Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

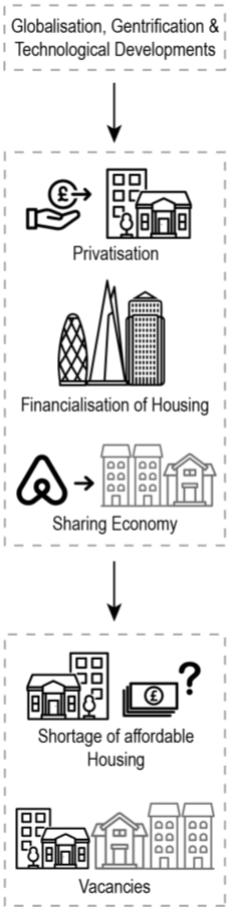
Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Nora Leonie Anders
Student number	5615488

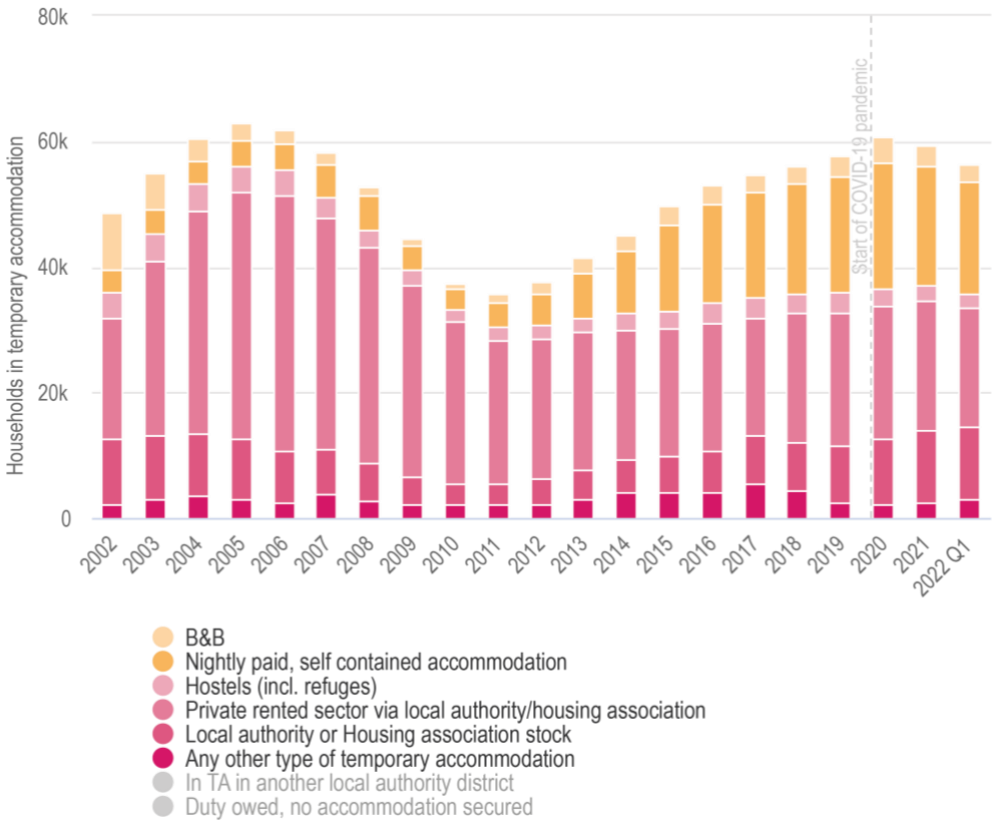
Studio		
Name / Theme	Planning Complex Cities	
Main mentor	Dr. Verena Balz	Spatial Planning and Strategy, Urbanism
Second mentor	Ana Petrović	Multi-scale spatial Analysis, Urban Studies
Argumentation of choice of the studio	My motivation for choosing the graduation studio "Planning Complex Cities" as the first choice derives from the fact that for me urban planning and the urban includes so much more than just the physical environment. I understand the urban as a multi-layered construct of physical aspects like spatial forms and environmental characteristics, but also abstract aspects like economic factors, the organisation of societies and social behaviours. It's made up of people's movements, continuous flows, and ongoing changes. Within this complexity, numerous conflicts, affecting the spatial, social, and political environment, arise. These conflicts, therefore, also call for multi-layered strategies and solutions. During Q3 in the first year, I immensely enjoyed learning about themes like spatial justice, forms of governance and policy making as well as participation in the planning process. Therefore, in my master thesis I would like to deepen this knowledge further and continue to develop my standpoint as an urban designer, since in the future I want to participate in creating frameworks and processes towards a more just and sustainable urban environment.	

