

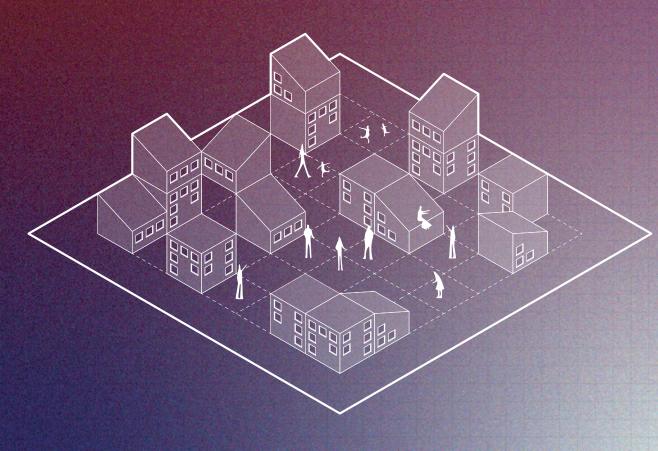
Fostering Integration of Refugees Through Flexible and Inclusive Design

Master Thesis in Architecture

DIA Studio: Days After Disaster

First Advisor: Eric Helter

Second Advisor: Roger Bundschuh



Tomás Guerra Henao DIA - Hochschule Anhalt 2022/2023

Table of Contents

Chapter 1 An Overview of Migration

Chapter 2 Being a refugee in Germany

Chapter 3

The Role of Humanitarian Architecture

Chapter 4

Berlin: Case Study / Analysis

Chapter 5

Design Proposal

62

54

8

18

28

Objective - Methodology

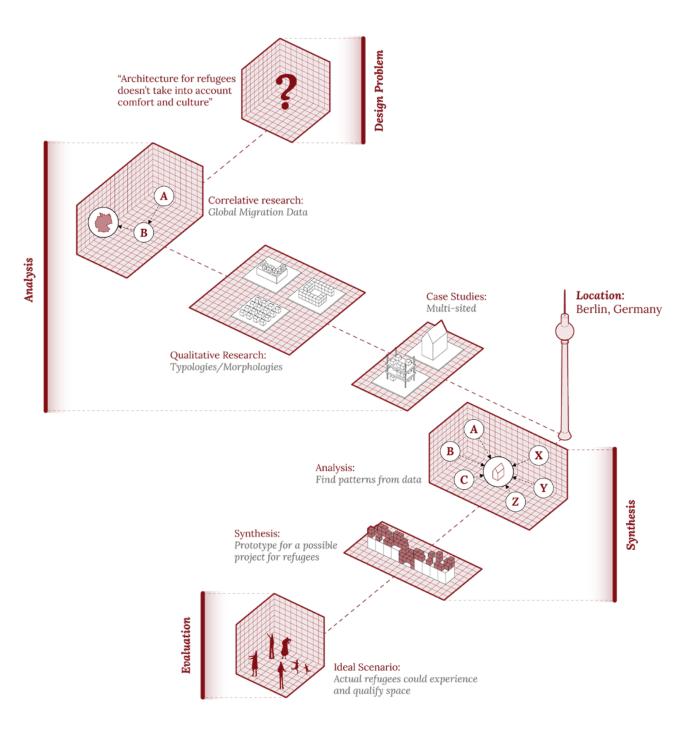
In order to achieve a holistic overview of the complex situation that entails refugee housing, this research utilized a **mixed methods** approach. By benefiting from both quantitative and qualitative methodologies, the project would be justified by the relationship of variables that would in turn propose a more integral and humane approach to refugee housing in Germany. To achieve this, the research methodology employed three types of methodologies: correlational research, qualitative research, and the use of multi-sited case studies.

Correlational research was used to provide insight into the social, political, and contextual factors influencing global migration flows. This methodology used statistical data to provide an overview of refugee routes worldwide and drew from official German sources to provide context on the situation specifically in Germany.

The **qualitative research** component of this study utilized an interpretive approach to provide insight into the psychological and emotional experiences of refugees on their journey to Germany. This approach was used to contextualize the realities that migrants face and explore the potential for implementing an architectural project that addresses their specific needs. Additionally, the research utilized typologies and morphologies to identify the prevailing design choices for refugee housing in Germany and to identify neighborhoods in Berlin where a project could be located according to community sensitivities.

Lastly, a **case study methodology** was used to examine existing refugee housing projects and their design choices. Through this approach, the research aimed to analyze the concepts and design features used in these projects to identify correlations that could be used in the proposed project. By employing these methodologies, this research was able to provide a more comprehensive and informed approach to the design of refugee housing in Germany.

Research Model



Chapter 1

An Overview of Migration

Figures on Migration

Human mobility in data

Today, it is common to read in the news about migrants, refugees, and asylum seekers, and the struggle associated with the response that host countries provide toward them. But what goes behind migration? Why are different terms used to describe the movement of humans? And more importantly, why, in an increasingly globalized world, are borders closer than ever before? What goes behind the psychology of the migrants that leave their culture and families looking toward a better future?

In order to provide a background to these questions, it is imperative to survey the data regarding migration flows. The current global estimate (according to the UN Department of Economic and Social Affairs) states that there were around 281 million international immigrants in the world in 2020 (3.6% of the population). This data includes not only "forced" migration, but also migration due to work, family, etc. (McAuliffe, M. and A. Triandafyllidou, 2021)

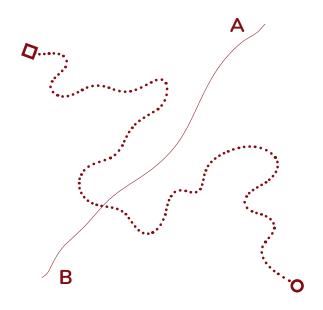
Trending Upwards

Migration in general has increased over the past 50 years. This coincides with today's relatively more affordable means of long distance travel. Migrants went from 83 million during the seventies (2.3%), to 281 million today (3.6%). Today, Europe is the largest receptor of international migrants (30.9%), closely followed by Asia (30,5%) and North America (20,9%).

According to the World Migration Report (IOM UN Migration), migration is not a phenomenon that is uniform across the world, this means that there is a complex mix of political, economic, geographic, religious and cultural factors that determine the flows of human resettlement.



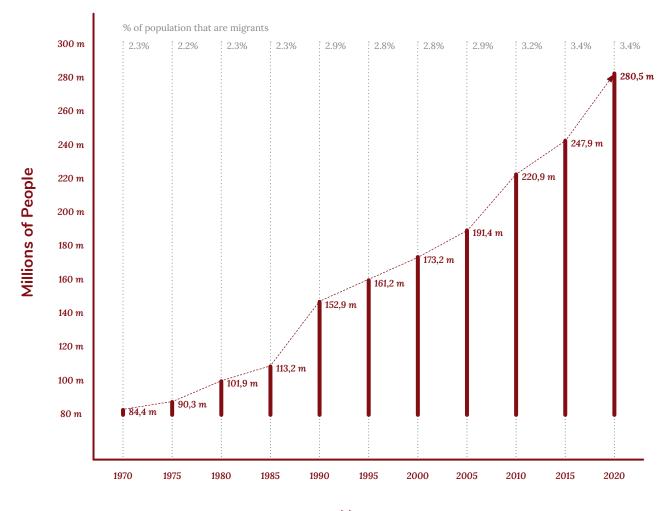
Total of international migrants in the world (2020)



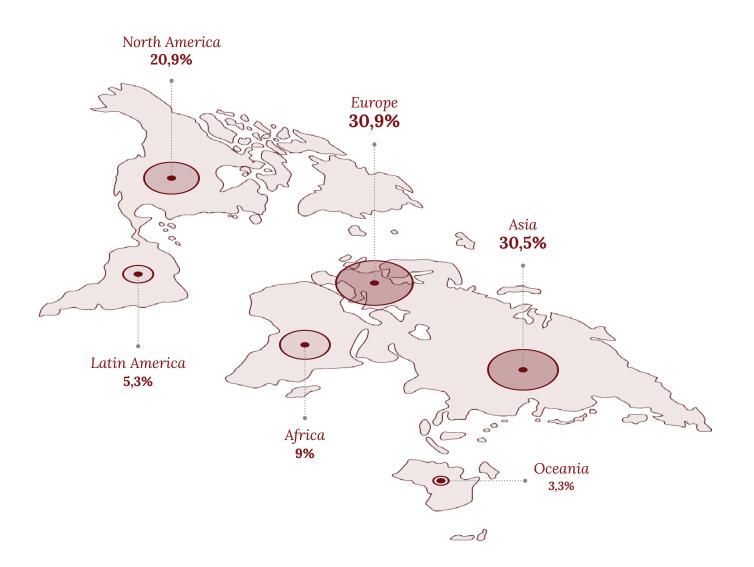
3,6%

Of the total world population is a migrant

Number of migrants through time (1970-2020)



Percentage of refugee hosts by continent



*Data acquired from the UNHCR Global Trends Report 2021 (United Nations Refugee Agency) + IOM Migrants ≠ Refugees

Classifying Migration

Forced Displacement

According to the United Nations, there are currently 281 million migrants worldwide (UNHCR, 2022), of which approximately 90 million were forced to leave their home countries due to conflict, persecution, or other forms of displacement. The UNHCR, the UN agency responsible for refugees, asylum seekers, and stateless persons, provides definitions and terminology related to human mobility.

Migrant: Any individual that moves from their home country to a foreign one.

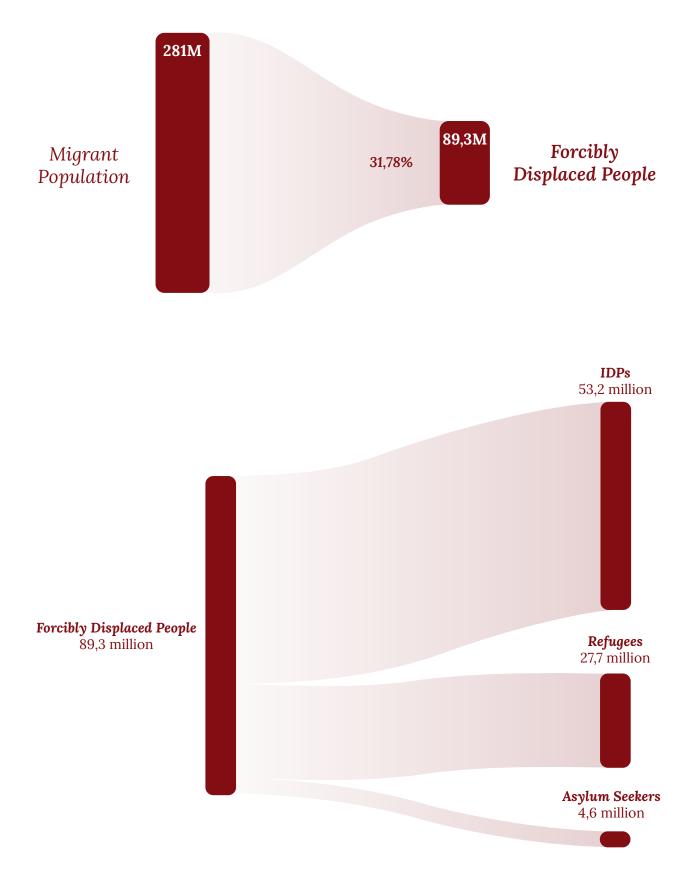
Refugee: A migrant that did so under the condition of being forcibly displaced, in this case the host country granted refugee status.

Asylum Seeker: A migrant that was forcibly displaced from their own country. The Asylum Seeker is a temporary state as the host country processes refugee application.

Internally displaced person (IDPs): An individual forcibly displaced from its home, but opted to remain in their home country.

The nature of forcibly displaced persons is dynamic and usually associated with the economic situation and political unrest of the home countries. These include but are not limited to war, famine, economic collapse, political instability, among others. In recent years climate change has also become a prevalent reason for forced migration. These events encompass nature-based situations that made the original homes of settlers inhospitable, situations such as flooding, earthquakes, landslides, among others that are becoming increasingly more apparent, thus creating a new wave of relocation that will become a challenge in the years to come.

With the 2022 Ukrainian situation and other displacements around the world, it is estimated that today more than **100 million people** are actively forcibly displaced worldwide.



*Data acquired from the UNHCR Global Trends Report 2021 (United Nations Refugee Agency) + IOM

Towards a Brighter

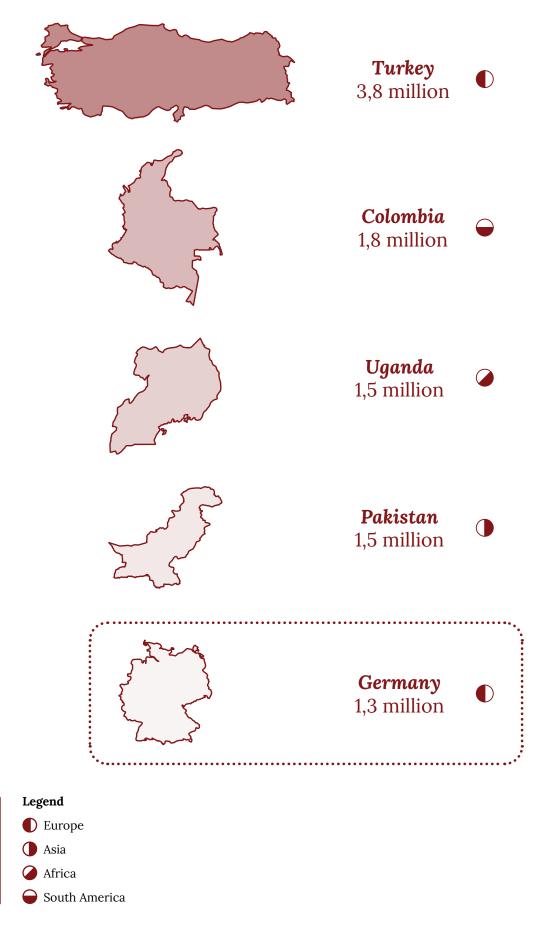
Future..?

International migration is typically a well-considered and deliberate decision. Although some people may be compelled to leave their home country due to conflict, or other circumstances, most migrants relocate by choice.

Common reasons for migration include pursuing higher education, finding better job opportunities, or reuniting with family members. Regardless of the specific motivation, migrating to a foreign country usually involves careful planning and preparation, including navigating bureaucratic procedures like obtaining visas and securing accommodations.

In contrast to voluntary migration, forcibly displaced people often lack the freedom to choose where they go. While many internally displaced persons (IDPs) are able to find refuge within their own borders (approximately two-thirds of forcibly displaced people), refugees often face significant challenges that require them to leave their home country entirely. For refugees, this entails adapting to a new culture, language, and way of life, often with limited resources or support.

