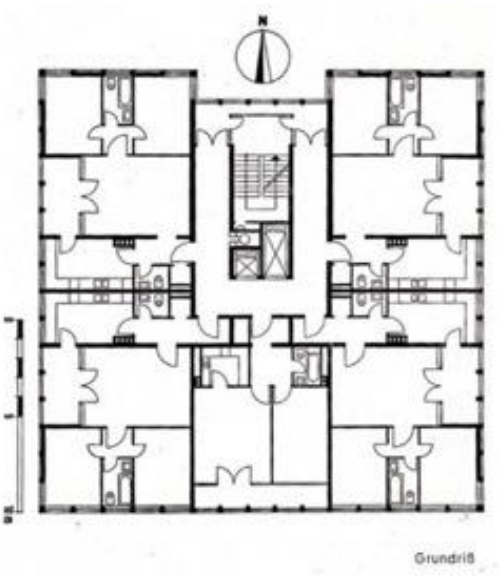
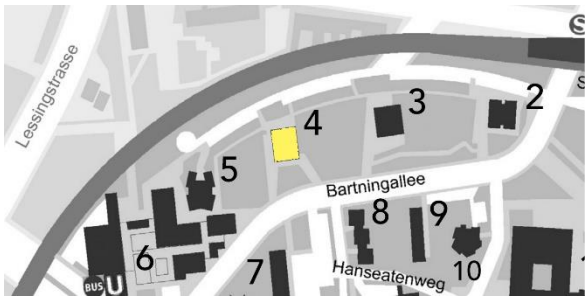


Figure 4.7. Building no.3 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, p.73

Figure 4.8. Building no.3
Source: https://deu.archinform.net/projekte/5571.htm

Building no.4



Architect:

J.H. van den Broek

J.B. Bakema

Building:

Number of floors: 16

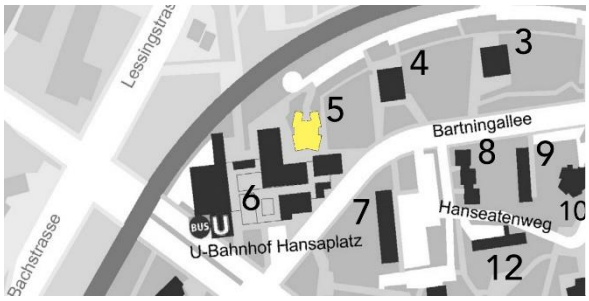
Number of apartments: 73

The 16-storey tower built by the Dutch architects J. H. van den Broek and J. B. Bakema is also placed on the northern edge of the Hansaviertel. The complex design of the vertical circulation in order to minimize access corridor area is one of the main characteristics of this building.

Figure 4.9. Building no.4 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, p.71

Figure 4.10. Building no.4
Source:https://i.pinimg.com/originals/88/bc/9c/ 88bc9c9de94b 055d29153e92688dad60.jpg

Building no.5



Architect:

Luciano baldessari

Building:

Number of floors: 17

Number of apartments: 131

The seventeen-story building of Luciano Baldessari is the westernmost of the five towers, which mark the northern end of the Hansaviertel parallel to the city railway.

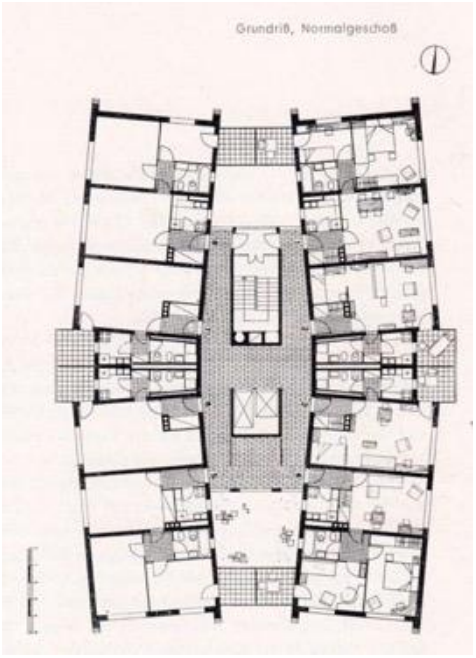
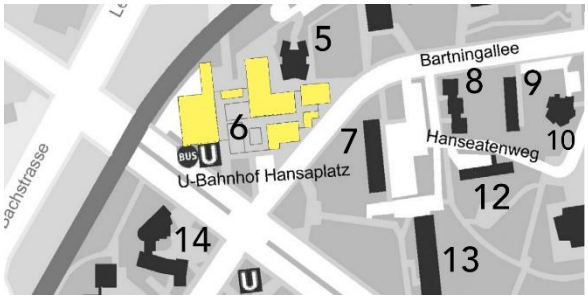


Figure 4.11. Building no.5 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 68

Figure 4.12. Building no.5
Source: https://commons.wikimedia.org/wiki/Category:Bartningallee_5_%28BerlinHansaviertel%29#/media/

Building no.6



Architect:

Ernst Zinsser

Hansrudolf Plarre

Building:

Shopping center

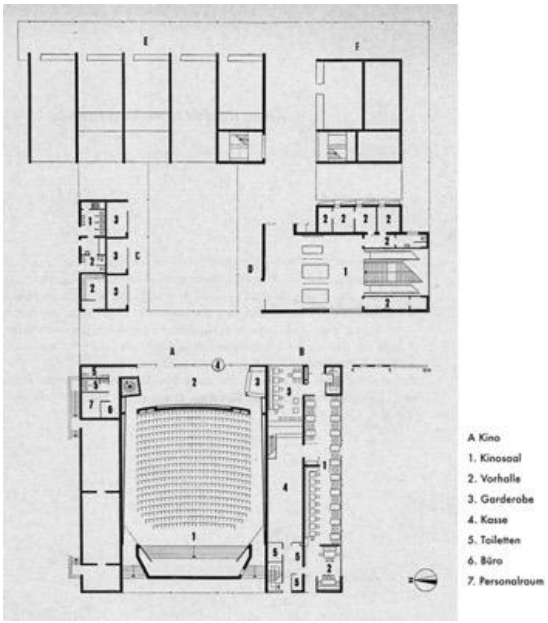
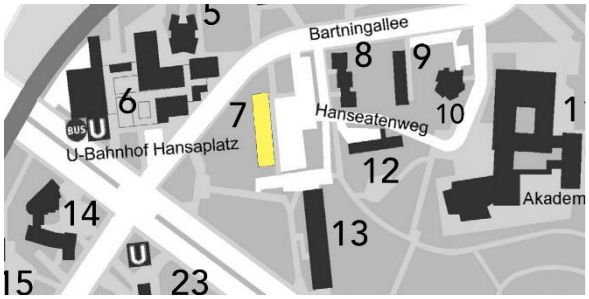


Figure 4.13. Building no.6 Shopping center floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 160

Figure 4.14. Building no.6
Source: © J. Berger, http://www.stadtentwicklung.berlin.de/denkmal/liste_karte_datenbank/de/denkmaldatenbank/daobj.php?obj_dok_nr= 09050387,T,035

Building no.7



Architect:

Egon Eiermann

Building:

Number of floors: 9

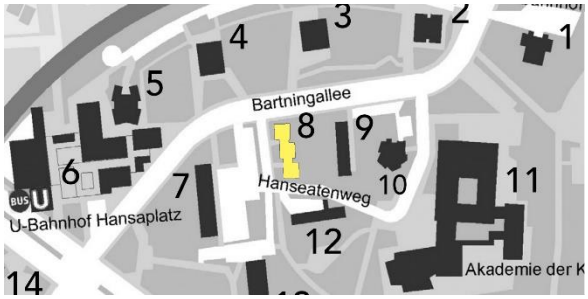
Number of apartments: 96

The nine-story bar of Egon Eiermann aligned to the north south axis and placed at the north of Niemeyer building. Like Niemeyer bar, Eiermann turns the main facade to west, placed each unit in a grid pattern behind loggias and divides each floor plan to twelve units.

Figure 4.15. Building no.7 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 91

Figure 4.16. Building no.7 view
Source: © Wolfgang Bittner, LDA Berlin 2015

Building no.8



Architect:

Max Taut

Building:

Number of floors: 3 to 4

Number of apartments: 19

The Max Taut building is part of the complex that has the important function of articulating the transition between park and 16-story towers. The building is divided into three main parts and connected with two narrower parts.

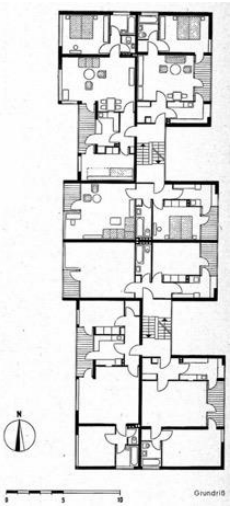
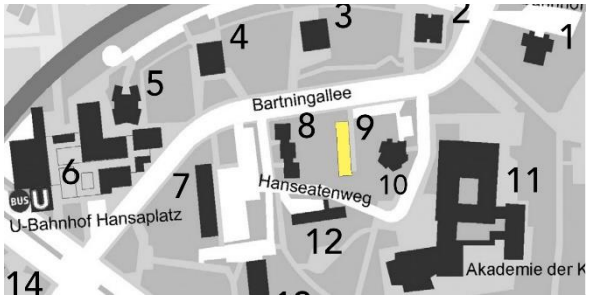


Figure 4.17. Building no.8 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 107

Figure 4.18. Building no.8 view
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

Building no.9



Architect:
Kay Fisker

Building:
Number of floors: 3 to 4
Number of apartments: 16

The Kay Fisker building is a north-south oriented bar, parallel to the Max Taut bar and divided into two wings with three and four floors respectively, the circulation is distributed through open linear corridors facing east.

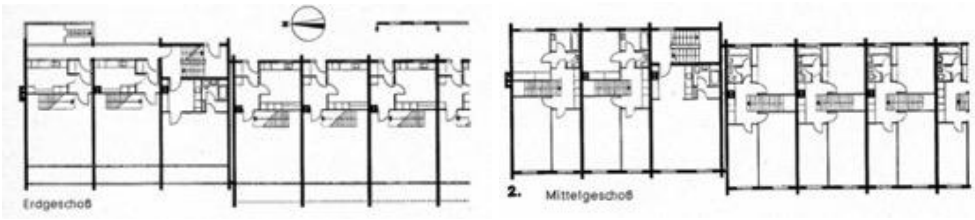
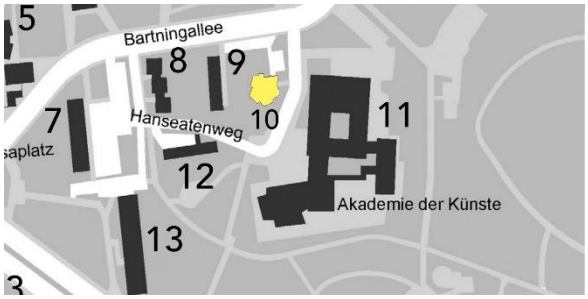


Figure 4.19. Building no.9 floor plan
Figure 4.20. Building no.9 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 108

Figure 4.21. Building no.9 view
Source: © Wolfgang Bittner, LDA Berlin 2015

Building no.10



Architect:

Otto H. Senn

Building:

Number of floors: 4

Number of apartments: 16

The four-story building planned by Otto H. Senn is a five-sided prism and placed opposite to the Academy of Arts. Each floor has four apartments.

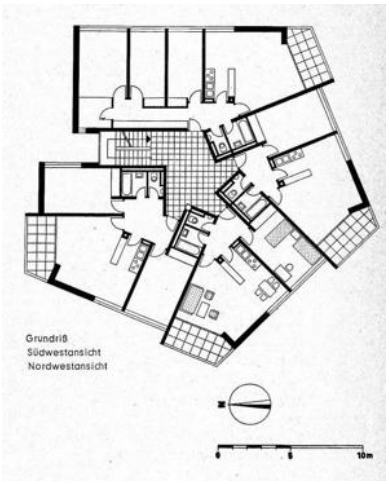
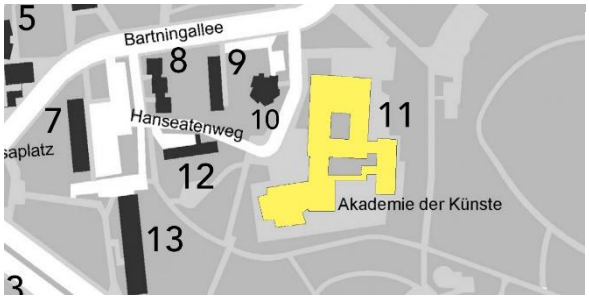


Figure 4.22. Building no.10 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 111

Figure 4.23. Building no.10 view
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

Building no.11



Architect:

Werner Düttmann

Building:

Academy of the Arts

Figure 4.24. Academy of the Arts floor plan
Source: Das Hansaviertel - Ikone der Moderne, page. 64

Figure 4.25. Academy of the Arts
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

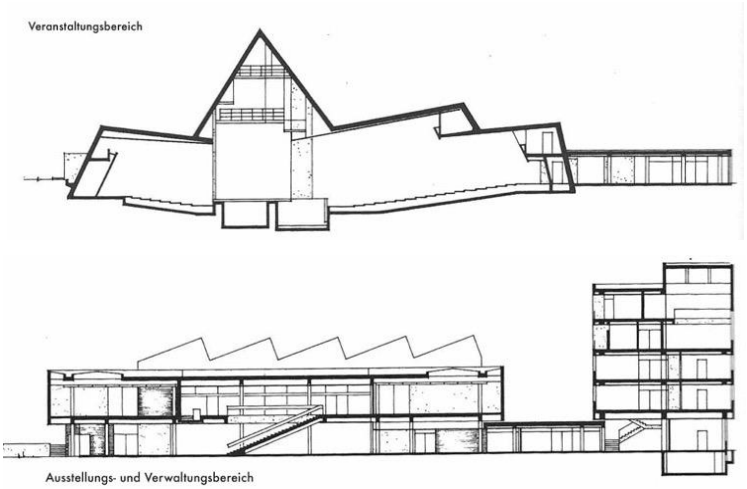
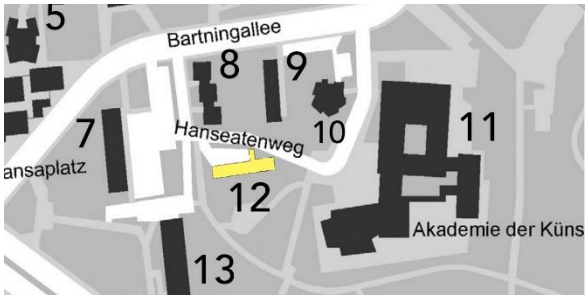


Figure 4.26. Academy of the Arts section
Figure 4.27. Academy of the Arts section
Source: Das Hansaviertel - Ikone der Moderne, page. 64

Building no.12



Architect:

Franz Schuster

Building:

Number of floors: 3

Number of apartments: 21

The house of Franz Schuster is a simple, three-story, south-oriented mass with a flat roof. Apartments are accessed via arcades and a trapezoidal staircase on the north side of the building.