Graduation project	
Title of the graduation project	Someone at Home? an integrated housing system that utilises vacancy in London for temporary housing to ensure homes for low-income families
Goal	
Location:	London, United Kingdom

The posed problem,	 PROBLEM FIELD People are attracted to cities, to the opportunities, diversity, culture, and knowledge. This has led to the worldwide trend of urban growth. Cities are expanding faster than ever before. As this growth is embedded in several autonomous developments it happens in a distinct way and with certain implications. The combined effect of technological developments and globalisation changes the way of urban regeneration and evokes questions regarding the ownership of urban space. Ongoing processes of gentrification and the global interconnectivity of financial markets have led to what is known as the 'financialization of housing' (United Nations, 2017). Housing is no longer solemnly purchased to be lived in but as an investment. Consequently, during urban regeneration processes investors have built profitable luxury homes while the construction of social housing fell short. Furthermore, as it became apparent that space in the cities is scarce and increasingly expansive, the idea of 'sharing' rooted in the concept of a 'sharing economy' became an attractive tool to utilise the limited urban assets to its full extend. But while the initial aim was to ensure a more sustainable and equal distribution of goods, services, and assets, in practice the participants of the 'sharing economy' are still profit-driven. This leads to the exploitation of the system and has significant consequences on various levels (Ferreri & Sanyal, 2018). An example that is notably impacting the urban environment are sharing platforms for short-term rentals, the most famous one being Airbnb. These developments have most certainly contributed what we nowadays call the 'housing crisis'. Existing homes are no longer accessible on the housing market leading to increasing housing prices and putting people and especially vulnerable groups at the risk of homelessness or displacement (Action on Empty Homes, 2018). As Hamnett (2001) explains, London is a prime example where these developments and processes can be observed. PROBLEM ANALYSIS Taking a closer look at the housing crisis in the context of London's housing market reveals two distinct observations. On the one hand, London is in desperate need of more housing, particularly affordable housing for low-income households who rely on local authority support. On the other hand, there are significant numbers of empty buildings and homes in all boroughs of the city. As Rugg (2016) illustrates, there is a discrepancy between the current supply and demand for affordable and social housing. Hence, a growing number of households

especially low-income families are not able to find an affordable home. The growing rent prices, job losses due to the pandemic and an insufficient welfare safety net are putting these households at an increased risk of becoming homeless (Kleynhans, 2021). When a household loses their home due to these or other circumstances, they are defined as being 'statutory homeless' (Wilson & Barton, 2022). Consequently, their local authority has then the responsibility to provide them with a housing solution. Thus, they are oftentimes placed in temporary accommodation due the shortage of social housing. Sometimes up to several years until they are provided with a long-term solution for their housing situation. According to Action on Empty Homes this currently concerns around 57.000 families including 80.000 children in Greater London (2018). In addition to that, Hall (2021) points out that every forth placement in temporary housing in London happens outside of the household's local area.

The provided temporary accommodation in London includes various types of refuge, ranging from self-contained flats, over B&Bs and hostels to other self-contained units (Rugg, 2016). A significant number of these types can be found in the private rent sector due to a shortage of publicly owned alternatives. As a consequence, the current system for the allocation of temporary housing is very expansive. According to Donati (2022), around £1.6bn were spend between 2021-2022.