Top refugee hosts (2021)



14 An Overview of Migration

Focus of study

The analysis presented here makes it undeniably clear that the situation of forced displacement and mass migration is deteriorating with each passing year. The data reveals a consistent upward trend, indicating a growing number of individuals and communities uprooted from their homes due to various socio-political, economic, and environmental factors.

It is evident that refugees and migrants tend to gravitate toward wealthier nations, seeking better living conditions, safety, and prospects for a more secure future. This pattern is understandable, as affluent countries often possess the necessary resources and infrastructure to support incoming populations. However, it also places a significant burden on these host nations, requiring them to address the challenges of integration, provision of basic services, and cultural diversity management.

While the global perspective provides a broad understanding of the migration crisis, this research will specifically focus on the situation in Germany. Germany has emerged as one of the key destinations for refugees and migrants, driven by its strong economy, generous asylum policies, and commitment to human rights. By narrowing the scope to Germany, this study aims to shed light on the unique challenges faced by both the host country and the migrant population, as well as the strategies employed to facilitate their integration and harmonious coexistence. **Chapter 2**

Being a Refugee in Germany

Background of Immigration in Germany

European Phenomena

No one flees without need. Forced migration has been a significant phenomenon in Europe for many years, with millions of people having been displaced from their homes due to conflicts, persecution, and other forms of violence. In recent years, the majority of refugees arriving in Europe have come from Syria, Afghanistan, and Iraq. These three countries alone accounted for over half of all asylum applications in the European Union in 2020.

The European Union has remained relatively open to address the challenges associated with forced migration, including the provision of support for refugees and asylum seekers. Germany is by far the most welcoming European state, at least in numbers, with over 220 thousand new applicants asylum applicants in 2022. This is followed by France and Spain.

In recent years, the number of refugees and asylum seekers arriving in Europe has decreased significantly, although there are still many challenges that need to be addressed, including the integration of refugees into European societies, ensuring their human rights are protected, and preventing discrimination against them.

Syrian Civil War (2011)

The Syrian Civil War became a breaking point in European response to migration. The crisis (that began in 2011) became especially acute in 2015 and 2016, when thousands of refugees arrived in Europe, many of them traveling through Turkey and then crossing the Mediterranean Sea to reach Greece and Italy. This influx of refugees put significant strain on European countries, which struggled to provide adequate support and resources for the new arrivals.

Germany, in particular, played a leading role in responding to the refugee crisis, with a so called "open-door policy" for Syrian refugees in 2015. This decision was praised by many as a humanitarian response to the crisis, but it also generated significant controversy and political opposition within Germany and elsewhere in Europe.

Refugees in Germany by country of origin

Germany is the country that hosts the most refugees in Western Europe, and is third in the world altogether. This accounts for more than **2,2 million refugees** in mid-2022.

Legend Germany Ukraine (undefined) Syria (70,9K) Afganistan (36,3K) Turkey (23,9K)

Measured by the number of asylum applicants in Germany in 2022 (BAMF)

Choosing a destination

The "Open door policy"

Germany's open door policy towards refugees has garnered significant attention and shaped the country's response to the ongoing refugee crisis. The policy, which was initially implemented during Angela Merkel's turn in 2015, signaled a commitment to providing sanctuary and support to those fleeing war, persecution, and humanitarian crises.

Germany has experienced a substantial influx of refugees in recent years. According to official statistics, the country received over 2,2 million asylum applications between 2015 and 2022. This surge in arrivals has significantly transformed the demographic landscape of Germany, presenting both challenges and opportunities for the nation.

Syria has consistently topped the list of refugee incomers, with a large number of Syrians seeking safety from the ongoing civil war. Other significant source countries include Afghanistan, Turkey, and most recently, Ukraine.

The decision to open its doors to refugees was not without controversy and posed significant logistical and integration challenges for Germany. The sheer scale of the influx strained existing infrastructure, including housing, healthcare, and educational facilities. Furthermore, the cultural and linguistic diversity of the incoming population required a comprehensive approach to integration and social cohesion.

Debates arose regarding the potential strain on the welfare system, security concerns, and the overall capacity to successfully assimilate such large numbers of newcomers. These discussions continue to shape public opinion, policy formulation, and the ongoing implementation of integration measures.

Road to "freedom"

Most of Germany's refugees come from the Middle East, or more recently, Ukraine. The **Western Balkan Route** is one of the main migratory paths into Europe.

Legend

- By foot or car
- By boat
 - By plane

Data acquired from the Council of the European Union (EU Migration Policy)

How to get to Germany?

The Western Balkan Route

Displaced persons traveling to Germany typically do so by a plethora of means, depending on their country of origin and the route they take. One of the most common routes to Germany in recent years has been through the Western Balkans, which refers to the countries of southeastern Europe, including Serbia, Bosnia and Herzegovina, and Croatia.

Refugees traveling through the Western Balkans often get to begin their journey by leaving their home countries towards Turkey, where they may stay in refugee camps or rely on smugglers to help them cross the border into Greece. From there, they may travel through Macedonia and Serbia, often on foot or by bus, before reaching the Croatian border.

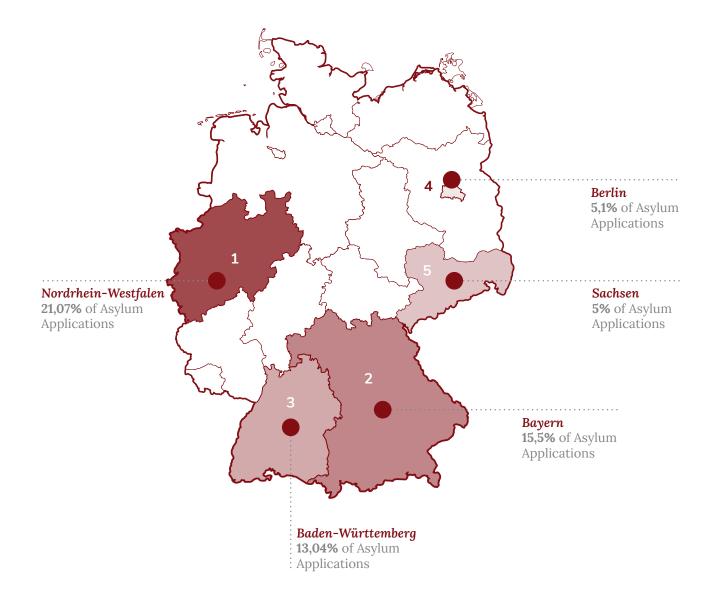
Many refugees who travel through this route face significant risks and challenges, including dangerous terrain, extreme weather conditions, and exploitation by smugglers and traffickers. In addition, border crossings and security measures in the region can be unpredictable, and refugees may be subject to arbitrary detention or deportation. Despite these challenges, many refugees continue to make the journey through the Western Balkans to reach Germany, where they hope to find safety and opportunities for a better life.

The German government has implemented various policies and programs to support refugees who arrive in the country, including language classes, job training, and access to healthcare and housing. However, the process of integration and adjustment can be difficult and complex, and many refugees continue to face challenges in adapting to their new lives in Germany.

Welcome to Germany! Now what?

Distribution of refugees in Germany

by federal state (2022)



Data acquired from BAMF - German Federal Office for Migration and Refugees

The Refugee Experience in Germany

The process of achieving refugee status in Germany usually involves a heavily bureaucratic application, which in turn makes it a lengthy process. In order to be granted refugee status, an individual must apply for asylum with the German government and demonstrate that they meet the criteria for protection under international and national law.

Upon arrival in Germany, asylum seekers are typically required to register with the authorities and undergo an initial screening process to determine their eligibility for asylum. This process can involve interviews, document checks, and medical examinations (BAMF, 2019).

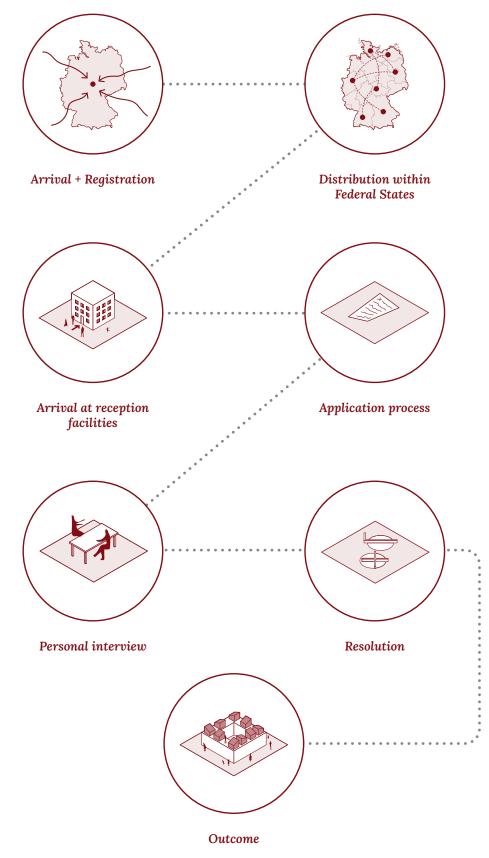
If an asylum seeker is deemed eligible for protection, they will be given temporary accommodation and support while their application is being processed. This can take several months or even years, depending on the individual case and the capacity of the German asylum system.

Usually, asylum seekers are housed in large reception centers or camps, where they are housed in shared rooms with limited privacy and space. These facilities are often overcrowded, and conditions may be basic or even substandard, with limited access to facilities such as kitchens, bathrooms, and recreational areas. Today, the German government has sought to improve the living conditions of asylum seekers. However, many continue to face significant challenges in the temporary accommodation system. These include social isolation, mental health issues, and discrimination, as well as practical concerns such as inadequate food or medical care.

During the application process, asylum seekers are expected to provide evidence and documentation to support their claim for asylum, including information about their country of origin, the reasons for their flight, and any experiences of persecution or violence they may have suffered.

Once a decision has been made on the asylum application, the applicant will be notified and, if successful, granted refugee status. This status allows the individual to remain in Germany and receive protection and support from the government, including access to housing, healthcare, and education.

The steps to become a refugee



Data acquired from BAMF - German Federal Office for Migration and Refugees

How will the refugee situation in Germany change *moving* forward?

From the previous analysis, it becomes evident that the current approach to managing the influx of refugees lacks efficiency and fails to provide a truly welcoming experience. In this context, the role of architecture becomes crucial in shaping a more inclusive and supportive environment for refugees.

The slow administrative procedures imposed on refugees contribute to prolonged waiting periods and uncertainty, exacerbating the already challenging circumstances they face. The lack of coordination and streamlined processes hinders their integration into German society and perpetuates feelings of isolation and disempowerment. It is essential to acknowledge the urgency of addressing these issues and to recognize the potential of architecture to play a transformative role.

In this thesis, the focus will be on designing a hypothetical project aimed at providing housing for refugees who have recently arrived in Germany. This particular stage of the refugee process presents a critical opportunity for improvement, as the existing facilities during this phase are often inadequate and refugees face significant barriers in accessing permanent housing of their own. By addressing this specific stage, the project seeks to address the precarious living conditions faced by refugees and enhance their prospects for secure and dignified accommodation. **Chapter 3**

The Role of Humanitarian Architecture

The Reality of Refugee Architecture

A Home Away from Home

Becoming a refugee means becoming vulnerable, and architecture plays a crucial role in mediating this experience. The most private place a person can be is at home, therefore leaving it behind when seeking safety and well-being entails leaving a core piece of one's life behind.

As a refugee, this intimate space becomes one of uncertainty, lacking the comfort of choice and security that a permanent home offers. While architecture cannot change the underlying factors that lead to migration, it can influence the conditions that make migrants feel safe and comfortable.

In the setting of war or climatic conditions, the loss of shelter signals a shift in label, in which a "resident" becomes a "migrant" or a "refugee". In this setting, architecture is reduced to its most basic form of being a "shelter".

Refugee housing can take various forms, depending on factors such as the number of incoming refugees, the socio-political context of the host country, and the specific circumstances of each refugee population. In some cases, these spaces can signify refuge, offering a sense of safety and comfort for those seeking asylum. However, in other cases, refugee spaces can become sites of containment, emphasizing the displacement and separation of refugees from local society. The form these spaces take can be influenced by various factors, including architectural design, policy decisions, and public perception of refugees.

In the case of refugee camps, the design of shelters often prioritizes efficiency and cost-effectiveness. Modular designs that can be easily assembled and disassembled are preferred, with lightweight materials commonly used. These shelters, often in the form of tents, provide only the most basic necessities, with cultural distinctions and individual needs often overlooked in order to provide temporary shelter for a vulnerable population.

In host countries, refugee architecture is often described as "temporary," suggesting that the refugee situation will eventually come to an end. However, in many cases, these temporary camps become permanent settlements due to a variety of factors. This blurring of the context of refugee architecture highlights the complexity of the issue and the need for flexible and adaptable solutions that can respond to the changing needs of refugees over time.

The Logistics of *Emergency* Housing

The United Nations High Commissioner for Refugees (UNHCR) is the entity responsible for coordinating the development of settlements and housing units for populations in emergency contexts such as forced migration due to conflict or climatic events.

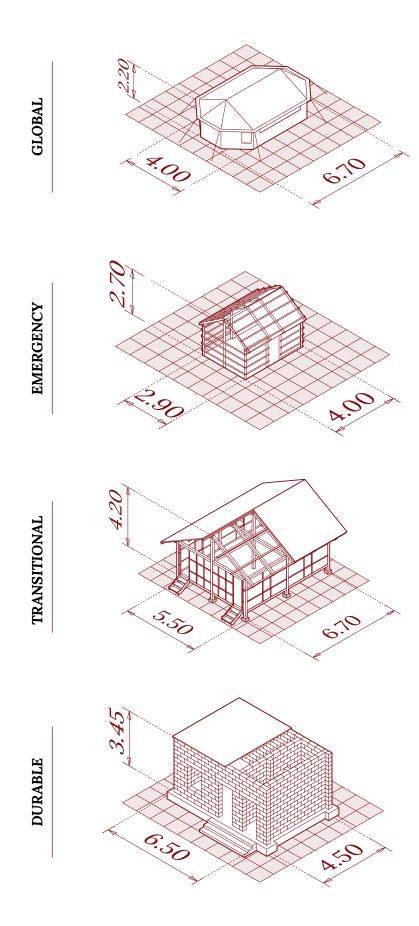
The UNHCR Executive Committee mandates that: "Refugees and asylum seekers should receive all necessary assistance and be provided with the basic necessities of life including food, shelter and basic sanitary and health facilities." (UNHCR. 2016) In this context, a shelter is a fundamental component of this assistance, providing security, personal safety, and protection from the elements while also upholding human dignity.

However, not all shelters are created equal. Comfort and functionality depend on adapting the design to the climatic, geographic, social, and cultural contexts, as well as the availability of local construction materials.