Figure 4.28. Building no.12 floor plan
Source: Das Hansaviertel - Ikone der Moderne, page. 72

Figure 4.29. Building no.12 view
Source: http://www.buergerverein-hansaviertel-berlin.de/das_hansaviertel/label_architekten/17gallery/ 17gallery.html

Building no.13

Architect:
Oscar Niemeyer

Building:
Number of floors: 8
Number of apartments: 78

The building planned by Oscar Niemeyer is located directly on the Tiergarten and, together with the house of Jaenecke and Samuelson, forms the entrance gate to the Hansaviertel on Altonaer Straße. One of the most outstanding characteristics of Niemeyer building is its elevator tower which stands as a sculpture outside the floor plan and in front of the eastern façade. The elevator stops only at fifth and eighth (attic) floors and the tower connects to the main building only in these floors. The original project published by Niemeyer in 1955 but the realized version has undergone strong modifications in Hansaviertel.

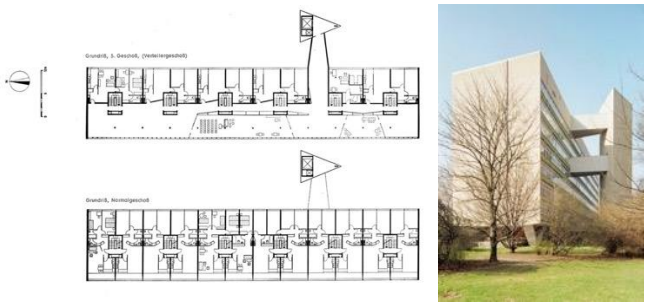
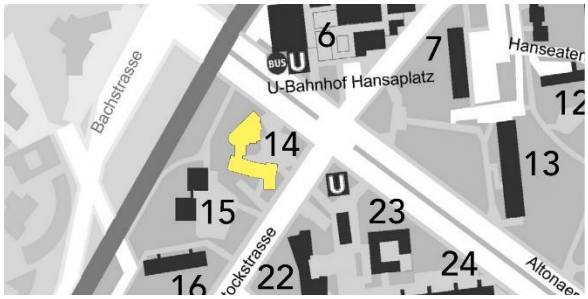


Figure 4.30. Building no.13 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 91

Figure 4.31. Building no.13 view
Source: https://media.archinform.net/l/00110142.jpg

Figure 4.32. Building no.13
Source: https://www.archinform.net/projekte/11477.htm

Building no.14



Architect:

Willy Kreuer

Building:

Church and Community Center

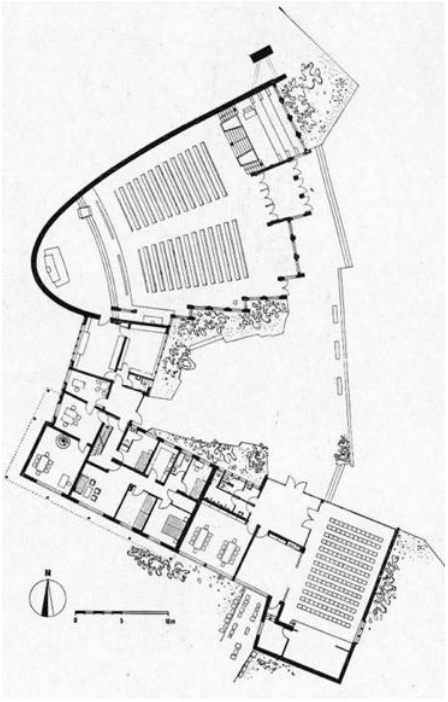
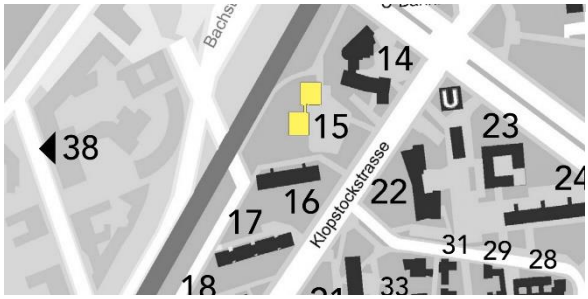


Figure 4.33. Building no.14 St. Ansgar Church floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 152

Figure 4.34. Building no.14
Source: https://olgakuzminskaya.com/st-ansgar-church-berlin-hansaviertel

Building no.15



Architect:

BEZIRKSAMT TIERGARTEN,

AMT FÜR HOCHBAU

Building:

Day Care Center

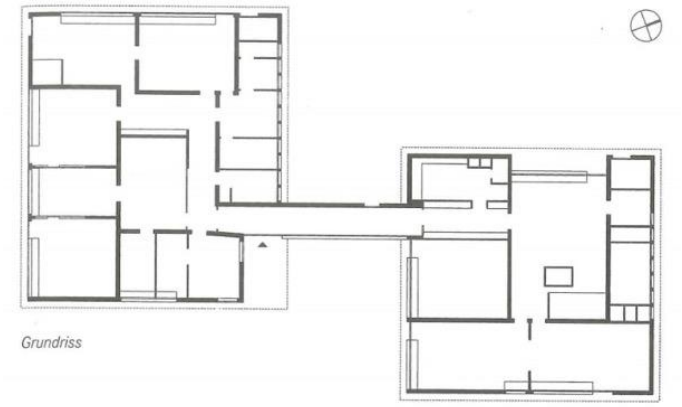
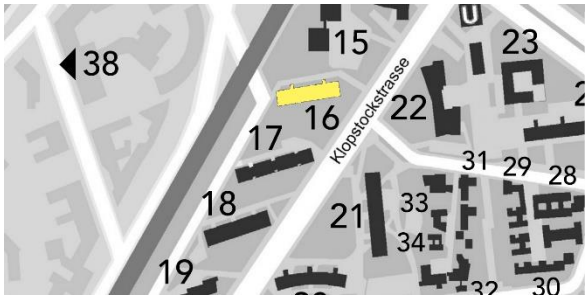


Figure 4.35. Building no.15 Day Care Center floor plan
Source: Das Hansaviertel - Ikone der Moderne, page. 45

Figure 4.36. Day Care Center
Source: http://www.buergerverein-hansaviertel-berlin.de/das_hansaviertel/label_architekten/05gallery/ 05gallery.html

Building no.16



Architect:

Paul Schneider-Esleben

Building:

Number of floors: 4

Number of apartments: 20

The fourth building of the sequence of four bars on the north west arc of the rail road is a four-story building designed by Paul Schneider-Esleben, which is the last residential building in the row.

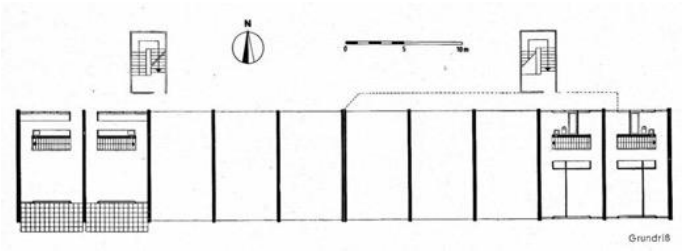
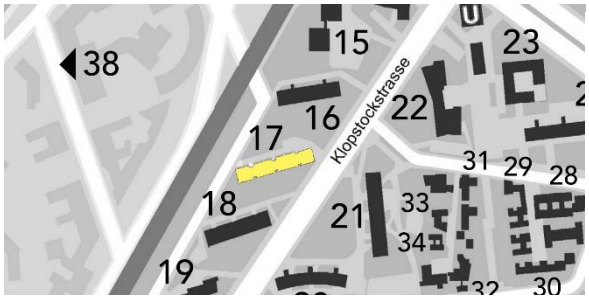


Figure 4.37. Building no.16 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 102

Figure 4.38. Building no.16 view
Source: © Wolfgang Bittner, LDA Berlin 2015

Building no.17



Architect:
Wassili Luckhardt
Hubert Hoffmann
Building:
Number of floors: 4
Number of apartments: 28

The third building in the row is the four-story bar designed by Wassili Luckhardt and Hubert Hoffmann. The bar is divided into four volumes by three transparent staircases, two inner volumes are slightly bigger than the outer ones. Each staircase core gives access to two apartments per floor.

Figure 4.39. Building no.17 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 101

Figure 4.40. Building no.17 view
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

Building no.18

Architect:
Günther Gottwald

Building:
Number of floors: 4
Number of apartments: 32

The second bar on the north west border is a four-story building by Günther Gottwald. The building is divided into three parts structurally with three different circulation zones, different entrances and different stairs.

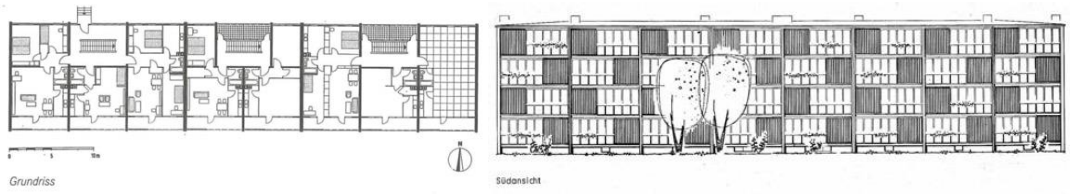


Figure 4.41. Building no.18 floor plan
Figure 4.42. Building no.18 elevation
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 98,99

Figure 4.43. Building no.18 view
Source: http://www.buergerverein-hansaviertel-berlin.de/das_hansaviertel/label_architekten/02gallery/ 02gallery.html

Building no.19

Architect:
Hans Christian Müller

Building:
Number of floors: 4
Number of apartments: 22

The first building on the sequence of buildings forming the north-western edge of Hansaviertel bordered by rail road is the building of Hans Christian Müller. The Müller house is divided into three displaced volumes with three different entrances and three separate staircases leading to apartments at four different levels.

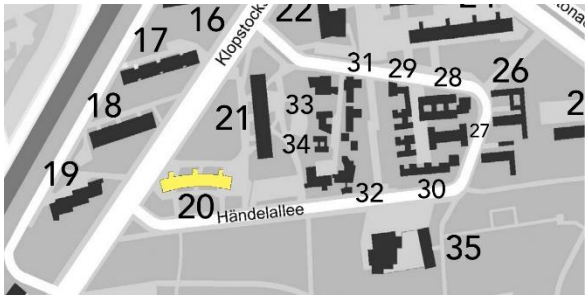
Figure 4.44. Building no.19 floor plan

Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 97

Figure 4.45. Building no.19 view

Source: http://www.stadtentwicklung.berlin.de/denkmal/liste_karte_ datenbank/de/ denkmaldatenbank/daobj.php?obj_dok_nr= 09050387,T,035

Building no.20



Architect:

Walter Gropius

Willy Karl (Wils) Ebert

Building:

Number of floors: 9

Number of apartments: 67

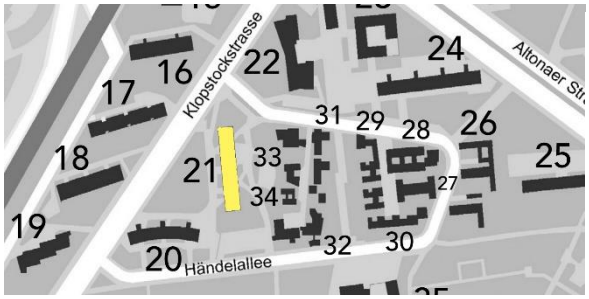
The Gropius building for Interbau is the product of a team of three partners; according to the Interbau catalogue, it can be seen that the constructive typology, the lower floors, and the arrangement of the balconies, as well as the idea of bending the building are credited to Gropius himself. However, the subtleties and details of the development of the project, especially with regard to the south façade, are attributed to Norman Fletcher. Meanwhile, detailing the interior of the building - such as stair areas and ceiling lining, wall and floor coverings - was taken care of by Wils Ebert.

Figure 4.46. Building no.20 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 80

Figure 4.47. Building no.20 view
Source: https://tr.pinterest.com/pin/255297872609647701

Figure 4.48. Building no.20 view
Source: https://www.archinform.net/projekte/2943.htm

Building no.21



Architect:

Pierre Vago

Building:

Number of floors: 9

Number of apartments: 59

The 9-story building of Pierre Vago is designed as a bar with complex arrangement of units with different ceiling heights. The variations of ceiling heights are also visible on main façade.

