## 0. One story

I arrived in Berlin in the winter of 2013. The following week after my arrival, I started learning German as I was not good at it. I could make friends with people in similar situations at the place where I was learning German. A few months later, I became capable of having everyday conversations in German, but I still didn't have any German friends. Ironically, the time in Germany passed without me having any local friends, which led me to ponder, "How can I make a local friend." Consequently, I started considering which aspects of myself could be the connecting factors to get to know local people. Then, I realized that the elements could be my native language and my interest in architecture, which are integral to my identity and why I came to Berlin. So, I decided to visit a nearby German university where people of my age group might gather. I posted a note on the bulletin board in front of the student cafeteria, suggesting a language exchange. After that, I brought my portfolio and headed to the architecture department studio. I came across people I had encountered at the German language school there. I showed them my portfolio and engaged in various architectural discussions, which eventually led to making friends.

## 1. 25 Fragment(s)

#### a. Ambition

How can we revitalize an unattended village that has been cut off from neighbourhoods? How can diverse groups coexist and thrive together as vibrant neighbours? Eventually, the essence of these two questions is how people and places could be familiar with their surroundings. The beginning of an answer to this inquiry lies in reflecting on the essence of our own identity and the process that fragments it. My ambition in this contest is to explore the concept of fragments by contemplating the intrinsic nature of disconnected places and diverse groups. By discovering these fragments, I aim to connect or gather them and sometimes daringly separate them to give shape to new possibilities.

# b. 8 Groups

The groups that contribute to revitalizing the village will consist of German families who have lived in Regensburg for a long time, such as foreign families who immigrated during their younger years, refugees, retired seniors, single-parent households or young individuals starting their own startups, international university students from nearby, religious communities, and working professionals from the local area.

#### c. Programs

Based on eight fragmented elements that can be connected-education, care, commerce, resident community, sports, health, religion, and mobility-various programs will be designed by considering the characteristics of the eight groups. Firstly, in the education program, there will be language classes for groups from foreign countries, job coaching for young individuals or those facing challenges in their workplace, as well as diverse offerings related to health, politics, general knowledge, and more, provided by the VHS education facility, complemented by an agora-like outdoor space. In the care program, facilities will be set up to cater to the needs of residents' children, including childcare centres and playgrounds. Under the commerce program, an international supermarket and cafe will be operated by a multicultural group, receiving support from volunteer organizations, city administration, and urban green spaces. For resident community, shared open kitchens and community gardens are set up for residents' everyday use. The sports ground would provide fields for various age groups to enjoy basketball, volleyball, badminton, table tennis, and other sports activities. The health program focuses on therapy facilities for the elderly and individuals of different age groups with physical discomfort, offering services such as physical therapy, orient acupuncture and adjustment. Religion refers to the inclusion of pre-existing churches. Lastly, the transportation program offers car-sharing services for residents with the same destination and electric cars, electric bicycles, bus stops, and various transportation options.

## 2. Urban scale

# a. 25 Fragment(s) as city scale

The site is located between the nearby hospital campus and a low-density residential area. Public facilities such as schools, playgrounds, sports facilities, community education centres, dormitories, commerce, and religious buildings are scattered like fragments. Within these scattered elements, 25 new fragments

emerge, each connected and expanded based on the characteristics of public facilities, green axes, mobility, and building scales.

### b. Public connection

The 25 fragment(s), each with public spaces accessible to everyone in categories such as education, care, commerce, communication, sports, health, religion, and transportation, interact and function harmoniously with the existing scattered public spaces. Additionally, through the development of an application, anyone can easily reserve and utilize these spaces.

## c. Green axis

The site would be connected in all directions using the pre-existing trees located on the north side of Ludwig-Thoma-Straße, the east side near the university botanical garden, the south side adjacent to the TV tower green space, the west side of the residential area green space, and the urban green space to be created on Vitusstraße.