The UNHCR Shelter Design Catalogue classifies shelters based on the temporality of the event: Global Shelter Designs, Emergency Shelter Designs, Transitional Shelter Designs, and Durable Shelter Designs. From this catalogue it can be inferred that in a emergency context, *the tent* is the most sought of method of shelter due to its simple assembly and relative cost-effectiveness. However, this approach assumes that the housing units will be temporary. In reality, many refugee camps evolve into permanent settlements due to the complex logistics and the uncertainty of events that led to the population's displacement. This focus on temporary shelters neglect the long-term needs of refugees, who often end up living in these spaces for extended periods of time.

The catalogue does include design methods for more permanent, or "durable" shelters that use locally available materials. However, these shelters often suffer from the same issue as their more temporary counterparts in that they are typically designed as a standard unit repeated sequentially, without taking into account the need for personalization and a sense of home.

UNHCR Shelters



UNHCR Family Tent Everywhere

Area: 23 m2 Assembly: 2 persons Duration: 1 year Cost: 420 US\$

Wooden Gable Frame Shelter

Ajuong Camp, South Sudan

Area: 12 m2 Assembly: 1 skilled + 2 persons Duration: 1 - 1.5 years Cost: 299 US\$

Twin Elevated Shelter

Kachin State, Myanmar

Area: 36 m2 Assembly: 3 persons Duration: 2-4 years Cost: 658 US\$

One Room Shelter Sindh Province, Pakistan

Area: 25 m2 Assembly: 4 persons Duration: 10 years Cost: 1949 US\$

Refugee Architecture in an *Urban Context*

Urban planning approaches for accommodating population influx vary significantly between the "Global South" and the "Global North (Slater, J., 2014). In the Global South, where many refugees originate, neighboring countries face a substantial challenge in handling the influx of people seeking refuge.

This mass migration creates an urgent need for swift decision-making and uncertainty in determining suitable sites for refugee settlements. As a result, the settlements here are typically established wherever available plots of land can be found, often in close proximity to the borders of the refugees' home countries.

Given the urgency of the situation, these refugee camps are frequently disconnected from the existing economic networks of the host country. This poses a significant challenge for refugees who aspire to gain independence and integrate into the local economy. Furthermore, the limited access to employment opportunities and the lack of proximity to economic centers hinder their ability to improve their situation and become self-sufficient within their new environment. These camps themselves often become isolated enclaves that stand apart from the surrounding areas, creating a perception that they are places where individuals deemed "undesirable" are contained (Slater, J., 2014).

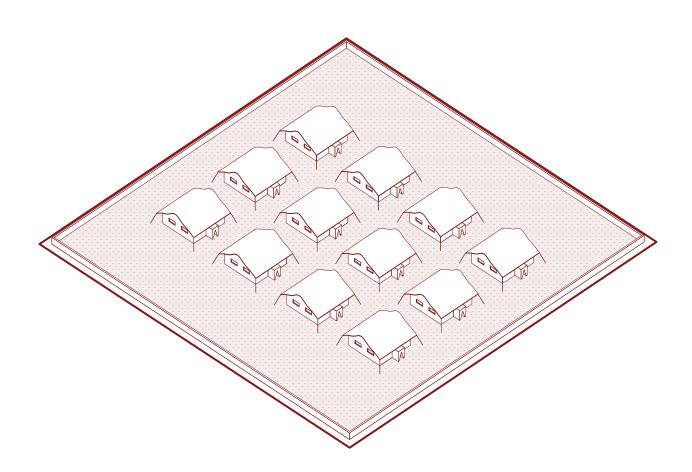
The question arises as to what extent urbanists, architects, and designers have control and influence in creating settlements that truly enhance the quality of life for refugees. There is a concern that the phenomenon of "over-designing" refugee camps, where structures and layouts are rigidly imposed, may be an intentional attempt to dictate a particular way of life onto the inhabitants. However, the approach should shift towards designing camps that prioritize openness and flexibility, allowing residents to shape and personalize their own lives within this new environment, fostering a sense of community and dignity.

One way in which a sense of "*imposition*" is exerted in refugee camps is through the use of lightweight materials for constructing the shelters. This choice of materials often reflects the host country's perception that the situation is temporary, despite the reality that many refugees face prolonged displacement. An example of this is the Zataari Camp in Jordan. Established in 2012 following the onset of the Syrian Civil War, it currently hosts the largest Syrian refugee population outside their homeland. The initial influx of refugees was rapid, making organization challenging, and as a result, the camp expanded in an organic manner. Interestingly, a dichotomy emerged between the base grid provided and the subsequent construction by refugees themselves. Permanent structures were built alongside temporary ones, transforming the camp into a city with stores and amenities. Despite the initial precariousness of facilities, the camp now boasts an extensive network of services, including schools, health centers, markets, and community spaces (Slater, J., 2014).

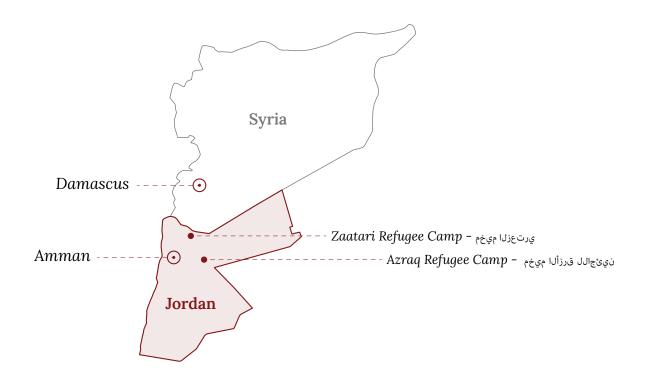
Learning from this experience, the United Nations High Commissioner for Refugees (UNHCR) established a second camp called Azraq. Unlike Zaatari, Azraq was designed with a more comprehensive infrastructure from the beginning, including electricity, water, and sanitation systems, as well as better-equipped schools and health facilities. However, the lack of flexibility became apparent as everything was pre-built before the arrival of the refugee population. This rigidity led to strict policing by local authorities to preserve the original design. Nevertheless, refugees found ways to adapt and change the layout to suit their needs, much like in an established city.

Perceptions of the two camps would vary among individuals. In isolated camps, an informal settlement can provide a sense of belonging, despite potential shortcomings in facilities. On the other hand, a more organized settlement like Azraq can offer a higher quality of life due to planned infrastructure and adherence to minimum standards. However, there may be a sense of imposition from the designers. Striking a middle ground is crucial, allowing refugees to actively participate in the design process and shape their living environment, fostering a stronger sense of home. It is imperative to recognize that a refugee camp, much like a city, should be flexible enough to accommodate change and better reflect the will and values of its inhabitants.

Camps were allocated on the periphery of Jordan, close to the borders of their neighbors. A debate arises to ask if this decision was taken due to closeness to country of origin or premeditated exclusion from the urban networks.



"Basic layout of a refugee camp"







Zaatari Refugee Camp

Zaatari, Northern Jordan

- + Established 2012
- + Emergency planning disorganized
- + Decentralized services
- + Shelters are "temporary"
- + Variety in shelters
- + Built as situation demanded

Azraq Refugee Camp

Azraq, Eastern Jordan

- + Established 2014
- + Long-term planned
- + Centralized services
- + Shelters are fixed
- + One standardized shelter
- + Conceived as evolution of Zaatari

Minimum Standards of Comfort

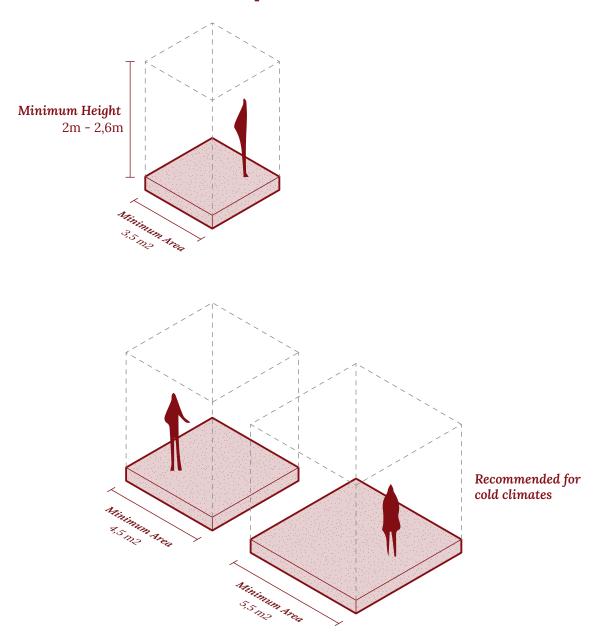
In the field of humanitarian architecture, standardization and efficiency have proved crucial in providing a prompt response to crisis events. To achieve this, several guidelines have been developed.

The Sphere Minimum Standards stand out as a practical guide for shelters and settlements in humanitarian contexts. These standards are grounded in the principles of the Humanitarian Charter and serve to ensure minimum levels of assistance across various sectors, including shelter, to guarantee a basic level of comfort and support in humanitarian settlements.

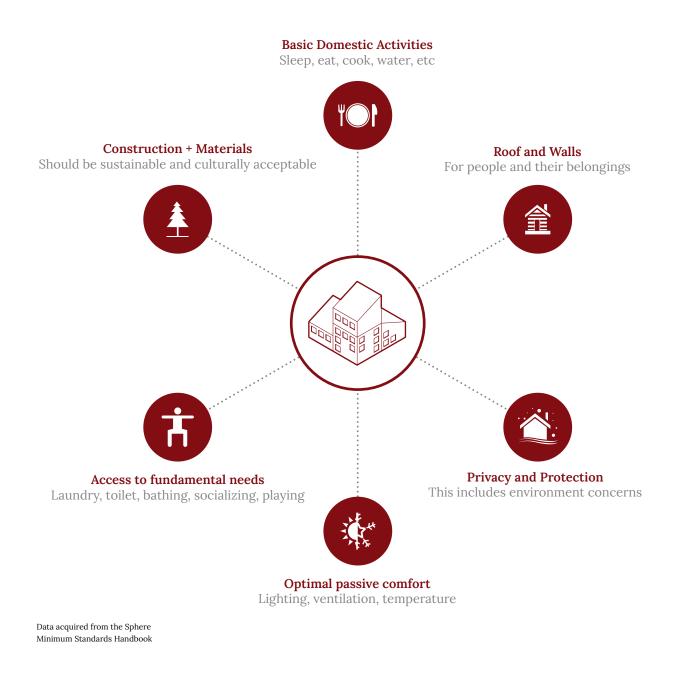
Of note of this specific guideline is the determination of minimum floor area requirements for shelter units, which aim to recognize the importance of providing adequate living space to promote the physical and mental well-being of displaced individuals (Sphere Association, 2018).

According to the guidelines, the minimum floor area for emergency shelter per person is 3.5 square meters, while the recommended minimum for longer-term shelter is 3,5-4,5 square meters per person. In cold climates, this minimum is increased to 5,5 square meters, in terms of free-height space, a minimum of 2-2,6 meters should be respected.

By adhering to these guidelines, a first approach can be made towards preventing issues such as overcrowding, ensuring privacy, and facilitating the fulfillment of essential daily activities within the shelter environment. By providing sufficient living space, these contribute to creating a more dignified and supportive environment for displaced populations.

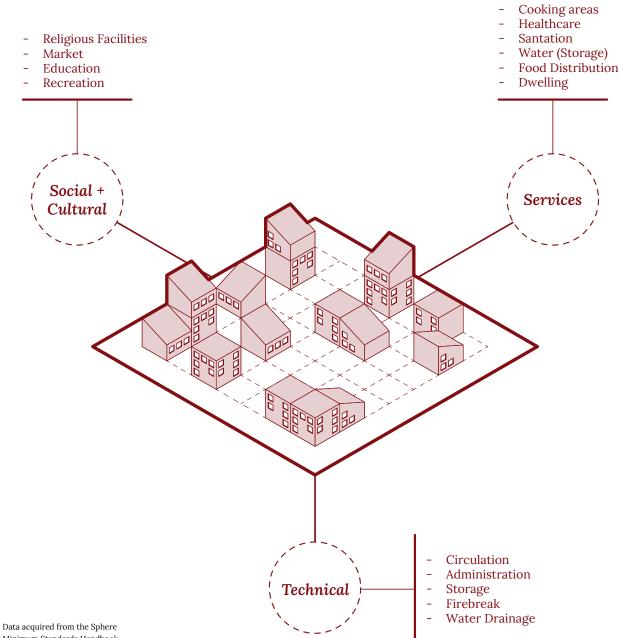


Minimum Floor Area per Person



What should be in a humanitarian shelter?

According to the Sphere Standards, a shelter encompasses more than mere protection from the external environment. It should also promote a **dignified** living by addressing the need for privacy, but also promote independence and **self-sufficiency.** Shelters should serve as environments that facilitate social interaction and promote a sense of belonging, which includes vulnerable groups such as the elderly, disabled, and children.



Minimum Standards Handbook

How to build community settlements?

To promote social cohesion, a settlement should include common spaces for social interaction, such as communal facilities like kitchens or recreational areas, and incorporate participatory approaches that engage residents in decision-making processes. Settlements should also encourage the formation of social networks and support systems, facilitating communication, cooperation, and collective problem-solving.

Refugee Architecture in the German Context

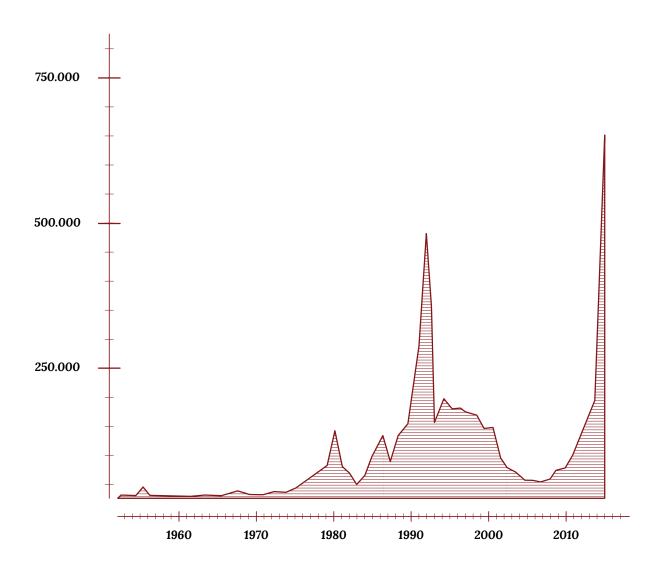
A shifting demographic

The implementation of the open-doors policy has led to an influx of individuals from diverse cultural and ethnic backgrounds, fundamentally transforming the composition of the population in Germany. **Today**, **Germany is a more diverse country** (Schmal, C.P., Scheuermann, A. and Elser, O., 2017). The demographic changes have had profound implications for various aspects of German society, including social dynamics, cultural integration, and economic patterns.