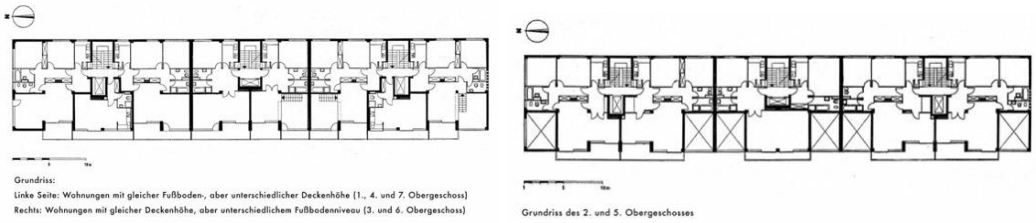
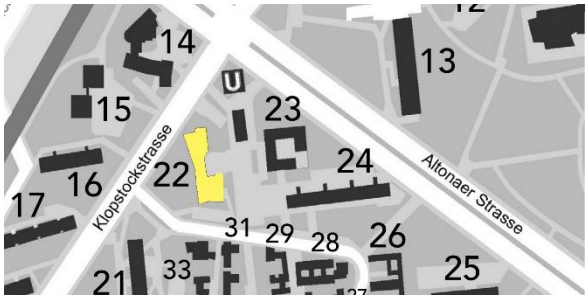


Figure *4.49.* Building no.21, Apartments with the same floor, but different ceiling height: 1, 4 and 7floor, Apartments with the same ceiling height but different floor level: 3 and 6
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 84

Figure 4.50. Building no.21, Floor plan of the 2nd and 5th floors
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 84

Figure 4.51. Building no.21 view
Source: https://www.archinform.net/projekte/11820.htm

Building no.22



Architect:
Alvar Aalto

Building:
Number of floors: 8
Number of apartments: 78

Alvar Aalto's eight-story building is located north-south between Klopstockstraße and the library. C shaped volume of the building is different from the usual bars and characterized by two roughly square volumes, one to the north and one to the south, with four apartments in each, connected by a narrower central wing.

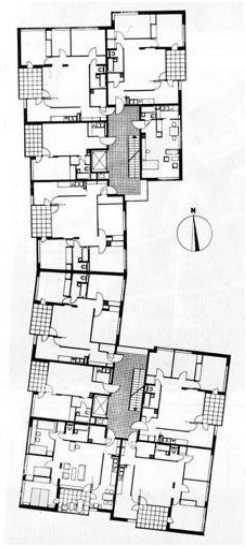
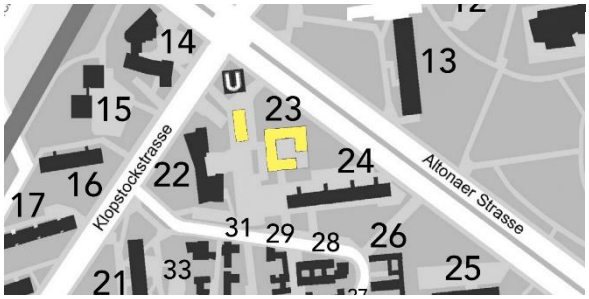


Figure 4.52. Building no.22 (building's number at the time of the exhibition) floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 87

Figure 4.53. Building no.22
Source: http://www.buergerverein-hansaviertel- berlin.de
/das_hansaviertel/label_architekten/22gallery/22gallery.html

Building no.23



Architect:
Werner Düttmann

Building:
Entrance to the Hansaplatz subway station and Hansa Library

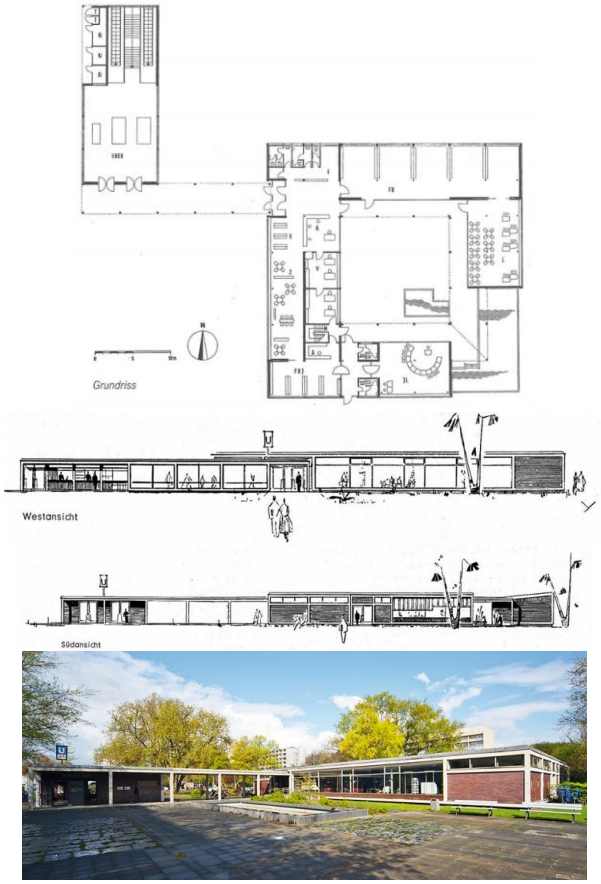
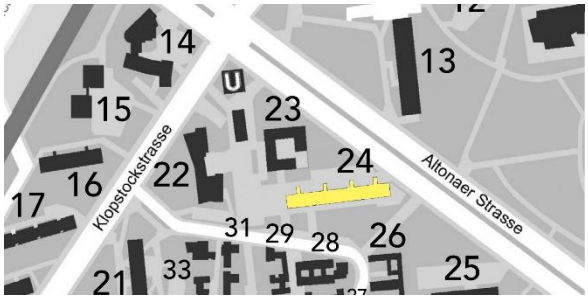


Figure 4.54. Building no.23 Entrance to the Hansaplatz subway station and Hansa Library floor plan
Figure 4.55. Building no.23 elevation
Figure 4.56. Building no.23 elevation
Source: Das Hansaviertel - Ikone der Moderne, page. 86

Figure 4.57. Building no.23
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 155

Building no.24



Architect:

Fritz Jaenecke

Sten Samuelson

Building:

Number of floors: 10

Number of apartments: 68

The ten-story building of Swedish architects Jaenecke and Samuelson is aligned on east west axis, with blind walls on each side and open facade behind loggias (south side) and arcades (north side). The building, besides being one of the few ready at the time of the inauguration of Interbau, also had a fully furnished model apartment available for visitors and together with the Oscar Niemeyer bar, form the entrance gate to the Hansaviertel on Altonaer Straße.

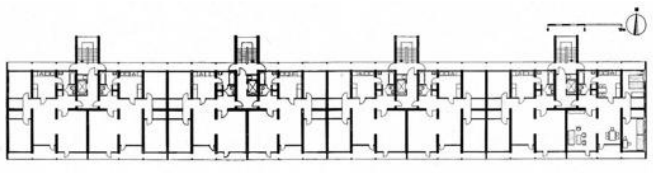
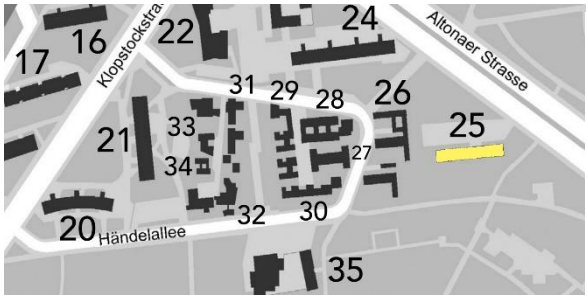


Figure 4.58. Building no.24 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 88

Figure 4.59. Building no.24 view
Source: https://de.wikipedia.org/wiki/Schwedenhaus_(Berlin)#/media/Datei:Hansaviertel_schwedenhaus.jpg

Figure 4.60. Building no.24 transparent staircase façade
Source: https://commons.wikimedia.org/wiki/File:Schwedenhaus,_ Berlin-Hansaviertel,_Treppenhaus_1957.jpg

Building no.25



Architect:

Paul G. R. Baumgarten

Building:

Number of floors: 3

Number of apartments: 7

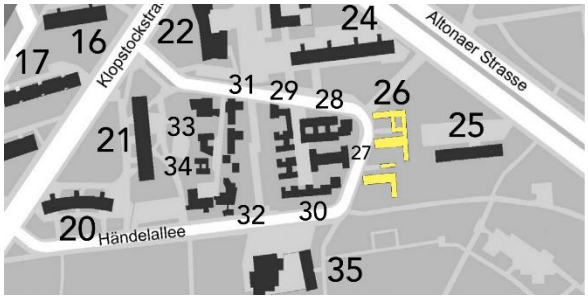
The bar shaped building designed by Baumgarten is constructed in three floors so it is not just a row of simple duplex apartments and the volume resembles more to a three and four-story bars of the Hansaviertel. The ground floor housed an auditorium, exhibition area, toilets, a staircase leading to the basement, as well as the caretaker's house at the west end of the pavement.

Figure 4.61. Building no.25 floor plans
Source: https://hansaviertel.berlin/bauwerke/altonaer-strasse-1-eternit-haus/

Figure 4.62. Building no.25 south façade
Source: http://www.buergerverein-hansaviertel-berlin.de/das_hansaviertel/label_architekten/27gallery/ 27gallery.html

Figure 4.63. Building no.25 north façade
Source: https://de.wikipedia.org/w/index.php?title=Datei:Berlin-EternitHaus- 2007.jpg

Building no.26



Architect:
Eduard Ludwig

Building:
Number of floors: 1
Number of apartments: 5

The flat single-story development which refers to the area of single-story single-family homes in the south-eastern part of the Hansaviertel, starts with five atrium buildings by the architect Eduard Ludwig at the east side of the Händelallee.

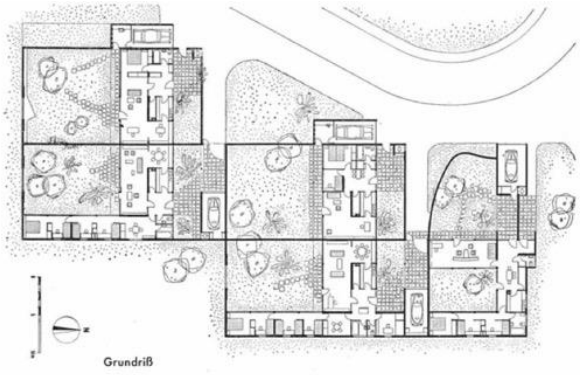
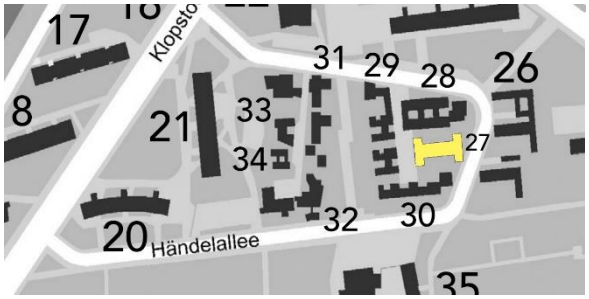


Figure 4.64. Building no.26 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 131

Figure 4.65. Building no.26
Source: https://hansaviertel.berlin/bauwerke/haendelallee-26-34-eduard-ludwig/

Building no.27



Architect:
Gerhard Weber

Building:
Number of floors: 1
Number of apartments: 2

Gerhard Weber's two houses are located on the south side of Jacobsen units and mirrored by south-north axis so the unit on eastern side opens to the Händelallee and the western one to the Stichstraße. Each building has two wings shaped by a bordered personal garden on south and an internal courtyard on north side.

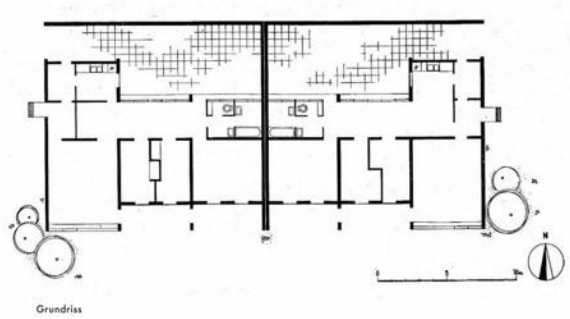
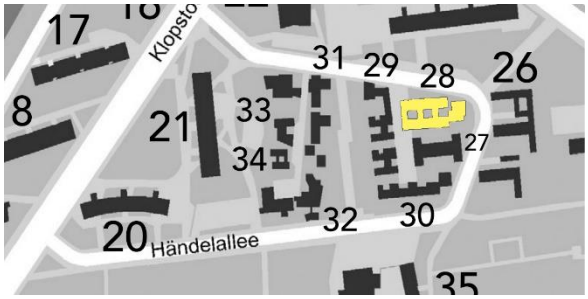


Figure 4.66. Building no.27 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 134

Figure 4.67. Building no.27
Source: https://hansaviertel.berlin/bauwerke/haendelallee-29-41-gerhard-weber/

Building no.28



Architect:

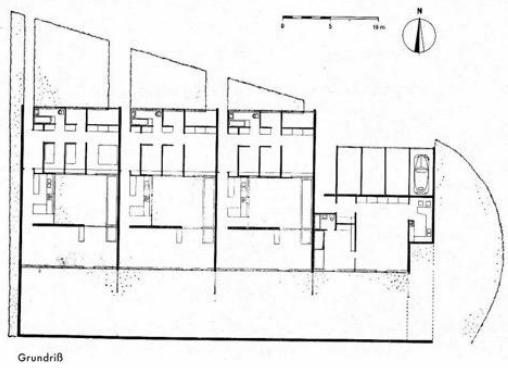
Arne Jacobsen

Building:

Number of floors: 1

Number of apartments: 4

Four single-story houses designed by Arne Jacobsen fill the area inside the north-east curve of Händelallee. From four buildings, which are set side by side from east to west, three are identical atrium houses with larger area and the last one on the corner of the turn is slightly smaller without inner courtyard and having four garages for all houses at the front side.