## d. Mobility

Currently, car-sharing points are centred in the university area, making it difficult for residents to access them; thus, there is a demand for car-sharing points that are accessible to residents. Additionally, there is the inconvenience of going through the busy streets around the university or the old town to reach the central station via public transportation. A new mobility axis will be established on Vitusstraße, featuring sharing cars and bikes and a bus stop to address this matter.

# e. Building form

Starting from the lower floor houses in Ganghofersiedlung on the west side, the scale gradually increases towards the east with timber-framed block structures, linear blocks, and finally, the massive blocks of the university area. In this context, the seemingly out-of-place linear block building on the site harmonizes with its surroundings through the installation of timber pergolas on the roof and balconies.

# 3. Neighbor scale

# a. 25 Fragment(s) as neighborhood scale

The pre-existing cut-off green spaces, underutilised parking areas, and disconnected ground-level residences form fragmented relationships with the surroundings. Based on the urban context, these fragmented spaces are reorganised along the public mobility axis Vitusstraße and the resident axis Adalbert-Stifter-Straße. The fragmented spaces, diversified through various programs, are reorganised along five axes to create a new neighbourhood appearance.

#### b. Five axes that have various publicity

The five axes consist of the mobility axis of Vitusstraße as the starting point, followed by two fragmented axes, the green axis centred around the pre-existing trees and the resident axis of Adalbert-Stifter-Straße. The first axis, which is the mobility axis, provides facilities such as education, commerce, and health, along with urban green spaces, making it the most public-oriented axis. Behind this, in the second public axis, agora, community gardens, and urban forests are placed in harmony with the diverse facilities of the first axis, allowing residents to access these amenities. The third axis comprises facilities closely related to the residents, such as childcare centres, playgrounds, sports fields, and flower gardens. Following this, the fourth axis features a forest area with pre-existing trees and tree bridges, serving as a resting place for the residents. Finally, on Adalbert-Stifter-Straße, the ground-level spaces consist of individual gardens for existing residents, occasional meeting spots, and public roads.

#### c. Circulation & Crossing points

The circulation paths consist of three main routes: direct access roads from public roads like Vitusstraße and Adalbert-Stifter-Straße, four internal paths that circulate within the site, intersecting diagonal paths, and a green axis path. The four routes overlap, creating various intersections, where elements like tree islands, pavilions, pv-pergolas, and small ponds are placed to provide residents with places of diverse themes for chance encounters and gatherings.

Various environmentally friendly elements have been applied as follows: the reuse of pre-existing garages as sharing stations, waterways and small ponds created along the paths for rainwater reuse, rooftop gardens, PV panels used at crossing points, and preservation of pre-existing trees and green axis connections.

## 4. Building scale

### a. 25 Fragment(s) as building scale

As the sites within the village are fragmented, various aspects are also fragmented within residential buildings. There are three main degrees of fragmentation: on the first floor, there is complete fragmentation that is open to everyone; on the rooftop, there is fragmentation for the residents; and on each floor, there is limited fragmentation through shared living spaces, home offices, and segmented small apartments.

## b. Conversion & Modernisation

Firstly, renovation and modernisation methods will be proposed instead of demolition for buildings eligible for reconstruction. It aims to avoid the consumption of grey energy associated with demolition and new construction and maximise existing structures' potential. Furthermore, these buildings will be developed consistent with other structures along Vitusstraße, ensuring harmony within the surroundings. The modernization of existing buildings consists of five main elements. Firstly, the installation of elevators for 100% accessibility, the transformation of the rooftop into a public space, installing PV pergolas and the addition of balconies, the replacement of insulation materials, and finally, various internal floor plan modifications. An elevator will be installed directly in front of the residential entrances, connecting them with the existing stairs. The rooftop will be transformed into a green public space with PV panels integrated into pergolas, providing residents with new meeting places. Additional balconies will be added to improve the quality of indoor spaces and strengthen the relationship with the outdoors. Various floor plan types will include drywall removal, minor structural wall modifications for door sizes, and utilizing existing shafts for equipment, resulting in six main ground floor plan types and four main residential floor plan types. Diverse functions will be accommodated on the ground floor, including vhs education facilities, communal kitchens, cafes, multicultural supermarkets, childcare centres, and healthcare facilities. On the residential floors, there will be shared living rooms, shared offices, two-room apartment types, and open studio types.

