

„Public space is a political space that measures the democratic breadth of a given community; a physical and at the same time metaphorical space whose presence is a guarantee of freedom of expression of the individual and the community.“

Maria Claudia Clemente and Francesco Isidori

1. The District of Grünau – Study Site

Leipzig-Grünau, planned between 1976 and 1986 according to socialist principles and one of the largest prefabricated housing estates in the former GDR, is located on the western outskirts of Leipzig. A large residential settlement was built, consisting of several neighborhoods and divided into various residential complexes (WK). In the study area, Residential Complex 7, a homogeneous, monofunctional use has solidified. The lack of housing diversity, the need for diverse uses, and the urgent need for the renovation of existing buildings need to be considered, and ideas for revitalizing the neighborhood need to be developed.

2. The Strategy

The key points for the development and revitalization of Grünau neighborhood, Residential Complex 7, encompass five guiding principles that are holistically applied in the restructuring of the neighborhood:

PRINCIPLE 1: Create Diversity

To transform Grünau from a purely residential area into a lively urban district, it is essential to integrate and establish new residents and functions within the neighborhood in the long term. This involves careful interventions in the existing neighborhood context, including architectural and landscape interventions, short-term immediate actions, and long-term restructurings. The goal is to facilitate the coexistence of living and working, ensuring quick accessibility to all aspects of daily life within the neighborhood.

PRINCIPLE 2: New Living Concepts

To attract and accommodate new residents, a new housing concept for the neighborhood is needed. The current one-sided housing offer will be diversified, with plans to renovate and expand existing buildings. Extensions will include public areas on the ground floors, providing space for social services, small businesses, or cultural events.

PRINCIPLE 3: Create Identity

To become an attractive place for new residents and businesses, the neighborhood needs a distinct and strong identity shaped and lived by its inhabitants. Involving the residents in the restructuring process through participation activities and information events is essential. The central square forms the core of the neighborhood's identity, with its high density of buildings and public and cultural functions. By integrating living and working, a strong sense of identification is created, turning Grünau into a mixed neighborhood where living, working, and leisure can coexist.

PRINCIPLE 4: Climate Neighborhood

Sustainable planning and construction are inevitable for the continued development of neighborhoods. Planning a sustainable Grünau neighborhood involves integrating new housing and jobs into the overall plan. Sustainability goes beyond making new buildings as climate-neutral as possible; it also requires upgrading existing structures energetically and reorganizing transportation planning.

PRINCIPLE 5: Design Landscape

The transformation into a sustainable urban neighborhood necessarily involves redesigning the open spaces. The redesign aims to enhance the quality of stay within the neighborhood and create spaces for encounters and appropriation, such as shaded areas, urban furniture, and cooling options like water fountains and water features.

3. Urban Planning Strategy | Intervention Fields

The urban planning measures for the transformation of Residential Complex 7 Grünau are divided into cross-neighborhood and neighborhood-specific interventions. The focus is on four intervention areas:

3.1 Restructuring | Conversion

Intervention Area 1 encompasses the area around Jupiterplatz, the main square of Residential Complex 7. In the process of transforming it into a vibrant neighborhood center, renovation, conversion, and expansion measures are planned. The building of the former library will be preserved and transformed into a new neighborhood meeting place. Its height will be increased through expansion. The former Konsum building will also be preserved, refurbished, and expanded with accessible entrances from all sides. It serves as a connecting urban element to the southern part of the neighborhood. The area east of the neighborhood square will be densified, and a new urban block, consisting of small, introverted courtyards, will be created. These courtyards define the main square's boundaries and form a new spatial edge. At the same time, they remain permeable, offering flexible space and usage qualities that are crucial for a neighborhood center. The shopping strip to the west of the square will be upgraded and modified, clarifying the previously undefined spatial edges through expansion and extensions. This will make the undefined spatial edges more discernible in the street space. Upon arrival in the neighborhood, visitors will be led to the main square through a representative neighborhood promenade. The main square will be emphasized in the urban context and receive a distinct square character.