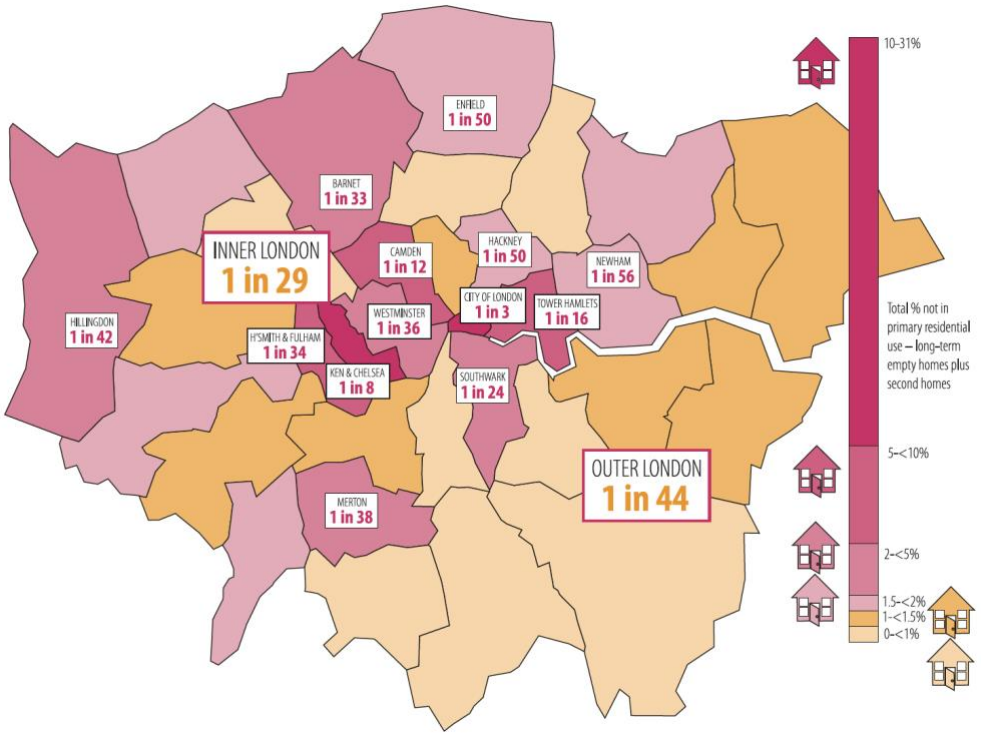


Temporary accommodation types in London (Image: retrieved from MHCLG, London's Poverty Profile 2022)

The uncertainty that comes with living in temporary accommodation can have long-lasting impacts on the health, education, and future job opportunities of children growing up under these circumstances (Barton & Wilson, 2022). Furthermore, a report

of Human Rights Watch and the Childhood Trust states that often the offered temporary accommodation in London does not fulfil minimum housing standards and provides unsafe environments for children to grow up in (Firth, 2022). The housing units are often too small, with families consisting of three or more members sharing one-bedroom apartments (Firth, 2022).
In addition, a report by Ajisola (2022) reveals that many units are not properly insulated, which leads to cold, dampness and mold, which could lead to severe consequences for the physical health of the occupants. As Firth (2022) explains, in the current allocation system it is difficult for the depended households to change their situation. This is due to the shortage of system workers and more importantly due to the missing housing alternatives.

While the urgency in the social and temporary housing supply in constantly growing, all over Greater London un-occupied and empty properties and units can be found. They are defined as long-term vacancies when they have been empty for at least 6 months (Dunning & Moore, 2020).