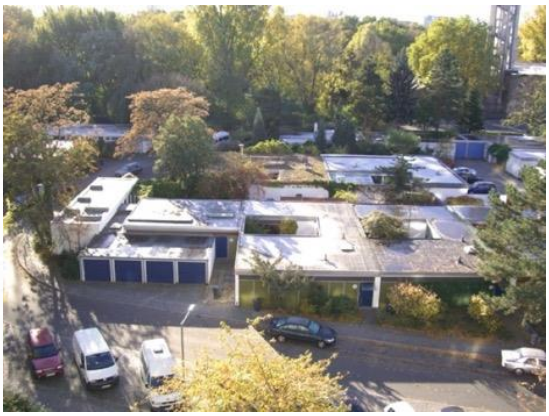
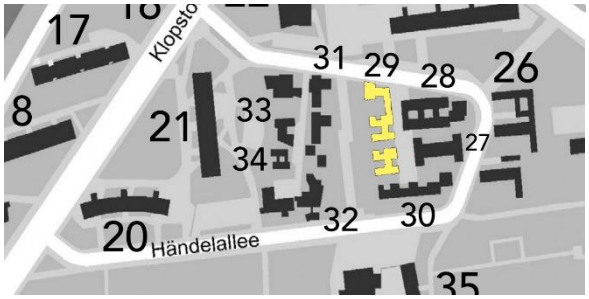


Figure 4.68. Building no.28 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 133

Figure 4.69. Building no.28
Source: http://www.buergerverein-hansaviertel-berlin.de/das_hansaviertel/label_architekten/29gallery /29gallery.html

Building no.29



Architect:
Johannes Krahn

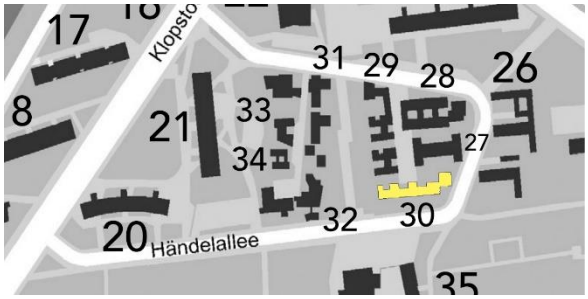
Building:
Number of floors: 1
Number of apartments: 3

The three houses planned by Johannes Krahn inside the loop of Händelallee road are placed on the east side of the promenade from the Hansaplatz to the Kaiser Friedrich Memorial Church. Two buildings on the south have identical plans and both are accessed by the private road which circulates buildings inside the loop, the northern building placed by Händelallee road is linked directly to the main road.

Figure 4.70. Building no.29 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 138

Figure 4.71. Building no.29
Source: https://hansaviertel.berlin/bauwerke/haendelallee-49-53-johannes-krahn/

Building no.30



Architect:

Alois Giefer

Hermann Mäckler

Building:

Number of floors: 1

Number of apartments: 3

The series of three single-story houses occupying the south-east corner of Händelallee turn is designed by the architects Alois Giefer and Hermann Mäckler. Two buildings on the western side have identical mirrored plans with inner courtyards on the north and more spacious garden placed on the south part of the land, the third one has a similar plan configuration but, the building divides into two displaced parts to adapt the curve of the road.

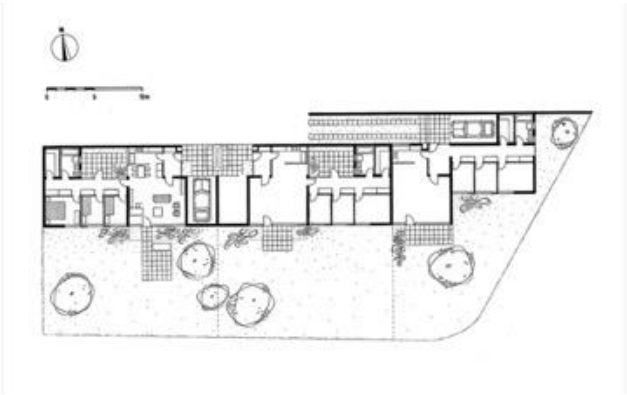
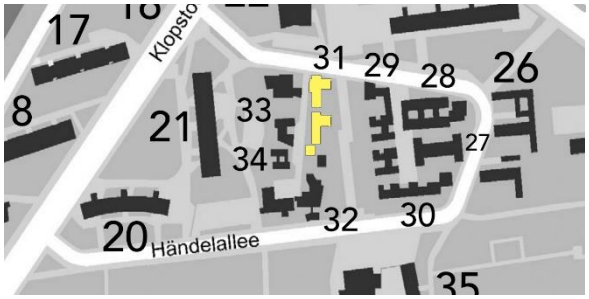


Figure 4.72. Building no.30 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 136

Figure 4.73. Building no.30
Source: https://hansaviertel.berlin/en/bauwerke/haendelallee-43-47-h-maeckler-a- giefer/

Building no.31



Architect:
Sep Ruf

Building:
Number of floors: 1
Number of apartments: 2

Two buildings designed by Sepp Ruf are located on the west side of the walkway in front of the Krahn buildings. The buildings of the same shape, which are located side by side in a north-south direction, entrances are on the west side and an outer garden wall divides the buildings from road, on the east side the buildings are located on a greater distance to the walkway so they have a larger semi-private garden. Garages are located side by side to the southern end of the houses.

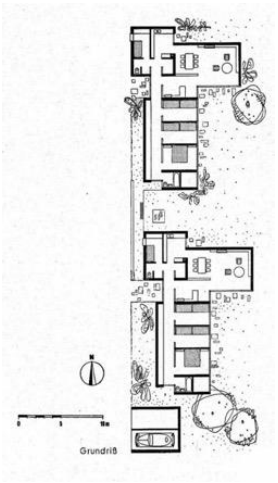
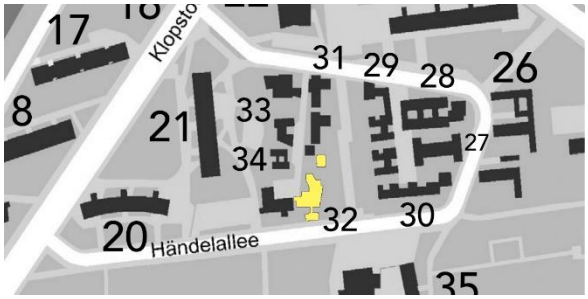


Figure 4.74. Building no.31 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 141

Figure 4.75. Building no.31
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

Building no.32



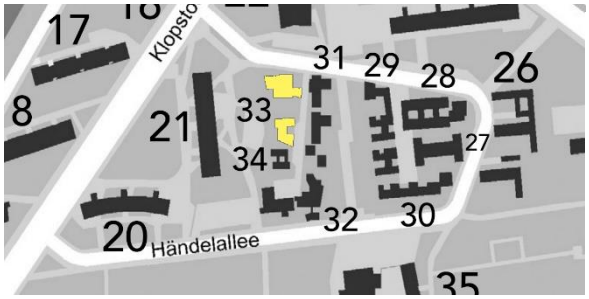
Architect:
Sergius Ruegenberg
Wolf von Möllendorff
Building:
Number of floors: 1
Number of apartments: 3

From three hoses designed by Sergius Ruegenberg and Wolff von Möllendorf at the southern side of Ruf's houses and the corner of the promenade with the south portion of Händelallee just one is constructed.

Figure 4.76. Building no.32 floor plan
Source: https://hansaviertel.berlin/bauwerke/haendelallee-59-s-ruegenberg-w-v- moeoellendorff/

Figure 4.77. Building no.32
Source: https://hansaviertel.berlin/bauwerke/haendelallee-59-s-ruegenberg-w-v- moeoellendorff/

Building no.33



Architect:

Klaus Kirsten

Building:

Number of floors: 1

Number of apartments: 2

Two houses designed by Klaus Kirsten are placed at the north-west corner of single-family houses. Both of the houses were not initially one of the official buildings in Interbau 1957, but the slightly spacious one on the northern part was accepted by Otto Bartning and the executive committee of Interbau, and is listed as part of the overall ensemble. The second one however, was not originally included on the list of Interbau structures and Kirsten designed this house for his own use.

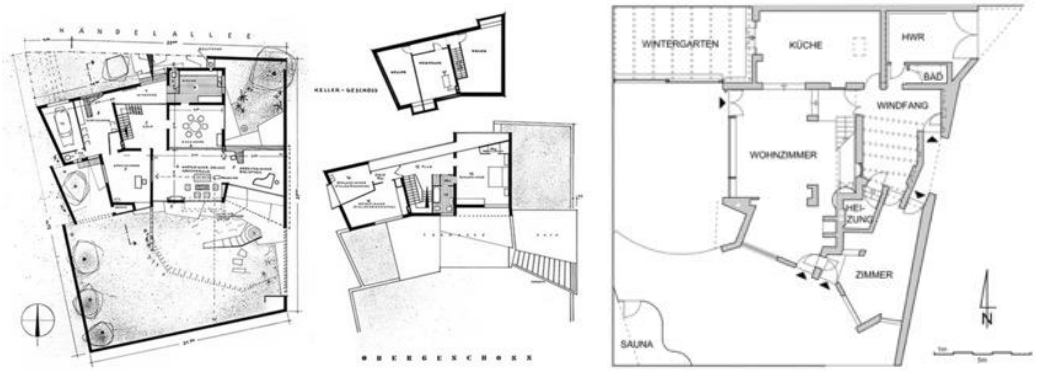
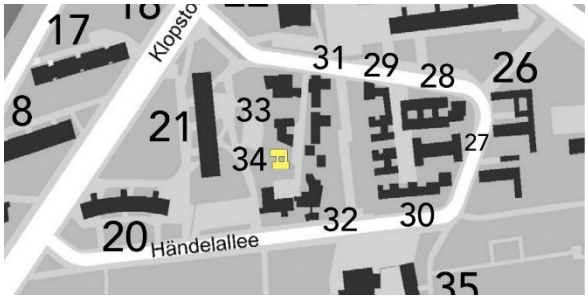


Figure 4.78. Building no.33 floor plan
Figure 4.79. Building no.33 floor plan
Source: https://hansaviertel.berlin/en/bauwerke/haendelallee-67-haus-prof - blumentahl-k-kirsten-h-nather/

Figure 4.80. The second building Kirsten built for his own use
Source: https://www.baunetz.de/baunetzwoche/baunetzwoche _ausgabe_90474.html

Building no.34



Architect:

Günter Hönow

Building:

Number of floors: 1

Number of apartments: 1

To the south of Kirsten's two houses is the small courtyard house built on Hansaviertel, designed by Günther Hönow. “The project for this house was the result of a national competition to enable the participation of the new generation of architects in the reconstruction of the Hansaviertel” (Eskinazi, 2008)

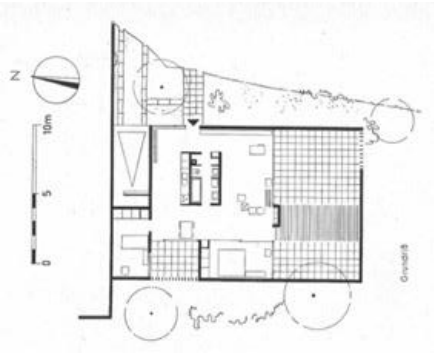
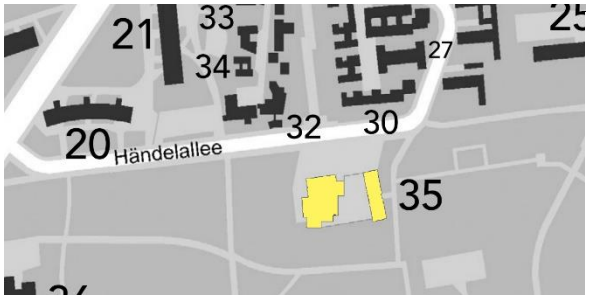


Figure 4.81. Building no.34 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 143

Figure 4.82. Building no.34
Source: https://hansaviertel.berlin/bauwerke/handelallee-63-guenter-hoenow/

Building no.35



Architect:

Ludwig Lemmer

Building:

Church and Community Center

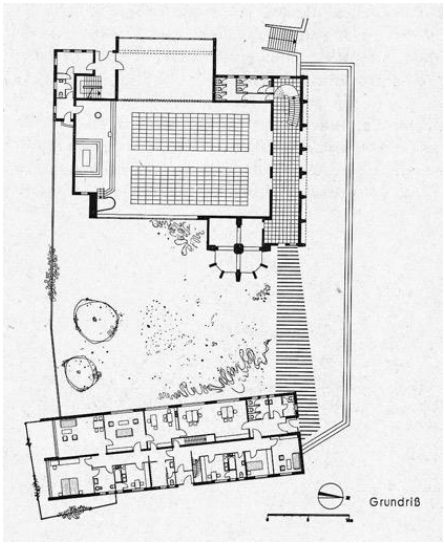
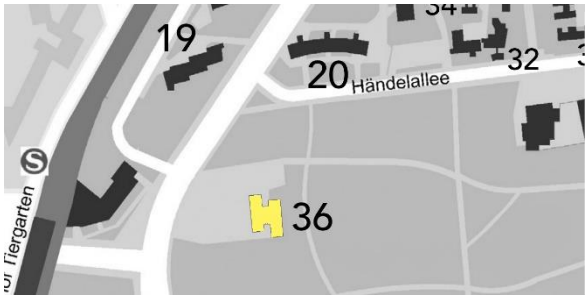


Figure 4.83. Building no.35 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 151

Figure 4.84. Building no.35
Source: © Alexander Hartmann, Wissenschaftliches Bildarchiv fur Architektur

Building no.36



Architect:
Klaus Müller-Rehm
Gerhard Siegmann
Building:
Number of floors: 17
Number of apartments: 164

The Müller-Rehm and Siegmann building represents the "cornerstone" of the southwestern Hansaviertel. The 17-storey building in addition, due to its height, which stands out from the park's leafy landscape and makes it visible from various points of the city, recognized as the hallmark of the exhibition.