#### c. New construction

Using timber modular construction and deck access apartments in new buildings is proposed. Firstly, the timber modular construction method minimizes on-site concrete casting, reducing grey energy consumption and minimizing local disturbances. Through this modular approach, construction becomes simple and fast. Additionally, deck-access apartments create possibilities for interactions among residents and allow for partial indoor living spaces to open up to the outside, making them highly suitable for communication. Moreover, with an elevator and staircase, these apartments can economically accommodate many residents.

#### d. Form

In terms of form, a gable roof proportion commonly seen in Regensburg would become a motif. In modernized buildings, balconies and rooftop pergolas are used to create various forms and sizes resembling pitched roofs, reducing the bulkiness of the buildings and harmonizing with the surroundings. Similarly, in new construction buildings, the form is composed in the same context, incorporating zigzag-shaped balconies and pergolas inspired by a gable roof, proposing modern yet harmonious new buildings with the surroundings.

#### f. Sustainability

The environmental elements in modernised buildings are as follows: 30-50% of electricity independently through installing PV panels on the rooftop and building sides and air-based heat pumps for heating energy. The city's supply supplements any additional energy requirements. Moreover, rainwater collected on the rooftop is not immediately drained but reused in the rooftop and balcony greenery. The same approach is applied in new buildings, and geothermal energy-based heat pumps are proposed. As mentioned earlier, the use of timber modular construction can also be considered an eco-friendly element.

### 5. Process

The site development is proposed in stages, focusing on strong axes. In the initial phase, development proceeds with the central axis intersecting Vitusstraße and Adalbert-Stifter-Straße as the main focus. This phase includes the development of two buildings along Vitusstraße, the creation of a mobility hub, and the renovation of existing green spaces. In the second phase, the remaining buildings in need of modernization and their adjacent external spaces are developed together. Finally, the development concludes with constructing of new buildings on the designated sites, renovating green axes, and introducing new external elements at intersections.

#### 6. Technical Information

Site Plan		Parking	
Street	12.000 m <sup>2</sup>	Car_resident	
Buildings	8.500 m <sup>2</sup>	- Adalbert-Stifter-Straße	102
Forest	11.000 m <sup>2</sup>	- Existing Basement	31
Green Block	5.000 m <sup>2</sup>	- new parking area	55
Green Island	1.500 m <sup>2</sup>	Car_sharing	15
Urban Green	3.500 m <sup>3</sup>		
Vegetable Garden	1.000 m <sup>3</sup>	TOTAL	203
Agora	1.000 m <sup>2</sup>		
Sport Ground	1.000 m <sup>2</sup>		
Playground	3.000 m <sup>2</sup>	Bike_resident	500
		-Basement	
Resident Parking	1.400 m <sup>3</sup>	Bike_sharing	50
Sharing Parking	600 m <sup>2</sup>		
(sharing car & bike)		TOTAL	550
TOTAL	49.500 m <sup>2</sup>		

#### New Building

	T1	T2	тз	T4	<b>T</b> 5	Т6	Bike	NFA	GFA
BF	0	0	0	0	0	0	32	240m <sup>2</sup>	290 m
GF	0	0	0	0	0	2	0	240m <sup>2</sup>	290m <sup>2</sup>
1F	0	1	0	1	2	0	0	320m <sup>2</sup>	404m <sup>2</sup>
2F	2	1	2	0	0	0	0	312m <sup>2</sup>	378m <sup>2</sup>
3F	2	1	2	0	0	0	0	319m <sup>2</sup>	370m <sup>2</sup>
TOTAL	4	3	4	1	2	2	32	1.431 m <sup>2</sup>	1.732㎡