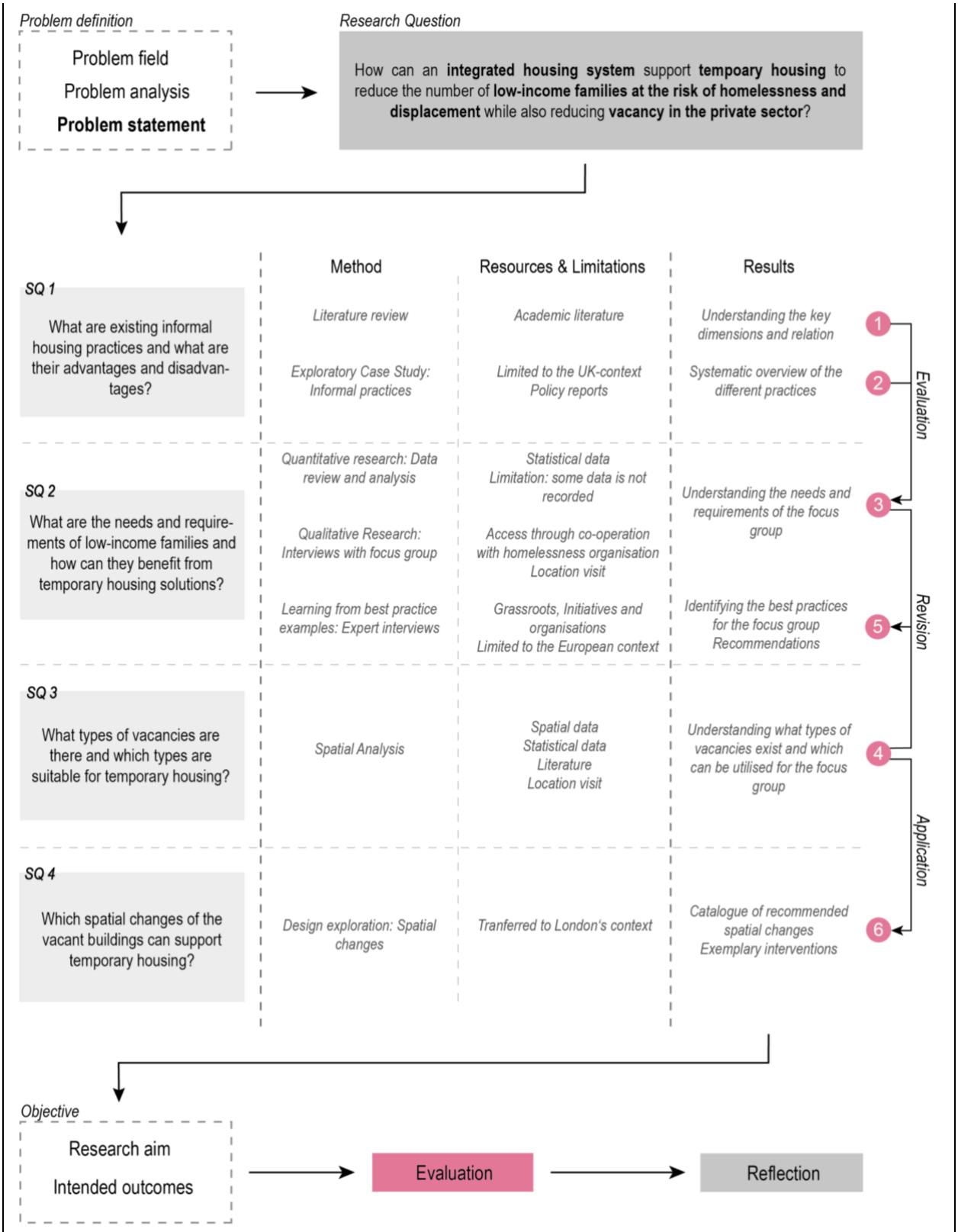


Privately owned empty homes in Greater London (Image: retrieved from Action on Empty Homes, actiononemptyhomes.org)

A government report states that more than 400 publicly owned vacancies or so-called 'dead spaces', including empty office units, schools, commercial and industrial units can currently be found throughout the city. Main reasons that are mentioned besides renovations and repairs, include the leaving of tenants and the closing of services (Berry, 2022). Similar vacant commercial properties can also be found in private ownership.
Meanwhile, the organisation Action on Empty Homes (2018) estimates that there are currently around 125,000 empty homes in Greater London. This figure includes

	dwellings used as 'assets' with no permanent occupants, dwellings used as short-term rental properties and so-called 'second homes' with no main occupants (Action on Empty Homes, 2018). Due to the fact that these numbers can only be estimated, the dark figure of vacant buildings spread throughout London could be even higher. PROBLEM STATEMENT Within the context of London's housing crisis, two opposing developments can be observed. While gentrification and the 'financialisation of housing' facilitates a growing number of **vacancies of privately owned properties**, the shortage of social housing and the expensive alternatives in the private rent sector has led to an **increased risk of homelessness and displacement in the low-income groups**. Thus, a **placement in temporary accommodation through the local authority** is often the last resort. One group that is concerned by this situation particularly frequently, are **families with dependent children**. Often, the provided temporary accommodation **does not fulfil certain housing standards and provides unsafe environments for children**. Furthermore, the uncertain situation could **negatively impact the mental and physical health, education, and job opportunities of its inhabitants**. As solving the housing crisis will be an ongoing and complex process over the coming decades an **intermediate solution** for the intolerable situation of these households stuck in insufficient temporary accommodation is needed. Thus, the **allocation of temporary housing** needs to be revised in order to develop a **systematic solution**.
research questions and	**Main Research Question:** How can an integrated housing system support temporary housing to reduce the number of low-income families at the risk of homelessness and displacement while also reducing vacancy in the private sector? **Sub-Question 1:** What are existing informal housing practices and what are their advantages and disadvantages? **Sub-Question 2:** What are the needs and requirements of low-income families and how can they benefit from temporary housing solutions? **Sub-Question 3:** What types of vacancies are there, and which types are suitable for temporary housing? **Sub-Question 4:** Which spatial change of the vacant buildings can support temporary housing?
design assignment in which these result.	RESEARCH AIM The aim of this graduation project is to develop a systematic solution for the allocation of temporary accommodation based on informal housing practices that improves the living conditions of low-income families while also utilising vacancies.