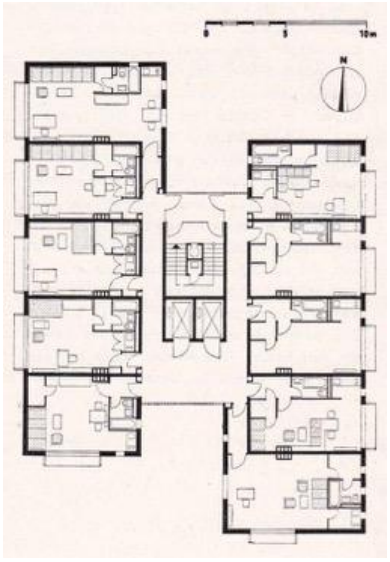
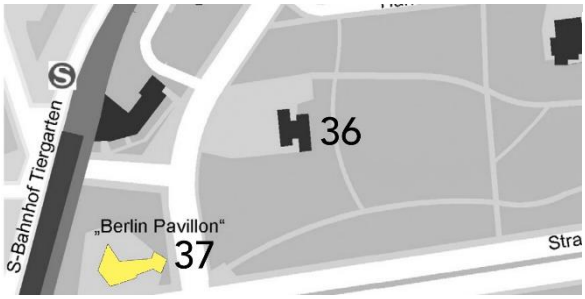


Figure 4.85. Building no.36 floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 65

Figure 4.86. Building no.36 in the background of Interbau exhibition entrance
Source: © Landesarchiv Berlin, Photograph: Horst Siegmann

Building no.37



Architect:

Herrmann Fehling

Daniel Gogel

Peter Pfankuch

Building:

Berlin-Pavilion (Restaurant)

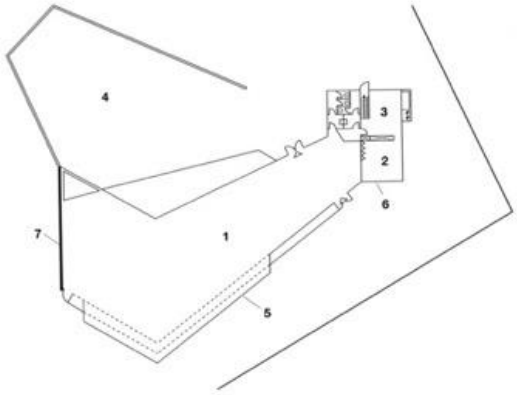


Figure 4.87. Berlin-Pavilion floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 160

Figure 4.88. Berlin-Pavilion
Source: © J. Berger, http://www.stadtentwicklung.berlin.de/denkmal/liste_karte_datenbank/de/denkmaldatenbank/daobj.php?obj_dok_nr= 09050387,T,035

Building no.38

Architect:

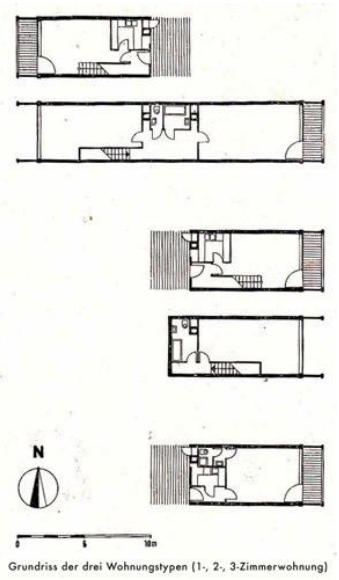
Le Corbusier

Building:

Number of floors: 17

Number of apartments: 525

Le Corbusier's Unité d'Habitation project for Berlin has 530 apartments in 17 floors and planned to inhabit 2000 people which is around the same population of Hansaviertel. According to its unadaptable size it was decided to build outside of the Hansaviertel. The building is located at the Charlottenburg, an area far from Hansaviertel, located south of the Olympic Stadium and north of the Grunewald Forest.



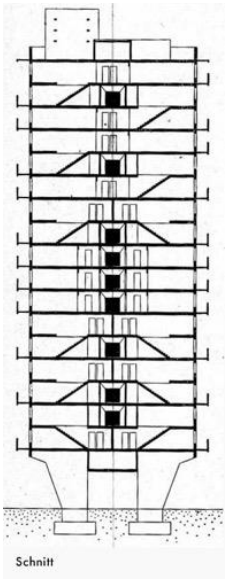
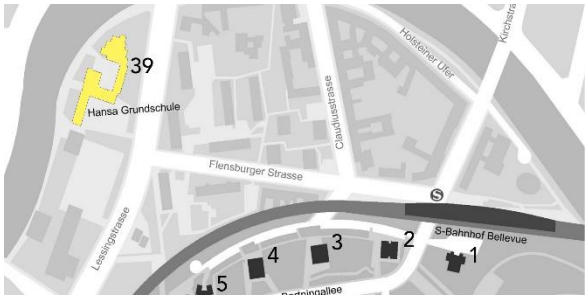


Figure 4.89. Unite d'Habitation floor plans
Figure 4.90. Unite d'Habitation section
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 164

Figure 4.91. Unite d'Habitation view
Source: http://www.buergerverein-hansaviertel- berlin.de/das_hansaviertel /label_architekten/40gallery/ 40gallery.html

Building no.39



Architect:

Bruno Grimmek

Building:

Elementary School

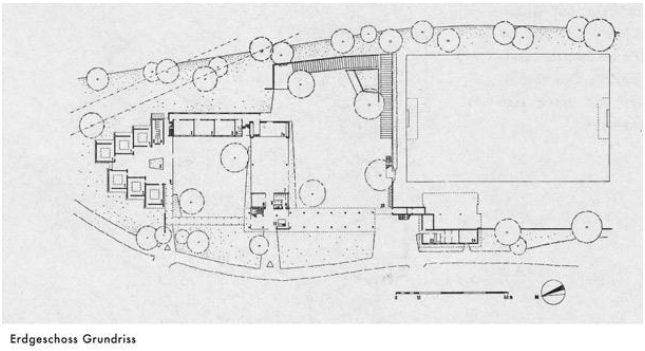
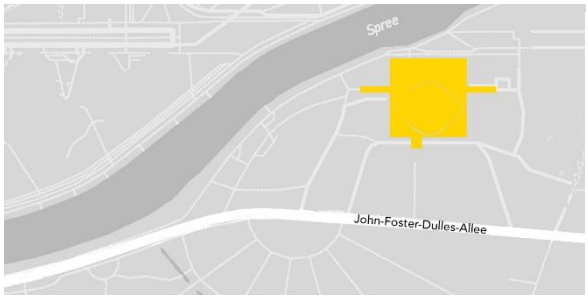


Figure 4.92. Building no.39 Hansa Elementary School floor plan
Source: Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellung, page. 157

Figure 4.93. Building no.39 view
Source: https://tgw-architekten.de/grundschuleberlin-hansaviertel/nggallery/image/image-87

Building no.40



Architect:

Hugh A. Stubbins

Building:

The Congress hall

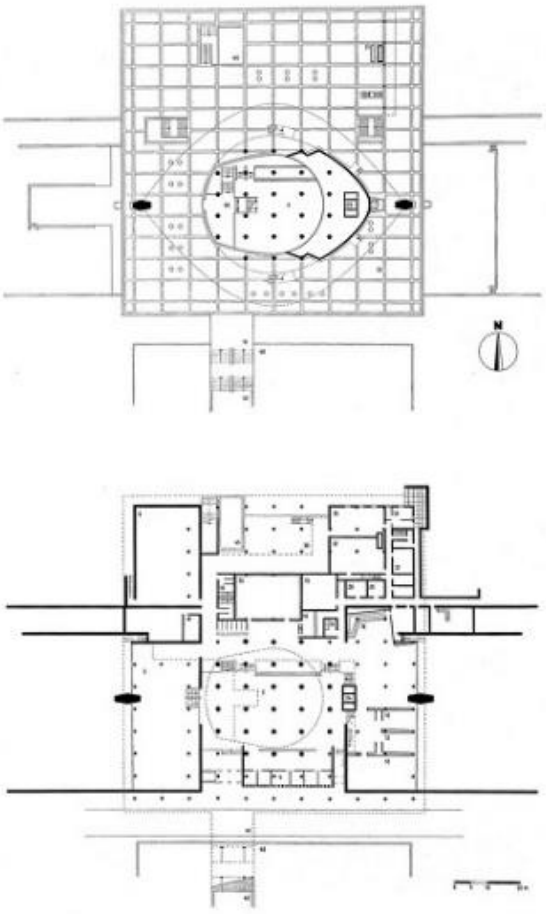


Figure 4.94. The Congress hall plans
Source: https://hansaviertel.berlin/en/bauwerke/john-foster-dulles-allee-10-kongresshalle-hugh-a-stubbins/

Figure 4.95. The Congress hall
Source: https://hansaviertel.berlin/en/bauwerke/john-foster-dulles-allee-10-kongresshalle-hugh-a-stubbins/

CHAPTER 5

CONCLUSION

4.3. Conclusion

Collaboration of 60 well-known architects and landscape architects in creation of an architecture exhibition with buildings designed and constructed in an uncommon free configuration to reestablish a central district of a metropolitan city from zero, at first glance seems to rise enough reasons to organize a master thesis study, but deeper digs into the project and its history clearly reveals that Interbau is not just an exhibition. Following the motto of "the city of tomorrow", organizers of Interbau tore down what remained in Hansaviertel to the ground level and completely design a new urban fabric and building configurations afresh in a format that have never been realized before in this scale at the center of the city. Understanding the intentions behind the realization of a model of the free world at the center of a war-torn city and effectuating hope for the citizens living with the miseries of rental barracks, having lost their homes and families during the World War required deeper research in the history of the city of Berlin.

Taking all facts into the consideration, the disregard of Interbau by architecture historians and theorists, and the lack of attention in scholarly works in the English language is staggering. As one of the major concerns of this thesis, in the fourth chapter, a descriptive catalog on Interbau projects is produced with plans and photos; further detailed analytical descriptions are placed in the appendices. The lack of information in English language was evident at the beginning of this research, while a number of profound studies have been published on the subject mostly in the German language and recently in Portuguese language. The publication of the *Hansaviertel.Berlin* website in both German and English languages in 2019 produces a comprehensive data on Hansaviertel's history, buildings, architects, current situation, and news and efforts to conserve this international heritage.

This work introduces one of the greatest examples of architecture being used as a political tool. How political issues at the peak of the cold war considered domestic architecture as a determinant weapon of superiority, and how an urban and architectural project in the scale of a city district directly was organized by governmental decisions, were among the initial questions of the research. World War II left the city of Berlin with an enormous housing deficit in both East and West, while urban and architectural propagandas became the main issue in the battleground of the Cold War to claim the ideological superiority of the two blocs. Architecture was viewed as a politically significant "expression and embodiment of culture" of the new societies created by the east and west powers (McNamara & Farrell, 2012). The governments on each side of the wall seem to have organized their reconstruction projects in complete accordance with their ideologies.

The Hansaviertel in this competition become west's response to east's Stalinallee project which has been already started the reconstruction of the remains of Frankfurter Allee, the main axis route along the East German capital of Friedrichshain. The Stalinallee buildings with functions of housing, bookshops, restaurants, cafes and other such amenities in ground floor create a "showcase of socialist ideals." (Jaquand, 1991) These ideals are further promoted by classical details on the exteriors and the promotion of order may be Stalinallee building's most important characteristic.

So, in comparing to design ideals of Interbau Stalinallee's "monumental proportions and limited repertoire of forms extinguished the excitement and unpredictability that characterize modern urban life." The diversity of forms, housing typologies and the organic placements of the buildings in Hansaviertel and amalgamation of city life and green spaces which described as creation of "pastoral life in suburbs" by David Crowley are west's main acts of superiority. According to Gerhard Jobst, "the free man does not want to live in an army camp, not buildings in rows," but in buildings "arranged organically... to convey the impression of people turning to one another in conversation." (Crowley & Pavitt, 2008)

The gradual disintegration of the city into the park in Hansaviertel site plan is completely evident even today when you pass from other neighboring districts to the Interbau Settlement. The “pastoral” definition of Crowley and efforts to create a sense of freedom in Hansaviertel can be described from author’s visit to the district as: Unparalleled configuration of building facades amplified by multiple perspective points let the sky playing the primary role in creation of the space and on the human level the properly positioned greenery which have grown favorably during more than half a century completely wiped away the sense of being at the center of a metropolitan and yet it does not give the feeling of being inside of a bushy and uncontrolled jungle with some buildings around.

Intentions to create a sociable living in both neighborhoods are also done in different manners. For example, the social functions are located on the ground floors of the Stalinallee buildings where in Hansaviertel, separate building were built for these functions or in some cases like Niemeyer’s and Le Corbusier’s buildings these functions are planned at the upper levels. At the end both sides provide similar amount of public social functions. To conclude the aforementioned competition, the living population of 2.2 million people in west berlin compared to 1.3 million in east in 1957 and building of the Berlin wall in 1961 by East government in order to prevent the west’s consequences on the people of the east. (Rosner, 1957)

The creation of Interbau exhibition and construction of Hansaviertel district with the motto of "the city of tomorrow" created a model of the free world bringing hope with its organic, modern, and futuristic style. This is where not only Interbau becomes a political mean and a weapon in the battleground of the Cold-War, but it also becomes the realization of the theories of modern architecture which searches for a solution to redeem citizens of the crowded metropolitan from miseries of poor city conditions.