One of the notable demographic shifts in Germany has been the increase in the number of foreign-born residents. Foreign policies have become more lenient which has attracted a substantial number of refugees and migrants from countries affected by conflict, political instability, and economic hardships. As a result, Germany has witnessed a marked rise in its foreign-born population, contributing to a more multicultural society. This demographic transformation has brought about with it an influx of languages, traditions, and perspectives, adding to the country's cultural diversity. Germany is also younger now. With the arrival of refugees, there has been an influx of younger individuals, including families with children. This has helped counterbalance the effects of an aging population and declining birth rates that Germany has been grappling with in recent years. The injection of young, dynamic individuals has the potential to invigorate the labor market, stimulate economic growth, and contribute to the sustainability of the welfare system.

Fluctuation of asylum applications

in Germany (1960s - 2016)



Data acquired from Making Heimat. Germany, Arrival Country

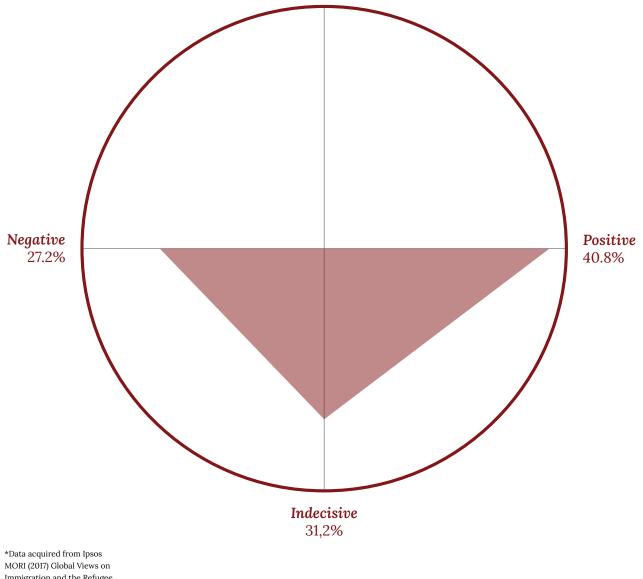
Local perception of refugees

The local perception of refugees in Germany is generally characterized by a welcoming attitude and a recognition of the humanitarian need to provide refuge to those fleeing conflict and persecution.

The majority of Germans embrace the principles of inclusivity, understanding the challenges faced by refugees and expressing a willingness to support their integration into society. However, it is important to acknowledge that a segment of the population, estimated to be around 35%, harbors concerns regarding security and the potential strain on resources due to the influx of arrivals. These concerns are rooted in apprehensions about the ability to effectively manage the integration process and ensure the safety and well-being of both refugees and local communities. It is crucial for policymakers and society as a whole to address these concerns through effective communication, fostering dialogue, and implementing comprehensive integration programs.

Surveys conducted in Germany consistently indicate that a significant portion of the population expresses positive sentiments towards refugees and supports their presence in the country (Hearts and minds, no date).

The positive perception of refugees is often influenced by an understanding of the economic and cultural contributions they can bring to the nation, as well as a desire to uphold Germany's humanitarian values. While challenges and concerns exist, the overall sentiment towards refugees in Germany leans towards empathy, support, and a commitment to fostering an inclusive society that embraces diversity. **2018 survey where Germans were asked:** Does immigration make Germany a worse or a better place to live?



Immigration and the Refugee Crisis and the European Social Survey (n.d.) 'Germany.' (2018) Would you live in refugee housing?

Characteristics of German Refugee Architecture

German refugee architecture exhibits certain characteristics that are influenced by the availability of vacant lots and empty areas, as well as the potential for repurposing existing buildings. The presence of vacant lots and underutilized spaces in urban areas provides opportunities for the construction of purpose-built refugee shelters and housing. Germany's rich architectural heritage includes many older buildings that can be refurbished and transformed into suitable accommodations for refugees. This approach allows for the preservation of architectural heritage while simultaneously addressing the pressing need for adequate housing for refugee communities.

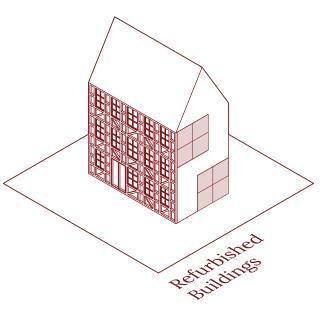
However, despite these possibilities, it is worth noting that many refugee projects in Germany are located in the outskirts of cities, leading to a disconnect from the urban fabric and potentially resulting in the segregation of refugee communities. This spatial separation hinders social integration and limit access to essential services and opportunities available within the city centers. Recognizing the importance of fostering inclusivity and integration, there is a need to reevaluate the location and design of refugee architecture to ensure better connectivity to urban networks, thereby facilitating social interaction, access to employment, education, and healthcare.

To gain a better understanding of the characteristics and implications of German refugee architecture, an in-depth analysis of several projects will be conducted (Berlin Award 2016 Heimat in der Fremde, 2016). This analysis will provide valuable insights into the successes, challenges, and opportunities of existing designs and their impact on the lives of refugees.

Refurbishment in Solingen



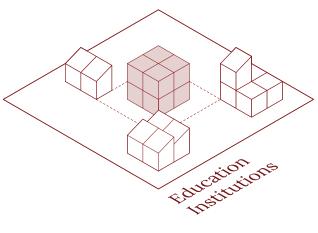
Developed by: Ladleif Architekten BDA Status: Built Number of Residents: 11 apartments Description: Apartments for asylum seekers were created in a renovated historic building. Even the vacant commercial space on the ground floor was converted to living space.



Housing for Refugee Students in Frankfurt Am Main



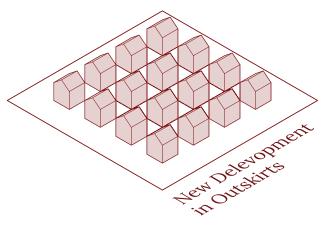
Developed by: TU Darmstadt Status: Built Number of Residents: 12 persons Description: Provides custom-made 7,5 m2 cubes with the basic ammenities (bed, desk, shower, and are grouped in a 16m x 16m public space. Made for refugee students.



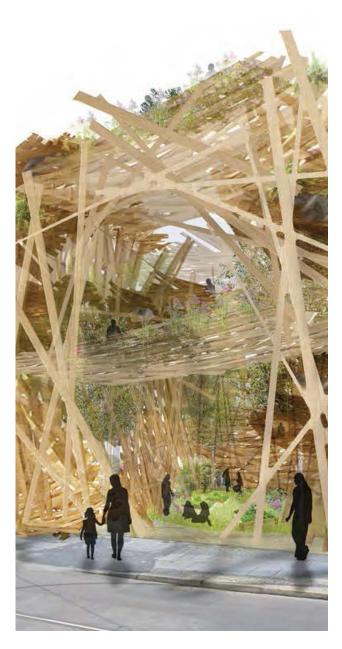
Housing for Refugees in the outskirts of Halberstadt



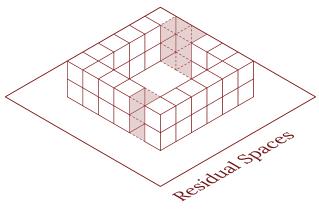
Developed by: Opitz Holzbau GmbH Status: Built Number of Residents: 11 apartments Description: Apartments for asylum seekers were created in a renovated historic building. Even the vacant commercial space on the ground floor was converted to living space.

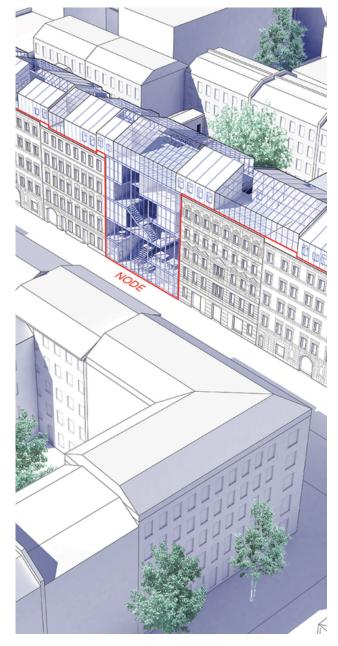


Use of residual space as meeting place for refugees



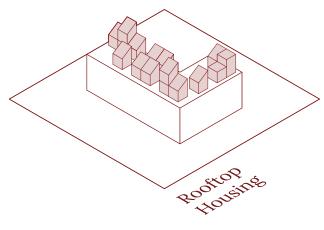
Developed by: Ma.Gy Collectif Status: Concept Number of Residents: 24 to 48 people Description: It is conceived as an inhabited garden dedicated to the wellness of refugees and inhabitants and their mutual enrichment and understanding. It is an artwork that raises awareness on the refugee question.





Rooftop Housing in Berlin

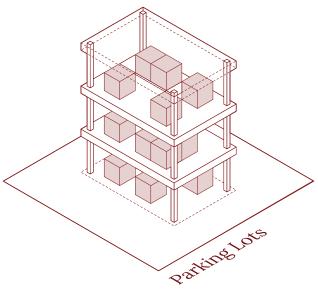
Developed by: Rennie Jones Status: Concept Number of Residents: ca. 30 persons Description: Raises the idea of using the roofs of existing buildings as new housing for refugees.



PROP HOUSE



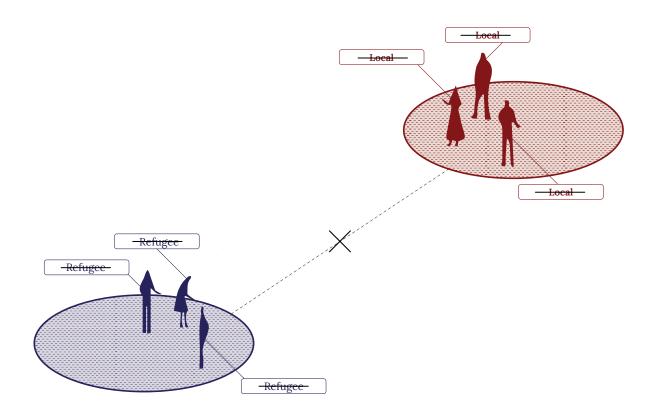
Developed by: C. Kennedy C. Capeille R. Wu Status: Concept Number of Residents: 50-300 people Description: The standard parking spot has a size of 2,4 x 4 and forms the modular basis for prefabricated housing units.

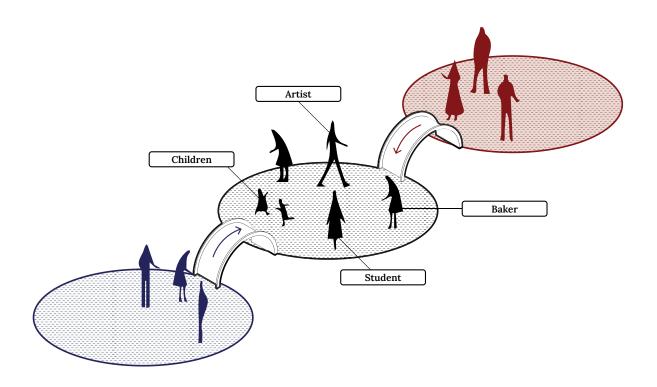


Removing The Label

The physical separation of refugee architecture from the urban network and the isolation of refugee populations can perpetuate a sense of "otherness" and hinder social integration. It is crucial to recognize the power of architecture as a catalyst for change and bridge-building between communities.

Architecture has the potential to transcend labels and create spaces that foster inclusivity, promote interaction, and nurture a sense of belonging for both refugees and locals. By reimagining the design of refugee architecture, interventions can be developed that prioritize integration, community engagement, and shared experiences. Designing projects that intentionally foster interactions between refugees and locals can break down barriers, challenge stereotypes, and create a sense of unity and understanding. The aim of this project is to contribute to the creation of better communities by designing a project that fosters the integration of both refugees and locals. By placing emphasis on inclusivity, shared spaces, and opportunities for interaction, the project seeks to create an environment that encourages social integration and mutual respect. The concept is to challenge the existing labels and divisions, bridging the gap between refugees and locals, and fostering a sense of community and cohesion.





Chapter 4

Berlin: Case Study / Analysis

Willkommen in Berlin

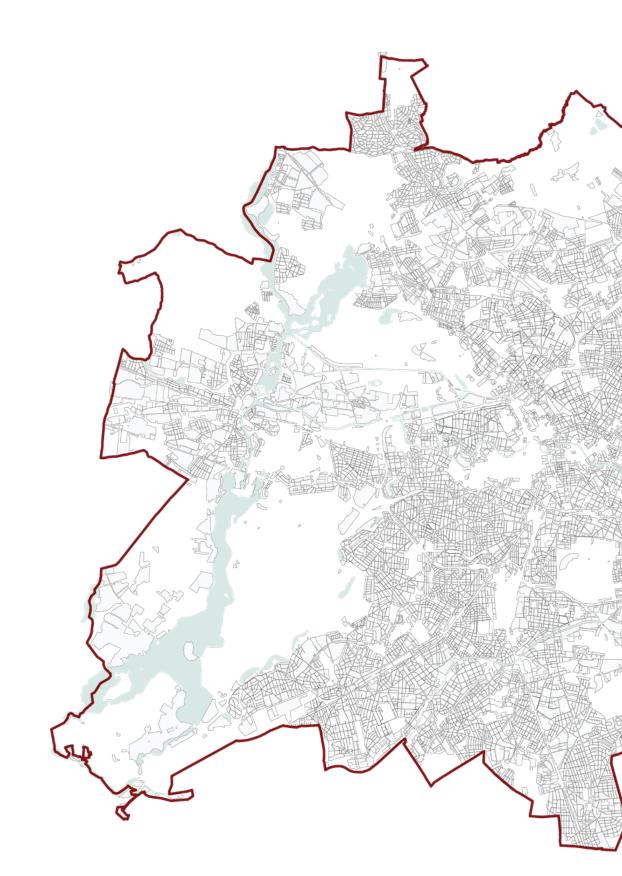
Population data

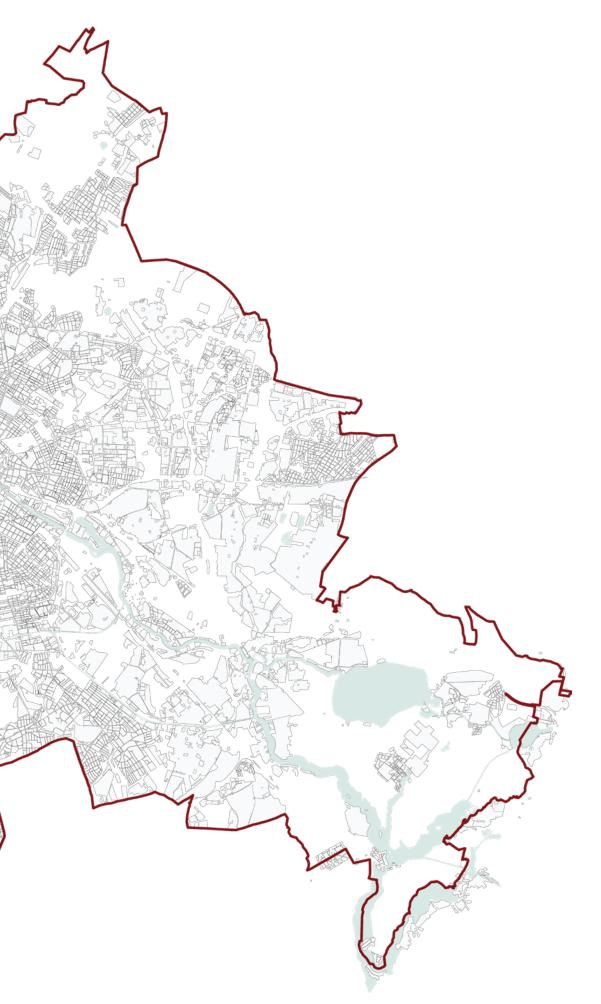
What sets Berlin apart is its cosmopolitan atmosphere and multicultural makeup. The city has been a magnet for international artists, entrepreneurs, students, and professionals seeking opportunities, creativity, and a unique urban lifestyle. This influx of people from different countries and cultures has contributed to the cultural richness and diversity of the city.