As part of the restructuring and redesign of the neighborhood center, and with the potential mix of residential, service, commercial, and industrial uses, a stronger activation of the neighborhood is targeted. The newly designed ground floors are particularly suitable for this purpose. Various-sized spaces will be provided for commercial use, such as cafés, neighborhood meeting places, laundries, etc. This enhancement will also enliven the street space. Communication places, such as a neighborhood center with multifunctional usable rooms, will be created. The functions of living, working, supply, commerce, services, and gastronomy will now be combined according to the principles of a productive city. The previous concept of spatially separating the functions of living and working will be abandoned.

3.2 New Construction

Intervention Area 2 comprises three undeveloped open spaces. The first currently unused space is located directly north of Jupiterplatz and will remain an open space in the future. As the area around the neighborhood square undergoes intense densification, compensatory measures need to be taken to maintain the green space, especially for the city's microclimate. By transforming the currently undefined lawn area into a green activity strip, a green counterpart to the urban neighborhood square will be created, enhancing the square's value. To the north of the Green Activity Strip, a special building block, in the form of a neighborhood balcony, will be placed. It frames the urban situation and adds an additional identifying feature to the neighborhood. The second unused lawn area is located southwest of the neighborhood balcony. A new education center is planned here. In terms of its size and urban orientation, it will be in dialogue with the surrounding existing buildings, forming a clear spatial edge to the main road on the west and the green activity strip on the east. The third currently unused building plot forms the framework for the new education center northwest of the neighborhood square. A new school campus is planned here, which relates to the neighborhood square and at the same time forms its own subordinate center, expanding and enlivening the neighborhood to the southeast.

In addition to Intervention Area 2, the existing residential buildings and their planned extensions need to be mentioned. Targeted expansions and additions to the existing structures will enable the integration of new housing types into the existing residential context. The aim is to create adaptable and diverse structures, primarily in sustainable, preferably wood-modular construction. Newly integrated housing types will include assisted living communities, student housing, multi-generational living, cluster apartments, and micro-apartments.

3.3 Entrance | Transition

Intervention Area 3a represents the arrival area in Jupiterquartier. The gesture of arrival is emphasized by the placement of a new urban element. A neighborhood garage, Mobility Hub, strengthens the arrival situation and creates space for amenities such as shops for daily needs. The transition between different modes of transportation is facilitated by directing automobile traffic directly into the HUB, allowing for a clear pathway into the neighborhood. Simultaneously, the pathways leading to Residential Complex 8 will be redesigned through the Urban Forest. The Urban Forest will be transformed into a natural and discovery area, featuring educational paths and providing opportunities for use by the neighborhood schools. Meeting places and spaces for appropriation will be created along a path within the Urban Forest. Intervention Area 3b encompasses the Uranuspark, located at the transition between Residential Complex 7 and the Schönauer Viertel. A new bridge and pathway will directly connect the park to the residential area and the nearby Kaufland supermarket. It also includes an express way for bicycles to the city center and a saver option for pedestrians to other districts. The creation of new sports facilities, barbecue areas, and urban furniture will enhance the park's versatility and usability.

3.4 Public Spaces | Connecting Axes

Intervention Area 4 is divided into three main connecting axes: Axis 1, Axis 2, and Axis 3. Axis 1 is a traffic-calmed shopping street running in an east-west direction. Axis 2 is the Jupiterstraße, which serves as the main access route and will be transformed into a green retention and connecting axis. It will become the primary connection element in the east-west direction, linking the Urban Forest, the shopping street, Jupiterplatz, the new school building to the southeast, and extending to Uranuspark and Miltitzer Ortslage. Due to anticipated increased usage in the future, the creation of a bicycle highway is planned to accompany it. Axis 3 is integrated into the Green Active Belt, extending from Jupiterplatz to the north towards Quartiersbalkon. The surrounding space will be redesigned with new greenery, urban furniture, and cooling options to transform it from a transit area into a space with enhanced stay qualities. Additionally, a bicycle express route in the north-south direction will be implemented in parallel.