Interbau introduces a life inside a green urban configuration with the freedom to choose from a variety of housing typologies in direct connection to the soil and nature and it completely breaks the bounds from the dull historic fabric of the city. In the

competition with Stalinallee, it is obvious that success will not be achieved only by the construction of new buildings. People who have lived in Berlin before the Second World War were not only broken by destructions of the War. They suffered for many years from the poor living conditions of inappropriate industrial growth; and as Ebenezer Howard propagated in his book, the integration of the social world into the surrounding environment is the route to our survival. This also becomes one of the predominant characteristics of Hansaviertel where the urban development blends organically among the green coverage of the Tiergarten park.

With the adaptation of principles of The Athens Charter, Interbau stands on a very specific theoretical ground in the evolution of modern architecture and at the edge of a great paradigm shift which makes it a realization of theoretical practice from before and criticized by theories afterward. Interbau exhibition is one of the latest examples of educational exhibitions started by Werkbund to pave the way for artists and architects to share the latest ideas on modern practice.

The Hansaviertel project may not have implemented all the principles of CIAM exactly in an expected way but all the ideas are present in the project. For example, the different building typologies have been studied in the third congress and the high rises were accepted as the best model for development of the modern city. As the model of the free world, Interbau implemented all typological varieties of one and two-story houses, bars with 4 to 5 floors, higher bars with 8 to 10 floors and towers with 16 to 17 floors. Interbau is one of the few projects which had this typological variety on such a big scale at the time, and this is one of the major characteristics differing Interbau from other projects.

Four functions of the city are applied in some parts according to the principles of the Athens Charter. Housing units have sufficient light and ventilation. Buildings are located far from traffic and there are lots of social and recreational possibilities inside the urban landscape. The road system and the train stations completely answer the transportation needs, but the mono-functional zoning is completely ignored in the

Hansaviertel and it brings housing units and other functions such as commerce, school, theater, library, subway station and churches together. The multi-functional design of Hansaviertel urban development also has some references to the ideas of sustainability in garden cities of Ebenezer Howard.

The last question that may come to the mind about the exhibition of "the city of tomorrow" is to what extent Interbau becomes the model for the city of tomorrow. In answering this question, again Sarah Williams Goldhagen's article "Something to Talk About: Modernism, Discourse, Style" in the definition of the modern architecture becomes handy. The search for the fixed principles in defining the details of the city of tomorrow will never end. The modern architecture discourse aims to create the best solutions for the needs of the society. The one by one comparison between Interbau exhibition and two exhibitions of Weißenhofsiedlung 1927 and IBA 1987 held before and after Interbau in the third chapter clearly shows society's requisitions are shifting according to the life conditions.

Interbau seems to answer the needs of the citizens of Berlin which lived the miseries of industrialized city and two World Wars in an appropriate way. Interbau applied in addition to the design principals of Weißenhofsiedlung, prominent presence of nature and typological variety of structures in a great extent with high-rise buildings in demand for the population of the metropolitan cities. On the other part of comparison, IBA criticized the principles of Interbau beginning from the decisions of ignoring the existing fabric of the city and implement its constructions and renovations complying with stablished building blocks defining the streets and tries to redeem the urban identity of the city.

In a nutshell, as Goldhagen defines:

"Modernism in architecture was and is an ongoing conversation, a discussion about how, in living with the cultural, political, social, and economic conditions of modernity, a newly conceptualized built environment might enhance self-awareness, might improve social life, might contribute to a more humanized present, and might help people to envision their future in a better world" (Goldhagen, 2005).

Interbu as a modern project intended to “improve social life”, “contribute to a more humanized present”, and “help people to envision their future in a better world.” (Goldhagen, 2005)

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APPENDIX

A. Analitical Discriptions of Hansaviertel Domestic Buildings

Housing buildings of Hansaviertel are analyzed in depth one by one within their formal architectural design characters. The buildings are analyzed within all aspects of plan development, vertical development, volumes, circulations, additional functions, façade design, materials, and location. In completing the descriptive analysis of this section, the data is mainly compiled from M. O. Eskinazi's thesis and Stefanie Schulz and Carl-Georg Schulz' book *Das Hansaviertel Ikone der Moderne*, unless other names are cited. This collective data has also examined with published plans, sections, elevations and photos and on-site observations during the author's trip to Berlin in 2016.

A.1. Building no.1 Hans Schwippert

The Schwippert building, located south of the S-Bahn Bellevue station is the last tower of the group on the easternmost side. The building constitutes of three wings of the same width and depth, oriented to south, east and west and a central core with a glazed facade on the north.

In the building there are three apartment types; on each western and eastern wing there are a single room apartment and a two-room duplex with entrance, living and dining area, kitchen and loggia on the lower floor and three rooms, bathroom and toilet on the upper floor and a three-room apartment on the southern wing.

Complex organization of simple and duplex apartments are due to emphasizing the feeling of privacy in the "own house", the building is arranged in such a way that mutual insights into the rooms and loggias are not possible.

A.2. Building no.2 Raymond Lopez, Eugène Beaudouin

The fourth tower house on the northern edge of the Hansaviertel designed by Raymond Lopez and Eugène Beaudouin is also a building on a square ground plan. The access zone is located between the east-west oriented apartments and widened in the center for access to the diagonally arranged elevators. Fifteen floors house 87 flats of seven different plan types.

Each side has three apartments two at the corners and a slightly smaller one at the center. The smaller apartment is at the same level as the central access zone but the corner apartments are located half-level higher and the main entrances are located in the stairwell on the landings, there is a second entrance to four corner apartments just by the door to middle apartment opening to an inner corridor with stairs leading to the kitchen.

The two main facades oriented to the west and east have the same design. They are divided into nine vertical fields on a grid of 2.34 meters through slender building-high metal profiles. In the north and south facades there is also a predominance of verticality; but in them the displacement of levels does not manifest itself, since both the apartments facing south and the two facing north are all on the same level. Thus, it can be affirmed that these two façades are characterized by five vertiginous bands, two blinds at the extremities, two with balconies and squares of the apartments and a central glazed strip, recessed in relation to the others, corresponding to the vertical circulation.

The border line on the roof is marked by a wide encircling sheet-metal attic. The emphasis on verticality through the narrow, building-like façade segments and the use of an equally vertical pitch in the slender window profiles and filigree railing lend the building lightness and elegance despite its compactness.

A.3. Building no.3 Gustav Hassenpflug

The third tower of the series was designed by the Munich architect Gustav Hassenpflug. 16 story building has 14 type floors a ground floor and a top floor. The

apartments are arranged U-shaped around the access zone. There are five apartments per floor in the 14 normal floors, two two-room apartments on each east and west side and one single-room apartment on the south side in extension of the access zone. The ground floor houses, in addition to the circulation areas, an apartment for caretaker, laundry and storage for bicycle and baby strollers. The top floor has a two-room apartment and four one-and-two-half-room apartments.

The facade elements are standardized and made of prefabricated elements, pendulum supports, sandwich panels and window elements mounted. The north facade is set back in the width of the access zone, around a column length.

The basic idea of the architect was to keep the apartment floor plans variable. For this purpose, the partition walls were so self-supporting stretched over each apartment, that the partitions can be set according to the wishes of the tenants within the apartment arbitrarily. Only kitchens, bathrooms and toilets retain their permanent place as a result of the continuous installations. To illustrate the possibilities of variability, the bigger apartments placed on western and eastern sides designed and built in six different versions.

A.4. Building no.4 J.H. van den Broek, J.B. Bakema

The 16-storey built by the Dutch architects J. H. van den Broek and J. B. Bakema is the second tower on the northern edge of the Hansaviertel. It stands out due to the peculiarity and power of its materials and elements: washed concrete slabs of medium grain size, white ribbons with windows of the same shape and colored parapets in red, blue and yellow. North and south facade are divided into three parts vertically. The east and west facades, on the other hand, are divided horizontally by three two-story incisions with loggias.

One of the most striking aspects of the building, which is reflected both in its interior and in the formal outcome of its façades, is the complex division into levels presented: building floors divided in to half at the center of northern southern axis and offset vertically half a floor-height from each other. This movement gives the opportunity to

circulate units in different levels from a single corridor and half floor-height staircases. Each corridor has access to four studio apartments directly at the corridor level, as well as eight three-room duplex apartments, which are located either half a floor below or half a floor above the corridor level. To access these apartments, you go through a small internal staircase up or down to reach the first level of the apartment, and then follow respectively one more level below or one above to reach the second level of the apartment, these apartments has access both to eastern and western facades.

As the corridors feed three and two floors respectively in each half of the building as can be seen in figure 3.6., there are only six corridors circulating all 16 floors and total of 72 apartments (without a caretaker 's house) and each system of circulation is mirrored respectively in order to fit on each other. This mirroring also caused the placement of half of the corridors and studio houses on western side of the central staircase and the other half on the eastern side.

A.5. Building no.5 Luciano baldessari

The seventeen-story building of Luciano Baldessari is the westernmost of the five towers, which mark the northern end of the Hansaviertel parallel to the city railway. Symmetrical arrangement of the building, precise shape of the floor plans and facades and super cooled effect of materials show Italian rationalism style of Milanese architect.

Access to the building is through the center of the east facade. The ground floor houses, in addition to the circulation areas, the caretaker's apartment and two units destined for offices. The storage, laundry and equipment areas are located underground.

Each floor has eight apartments in two broken lines symmetrically bent slightly toward wide central nucleus where the vertical circulation is located. Each line has two smaller studio apartments at the center with a kitchen and bathroom, the other two bigger apartments have, in addition to the social area facing east or west, two rooms facing north or south. Northern and Southern facades have the incised balconies of the

bigger units in center and Eastern and Western facades have the drawer shaped balconies of the smaller units in center. The building has 123 apartments in total.

A.6. Building no.7 Egon Eiermann

The nine-story bar of Egon Eiermann aligned to the north south axis and placed at the north of Niemeyer building. Like Niemeyer bar, Eiermann turns the main facade to west, placed each unit in a grid pattern behind loggias and divides each floor plan to twelve units.

The ground floor is recessed and contains some commercial and technical rooms. Two vertical circulation towers with an elevator and stairs are located at each end leads to the horizontal corridors alternating every two floors. This placement of corridors creates two different floor plans.

On the floors where the horizontal circulation corridor exists, the corridor divides the plan into three parts, storage rooms on east side corridor at the center and studio apartments on the west with bathroom, kitchen and an environment corresponding to living room or bedroom with balcony facing west.

In the axis of the partition walls between apartments, a staircase was designed that gives access to the floor devoid of a circulation corridor and an elevator stop. This staircase leads to a small hall that distributes to the entrance of two apartments. On this type floor, the apartments are structured similarly to the apartments on the previous floor but with a single bedroom facing east.

A.7. Building no.8 Max Taut

The Max Taut building is part of the complex that has the important function of articulating the transition between park and 16-story towers. The building is divided into three main parts and connected with two narrower parts. “In the ground floor, the central block houses a collective area, with rooms for parties and games; however, this area, as well as the collective pavement of the Niemeyer building, did not count with great acceptance” (Eskinazi, 2008).

The head apartments in the northern and southern parts of the building face east or west, the smaller connection volumes contain the stairwell in the east side and one room owned by one of outer part apartments so one plan has on bedroom and the other one two. The two apartments in the middle section are pushed through from east to west and provided with windows on both sides, the living room faces west and the bedroom and kitchen to the east; bathroom and distribution hall are in the center.

A.8. Building no.9 Kay Fisker

The Kay Fisker building is a north-south oriented bar, parallel to the Max Taut bar and divided into two wings with three and four floors respectively, the circulation is distributed through open linear corridors facing east; in the north wing the corridors are on the ground level and on the third floor, while in the south wing only on the third floor, since residential units on the ground floor are accessed directly from the street level.

The north wing has four floors and was divided into three equal modules, The module adjoining to the south wing holds the vertical circulation so the other two modules has larger areas dedicated to residential and divided into two duplex apartments with three bedrooms each, the third module contains studio apartments on the west side behind the stairwell on the east side and in order to continue the extrusions and recessions of duplex apartments on the west facade these studio apartments are slightly different on each floor. The south wing however is divided into four modules but only has three floors, all modules correspond to a duplex apartment with three bedrooms on the ground floor and first floor and a studio apartment on the third floor.

With a basement placed underneath the northern wing it sits half a floor height higher than south wing so two volumes are displaced both vertically and horizontally. White colored module division walls protrude from west facade and create a rhythm as well as color contrast with dark gray walls in between.

A.9. Building no.10 Otto H. Senn

The four-story building planned by Otto H. Senn is a five-sided prism and placed opposite to the Academy of Arts. Each floor has four apartments –a three bedroom, a two bedroom and two two-bedroom apartments –turned to the east, southeast, southwest and northwest and the fifth side which turns to north houses the stairs.

All apartments are opening to a central corridor and kitchens, toilets and bathrooms are located attached to this central core and all rooms and living rooms have natural lighting and ventilation. Each unit has a deep loggia at the corner side of the pentagon which pushed out of the facade and loosens the compactness of the building.

The building stands on a recessed basement and the attic floor also follows the outlines of the basements so all apartments on the fourth floor has terraces in front of them. All facade elements are color coded, the main building is in light gray, the window frames and the attic in white, the loggias in ocher and the basement is in dark gray.

A.10. Building no.12 Franz Schuster

The house of Franz Schuster is a simple, three-story, south-oriented solid construction with a flat roof, whose apartments are accessed via arcades and a trapezoidal staircase on the north side of the building. There are seven identical housing units on each floor with the exception of westernmost apartment with a small volume extension on the north west corner of the building. The small and very economical apartments have kitchen and bathroom facing north, and a living room with balcony facing south.

The white south façade of the building consists of a few elements, a variation of narrow balconies with square windows and incisions for recessed facade elements with protruding balcony railings. The basement is halfway under the ground level. Parking area is in the northwestern part of the property at the basement level.

A.11. Building no.13 Oscar Niemeyer

The building planned by Oscar Niemeyer is located directly on the Tiergarten and, together with the house of Jaenecke and Samuelson, forms the entrance gate to the Hansaviertel on Altonaer Straße.