Berlin has historically been a melting pot of nationalities and continues to attract residents from all over the world. Notably, it has become a hub for young Europeans seeking new experiences and a vibrant social scene. Additionally, the city has attracted a significant number of immigrants from countries such as Turkey, Poland, Russia, and various Middle Eastern and African nations, among others. This blend of cultures has shaped the city's identity and created a dynamic environment that embraces different languages, traditions, cuisines, and artistic expressions.

Berlin's multicultural population is reflected in its diverse neighborhoods, where you can find pockets of various ethnic communities, international restaurants, cultural institutions, and events celebrating different cultures. The city's openness and acceptance have fostered an environment where people from all walks of life can feel at home and contribute to the city's vibrant tapestry.

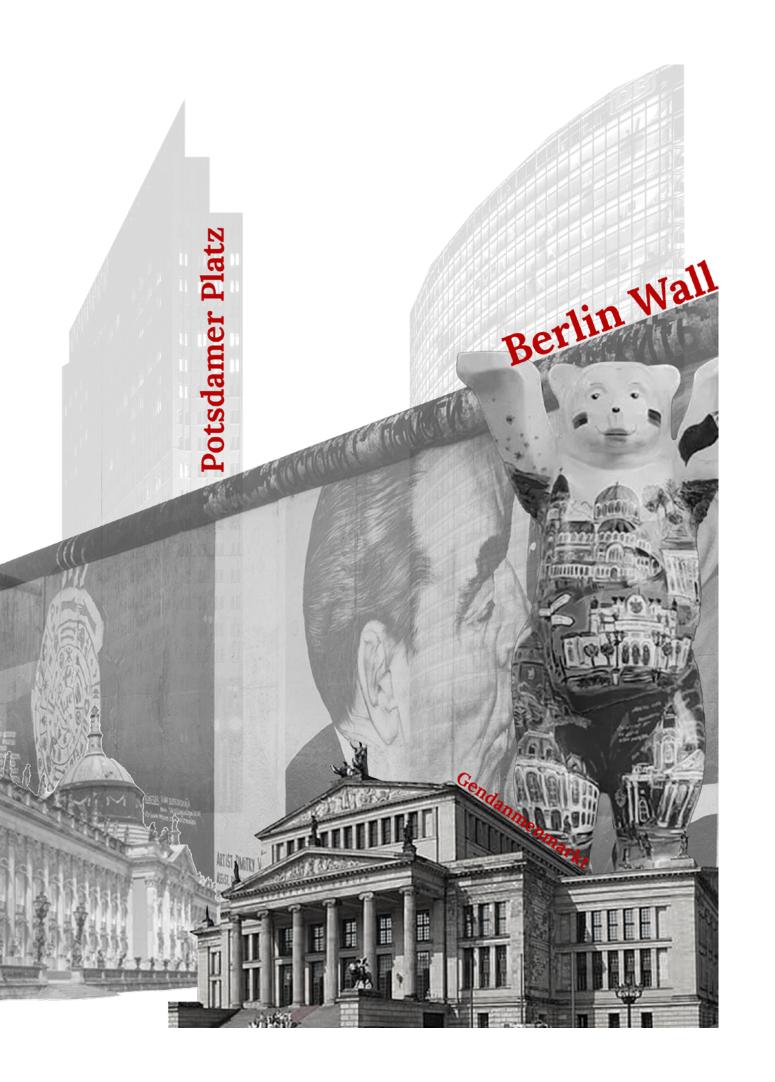
It's important to note that the demographic composition of Berlin is subject to change over time, as migration patterns and global circumstances evolve. For the most accurate and up-to-date information on the population of Berlin, I recommend referring to recent official sources or conducting further research using current data.



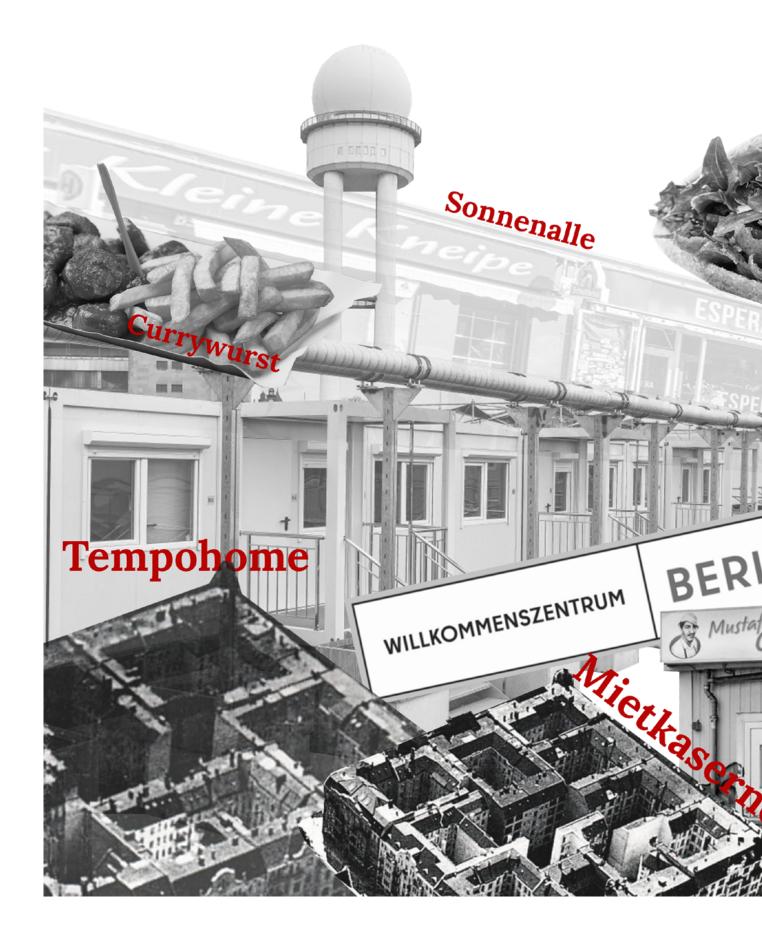


This is Berlin...





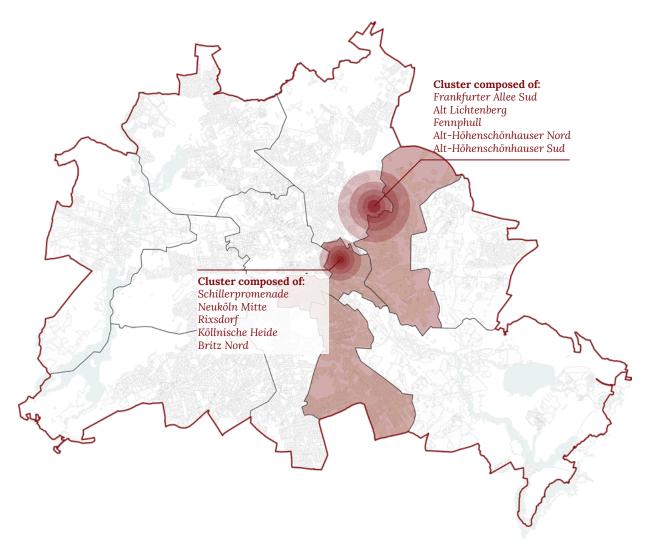
This is ALSO Berlin





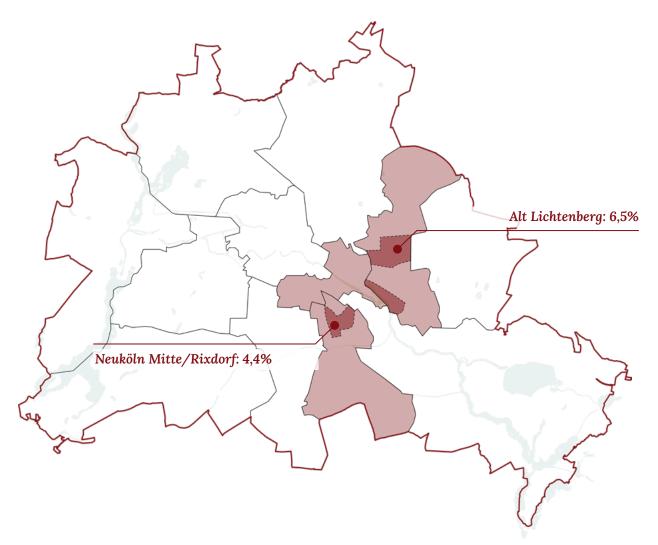
Berlin by third-countries:

district regions



Data acquired from: web. statistik-berlin-brandenburg.de

Berlin by: share of vacant dwellings



Data acquired from: web. statistik-berlin-brandenburg.de

Precedents of social

housing in Berlin





Mietkaserne

Plattenbau



Templehof Airport

Why is Refugee Housing different from Social Housing?

Berlin has a rich history of developing social housing projects, such as the Mietkaserne and Plattenbau, which were designed to address the needs of the population. However, there seems to be a disparity when it comes to perceiving refugee architecture as a form of social housing.

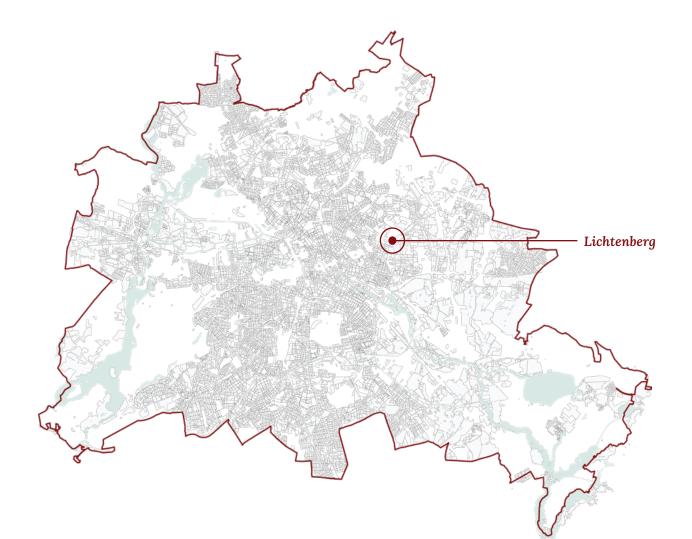
Considering Berlin's existing mix of diverse housing typologies, it becomes apparent that architecture for refugees should be seen as an opportunity for the future. Rather than creating separate, isolated structures for refugees, there is potential to integrate refugee architecture within the city's existing collection of housing. By repurposing and adapting existing buildings or designating specific units within mixed housing developments, refugee architecture can contribute to the larger goal of providing social housing solutions.

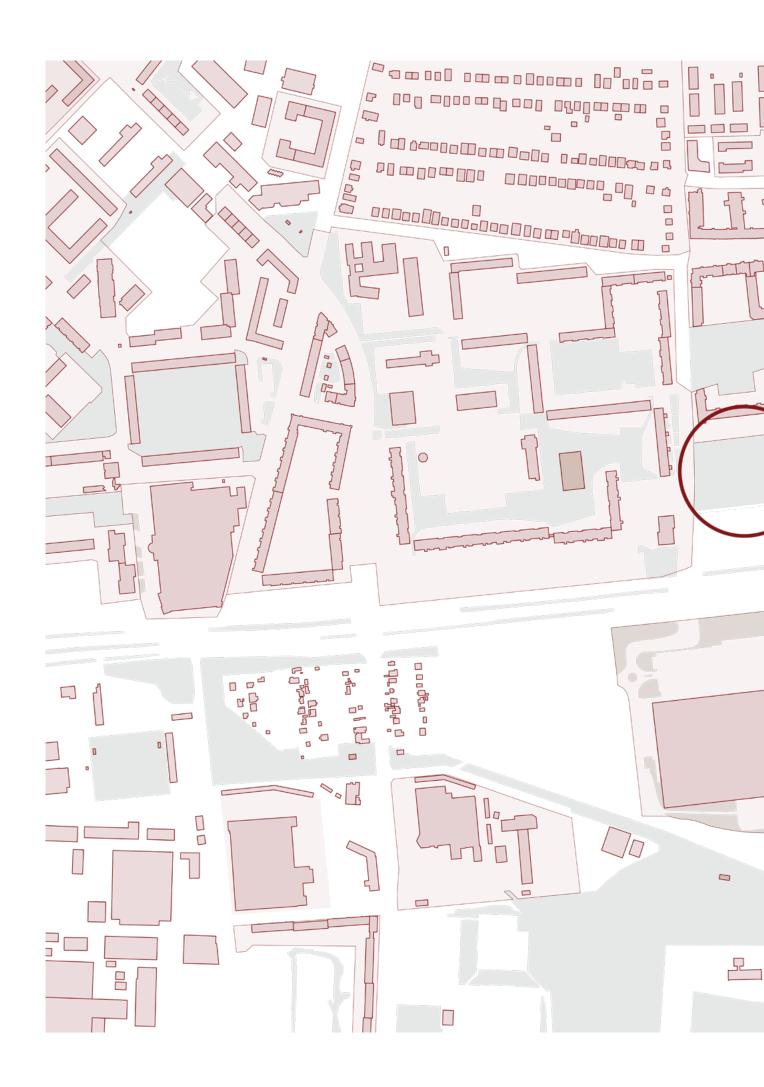
This approach not only addresses the immediate needs of refugees but also ensures that the architecture for refugees becomes a part of the fabric of the city. By integrating refugee architecture with other housing typologies, it promotes social integration, fosters diversity, and reduces the stigmatization and segregation often associated with refugee housing. Additionally, the adaptability of refugee architecture allows for future repurposing, ensuring long-term sustainability and the potential for these spaces to transition into permanent social housing units.