4. Open Spaces | Landscape Architecture

The four types of open spaces considered for the design of the ample green and open areas in the residential complex 7 Grünau are:

1 Private Green - Residential Gardens & Courtyards:

In this type of open space, the privacy and relaxation of the residents are paramount. Residential gardens and courtyards are created and associated with the residential buildings. These private green areas allow residents to use them for personal relaxation and recreation. The residential gardens can be individually designed and serve as private retreats. The courtyards can function as communal inner courtyards used jointly by the residents. Community can flourish here, fostering neighborly interactions.

2 Public Green - Parks and Green Areas:

The public green areas and parks are designed as meeting points and recreational spaces for the entire neighborhood community. These areas provide space for social interactions, play, and relaxation. The green areas are clearly defined and landscaped with trees, shrubs, and grassy spaces. Playgrounds, seating areas, bigger team sports facilities, and barbecue spots can be created to diversify the usage and recreational opportunities. These public green spaces aim to promote a sense of community and connection with nature within the neighborhood.

3 Active Green - Sports and Exercise Areas:

The "Active Green" open spaces encompass sports and exercise areas available for the physical activity of the residents. This includes sports fields, running and cycling paths, outdoor fitness equipment, or basketball courts, for example. These areas encourage an active and healthy living environment and offer opportunities for individual outdoor sports and physical activities. The design of these areas should be dynamic and functional, supporting the residents' desire for movement.

4 Urban Green - Town Squares and Promenades:

The Urban Green areas consist of town squares and promenades, serving as lively and vibrant public spaces. These open areas aim to promote social life in the neighborhood and act as gathering spots for events and cultural activities. The design can include benches, seating steps, greenery, water features, or art installations to create an attractive and appealing atmosphere. The Urban Green areas are meant to be the heart of the neighborhood, contributing to the residents' identification with their residential complex.

By clearly defining and designing these four types of open spaces, the residential complex 7 Grünau becomes a lively and diverse living environment that caters to the needs of the residents and offers a high quality of life.

5. Climate-Friendly Neighborhood | New Mobility Concept

A fundamental aspect of transforming Residential Complex 7 into a sustainable neighborhood is rethinking mobility and aligning it with ecological standards. During the district's initial planning, easy access to workplaces located beyond the residential area was prioritized. However, with the integration of living and working spaces within the neighborhood, the vast parking areas have become unnecessary. The long-term goal is to reduce public parking areas in the neighborhood and significantly decrease car traffic. Measures to achieve this include:

- 1 Mobility Hubs - Offering residents the flexibility to switch between car-sharing, bike rentals, and public transportation. Moreover, individual car parking spaces are available at these hubs.
- 2 Expansion of the Grünolino neighborhood bus line to serve all commuters efficiently.
- 3 Strengthening Car-Sharing services and installing convenient charging stations.
- 4 Introducing a bike-sharing program along with easily accessible repair stations.
- 5 Creation of a new bicycle highway - Radschnellverbindung Leipzig-Markranstädt – Urbaner Wald – Innenstadt (Leipzig-Markranstädt rapid bike connection - Urban Forest - City Center).

By promoting sustainable forms of mobility, we aim to encourage walking and cycling by enhancing street and pathway connections. This will foster seamless connectivity within the neighborhood, turning it into a "city of short distances." Gradually replacing car traffic with greener spaces will allow us to plant more trees and design larger green areas. Additionally, we plan to integrate green rooftops and facades, along with effective rainwater management. Our vision is to create adaptable and multifunctional public spaces that not only facilitate free movement for pedestrians and cyclists but also provide welcoming places for social interactions and diverse activities. Our sustainable urban planning, along with the enhanced biodiversity and climate resilience, aligns with the overarching concept of the "Sponge City Leipzig."

Furthermore, we aim to cultivate a strong sense of community by organizing local events, cultural activities, and collaborative initiatives. We believe that actively involving residents in shaping the neighborhood will contribute to its vibrancy and harmony. Through these comprehensive sustainability measures, Residential Complex 7 Grünau seeks to become a role model for future urban developments that prioritize environmental consciousness and improve the overall quality of life for its residents.