The seven story building floats on V-shaped pillars. Recessed loggias framed by narrow dividing walls and ceilings created an open shelf structure on the west façade, perforated balustrades covered partially by color-coded screens to create privacy and the grid pattern only interrupted on the fifth-floor by building-length window band (the primary element of east façade). East façade composed of building-length window bands with white frames, lime green parapets and anthracite colored glass plates on ceiling stripes. Both sides completed by floor-height concrete wall with occasional narrow, decorative light slits. A vertical narrow anthracite glass divides north and south facades asymmetrically into two parts.

One of the most outstanding characteristics of Niemeyer building is its elevator tower which stands as a sculpture outside the floor plan and in front of the eastern façade. The elevator stops only at fifth and eighth(attic) floors and the tower connects to the main building only in these floors so the apartments of first to fourth, sixth and sit in the living room as in the open seventh floors can be reached only trough "very cramped" and windowless interior staircases (Schulz & Schulz, 2007).

The building constructed as six pairs of apartments with a described stairwell at the center. Each apartment has a living room and a kitchen with a loggia at the front on the western side and two rooms facing the east façade, all bathroom, a separate toilet, circulation hall and a curved built-in closet are located at the inner part of the building. The plans variated by creation of a one bedroom and three bedroom pairs where one bedroom is added to the neighboring apartment. The fifth floor however designed in a different way to accommodate community zone and development area at the west side and apartment units with openings facing only the east façade.

However as depicted in the introduction part of the chapter it has been tried to keep the project expressions in direct relation with realized version of the projects and not the first concepts or architects' intentions, it is impossible not to mention "strong" modifications on Niemeyer's original project as published by himself in 1955 and analyzed deeply by Eskinazi.

If it can be summarized, building floors reduced from eleven to seven, apartment areas downsized, number of units in each floor, circulation zones, V-shaped pillars changed; common service floor brought to fifth floor and in order to keeping up with original unit numbers this floor shared its area with one sided different apartments, restaurant is canceled and the halls alternate with spaces of unspecified use and become empty; the gymnasium, swimming pool, playground, terrace, garden beds and low parapets on the roof turned into an attic closed laterally by tall and opaque walls with small perforations and undivided space under the cement-asbestos roof; the circulation tower with ramps and curved envelope becomes triangle with stairs and much more.

As can be seen from the ongoing list of changes it is not just an explanation of changes made by builders, Eskinazy creates a portrait of the original design, consider all its admirers even brings forward Bauwelt magazine's anticipation of the project's future becoming a visiting point such as Le Corbusier's Marseilles building for architects, she names all the differences one by one, calls the building inferior, reminds how Niemeyer was not proud of the building and also gives examples of how historians ignored the building. But, despite all the short comes she addresses Niemeyer building and Le Corbusier's building which also underwent undesirable modifications the children that may be bastards, but the parents do not deny paternity at all.

According to Eskinazi, the Niemeyer House, partially frustrated in its plastic and functional solutions, does not fail to illustrate in many ways the series of "Brazilian housing units" that the architect elaborates in the first half of the 1950s.

A.12. Building no.16 Paul Schneider-Esleben

The fourth building of the sequence of four bars on the north west arc is a four-story building designed by Paul Schneider-Esleben, which is the las residential building until the Altonaerstraße. The building is divided into 10 5.5m modules, each module corresponds to two duplex apartments with total of 20 apartments. "The very cramped design shows modernity in conjunction with a minimalist aesthetic"(Schulz & Schulz, 2007).

The floorplans are mirrored vertically so the living areas –kitchen, living room and balcony -are located at the ground floor and third floor respectively and bathroom and two bedrooms on first and second floor. The entrances are also mirrored as lower units are reached directly from ground-floor and the circulation to the upper unit is accomplished with two exterior staircases and a glass-covered pergola on the north facade.

Divisions on plan are also visible on north and south facades with grey concrete walls, ceilings are colored in white and together with vertical grey wall elements they border prefabricated square curtain panels on two sides and light blue, white-tiled ceramic cladding at the center.

A.13. Building no.17 Wassili Luckhardt, Hubert Hoffmann

The third building in the row is the four-story bar designed by Wassili Luckhardt and Hubert Hoffmann. The bat is divided into four volumes by three transparent staircases, two inner volumes are slightly bigger than the outer ones. Each staircase core gives access to two apartments per floor.

The building has a different configuration possibilities and sizes of apartments from small studio apartments to three room apartments and duplex units. All units finished on the southern facade with balconies and apartment division walls are parts of facade composition and each volume is divided into two unequal parts with these walls. East, north and south facades have white colored metal panels with a good contrast to red

glass parapets on the south and glazed staircases, however, the panels were originally light gray, and the contrast was not so intense.

A.14. Building no.18 Günther Gottwald

The second bar on the north west border is a four-story building by Günther Gottwald. The building divided in to three parts structurally with three different circulation zones, different entrances and different stairs. Two outer parts are divided in to three and the narrower part is divided to two, all the parts have same width and compose a structural grid pattern of loggias, glass parapets and sand-colored shaders placed on facade to create a checkerboard pattern. On the north facade, the area occupied by circulation zones are lightened with large glazed features and remaining areas are lighting bedrooms and kitchens.

The stairs are placed longitudinally parallel to outer wall and each serves three units- of two double bedroom apartments and a studio apartment at the center- on outer parts and two symmetrical units with single bedroom at the central part. Beside studio apartments all apartments have access to both north and south façades.

A.15. Building no.19 Hans Christian Müller

The first building on the sequence of buildings forming the north-western arc of Hansaviertel bordered by rail road is the building of Hans Christian Müller. The Müller house is divided to three displaced volumes with three different entrances and three separate staircases leading to apartments at four different levels. The displacements on the volumes helps to keep the north south alignment of the units in addition to align the whole building to diagonal arc of the rail road, the broken walls also reduce the propagation of train noise.

The building has four different types of apartments but each type also can show slight variations in each three parts of the building. All apartments have openings to south and to the north, the smaller studio apartments are the only type which doesn’t have a balcony. The apartments with biggest area are located at ground floor of first two parts and are the only parts containing single apartment and all other parts are divided to

two units. The corridor areas have largely reduced and the large living areas has also access function.

A.16. Building no.20 Walter Gropius, Willy Karl (Wils) Ebert

The Gropius building for Interbau is the product of the work carried out by a team of three very heterogeneous partners; according to the Interbau catalogue, it can be seen that the constructive typology, the lower floors, and the arrangement of the balconies, as well as the idea of bending the building are credited to Gropius himself. However, the subtleties and details of the development of the project, especially with regard to the south façade, are attributed to Norman Fletcher. Meanwhile, detailing the interior of the building - such as stair areas and ceiling lining, wall and floor coverings - was taken care of by Wils Ebert.

The apartments in the standard floors are three-room apartments and there are three apartments with different plans in the attic, two of which have a roof terrace. These "studio apartments" were later converted into two apartments.

In the normal floors there are three types of apartments, which are developed from a basic type and changes due to different positioning of the balconies. For type 1, the balcony of the kitchen and the bedroom is stored in the front and accessible from the side of the living room (on the first, fourth, fifth and eighth floor). In Type 2, the balcony extends across the entire width of the living room (on the second, third, sixth and seventh floors). In the corner apartments (type 3) on the west and east sides, the balconies are located on the front ends of the house (on the second, third, sixth and seventh floors). Living room, kitchen and a larger room of all the apartments are on the south side and to the north are two smaller rooms and the bathroom. This floor plan could be changed with relatively little effort by moving the kitchen to the north side, where sanitary connections are also available. In return, a kitchen-sized room would be moved south or the living room would be enlarged.

Between the apartments on the north side are the staircases with elevator at the outermost side extruded at the breaking points which created the curvature of the

building. As the lifts are positioned on the opposite side of the staircases from the actual apartment landings in order to reach the apartments you have to go half-stairs up or down.

The main building is placed on a set back ground floor and has a studio floor at the upper end reachable with just three of the staircases which originally had three apartments with roof terrace for the outer two and lately modified to two apartments, both with roof terrace. On the southern façade from the second to the seventh floor, the balconies drawn out of the façade surface are grouped into "four-packs" from two adjoining apartments on two floors and arranged in a checkerboard pattern. This pattern however completed at the eastern and western ends of the building with white blind walls that creates our third plan type by rotating the balconies off the southern façade.

A.17. Building no.21 Pierre Vago

The 9-story building of Pierre Vago is designed as a bar of 64m long, 12.5m deep and 28m high and aligned to the north south axis. The formal description of the building facades may be confusing as the north direction of the plans taken from original Interbau catalogue and the actual building are completely on opposite directions.

The building is divided into three parts reached by separate staircase on western facade and an elevator on the center of the circulation and each outer part is slight wider than the one on the center. There are only four apartments on the ground floor and three in the attic and all the remaining area kept free for the benefit of all residents. The laundry and storage functions, as well as infrastructure of the heating system are located underground.

In the 24 apartments on floors one, three, four and six, the east-facing living area is one and a half times the ceiling height. Either the floor is lowered half a story and connected to the other rooms of the apartment by a staircase (on the third and sixth floor), or the ceiling elevated half a story (on the first and fourth floors).

The complexity of the design is on the arrangement of the plans due to this floor and ceiling play and also the difference on managing this design idea between outer parts and the narrower middle part. In two outer part, on the floors with units which has high and fresh living room (on the first, third, fourth and sixth floors) there is a third studio apartment at the center of the two apartment facing only the eastern façade where the other two has openings on both eastern and western sides (figure 3.17.), on the other hand, on floors where living space is occupied by living rooms from other floors (on the second and fifth floors) this third unit is removed and gave half its area to other two units keeping them from shrinking (figure 3.18.). On the narrower middle part however, there is no mid apartment on the first, third, fourth and sixth floors and on the second and fifth floors where the area shrinks by two living room space all the eastern façade is given to one unit and remaining area becomes a studio apartment with openings only on eastern side.

On the west and south sides, the window openings are completed by colored facade panels on the wall sections between the windows. This results in a kind of large-format tiling in the colors light blue, green and concrete gray. On the east side, a large shape is formed, from a position of the glass surfaces of the living room windows and balcony elements that end on both finishing sides of the building.

A.18. Building no.22 Alvar Aalto

Alvar Alto's eight-story building is located north-south between Klopstockstraße and the library. C shaped volume of the building is different from the usual bars and characterized by two roughly square volumes, one to the north and one to the south, with four apartments in each, connected by a narrower central wing with a slight sloping break, where there are two apartments per floor." However, even the building can be characterized as a bar, the centrality is very present in several levels of its conception, which refers to comparisons with the typology of residential towers, where there is a predominance of plants with central organizational structure." (Eskinazi, 2008)

The building has a basement with a laundry room, ground floor, seven floors and a top floor useable by residents. There are 78 apartments of six different types and sizes, having units of one, two and three bedrooms. The circulation is done with two different circulation zone aligned to the northern-southern axis inside each square wing with straight stairs and an elevator.

Ground floor units of the central wing are removed so this open area functions as the hall for collective use and doors to each vertical circulation zone are opening to this hall reachable by stairs on the east side and a ramp on the west. This elevated hall creates a visual integration between west and east and also allows pedestrian crossing between both sides. With this, Aalto is able to transfer to practice one of the most important principles of Interbau, which is based on the idea of making the ground areas of buildings in fluid places, integrated with the green areas of the park.

Without units on the central wing the ground floor houses only eight apartments. Each type floor has ten units, nine of which have balconies and a studio apartment without balcony. All units have a central living area, kitchen and bathroom services develop in walls adjoining the corridors, leaving the entire surface free with exterior contact to the balconies and rooms.

A.19. Building no.24 Fritz Jaenecke, Sten Samuelson

The ten-story building of Swedish architects Jaenecke and Samuelson is aligned on east west axis, with blind walls on each side and open facade behind loggias (south side) and arcades (north side). The building, besides being one of the few ready at the time of the inauguration of Interbau, also had a fully furnished model apartment available for visitors and together with the Oscar Niemeyer bar, form the entrance gate to the Hansaviertel on Altonaer Straße.

The ground-floor is a commercial center, with four stores, four warehouses and three offices. All floors from first to eighth has eight units per floor and the four inner apartments on the eighth floor have another room on the ninth floor, which is accessible via an internal staircase so that there are only four units at the ninth floor.

Each unit has a bedroom, kitchen and bathroom facing north, and a bedroom and living room facing south - all three with interconnected balconies.

The apartments are accessible from four vertical circulation zone with an elevator in each and all has a stair case box – the only element interrupting the clean box shape of the bar – on the north facade but only the two on sides reach to the last floor and two inner ones serves only ground-floor and first-floor, these vertical circulation zones are all connected via open corridors along the north facade on each floor.

The open circulation corridors bordered with light orange stripes on north facade and the horizontality is broken with the volumes of vertical circulation with transparent side walls and yellow frames, in the south the horizontality is crated with light blue balconies of the apartments. A grid pattern is created on both north and south facades by horizontal stripes and small vertical elements.

A.20. Building no.25 Paul G. R. Baumgarten

The bar shaped building designed by Baumgarten is located in this chapter not for its location beside single-family houses but for its set up as a grouping of single-family residences. However, the building is constructed in three floors and not two so it is not just a row of simple duplex apartments and the volume resembles more to a three and four-story bars of the Hansaviertel.