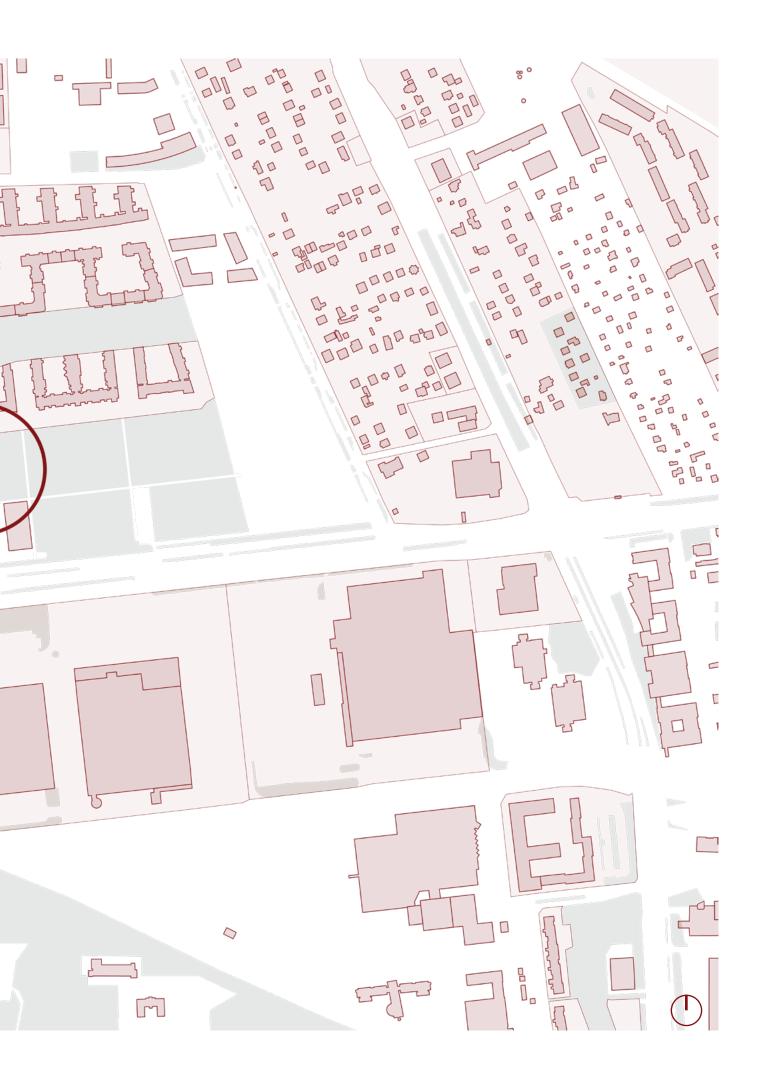
In this context, architecture for refugees should be seen as a catalyst for positive change, a chance to reimagine and enhance the existing housing landscape of Berlin. By embracing the opportunity to incorporate refugee architecture into the diverse mix of housing typologies, Berlin can pave the way for innovative and inclusive solutions that address the pressing need for social housing while fostering a sense of community and shared responsibility. Chapter 5

Design Proposal

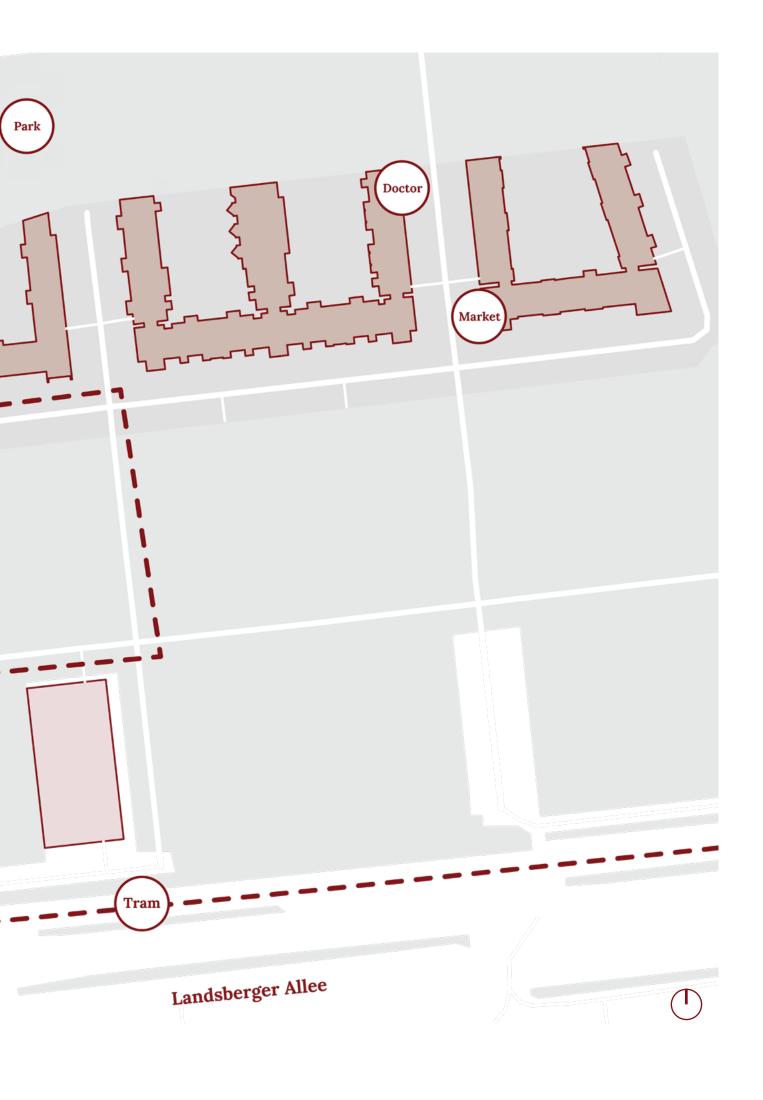
Chosen site

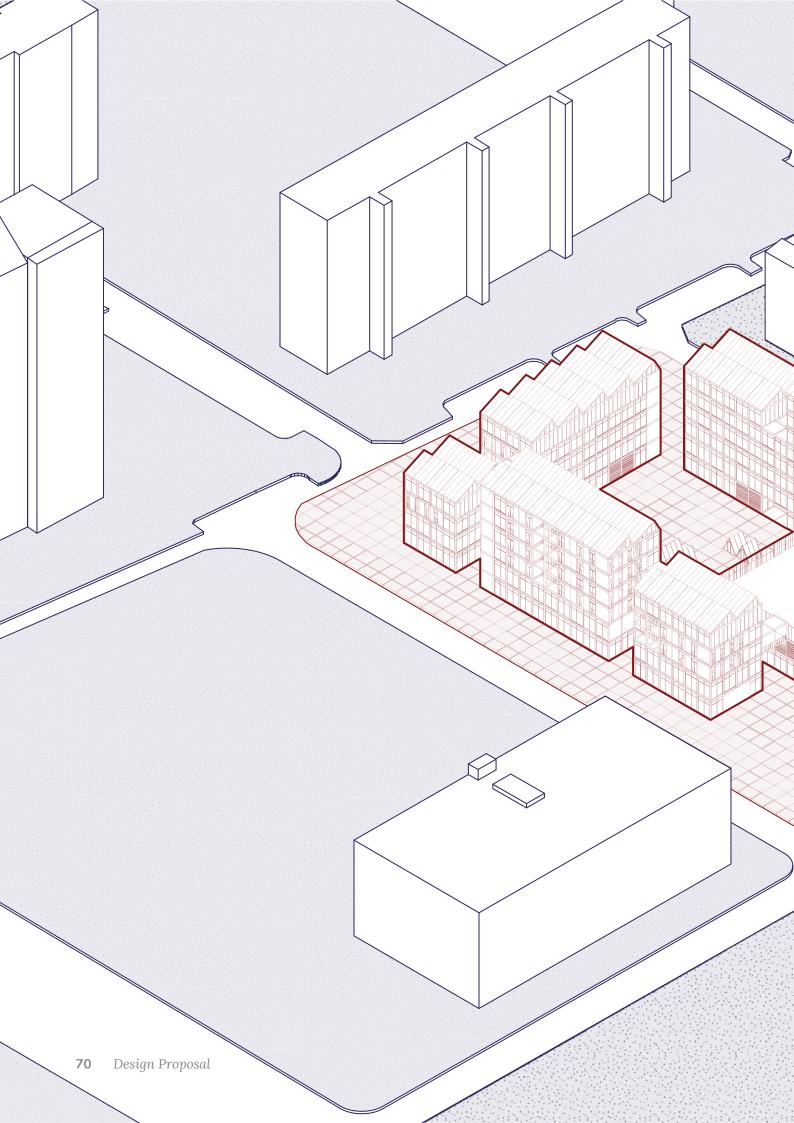


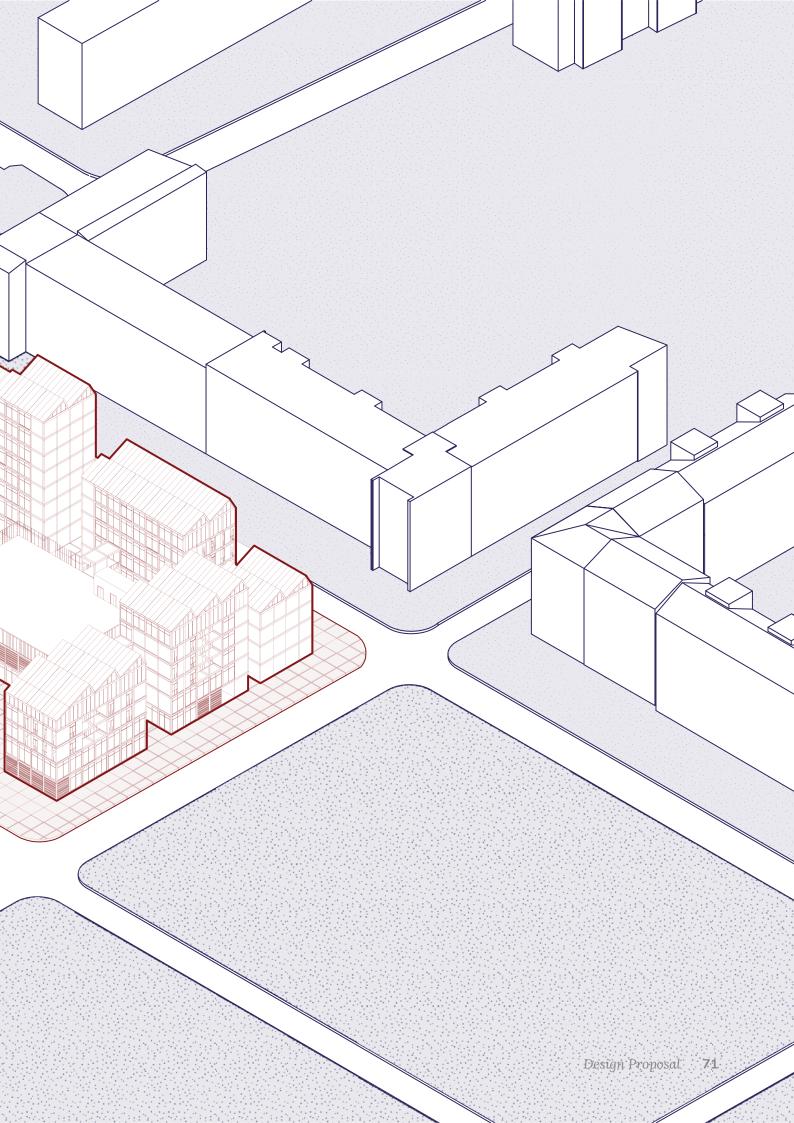












Morphologies for togetherness

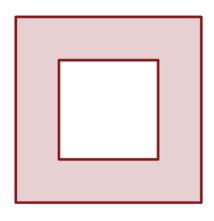
Architectural tools to promote encounter

Architecture primarily serves the purpose of addressing the physical need of shelter from the elements, but it plays a significant role in fulfilling human innate social needs.

Public spaces are widely recognized as the ideal settings for human gatherings. These spaces offer an open and inclusive environment where people can come together, and share experiences. The absence of physical barriers and the availability of open spaces create a sense of freedom and equality among individuals, encouraging the formation of communities.

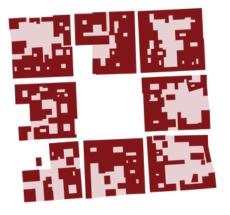
However, the effectiveness of public spaces in facilitating gatherings is not solely determined by their size or emptiness. The deliberate design of boundaries and delineations within these spaces can play a crucial role. By providing a clear framework and defining the limits, architectural elements such as the program proposed and ample height of the ground floor help create a sense of place and purpose. These delineations not only demarcate areas for specific activities but also establish a visual and psychological contrast between occupied and unoccupied spaces, making the emptiness more noticeable and inviting. The understanding and utilization of public spaces for gatherings can vary across different cultures. Cultural practices, social norms, and historical traditions shape the ways in which people interact and gather in these spaces. In some cultures, public squares or parks serve as vibrant hubs of social activity, hosting events, markets, and celebrations. In others, religious or sacred sites become the focal points for communal gatherings and rituals.

By utilizing boundaries as an integral component of the project, which encircle a central public area, the project can become a catalyst for interaction and the cultivation of communities.



What does this shape mean to you?

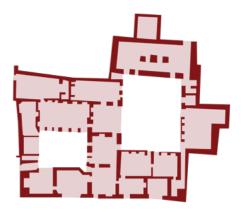
Architecture for encounter in different cultures



Plazas

Plaza de Barichara, Colombia

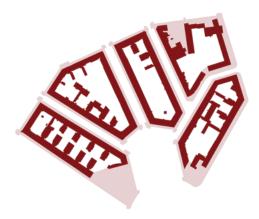
Plazas were the first delineation of new Latin American cities during the time of colonization. These are usually surrounded by public institutions and serve as the backdrop for communities to interact with the state.



Courtyards

Warda House, Damascus

The layout of Syrian homes revolves around the "hayyara." This space serves as the heart of homes as it is the gathering space for family members and guests. It is often surrounded by various rooms and halls.



Perimeter City Blocks

Berlin Perimeter City Block, Germany

East German city blocks built on top the medieval city grid were concieved to create a sense of enclosure and privacy while simultaneously encouraging social interaction.