	The intended outcomes of this thesis consist of two parts. One is focused on the planning and policy side; the other one explores possible spatial design interventions. As described in the research aim, the first part includes regulations and policies that define a new system for the allocation of temporary housing. The development of this system includes an exploratory case study of different initiatives and informal practices. The initial exploration is followed by a second round focused on best practices examples. This iterative approach of exploring and evaluating the different practices ensures the best outcome for low-income families as the focus group. Their needs and requirements regarding livability and feeling at home need to be met. Therefore, a set of assessment criteria will be developed. In addition, the aim mentions utilising vacancies. Thus, the second main outcome of the thesis is a design exploration of potential spatial changes in these vacancies. This will include a guide of recommended interventions, based on a multi-scale spatial analysis. The design exploration will be showcased with a set of maps and other visualisations in one or more locations in London that were identified during the initial analysis. Although the project refers to the housing crisis as an overarching problem, it is important to note that it is primarily concerned with urgent problems that may arise in the provision of temporary accommodation and therefore seeks short- and medium-term improvements. Additional solutions are needed to address the crisis in the long term.
Process	
Method description	



The structure of the methodology is separated into four parts that follow the main research question and four sub-questions. A mixed-method approach is used to answer the sub-questions accordingly. The generated knowledge will be evaluated and revised before it is followed by the application in form of a spatial design exploration. This way, an iterative process is ensured.

LITERATURE REVIEW

The literature review is used to develop the conceptual framework and includes definitions of important terms and concepts. Therefore, it outlines how housing is allocated in the UK. The focus will be put on identifying alternative 'informal housing practices'. The goal is to understand their key dimensions and relations. Furthermore, the conceptual framework will establish a definition of 'livability' and the meaning of 'home' to get an understanding of the general needs and requirements of the focus group, meaning the low-income families. Academic literature will be the main resource to provide the knowledge.

EXPLORATORY CASE STUDY: INFORMAL PRACTICES

This method is used to get an overview of the different informal housing practices that can be found in the UK. Therefore, the various grassroots and initiatives will be analysed and categorised in a systematic comparison. This is based on the three dimensions and their operationalised elements, that were introduced in the conceptual framework. The three dimensions are: *reach*, *communication*, and *participants*. The main resource will be policy reports from governmental and non-governmental organisations.

QUANTIATIVE RESEARCH: DATA REVIEW AND ANALYSIS

The intended outcome of the quantitative analysis in to get an overview over how many low-income families are currently at the risk of homelessness and displacement and where and under what conditions they are housed. The first step consists of defining which types of statistical and spatial data sets are needed for the analysis and where they can be found. During this process it is important to be aware of the validity of the data source and the correctness of the given information. This step is followed by processing and visualising the data through tools like QGis and Illustator. Possible resources for data sets are official public institutions like the London datastore and the Office for National Statistics as well as NGOs and independent organisations. One limitation of the analysis could be that there might not be reliable numbers of certain types of data but only estimations. In these cases, it needs to be decided to what degree these estimations can be used as a given fact and where they are too unreliable to be used.

QUALITATIVE RESEARCH: INTERVIEWS WITH FOCUS GROUP

The second part of the analysis is following a qualitative approach to get a more personal understand of what 'livability' and 'home' mean to the low-income families especially while living in a temporary situation. Therefore, the chosen method is semi-structured interviews with members of the focus group. The first step is to find and contact possible interviewees. A good way of creating an initial contact would be through a collaboration with an NGO that is working with members of the focus group daily and has their trust. Therefore, a fitting organisation needs to be contacted and informed about the project. If they are willing to support the project, they can help to find appropriate interview candidates. While organising the questions and setting up the interviews it is important to be aware of the type of language that is used and that the project is explained in an understandable way. Preferable, the interviews will be held in person and in an environment where the interviewees feel comfortable and safe. As the topic is also very sensitive it is important that personal boundaries of each individual are considered and accepted.