"The task I had determined called for the design of seven two-story houses, located in the southern portion of the Hansaviertel, with a formal configuration that sounded to me quite adequate for the area. I decided that I should not build isolated two-story houses, but rather a series of houses; however, they should not touch the ground, since for me it was not possible to imagine in this area a quiet and adequate use of the garden areas located on the ground floor, given the intense flow of pedestrians in the Tiergarten. It seemed more convenient to me to elevate the building from the ground and to provide for the residents, private terraces-gardens on the last floor, extending over the whole width of the building." "(Schulz & Schulz, 2007)

“The initial idea of Baumgarten, as it is understood from his own account, is to elevate the building of the ground, locating seven residential units of the duplex type in line in the second and third floors, thus leaving the ground floor free. With this, it would reach the goal of making possible the construction of a building in an area of great pedestrian traffic, but avoiding to obstruct the circulation flow.” "(Schulz & Schulz, 2007)

Materials made by a company named Eternit are used dominantly in the building and elevating the units to the first and second floors and clearing the ground floor from residentials were also made possible by this company as the ground floor is designed for company events and eventually the building named Eternithaus.

The ground floor housed an auditorium, exhibition area, toilets, a staircase leading to the basement, as well as the caretaker's house at the west end of the pavement. The facade elements in this floor is divided to three parts, glazed materials at the central part, Glass-brick walls on the auditorium and solid blind walls of the caretaker’s unit which faces only to the west.

Seven duplex apartments on first and the second floors are reached by a long open corridor on the first floor which can be reached by stairs attached to the building at the center of the north facade. On this floor the circulation zone with stairs to the upper floor, a bathroom and a small storage room are facing north and three bedrooms facing south; Both north and south facades are dominated with white panels bordering inner elements –thinner on lower part and side parts and thicker on the top part –and creates a strong horizontality.

Social areas of living, kitchen and dining are places on the second floor and units are divided with 2.70m wide garden terraces, three of four faces on this floor are glazed and only the adjoining wall to the neighbor is blind and straightly connects to the inclined roof. As one side of the apartments is blind on facade in order to prevent of having a blind wall at one end of the building two units at the eastern end are mirrored.

A.21. Building no.26 Eduard Ludwig

The flat single-story development which refers to the area of single-story single-family homes in the south-eastern part of the Hansaviertel, begins east of the loop on Händelallee with five atrium buildings by the architect Eduard Ludwig. The buildings are placed on three rows from south to north, first two rows consist of two units aligned to south north axis and exactly copied in each row but offset by a building axis to accommodate the curvature of the Händelallee, the fifth building is aligned on east west axis and placed on the third row covering both buildings northern façades completely.

On the first and second rows, both buildings at the west side which are closer to the road have a simple rectangle construction with covered garage at the west end, a larger main courtyard on south and a smaller one on the north acting as an entrance hall. The two buildings at the east side however are different from the first ones in two parts, the building has an L shaped extension on the east façade, which accommodates four bedrooms and as the buildings aren't directly linked to the main road the courtyards on the north are expanded by a car lane width so the roofed garage and the entrance hall is located in this extension and in order to create the link buildings are also separated to create a narrow street.

The fifth building is a U-shaped building placed on the east side with an inner courtyard turned to the south and on the west side is placed another bigger courtyard with roofed garage and open entrance walkway on the north face. The west wing placed in between both gardens houses the social area and is glazed in both sides.

A.22. Building no.27 Gerhard Weber

Gerhard Weber's two houses are located on the south side of Jacobsen units and mirrored by south-north axis so the unit on eastern side opens to the Händelallee and the western one to the Stichstraße. Each building has two wings shaped by a bordered personal garden on south and an internal courtyard on north side.

The north-south aligned wings are placed on two ends and shelters entrance hall at the center, kitchen and storage room turning north and the living-room turning south, the roofed garage in front of the kitchen is also part of this wing on roof-plan. The east-west aligned wing has the corridor, bathroom and separate toilet on north side and bedrooms on the south side. All elements on northern part of the buildings are lightened by the courtyard and living-room and bed-rooms are getting south light, in order to reduce light intensity, bed-rooms façades are recessed from living-room and shaded by pergolas created on the ceiling.

A.23. Building no.28 Arne Jacobsen

Four single-story houses designed by Arne Jacobsen fill the area inside the north-east curve of Händelallee. From four buildings, which are set side by side from east to west, three are identical atrium houses with larger area and the last one on the corner of the turn is slightly smaller without inner courtyard and having four garages for all houses at the front side. On the south part of all units there are four gardens connected to the buildings with end to end glazed walls on south facade.

Three identical buildings have three wings around the internal courtyard, the living-room is on south wing facing both inner courtyard and the garden, kitchen, dining area and a narrow corridor are all on the west wing and the north wing consists of three rooms on the southern side facing inner courtyard and a bathroom and two storage rooms on the northern side, one of the storage areas is reachable from outside by a door on north facade.

The entry to the fourth unit is placed between garages and neighboring unit beside south facade all facades are blind, inside the building the living area kitchen and the sleeping area are all affiliated and the small bathroom with toilet is linked to the sleeping-room.

The extreme care to details and materials by architect is pointed out by Eskinazi to demonstrate the importance of the relation and integration of detailed elements with the whole design in order to obtain quality architecture.

A.24. Building no.29 Johannes Krahn

The three houses planned by Johannes Krahn inside the loop of Händelallee road are placed on the east side of the promenade from the Hansaplatz to the Kaiser Friedrich Memorial Church. Two buildings on the south have identical plans and both are accessed by the private road which circulates buildings inside the loop, the northern building placed by Händelallee road is linked directly to the main road.

The two houses to the south are made up of two main parallel volumes with a courtyard and a smaller glazed volume in between and another courtyard on the south part of the land which extends over the entire building width. The north wing houses in different arrangements, a large living room, kitchen, guest rooms, separate toilet, garage and an inner patio adjoining the garage, the connection wing distributes the functions and the inner courtyard lightens the living-room and corridors in both wings. The south wing contains a bathroom and three bedrooms turned to the south garden.

The third plan also contains of two main wings and a connection wing but it turns 90 degrees so the entrance faces north and opens to the Händelallee, the sleeping zone turns to the east and contains another room with living-room or office function and the third wing on the west is reduced in size in a way the inner courtyard could expand to the west facade and become the only courtyard of the building. The west wing houses the garage, living-room, kitchen, storage-room and a toilet.

A.25. Building no.30 Alois Giefer, Hermann Mäckler

The series of three single-story houses occupying the south-east corner of Händelallee turn is designed by the architects Alois Giefer and Hermann Mäckler. Two buildings on the western side have identical mirrored plans with inner courtyards on the north and more spacious garden placed on the south part of the land, the third one has a similar plan configuration but, the building divides into two displaced parts to adapt the curve of the road and also to create a cavity in order to place the access road and the garage in between the north façade and neighboring buildings.

The mirrored plan type divides into two parts of living space and sleeping space, the open paved entrance area with access to the garage, vestibule, open kitchen and south facing garden-oriented living-room, occupies the living space and placed by the mirroring axis, the outer part consists of bed-rooms turned to the garden, a corridor at the center which opens directly to the living-room, bathroom, storage-room and the inner courtyard at the northern side, the courtyard supplies natural light and ventilation for bathroom kitchen and the corridor.

In the third building the living space configuration is the same as other two buildings, but on the other half of the plan the courtyard gives its place to the garage, the corridor is linked to the vestibule and bathroom is placed on the eastern end to ventilate from openings on east façade. The garden walls in the third building are also following the curve of Händelallee.

A.26. Building no.31 Sep Ruf

Two buildings designed by Sepp Ruf are located on the west side of the walkway in front of the Krahn buildings. The buildings of the same shape, which are located side by side in a north-south direction, are designed as bungalows, in dark red brickwork, with a flat roof and a large roof overhang, as well as a wooden underside. Entrances are on the west side and an outer garden wall divides the buildings from road, on the east side the buildings are located on a greater distance to the walkway so they have a larger semi-private garden. Garages are located side by side to the southern end of the houses.

The plan type resembles a L word with longer wing aligned to the south-north axis, in this wing a long corridor is developed that distributes to the three bedrooms and a bathroom, all facing east; to the west of the corridor, a blind wall houses an area for built-in closets throughout its length. The short wing contains the living area which is glazed on south and opened to the garden and in the corner of the L, next to the entrance are located, the kitchen, a storage-room as well as a guest room with separate toilet.

A.27. Building no.32 Sergius Ruegenberg, Wolf von Möllendorff

At the southern side of Ruf's houses and the corner of the promenade with the south portion of Händelallee one of three houses designed originally for the Interbau by Sergius Ruegenberg and Wolff von Möllendorf is constructed with some modifications.

The built house, besides having two decks - the original planned had only one -, had its area enlarged and its interior even more subdivided. The horseshoe-shaped environment that houses a bathtub and has direct access to the garden, present in the three houses, has been maintained, as well as the attached volume housing the larger bedroom, connected to the main body of the house from a walkway Link. The other bedrooms are located in line next to the main body of the house and they turn to the promenade. The central wing houses living room, dining, kitchen and a covered terrace open to the garden. The second floor, also of rather irregular geometry, houses a balcony, a living room, a bathroom and a small bedroom. An inclined external metal pillar helps to support the second floor and its cover slab.

"The architects clarify in Interbau's catalog that the principle employed was to develop the project not from the technical, functional and formal constraints present in the reality of a building, but rather from the routine and daily activities of a family's life. According to Ruegenberg and von Möllendorf, this means returning each environment to the best orientation, according to the time of day in which they are most used and with the type of function they receive. Thus, they would be establishing a counterpoint to all the strategies of rationalization, serialization, and economy of means prevailing since the beginning of modern architecture." (Eskinazi, 2008, cited from Interbau Berlin 1957. Amtlicher Katalog der Internationalen Bauausstellun)

A.28. Building no.33 Klaus Kirsten

Two houses designed by Klaus Kirsten are placed at the north-west corner of single-family houses. Both of the houses were not initially one of the official buildings in Interbau 1957, but the slightly spacious one on the northern part was accepted by Otto

Bartning and the executive committee of Interbau, and is listed as part of the overall ensemble. The second one however, was not originally included on the list of Interbau structures and Kirsten designed this house for his own use.

Both houses have two decks, smaller courtyards on the northern end –one in east other on west –and completely bordered gardens on south. The larger house to the north integrates a residence with a doctor's office, the entrance and garage are turned to the north and design has regular geometries on east and irregular geometries on the west side of the building, while the smaller one to the south houses only a residence, the entrance and garage are turned to east and irregular geometries are on east side of the building.

A.29. Building no.34 Günter Hönow

To the south of Kirsten's two houses is the small courtyard house built on Hansaviertel, designed by Günther Hönow. “The project for this house was the result of a national competition established by the *Otto Bartning Stiftung für Baukunst und bildende Künste*, an institution founded in 1953 on the occasion of Bartning's 70th birthday. The idea with the competition was to enable the participation of the new generation of architects in the reconstruction of the Hansaviertel - considering that most of the projects for the exhibition had been entrusted by renowned architects and that they already had some experience at that time. ... Among the 24 projects submitted at the end of 1956, 13 were classified as finalists and taken to a second analysis, from which the Günther Hönow project was victorious.” (Eskinazi, 2008)

Hönow creates in this project an open living area with central core for bathroom, toilet and a storage area, the kitchen is placed on the north of this core and the living-room on the south, the master bedroom is beside the living-room and lightens from the garden alongside the living-room. The garage and the second room are located on the northern end of the plan, the garage is opened to the road on the east and the bedroom gets light from the inner courtyard placed on west side of the building between two bedrooms, this courtyard also provides natural light for the dining area.

The house located south of Günther Hönow's house was designed by the architects Bodammer and Berndt in 1960. However, since this house does not belong to the set of buildings designed and built at the Interbau, it is not important, for the purposes of this work.

A.30. Building no.36 Klaus Müller-Rehm, Gerhard Siegmann

The Müller-Rehm and Siegmann building represents the "cornerstone" of the southwestern Hansaviertel. The 17-storey building in addition, due to its height, which stands out from the park's leafy landscape and makes it visible from various points of the city, recognized as the hallmark of the exhibition. (figure 23.3)

Unlike the sequence of five towers, which have square or rectangular perimeter deployments, the Muller-Rehm and Siegmann building is formed by two bars displaced by width of a housing axis and articulated by a central nucleus where the vertical circulation is located.

The tower houses ten studio apartments per floor with kitchen, bathroom, storage room and balcony, five in each side. The two apartments located at the south end of the bars only return their living rooms to the south, while the others all open essentially to the east or west.

The flat roof, which traces the orthogonal ground plan, floats as a flying roof on the recessed attic. The floors are marked by gray-pink ribbons marking the ceilings. There are narrow balconies in front of the window elements which distributed regularly over the façade. The floor-high balcony doors can be opened over a large area. The architect wanted "one could sit in the living room as in the open".

A.31. Building no.38 Le Corbusier

“The Corbusier project for Berlin has 530 apartments, 172 apartments with 32m2, 270 with 61m2, 84 with 100m2 and 4 with 130m2 that total approximately 33,000m2 of residential area built.” Even as it has 17 floors and 56m high like tower builing of

Luciano Baldessari and it is much taller than other bars built inside the Hansaviertel, I placed it in this section because of its typological qualities.

The population 2000 people are planned to inhabit the vertical city of Le Corbusier, which is around the same population of Hansaviertel, so according to its unadaptable size it was decided to build the Le Corbusier building at the Heilsberger Dreieck, at Heerstraße, in Charlottenburg, an area far from Hansaviertel, located south of the Olympic Stadium and north of the Grunewald Forest.

Le Corbusier's building just as happened to Oscar Niemeyer's building for Interbau suffered significant changes in the hands of the German builders. Le Corbusier started his protest after his visit to the Berlin, but at the end he made some concessions and accept some changes.

His 2.26m floor heights changed to 2.50m in order to be accepted by the Berlin building code, the width of apartments changed from 3.66m to 4.06m. The sunshades on the façade as well as the frames were originally wooden but executed with iron to the fourth floor but with Le Corbusier's demands the rest were executed in wood. Finally, the collective pavement on the seventh-floor undergone lots of modifications and lost its functionality, as happened to Oscar Niemeyer's building.