During migration, **time and space** play a key role due to the uncertainty of the situation

Users gives life to architecture, and as users are temporary, refugee projects would then need to become **atemporal**

This means that the project should adapt to **user's dynamics**

So as to create memory and **remembrance of past users**, each moment of the project's life should remain registered. Furthermore, a transition to a second life would keep refugee architecture projects as a sustainable option for **upcycling**

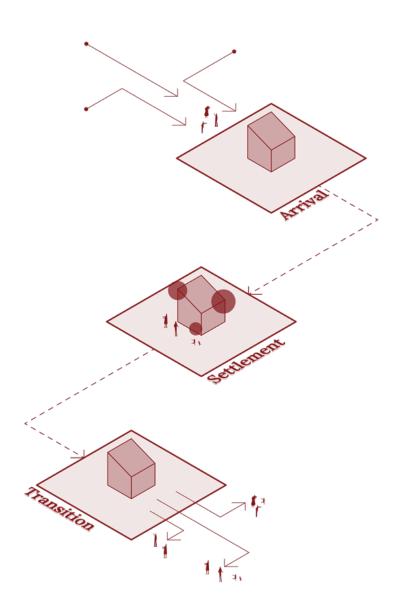
This represents a possibility for rethinking the way architecture for refugees is being thought out, in a way...

Transforming crises into opportunities for tomorrow

The temporality of being a *refugee*

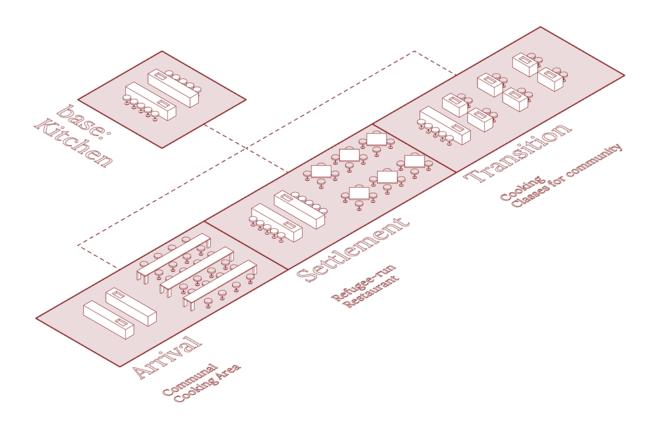
Time and uncertainty

The stages of residing as a refugee in Germany can be summarized in **arrival** (where they are allocated while being registered), **settlement** (and in-between state while refugee applications are sorted out. And **transition**, when refugees get full permission to get their own housing with most liberties.



Law of *identity*

A Rose, is a rose, is a rose. This excerpt from Gertrude Stein summarizes the idea that things "are what they are". So why can't a room be a room be a room? A base kitchen should be flexible enough to change life according to the users.



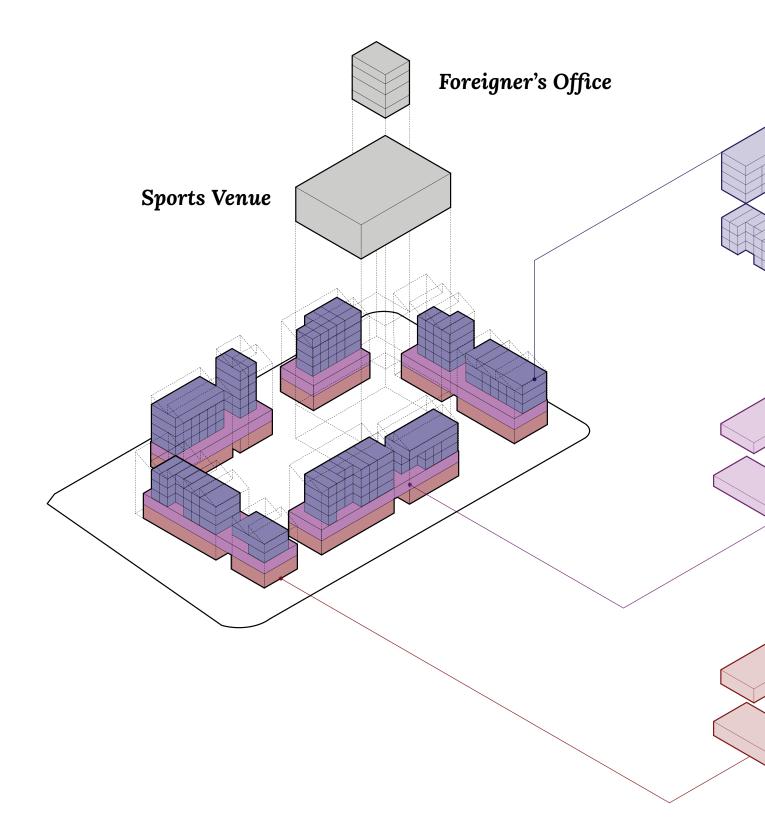


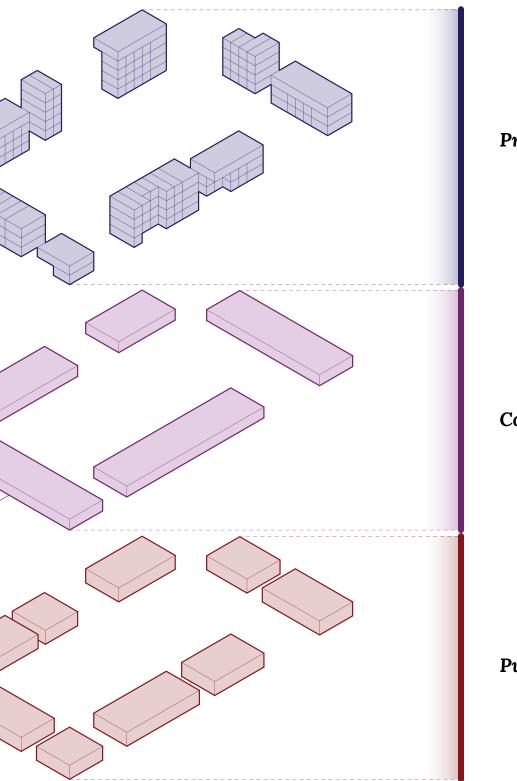






Balancing integration and intimacy



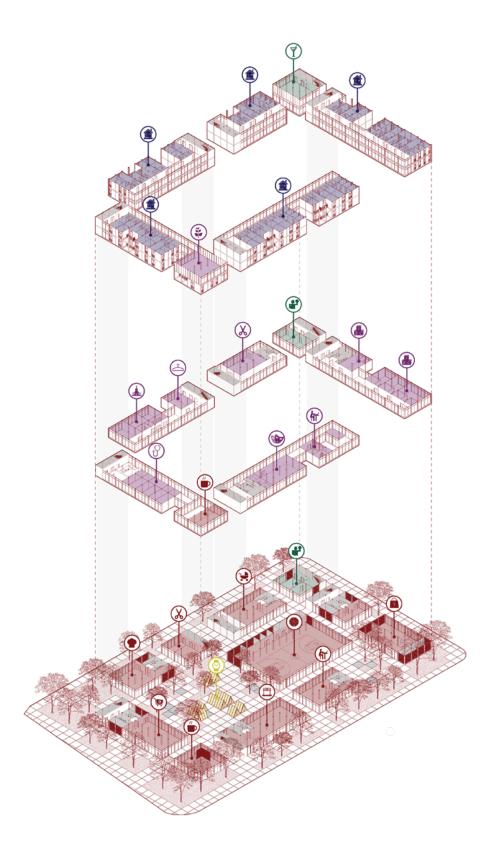




Community Spaces

Public Area

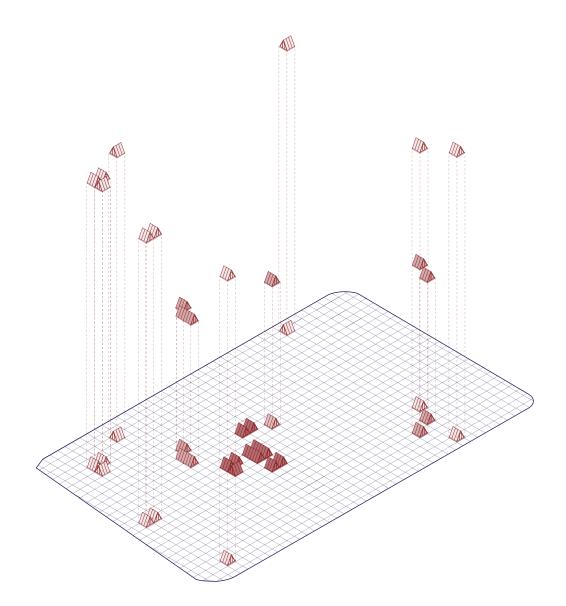
Uses based on privacy



A place for remembrance

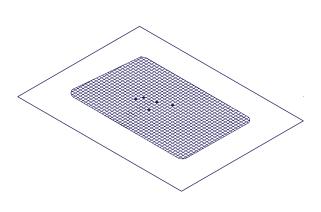
Leaving a footprint

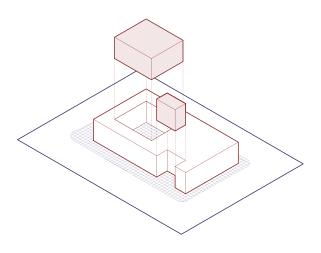
The public space in the project will be utilized as a time marker, where the path of time will be recorded by the use of a museum of remembrance, these units will be placed as more population goes thorugh the project, leaving behind pieces of their past experiences like journals, and mementos.



Massing concept

The project consists of multiple buildings strategically arranged within the plot, forming a cohesive and semi-neighborhood environment. The design aims to cultivate connections and interactions among the residents while also being inclusive and open to the surrounding local community.



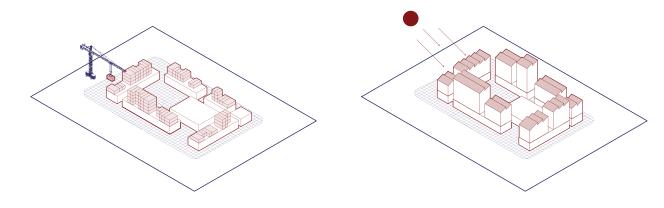


1. Base Grid

A 3 x 3 grid is established as the base from where the project is going to be built upon, the grid follows the Sphere Standards of minimum livable area.

2. Place of Gathering

From the base massing, central pieces are carved to create the spaces of gathering meant to promote interaction.



3. Module Stacking

In order to create an economic solution to housing, as well as ensuring standards of comfort, modules are prefabricated and transported to the site.

4. Solar Panels

The rooftop of the project is oriented south as to create sustainable energy and self reliance within the building.