SPATIAL ANALYSIS

The spatial analysis is used to locate vacancies that are suitable for temporary housing. Therefore, data regarding the typology, location, ownership, and the condition of the vacant buildings will be collected and categorised. The first step consists of setting up criteria to determine the suitability, validity and correctness of the data sets that are going to be selected. In addition, it will be defined which types of data are needed for the analysis. The data sets could include spatial and statistical data obtained from public data stores and official institutions as well as policy reports conducted by NGOs. It is possible, that a certain type of data is not recorded in reliable numbers and only estimations can be found. In this case it needs to be decided whether the estimation is reliable enough to be used in the project. Once all the available data is collected it needs to be visualised by creating maps and diagrams. The results of the analysis give an indication regarding their suitability form being used as temporary housing.

LEARNING FROM BEST PRACTICE EXAMPLES: EXPERT INTERVIEWS

To get a better understanding of how the focus group could benefit from an alternative housing system, the method of exploring best case examples is used. The revised selection criteria for identifying the best practices are based on the knowledge gained in the first exploratory case study and the analysis of the focus group and the vacancies. The aim is to gather inside knowledge from real-life practice and hopefully some useful takeaways that can later be transferred to London's context. It should be noted that the best practices will be limited to European examples to have a better comparability and possible transferability. The resources will most likely consist of policy reports and if possible, also of semi-structured expert interviews.

DESIGN EXPLORATION: SPATIAL CHANGES

Based on the results of the spatial analysis and after obtaining in depth knowledge about the needs and requirements of the low-income families, a design exploration of spatial changes will be made. To showcase how these changes can be implemented in the actual context of London, a location within the city will be selected to visualise an exemplary spatial intervention. Thus, the first step is to select one or more locations best fitted to show a variety of different interventions. The second step consists of designing and visualising these interventions in various drawings including maps, floorplans, and impressions.

Literature and general practical preference

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Reflection

REFLECTION

The topic of my thesis is strongly related to the themes of the 'Planning Complex Cities' studio as it covers the relation of political, economic, and social developments with spatial conditions and consequences. It explores processes related to planning and governance and aims at improving the detected problem through a systematic solution and exemplary and preferably transferrable spatial design interventions. Therefore, the thesis project reflects the complexity of observing and researching global trends on various scales and from different perspectives that is taught in the master track 'Urbanism'. Furthermore, it also covers topics that could be related to the different tracks of the master programme 'Architecture, Urbanism and Building Sciences'. The thesis includes the reuse of various typologies and redesigning built structures on the architectural scale. This aspect could also be interesting for Building Technologies as the goal is also to improve living conditions, meaning the interior room climate, insulation and more. Moreover, the project explores the functions and relations of the housing market in London and is therefore also relevant from an economic and management perspective. Summing up, my thesis project covers a wide range of topics that are relevant in the field of the built environment and planning. It explores interrelations through various perspectives and uses different planning and design approaches to develop solutions.

RELEVANCE

The living costs and scarcity of affordable housing in London are currently higher than ever. Thus, the threat of homelessness is particularly high in the English capital leading to a significant number of households being dependent on their local authority to provide them a housing solution.

In these cases, temporary housing is oftentimes the only available solution. At the same time several NGOs like Human Rights Watch (2022) report that the living conditions in these temporary solutions are currently very concerning as they are often below minimum standards. As Boobis and Albanese (2020) reveal, the Covid-19 pandemic has made this situation even worse due to the economic and societal consequences. The impacts are especially severe for children (Rosenthal et al., 2020). The urgency of this situation calls for

immediate action to improve these people's situation as it is foreseeable that solving the general housing crisis in London will be an ongoing process over the coming decades as it is a wicked problem.

As already stated, London is a prime example to observe mechanisms and consequences of the housing crisis. Thus, there is already a wide variety of research set in various fields exploring the causes and effects as well as possible solutions. It should be pointed out that the majority of this research it focused on long-term solutions. Therefore, the research in this thesis is filling the niche of addressing the urgency of the risk of homelessness by looking into an improved and more inclusive solution for the short and medium-term.

Furthermore, the focus is laid on alternative informal housing practices. As Shrestha et al. (2021) emphasise 'informality' is still a relatively unexplored field with the context of housing scholarship. Additionally, Maalsen et al. (2022) point out that related to the increasing digitalisation, informal practices could provide potential changes but also threats. Therefore, more research regarding their regulation is required (Griffin et al., 2022).