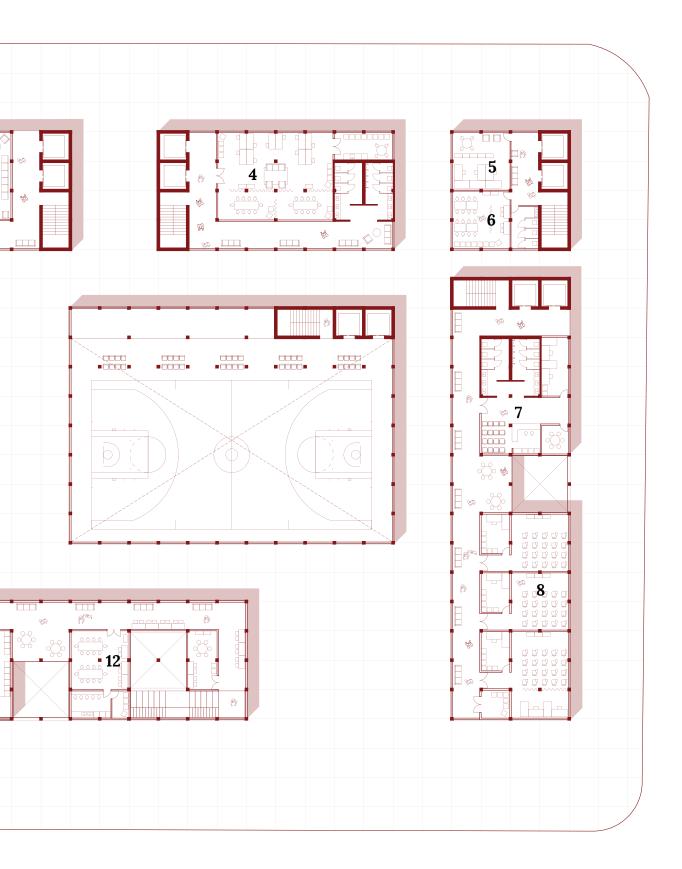
Public Area: Ground Floor





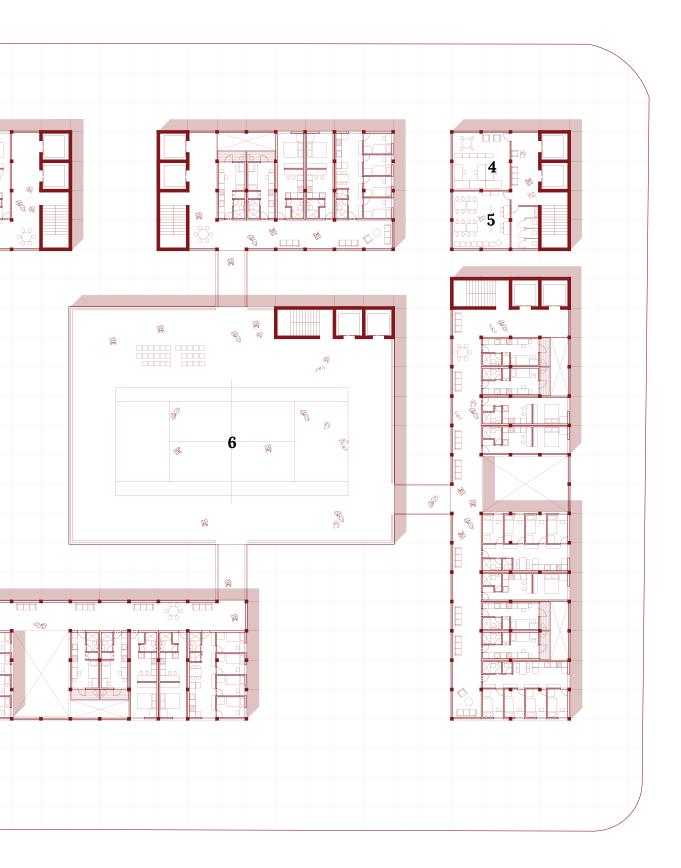
Community Area: 1st Floor



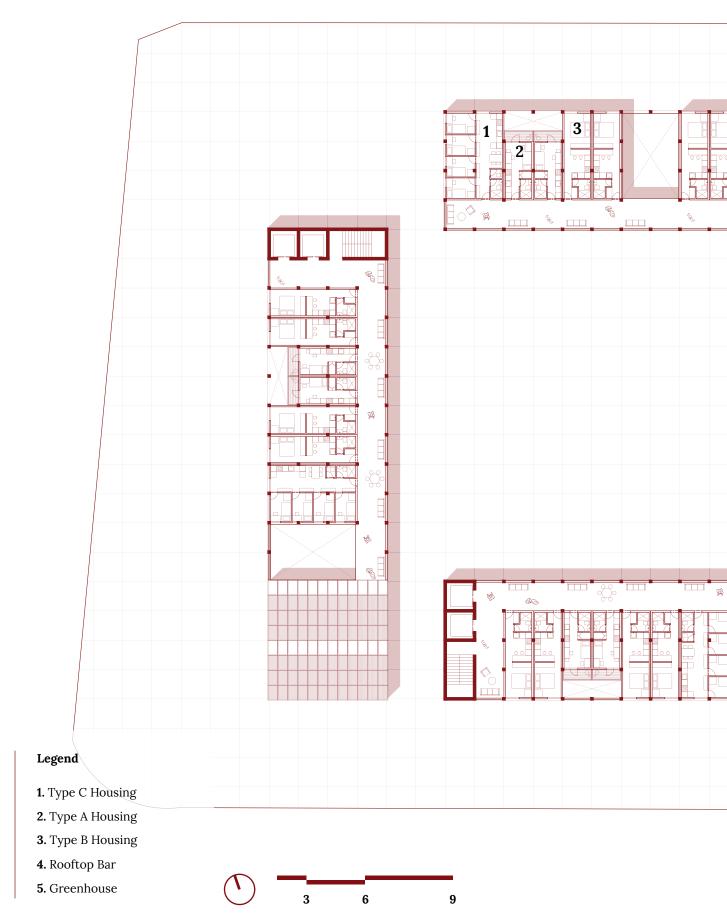


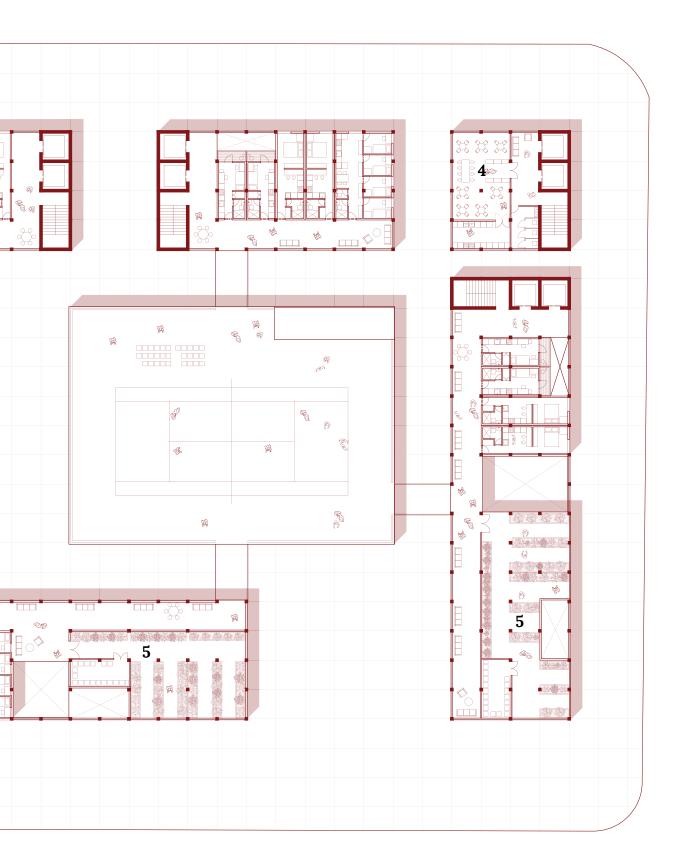
Housing: Typical Floor Plan





Roofing: Plan





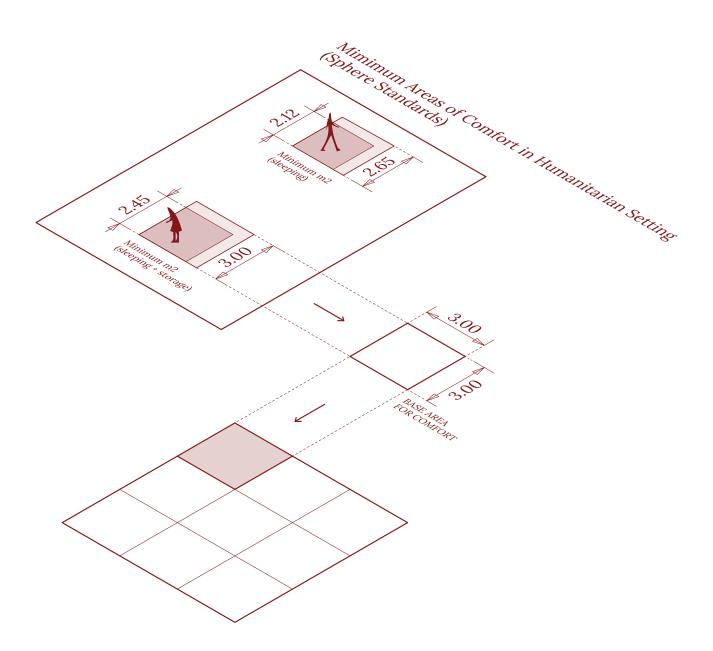


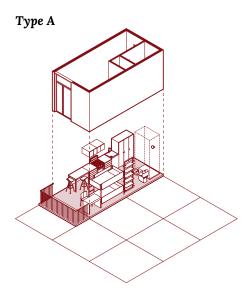


Housing Typologies

Base square meters

To ensure a minimum standard of comfort in the design, a base grid was established using the Sphere Standards to dictate the minimum required area for quality housing. In this case, the base grid was set at a minimum area of 3 square meters. From this grid, three housing typologies were developed with flexibility as a key factor. The grid was designed to allow for modular stacking and the potential for the structures to be re-purposed in the future.



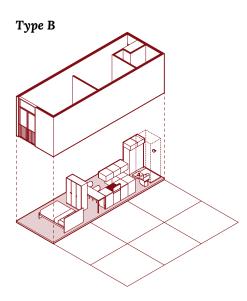


Arrival + Settlement (For Refugees)

- Houses 2 people in bunkbeds +
- Intended for close family/friends +
- + Minimum fitted kitchen
- 1 bathroom + shared storage area +
- + Balcony

Transition (Second Life)

- Student Apartment +
- Shared Apartment (WG) +
- Single Studio +
- Hotel Room



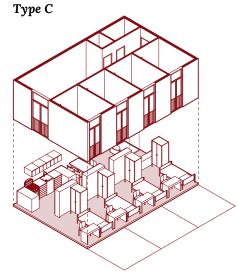
Arrival + Settlement (For Refugees)

- +
- Houses 2 people in Double Bed Intended for couples and disabled population +
- Wider Kitchen than Type A +
- Room and Living Area are separated +

Transition (Second Life)

- Apartment for couples
- Apartment for persons with disabilities +
 - Hotel Room

+



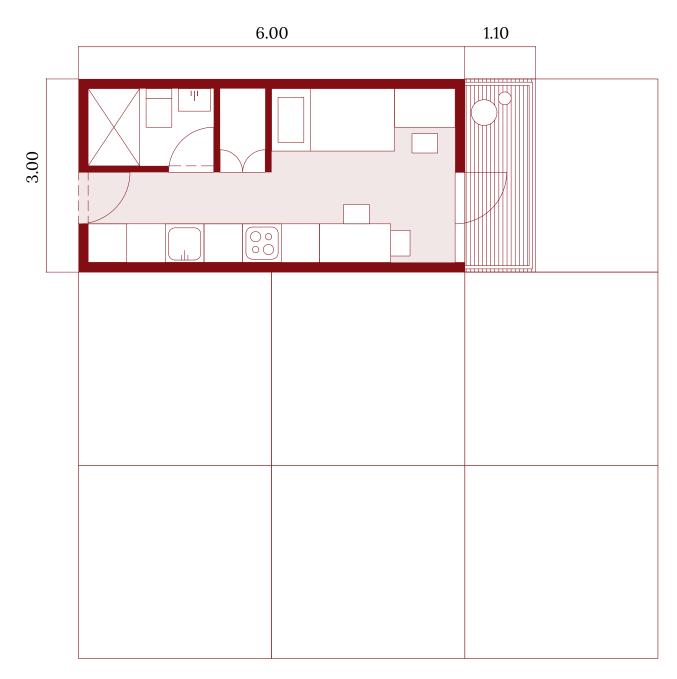
Arrival + Settlement

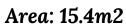
- Houses 4 people in Single Beds Intended for single arriving persons +
- + Shared housing with common area +
- Each room ensures privacy +
- Private + Shared Storage

Transition

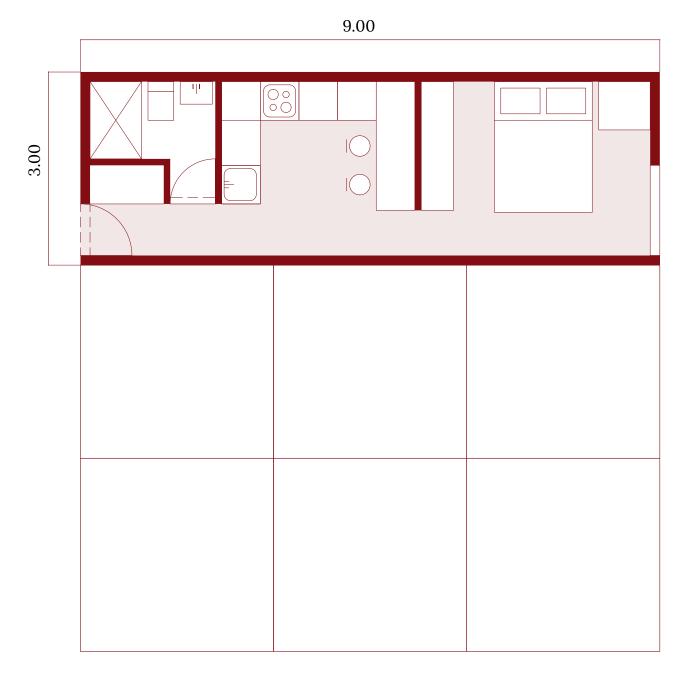
- Hostel Room
- Student Dorm +
- Humanitarian Housing +
- Shared Apartment (WG)

Type A: 1-2 persons (bunkbed/single)





Type B: 1-2 persons (double)





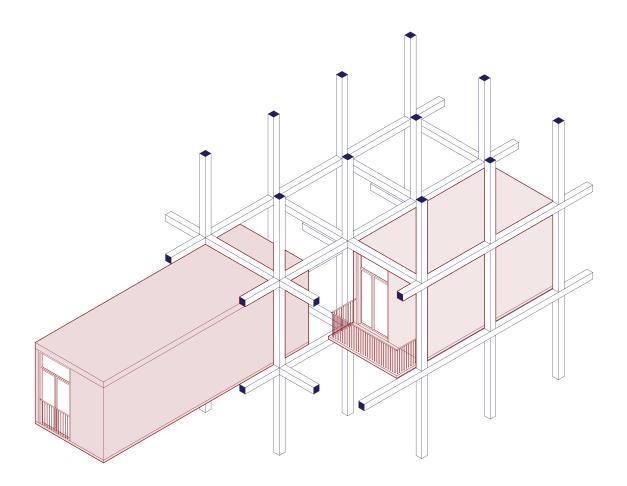
Type C: 4 people (shared living space)





Assembly system

The building's structure is a hybrid system, the first two floors are built using conventional timber structure techniques, forming the foundation for the subsequent construction. A skeletal framework is then erected, providing support for the stacked prefabricated modules that are inserted into the structure. Additionally, the design incorporates dedicated circulation areas to ensure smooth movement within the building.















Bibliography

- McAuliffe, M. and A. Triandafyllidou, (2021). World Migration Report 2022. International Organization for Migration (IOM), Geneva. [Online]. Available at: https://drive.google.com/drive/folders/1kMra-2WVjtIp0X3CBFdSjILc0x1fJ36S (Accessed: 6. February 2023).

- Global trends report 2021 (2022) UNHCR. [Online]. Available at: https://www.unhcr.org/media/40152 (Accessed: 02 June 2023).

- The stages of the asylum procedure (2019) BAMF. [Online]. Available at: https://www.bamf.de/ EN/Themen/AsylFluechtlingsschutz/AblaufAsylverfahrens/ablaufasylverfahrens-node.html (Accessed: 02 June 2023).

- (2016) UNHCR | emergency handbook. [Online]. Available at: https://emergency.unhcr.org/ sites/default/files/Shelter%20Design%20Catalogue%20January%202016.pdf (Accessed: 02 June 2023).

- Slater, J. (2014). Urban Systems of the Refugee Camp Architecture Thesis Prep. 272. [Online]. Available at: https://surface.syr.edu/architecture_tpreps/272 (Accessed: 02 June 2023).

- Sphere Association. (2018). The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response, fourth edition. Geneva, Switzerland. [Online]. Available at: https://www.spherestandards.org/handbook/editions/ (Accessed: 02 June 2023).

- Schmal, C.P., Scheuermann, A. and Elser, O. (2017) Making Heimat. Germany, arrival country: Atlas of refugee housing = flüchtlingsbautenatlas. Berlin, Deutschland/Germany: Hatje Cantz.

- How Europeans think and feel about immigration (no date) Hearts and minds. [Online]. Available at: https://heartsandminds.odi.digital/country.html?country=fr (Accessed: 02 June 2023).

- Berlin Award 2016 Heimat in der Fremde (2016) Digitale Landesbibliothek Berlin. [Online]. Available at: https://digital.zlb.de/viewer/metadata/16079467/0/ (Accessed: 02 June 2023).

-Statistik Berlin Branderburg GEO Service. (2021). Kommunalatlas Berlin. [Online]. Available at: https://web.statistik-berlin-brandenburg.de/instantatlas/interaktivekarten/kommunalat-las2021/atlas.html (Accessed: 02 June 2023).

IMAGES

Niendorf, VJ. (2012).Der Wohnungsdiscounter, plattenbau. [Online]. Available at: https://www.faz.net/aktuell/wirtschaft/wohnen/plattenbau-der-wohnungsdiscounter-11680031.html (Accessed: 1. May 2023).

Klar, R. (2020). Container auf Tempelhofer Feld werden reaktiviert. [Online]. Available at: https://www.morgenpost.de/berlin/article228656831/Container-auf-Tempelhofer-Feld-werden-reaktiviert.html (Accessed: 1. May 2023).

Martin, Bundesarchiv. (1959). Mietskaserne nach dem Zweiten Weltkrieg. [Online]. Available at: https://ferrarsundfields.de/2020/08/17/architektur-und-ideologie-2-planstaedte-berliner-mietskasernen-und-verlassene-orte/ (Accessed: 1. May 2023).